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TRAVELS

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EUROPE, AFRICA, AND ASIA,

MADE

BETWEEN, THE YEARS 1770 AND 1779.

IN FOUR VOLUMES.

VOL. I.

CONTAINING A VOYAGE TO THE SOUTHERN PARTS OF EUROPE,

AND TO THE

CAPE OF GOOD HOPE IN AFRICA,

IN THE YEARS 1770, 1971, 1772, 1773.

THE SECOND EDITION.

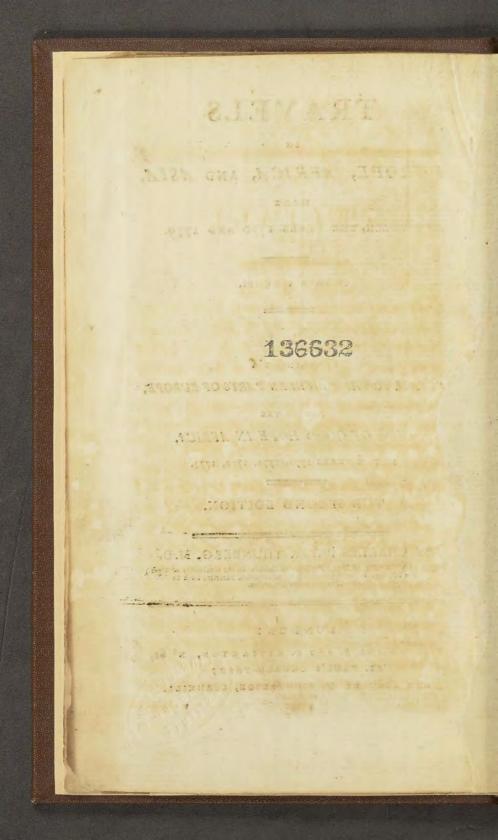
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BY CHARLES PETER THUNBERG, M.D. V Knight of the Order of Vafa, Profesor of Botaay in the University of Upfal, and Member of various Academies and learned Societies both in Sweden and other Countries.

LONDON:

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1795.



SO many relations of Travels have already been obtruded upon the Public, that the shelves in the bookfellers shops are loaded with them. It might therefore feem needlefs to add to their number, did not the generality of them abound more in the marvellous than in fimple and certain truths; did they not contain more ridiculous, and, frequently, infipid narratives, than articles of ufeful information; and did they not fupply more obfcure defcriptions of animals, plants, and other productions of nature, than plain and intelligible names and characters of these different objects. How often is the reader's time wafted in toiling through a large folio, which fcarcely contains as much ufeful matter or real facts, as would fill a fingle page ! How often has the natural philosopher, as well as the cultivator of rural æconomy, fought in vain for ufeful information in many of thefe books, for want of understanding the barbarous A

names

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names of natural objects, which the author has mifreported, and frequently did not comprehend himfelf! Is not the nutmeg, of which almost all the travellers to the East Indies have made mention, and which for feveral centuries paft has formed a confiderable branch of the European commerce, is not the genus of this in a great measure unknown ? Has not our knowledge of the animals and plants mentioned in the Bible, a book the most ancient, most facred, and most univerfally read of any, been very imperfect till thefe later times, and are they not even now in fome measure unknown to us? An ignorant traveller is apt to call for reign and uncommon animals by the names of those that he is already acquainted with; and, confequently, to confider all the different forts of wild cats as tigers, and feveral fpecies of the dog genus as foxes, and thus confound the jackall, or Sampfon's fox *, either with the common European fox, or with the ordinary bouse-cur, however diffimilar they are in their qualities.

Every traveller thinks himfelf under an obligation to turn author, and report fomething marvellous to his countrymen, although, perhaps, poffeffed of fo fmall a ftock of knowledge, as not to be able himfelf clearly to comprehend what he has feen or heard, much lefs to give

* Vid. Judges, Chap. XV.

others

others a diffinct idea of it. And this circumftance alone has produced more unintelligible books than can eafily be imagined.

Upon the whole then, if relations of travels can either clear up the obfcurities of ancient authors, or throw a new light on geography, political hiftory, rural œconomy, phyfic, natural philofophy and natural hiftory, and feveral other fciences, they will certainly not be fuperfluous.

When travellers pafs through countries with as much knowledge and attention to the objects they meet with as fome of the more modern travellers have done, the reader, in perufing their books, imagines that he is following them, as it were, ftep by ftep, and with his own eyes fees what they have feen. And when every thing is fet in a clear light, and rendered perfectly intelligible, the reader is always enabled to derive more or lefs advantage from them.

Many accounts have been published of the CAPE OF GOOD HOPE in Africa, and fome of them in large volumes, in which one may naturally expect to find every thing mentioned which relates to that part of the world. Befides feveral detached tracts relative to this country, KOLBE, in 1727, published two folios in Dutch, which have been translated and printed in feveral languages, to the no finall emolument of the bookfellers; and two other defcriptions

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of the Cape, which are little elfe than extracts of KOLBE's prolix narrative, with fome few additions, appeared not long ago in Dutch at Amfterdam, viz. in the years 1777 and 1778, in octavo. The celebrated aftronomer DE LA CAILLE arrived at the Cape in 1751, and left it in 1753. The fhort account he gives of the Cape, confifts, for the most part, of the relations of others, and those frequently refting upon very uncertain foundations. The travels of Professor SPARRMAN, printed at Stockholm in 1783, turn chiefly upon geography and zoology, of which KOLBE had treated in the old-fashioned obfcure manner, fo that zoology has gained confiderably by the refearches and difcoveries of that learned professor.

So much, therefore, having been written, and confequently fo much being known concerning this country, I might have faved myfelf the trouble, and my readers the expence of this publication. But as both my own countrymen, and alfo feveral foreigners who honour me with their friendfhip, have frequently fignified to me their defire of being informed of the events that have occurred to me, and the difcoveries I have made in my travels, and have, moreover, in the kindeft manner, encouraged and perfuaded me to publifh thefe remarks; I could do no lefs than (at the few leifure hours I had, after an

PRYFACE.

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an affiduous application to the duties of my office) collect and put in order the feattered obfervations I had made in the course of my longcontinued and extensive travels.

With a view of facilitating the publication of it, I have divided my narrative into three parts; the first of which contains my travels through Denmark, Holland, and France, my voyage to the Cape of Good Hope, in Africa, my first expedition up the coaft of Caffraria, and my refidence at the Cape during the two first winters. The fecond part will contain my farther ftay at the Cape the third winter, and two long journies into the country of the Caffres, and Namaquas land north-The third will comprize my voyage to wards. Java and Japan, my refidence there, and journey to the Emperor's court; and farther, my return by the way of Java, Ceilon, the Cape, Holland, England, and Germany, to Sweden.

I have carefully avoided introducing into this narrative any prolix defcriptions (and particularly in Latin) of animals or plants, for fear of tiring out the patience of the generality of my readers; but, for the use of botanists and zoologists, I have thought proper to publish them in separate works; still, however, I have taken care, as far as it might be done, to diftinguish them by their proper and genuine names. The relations of others which have come

come to my ears, I have for the moft part forborn to fpeak of, that nobody might be mifled or confused by them; and have therefore merely given an account of what I myfelf have done, feen, or experienced.

I have likewife prefented, in an artlefs unpremeditated order, the memorandums I had put down in my journal, thinking it lefs neceffary as well as lefs ufeful to write an elegant romance or a well-compiled hiftory, than to introduce naked and fimple truths in the fame order of time and place as they have occurred to me.

- If the reader fhould find any paffages in this narrative, that might have been either arranged in a better order, or more elegantly expressed, he will be pleafed to recollect, that I neither had an opportunity of collecting the materials for it with a free and vacant mind, nor of arranging them properly afterwards, having been for the most part interrupted and disturbed by a great variety of other occupations. And if he will likewife be kind enough to confider, on the one hand, how much in the course of thefe laft nine years I have already written and published for the advancement of the science I profefs, and, on the other, the almost innumerable occupations in which I have been engaged, as well with refpect to the inftruction

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tion of the fludents, as to the arrangement and making catalogues of various botanic gardens, and more particularly of different collections of natural hiftory, I cannot but hope for his favour and indulgence.

In this volume, I am perfuaded, various particulars relative to the Cape will be found to be mentioned and illustrated, which have been entirely paffed over by others; and many ufeful and important propositions are advanced with refpect to rural æconomy, natural hiftory, medicine, geography, and natural philosophy, which were my principal objects, as also on the fubject of historical geography, according to the difference of countries and circumstances. But in all thefe a great degree of perfection cannot be expected, when one travels through regions, little better than deferts ; when one runs with the greateft rapidity through whole provinces, where the natives are almost wild, where not the least trace of literature or civilization is to be feen, and where all nature is enveloped in the fwaddling clothes of fimplicity and ignorance.

Befides geographical obfervations, the phyfical knowledge of countries, together with the different inflitutions for arts and fciences, political and œconomical eftabliſhments, architecture, the different cuftoms and ways of living of different nations, the reader will find I have principally

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cipally had in view the various difcoveries, that may have been made, for the benefit of mankind, in natural hiftory, phyfic, and rural as well as domeftic economy; three feiences to which I am very much attached. And in confequence of these my endeavours, which I flatter myfelf have not been entirely fruitlefs, I have been enabled to propofe, in this first part of my travels, the following natural products, as being ufeful, and most of them unknown before :-viz. As efculent and fit for food, the Cavia Capenfis, Hyftrix, Myrmecophaga, Gladiolus plicatus, the roots of Anife and of Gatagay, the Aponogeton diftachyon, Arduina bispinofa, Mefembryanthemum edule, Euclea undulata, Strelitfia, Vitis vitiginea, Salicornia fruticofa, Zamia Caffra, Guaiacum Afrum, Albuca major, and the Myrica.

As tried and approved medicines for various difeafes, both internal and external: The Arctopus echinatus, various fpecies of Geranium, the Bryonia Africana, Afelepias undulata and crifpa, the Eriocephalus, Hæmanthus coccineus, Polygonum barbatum, Crotalaria perfoliata, Piper Capenfe, Fagara Capenfis, Mefembryanthemum edule, Ofmitis camphorina and afterifcoides, the Adonis Capenfis, Atragene veficatoria, Adianthum Æthiopicum, Protea mellifera and grandiflora, the Oxalis cernua, Tulbaghia, Montinia, Turtle's blood, the Ricinus communis, Solanum nigrum, Sonchus oleraceus,

oleraceus, craffula tetragona, lycoperdon carcinomale, and the feriphium. As useful for the purposes of domestic and rural

acconomy.

For ropes, the rind of the anthyllis. For bafons or bowls, tortoife-fhells. For window-blinds and chairs, ratans. For tobacco, the cannabis fativa. For tinder, the bupleurum giganteum. For tea, the borbonia cordata. For coffee, the brabejum ftellatum. For foap, the falfola aphylla.

For candles, the myrica cordifolia and quercifolia.

For trumpets, the fucus buccinalis.

For brooms and thatching, the reftio dichotomus.

For mats and thatching, the cyperus textilis. For fences and folds for cattle, the mimofa nilotica, arduina bispinofa, galenia Africana.

For quicklet bedges, the aloe fuccotrina, zygophyllum morgfana, quince, apple and pear tree, hawthorn, euonymus, willow, rofe bufhe, bramble, yew-tree, elm, holly, box, lime-tree, dogwood, honeyfuckle, cherry-tree, cercis, filiquaftrum, lycium barbarum, maple, coronilla fecuridaca, lilac, oak, laurel, and myrtle; to which may be added, as borders in gardens, the fhin-bones of fheep.

Fon

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For *fuel*, the protea grandiflora, conocarpa, hirta, fpeciofa, mellifera, and argentea, with various fpecies of ericæ and bruniæ.

For various tools and utenfils, camaffie wood, the ilex crocea, olea Capenfis and Europea, flink hout, the gardenia Thunbergia, the bamboo, and the curtifia.

Though I cannot flatter myfelf that every thing in this journal will be equally pleafing to all of my readers, or that all my readers will be able to derive the fame advantage from the perufal of it; yet I am inclined to hope, that fomething will continually occur in it which will prove either entertaining or inftructive to every one of them. And fince the two first volumes, which treat chiefly of the Cape and the Hottentots (a country and people in which art has improved but little upon the wild fimplicity of nature) cannot poffibly be as interefting as the third, which will contain relations and observations respecting a civilized nation, that has both a regular government and other good inftitutions, and even vies with the Europeans themfelves; I prefume the reader will not impute this circumstance to any want of attention in me, but to the country itfelf and the natives, that could not poffibly prefent more materials to an attentive traveller, than they actually poffeffed.

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TRAVELS.

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TRAVELS

I N

EUROPE, AFRICA, AND ASIA.

JOURNEY TO DENMARK, 1770.

A FTER having ipent nine years at the University of Upfal, the most respectable in Sweden, and passed the usual examinations for taking the Degree of Doctor of Physic, I obtained from the Academical Consistory the Kobrean Pension for travelling, which, in the space of three years, amounts to 3,800 Copper Dollars †, and with my own little stock, enabled me to undertake a journey to Paris, with a view to my farther improvement in Medicine, Surgery, and Natural History.

On the 13th of August, 1770, leaving Upfal, I passed through Stockholm, Johnkoping, Halmstadt, and Helfingborg, to Elfineur, whither I was accompanied by M. BARKENMEYER, an

+ About 45l. 16s. 8d. Sterling. [T.] VGL. L. B. Apothe-

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Apothecary, who, during my ftay at Helfingborg, had fhewn me many civilities.

On the 15th of September, I left my native country, little thinking that I fhould not return to it, till I had fpent nine years in travelling through the remoteft regions. During my paffage acrofs the Sound, the innumerable ships under fail refembled a vaft foreft; and those that lay in the road, appeared like a town floating on the water: At Kronoburg, they pay a toll, which is levied by the Danes on all other nations. Of this toll Sweden cannot partake, on account of the fhoal water contiguous to her coafts, which yearly becomes shallower from a continual accumulation of fand, grafs-wrack, (Zoftera), and Sea-weed (Fuci), near Helfingborg.

As there was no fhip in the road of Elfineur ready to fail for Amfterdam, I refolved in the mean time to make a trip the fame day to Copenhagen, by the common-stage cart. * The road was very pleafant. After travelling a great way along the fhore, and afterwards through thick forefts of beech and oak; we entered the King's Park, in which, I underftood, it was a capital offence to discharge fire-arms. By the

* In fome parts of Germany and the North of Europe, they travel chiefly in carts, the roads being too rough for chaifes or coaches. [T] 51.5

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road-fide, especially near Copenhagen, there were very fine avenues of horse-chesnut trees, (*Æsculus Hippocastanum*), the trunks of which had been wreathed, when young, into a spiral form at the bottom. Vines were pretty numerous in the hedges.

At Copenhagen I viewed the Botanical Garden, which they were just then removing. I alfo visited the Hospital, which, together with its Dispensary, I was told, was founded by the late unfortunate Queen, and now contained about 200 patients; at the same time I viewed feveral private Museums.

The Profeffors ZOEGA and FABRICIUS, who a few years before had been my friends and fellow fludents at Upfal, were the first whom I enquired after. Befides other civilities, they gave me free accefs to the Botanical Garden, and their own private Collections, particularly Profeffor FABRICIUS, whole collection of infects was well worthy of attention. These gentlemen would certainly have rendered my flay at Copenhagen longer, as well as more agreeable and more advantageous to myfelf, had they not been under the neceffity of going, in the afternoon of that fame day, on bufiness of importance to Slefwick.

The ftreets of Copenhagen are paved at the fides with flag ftones, for the convenience of

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foot paffengers; and there are planks over the kennels. The houfes have funk ftories, in which the inhabitants generally live.

Having viewed feveral remarkable things in the City, fuch as the Royal Palace, the Univerfity, Frederick's Square, the Exchange, the Quay, the Port, &c. I haftened back towards Elfineur, in a return-cart, which was to convey me only part of my way, after which I was to proceed in a ftage-cart; but having got near the Park, it being Sunday night, all the inns were fo full of people, including ladies, as well with natural as artificial complexions, who had crouded together from all quarters to fpend the Sunday evening here in fiddling and dancing, that I could neither get horfes, nor a room to fleep in for the night. And as the amufement of this noify rout had no great charms for me, I refolved to walk away with my botanical knapfack under my arm, to fome inn farther on. But not knowing a ftep of the road, and having no guide, I loft my way in the Park; when, darknefs overtaking me, I was obliged to repofe under a large tree, with the fky for my canopy, in the company of animals both tame and wild. The next morning I refumed my journey on foot, and, it being a fine warm day, found my cloak, which had protected me in the night against the cold, very heavy and trouble_

troublefome. Towards noon I arrived at an inn, where I procured a carriage, in which I proceeded to Elfineur.

I could plainly perceive, that near the fhore the land has gained upon the water, by means of fand and fea-weed (*fuci*), though much lefs than on the Swedifh fide. Hence it appears evident, that the found is already become narrower, and probable, that its breadth will be progreffively contracted. On the fhore I found feveral fpecies of fucus, zoftera, and falfola, as alfo mufcles (*mytilus edulis*). By the fides of the roads were feveral fine gardens, many of them adorned with arbours of ever-greens.

The houfes in *Elfineur* are built either entirely of bricks, or, as in Halland in Sweden, of wooden frames, with the fpaces filled up with bricks. The numerous fountains that are feen in the fquares, and in feveral ftreets of the town, are no lefs ufeful than ornamental; fo that water may conveniently be had in a place, where, in other refpects, dearth herfelf feems to have fixed her head quarters.

At my return to Elfineur, I foon found a veffel bound for Amfterdam, which had juft arrived from *Pillaw* with corn. In her I fet fail on the 18*tb of September*, and foon loft fight of the Swedish and Danish Coasts. On the 21st, we were obliged, by a heavy gale of con-

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TRIP TO NORWAY, 1770.

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trary wind, to put into a harbour in Norway, about twenty miles from Fredrickfhamn, where, among others, I found a Swedifh fhip. The mountains and the fhore round this little harbour, are frightfully precipitous. The water near the fhore abounded with ftar-fifh (afterias), fuci, ulvæ, barnacles (lepades), cray-fifh (canceres), and other marine animals. The Lobfters here (gammarus), were not much efteemed. Every thing was as cheap here, as it was dear at Elfineur. The mountains produced, at this feafon of the year, nothing but the Silene rupeftris (a fpecies of catch-fly), and a kind of rofe, together with (empetrum nigrum) or crow-berries.

On the 24th we failed with a fair wind; but foon again were oppofed by a ftorm and contrary wind with rain, which lafted for feveral days, fo that we faw nothing but thick clouds and the fea, the green waves of which frequently broke over our little vefiel, and rendered the deck extremely flippery.

The diet of the crew of a Dutch fhip is ftrong and nutritive, confifting of the feeds of French beans, with fweet and four fauce; ftockfifh, with muftard and potatoes; ftewed grey, and boiled yellow peas; thick flummery, made of coarfe-ground barley, with fome fat in it; pudding, with fat and treacle; and coarfe four 6 Dutch

VOYAGE TO HOLLAND, 1770.

Dutch bread, with butter and a flice of cheefe. They drink tea and coffee feveral times a day, the former in general ftrong, and fometimes mixed with a little faffron, efpecially in bad weather; but the coffee is made weak, moltly without any fugar, always without milk or cream : of both they drink plentifully, to the quantity of ten or twelve cups at a time. The Captain and myfelf were the only perfons on board who were indulged with a little fugarcandy, when we drank our coffee, together with English wheat-bread for our bread and butter, and rice-gruel with raifins and butter in it .---Butchers-meat and bacon are always eaten with muftard. Brandy is feldom drank, except a pilot comes on board, or the weather is very bad. Wine is still less common. They take out beer with them, indeed, in earthen veffels, but do not often drink any; fo that their food is ftrong and dry, and not a little greafy .--Cleanlinefs and neatnefs is the great object of their attention on board their fhips, which they are perpetually fcrubbing and painting.

On the 1st of Ostober we arrived off the Coast of Holland. The Island of Texel first prefented itself to us, and a pilate came on board to conduct us to Amsterdam. Here was an infinite number of ships, men of war, East and West Indiamen, and smaller vessels, some

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VOYAGE TO HOLLAND, 1770.

at anchor, others failing in all directions; all which could not but prove an enchanting fight to an eye that was not accuftomed to fuch profpects.

On the 2d, having arrived at the little town of Bergen, we were ordered, on pain of death, not to go on fhore, becaufe the ship came from Pillaw, on the borders of Poland, and was fulpected of being infected with the plague .---Though I had come as a paffenger, not from Pillaw, but from Elfineur, yet my trunks were brought on fhore, to be kept in quarantain; but the fhip, with its crew, was permitted to fail to Amfterdam. A furgeon, however, came previoufly on board, to enquire into the ftate of our health, and for the trouble of feeling the pulfes of five perfons, fairly pocketed his ducat, by way of convincing me and a few poor failors of the profits attending his profeffion.

In the continuation of our voyage towards Amfterdam, on the Zuyderzee, we frequently met with Islands almost covered with towns.— The horizon was skirted with forests of ships failing different ways, and forming the most beautiful sea-piece. The tide here, on its changes, forms long and irregular spots of fmooth water. In this sea we spent several days in failing little more than softy miles,

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VOYAGE TO HOLLAND, 1770.

as the wind at beft was faint, fo that we were for the most part obliged passively to obey the direction of the current. During our frequent calms, the crew were fo earnestly employed in fcouring, washing, and painting, that they did not even leave the dog's kennel unpainted. I had at this time also the pleasure of feeing a large vessel brought out by camels, * to the Texel; a method which they make use of, on account of the low water, to convey large vessels from the city into deep water. In this fea I faw nothing deferving the attention of a naturalist, but large masses of feed-weed (zostera) floating about.

On the 5th, towards evening, we arrived at the populous and fplendid commercial city of *Amfterdam*, which extends along the fhore in the form of a crefcent. The harbour is crouded with an incredible number of fhips. The largeft veffels lie fartheft from, and the fmalleft neareft to, the city, according to the depth of the water; and in fuch order, that they form a kind of wall feveral rows deep; and their num-

* The camels are two very large lighters, nearly full of water, between which, large fhips that have been built at Amfterdam are made faft. The water is then pumped out of the lighters; and thus, by their buoyancy, the intermediate veffel is fufficiently raifed to pafs over the bar, which, being a fecurity against a hostile fleet, is fuffered to remain. [T]

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bers are fuch as to intercept the view of the city. Within thefe the city is bordered with feyeral rows of piles, off which fmaller craft and lighters can lie, and run up through their openings and bridges. Both towards the water fide, and in the city itfelf, the banks of the canals are faced with brick-work, to which boats and fmall veffels can lay their fides.

The houfes are in general very neat and elegant, though not always equally convenient .----Every where they are nearly uniform and regularly built of brick, five ftories high, with pitchroofs covered with tiles. The gable ends are towards the ftreet, and flope off, as it were, by fteps, which gives the houfes a nobler appearance, than when the flope of the roofs is next ... to the ftreet. The houfes have in general a bafement, or funk ftory, which is made use of for work-fhops, kitchens, and fometimes for dwelling apartments. The windows immediately above the ftreet are very high, and in two divisions, as they give light both to the first floor, and to that beneath it, which in most of the common houfes appear externally to form but one ftory. The walls are very thin, on account of the bad foundations in that marfhy foil: and five ftories in Amfterdam are hardly fo high as three in Stockholm. The infide of the apartments, and still more frequently of the

the anti-chambers and paffages, and fometimes even of the churches, is covered with fmall squares of Delft ware, and the floors are laid with white and other marble. The houfes in general stand upon little ground, and have but few apartments, often but one on a floor, except in certain quarters of the town, where the houfes, in point of fize and magnificence, refemble palaces. The water is conducted to and from every ftreet and houfe, by means of little covered channels communicating with the large canals. Throughout Holland chimnies are generally ufed; ftoves are but fcarce, the great utility of them being as yet little known in that country, where turf, which is their most common fuel, is probably unfit to heat them, and its fumes, if prevented by ftoves from having a free exit, might be dangerous. The ftreets are paved in the middle with oblong granites of the beft fort, and at each fide with hard yellow bricks, or, as they are there called, clinkers, Clofe to the houfe, the ftreet is laid as far as the outer fteps project, with white marble flabs, or blue lime-ftone. Though all the ftones for paving are imported, yet in no other place do we meet either with fuch choice ftones, or ftreets fo well paved; befides that, the pavement or clinkers at the fide of the houfes, which is daily washed, is very agreeable to the foot-paffenger,

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fenger, who is thus, not only fecured from the inroads of carriages and horfes, but likewife avoids being befpattered with dirt. Wheelcarriages are very little ufed here, except by phyficians, who are obliged to make difpatch in vifiting their patients; and who ufe large chaifes with high wheels, drawn either by one or two horfes.

The coaches, or rather fledges, are drawn by one horfe upon fliders, by which means the houfes are not fhaken, nor the ftreets foiled.— Goods are alfo conveyed on fledges, or on a kind of wheel-barrow.

The whole city is interfected with canals, on which goods are conveyed in craft of a moderate fize. On each fide, rows of trees are planted, with lamps placed between them. Many of the lanes and alleys interfecting the ftreets, are very narrow.

At the fame time that the eye of the ftranger is entertained with viewing elegant buildings and other objects worthy of attention, the ear is charmed with the mufic of the chiming clocks in the Stadt-houfe, or town-hall, and of almost every church-steeple in the city. They chime a little at the end of every fifth minute; longer at every quarter of an hour; and every hour, just before the clock strikes, they play an entire piece.

Among

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Among the chief and most remarkable buildings, is the Stadt-house, the Custom-house, and the Exchange; the first of which is fearcely to be paralleled. The outside of the Stadt-house is faced with free-stone: in the first floor is a large and losty hall, the walls of which are decorated with marble of different kinds, and with feveral marble statues.

In fo large and populous a city, where fo much bufinels is transacted, the ftreets of course are noify. The mode of crying fruit, milk, &c. in the ftreets, faves the inhabitants much trouble. Immediately on my entering the city, I met a man with a rattle, which is a fignal every morning to the inhabitants to bring out their assessment of the conveyed away in large carts, which have feparate divisions for every kind of foil; this regulation prevents the canals from being choaked up with dirt, and the air from generating putrid difeases.

The inhabitants enjoy a degree of liberty, which is equally diftant from reftraint and licentioufnefs. Perfons in a coftly or in a mean drefs, are equally exempted from reflections.—Without ceremonioufly regarding either perfons or occafions, they keep on their hats in the houfe, and even at church.

In like manner every one, whatever may be his religion or country, is at liberty to earn his livelihood

livelihood in any way, fo that it be but honeft, that he may think proper; and without being checked in his purfuits by corporations, monopolies, or exclusive privileges. Strangers are likewife exempted from being vifited, much lefs ill-treated, by toll-gatherers in this country, where happily no land-tolls * exift.

The day after my arrival, feveral criminals were punifhed on a ftage erected near the Stadthoufe; one of them was broke on the wheel, and the reft whipped. The magiftrates, in their official drefs, viewed the execution from the windows of the Stadt-houfe. It appeared to add great folemnity to the punifhment, that thofe who had tried and condemned the offenders, fhould themfelves fuperintend the execution; not, as in Sweden, where it is committed to an inferior officer, whofe ignorance of this important duty often renders him either too mild, or too fevere.—

In my landlord's houfe I obferved a very ingenious method of teaching children to walk.— A ribband was faftened under the child's arms, which paffed through a ring that flid on a long iron rod fixed horizontally in the roof, fo that the child could walk backwards and forwards along

* In this, very different from Sweden, where certain taxes are levied upon all forts of goods entering the inland towns and fea ports. [T]

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the room, without falling or taking up the time of an attendant.

On the *gtb of October*, I visited the Professors, Messes. BURMANNS, who received me in a very friendly manner. In my daily visits to them, I had not only the pleasure of furveying their different and numerous collections in natural history, and the advantage of their valuable library; in which the late celebrated LINNÆUS put the last hand to his *Bibliotheca Botanica*, but was likewise invited every day to their tables, and requested to examine and give names to a great number of unknown minerals, infects, and plants, particularly of the grass and moss kind.

Here were fome exquifitely beautiful petrifactions and corals; and the Library, fo far as related to Medicine and Natural Hiftory, might be faid to be quite complete. This rendered my ftay at Amfterdam both agreeable and ufeful; and notwithstanding the advanced feafon, I should not have hastened from thence, had I not been deprived of my little stock of clothes and books, which, in my opinion, were both unjustly and imprudently kept in quarantain.— It could not but be imprudent, to fuffer a ship suffected of infection, to enter a harbour crouded with ships, and the crew to frequent the towns freely for several days, and afterwards to fend

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fend the fhip and cargo back to the Texel to perform quarantain. It appeared likewife to be unjult, when there were no fymptoms of infection on board, to detain the trunks of a paffenger, who did not come from the suspected place, contrary to every ufage on fuch occafions. This conduct excited my pity for a government, that, on fo ferious and delicate a conjuncture, must frequently entrust the execution of its orders to ignorant and imprudent officers. I endeavoured, by means of an application to the Swedish agent, M. BAILLERIE, to procure from the admiralty an order to deliver up my trunks; but all I could obtain, was a permit to get them at passing the Texel, if I should chuse to take a passage for France .--Thus I was obliged to change my route, and fubjected to confiderable inconvenience and expence.

In the mean time, I determined to travel about in Holland, and view fome of their many curiofities, collections of natural hiftory, and gardens.

On the 15th of October, I went out in a carriage with Professor BURMANN, to a country house of his, near Amsterdam. His garden is finely laid our in the English taste. The hedges were formed of yew (faxus), holly (ilex), beech (fagus), and oaks (quercus). Among

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Among the many rare plants now in bloom, were the *amaryllis*, *ceilanica*, and *gladiolus triftis*. In the Wildernefs I obferved, among others, the *kalmia latifolia*, the *æfculus pavia* (or fcarlet horfe-chefnut tree); the *cletbra alnifolia*, and the *magnolia grandiflora*.

At eight in the evening I went in the treckfchuyt (or paffage-boat) to Leyden. Thefe boats are generally used for travelling in Holland, where the whole Country is interfected with Canals. They are very long, and tilted over, to shelter the passengers from the weather : at one end is a cabin, which the fkipper fometimes hires out to fuch perfons as with to fleep, or to fit feparate from the common people .--Thefe boats always fet out on a certain day and hour, and arrive with the fame regularity at the places of their deftination. In the middle they have a maft, to the top of which is fastened a rope, by which a horfe draws the boat. When the wind is favourable to them, they make fail; and the helm in both cafes regulates the motion. Every paffenger is entitled to bring as much baggage as he can carry, without any extra charge. As foon as the boat has fet off, the paffage-money is paid, which, confidering the eafe and convenience of this mode of travelling, is very trifling.

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The first thing I did in the morning of the 16th of October, was to vifit Professor DAVID VAN ROYEN, who showed me his collection of plants from the Cape of Good Hope, and another which had lately been fent him from Ceylon. I next viewed the cabinet of natural hiftory that was committed to the care of Professor ALLAMAND; as alfo the botanic garden, where I procured many rare plants for my own bortus ficcus, and feeds and roots for the garden at Upfal. The botanic garden is fituated near the univerfity, and is furrounded with a ftone wall. Though not very extensive, it is neat and elegant, divided into feveral quarters, and well furnished with curious plants. On three fides it is inclofed by the univerfity, the apartments of the botanical professor, and of the gardener, the cabinet of natural hiftory, and other neceffary buildings.

Among other things worthy of attention, I was fhown a *bortus ficcus*, composed for the use of the lecturer, of all the plants that had flowered in the garden. This is certainly a proof of the professor's zeal for the fcience he teaches, and for the improvement of the students. At the gardener's, NICOLAS MEERBOURG, Ifaw also feveral fine softime mens of animals preferved in spirits of wine; as well as of plants and infects, of which latter I bought 6 and

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and procured by exchange, feveral American and Eaft Indian butterflies.

The houfes at Leyden have the fame external appearance as at Amfterdam, but have no funk ftories.

The edifice of the univerfity is divided into feparate apartments or lecture-rooms; the chairs are fmall, and there are benches with defks before them for the fludents.

The library is neat, though neither large nor much decorated.—Immediately under it, is the anatomical theatre.

I paid a vifit to the learned and aged librarian, GRONOVIUS, was well received, and heard him beftow great encomiums on the learned affeffor, SWEDENBORG, who a few weeks before had gone from thence to England.

I also visited the fenator (*fcabinus*) GRONO-VIUS, a very polite and cheerful, as well as learned man, who, notwithstanding his many occupations, showed me his valuable collections of corals, fishes, amphibious animals, infects, minerals, plants, and books. The bottles that contained the specimens of animals preferved in spirits of wine, were covered with a glassplate and a red cement, the composition of which was communicated to me. It answered the purpose fo well, that the spirits appeared not to have evaporated much, though they had been

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feven years in the bottles. Thefe must be filled in the fummer, and not in the fpring, left the glass-plate should be broke by the rarefaction of the air. Among the minerals were many which had been fent him from Sweden, by M. GOTHER. Speaking of iron ores, he gave it as his opinion, that all iron was native, that was attracted by the load-stone.

I went to fee the garden of that celebrated florift, VAN HAZEN, in the neighbourhood of Leyden. This gentleman fends yearly many thoufands of roots, feeds, and fhrubs, to different countries.

In the evening I walked to Zudwyk, where I met with a hearty welcome from a Mr. VITT-BOM, a Swedifh gardener; here I deposited the plants which I had purchased at Leyden, for the garden of Upfal, to be fent over the following fpring. The elegant garden which VITT-BOM superintended, was the property of Count HAHN, and was ornamented with visitoes, hedges, grottos, fountains, canals, English summer-houses, Chinese temples and bridges, and other decorations. As for walls, it needed no other than the deep canals by which it was surrounded, and which are the usual boundaries of property in this country, the very cattle never attempting to fwim over them.

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On the 18th of October, in the morning, I took a walk to the Hague. The road is heavy and fandy, but is rendered agreeable by large cuts, or canals, ornamented with avenues of trees or cut hedges, and furrounded with a variety of beautiful feats. By the road-fide grew poplars (populus alba), alders (betula alnus), common broom (fpartium fcoparium), German broom (genista Germanica), reed canary-grafs (phalaris arundinacea), &cc. The public houses, which were by no means few, were plentifully fupplied with ale, wine, and mead.

I paffed the palace of the Prince, near the Hague, which is decorated with an elegant garden. Before I arrived at the town, I viewed the phyfic-garden, which, though finall, contains fome very curious plants.

The Hague is a handfome town; the houfes being larger than they ufually are in Holland, bear a greater refemblance to those of Paris or Stockholm, and the flope of the roofs, which have no gable ends, is towards the ftreet. The fquares are tolerably large, and ornamented with trees.

Throughout all Holland turf is their ufual fuel. Their chimneys have no register for opening and shutting the vent, which, as well as stoves, the Dutch do not think adapted to a damp country, being of opinion that it would C $_3$ render

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render them more fubject to gout and rheumatifm; but the true reafon probably is, their want of wood, which is very fcarce and dear, and turf is not proper for heating floves. Turf is fometimes fold by the ton, and fometimes by tale; it has a difagreeable fmell like that of greafe, which excites a head-ach and naufea in perfons unaccuftomed to it. It is cut into oblong fquares; and though it burns flowly, and muft be kindled with wood, it throws out a ftrong heat.

At half paft three in the afternoon, I went in a treckfchuyt to *Amfterdam*, where I arrived at fix the next morning. Whenever the boats ftopt at the inns, feveral women came up to us to fell us bread, fifh, and other refrefhments.

The country, between the Hague and Amfterdam, is very agreeably interfperfed with numerous gentlemens' feats, fituated on each fide of the canal, and adorned with elegant gardens and fummer-houfes. The walls of their houfes are frequently covered all over with ivy (*bedera*), and the box trees and hedges are formed by the fhears into a thoufand fantaftic figures.

While I was waiting for a veffel to convey me to Rouen, I daily vifited Professor Bur-MANN, and made use of his library, and cabinet of natural history. Here I perceived the unspeakable advantage of a professor having a library so near at hand, which affords him an oppor-

opportunity of arranging it in fcientific order, and of comparing the different fubjects in his collection with the figures and defcriptions of different authors, of which it is frequently neceffary to confult not only one or two, but a hundred. The largest public libraries are, in this refpect, lefs ufeful, becaufe they are opened and fhown only on certain days, and that frequently under the infpection of one librarian only, who cannot be fuppofed to intereft himfelf in accommodating his vifitors with books in all the branches of fcience alike, or with fuch a number of them as is often neceffary; not to mention the inconvenience of frequent applications. Thefe important confiderations render it adviseable for professors to furnish themselves, as far as they are able, with libraries of their own; and alfo fhow, that notwithstanding all that has been faid of the utility of large public libraries, much is wanting to render them as extensively useful as is pretended .- Among the many fcarce books it contained, were RUMPHIUS'S fhells and fifnes, coloured, in large folio, drawn at Amboyna, by RUMPHIUS the fon; the original drawings of PETIVER's plants; MERINA's coloured drawings of butterflies; RUMPHIUS'S plantæ Amboynenses, also coloured, &c. I likewife attentively examined his various collections of dried plants, from the East and West Indies, C4

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Indies, and Africa, but efpecially those of HER-MANNUS and OLDENLANDIUS, which were bound. And as I arranged and defcribed feveral plants belonging to the most comprehensive genera, fuch as Ixia, Erica, Afpalathus, &c. Profeffor BURMANN mentioned, that he would procure me an opportunity of making a voyage either to Surinam, or the Cape of Good Hope, at the expence of the States. I teftified my fenfe of his friendly offer in the beft manner I was able, and told him I would gladly accept it, and that I had no objection to fpend a few years in an expedition of this kind; at the fame time I could not help expreffing my furprife, that he fhould place fo much confidence in a ftranger, whom he had known only for a few days. In anfwer to this, he affured me, that from the time that he had paffed a fummer at the university of Upfal, he had conceived, and ftill entertained, a great partiality for the Swedish nation, and that he had taken a great liking to me in particular, on finding with what readinefs I named and defcribed a great number of his non-defcripts, a circumftance, which, he was pleafed to fay, filled him with a lonithment.

The profession at this time complained, that his falary was fo finall, that it barely paid his houfe-rent, and that confequently he was obliged to fupport himself by his medical practice, which,

which, being pretty extensive, took off his attention from a fludy, to which he was more inclined, and which was the proper object of his profefforship. Here I could not help tacidy congratulating the professions in the Swedish universities, who are not under the necessity of dividing their attention between the cares of their subsistence, and their proper employment, the instruction of youth.

I now also took a view of the physic-garden, and the different hospitals in and about Ami sterdam. The botanic-garden is fituated near the town, is large and elegant, and contains feveral large orangeries and hot-houfes, and a great number of fucculent plants, and other curious productions from the Cape. The great American aloe (agave Americana) was in full bloffom, and fhown every day for money. Of the city hospital, Professor BURMANN, jun. had been for fome time before appointed chief phyfician, in the room of his father, whole great age had obliged him to retire from his office. Seven or eight hundred patients were faid to be fupported here. Two women were generally in a bed, and the beds were all numbered. In the morning-vifits, the number of the patient was put down on a flate, with the medicine prefcribed to them for that day. The difpenfary of the hospital was contiguous to it. The lazaretto

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retto (or peft-house) is fituate at some distance from the town.

The air of this low country was at this time very damp and unwholefome. The hair would not keep in curl without the help of pins; and plants could not be dried otherwife than before the fire. The atmosphere bore an appearance fimilar to the exhalations of a bath; there often fell a drizzling rain, attended fometimes with a fog, fo thick as to occasion imprudent people to fall into the canals. A very fingular phænomenon is fometimes obferved, caufed by an exhalation altogether opake fuddenly arifing, and as this fubfides, which it generally does in a fhort time, at first only the heads of the footpaffengers are to be feen, and afterwards their bodies gradually come into view. Catarrhal fevers (febres catarrhales) also now began to prevail.

During the cold feafon, women of the middling flation in life kept themfelves warm by means of chafing-difhes, containing live coals of turf, placed in perforated boxes on the floor, under their clothes.

As the Dutch in general are great fmokers, a neceffary part of the furniture of every fittingroom, is a copper chafing-difh, with live coals of turf to light their pipes, and a fpitting-box, with

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with a fmall mouth and broad brim, befide it on a table.

Tea and coffee are the ufual fubfitutes for beer, which is but little drank in Holland. The coffee is always weak, and roafted but little, and is copioufly ufed in the morning, fometimes with and fometimes without milk, and a bit of fugar-candy is kept in the mouth to fweeten it. Tea is drank in the fame manner in the afternoon. On board of fhip we fometimes had milk and water, with an infufion of tea or fage, and a little powdered fugar.

Soups are but little ufed; their diet is chiefly folid, and confifts of vegetables, butcher's meat, and fifh. This laft is the moft common, and the cheapeft food. The common people at every meal eat two forts of bread cut into flices, with butter, and a piece of cheefe between the flices. Salt meat is hardly ever ufed. Frefh, water fifh, fuch as pikes and perch, is fcarce and dear. Potatoes and fea-fifh form the chief diet of the poor.

The ladies all wear fmall hoop-petticoats, and have frequently a pouch or bag at their fide, with a large filver lock.

October the 26th I went on board a Dutch veffel bound for Rouen. In the harbour I obferved many boats loaded with milk, vegetables, fruit,

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fruit, and other provisions, for the fupply of Amfterdam.

November the 1ft we fet fail, and on the 5th arrived in the Texel, where I at laft recovered my trunks by the good offices of Mr. ROSE-BORN, our Commiffary at Aufgell, at which place, all fhips bound to and from Amfterdam, muft be entered and cleared out. The ifland is furrounded with dykes, formed of feed-weed (zoftera). A road goes round the ifland along the fea-fhore, which, though elevated, being composed of clay, was, at this wet feafon, rather dirty.

The furface of this island, like that of a great part of Holland, is evidently lower than the furface of the fea, which is only prevented from over-flowing the land by the dykes, in the repairs of which immenfe fums are yearly expended.

From the element of water the Dutch derive all the advantages of their internal and external commerce. It fertilizes their meadows, which are the true fource of their natural riches. At the fame time, their fecurity from this element cofts them much expence and labour; but, in fpite of all their precaution, the florms from the N. W. often caufe irruptions of the fea through their dykes and fluices, deluging whole tracts of land, and laying even towns under water,

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to the great terror and danger of the inhabitants.

The foil in general is loofe and marfhy. We may therefore fafely affirm, that fcarcely any country in the world is naturally dirtier; but by the ingenuity and indefatigable induftry of the inhabitants, it has been rendered incomparably neat and clean.

I lodged that night in a village, before which the veffel lay at anchor. Mufcles (mytilus), and oyfters (offrea edulis), are eaten here, both boiled and raw, with vinegar, oil and pepper .- When the mufcles are boiled till the fhell opens, and eaten with fweet and four fauce, they are both relifhing and nutritive. While the fhip lay at anchor, the failors went on fhore in the evenings, and brought whole pails full of them on board. They fometimes used Spanish onions, inftead of bread, with their peas and other victuals. Notwithstanding that they keep every thing clean and neat on board, I now difcovered them to be very uncleanly at their meals, for they fed themfelves with their fingers, which feemed very well fecured against putrefaction, by a thick coat of tar.

On the evening of November the 13th, which was perfectly calm, a murmuring noife was heard from the fea, and the water fwelled towards the fhore, exhibiting a very beautiful phæno-

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phænomenon; for it fparkled like fire, or as if the light of the moon had been reflected from its furface; but this was only when it was agitated, as, for inftance, when any thing was thrown into it, or it was ftirred with an oar.

On the 15tb, we left the Texel with a fair wind; but in the night a florm arofe, which continued till the 17tb, when we were in the English Channel, just between Dover and Calais, and plainly faw two light-houses on the English shore. At length the gale increased so much as to split feveral of our fails, and the rain fell in torrents.

On the 18th, the wind being fair, we faw the French fhore, which appeared very high.

On the 19th, we were within a ftone's throw of the fhore, which is very precipitous, projecting in irregular promontories, and feemed to confift of chalk, interfperfed with red ftreaks. Towards noon we arrived at *Havre de Grace*, where feveral fhips lay in the large harbour formed there by the fhore. The failors feet, which had been wet for feveral days, from the fea-water which had wafhed over the fhip, were now fwelled and bliftered, an inconvenience which they remedied merely by rubbing their feet with brandy.

On the 20th of November, the Captain went to the town, to get a certificate of health (lettre de fanté) and a pilot.

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The town is fituated on a declivity, and is nearly furrounded with hills. Though not very large, it is neat, well fituated, and has the advantage of an excellent harbour, which, at this time, contained about 150 veffels.—In the road there were fome Hamburgh fhips riding quarantain. The next day, towards noon, we arrived at *Quillebauf*, at the mouth of the river Seine. Here a cuftom-houfe officer came on board to feal the hatches, and a pilot to conduct us to *Rouen*. The water was quite white from the chalk which forms the bottom. From the mouth of the winding Seine to Rouen, the diftance was faid to be thirty French leagues by fea, and only ten by land.

On the 23d, I went on fhore, The farmhoufes are very clofe to each other, and the lands are feparated merely by quick-fet hedges or apple and pear trees, hawthorn (cratægus oxyacanthus), prickwood, (euonymus), and willows (falices); among which were wild briars (rofæ), and brambles (rubus cæftus), interwoven with ivy (hedera). Here I could not help indulging the patriotic with, that Sweden might one day be fo far improved, as to fubflitute quick hedges for its prefent wooden fences, which are not only expensive, but tend to deftroy the forefts. If, at the fame time, the plantation of trees was encouraged, and the laws for fecuring

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fecuring them enforced, the country would foon affinne a far more delightful appearance. The fruit trees here are planted regularly in rows. Apples were in fuch plenty, that a quart of cyder coff only three fols.

The houfes are built with wooden frames wattled, and clay. The peafants wear wooden fhoes, with focks or ftraw within them.

. The wild plants growing here were (daucus carota) carrots (bellis) daifies, (fenecio) ragwort, (mentha) mint, (betonica) betony, and (vifcum) mifletoe. The belix bifpida was found here on the trees.

In the evening, we came to a part of the river where we were furrounded with high hills, which intercepted the wind, fo that we were obliged to hire horfes from the peafants to draw the veffel up the river. When nearer Rouen, we obferved feveral iflands in the river.

On the 25th of November, towards noon, we arrived at Rouen, which is a large fortified town. Some of the houfes are of ftone, and others of frame-work and plafter. The convent is very extensive. The veffels run up to the bridge, directly opposite to the exchange and the parade. This exchange, which is opened only in fine weather, is inclosed with iron rails; and there is another exchange in the middle of the town. The whole firect along the harbour is

ROUEN, IN FRANCE, 1770.

is lined with cuftom-houfe officers; the entrance from the harbour to the city is through gates, which are fhut at nine at night. The houfes in general are covered with flate. The horfes are fmall, and flow in motion. Both men and women rode on them, frequently two at a time. Affes are much ufed here, feveral of which were harneffed one before the other to large carts, and were ornamented with bells, which produced a very difcordant kind of mufic.

Though the weather was not very cold, yet the inhabitants already wore waiftcoats, lined with fhag.

- A kind of Dutch floves were in common ufe here, which were made either of iron or Delftware, and were heated with brufh-wood; thefe warm a room in a quarter of an hour, but their effect is merely temporary.

The fhops of the tradefinen and mechanics are built with open fronts. It could not but appear ftrange to me, to hear the ordinary burghers and peafants fpeak in common the language which in others countries is peculiar to the gentry, and to fee the fervant-maids ftalking about in their wooden fhoes, and at the fame time dreft up in their fly caps and negligees, like ladies.

In every part of the city the inhabitants enjoy the benefit of fountains conveniently fituated. vol. 1. D I visited

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I visited M. PINARD, the professor of botany here, and viewed his *bortus fiecus*.

The botanical garden, which is fituated at the end of the town is not very large; it is divided into two parterres, and has a round mount in the middle, and an orangery, which confifts of three divisions, and is not very elegant.

An illicit commerce in tobacco is prohibited, under no lefs a penalty than that of flavery in the galleys. All the tobacco on board our fhip was immediately entered and taken into cuftody; and the crew, who could not exift without this commodity, received only a weekly allowance of it, for their immediate ufe.

November the 29th, at four in the morning, when the city gates were opened, I was told the poft-coach was juft going to fet out. Though this vehicle holds ten perfons, there was no paffenger in it but myfelf; it was loaded with a great deal of luggage, and was drawn by four horfes. The cold was intenfe. A fog enveloped the country, and there was ice on the water.— Trees were planted at the fides of the roads, which were very broad. On all the hills there lay a great number of blue and yellow flints.— The houfes on the road were built with limeftone and flint,

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During this journey, which lafted three days, I paffed through feveral fortified towns. At the inns on the road a traveller may dine either in company with other people at a fixed price, or may chufe his own difnes, and dine by himfelf, paying in proportion. At every inn fomething muft be given to the domeftics (quelque chofe pour le garcon),' effectally for being awaked in the morning, when the diligence fets out.

Mile flones are regularly placed along the road, and at every quarter of a mile there is a poft with a copper-plate on it. Near the convents it was not unufual to meet with boys and other mendicants, who read the pater-nofter for the edification of travellers.

The hedges were in fome places formed of brambles (*rubus*), which, though prickly, were not thick fet.

On the 1*ft of December*, in the morning, I arrived at Paris. The luggage was all unloaded and fearched in the inn yard. I took an apartment in the neighbourhood to hold my baggage, till I could get a lodging nearer to the colleges and hofpitals in the city. And, as I had an addrefs from Affeffor RIBE to a M. BERTH, his quondam landlord, I went in fearch of this perfon immediately, took a room at his houfe, and D 2 ordered

ordered my trunks to be carried thither that fame afternoon.

I viewed the two hofpitals, I.a Charité, and the Hotel Dieu; the former is neat; and the latter, which is very large, I afterwards vifited daily, and hence had always an opportunity of learning fomething, either from the many chirurgical operations that are performed here, or elfe by attending the fick.

I next had the good fortune to become acquainted with two of my countrymen, who purfued the fame ftudies with myfelf; this proved to be of confiderable advantage to me, who being a ftranger, could not otherwife fo foon have been informed of the many opportunities this place affords for the improvement in the medical fcience. In the afternoon, among feveral churches we visited that of Notre Dame, from which the model of the Cathedral of Upfal was taken.-Most of these churches are built with crofs ailes, and they are in general beautifully decorated. Three young girls flood before the altar in the church of the Hotel Dieu, and fang delightfully : this circumstance I have frequently obferved fince at other places.

Desember the 2d. The proceffion was performed at the Hotel Dieu, that is ufually made there on the first Sunday of every month. The friars and nuns, who nurfe the fick, were on this

this occafion clad in white, with black cloaks, and carried long candles in their hands.

My landlord reported my arrival, and gave in my addrefs to the lieutenant of the police.

December the 9th, I attended divine fervice at the Swedish hotel. It was performed in the German language.

December the 14th, I viewed the convent of St. Genevieve, its library, cabinet of natural hiftory, and fine gardens. The library is in the uppermoft ftory, in the form of a crofs, having book-cafes all round the fides, and under the windows: the doors of the book-cafes are of wire-work, and fecured with locks. The books are all numbered. Between each book-cafe is placed the picture of fome monarch or philofopher. The library is open on Mondays, Wednefdays, and Fridays, from two till five in the afternoon, and books may be borrowed from it. The cabinet of antiquities, and that of natural hiftory, are contiguous to the library, and contain feveral amphibious animals and fifnes thuffed, mummies, minerals, shells, and corals, but efpecially a great number of antiquities, all locked up within wire-work. The garden is neat, and is prettily ornamented with box cut in different forms.

On December the 24th, or Christmas eve, I faw the celebration and pompous ceremonies of the D 3 Catholic

Catholic fervice in all the churches: this being performed in the night, the churches were well illuminated with a number of chandeliers.

That I might not fuffer any time to pais awayunemployed, befides vifiting the hospital once, and fometimes twice a day, I engaged myfelf inanatomical diffections with M. Du MAS, furgeon to the Hotel Dieu. And while I attended the public lectures at the chirurgical college (St. Côme), the medical college, or ecole de medicine ; the botanic garden, or jardin royal; and the lectures in natural philosophy at the college naval, I did not neglect to attend private lectures upon anatomy, furgery, and midwifery. The apparatus and method of teaching all thefe fciences, are as various as excellent : neither are. they taught all at the fame time, but fucceffively, fo that the professions, who give their lectures at different hours, may have numerous audiences, and the fludents not be perplexed with too many fubjects at a time.

In the winter, anatomy is first read; then the chirurgical operations; afterwards chemistry and midwifery; towards fummer, botany, pathology, and other branches of the fciences. Theory is always accompanied and illustrated by practice. And befides the public lectures, most of the professions and affistants deliver private ones, and that fometimes even gratis.

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At

At most of the professors public lectures, their affistants, or *provôts*, are prefent; and when the professor has lectures upon any particular fubject, the affistant immediately demonstrates it practically.

Though medicine and furgery are fo amply difcuffed in public lectures, as would feem to render private inftructions unneceffary, yet private lectures are very numerous; of which the chief use appears to be not fo much the improvement of the fludents in theory, as to afford an opportunity of affifting with their own hands in the operations relative to furgery and midwifery. I therefore immediately engaged myself with Meffrs. Du Bur and Du Mas, to go through a courfe of chirurgical operations, and afterwards to perform them myfelf every day under their tuition; and with M. SALAY-RES, to improve myfelf in midwifery, and the various modes to be purfued in difficult labours.

From the account given above, the reader may collect, that at Paris there is the most confiderable medical college in Europe; and that no other place affords fo many opportunities for improvement in this fcience. The medical ftudents at Paris exceed 3000, a number unequalled at any other university.

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The lecture rooms are, for the most part, built in a circular form, with benches gradually rifing one above the other, and in the center and loweft part a table, at which the profession is feated, much in the fame manner as at the anatomical theatre at Upfal. At the door there is always a guard to prevent noife and confufion, and to give more dignity and eclat to the act. No perfon is fuffered to go in with a fword, or couteau de chasse, which would be inconvenient in fuch numerous audiences, not to mention more ferious confequences. The gate of the hall is opened when the clock ftrikes; and in order to obtain a feat in fome of the lower and more convenient forms, the pupils are frequently obliged to ftand waiting at the entrance an hour before hand. Both when the profeffor enters, and when he finishes his lectures, a plaudit is often given by clapping of hands.

At the ecole de medicine, difputations are held every Tuefday and Thurfday, when thefes of half a fheet long are argued. The hall is at this time parted off. Without, a perfon fits at a table, dreffed in black, and wearing a band, and diffributes the thefes. Within, the officiating profeffors are feated on benches lined with cloth, and in chairs. The refpondent is feated by the fide of the prefident, and like him clad in white linen

linen robes. The opponents are dreffed in black gowns and blue bands.

At *l'ecole de chirurgie* alfo difputations are held. The chairs are covered with laced velvet. Benches are placed all round, and chairs in the middle. All thefe formalities contribute to give dignity and folemnity to the act. A fimilar end is promoted by the profeffors delivering their lectures in their official robes, which are black, and ornamented with a white band. The French pronounce the latin fo much like their own language, that at first it is difficult to understand them.

Incitements to diligence feem to be unneceffary, in a place where there are fo many good opportunities for improvements in the arts and fciences; but yet they have not been forgotten. For this purpofe, public examinations are held, where the fludents who most diffinguish themfelves receive gold and filver medals, and other rewards. On the 15th of February, I was prefent at a competition of this kind at St. Côme, where the pupils interrogated and refponded to each other alternately. And in the month of March I attended an examination at the fame place, when fix profeffors put the queftions. Here any Frenchman that pleafed, except Parifians, might ftand as a candidate. Those who are admitted to the ecole practique, or who obtain the prizes

prizes at these examinations, enjoy afterwards the privilege of diffecting and performing the chirurgical operations on dead bodies gratis.

The Hotel Dieu is the largeft hofpital in Paris, and perhaps in the whole world. The fund for its fupport is faid to amount to fix millions of livres, the greater part of which was formerly raifed by voluntary contributions. The patients here are attended gratis, and their number is not limited. They are commonly carried hither on long litters, and their names entered at the admission-room. The entrance is through the church itfelf, to which an apartment is contiguous, having a row of beds, which, however, are not always occupied. At the bottom of this there are doors to other larger wards, which contain feveral rows of beds. A great number of the patients, efpecially the children, lie four in a bed. In the upper ftory the chirurgical patients are lodged; and the higheft ftory of all is occupied by lying-in women, and by those who are in the laft ftage of pregnancy. The male patients are attended by friars, and the females by nuns. Their food is fet on a table, and ferved out to them in bafons. A clofe-ftool covered over with cloth ftands by each bed. At night the wards are lighted up with large lamps. When a patient dies, he is carried to the deadroom (falle des morts). Those who die before and

and after midnight are laid feparately. Between ten and twenty perfons die in general in the courfe of every twenty-four hours, and are fewed up in coarfe unbleached linen. The number of patients generally amounts to about 3000, of whom 2000 are under the care of the phyficians, and 1000 under the furgeons. The number of them on the 1ft of March, was 3950; and the week following they amounted to 3978.

The hospital of *la Charité* is much finaller, but neater and more elegant than the Hotel Dieu. It contains about 200 beds, and has a dispensary of its own. Only a certain number of patients is received here, to whom M. Du, Scu, the director, gives tickets of admission.

The hofpital of the *Invalids*, for the maintenance of old and difabled foldiers, has one fpacious ward for patients, and is fituated near town. The chapel belonging to it is large, and has an elevated choir, which is elegantly inlaid with different forts of marble; part of its floor is deprefied, and here no one is permitted to enter but the King, on which account it is conflantly guarded by fentinels, as are alfo the doors of the chapel; many of thefe fentinels are old crippled foldiers. Adjoining to this hofpital is the *ecole militaire*.

The Bicêtre, or hospital for those that are afflicted with the venereal disease, is at a smalldistance

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diftance from town; and those who are received into it, must previously procure tickets of admission.

The botanic garden (*jardin royal*), which is under the able direction of M. THOUIN, is extenfive, and divided into two long partitions, inclofed within hedges, and the beds or fubdivifions are bordered with box. Towards the ftreet ftands the cabinet of natural hiftory, which contains feveral apartments; in the first of these, different forts of woods, barks, feeds, roots, and fruits, are kept in bottles, with the names affixed to them in French, the bottles being inclosed in cafes with glass doors.

In the fecond room is a fine collection of foffils in cafes, placed on inclined planes : here are alfo various petrefactions, and fpecimens of polifhed marble. The third chamber contains birds in glass-cafes of three different fizes; their eggs and nefts are placed on the loweft shelves : here likewife occur fome corals and fhells, with infects in fquare glafs-cafes. To the cieling of the fourth apartment amphibious animals were fuspended: here I faw a stuffed zebra, the skin of which had been brought from the Cape by M. DE LA CAILLE; alfo amphibious animals, fishes, infects, &c. preferved in spirits of wine. The room defined for anatomical preparations, was not yet quite finished. This collection is exhibited

exhibited to the public from two till five, on Tuefdays and Thurfdays. In every room there is a fentinel, who gives admiffion to people of a genteel appearance.

The lowest part of the garden forms a kind of wilderness, confifting of trees of various forts. On the left hand are orangeries and hot-houfes. Before these is a terrace on which pots are fet out in the fummer, and feveral fmall partitions for plants, inclosed with yew trees (taxus). Above thefe, on a rifing ground, are other hothoufes, and the gardener's dwelling-houfe, with a room for drying feeds. Behind the hot-houfes and the orangery, on the fame elevation, are walks and a grove, together with a hill, fo high, that the whole city of Paris may be feen from it. This garden is open to the public, both for botanical purpofes and for recreation. The hedges are formed of yew (taxus baccata), elm (ulmus campestris), holly (ilex aquifolium), box (buxus), lime trees (tilia Europæa), dogwood (cornus mascula), honeyfuckles (lonicera caprufolium), the double bloffomed cherry-tree (prunus cerasus), the judas tree (cercis siliquastrum), lycium barbarum, coronilla securidaca, the leffer maple (acer campestre), lilac (syringa vulgaris), &c. The trees planted in the garden were chiefly the cut-leaved Montpellier, and common maple (acer plantanoides, monspessfulanum, and campestre),

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campestre), the common and kermes oaks (quercus ilex, and coccifera), the common cypress (cupressive fempervirens), the Bermudian cedar (juniperus Bermudiana); yew, elm, lime, and horse-chesnut trees, the cercis, the phillyrea, both latifolia and media; the pyrus cydonia, or quince tree; and both forts of platanus, or plane tree.

The water of the Seine, that runs through the city, is unwholefome, effectially to ftrangers newly arrived. From the chalk it holds in fodution, it has a milky colour, and is apt to occation diarrhceas.

Large carts go about the ftreets in the morning to take away the foil, which the inhabitants have previoufly fwept up close to the walls.

The outfides of the houfes have for the moft part a gloomy appearance, from the windows being placed near the infide of the walls. Before the windows of the fecond and fometimes the third flory, there is often a little balcony with an iron railing, and the window opens inwards. Many of the floors are laid with bricks or ftone, and confequently cold—to prevent their bad effects, the inhabitants wear at home large flippers lined with fur.

The beds, which are well furnished with clothes, are very high and large. The bolfters are

are cylindrical, and rather inconvenient to perfons unaccuftomed to them.

No fireets are better lighted than those of Paris. The large lanterns fuspended on cords over the middle of the ftreet, project no fhadow. Fruits and other neceffaries are cried in the ftreets, as well as water, which is brought by men from the river for domestic uses.

The fhoe-blacks make a tender of their fervices to the foot paffengers, in every fquare, and almoft in every ftreet, which are extremely dirty all the year round, from the vaft number of carriages paffing and repaffing, and from the kennels being in the middle of the ftreets. In Sweden fuch gentry would have no employment for three quarters of the year. In rainy weather the ftreets are fcarcely paffable for umbrellas, which are indifpenfibly neceffary in a city where all the world follows the Japanefe failing of going bare headed.

Very finall muffs were worn here by both fexes, fo early as in the month of December. In the middle of January, when the cold is generally intenfe, fome people carried pitchers with charcoal in them, to keep their hands warm. During a thaw, water rufhes with fuch impetuofity down the ftreets that go floping towards the river, as to render them impaffable.

Auctions

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Auctions are often held in the open fireets. The auctioneer did not make use of a hammer; but after two or three articles had been put up, he faid *adieu*, and the money was paid down directly.

The tables in France are not always laid with knives and forks, which obliges the guefts generally to carry clafp-knives about them.

The police is admirable; patroles are going both night and day, one clofe upon the heels of the other, to fecure the peace of this large and populous city. In almost every street there is a commission, who has a right to determine triffing disputes.

It fometimes happens, that people, either by accident or otherwife, die in the ftreets. And as it is impoffible that all fuch perfons fhould be known, they are carried to a particular houfe, and exposed to public view in a room with an iron grate before it, in order that the friends of the perfons miffing may know where to look for them, before they are buried, which is done within a certain time after.

The commerce of good offices is here carried to fuch a height, that a perfon who is obliged to be out in the night, will frequently find men with lanterns in the ftreet, who, for a trifle, will light him home.

Le

Le Palais des Marchands is a large elegant building, where all forts of trinkets, &c. are fold. On new year's eve it is most fplendidly illuminated, and all their fineries are displayed.

Luxembourg is a fine palace, having a fpacious court and garden, which, as well as the *Thuilleries*, is open for every perfon to walk in, who has not a fword on. The gallery of pictures and drawings is open every Wednefday and Saturday, from ten till one o'clock. The hiftory of MARY OF MEDICIS is placed on one fide; and in the apartments on the other fide, a great variety of other paintings.

Many of the convents are large, having their court-yards, and often beautiful gardens, open to the public.

Vauxball, fituated beyond the Champs Elizées, was founded and is kept in elegant order by fome private gentlemen. On certain days there is a band of mufic, and every one that chufes it is at liberty to dance. Towards evening there is a difplay of fire-works. Admission is obtained by means of a ticket, which costs thirty fols.

Immediately after Chriftmas, the image of Chrift, and that of the Virgin Mary with the holy infant, were placed all over the ftreets and houfes, in little niches or cafes, environed with crowns and tapers.

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In

In Lent, when meat is prohibited, all the butchers-fhops in the city are flut up. Provifions are dearer at this time than at any other, there being a great dearth of eggs and milk, and butchers' meat being only to be had at the flaughter-houfe belonging to the Hotel Dieu, to the very great emolument of this place. In the day time, during the carnival, the people amufe themfelves in a thousand different ways. A bullock with gilt horns and otherwife decorated, is led round all the fireets of the town, with a boy on his back. Many went masked along, on horfeback, in coaches, or in chaifes, in fuch fantaftic dresses, and vast numbers, that a stranger might be eafily induced to believe, one-half of the inhabitants had loft their fenfes.

Befides the diverfions fo much abounding at Paris, which entice fuch numbers of travellers to this fplendid city, all the Swedes now refiding here, and myfelf among the reft, had the honour of being prefented to the then Prince Royal, the prefent KING of Sweden, and his brother, Prince FREDERICK ADOLPHUS.

But this joy was much damped by the news brought on the 1ft of March, of his Swedifh Majefty, ADOLPHUS FREDERICK's death, and of the fubfequent illnefs of his Royal Highnefs Prince FREDERICK ADOLPHUS.

On

On the 26th of March, his Swedish Majesty departed from Paris for Sweden, in good health.

On the 29th, I took a walk to the Bois de-Bologue, a wood confifting chiefly of oaks, where the people affemble and dance.

At Calvaire, a high hill on the banks of the Seine, on the afcent of the hill the Paffion of Chrift is reprefented in feven acts, in feven different rooms, difpofed two by two, in regular order. On the fummit of the hill are placed three croffes and the holy fepulchre, with a church. It now being Eafter, the crofs was prefented to the populace to be kiffed, who preffed forwards in crouds to the altar, and to the priefts, who prefented it to them. In the mean time, two friars receive upon plates their offerings on the occafion.

On the 30th, I was invited by two of my friends, Meffrs. VEBER and VOLSTEINO, to accompany them to the *Ecole Royale Veterinaire*, near *Charanton*. The number of pupils here amounted to near 100, who lived fometimes two or three together, in chambers on the upper ftory. On the lower flory is, on one fide, the anatomical theatre, which is very large; and on the other fide a long room, with three rows of feats in it, for the public examinations. On this day was held one of thefe examinations (concours), of which there are four or five in a year. E 2 The

The prefident and feveral of the deputies were feated at a long table, and on another fmaller one were placed the anatomical preparations.— The prefident and affeffors had paper before them to write their notes upon. The prefent fubject was the mythology of a horfe, which the ftudents demonftrated two at a time, one putting queftions and the other refolving them.— The two ableft competitors drew lots for the prize on this occafion.

During the examination their names were always mentioned. In the upper flory was the mufeum, where excellent preparations of various animals were preferved within glafs-cafes. The director of this fine fchool lived in a large houfe adjacent to it. On one fide of the yard was a fmithy for the inftruction of the ftudents, which had two fire-places or chimnies, and two forges in each fire-place.

The Infirmary for difeafed animals was divided into feveral apartments, which were placed in two long rows.

Here was also a finall botanical garden, laid out for the cultivation of medicinal plants for the cattle, and furnished with a little hot-house.

The apothecary's flop too was very handfome. Those who boarded here paid twenty livres per month.

Among

Among the various forts of fheep that I faw here, was a Turkifh one, which, having had its left thigh amputated, walked with a wooden leg.

April the 1st. Stained eggs ornamented with figures foratched on them, were fold in the ftreets during the Eafter holidays; and Lent being at an end, pigeons were brought in to the town, and butchers' meat was hung up for fale in the fhambles.

On the 25th of April, M. LA FAYE prefented to the academy of furgery a woman thirtyfix years old, who, in the feventh year of her age, had the fmall pox, in confequence of which, by means of abfceffes or gangrene, fhe had loft her tongue piece-meal. For two years after this fhe could not fpeak; but had fince accuftomed herfelf to it by degrees. There were now no traces of the tongue remaining, but only the glands or almonds of the throat projected a little : yet fhe fpoke very plainly, and in finging likewife articulated her words diftinctly. This fhe performed by fhutting her teeth clofe together, and by applying the under lip againft the upper.

May the 2d. To-day the French guards, who wear a blue uniform with white lace, and the Swifs guards, whofe uniform is red, after having marched with a large band of mulic to E_3 the

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the church of *Notre Dame*, received their benediction for this year. On this occasion I went up into the steeple, which affords a most delightful prospect.

On the 14th of May, were celebrated the nuptials of the Compte de PROVENCE with the Princefs of SARDINIA. All Paris was illuminated with candles and lamps, which were placed on the outfide before the windows; and victuals and wine were diffributed in the fquares.

On the 25th, I vifited the apothecary's garden, which, though fmall, contains feveral curious plants, and has at the bottom a grove for walking in. Free admittance to this garden may be obtained for twelve livres, and about fix more in gratuities to the attendants, when the gardener prefents the fubfcriber with a catalogue, by which the plants may be found that are not yet numbered.

On the 30th, the feaft of the Sacrament, or Fête Dieu, was celebrated. The friars of all the churches paraded about their refpective parifhes, with *le bon Dieu* inclosed in a glass-box with a fun round it, and placed under a canopy, with mulic, drums, cenfers, and baskets of flowers. All the houses, as high as to the top of the first floors, were hung with tapestry of all forts, which gave the streets fo different an appearance, that a stranger could not without difficulty

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difficulty find his way home again. In the ftreets flowers were fcattered, and in different parts of them altars erected, upon which the priefts mounted, in order to give their benediction to the ftreet and to the houfes. During the proceffion, money was collected for the purpofe of releafing prifoners from the *petit chatelet*. On this occafion a great many ridiculous fituations and abfurdities are exhibited. Parents were feen to throw their children on the ground, that the proceffion might pafs over them, yet without hurting them.

In the afternoon I faw the gobelins, or the magnificent tapeftry which is manufactured here, and is always publicly exhibited on this day.— All the walls of the court yard were hung with them on the infides, as well as the apartments. They reprefented feveral hiftories from the Bible, as also from OVID and other poets. The figures were full of animation.

On the 12th of June, I paid a vifit to the famous enameller, M. Roux, who makes eyes in enamel, repretenting all the diforders of that organ, as likewife artificial eyes, to fuch perfection, that they cannot be diftinguished from the natural. The different colours of the eyes he imitates with pieces of enamel of various colours, which he procures from Venice, and afterwards mixes them up with different metals. E_4 His

His apparatus, which, however, he does not fhow to every body, is as follows : On the table is fixed a brafs plate, on which ftands a lamp with a large wick. Under the table is a pair of bellows, which he works himfelf with his foot, and the mouth of which paffes upwards through the table : here a glafs-tube is fixed to it, which is bent towards the flame of the lamp, and by means of which he brings the enamel into fufion. Having fixed his materials to the end of a tobacco-pipe, he first begins the globe of the eye, which is made wider and wider in circles, and then brought into a fmaller compass, till only an aperture is left for the cornea, which is formed in that place by the addition of blue enamel. The end of the pipe is then heated, and the cornea is first of all blown, and afterwards the reft of the eye-ball. With a flick of blue and white twifted enamel, feveral dots are then made within the outward rim of the cornea: within this row is made a row of white dots, and within thefe another row of blue and white dots, all of which are melted together, and diffused over it by means of heat. After this fome black enamel is laid on, to form the pupil, and on the outfide of all a larger knob of fine and clear cryftal glafs, for the purpofe of making the cornea transparent. All this is then wrought up by the flame into the natural form of

of the eye, by blowing it outwards from within. Laftly, in order to get the pipe loofe, the flick of cryftal is very flightly faftened to one fide of the cornea, and the pipe is taken away, and at the fame time the globe of the eye has its proper fhape given to it behind.

The proper fize- and the circular form is given to the cornea and to the globe of the eye itfelf, during the blowing, by means of a pair of compasses. From the bulb fo much is taken off behind, that the whole fits exactly, and the edges are made fmooth and even in the flame. Previous to the pipe's being taken away, the globe is blown out at the two fides, in order to form the two angles of the eye. All this being done, a cryftal-glass is fixed very flightly to the edge of the eye, and the flick that was before fixed to the cornea, is taken off; the mark made by it is closed up by blowing on the part, and the eye put into a box filled with live coals and embers, in order to cool by degrees. This artift works with spectacles in a darkened room. Before the flame of the lamp he has a plate, the convex fide of which is turned towards the flame, the plate itfelf being fixed on a fland.

Every month he diffributes eyes gratis to fuch poor people as ftand in need of them. People in lefs affluent circumftances are fupplied with them at a cheaper rate than the rich, by whom he

he is well paid, the price differing from one to twenty-five Louis d'ors. The furgeons may have them of him for fix livres a piece. Any perfon who has had the misfortune to lofe one of his eyes, and wifnes to repair his lofs with one of enamel, may go to the artift, who will take a pattern for it from his remaining eye. A draught of the eye is required, or elfe a very accurate defcription may be fent him by the post, and he will make an eye according to the orders. In all fuch cafes he takes the precaution of putting by in a paper, famples of those forts of enamel which he has used, to make use of, if neceffary, another time. According to the different colour of the iris, the colours of the enamel muft be chofen; in like manner with refpect to radii, points, fhades, and veffels. The eyes vary in fize, according to the difference of age; and fometimes he makes them with angles or little hooks. One of these eyes may be worn three months, and even half a year, when, on account of its being injured by the friction, it must be changed. For an eye that reprefents fome difordery he charges a Louis d'or, or at leaft twelve livres. The number of eyes of this kind amount to fifty and odd.

On the 2*d* of *fuly*, towards evening, the effigy of a man was carried about fome of the ftreets in the city, and afterwards beheaded and burnt. This

This was faid to be done in remembrance of a man, who, many years ago, when in a flate of intoxication, had affaulted, and run his fword through an image of the Virgin Mary, that he met with in his way just before a convent; for which he fuffered the punishment which is ftill repeated in effigy, in commemoration of fuch a deteftable action.

M. GEOFFROY, whom among others I vifited, received me with the greatest politeness, and showed me his collection of infects. He had fet them up all along the walls of a room in fmall glass-cafes.

In one of the boats that run down the Seine, I took a paffage to *Verfailles*, and from thence to *Trianon*, for the purpole of feeing the royal botanic garden in this place, which is the moft elegant of any that I have feen; and of examining at the fame time the collection of plants of Meffirs. RICHARDS, made by the younger of thefe gentlemen, in his voyage to *Majorca* and *Minorca*.

On the 18th of July, I went from Paris to Rouen, in order to take my paffage in fome veffel from thence to Amsterdam, and from thence to the East-Indies, in confequence of an offer made me during my stay at Paris, by Profession BURMANN, which I accepted with the greatest pleasure.

ROUEN, 1771.

In my paffage to Rouen, which I made partly in boats down the Seine, and partly by land, I went to fee the vaft and remarkable engine at *Marly*, which carries water up to Verfailles for the fpace of feveral leagues, and over confiderable eminences.

Having travelled by day and night, I arrived at *Rouen* on the 19th.

The large bridge conftructed here on the Seine, which is of a confiderable breadth, is formed of boats, and may be taken to pieces.

The mountain near Rouen appeared to have regular beds or firata of chalk and fint, each bed being of the breadth of about a hand, or fornewhat more. Thefe firata reached only as far as to the middle of the mountain, where they were fucceeded by chalk. The fint is for the most part black, formetimes white, grey, yellow, or bluith, and at the fame time exhibited many cavities and elevations. Though the chalk is thus intersperfed with flints, yet ftones are cut out of it for building. Near Paris the chalk appeared to be more mixed with petrefactions. The mountains near *Bouille* contained alfo flints, and near *Quillebeuf* it confifted of chalk rubble, with finall pieces of flints.

On the 9th of August, I embarked in a Dutch vession. We fell gently down the river, frequently casting anchor, and sometimes following the

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the tide at ebb. The ebb, the nearer one approaches to the fea, becomes longer and longer, infomuch, that a great part of the land was left dry, and the fhips lay aground, and fluck in the foft clay.

On all holidays the inhabitants of the villages were feen dancing and amufing themfelves out in the fields. The girls had a particular kind of drefs, confifting of bare ftays with bows of ribbands behind, and on the fides of the petticoats; gold and filver lace about the head, with a piece of linen hanging down on each fide of it.

The mountains, befides chalk and flint, feemed to confift more or lefs of light or dark layers of chalk, of the thickness of an inch, formed by the tide. This is very confpicuous in the elevations which are yet under water, and become visible only at the ebb; the colour of these strata is owing to the clay being dark beneath them ; but the fediment, which the water deposits on its surface, is lighter, or of a yellowish grey. This affords an evident example of the manner in which the beds of mountains are formed, viz. during the ebb, which comes on flowly, the water deposits a fediment, by which means fmall elevations are formed like promontories, refembling fteps placed one above another; before the time of flood, which comes on

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on rapidly, the fediment of each tide is become in fome meafure hard. The hills from Paris towards the fea, were for the most part of the fame height as the caftle-bill near Upfal: and bays were feen running into them, which fometimes shelved off gradually, and at other times were quite fteep. Their fteepnefs frequently proceeds from pieces falling down; this was clearly evident at low water from the fmall banks that are now forming for future generations .---Below the mountains, in fome places, lay plots of level ground of different fizes, which the water had formerly accumulated by degrees, but had now left entirely; fome of thefe were ftill bare, while others, though in a foft ftate, were already over-grown with grafs and trees, and thus already formed into islands. Nearer towards Havre de Grace, the tide has formed near thefe iflands, bays which refemble finall harbours, and are in every refpect fimilar to those that are feen on a larger fcale nearer the higher mountains. All this clearly flows the formation of the mountains, as well as the decreafe of the water. More towards the fea the flints appeared to be both in fmaller quantity, and lefs mature, than higher up in the country; in the vicinity of the fea they were pale, were covered with a thicker grey coat, and feemed to be lefs hard. The flints are, no doubt, coagulated in and

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and by the chalk, however diffimilar thefe two fubftances are feparately confidered. In bread, which, from impeded fermentation and cold, turns flony, one would fearcely fuppofe the hard part to be of the fame materials with the reft, although it has only undergone the process of baking.

In going down the river a pilot conftantly attended on board the vefiel, to take care of the anchorage while in low water. On this occafion the vefiel is frequently laid clofe to the fhore, and in a finall creek, where it lies on one fide in the foft mud. Our pilot was imprudent enough on fuch an occafion to lay our vefiel directly acrofs one of thefe creeks, fo that at low water it refted on its fore and aft ends; and as it had no fupport in the middle, it broke in two, and was afterwards obliged to be taken to Havre de Grace to be repaired. This fhipwreck on dry land put me under the neceffity of fending my baggage on board another vefiel, in which I continued my journey to Amfterdam.

Honfleur is a little town at the mouth of the river, that has a fine harbour, at which we artived on the 22d of August. The tide left a great deal of the bottom dry. Here shrimps (canter fquilla), were caught in a net fixed between two sticks, which the fisherman pushed before him.

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From the wind the failors get weak and red eyes; from the rolling of the fhip, bandy-legs, and prominent pofteriors; and from labour and handling of the rigging, hard and callous hands.

On the 30th of August, I arrived at Amsterdam, and was received with a hearty welcome by my patrons, the Professions BURMANNS.

In September the ufual annual fair was held, which lafts three weeks, when booths are fixed in all the fquares, and in many other places.

Whilft I was preparing for my long-intended voyage, I vifited almost daily the physic-garden in the morning, and spent the evenings at Profession BURMANN's house, among his collections and in his library. In the physic-garden I examined, at his request, all the plants in the parterres, to see whether the names affixed to them were proper. The plants were arranged according to the system of VAN ROVEN, and close by each plant was placed a painted stick, with a number on it.

I also went to see the academy of painting, the anatomical theatre and its preparations, the exotic animals at *Blue-John's*, and other curiofities; and early every morning I took care to visit the hospitals. Blue-John's (*Blaauve Jean*) is a private house, where wine is retailed, and where various forts of curious animals, birds, as well as beasts, sometimes very rare ones, from both

both the Indies and Africa, are kept in cages and exhibited. Thefe beafts attract a great number of people to the houfe, and thus promote the fale of the landlord's wine; for the fpectators are always obliged to buy one or more bottles of wine at a dear rate, though they are allowed to fee the beafts gratis.

I had an opportunity of making acquaintance with a M. KLEINHOFF, who had been three years in the Weft Indies, and one and twenty at Batavia. At this time he lived at the diftance of two day's journey from Amfterdam, upon his revenues; and gave me information in feveral particulars relative to the Indies.

I alfo became acquainted with a M. SCHEL-LING, who had been a long time in America, and was shortly to return thither in the quality of fupervifor of the hofpitals. Among other things he told me that the difeafe called jaffi, or the yares, to which the Americans were fubject, was unknown in Europe, and was painful, chronic, and eruptive, caufing a fenfation in the skin like that which arises from the pricking of needles; it is cured by means of mercury. The leprofy he afferted to be very common in America: it makes its first appearance in the form of a finall fpot, which afterwards, by degrees, fpreads all over the fkin .---This fpot is devoid of all feeling, even if burnt with VOL. I. F

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with a red hot needle; and in process of time, the fingers and limbs fall off while the patient is at work, without his perceiving it. With good diet the difease may be concealed for a long time, and when the eruption becomes universal, it generally goes away. Sudorifics are of fervice, but mercury hurtful.

On the 4th of November, a profession of laws was introduced into the Athen.eum, or academy, here; who made an oration de jurisprudentia civili circa promovendam mercaturam. All the professions were dreffed in black, and wore cloaks, bands, and large wigs with flowing curls, of which two hung in front, and one on each schoulder.

Since the preceding year, when I ftayed a few weeks at Amtherdam, and paffed many agreeable hours in Profeffor BURMANN's library and cabinet of natural hiftory, that gentleman had, during my ftay at Paris, paffed a great many encomiums on my knowledge in natural hiftory, in the prefence of fome gentlemen at Amfterdam; and at the fame time reprefented to them, how ferviceable I fhould be to them, as lovers of curious exotic plants, if I could but have the opportunity of going, at their expence, to fome of the northern parts of Afia, efpecially Japan, from whence we had no plants in Europe, although it was probable, that they would

would bear the climate as well as others lately brought hither in great numbers from North America.

These gentlemen, who spared no expence for their fruit and pleasure-gardens, listened with pleasure to this proposal, and resolved to furnish me with the means and recommendations necessary for a voyage to Japan. And as no nation, except the Dutch, is suffered to come into Japan, it was necessary for me both to understand Dutch and to speak it; to obtain this, I requested to be permitted previously to pass a couple of years at the Cape of Good Hope, and to be taken into the fervice of the East India Company.

The Dutch East India Company fit out their numerous ships at three different seasons. The largest fleet is ready in September, and is called the Kermes fleet; the second, which is less numerous, is ready before Christmas, and is called the Christmas fleet; the third, called the Easter fleet, fails about the time of that session, and is the least.

As the first fleet lay ready in the Texel, only waiting for a fair wind, and the fecond fleet also was provided with all its officers, it was refolved, that I should be engaged in the capacity of surgeon-extraordinary in one of the ships then bound for the Cape of Good Hope, by F 2 which

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which means I fhould be more at my leifure on the voyage, without being under an obligation to do duty any farther than I myfelf fhould pleafe. By this I afterwards gained the great and ineftimable advantage, that upon my arrival at the Cape I could ftay three whole years, without being obliged to attend the fhip to the different places whither it was fent.

I was confequently received on board the *Schoonzigt*, and had the pleafure to fee it commanded by a Swedish captain, M. RONDE-CRANTZ, from *Smaland*, who was born near *Calmar*.

The little time I ftill had to remain, I fpent in informing myfelf, as much as poffible, of the ftate of this powerful Eaft India Company, as well as of the œconomy obferved on board their fhips, and alfo of the regulations of their factories in the Eaft Indies.

On the 6th of December, the crew that was to go on board the fleet, paffed mufter, and took the ufual oaths in the East-India-House. After this their baggage was brought on board. All their chefts, which they buy new, have the mark of the Company burnt on them in the India-House, and are then brought on board in the Company's own craft. A foldier is allowed to have a little box about two feet square, to contain his scanty store. A failor, who wants a greater

greater change of clothes, is allowed one as large again; but the officers may bring one or more large chefts (befides baskets, bottle-cafes, and cafks of beer) as well for flowing merchandize in, as for provisions; though for the most part, befides thefe, they find means of conveying feparate chefts of clothes and provisions on board. In each ship there are above a hundred failors, and from two to three hundred foldiers. A day or two previous to the crew's going on board, a drum is beat throughout all the ftreets, for the purpole of informing them of the time when they are to join the boats, in order to be transported on board the ships. On these occafions, if an officer lives in that ftreet, they do him the honour of drumming violently, and for a long time before his door-an honour that always stands him in a few shillings, and draws a great concourse of people of all denominations about his houfe.

On the 10th of December, I had the honour of going with M. BEAUMONT, the director, in the Company's yacht to the Texel, where the fhips, bound to different places in the Eaft-Indies, lay ready, waiting only for the mufter and a fair wind. I was amply provided with letters of recommendation to the Governor at the Cape, M. RYK TULBAGH, from M. RHEEDE VAN OUDSHORN, who, about Eafter, was to go

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to the Cape in quality of Vice-Governor; and from the burgomafter TEMMINK, as alfo from Profeffor BURMANN and his mother-in-law, to M. BERG, counfellor of police; and to M. NETHLING, fecretary of the court of juffice.

We did not reach the Texel before the next day.

On the 14th, I had the pleafure of being prefent at the mufter in the Nieues Roon Indiaman. As foon as the officers had been called over, they received their inftructions, their cabins were given them, and the fhip's council was appointed. The failors and foldiers were then muftered, and their abilities enquired into afresh, although they had been examined previous to their being received at Amfterdam. If they now were found to be not fo well qualified as they ought to be, a circumftance which was frequently decided by their looks alone, and the teftimony of a furly fkipper, their monthly pay, contrary to prior agreement, and to all juffice and equity, was diminished to the value of a gilder or more. As foon as the director had taken his leave, the whole crew went aloft into the rigging, and waving their hats and caps, gave three cheers. This was acknowledged by the fame number of cheers from the yacht; the thip then fired her guns, and was answered by the yacht.

In the evening of this day, an unlucky accident happened on board the fhip in which I was to fail. A foldier had his left foot torn off by the bite of a rope, near the capitan, in fuch a manner, that the tibia was feparated at the joint, the fibula obliquely fractured, and the whole held together by the tendo achillis only. This difagreeable occurrence deprived me of the pleafure of fpending my time on board the yacht, till all the fhips had paffed mufter, with the Director BEAUMONT, who was a very amiable as well as fenfible man, and was the occafion that I was obliged to go on board the Schoonzigt the next morning. The patient was then dreffed, without our being able to find and tie up the artery, for which reafon it was neceffary to keep on the tourniquet; and, whilft preparations were making for the amputation of the leg, orders came for the patient to be carried to the hospital at Amsterdam.

We staid a fortnight longer for a fair wind, during which time I had an opportunity of making myself acquainted with the economical regulations observed on board, both with respect to the healthy and fick part of the crew. Each man fingles out for himself a companion, in whom, during the voyage, he can place most confidence. The messes are so regulated, that feven men dine at a table, which has a F_4 caterer

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caterer. to keep order at it. To the failors as well as foldiers are diffributed wooden-bowls, as being lefs fubject to accidents on board of fhip, than earthen veffels.

As the crew had been but a week on board, I expected, on my arrival, to find no patients; but found, to my great furprize, that feveral men were already ill; I heard alfo, that the number of fick and dead on board the fhips which had been lying in the Texel fince September laft, was fo confiderable, that when we failed, feveral fhips, fuch as the Groendal, the Huyfter Mey, the Kroenbourg, and the Hoenkoop, were obliged, for want of hands, to wait for a fresh fupply, notwithstanding they had been fent out at first with more than three hundred men.

The caufes of this epidemical difeafe, which I minutely inveftigated, I found to be multifarious. The air was at this time very heavy and moift, and the fog in general fo thick, that nobody ventured to pafs from one fhip to another without taking a compafs with him, in order to find his way back, as no light from any lamps or lanterns that were hung out could pierce through the fog. Till the fhips get under fail, little or no order is obferved, either in the œconomy of the fhip, or among the crew itfelf. But what very much, if not folely, conduces to the increafe of maladies, is undoubtedly the

the great number of difeafed foldiers fent on board by the kidnappers (zeelverkoopers) with bodies partly emaciated, and partly replete with fcurvy and corrupted fluids. Thefe men, unaccuftomed to the manner of living on board of fhip, and to the damp cold fea-air, foon contract putrid fevers, and infect the reft of the crew. This happens the fooner, if they are alfo ill provided with clothes or dejected in mind.

And as thefe kidnappers, the most detestable members of fociety, frequently effect the ruin of unwary ftrangers, by decoying them into their houfes, and then felling them to be tranfported to the East-Indies, I have thought it my duty to make fome mention of them in this place, as a caution to all fuch as may have occafion to go to Holland. These man-stealers are citizens, who under the denomination of victuallers, have the privilege to board and lodge ftrangers for money, and under this cloke perpetrate the most inhuman crimes, that do not always come to the knowledge of their fuperiors, nor can be punished by the hands of justice. They not only keep fervants to pick up ftrangers in the ftreets, but also bribe the carriers (kruyers) who carry the baggage of travellers from the fhips to the inns, to bring ftrangers to lodge with them; who, as foon as they arrive,

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are generally fhut up in a room, together with a number of others, to the amount of a hundred and more, where they are kept upon fcanty and wretched food, entered as foldiers on the Company's books, and at length, when the fhips are ready to fail, carried on board. The honeft dealer, on the other hand, receives two months of their pay, and what is called a bill of tranfport, for 100, 150, or 200 gilders. In the two, three, or four months, during which they are fhut up at the kidnapper's, they contract the fcurvy, a putrid diathefis, and melancholy, (which break out foon after they come on board); and by their pale countenances, livid lips, and fwelled and ulcerated legs, are eafily diffinguished from the others who are healthy and found. A transferable bill for a certain fum of money is fometimes given by the Eaft-India Company to perfons enlifted in their fervice, as an advance of their pay, to enable them to fit themfelves out; but this bill is not difcounted by the Company, unlefs the perfon to whom it was given, ferves to the full amount of the fum thus advanced. Thus if the perfon enlifted dies before he has ferved to the full amount of the bill, the deficiency is not paid. For this reafon fuch a bill is always negotiated at a great lofs, proportionate to the ftrength of conftitution or health of the affignee, and to the time that

that he appears likely to live. In fact, it is feldom negotiated at more than half its nominal value. Many innocent people, often of decent family and in eafy circumftances, are trepanned by these man-ftealers, and must go as foldiers to the East or West-Indies, where they are obliged by the articles of their agreement to ferve at leaft five years. Yet all do not fall into their hands in this unfortunate manner, but many having no other means of fubfiftence, go of their own accord to one of these traders in human flefh, who provides them with board and lodging on credit, and for his own fecurity fhuts them up, till they can be fent on board. It is unfortunately too true, that many perfons are fo unhappy as to fall in the manner above-men-'tioned into their fnares; yet neither are thefe things done under the fanction of government, nor do they go unpunished when they are difcovered.

Neverthelefs, the directors of the Eaft India Company can neither be defended, as not knowing of fuch fcandalous practices that difgrace humanity, nor, indeed, be acquitted of favouring them at times. For as the company is often in want of men, and does not care to give better pay, they are obliged to overlook the methods ufed by thefe infamous traders in human flefh to procure hands; and if at the mufter

mufter any one fhould think proper to lay open his cafe and misfortune, the director, not overfcrupulous, never thinks fuch a one too good for the Company's fervice. So that the directors would be able to prevent all fuch illegal violence, if at the reception of their men, and efpecially at the mufter of them on board of thip, they made a ftrict enquiry into particulars, or wifhed in the leaft to vindicate the rights of mankind. It is common to hear that these unfortunate perfons have been deprived of their clothes and other property by the kidnappers, who in their flead have fent them out with two or three pair of worfted flockings, trowfers made of fail-cloth, 16lb. of tobacco, and a keg of brandy: of this feanty and certainly not very enviable property, the greateft part is frequently ftolen from them on their arrival on board, fo that they are afterwards obliged to run barefooted and bare-headed in the cold, having fcarcely fufficient to cover their nakednefs.

The crew being thus badly clothed, dejected in mind, and forced by rough means to hard and fevere labour, it is not furprizing that difeafes fhould fuddenly fupervene, and be rapidly propagated. Out of twenty patients, at the beginning of the voyage, fcarcely one is a failor, but all of them foldiers from the kidnappers. Thus thefe dealers in human flefh undoubtedly occafion great lofs

loss and injury to the Company with their wretched fupplies. This the Company might prevent, if they eftablished a house on their wharf, in which poor people, who were defirous of being engaged in their fervice, might be decently fitted out, and maintained till such time as the ships were ready to fail, and afterwards ferve to the amount of what had been advanced to them, without, at the same time, enriching an infamous ruffian.

Theft can hardly be carried to a greater height, than it is on board an Eaft Indiaman during the time it lies in the Texel. Chefts are broken open in the night, and emptied of their contents, fo that the owner has not a fingle rag left for fhifting himfelf: hammocks and bed-clothes are ftolen, infomuch that the owners are obliged to fleep on the bare boards of the deck: fhoes and night-caps are purloined from the feet and heads of thofe that are afleep; and the fick have frequently their breeches and ftockings ftripped from off their bodies: fo that thofe who flept, when they awake, and the fick when they recover, muft run about in the cold leare-headed, bare-footed, and half naked.

As long as the fhips are at anchor in the Texel, the medicine-chefts muft not be opened, but the neceffary medicines are taken out as occafion requires. The patients are at this time kept

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kept on the lower deck under the forecaftle; but as foon as the fhip is out at fea, they are brought up between decks as long as the capftan is not ufed. For fuch patients as have no hammocks, a fhelf is made of boards to fleep upon at one fide, and at the other is placed one of the medicine-chefts, the other being fet juft before the windlafs, where during the whole voyage the patients are dreffed.

The phyfician of the Company, indeed, Dr. FAMARS, had ordered, by way of preventing infection in the fhips, that the attendants fhould hold a fponge filled with vinegar in their mouths, and wafh themfelves with vinegar; that the healthy fhould drink tamarind-tea, and take fpirit of fcurvy-grafs; that the convalefcents fhould have tincture of bark and frefh mutton; that the fides of the fhip fhould be fprinkled with vinegar, &c.; but thefe and other precautions were not fufficient to put a ftop to the prevailing contagion, which hardly ceafed during the voyage, till almoft all the half-rotten fellows fent in by the kidnappers were carried off.

On the 30th of December, at three in the afternoon, we fet fail, and left the Texel with a favourable eafterly wind, that had lasted, and even increased, for the space of twenty-four hours; Capt. MORLAND, of the ship Bovenkerkerpolder,

kerpolder, as first in command, having previously given the fignal, by the firing of guns, for weighing the anchors. A great number of East India and other merchant ships bore us company. After the pilot, the custom-house officers, and others, had taken their leaves, and left the ship, and we had passed the third tun or beacon, we fired our guns, and wished each other a happy voyage.

On the 31st, in the afternoon, we paffed the Channel that feparates England from France.

1772, Jan. 3, we had got out of the Channel into the Bay of Bijcay, when the water, which hitherto had been green, now appeared quite of a blue colour, and the air was confiderably warmer.

On the 4th, among other diffies, there were ferved up at night, at the officers' table, fome pancakes, for which the domine or chaplain, as caterer, had given the flour out to the fleward, and by miltake, or rather from groß flupidity, had taken almost one half of fome white lead, which had been put into a pitcher, and fet by in the cupboard, for the purpose of painting the ship; the extraordinary weight of which, .however, did not excite any sufficient in him. The pancakes were thin, with brown spots here and there scattered over them, especially on one side; but otherwise white, and as dry as if there had a

not been a morfel of butter put into them .---The cook being fuspected of having dreffed them ill, and been too fparing of the butter, was called in, and feverely reprimanded .--Most of the officers at table, however, ate a pancake apiece, which tafted fomewhat fweetifh, but betrayed no marks of poifon. The remainder were confumed by the purfer and boys, fo that in all twenty perfons partook of them. The effect of the poifon was this, that fome of them immediately threw it up again, efpecially the boys, as having the most irritable nerves; others did the fame in the night following, and during the whole of the next day. The whitelead, fettled at the bottom of the veffel, was of a dark-grey colour. Though the verdigrife of fome copper pan was now chiefly fufpected, and the fea-fickness likewife came in for its share of the blame, yet at the fight of this fediment, it came into my head to examine it more narrowly. I therefore put a little of it on live coals, and with a blow-pipe melted it into lead.

At the fame time I recollected, that the acid French wine which we drank at table, and which now rofe on our ftomachs, and tafted quite fweet, could not be fo from the finall quantity of fugar that was ftrewed on the pancakes, but might poffibly have been rendered fweet by means of fomething of the nature of lead. This

This, though I could not conceive how it was brought about, induced me to make the experiment above mentioned. Those who happened to vomit in the evening, got rid of the lead, and recovered perfectly, as was the cafe with all the boys that were fervants in the fhip. Nor had feveral of the officers, that vomited foon, any farther inconvenience from it. Probably they had got fome of the pancakes that were first fried, which confequently contained lefs whitelead. Others, however, paid dearer for their repaft, a circumftance which deferves to be related feparately. The Captain, having vomited, was well for a couple of days; but was afterwards feized with a violent cholic, which could not be alleviated either by emollients externally applied, emollient draughts, or clyfters, but continued for two days; after which a dofe of laudanum was given in the evening, on which the cholic entirely left him, and never incommoded him afterwards. He was of a confumptive habit; and his cough kept away for feveral days in confequence of this accident. But nobody was more tormented than myfelf and the domine. In the morning of the 5th, I first began to have retchings, which continued almost all that day, fo that I had in all between thirty and forty fits of vomiting, from which about five fpoonfuls of a brown fediment precipitated to the bottom of YOL. I. G the

the veffel. The pancake I had eaten was one of the uppermoft in the difh, and confequently was one of those that were fried last, and thus contained a great quantity of white-lead, which, on account of its weight, had funk to the bottom of the pitcher. At the fame time I was feized with the head-ach and cholic, which latter fymptom however, was not very violent. Already on the fame day the gums fwelled near the roots of the teeth, forming finall knobs, as it were, that feemed to contain white-lead, and were very fore; the glands alfo fwelled in the mouth, as well as those under the chin. The faliva was very tough, and the tongue brownifh. By means of copious drinking, the vomiting was promoted and rendered eafy, and an emollient gargle was used to allay the fwelling in the mouth. On the 6th I was in a complete, but gentle, falivation, and my mouth was ulcerated, efpecially at the fides, a circumftance which was accompanied with a difagreeable ftench. My teeth were covered with a yellowish flime. My urine was reddifh. In order to carry the peccant matter downwards, I took a gentle dofe of phyfic. On the 7th the falivation proceeded gently, and the ulcers in my mouth grew quite yellow. On the 8th I was a little better; but the night following, the whites of my eyes were inflamed, an inflammation which was difperfed with the greatest eafe, merely by the friction of the eyelids.

lids. On the 9th the tears flowed copioully, were fharp and corrofive. The right-fide of my face fwelled, with a violent ear-ach, which was extremely troublefome, particularly in fwallowing, fo that it was with the greateft difficulty I could drink, but it was impoffible for me to chew or fwallow any thing folid. Towards noon a kind of red fpots, of different fizes, appeared on my fingers, as if caufed by cold, but which were not very fore : thefe vanished in a few hours, and made their appearance again in a couple of days. On the 10th the fwelling of my throat abated, and the peccant matter, or particles of lead, moved from my head into my ftomach, and caufed fresh fits of vomiting. On the 11th this vomiting continued, with the appearance of a fmall quantity of blood. On the 12th the fame, with more blood. I was now very low from the repeated vomitings. On the 13th I had only a nausea, and at times flight fits of the cholic. On the 14th my mouth and throat were fo very dry, that they felt as if they were glued together, and the white-lead was perceived in my faliva. On the 15th I had the cholic again, with a ftiffnefs in my knees, a fymptom which was likewife experienced by four of the officers. On the 19th I had a head-ach and naufea, with great debility. On the 21/f the cholic again, and flying pains in my right-arm, but fixed pains in my knees, under the foles of my feet, G 2 and

and between the very bones of my feet, infomuch, that I could hardly walk. In this ftate I continued till the 22d; afterwards I was tolerably well, and by degrees regained my ftrength. till the beginning of February, when my pains returned, attended with a violent rheumatifm, which forced me on the gth of February to take to my bed, on account of a weakness in my knees, which increafed daily. By way of cleanfing my ftomach, I immediately took an emetic. On the 16th I had a violent head-ach, and pains in my joints, with cholic, and even fever at noon and in the afternoon, when the pains were most violent. During all this time I took cooling medicines for feveral days, and in the morning an ounce of elect. diapruni, which occasioned a cholera that weakened me apace, even to faintnefs, but immediately gave way to a dofe of laudanum. And afterwards, though I was able to quit my bed, yet I was conftantly afflicted with a heavinefs in my head, and weaknefs in my knees, which continued without any remarkable alteration till the 23d, when the heavinefs in my head increafed, and was accompanied with a pain in my right-ear. On the 24th my head ached violently, with hard throbbings on the right-fide, and that to fuch a degree, that when fitting upright in my bed, or otherwife in motion, I was almost in convulsions, and was under

under fome apprehenfions of an apoplexy. My ear-ach was also very violent, and at times I felt fome fymptoms of the tooth-ach, all on the right-fide. I therefore ordered myfelf to be bled, and used the antiphlogistic regimen. On the 25th the fame fymptoms continued with almost unabated force, and I passed the night reftlefs. On the 26th my ear-ach had entirely left me, and the throbbing in my head was much abated; but instead of these, I was seized with pains in all my joints, which in fome of them were flight, in others again more fevere, efpecially in my knees and elbows, fo as to produce fome degree of lamenefs. My cholic had abated, but a violent and momentary pain darted at times from my left kidney. When I lay on my back, I was troubled with an afthma (which was fometimes better and fometimes worfe) and a dry cough. The fymptoms (perhaps from the heat of the day) were always aggravated from ten in the morning till four in the afternoon, when my pulfe likewife was high and intermittent. My ftomach could not bear any thing acid mixed with my drink : as for inftance, infufion of tamarinds, lemon-juice, &c. but only now and then a drop or two of spiritus nitri dulcis in my tea. The application of a blifter to the nape of my neck did not abate my head-ach in the leaft. On the 28th the throbbing in my G 3 head

head ceafed, as well as my dyfpnœa, though my head still continued to be as heavy as lead, and I had an obfcure pain in my joints. Towards evening this pain increafed, even in the fhoulders, lasted the whole of the 29th, after which it became still more violent. On the 1st of March, and the following days, it abated, but the heavinefs in my head, and the weaknefs in my knees, together with fome degree of pain, caufed by the particles of lead deposited there, continued for a long time, and would undoubtedly have impaired my health in a greater degree than they did, had I not arrived in fuch a delightful country as that of the Cape of Good Hope; where I could use a great deal of exercife, and receive refreshment from all the agreeable fruits, vegetables, and wines, which this country, in the hands of the industrious Europeans, produces.

The domine, or chaplain, was at first likewife feized with violent vomitings and cholic, his gums fwelling, as did alfo those of the commander of the foldiers, and their mouths broke out into ulcers, which turned yellow, though the latter of these gentlemen had not such violent fits of vomiting, nor was so much tormented with the cholic. Towards the end of January the domine had a fresh access of the cholic, which

which was with difficulty removed by emollients, and a few days after returned with a perfect *iliac* paffion; neither *rhubarb* nor decoction of *fena*, nor the ufual acid clyfters, nor purgative pills, could remove this obftruction; recourfe therefore was had to a clyfter of a decoction of tobacco, which at firft had no effect, for which reafon it was repeated, when a paffage was procured; but the cholic pains and the vomiting did not ceafe, till a confiderable dofe of *laudanum* had been exhibited.

The cook's mate alfo, in the courfe of a few days, when his first fits of vomiting were over, was alfo feized with the cholic, which at first yielded to the ufual remedies, but afterwards returned, and increafed to fuch a degree, that on the 2d of February we were apprehensive that an inflammation of the bowels had taken place, as the patient was almost raving mad with the pain, and attempted to rip up his own belly: he was therefore bled, and a clyfter was administered, which eafed him a little; but the following day his cholic turned to the iliac paffion. No paffage could be procured by ftrong clyfters, purgative pills, nor even by tobacco-clyfters at first, till two or three of them had been adminiftered in vain. Laudanum was afterwards given him to eafe his cholic, but this did not affift him fo well as at first, but only gave him eafe for a fhort G 4

fhort time. On this account a blifter was applied to the region of the ftomach: this perfectly removed the cholic, but the patient was afterwards lame in one thigh, fo as not to be able to walk, an inconvenience, however, which went away gradually of itfelf.

Though no life was loft in confequence of this unfortunate accident with the white-lead, yet, as I myfelf was the principal fufferer from it, it taught me to be more particular and careful with refpect to my diet in the courfe of my travels afterwards.

January 17. To-day we made Port Santo on the ftarboard. The Dutch veffels, effecially if they have been beating up and down a long time in the north-fea, in general make for St. Jago, in order to take in frefh-water and fome provifions; though the water is faid not to keep well on board. As we had a fair wind, we paffed by this place, that we might not be retarded on our voyage.

On the 19th we had the lofty yellow and red mountains of the grand *Canary* on our righthand, and *Fort Ventura* on our left.

On the 20th we got into the trade-wind.

On the 26th divine fervice was performed on board for the first time during the whole voyage, and confisted of prayers, finging, and reading in the Bible. Morning and evening prayers were afterwards

afterwards read feveral times, when the weather was fine; but not often.

In the evenings and nights there appeared thoufands of fhining animals, like ftars, in the track of the fhip; as alfo large balls which threw a light, like faint flafhes of lightening, in at the cabin windows.

On the 29th we were in lat. 15°.

In the night of *February the 3d*, and the following nights, when we were in the 3th degree of latitude, it lightened without any thunder being heard. This was faid to be a fign of wind, though it did not prove fo then. We caught fome fifh, and fome large birds, called *malmucks*. The heat grew every day more and more intolerable; and lemon-juice with fugar was now an extremely acceptable and refrefhing beverage.

On the 8*tb* we faw an elegant water-fpout. The column began below, near the water, in fmall fcattered clouds as it were, from which it afterwards arofe in the form of a flender arched chord with finooth fides, and when arrived above the middle of its height, grew thick by degrees, and terminated in a cloud. Its duration was but fhort, as it vanifhed foon after we defcried it.

On the 21/t the fhip was followed by a great number of fifhes, which have the laft *radius* of the fin on their back, very long (*balliftes*).

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On the 22d, a little before noon, we paffed the line. The heat was now fo great that butter was liquid, like oil, and the fealing-wax on letters was fo foftened, that when the letters were laid together, the impression of the feal was effaced. Flying-fish (exocoetus volitans) appeared now in great numbers: they flew generally in one direction, and fometimes, though but feldom, in contrary directions. A kind of large birds of a black colour were feen, flying very high. The fcurvy now began to prevail more than ever. Our water, notwithstanding that quickfilver had been put into it, grew putrid, and began to emit a cadaverous finell, and generated maggots, fo that it could not be drank but in tea or coffee ; but in the course of a few weeks it purified itfelf, and after having precipitated to the bottom all its filth and infects, became fweet and palatable. In the mean-time, rain-water was collected more than once, notwithstanding it had been prohibited, on the fuppofition of its generating difeafes, befides, that it tafted of pitch from the cordage of the ship. Ale was reported to keep, if two eggs were put into the barrel to diffolve in it.

On the 28th we paffed the line again. As foon as we were come a little to the fouthward of the line, the wind increased by degrees, though it was frequently rather unfavourable, driving us towards

towards the American fide above feventy leagues from the fhore. The cold alfo increafed daily, in proportion as we approached the fouthern pole.

On the 24th of March we were in the latitude of the Cape of Good Hope. Here we caught dolphins, and ate them.

On the 26tb, the large birds, called *malmucks*, which are brown and white underneath, paffed us in great numbers, which was confidered as a fign of our not being far from fhore. When tired, they fat themfelves down to reft upon the waves. They did not appear on the following days.

On the 28tb, a plant of the fpecies called *trumpet-grass (fucus buccinalis)* was feen floating on the water, which was a fure fign of the vicinity of the Cape, from the fhores of which it is frequently torn off, and carried out to fea by the waves.

The number of patients, which ever fince the beginning of the voyage, had been very great, began now confiderably to decreafe, though not till very many lives had been loft.

The difeafes most common on board were fpotted fevers, putrid fevers, of a bad fort, catarrhal fevers more or less of a malignant nature; rheumatisms, eryfipelas, fcurvy, large and malignant ulcers, absceffes, coughs, diarrhœa, dysentery, the venereal difease, &c. The failors that ftood

ftood at the helm, and often perfpiring profufely; did not take care to avoid catching cold, frequently fell fick. Still, however, difeafes were more frequent and fatal among the foldiers, whofe juices were corrupt and tainted.

Attendants were appointed, according as they were wanted, for the fick, to give them nourifhment and medicines, to help them to get in and out of their hammocks, and to fee that the convalefcents on deck kept up in the frefh air.

Seldom did any fever terminate with a regular or good crifis; for the patients would either lay quite naked, or elfe quit their beds when in a perspiration, steal out of them to drink cold water, or to befprinkle themfelves with it .---Hence various metastafes supervened in the form of dreadful abfceffes in their arms, hands, legs, and cheeks, fome of which turned to gangrenes, and others exhausted the patients to death. Some of the fick were, more or lefs, afflicted with deafnefs. If the metaftafes affected the thighs, a violent pain in these parts was the consequence; if in the eyes, the patient could hardly fee; if in the feet, it would produce a dropfy in the legs .--Some few were feized with the variola (puria. As to the fymptoms of the fevers, feveral patients were taken with an obftinate vomiting, while others were afflicted with as obstinate a diarrhoea. In the malignant kinds of fever, a furor frequently

quently fupervened; but in one or two of the patients, a mild and harmlefs delirium acceded, in which they fung during the whole of the laft twenty-fours before they died.

During the voyage we had conftantly about a hundred and fifty patients on the lift, till we had paffed the line, and the most infirm and difabled part of the crew were carried off by death.

With a view to the prevention of difeafes during the voyage, orders were given that the ventilators should be constantly kept in play; and that fpecial care fhould be taken not to fuffer any diforderly fellow to fleep in the day, and get drunk at night; and, in order to introduce fresh air between the decks, that the air-fail should be kept conftantly hanging through the main-hatchway. In fair weather the crew were kept upon deck, whither alfo their chefts and hammocks were brought to be aired, whilft the fhip was cleanfed, fmoked with juniper-berries and gunpowder, and fprinkled with vinegar. Befides thefe precautions, the failors were encouraged to give themfelves up to fports and mirthful amufements, to wash and keep themselves very clean, as alfo to dry their clothes, and change them frequently.

The patients were vifited twice a day by the furgeon, viz. at eight in the morning and four in the afternoon, when the first dreffing was performed.

formed. The names of fuch patients as were able to walk to the medicine-cheft were fet down on a board, together with the medicines to be given that day. Next, thofe who were confined to their beds were vifited; after which the furgeon made his report to the captain, or the officer of the watch, if any died on the preceding night, as alfo of the number and difeafes of the patients. The names of the deceafed are taken down on a flip of paper, and a lift is alfo made out of the fick, and delivered to the boatfwain, that they may not be called upon watch.

The furgeon preferibes the diet of the patients, and the purfer is to make provisions for it accordingly. Such as are extremely ill are indulged with fome foup, or other diffies that come from the officers table. What may be wanted befides the medicines, or for the preparation of them, fuch as fresh water, fugar, vinegar, oil, lemon-juice, Spanish and white French wine, faltpetre, geneva, and the like, is put down upon a list, which is delivered to the firstmate.

When the furgeon has made his report of the death of any perfon, the mate of the watch immediately orders his cheft to be brought upon deck, and diffributes his clothes among those who have occasion for them.

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The furgeon keeps an account of the fick, with the medicines prefcribed for them, as well as of the deceafed, which lift is delivered to the governor at the place of the fhip's defination.

When the fhip is in harbour, and any one dies on board, a jack is hoifted half-way up the ftaff, in confequence of which a coffin is fent in a boat to bring the corpfe on fhore; but if a man dies when the fhip is out at fea, the corpfe is fewed up in a hammock, laid out for the fpace of a few hours before the main-maft, and then thrown overboard with fome ballaft of fand or lead at the feet, that it may fink.

When a man makes his will, it is figned by the boatfwain, the gunner, and a few others.

The ration or allowance of certain articles, fuch as oil, tamarinds, lemon-juice, butter, cheefe, &c. which ought to be diffributed once a week, or, at any rate, once in a fortnight, is frequently given out but once in a month or five weeks, juft as the captain and firft-mate chufe, or find it to fuit their purpofe. Hence it comes, that either feveral articles are embezzled and kept from the men, which the officers abovementioned afterwards difpofe of, or elfe that the men get more at once than they have veffels to keep it in, or can flow in their fmall chefts among their clothes and rags; not to mention, that when they get a larger ration than ordinary they

they are lavifh of it at firft, and afterwards have nothing left. It frequently happens alfo, that either the whole or fome part of it is ftolen from fuch as are not poffeffed of cunning enough to enable them to fecrete it properly. The allowance of meat, however, and falt-pork, is more frequently and more regularly diffributed. Of vinegar, oil, falt, and pepper, the crew in general have as much as they ftand in need of; but half a pound of butter only is allowed to each man per week, and three pounds and a half of bread.

The cook receives for every man, on Tuefday, a pound of falt-pork, on Thurfday butchers' meat, on Friday ftock-fifh, on Sunday peas and meat, and fometimes, by way of change, barley-groats, peas and beans, potatoes, redcabbage, and various kinds of onions, together with horfe-radifh and carrots, and fometimes frefh-meat or falt-pork, are alfo diftributed among the crew. As foon as the fhip was in the open fea, every man received three whole cheefes, of a few pounds weight.

The company fends out flockings likewife, and clothes made of coarfe and thin cloth, which are delivered out upon credit to fuch as chufe to avail themfelves of this privilege; this diftribution is made at the captain's pleafure, to thofe whom he favours, and not always where it is wanted.

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On the 30th, feveral large birds appeared in fight, and by their arrival gave us to underftand that we approached nearer to the Cape, Clothes were now, for the fecond time, diffributed among fuch of the foldiers as had been hitherto halfnaked.

On the 7th of April, befantjes, or Portuguefe men of war (bolothuria phyfalis) were feen failing on the water. The large malmucks now alfo appeared in greater numbers, and a contrary wind prevented us from approaching nearer to the coaft.

On the 10th, the effects of a deceafed failor were put up at auction before the maft. The fum amounted to fixty-eight guilders, one-half of which was given to the poor in Holland, and the other half to those at the Cape, without any regard being paid to the legal heirs of the deceased. At four in the afternoon a ship was seen, as also a little blue and white bird, of the fize of a swallow, hovering over the water. Two whales (*balænæ*) passed us. Already the water, in confequence of its increasing shallowness, changed from black to green; a certain indication to the failor of the vicinity of land.

On the 11th, land-birds were feen, which are diftinguished from the fea-fowl by their flower flight, and by their fluttering more with their wings. Towards ten o'clock Table Mountain vol. 1. H began

began to flow its head, and the water was extremely green.

On the 12th, we were overtaken by a foutheafterly wind, which prevented us from gaining the harbour, and obliged us to beat up and down for a few days at fea.

On the 14th, we faw whales fpouting, the feals (pboca) fporting, and trumpet-grafs (fucus buccinalis) floating in great abundance. Upon this laft the land-birds would often fit down to reft.

On the 15th, a confiderable number of feafowls were feen fwimming before the harbour.

On the 16tb, we arrived fafely in the road in *Table Bay*, dropt our anchor, fired our guns, and with mutual joy congratulated each other.

Immediately on our arrival, the fuperintendant over the fhips came to us from the town, accompanied by a furgeon; the former to fetch off the letters and papers for the company, and the latter to get information with refpect to the number of people that had died during the voyage, and of those that were still indisposed. The number of the latter was now not very great, but that of the former amounted to a hundred and fifteen, of which ten died before we left the *Texel*, and two had unfortunately fallen overboard. The other sin our company fuffered

fered a ftill greater mortality, viz. the *Hoenkoop* one hundred and fifty-eight in all, of whom one hundred and thirty-fix died while we were in the Texel. The *William V*. loft in all two hundred and thirty men, and the *Jonge Samuel*, of *Zeeland*, one hundred and three.

We were hardly come to an anchor, before a crowd of black flaves and Chinefe came in their fmall boats to fell and barter, for clothes and other goods, frefh meat, vegetables, and fruit, all of which our crew were eager to procure.

In the road we found, among others, a Swedifh fhip, which had arrived but a fhort time before at this fouthernmost point of Africa, and had brought my friend, Professor SPARRMAN.

On the 17th, I went with the captain on fhore, and took a lodging at M. HENDRIK FEHRSEN'S houfe.

Being fafely arrived at the Cape of Good Hope, my first care was to wait on the lieutenant-governor, Baron JOACHIM VON PLETTENBERG, and the other gentlemen of the regency, to whom I was recommended, in order to deliver to them the letters I had brought with me. And as the respectable and universally-beloved veteran, Governor TULBAGH, had, in confequence of age and gout, on the IIth of August in the preceding year, exchanged this life for a better, I delivered the letters directed for him to Baron

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PLETTENBERG, who received me with the greateft kindnefs, and promifed to affift me in my defign of travelling into the interior part of the country, during the term of my refidence in that quarter of the globe.

Whereas in my native country, to the northward of the equator, the most delightful of the feafons, fpring, was now approaching; here, to the fouth of the line, winter was stealing upon us, fo that I could not as yet, or for feveral months to come, travel to any advantage through the interior parts of the country, but must wait till the beginning of September. The intervening months I employed in informing myfelf of the internal œconomy and inftitutions of the Company, and examined the plants and animals in the environs of the town, and in the neighbouring mountains, making alfo fhort excursions into the country, which I was in hopes of penetrating deeper into afterwards, and of viewing it with a curious and obferving eye.

The Cape of Good Hope is the extreme point of Africa, and of the Old World, to the fouthward, and is probably the most capital promontory in the whole world.

BARTOLOMEW DIAZ, a Portuguefe, was the first who discovered this promontory in 1487, and King *Emanuel* gave it the name of the Cape of Good Hope. VASCO DE GAMA visited it next in

in 1497, by order of the fame monarch. According to the obfervations of M. de la CAILLE, it is fituated in lat. 33 deg. 35 min. S. and in long. 35 deg. 2 min. E.

The fhips that anchor in *Table Bay*, in a confiderably extensive road, are fomewhat above a mile diftant from the town.

The day after our arrival our fick men were taken to the hofpital, attended by the furgeon'smate; and afterwards the foldiers, under the conduct of their commanding officer, who was to ferve in the capacity of ferjeant after his arrival on fhore.

The town is very regularly built, from the fhore along the declivity formed by the Table Mountain, and its ftreets cut the quarters at right angles, the whole being bounded at the back part by Table Mountain (Taffelberg,) to the weftward by Lion Mountain (Leuweberg), and towards the eaft, in fome measure, by the Devil's Mountain (Duyvelfberg). So that it is most open towards the fouthern and eastern fides.

In difembarking, one is not incommoded here by the fhutting of toll-gates or by cuftom-houfe officers. The town has neither walls nor gates, and yet enjoys a perfect fecurity in a land of favages.

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The houfes are all of brick, white-washed, and one, feldom two, but very rarely three stories high, and covered in for the most part with flat roofs of brick-work, or a kind of grass indigenous to this country (*restio testorum*) laid upon very low frame work. On account of the violence of the winds that prevail here, the roofs cannot be tiled over, nor raifed higher. The house of the lieutenant-governor, and the company's warehouse, were the only houses that were three stories high.

The domeftics here do not confift of Europeans, but of black or tawny flaves from Malabar, Madagscar, or other parts of India. Thefe, in general, fpeak either broken Portuguefe, or elfe the Malabar, feldom the Dutch language, and learn various trades, by which they bring their mafters confiderable profit, efpecially fuch as are taylors, carpenters, bricklayers, or cooks. The flaves are let out by the month, week, or day, during which term they are to earn for their mafters a certain fixed fum per diem. The male flaves wear their own hair, upon which they fet a great value, wrapped up in a twifted handkerchief like a turban, and the females wreath up their hair and fix it on their heads with a large pin. Trowfers conftitute the other part of their drefs; and as a token of their fervile condition, they always go barefoot, and without a hat.

Previous

Previous to the company's fitting down to meals, either dinner or fupper, a female flave brings a wafh-hand bafon and towel, to wafh their hands, which is alfo done on the company's rifing from table. In the houfes of the wealthy, every one of the company has a flave behind his chair to wait on him. The flave has frequently a large palm leaf in his hand, by way of a fan, to drive away the flies, which are as troublefome here as they are in Sweden.

As well within as without the town, neat and excellent gardens are laid out, both for fruit and culinary vegetables, being watered by the ftreams that run down from the mountains. Among thefe that extensive and beautiful garden belonging to the company diffinguishes itself, like an old oak amidft a thicket of bushes. It is from these gardens that the ftranger, on his arrival, meets with his first refreshments; and from their superfluous flock the Dutch and other ships are supplied with ftores for their voyage. The gardenfeeds mult be brought every year fresh from Holland, as they otherwife, almost all, degenerate in time, excepting the feeds of cauliflowers, which are brought to great perfection here, and on that account exported from hence to Holland, where they gradually degenerate.

Apples, pears, and other European fruits, are mellower and riper, but have not that flavour

which they have in Europe, neither will they keep long. Nor are the peaches produced here equal in goodnefs to those of the fouth of Europe. They are fometimes dried like pears, with or without their ftones.

The trees imported from Europe, fuch as oak (quercus robur), the white poplar (populus alba), and others, fhed their leaves in the winter, as they do in their native places, whereas the African trees do not part with their's. It is not long, however, before they recover their leaves again. This circumstance is fingular enough; first, becaufe the cold here in winter is not more fevere than it is in Sweden in the autumn; and in the fecond place, becaufe they fhed their leaves to the fouthward of the equator at the very time that they put them forth to the northward of it. The lime-trees (tilia Europæa) do not thrive well, on account of the violent winds that rage here; and the fame may be faid of the hazel (corylus avellana), cherry-tree (prunus cerasus), goofeberry-tree (ribes groffularia & uva crifpa), currant-tree (ribes rubrum & nigrum), all of which degenerate, and feldom yield any fruit.

The myrtle (myrtus communis) grows to the height of a tree, though its ftem is neither thick nor fliff, nor does it throw out many branches. For this reason it feems to be proper, and indeed, is frequently used, for forming high

high hedges, in a country fubject to violent winds, as its fupple ftem bends to the ftorm.

The foot of the mountain, or the hills round, the town, confifted of a red flame-coloured clay, which proceeds from the water's running down the cracks, and tinging the earth with its acid, charged with ferruginous particles. Higher up on the hills, lie fcattered without order, ftones of all fizes, that have been rolled down from the mountains.

Among others I vifited M. AUGE, the gardener, who has made many, and those very long, excursions into the interior part of the country, and has collected all the plants and infects, which the late Governor TULBAGH fent to Europe to LINNÆUS, and to the Professions BURMANN and VAN ROYEN. And as he ftill continued his journies yearly into the country, he fold to ftrangers, as well herbals as birds and infects. It was of him that M. GRUBB. the director of the bank in Sweden, purchafed that fine collection of plants, which was afterwards prefented to Professor BERGIUS, and fo well defcribed by this latter gentleman in his book of the Planta Capenses. M. Auce's knowledge of botany was not very confiderable, nor did his collections in general extend much farther than to the great and the beautiful; but, in the mean time, we are almost folely indebted to

to him for all the difcoveries which have been made fince the days of *Hermannus*, *Oldenlandus*, and *Hartogius*, in this part of Africa.

' The citadel is fituated on the fea-fhore, below the city to the eaftward, and is furrounded with high walls and deep ditches; there is room enough in it for the governor, though he never lives there, as well as for the major, the other officers, and the foldiers. At fun-fet the great gate is fhut, when all the foldiers, that have not leave of abfence, are fummoned by beat of drun, and their names called over in each company. The little gate is kept open till ten o'clock, when the foldiers, who are abfent, without having previoufly obtained leave of abfence for the night, are fummoned by a bell, and their names are called over; the gate is after this not to be opened till the morning, except in cafe of neceffity, fuch as to fetch a midwife. A furgeon always fleeps in the caftle.

The farst thing a foldier must provide himfelf with, is his own uniform; this he receives of the company, but must ferve to the amount of its value. Every third year the company orders a number of new uniforms to be made for the use of the militia, and at no other time. If it should fo happen that the quantity ready-made should not fuffice for recruits that arrive during this

this interval, they must for fome time do their duty in their own clothes, and frequently in the jackets of the *zeelverkoopers*, or kidnappers, who have fent them thither.

Soldiers, who have received in Holland what is called a bill of transport, receive no pay till they have ferved to the full value of it. This takes at leaft a year and a half, or more; during which time they only receive a little fubfiftencemoney and fervice-money. What more they may want for fubfiftence and clothes, they muft earn by any trade that they may happen to have learned, or by doing duty for the others on their leifure days. A foldier who has learned a good trade, may earn half a dollar a day, and pays to him that does duty for him four fchellings. They have also an opportunity of making fomething by washing for others. A foldier may indeed obtain double fubfiftence-money; but then, two gilders per month are deducted from his pay, for what they term fubfidy-money.

The foldiers go upon guard every other or every third day, and confequently have a day or two to themfelves. The fame guard continues for twenty-four hours together, and confifts in the fmaller pofts of a corporal and three men; but in the greater, of a ferjeant and twelve men. When a man has been upon guard two hours, he is relieved, and exempt from duty, till

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till four hours more are expired, when he goes upon guard again.

A foldier is obliged to ferve five years, exclufive of the time taken up in the voyage, during which term he is not at liberty to return home; but by the favour of the officers, confiderable deductions may be made from this term, infomuch, that fometimes a foldier returns by the fame fhip that brought him. Sometimes a foldier is alfo metamorphofed into a failor for this purpofe.

When his agreement is at an end, he may either return home or renew it; if he chufes the latter, which is generally done for three years at firft, his pay is increafed two gilders more per month; this term being expired, he may engage for two years more, and then receives a frefh augmentation of two gilders per month; but in cafe of his continuing in the fervice after that term, his pay is augmented no more, unlefs, indeed, he is advanced. A foldier, if he has received any education, may be advanced to be a corporal, ferjeant, or officer, to be an affiftant in a factory, or to be furgeon, if he has learned that art in Europe.

There are feveral means by which a foldier may be releafed from the obligation of doing duty. The most common way is by what they call a furlough; in this case he is exempt from all

all duty, and at full liberty to get his livelihood in what manner foever he is able, or by any trade that he may have learned. For this he pays four dollars per month, and to the adjutant of the company one fhilling, in which cafe he receives his monthly pay. Of the men belonging to the garrifon, there were now about one hundred and fifty that had furloughs. The profits of the furloughs are diffributed among that part of the garrifon that does duty, and are called fervice-money; a foldier receives eight or nine, a corporal twelve, and a ferjeant fixteen shillings; the remainder is divided between the officers. The furlough-money is to be paid duly, the laft day of every month, into the hands of the chaplain, whofe duty it is to receive it. In time of war thefe furloughs are not given, but every one must then do duty. The governor takes from among the foldiers as many as he chufes, to work gratis for him; the major takes four and twenty or more; the fifcal two, the book-keeper one, and fo on. Thefe then are either to work for the above-mentioned gentlemen, or to pay them their furlough-money. The greater number there is taken of thefe men, the heavier does the duty fall upon the reft of the foldiers.

The foldiers receive their pay of the lieutenant of the company every four months; which for this reafon is called the *good* month.

If any perfon in the town or country wifnes for a foldier, either as a teacher for his children, or to work in his fhop, he may get one by the means juft indicated; but if fuch foldier has taken up a bill of transport in Holland, this muft now be repaid to the value of about eighty dollars, for which the fellow muft ferve till it is paid off: if in the mean time he fhould die, the lofs will be on the fide of the tradefinan.

Sailors may in the fame manner take out furloughs, by paying to the purfer eight dollars per month.

A perfect immunity from fervice, as well as erafure from the paymafter's books, may indeed be alfo obtained; but on no other confideration than that of being held difqualified for the company's fervice.

There are others, called *lichten*, who neither do duty, nor have any furloughs, nor receive any pay, and are always at their full liberty in time of peace; but when once they enter into the fervice again, they must ferve their five years out, for which they agreed.

Prayers are read in the citadel every morning and evening by a chaplain. On Sunday a fentinel is placed before the church-door, but within the church-door a foldier would fearcely be tolerated.

Before

Before the citadel, in a large convenient place, are laid the wine and water cafks that come from the fhips to be repaired; as likewife a great quantity of planks and fpars. In order to prevent any thing from being ftolen, a fentinel is placed here in the night-time. This poft is not unprofitable, when the foldier happens to catch a young fellow engaged in clofe converfation with fome female friend; in which cafe he muft make the foldier a compliment of a few dollars to avoid being taken into cuftody, and difcovered, or, at all events, incommoded and difturbed in his *menús plaifirs*.

If a foldier falls fick, he is taken to the hofpital, where he has medicines and his diet gratis, till he recovers, but he receives no pay, except his fhare of the furlough-money. Yet, if his difeafe is of a venereal nature, even this is withheld from him. If he does not chufe to go to the hofpital, he is at liberty to go elfewhere, though then he is obliged to pay his own phyfician, his attendants, and other neceffary expences, out of his own purfe, but receives his pay and fubfiftence-money.

Chimnies are not used in this country, nor are they wanted; and to stoves they are utter strangers. Yet I have known a family or two that had a sire-place in their hall, though rather for pleasure than for any other occasion they had

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had for it. The ladies have generally live coals in a kind of covered chaffing-difh or flove, which in winter time they fet on the ground under their clothes to warm them.

The cold is fevereft in the months of August or September, especially on mornings and evenings, when it rains or blows hard. The wind feels very piercing on account of the thin clothing that his worn here. The winter at the Cape refembles the months of August, September, and October in Sweden.

The mothers in this country feldom put their children out to nurfe, but fuckle them themfelves, for which reafon they have, in general, eafier labours.

There are a few families have defeended from Blacks in the female line, for three generations back. The first generation proceeding from an European who is married to a tawny flave, that has been made free, remains tawny, but approaching to a white complexion; but the children of the third generation, mixed with Europeans, become quite white, and are often remarkably beautiful.

The flave-houfe of the Company is adjacent to the garden, and contains a great number of flaves, who work in the garden and on buildings, carry burdens from the fhips, &cc. Thofe that are fick here have a furgeon to attend them,

them. The company brings the greatest part of its flaves from Madagascar, whereas private persons buy their's of the officers belonging to the ships, as well Dutch as French, that are on their return home from the East Indies, feldom of the English, and never of the Swedish.

Before the fhips weigh anchor, all the convalescents are felected out from the hofpital, and distributed on board the fhips.

The officers of the fhips, during their ftay here, fell to great advantage feveral European commodities, fuch as wine, ale, tobacco-pipes, coarfe and fine hardware, clothes, fhoes, glafs, and houfehold furniture; the European hams, beef, faufages, tongues, herrings, ftock-fifh, falmon, and cheefe, with fome other articles, were alfo in great requeft.

Whereas the foreign fhips, that ftop here, lie in the roads a fhort time only to take in provifions, and then refume their voyage, the Dutch fhips are obliged to ftop a great while, in order to take the convalefcents on board, who after all come thither in a very indifferent ftate of health. The Dutch have also occasion for a greater number of failors to work their fhips than other nations, as their rigging is made after the old fashion, with large blocks and thick cordage, heavy and clumfy in every respect.

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The company's garden is always open to the public. It is nine hundred and ninety-fix paces long, two hundred and fixty-one broad, and has forty-four quarters, which are feparated from each other by hedges, confifting, for the moft part, of oaks or bays (laurus nobilis), feveral yards in height. I obferved here, that a royena villofa, that grew befide one of these oaks, had fairly perforated one of its branches through the very trunk of the oak, in which it now grew like a parafitic plant. In like manner I obferved in another garden, in which a feat had been fixed between two trees, that the bark of one of the trees had grown over the feat, like a fungus (boletus), and held it fast. In the menagerie were feveral rare and uncommon animals, and particularly great numbers of birds.

Male and female flaves though belonging to different mafters, frequently cohabit together, by permiffion of their owners, in which cafe the children always become the property of him who is the owner of the female flave. Though the man, that cohabits with the woman flave, be a freed man, or even a European, ftill their offfpring are flaves. So that the bonds of wedlock among flaves are but loofely contracted, and eafily broken through. A mafter has the right of chaftifing his flaves with a whip, but has no power over their lives, as this belongs to the magiftrate.

If

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If a flave is too feverely treated by his mafter, he may complain to the fifcal; and if it then appears that he has been ill ufed, the owner is made to pay a confiderable fine. If a flave lifts up his hand againft his mafter or miftrefs, or any white man, he is punifhable with death.

A flave can give no evidence; nor has he the power of bearing, much lefs of having in his poffeffion, any kind of fire-arms: by thefe means the flaves, who always greatly exceed the Europeans in number, are kept unarmed. As foon as a flave is enfranchifed, he wears floes, flockings, and a hat, as a mark of his freedom.

In the months of April, May, and June, when the fhips lie in the road, the naval officers frequently put up at auction fuch commodities as they wifh to difpofe of at this place: for this they pay five per cent. to the fifcal, who receives five dollars for every cheft brought on fhore, for which five gilders only were paid in Holland. All European merchandizes are fold here at thirty, fifty, and one hundred per cent. profit.

The winter months are reckoned here from the middle of May till the middle of August, during which time ships must not enter Table-Bay, on account of the stormy north-westerly winds that prevail then, and might drive them on shore; but they are obliged to anchor in False-Bay.

I 2

Ratans

Ratans fplit very thin, and fastened together with strings, so as to roll up easily, are much used here for window-blinds. They are also employed for making baskets, bottoms of beds, and feats of chairs.

The thick bamboo canes, though hollow, are very firong. They are used for making the fides of ladders, and as perches to carry burdens on; of the more young and flender stems are made fences, to fet up on the tops of walls and of wooden pales.

The feed-veffels of the filver-tree (protea argentea) ferve for fuel; the restio dichotomus (befem riet) for brooms.

Kukumakranka (gethyllis) is the name given to the legumen or pod of a plant, that grew at this time among the fand-hills near the town, without either leaves or flowers. This pod was of the length of one's finger, fomewhat wider at top than at bottom, had a pleafant fmell, and was held in great efteem by the ladies. The finell of it refembled in fome measure that of ftrawberries, and filled the whole room.

On the clay-hills near the fhore before the citadel, I obferved people digging up the earth, which was mixed with a great many fea-fhells, and putting it into bafkets. This they wafhed till nothing but the fhells remained. In like manner I faw them carefully gather the larger fhells

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fhells thrown up by the fea on the beach, and lay them up in large heaps to dry. Thefe fhells they burn to lime for building. For this purpofe they make a pile of billet and bufhwood, within which the fhells are laid and burned. In *Robben Ifland* a great quantity of fhells are collected, and made into lime for the company's fervice, by the criminals exiled there. In the whole country there is no other lime to be found, nor any mountains containing either chalk or lime-ftone,

Poets are faid to be born fo; but the Dutch here, and indeed all over the Eaft-Indies, may be faid to be born merchants; for in cafe the father does not trade, but carries on fome handicraft bulinefs, his wife, daughter, or fon muft; and this is always done in a particular way of their own, and often without any regular fyftem. There is fcarce one regular merchant to be found; but every body carries on trade, and keeps a certain fpecies of goods only, at a certain time of the year, by which he endeavours to gain the moft he can.

Two winds in particular prevail here throughout the year, and are frequently very violent, viz. the fouth-eaft wind in the fummer, and the north-weft in winter. When the eaft or foutheaft wind begins to blow, it drives the clouds against the mountains, and away over them, I 3 which

which occafions a kind of drizzling rain up in those regions; the clouds are afterwards difperfed below the fummit of the mountain; and when the clouds are carried off, the wind may continue indeed, but then it is always accompanied with fine dry weather.

The town has but one Calvinistical church, which is tolerably large and handfome. The Lutherans have not hitherto been able to obtain permission to erect one, though their number here is very large; the Calvinistical church is ferved by two clergymen, who live in the town, and are well paid.

The hospital is ill situated, and much out of repair, infomuch, that a new one will fhortly be erected on a more extensive and convenient plan. The patients here are not remarkably well taken care of, on account of the fmall portion of medical skill possessed by the perfon who superintends the hospital; though the company spares for no expence with regard to them. I was informed, that the company pays 200 ducatoons per annum, or fomething more than 600 gilders, for the article of almonds only, for the patients, of which, perhaps, they do not get one. Every half year, the moiety of this fum is paid down, an exact calculation having been previoufly made, how many thousand of almonds may be had for that money, according to the then current

rent price. So that the fum is always the fame, though the quantity of almonds varies with the price; and the patients always receive the fame quantity, that is, little or nothing. For every one in the hofpital, that goes through a courfe of mercurial friction for the venereal difeafe, the furgeon receives eight dollars; and the patient muft pay two dollars for his medicines, as it is not thought proper that he should be cured of this difeafe gratis.

Several ftreets in the town are adorned with canals filled with the water that comes from the fuperimpending mountains. But the bringing of the water by means of wooden pipes, from the fame mountains down to the great bridge in the harbour, at the fide of the citadel, where the fhips unload, is of greater importance; as the fhips boats may conveniently lay along-fide of it, and fill their cafks with the pureft water.

The finall-pox and meafles are the moft fatal diftempers here; for the prevention of which they make the fame provisions, as is done in other places against the plague. Confequently, as foon as a ship has anchored in the road, a furgeon is fent on board of it, to examine whether any body in the ship is at that time infected, or during the voyage has been infected with either of these diseases. In the latter case, no one from the ship is suffered to come on shore; but the com-I 4 mander

mander is advifed to go to fome other place with the veffel; which, in the mean time, is furnished with whatever it may ftand in need of. When at any time the fmall-pox is carried thither, every one flies in hafte to the interior parts of the country. This infectious diforder, I obferved, and fome French fhlps, which they took for enemies, were the only things that at this juncture could infpire thefe rich farmers and burghers with fear, and make them shift their quarters. They were not yet become rational enough to adopt inoculation. In 1713, the small-pox was first brought here by a Danish ship, when it made a dreadful havoc among Europeans as well as Hottentots, only three houses having escaped. The Hottentots died in fuch multitudes, that their bodies lay in the fields and highways unburied.

In 1755, this diforder appeared for the fecond time; and in 1767, in April, for the third and laft time, being in like manner brought by a Danish ship. The last time the measures prevailed in these parts, they were the more destructive, as the surgeons sent out by the governor, from ignorance of the discase, treated it perversely. It is much to be lamented, that the account given of the medical practitioners of the Cape for some time past, should so exactly tally with that transmitted to us by

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by KAEMPFER, in his Amanit exot. Fascic. 3. p. 534 & 535, of the furgeons in the East-Indies.

The town is adorned with three large fquares: in one of thefe ftands the Proteftant church; it likewife has a fountain in it, which furnifhes the inhabitants of the town with water; in the other is the town-hall; and the third is lately laid out for the convenience of the country people who bring their goods to market, and in this is to be built the watch-houfe for the firemen,

On the fhore itfelf feveral batteries of differ, ent fizes are crected for the defence of the city. The citadel is intended to protect them as well against internal as foreign enemies, but the batteries more particularly against the ships of a foreign power; and, in fact, these can do no more execution in the road than the citadel poffibly can do. There were now, though in rather an indifferent state of repair, the great battery, the little battery, the new battery, the bones, and the line-guard.

In the beginning of July, I made a day's excursion to *Mount Pearl*, in company with Dr. LE SUEUR, who was fent for to fee a patient that had been ill of a fever, and had now fuch a weaknefs in his joints and ligaments, that he could not lift his hands to his mouth, and his knee-

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knee-pans were fo loofe, that he had loft the ufe of his legs likewife. Dr. LE SUEUR was a native of the Cape, but had ftudied in Holland, and taken his degrees at Groningen.

In many places the roads were interfected by large rivers, which were now fo fwelled by the heavy rains, that the water almost came into the carriage; the current being at the fame time very ftrong.

The land in these parts was very poor, being merely loose fand, under which lay the folid rock, confisting of brown ferruginous clumps, composed of clay, vitriolic acid, and flate. In these meagre plains, nevertheles, *phylicas*, *ericas*, and *proteas*, grew in abundance.

At Paarl the cold is felt more fenfibly in the mornings and evenings than at the Cape, and the hoar-froft frequently damages the vegetables in the gardens. The eafterly winds are faid to be very powerful here, and in fummer time to blow the grains of wheat out of the ear.

Butter is churned every day in the fummer, and every other day, or every third day, in the winter. They ufually pour luke-warm water into the churn, in order that the milk may coagulate the better.

The houfes are generally fituated at the foot of the mountains, from whence water runs down

down to them. The want of water in other places, and the confequent poverty of the foil, muft be confidered as the reafon why this country, fo excellent in other refpects, cannot be very clofely inhabited. The African foil is intrinfically meagre; but its fertility, which is fo much cried up by many, muft be afcribed to the excellence of the climate; for those fpots where water and a little mould are to be found, and which confequently are capable of cultivation, produce a rich harvest of corn, delicious fruits, and excellent wines. The chief object of the farmer, when chusing a fpot for his abode, is to find an earthy foil in the vicinity of water.

Every peafant builds his own houfe, fometimes of brick, fometimes only of clay, lime, and fand. Every one of them poffeffes a great number of horfes, oxen, cows, fheep, goats, ducks, and geefe, which in the day time are driven out on the hills, and tended by a flave, and driven home again at fun-fet. At night all thefe animals fleep in the open air, each fpecies feparately, in a place fenced in by a mud-wall. This is faid to be very detrimental to the wool of the fheep (the ovis laticauda). It was pleafant in the highest degree to fee the lambkins, which are kept, while they are young, in the houfe, go in the evenings, to meet their mothers on their return home. As foon as they heard

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heard the voice of their dams at a great diftance, the little hungry creatures began to cry out and run towards them; but if they could not fee their mothers diftinctly, they would immediately run back again. When their dams approached ftill nearer, their cries increafed, and the lambs ran full fpeed to meet them, and followed them home again. The wool of thefe African fheep, which have large tails, is none of the beft, and is not employed either in the manufacturing of cloth or for any other important purpofe, much lefs is it exported. M. HEMMING, however, had, a few years before, a piece of cloth woven from it large enough to make a complete fuit of clothes.

I frequently observed the shin-bones of sheep used, both in town and country, either for setting round the trees in the streets, or for dividing the parternes in the slower-gardens, where they had a very pretty effect, the end of the ginglymus articulation being placed uppermost.

Wolves were caught by an eafy and ingenious method: a fquare or oblong house was erected, either of brick or only of clay, of the height of fix feet or more, without any other covering than a few wooden bars. In the front a low opening is left, with a trap-door before it. In the house is laid a bait, tied to a rope that is fastened to a peg. This peg is brought through the

the lower part of the back wall, and fluck into a piece of wood, which hangs down the wall on the outfide; to the upper part of this piece of wood is fixed another rope, that paffes over the top of the houfe, and is faftened to the trapdoor, which it thus keeps fufpended over the aperture. The wolf having entered the houfe, pulls the bait, and at the fame time pulls out the peg from the piece of wood, when the trapdoor falls down, and makes the wolf prifoner.

The ftile of building in the country, among people in good circumftances, is nearly fimilar to that in town, viz. first there is a hall at the entrance of the house, and before this is a long gallery; on each fide of the hall is a room; and on one fide of the gallery is the kitchen, and on the other a bed-chamber. People of inferior circumstances had a gallery, with a chamber on each fide of it, and the kitchen behind. The poorer fort had huts of clay, with doors and windows almost pervious to the weather.

The water that runs down the mountains to the farms that lie below them is frequently conducted by art to different places, fuch as to artificial fountains, or to gardens, for the purpole of watering them in time of drought, or to fifhponds, to fupply them with water.

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Such waters as accumulated in the plains below the mountains, and formed rivulets, which at times were fo deep in certain places, as to make ferries or boats neceffary for paffing them, the farmers rendered useful to themfelves, by damming them up, in order to make them overflow their vineyards planted on their banks; when the water gently running off from them, manured the foil, and rendered it fertile.

The vineyards near Paarl flourished amazingly, and vines were seen here fifty years old. A vine was faid to bear so early as the second year after it was planted, but to yield a full vintage in the third. All the vines here were kept low, in order to make them produce large clusters.

In this place a church was erected and provided with a Calvinift minifter and a clerk. Divine fervice, however, is not performed every Sunday; but when the minifter is gone on a journey, fick, or otherwife hindered, the clerk reads to the congregation fome portion of the Bible.

The farmers, or colonifts, all through the country are, as well as the inhabitants of the city, all burghers, and are confequently obliged to be always in readinefs, in cafe of a war, to defend their country. For this purpofe they are divided

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divided into companies, and certain perfons among them appointed their officers.

On the fudden approach of danger from any enemy, the whole body of the inhabitants may be fummoned by the firing of guns and hoifting of flags. For this purpofe cannons are planted at proper intervals, and at the fide of each flands a flag-ftaff, to give fignals in cafe of the approach of an enemy, or of any great fleet belonging to a foreign power. In fuch cafe, feven guns are fired from the Lion's Head. The cannon on the banks of *Zout Rivier* is next difcharged, which is repeated by another placed at a greater diftance, then by a third, and fo on; the flag being always hoifted before the firing of the gun, by which means the alarm is foon given throughout the whole country.

As an antitode against the bite of ferpents, the blood of the turtle was much cried up, which on account of this extraordinary virtue, the inhabitants dry in the form of fmall scales or membranes, and carry about them when they travel in this country, which swarms with this most noxious vermin. Whenever any one is wounded by a ferpent, he takes a couple of pinches of the dried blood internally and applies a little of it to the wound.

Surgeons, apothecaries, and others, when they cannot find in this country the ufual and genuine medicinal

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medicinal plants, look for others that formewhat refemble them, either in their flowers, leaves, fmell, or general habit, and then give them the fame names. The phyfician, who hears this quid pro quo mentioned, must not let it puzzle or miflead him.

The leaves of the *Calla Æthiopica*, a plant which grew even in the ditches about the gardens near the Cape, were faid to ferve for food for the (*yzer-varken*) or porcupines.

The root of the artiopus echinatus, which grew both near the Cape and in other places, was of a foft texture, and contained a very white and pure gum, which was used in the form of a decoction, as an excellent purifier of the blood, and likewife as a remedy in the gonorrhœa.

The root of the *bryonia Africana* ferved the country people for an emetic; infufed in wine or brandy it proves an excellent purge, efpecially if a piece of bread be eaten after it.

The geranium cucullatum, a fragrant plant, was used as an emollient, inclosed in small bags.

Of the leaves of the borbonia cordata the country people made tea.

The montinia atris, though it is of a very acrid nature, was faid to be eaten by the sheep.

The

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The Hottentots eat the fruit of the brabeium ftellatum, a large fhrub that grows near brooks and rivulets, called wilde castanien (wild chefnuts), and sometimes used by the country people instead of coffee: the outside rind being taken off, the fruit is steeped in water to deprive it of its bitternes; it is then boiled, roasted, and ground like coffee.

The gout and dropfy were common difeafes in this country, proceeding from the great quantity of wine that was drank, and the very varying and cold winds.

The fields were by no means fo thickly covered with grafs here as they are in Europe where the grafs-turf, with its great variety of flowers, forms the moft beautiful carpet; but the grafs grew very thin, flewing the bare fand between the blades, fo that one could not with any pleafure lie down on it to reft one's felf.

The barley, after it had attained to a confiderable height, was mowed once or oftener, and given to the horfes as fodder. It was faid, that it might be cut in the month of Auguft, when in the ear. I frequently faw bundles of it brought to town in this ftate to market. The barley in this country is cultivated chiefly for the ufe of horfes; a few bundles of it being cut every evening, after the horfes are come in VOL. I. K. from

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from grafs, and laid in the ftable, or elfe out in the yard, where thefe animals are tied up, for their night-provender.

Beer is never brewed in the country, where the people, when thirfly, drink water, tea, coffee, or wine; but a brewery has been eftablifhed near Cape Town. The Cape beer, however, is never remarkably good, but generates wind in the ftomach, and foon turns four. This is the reafon why they are obliged to import their beer from Europe; the Dutch, Danifh, and Englifh beer, which they fometimes drink in fmall quantities at their meals, being held in particular efteem.

The vineyards muft be dug every year, and the ground turned, yet without diffurbing the vines. In manuring them, the old earth is dug away from around the vines, and fo that a hole is left in which the manure is laid. If a vine dies, a branch of an adjoining vine is bent down into the hole, where it foon ftrikes root, and is afterwards cut off at the top.

A widow at the Paarl had three Hottentots in her fervice; they fpoke with much delicacy and foftnefs, clacking lightly and rapidly with their tongues both before and while they pronounced their words. Their complexion was brown, but by no means inclining to black, being

ing more like that of a fun-burnt European. The apparent brownnefs of their complexions, in fact, proceeded more from the great quantity of flinking greafe with which they befmeared themfelves than from nature. The girls were fond of finoking tobacco, which they did with a pipe fo fhort, that the bowl of it came clofe to their lips. Their hair is of a fingular nature, being quite black, and twifted up together like fhort wool, fo as to refemble the nap upon frieze, the interflices between each lock being quite bare.

On my return to the Cape, I faw, towards the end of June, a body of Hottentots, men, women, and children, to the number of nine and fifty, brought up about one hundred and fifty miles from the interior part of the country, where they had committed various acts of violence against the colonists. They had been taken by a Hottentot captain, of the name of KEES, in the cleft of a mountain, where they had concealed and fortified themfelves against a party of peafants and foldiers ordered out against them, and had for a long time defended themfelves, by rolling large ftones down upon their enemies. In two villages they had carried off the cattle, killed the inhabitants, plundered the houfes, and taken poffeffion of feveral fire-arms. They did not deny their crimes,

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but afferted that they acted fo in their own defence, the Europeans making every year fresh encroachments upon their lands and poffeffions, and forcing them continually farther up into the country, whence they were driven back again by the other Hottentots, or elfe killed. These Hottentots were Boshiesmen, of a dark brown complexion, fome of whom were naked, wearing only a band round their waifts, which covered the pudenda before. Others wore, hanging loofe over their shoulders, a sheep's skin, the ends of which fcarcely met before, the upper part going, like a calafh, over the head. The women had their little ones hanging behind on their fhoulders; and girls eleven or twelve years of age had already children. The women were adorned with ear-rings, and broad rings of metal round their wrifts. Their mouths and cheekbones were very prominent, fo that they bore the ftrongest refemblance imaginable to apes. After thefe Hottentots had been confined for fome time at the Cape, they loft their colour, and became almost white.

On the 28*th of June*, the Javanese here celebrated their new-year. For this purpose they had decorated an apartment in a house with carpets, that covered the cieling, walls, and floor. At some diffance from the farthest wall an altar was

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was raifed, from the middle of which a pillar role up to the cieling, covered with narrow flips of gilt paper and filk alternately: from above, downwards, ran a kind of lace between the projecting edges. At the bafe of this pillar were placed bottles with nofegays fluck in them, Before the altar lay a cufhion, and on this a large book. The women, who were all ftanding or fitting near the door were neatly dreffed, and the men wore night-gowns of filk or cotton. Frankincenfe was burned. The men fat crofslegged on the floor, difperfed all over the room. Several yellow wax candles were lighted up. Many of the affembly had fans, which they found very ufeful for cooling themfelves in the great heat neceffarily produced by the affemblage of a great number of people in a finall fpace. Two priefts were diftinguished by a fmall conical cap from the reft, who wore handkerchiefs tied round their heads in the form of a turban. About eight in the evening the fervice commenced, when they began to fing, loud and foft alternately, fometimes the priefts alone, at other times the whole congregation. After this a priet read out of the great book that lay on the cushion before the altar, the congregation at times reading aloud after him. I observed them reading after the Oriental manner, from right to left, and imagined it to be the K 3

the Alcoran that they were reading, the Javanefe being moftly Mahometans. Between the finging and reading, coffee was ferved up in cups, and the principal man of the congregation at intervals accompanied their finging on the violin. I underftood afterwards, that this was a prince from Java, who had oppofed the interefts of the Dutch Eaft-India Company, and for that reafon had been brought from his native country to the Cape, where he lives at the company's expence.

On the 30th of June I vifited Paradife, and other farms belonging to the company, and fituated below Table Mountain. Rondebosch is a villa belonging to the governor. On this eastern fide, along Table Mountain, the fouth-east wind does not blow so hard as at the Cape, for which reason also both trees and shrubs grow here. Among other trees, the pine (pinus fylvestris) was confpicuous by its elegant crown. Wild vines (wilde druyven, vitis vitiginea) made a distinguished figure at this time with their yed berries, which refembled cherries, and were eatable.

In the beginning of July, I fet out on an exeurfion on foot, for a few days, to Conftantia and the neighbouring farms. In fome places rivulets ran across the road between the vallies down from

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from the mountains, and at this time they were difficult to pafs.

Ferruginous flones (*eifer klippen*), or flones containing iron, were found here, as well as nearer to the Cape.

I observed the clouds to be driven in contrary directions, the lower clouds coming from the fouth-east, and the upper being carried towards the fame quarter.

The domeftic animals, which otherwife are kept in the open air throughout the whole country, were here fheltered under a fhed, that was open in the front.

On my return to town, I had the opportunity of feeing a Chinefe burial. In their buryingground at a fhort diftance from the city, finall ratans are fluck up, faftened together with cotton-thread, fo as to form an arch or a vaulted roof over the tomb.

In a large hog that was killed, were found feveral round worms (*lumbrici*), which was faid to be a common cafe here with thefe animals.

July the 21st, I took a walk to Paarl and Stellenbosch.

From the Cape the horizon, on the land fide, appears bounded by high mountains, that ftretch acrofs the whole country. The plain between the Cape and thefe mountains, which is one day's journey long, is for the most part an K 4 uncultivated

uncultivated tract of fand, and deftitute of water, which for the most part is no where to be met with but near the fmaller fcattered hills, which lie about as it were infulated, and without any very evident connexion with each other. A traveller who has not been provident enough to bring water with him, has no other refource for affuaging his thirft in this burning heat, than ftrictly to examine, whether any black fhepherds are to be found attending their mafter's flocks in the neighbourhood, who may either have water themfelves, or may be able to inform him where to find it. In the winter feafon, however, on account of the frequent rains, large tracts of this plain lie under water.

The name of *kapock-bird* was given to a very fmall bird, that forms its neft (which is as curious as it is beautiful, and is of the thicknefs of a coarfe worftead flocking) from the down (*pappus* eriocephali) of the wild rofemary-tree (wilde rofmaryn).

In the months of April and May the feed is put into the ground; but in June and July the earth, which often has lain fallow for feveral, fometimes ten, twelve, and fifteen years, is ploughed up. The larger bufhes are previoufly pulled up by the roots, and the finaller ones left for the plough; all the bufhes are then collected

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collected, and burnt on the field, which are richly manured by the afhes. The fpots on which the combuftion has been performed, always produces a thicker and more luxuriant grafs than ufual; fo that fuch places are eafily diffinguifhable in a meadow by the high tufts of grafs. The wheat here was faid to yield, in general, at the rate of eight and ten, but frequently fifteen, twenty, and twenty-five to one; whereas in many other places again, the produce is ftill more abundant. I was even told, that at one farm, fourteen bufhels of feed had produced about fifty-five quarters of grain.

The ant-eater, or aardvarken (myrmecophaga), digs large holes in the earth, in which in the day time he lies fecure from his enemies. The country was full of fuch holes. This animal was faid to be fo ftrong, that feveral oxen together would not be able to drag it out of its retreat. It digs very expeditioufly. The flefh of it is eaten, and efpecially the hams, when hung up and dried. It lives on feveral forts of ants, efpecially the large red ones, which build their hillocks of clay, and are very common, increafing every year.

The daughters of the colonifts are fometimes with child by their fathers' black flaves. In this cafe, in confideration of a round fum of money, a hufband is generally provided for the girl, but the

the flave is fent away from that part of the country.

Hofpitality is carried to a great length among the farmers throughout all this country, infomuch that a traveller may, without being at any expence either for board or lodging, pafs a longer or fhorter time with thefe people, who with the greateft cordiality receive and entertain ftrangers. On the contrary, a ftranger finds it very dear living in town, where he is obliged to pay at leaft a dollar, if not a dollar and a half per day, for his board and lodging.

The farmers in general make four regular meals a day, viz. breakfaft at feven, dinner at eleven, their afternoon's luncheon at four, and fupper at eight.

A foldier here is not at liberty to marry, left, as in this cafe he muft live with his wife out of the citadel, he fhould run in debt in the town, and, in confequence of this, incur the ufual punifhment, which is transportation to Batavia. Neverthelefs, it would be much better that a foldier or corporal fhould be at liberty to marry, and, receiving his pay, do his duty, and on those days when he is exempted from duty, earn his livelihood by teaching, or by fome trade; and, although many, as daily experience evinces, for want of this regulation, fall into bad courfes, and ruin themfelves by connexions with black women;

women; not to mention, that a married foldier, in cafe of a war fupervening, always fights for his country, his wife and children, with greater courage and fpirit than another; yet, in defiance of reafon and common fenfe, all fuch men are obliged to quit the fervice and become free citizens. This freedom, however, they do not obtain but on condition of entering again into the company's fervice, if neceffity fhould require, and this in the fame capacity as that in which they left it.

Though the town is entirely under the company's jurifdiction, and confequently is fubject to the governor and fifcal; yet, in what concerns the management of its particular affairs, it has its own mayor and aldermen, with other neceffary officers.

The burghers, both in the town and throughout the whole country, are enrolled as militiamen for the defence of the colony, being divided into feveral companies of foot and horfe, and commanded by officers from among their own body. They meet every year to do their exercife, and in the town they go upon the municipal guard, &c.

The dead are buried without either clergyman, prayers, or the ceremony of throwing earth on the body.

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The ceremonies of marriage and baptifin muft always be performed in the church; private baptifin, in cafe of neceffity, not being fuffered.

Slaves are very feldom enfranchifed : the free blacks are not permitted to go upon the municipal guard; but in time of war they are obliged to throw up batteries with their fpades, which are their weapons. They are commanded, however, by one of their own body. The flaves, whom each mafter of a family muft drive before him out of his houfe himfelf when required, againft the enemy, are alfo formed into companies. The burghers, as well as the fervants of the company, are then flationed each at his poft. All the civil officers are flationed within the caftle, and others at the batteries in different places.

In the month of August the winter drew near to its end, and the fields began to be decorated with flowers; it therefore now became neceffary for me to think of fuch preparations as would be useful and requisite for me in my approaching long journey into the interior part of the country, a journey, relative to which a promise had been given me, that I should make it, in a great measure, at the company's expence.

I therefore provided myfelf with neceffary clothes, as well as with boxes and bags, for collecting

lecting roots and feeds, with boxes and pins for infects, a keg of arrack for preferving ferpents and amphibious animals, cotton and boxes for ftuffing and keeping birds in, cartridge-paper for the drying of plants, tea and bifcuits for my own ufe, and tobacco to diffribute among the Hottentots, together with fire arms, and a large quantity of powder, ball, and fhot of various kinds. Shoes for the fpace of four months were no inconfiderable article in this account, as the leather prepared in the Indies, is by no means ftrong; befides, that it is quite cut to pieces, or foon worn out, by the fharp ftones that occur every where in the mountains.

My equipage confifted of a faddle-horfe, a cart covered with fail-cloth, like an ammunition-waggon, and three yoke of oxen, by which it was to be drawn through the whole of the journey. My travelling companions were AUGE, the gardener, who had before made eighteen journies of different lengths into the country, and was now to be my fure and faithful guide; M. IMMELMAN, a youth, the fon of a lieutenant in the army, together with LEONHARDI, a ferjeant, who undertook this tedious journey for the fake of fhooting the larger animals and birds; and laftly, two domeflicated Hottentots, one of whom was to drive, and the other to lead our oxen.

Every

Every one that travels in this country, performs his journey pretty nearly in the following way. A large waggon, worth from one hundred and twenty to two hundred dollars, and covered with a large tilt of fail-cloth, is commonly drawn by five or fix yoke of oxen, which are driven by a man with a long whip, but led through the rivulets and by the farms. The horfes are but weak in this part of the world, and find no where in Africa either pafture or water; confequently they cannot be used for long journies. Nor are horfes employed for carrying any wares on their backs up to town from the farms that lie near it, but there are fome few wealthy perfons that now and then put two or three pair of them into a waggon for fhort journies. Still, however, they are made use of all over the country for riding on. When farmers, that live far down in the country, go up to the Cape, they generally take five or fix fpare oxen with them, for the purpofe of changing cattle in a journey which lafts feveral weeks. The whip is an inftrument which might feem to command refpect not only from the oxen, for whofe fervice it is principally deftined, but from every one elfe.

Thus equipped, I fet out with my company from the Cape on the 7th of September for Jan Befis Kraal, a fmall grazing farm belonging to the

the company, and fituated by the fea-fide, where we arrived at eleven o'clock.

All over the fandy fields the protea bypophylla was feen creeping and procumbent, with its leaves standing up erect on each fide of it. Near Eland's Fontain, (or Elk's Fountain) a plant of this fpecies was feen ftanding upright like a bufh, much refembling the former, but with broader leaves.

We proceeded on our journey till twelve o'clock, when we came to another farm belonging to the company, called Riet Valley : afterwards to MOSTERT'S Farm, and laftly, paffing by Brack Fontain we came to Groene Kloof (the Green Valley), a confiderable grazing farm belonging to the company, at the diftance of eight hours journey from the Cape. In this pleafant place we remained a whole week, as well becaufe we found a great deal to collect here, as because that, in consequence of the refraction of the fun-beams from the burning fand, I was unfortunately attacked with a very violent inflammation in my eyes, which I did not eafily get rid of.

The country has indeed been much inhabited and cultivated by the European colonifts, but as yet no mile-ftones have been fet up, nor have the farms and rivers every where received fuitable names. The farms are frequently called 6

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after their owners, and the diffances between places are meafured by the time required to travel over them in a waggon drawn by oxen, which anfwers pretty exactly to a fea-league per hour. All this occafions travellers a great deal of trouble, and is the caufe that I am obliged to call the places, which I paffed in my travels, by the Dutch names, by which they are known on the fpot.

The fandy and low plains, which we traverfed, abounded at this time in bulbous plants, befides others which were now fprung up in confequence of the heavy rains that had fallen during the winter, and which with their infinitely varied flowers decorated thefe otherwife naked heaths.

The roots (bulbi) of the iris edulis, when boiled and ferved up at table, tafted much like potatoes.

The African flowers vary greatly as to colour, efpecially on the upper part, and are more conftant on the under part.

Flamingoes (*phanicopterus ruber*) were feen in abundance, wading every where in the ponds and puddles, in which were found alfo ducks and fnipes (*fcolopax capenfis*). In the plains were heard among the bufhes the korthaan (otis). The baantje (a finall bird), and deer of various kinds were feen running about, fuch

fuch as harte-beefts (*capra dorcas*), fteen-boks (*capra grimmia*), divers (*capra _____*), as well as the ftately oftrich, diffinguishet by its black feathers from its grey females.

A clay, impregnated with fulphur, was fhown me, which is to be found near a fountain hard by *Paard Mountain*.

The feed-veffels of a fpecies of *Euphorbia*, pulverized, were ufed for poifoning wolves.

Here I faw, for the first time, the *oleum Ricini*, or caftor oil. The feeds were faid to be boiled in water, and the oil is skimmed off as it rifes, which is taken, in as large a dose as that of a tea-cup full, for a gentle purge. The leaves of the shurb dried, and applied round the head, were affirmed to be serviceable in the headach.

On the 14th, we passed Oranie Fontein, or Orange Fountain, and Uyle Kraal, or the Owl's Kraal, in our way to Thé Fontein, or Tea Fountain, a journey of fix hours; and afterwards pasfing by Elk's Fountain (Eland's Fontein), got to Saldabna Bay the next day.

The farmers on this fide of the Cape have neither vineyards nor much arable land, but inftead of these plenty of cattle. Butter is made here every day, in a churn like a pump; and the butter-milk, excellent as it is, is thrown out to the calves and dogs. Indeed, they fcarcely vol. I. L. allow

allow their milk to cream beforehand. As to household furniture, they were in great want of it.

We left our faddle-horfes at a farmer's houfe; after which we croffed the harbour in a veffel to the Company's Poft, where we ftaid feveral days.

Here was plenty of game, confitting of antelopes, ducks, and other animals.

The expressed juice of the fow-thiftle (*fonchus oleraceus*) was used for cleansing and healing ulcers.

The black juice of the cuttle-fifh (*Jepia*) mixed up with vinegar, was used for making ink. This animal has real eyes, confifting of a cornea, choroidea, and a crystalline lens, with all the humours usually found in the eye.

Among the fervants I found ELISAEUS HYPHOFF, who was in the capacity of a cook here, and was the fon of M. HYPHOFF, director of the bank in Stockholm.

The albuca major grew in this neighbourhood tall, ftraight, and elegant. Its fucculent ftalk, which is rather mucilaginous, is chewed by the Hottentots and other travellers, by way of quenching their thirft.

There were a great many fand-banks in the harbour, which were feen at low water.

Grafs grew on the islands in abundance; but there were neither sheep nor oxen in them.

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While

While I was botanizing, I found a dead tiger near the fhore. He had probably been eating fome poifonous plants, and afterwards went in queft of water, before he fell down.

On the islands without and round about Saldabna Bay, feals (phoca) were caught in abundance, from the blubber of which a good and ufeful oil was prepared. The fkins of the fmaller fort of these animals are used only for shooting-bags and tobacco-pouches. The large feals, I was told, would weigh fourteen or fifteen hundred weight. With refpect to thefe creatures, a difagreeable accident had happened here lately : a foldier was fent out to fhoot them, and having wounded one of them, which lay as though it were dead, he went to open a vein in order to draw off its blood, as the oil is fuppofed to be the better for this operation, when on a fudden the feal caught hold of his hand, which the foldier pulling back in hafte, his thumb was bitten off, and the tendon drawn out to a great length.

From Saldabna Bay we returned to Thé Fontein, and at a farm there had an opportunity of feeing with what dexterity the peafants perform the caftration of their oxen, fifty of which, two years old, and one at three years, went through this operation in one evening. The cord of a whip was fastened round the horns, and a rope round one of the hind-legs. The animal being

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by this means thrown down on one fide, its four legs were tied together. They then cut with a knife on the exterior fide through all the integuments quite to the tefficle; after this they laid hold of the tefficle and foraped the funiculus, continually twifting it at the fame time, till the tefficle came away.

Great complaints were made of the feedveffels of the *rumex fpinofus* (*dubelties*), which grew very common here, as the fharp prickles of them cut the feet of the flaves and others, who walked bare-footed.

In wet years, the *pharnaceum mollugo* (muggekruyd) grows copioufly here, and is faid to make the cattle, that feed on it, very fat.

Difficult as it is to come within reach of it, we at laft fhot a korbaan, a bird which in its flight cries kok-karri, kok-carri.

The *fecretary bird (falco fecretarius)*, made its appearance frequently, with its beautiful head and long legs; it runs very fait, and lives on the ferpents it catches. I was told, that its young are not reared without difficulty, as they are very apt to break their legs. Yet I faw at *Conftantia* an old bird that was tame. They lay two or three eggs, and are faid to build their nefts with twigs upon bufbes. They are almost always found folitary, and in no great abundance.

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The black berries of a bufh called *Kraije-bofch*, or crow-bufh, were greedily devoured by the crows at the Cape.

On the 25th, we left Thé Fontein, and ferried over Berg-Rivier (Mountain River).

The root of Anife (anys wortel) was eaten here roafted, and tafted well; it is either roafted in the embers, or boiled in milk, or elfe flewed with meat. The farmers fometimes make their flaves dig up a large quantity of them, which they fell in town.

The root of the gatagay is likewife roafted in the embers and eaten, but has a bad and difagreeable tafte.

Wherever we went, we obferved a black-beetle (*trichius laticollis*) occupied the whole day throughout in rolling large balls of dung with its hind-feet, and conftantly going backwards. With its fore-feet it digs large holes in the fand, and alfo throws the fand on one fide with its feutellum. It probably lays its eggs in thefe balls, which it afterwards buries in the fand. More than once we obferved two of the infects here fpoken of affifting each other in rolling away one of thefe balls,

The oats brought hither from Europe are now looked upon as the worft of weeds in this country, as the grains are eafily fhaken out of the ears by the violence of the winds that pre-

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vail here, and fowing themfelves, choak up all the other corn. It is to no purpofe to lay a piece of land fo fpoiled fallow for feveral years, for when the field comes to be ploughed up, the oats, having lain unhurt in the ground, fhoot up afrefh.

They gave the name of nightingale (*nachti-gall*) to a bird, which in its notes and geftures imitated feveral other birds.

The oppblazers (*pneumora*) a kind of grafshopper, were caught in the evening. After fun-fet they begin to make a fingular noife, by rubbing their barbed hind-legs againft their empty and transparent stomach. It was supposed that this found was heard at a great distance. As I perceived that these, like many other nocturnal infects, were fond of light, I ordered a large fire to be made in the field, near which they were caught, while they were marching up to it. Their whole body is, as it were, a bladder, and so empty, that these creatures cannot be carried about stuck through with a pin, like other infects,

Nefts of finches (loxiæ) made of the ftalks of grafs, curioufly interwoven, hung on the branches of trees over ponds, with a long and narrow neck, by which the bird ufed to enter. This neck prevented the birds of prey from getting at the young ones, and the water, over which the neft

neft hung on low fhrubs and bufhes, kept off foxes and other beafts of prey.

The cattle were liable to various grievous diftempers, of which they fometimes alfo died.

The bloody ficknefs (*blaar* or *bloodziekte*) is a difeafe of the cattle, in which the veins all over the body are extremely turgid. Letting of blood and violent exercife were faid to be ferviceable in this diftemper. The flefh of fuch beafts as die of it, is not eatable.

The fpongy ficknefs (*fponfziekte*) begins in this manner; firft a foot fwells, and then by degrees the whole body. This diforder fometimes lafts three days, but at other times proves fatal in as many hours. If the foot is taken off immediately, the creature's life may be faved. The flefh of fuch an animal likewife is not eatable. This diftemper, in my opinion, can proceed from no other caufe than the bite of fome ferpent, a kind of reptile, which, in this warm quarter of the globe, is but too common.

The lame diftemper (*laamziekte*) is, when the cattle are unable to ftand. It comes on gradually, and is flow in its progrefs. After the death of the animal the bones of its legs are found to be quite empty, and without marrow; inftead of which they are filled with water.

The horned cattle, as well as horfes, are afflicted with the ftranguary, or a retention of their

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urine, after feeding on the *euphorbia geniftoides*, which contains a milk that does no injury to the ftomach and bowels, but corrodes the bladder, and efpecially obftructs the urinary paffages. If the penis is preffed, this vifcid matter is fqueezed out. The peafants therefore either prefs it out, or with a ftraw pufh it back again. When the cattle are fupplied with good and frefh water, this difeafe cannot get the upper hand; but in fummer, when the water is thick and impure, fo that it cannot dilute the peccant matter, the cattle die.

On the right fide of Groote Berg-rivier (or great Mountain-river) was feen Ribeck-caftle, which is a high and large folitary mountain; and to the left, Picket-berg. We paffed by the Honing-bergen, and in the evening arrived at a farm belonging to one GRILING.

On the 26tb we croffed the river called Four and twenty river, and came to the farm of Arnbem, from thence to little Mountain-river, and farther through Roode zands-kloof (Red fand valley) to Waferfland or Roode Zand. The cleft, through which we paffed from the fandy plain, that lies low towards the Cape, but gradually rifes till it comes to Roode Zand, is one of the few chafins left by the long ridge of mountains, through which it is poffible for a waggon to pafs, though, perhaps, not entirely without danger.

In fome places it was fo narrow, that two waggons could not pafs each other. At fuch narrow paffes as this, it is ufual for the drivers to give feveral terrible loud finacks with their long whips, which are heard at the diffance of feveral miles, fo that the waggon that arrives first may get through unimpeded, before another enters it.

As foon as we had paffed the mountains as far as to Roode zand, the country appeared much higher than the fide from which we came. At one end this country is bounded by high mountains, called *Winter-boek* (or Winter-corner) becaufe their tops, almost the whole year throughout, are covered with fnow; at the other end it is open, with a range of mountains projecting into it, and forming an angle, called *Mostertfboek*, and grows wider and wider the nearer it approaches to the fouth.

We took up our lodging with a man of the name of DE VETT, a defcendant of one of the French families, which came with the first colonists that fettled in this part of Africa, to lay out vineyards, and plant fuit-trees.

Tintirinties is a name given to a fpecies of *Ornithogalum*, with a white flower, from the found it produced, when two ftalks of it were rubbed against each other.

In order to give our cattle time to reft a little, and, in fome measure, recover their loft flesh, we

we paffed almost a fortnight at this agreeable place, during which time we had the opportunity of drying the plants and feeds we had already collected, and of visiting all the hills and mountains in the environs.

On the 28*tb*, therefore, we fet out on an excurfion acrofs the cataract and the mountains, to a fadler's, named SWIEGER, and the next day went on to a man of the name of OLIVIFR, with whom we left our horfes, and afcended the mountain on foot.

On the 1st of October, we made an excursion over Mount Witsen; on the other fide of which was a tract of land, or rather a cleft in the mountain, narrower than Roode zand, but about four times higher. From this eminence, Table mountain, near the Cape, was feen; and by reafon of the coldness of this place, and the backwardnefs of the fummer, the plants flowered here at leaft one month later, than in other parts of the country. Snow frequently falls here to the height of three feet, which lies feveral days, but higher up on the mountain, a still longer time. Behind this valley, mountains were feen, and behind thefe, ftill higher ridges of other mountains; on the other fide of which, the Bokkevelden or Goat-fields, were faid to be fituated. In this narrow, lofty, and cold tract of land, there were feveral grazing farms, but no corn

which about

corn was cultivated there, as this latter commodity could not be transported from thence over the mountains. It took us up a full hour to pass the mountain on horfeback.

Being returned to Roode-zand, the much celebrated Snake-ftone (Slange-fteen) was shown to me, which few of the farmers here could afford to purchase, it being fold at a high price, and held in great efteem. It is imported from the Indies, efpecially from Malabar, and cofts feveral, frequently 10 or 12, rixdollars. It is round and convex on one fide, of a black colour, with a pale afh-grey fpeck in the middle, and tubulated, with very minute pores. When thrown into water, it caufes bubbles to rife, which is a proof of its being genuine, as is alfo, that if put into the mouth, it adheres to the palate. When it is applied to any part that has been bitten by a ferpent, it flicks fast to the wound, and extracts the poifon; as foon as it is faturated, it falls off of If it be then put into milk, it is fuppofed itfelf. to be purified from the poifon it had abforbed, and the milk is faid to be turned blue by it. Frequently, however, the wound is fcarified with a razor, previous to the application of the ftone.

I was informed that the Hottentots, when bitten by a ferpent, immediately go in fearch of a toad, with which they rub the wound, and thus effect a perfect cure. They have also the art of extracting

extracting the poifon, by caufing another perfon to apply his mouth to the wound, and fuck it, after fcarifying the flefh all round it with a knife.

A ferpent (*Coluber* fcut. adb. 197. fquam. caudal. 124) was found here, called the *Boomflang*, or (tree-ferpent) on account of its being frequently found in trees. The length of it was eight feet; *fupra totus fufcus*, *fquamis linea elevata carinatis*; *fubtus totus flavefcens*.

The *tulbagbia alliacea* (wilde knofflook, or wild garlic) the root of which fmells very ftrong of garlic, was reported to be a charm for ferpents.

With the poifon of ferpents, and the juice of the *fideroxylum toxiferum* (gift-boom, or poifontree) the Hottentots poifon their arrows, which they use against antelopes and wild buffaloes, as also against their enemies.

The fcrota of fheep are fometimes ferved up at table, roafted, and tafted very well, but were apt to rife on the ftomach.

The aponogeton diffachyon (waater uynties, or water lilies) grew in many places, in fhallow puddles of water, very plentifully, and from its white flowers that floated on the water, exhaled a most fragrant odour. The roots roasted, were reckoned a great delicacy.

Cucumbers, which were cultivated in the gardens, were ferved up at table, by way of deffert, being

being pickled first in falt water, and afterwards in vinegar, with Cayenne pepper.

From a decoction of the *folanum nigrum* (or deadly nightfhade) and the *fonchus oleraceus* (or fow-thiftle) which were found growing wild near almost every farm-house, were formed, with wax and lard, some excellent falves, for healing of wounds and ulcers of all kinds, remedies which were as common as they were approved.

The fwallows (*birundo ruftica*) were now, in the months of September and October, extremely bufy in the mornings and evenings in building their nefts, and that in the very houfes of the farmers, the doors of which are feldom flut; fometimes, though very feldom, they fix their 'habitations in the clefts of rocks. They build their nefts here of clay, which they work up with their bills, and carry in fmall fcraps to their habitations, which thus become daily more round and complete. The fwallows, which conftantly return hither at this time, migrate every year from hence, as they do in Europe, without the country people being able to afcertain whither they retire during winter.

A report that was very general at Roode-zand, ftruck me with the greateft aftonifhment, and excited my curiofity in the higheft degree. The inhabitants all affured me with one voice, that there was a bufh to be found on the mountains,

on which grew various wonderful products, fuch as caps, gloves, worfted ftockings, &c. of a fubstance refembling a fine plush. I importuned almost every body in the neighbourhood to procure me, if poffible, fome of thefe marvellous products, and I refolved not to leave the place till I should have unriddled this mystery. In the course of a few days, I had several of the leaves brought me down from the mountains, which were covered with a very thick fhag or down (tomentum) and very much refembled white velvet. The girls, who were used to the management of these leaves, began immediately, with fingular dexterity and nicety, to ftrip off this downy coat, whole and entire as it was, without rending it. After it had been taken off in this manner, it was turned infide outwards; when the green veins of the leaf appeared on one fide. Accordingly, as the leaf was more or lefs round or oval, divers of the above-mentioned articles were formed out of it, the fhape being now and then affifted a little by the fciffars. The stalks of the leaves furnished stockings and ladies' fingered gloves; the finaller leaves, caps. So that the matter was not quite fo wonderful, as it was wonderfully related. But in the mean time, it remained still for me to find out to what plant thefe leaves belonged, and this forced me to climb up myfelf the higheft fummits of the mountains.

mountains, where they grow. The plant, indeed, was not fcarce in those places, but it cost me a great deal of trouble before I could find one in flower, or in feed, and when I did, I was convinced that this plant belongs to the genus of bupleurum (*bupleurum giganteum*). The downy coat, refembling fine wool, being well dried, was also used for tinder, and answered the purpose extremely well.

Roode-zand has a fine church, and its own appropriate minifter. To this parifh, all who live farther down in the country muft neceffarily belong; though they fcarcely come more than once a year up to church, on which occafion they generally bring their children with them to be baptized.

On the 6tb, having made here a fine collection of plants, birds, and feeds, and our cattle being perfectly refreshed, we left this beautiful spot, and penetrated into the country over several rivers, such as Hartebeest's rivier, (where we took up our lodging for the first night with MICHAEL DE PLOI), Hex rivier, Breede rivier, and so on to Matties valley and Brandsteeg, and crossing Mattjes kloof, arrived at the house of PETER DE WETT, near the hot bath, where we rested a day for the sake of using the bath, and of visiting the neighbouring mountains.

Before

Before we reached DE PLOI's houfe, near Hartebeeft's rivier, we paffed by a mountain, called Slangenkop (ferpent's head), which may, perhaps, be confidered as the most remarkable in its kind. It ftands feparated from the other ridges of mountains, like a large folitary rock, and is not very high. On one fide of it is a large and deep crevice, which makes this rock remarkable, as every autumn almoft all the ferpents of the neighbourhood creep into it, and affemble together, in order to remain there fecure and unmolefted, during their torpid state. Towards fummer, when the heat begins to fet in, ferpents of many different kinds, and frequently coiled up together in large knots, are feen coming out from this hole, in order to fpread themfelves afterwards all over the fields, each to its respective place of abode, and, by means of proper food, to recover the flefh which they have loft in this retreat.

The colutea veficatoria bruifed, was used in difeases of the eyes. The pyrus cydonia, (or quincetree), grew here, being planted out for hedges.

The Hot-bath has its fource at the foot of of the mountain, on the eaft fide of the ridge, in a fandy foil. The fprings are feven in number, one of which is very large, compared with the others. The fecond or uppermoft, is of a midling fize, to the fouthward of which the firft is fituated, and the third close by it. Below thefe

thefe is a fourth, and the fifth is fituated a few yards farther off, and between these two the fixth, which does not fpring up in any one regular place, but bubbles up alternately out of feveral places. The lowermost is the largest, end boils with great force. The water is quite boiling hot, fo as even to be fit for fealding animals in. The finoke is feen to rife as it were out of a pot boiling over the fire, and continues fo to do in the ftream that runs down from it, to the diftance of two mufket-fhots. The fides and bottom of the channel have no fediment : but a green conferva grows in it. The ftones that lay in the channel, and at this time were elevated a little above the furface of the water, were neverthelefs covered with a grey coat, and in the channel a foft ftone was found, which might be fcraped with a knife, and was ufed inftead of chalk. A piece of blue woollen cloth did not change its colour in the water, neither did blue fugar-paper, a fign that the water contained no acid. By fugar of lead it was no otherwife affected than that it acquired the colour of milk, and with powder of Peruvian bark it became rather brown. The vein runs always equally ftrong, without increasing or diminishing; yet the water was faid to be hotter in fummer. Linen may be washed in it, without being coloured by it, and meat may be boiled in M the YOL. I.

the ufual manner in the bath itfelf, without acquiring any difagreeable tafte; all which proves the purity of this water.

From the fprings, the water, in running down, gathers together into feveral cavities of different fizes, in which people may fit down to ufe the bath. Over two of these pits small huts were erected for the convenience of the company; and to thefe cold water could be brought at pleafure from a ftream that ran down from the mountains. Indeed, it would be too venturefome to go alone into this bath; as the heat of the water, which increases the palpitation of the heart, drives the blood into the extremities, and the veins of the lower parts of the body, which are in the bath, become fo expanded, that the blood is derived in too great a quantity from the head, and one is in danger of falling into a fwoon in a quarter of an hour. Sometimes both naufea and vomiting fupervene.

Among the invalids, who were here at this time for the benefit of their health, were two who had a peculiar claim to our pity. The one was a countryman, who had a malignant ulcer in his ftomach, in confequence of being gored by a mifchievous ox: he could not take any thing into his ftomach except a very fmall quantity of the bath water, as he vomited continually. The other was a flave, who had a large flefhy

flefhy excrefcence on his right fhoulder, which had pufhed the arm out of joint before; this was occafioned by a finart blow on the fhoulderblade, that he had received by a fall.

The *mefembryanthemum edule* grew here in abundance, and efpecially in the fandy plains, and was called Hottentots figs (*Hottentots vygen*) the fruit when ripe and peeled, tafting tolerably well; it varies greatly in the colour of its bloffoms, which are fometimes red; at other times, carnation, yellow, or white.

On the 9th of Octol er we paffed over Maurice's Heights to Koree. From this hill the mountain, in one of its floping fides, was feen to confift of flate (*fchiftus foriptura candida*) in laminas, but very brittle and unfit for writing upon. On the other fide of this eminence were feen alfo the *Carrow Plains*, which are very dry, fteril, and bare of grafs, being covered with a great number of fucculent plants only, and buffhes.

The prickly bulh of the *arduina bifpinofa* now bore ripe berries, which were faid to be eaten by the Hottentots.

I had here an opportunity of feeing the fame operation performed upon a great number of lambs, as I had before feen done with refpect to oxen : the farmer himfelf caltrating them with a fmall knife, with which he laid open the fero-

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tum. The tefficles then were drawn out fucceffively, and very dexteroufly feparated.

In this place, where the farms ftand clofer together than elfewhere, the fheep were marked, and particularly in the ears. When it rained any great length of time, the fheep grew ftiff, and fome of them died. In confequence of this, they were alfo attacked with the dropfy (*afcites*), which the peafants cured by tapping them in the belly.

The fheep are fometimes florn in this country, though the wool is feldom made use of; but the fheep-fkins are frequently given to the flaves unflorn.

The zygophyllum morg fana, a handfome fhrub, now adorned the hills with its bloffoms, and appeared to be very proper for arbours.

A place or fold, where fheep as well as horned cattle were inclosed in the open air, was called a *kraal*. This place was always near the houfe. It was furrounded either by a mud-wall or by very prickly bufhes. For the purpose of letting the cattle in or out, an opening was left, before which was placed a gate or door. In these parts, where there was plenty of wood, these *kraals* were inclosed by felled trees, confisting of the *mimofa nilotica* and *arduina bifpinofa*, the most prickly of any almost in all Africa.

Africa. Thefe fences keep off wolves, foxes, and other beafts of prey, as well in confequence of their breadth, as by their prickles.

The mimofa nilotica, while it is cutting down, may fometimes happen to fall upon a man, and its prickles to enter deep into his body, on which occafion they may chance to break off, and flick faft in it.

The antelopes eat the leaves of the mimofa nilotica, and frequently the prickles of it run into their feet, without doing them any injury.

In the crevices of the mountains a great number of *daffes* (*cavia capenfis*) were found, which were generally fuppofed to have the menftrual flux : and the fand-hills to the right harboured near the fuminit of their fides a deep white fand, which was driven about by the wind.

In a river, which had a fmall creek, and in this a deep hole, I faw in miniature the manner in which Nature forms whirl-pools, or *maalfroms*. Above the hole, the froth and other impurities were carried round in a direction contrary to that of the current, and were drawn down in the centre,

On account of the flooding of the rivulets we were obliged to remain here a few days; and from hence we took our route on the 14th over the river Koree, which we croffed twice, and afterwards paffed over Sand River, which

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is frequently dried up, to Riet Fontein (Reed Fountein) and farther over CLAS VOGT'S Rivier to a farm which at this time belonged to one LE ROUX.

The viscum capense, a paralitic plant, was feen, differinated every where on the branches of trees (especially of the *rbus*) by means of its berries, which the birds are fond of.

On the 15tb, paffing by GERT's houfe, we croffed a very deep river, in our way to PHILIP BOTA's: and went from thence paft DROSKI's houfe to JACOB BOTA's.

, Here they flowed me a specimen of cat-filver (mica argentea) found in the mountains, which was mixed with a transparent and irregularly crystalized calcareous spar; as also a kind of bitumen, which the country people were pleased to call daffes-p—; supposing it to be the inspissated urine of the great mountain rat (cavia capenfis) that is found there. I was informed that this bitumen was to be found in great abundance in the cracks and crevices of the mountain, especially at one large projecting krants, or fummit. The bitumen was very impute, and known to the country people on account of its great use in fractures.

The branches of the wax-fhrub (myrica cordifolia) the berries of which are covered with a fat fubftance refembling bees-wax, were put whole

whole into a pot of boiling water, in order to melt and fkim off the wax. It refembles grey impure wax, is harder than tallow, and fornewhat fofter than wax. The farmers use it for candles, but the Hottentots eat it like a piece of bread, either with or without meat.

On the 17th, paffing by Bruynties Rivier and Leeuwe Rivier (Lion River) we came to Keureboom's Rivier, which is fo named from the trees (fophora capenfis) which grow near it in abundance.

An infusion of the root of *afclepias undulata* was used as a remedy for the colic.

Cryftals of *gypfum*, which were faid to be found in the mountains of Africa, were ufed for cleanfing ulcers, when pounded and fprinkled upon them.

On the 18th we paffed Pulpas Valley and Rivier, and arrived at Zwellendam, the refidence of one of the company's land-drofts, whofe jurifdiction extends over all the interior part of the country that lies beyond this fpot, and whofe office is in fome refpect, though not abfolutely, fimilar to that of the governor of a province.

The acrid berries of the *fagara capenfis* were used both here and in other parts of the country in the colic.

After dining with the land-droft, M. MENTZ, by whom we were received with the greateft M 4 hofpitality,

hofpitality, we continued our journey acrofs the broad river, known by the name of *Buffeljagt's Rivier*, to one of the company's pofts, called *Riet Valley* (Reed Valley), where we ftayed feveral days, to arrange the collections we had made, and to repair our wretched carriage, which had been fhattered to pieces by the ftrong and mountainous roads; a cart io fmall, old, and crazy, that probably nobody, either before or after us, can boaft of having made, in fuch a vehicle, fo long and dangerous a journey into this mountainous country.

The plains now began to abound more in grafs, and looked fomething like meadows.— The mountains which had followed us, as it were, all the way from *Roode Zand*, now terminated gradually in large declivities like fteps, and hills. In the fame proportion, likewife, the herds of cattle became larger, and occurred more frequently; while the vineyards and corn-fields, which, however, were not wanting as yet, grew more and more fcarce.

We were told that infectious diftempers frequently prevailed among the cattle here, and that the *brandziekte* was not uncommon. It was defcribed as first attacking the lungs and liver, and then the other parts of the body; in confequence of which the flesh became fo fost and tender,

tender, that there was hardly any cohefion left between the fibres.

Not far from this farm of the company's, which particularly furnishes it with large timber, in a cleft in the mountains, stood a large wood, called *Grootvader's Bosch*, or Grandfather's Wood. To this we made an excursion, with a view of becoming acquainted with the indigenous trees of Africa. After passing by a farmhouse called *Rietkeul*, we arrived at *Duyvenboek's Rivier*, at a spot which had obtained the name of *Helle* (or Hell) on account of the mountain at this part forming a very deep valley. The forest was very thick and losty, but unfortunately the trees at this feason had neither blossom nor fruit on them, to fatisfy my curiosity.

Camafie-bout was a very fine fort of wood, ufed for the borders of chefts of drawers, and of other pieces of furniture.

Stink-hout (ftink-wood) which refembles the walnut-tree, is a tall tree, and is ufed for making writing-defks and chefts of drawers.

Geel-hout, or yellow wood (*ilex crocea*) is a large tree, the wood of which is very heavy, more or lefs of a pale yellow colour, and is ufed for making tables.

A rock crystal that was found here was flown to me, of the length of the little finger, and pointed at both ends.

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A fpecies of pepper (*piper capenfe*) that was found in abundance in the wood here, was called by the country people *ftaart pepper* (or tail-pepper) and ufed by them as a fpice.

We left our cart at the company's poft, and in the place of it procured a large waggon tilted over with fail-cloth, together with ten fresh oxen, to continue our intended expedition to the Coaft of Caffraria.

Not far from this farm there lived a few Hottentots, who were fometimes employed in the fervice of the farm and the company. They were quite mad after brandy and tobacco, and feemed to place their whole delight in filth and flench. Their bodies were befmeared all over with greafe, and powdered with the powder of bucku (diofma); and to fhow us refpect as ftrangers, they had painted themfelves befides with red and black ftreaks. The women wore a triangular piece of fkin, and the men a bag or pouch, on the fore-part of their bodies, for the fake of decency. Round the neck, arms, and waift, they were decorated with ftrings of blue, white, red, and motley coloured glais-beads in feveral rows. Some of them wore rings of iron, brafs, or leather round their arms. A fheepfkin thrown over their hips, and another over their back conflicted the whole of their apparel. The tobacco-pipe was continually in their mouths. They fubfift upon their cattle, and

and upon bulbous roots, which they are very ready at finding out and digging up in the fields.

For want of clocks, the colonists always meafure time by the course of the fun.

On the 23d and 24th we paffed over Krakous Rivier, and Krakous Heights (Krakous Hoogt) and at noon arrived at Vett Rivier, and afterwards croffing this river, paffed by feveral farmhoufes.

In these plains the aloe-tree (aloe perfoliata) from the leaves of which the gum aloe diffils, grew in greater abundance than I ever observed it to do in any other place.

The fheep here were feeding on various poifonous plants, fuch as the *rbus lucidum*, *lycium afrum*, &c.

On the 25th we visited MARTIN LAGRANS, at *Palmit Rivier*, a farmer, who had as many fowls as supplied him with a hundred eggs every day.

From thence croffing Zoet-melks Rivier (Newmilk River) and paffing by Zwarte Valley, or Black Vale, we came to a farm called Wel te Vrede (Well fatisfied) near Valfe Rivier (or Falfe River).

Hard by Zwarte Valley, to the left, the rock plainly appeared to contain iron.

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On the 27th, paffing by Groote valley, or the Great valley, and croffing the broad river, called Goud's river, we arrived at DANIEL PINARD's.

Here, we were informed, the Rabies canina and vulpina had prevailed.

I obferved that the peafants here practifed a curious method of clearing their poultry-houses from vermin. These houses are constructed of clay, almost like large ovens; and when they are infected with vermin, the owners have nothing more to do, than to put a little straw into them, and set it on fire, in order to be rid of these unwelcome guests.

On the 28th, we paffed by a large rock, which, on account of its harbouring bees, has obtained the name of the Honey-rock (Honing klip) and reached a farm-houfe, fituated near Attaquas kloof. The Honey-rock yields, at a great diftance, a remarkable echo, that repeats feveral fyllables fucceffively, on which account, it was an object of attention to us in this place.

The wood of the olive-tree (olea capenfis) which was white and very heavy, ferved to make chairs of.

It is true, wheat was not fown here in great quantities, but the foil was faid to be fo fertile, and the roots of the thinly fown corn to branch out fo much, that every grain always produced feveral ears. They affured us that they had frequently

quently counted twenty, nay, as far as eighty ears, that proceeded from one root. This I conceived to be fcarcely credible, and in order to gain more accurate information on this fubject, I undertook to count them myfelf in the field; when I found, that from one fingle grain of wheat, a great many ears had frequently fprung up, though the number of those that I examined, did not amount to more than one and forty.

The Hottentots we had hitherto met with in our expedition, had either been brought up by the Europeans, or in the neighbourhood of their farms, and confequently were often much altered from their natural flate. Thofe we vifited now, and efpecially after this period, lived mostly at a greater diffance from the Europeans, had fometimes villages and families of their own, and prefented themfelves to us more and more in a flate of nature, that is to fay, in the flate in which we were defirous of becoming better acquainted with them.

A century ago, it was much eafier to fearch into, and get acquainted with the peculiar manners and mode of living of this people, at which period they dwelt nearer the Cape, were more numerous, and enjoyed their priftine liberty. Now, the way to their abodes is very long, their focieties fmall, their manners and way of life much

much altered, and the whole nation under great reffraint.

Some of those that lived as fervants with the colonifts, fpoke Dutch tolerably well. When the farmers first fettled in this part of the world, they found the Hottentots to be very much afraid of gunpowder and fire-arms, not being able, as they expressed themselves, to form the least idea of their arrows, meaning their balls, of which, after they were fhot, they could not difcern the flight; nor of their fcrews, which they could not pull out again, as they could nails.

We heard frequent mention made of a Hottentot, who had died a few years before, and who, in confequence of having been toffed by a wild buffalo, had loft the whole of his lower jaw, notwithftanding which, he had lived twelve or thirteen years after the accident. He could not fpeak a word; as for his victuals, he pounded them between two ftones (which are commonly ufed by the Hottentots, instead of a pestle and mortar) and then crammed them down his throat with his fingers. He made, likewife, fhift to fmoke tobacco, by holding his hand over the aperture. At last he had the good fortune to shoot the very buffalo, which had brought this difafter upon him.

The leaves of the Atragene vificatoria were used by the country people in this and other places, inftead

inftead of *cantharides*. Bruifed, and applied to any part of the body, in the fpace of half an hour, they raife a large blifter, which keeps open a long time. The root alfo cut into flices, and applied to any part of the body, draws fo powerfully, that if it lies on all night, the fore will keep open for a month. This plant grew chieffy near the precipices of mountains; and is ufed in rheumatic and other pains.

All along from *Roode-zand*, we had now proceeded nearly due fouth-eaft, through a country furrounded on both fides with mountains, of which, the ridge that lay to the right of us was now at an end, without reaching as far as the fea-fhore. The ridge we had on our left, ftretched ftill farther on, fo that as we wilhed to penetrate deeper into the country, we were under the neceffity of croffing it.

Such a paffage may be effected through Attaquas kloof, a vale of fuch a length, that it requires almost a day's journey to pass through it.

On the 29th, we took a refolution to fend our waggon this way, with Mr. IMMELMAN, and to make a round on horfeback ourfelves, through the verdant and woody country of the *Hautniquas*, (which lay to the right of us, and extended quite to the fea-fhore) and afterwards to crofs the mountains

mountains in another place, and join our waggon in Lange kloof.

With this view, paffing by *little* and *great Brack-rivers*, we came to *Zout fontein*, a farm, belonging to a man of the name of VIVIER; afterwards we rode through a woody dale, and paft a colony, where we faw only a few Hottentots tending the cattle, and at laft arrived at *Klein fontein*, or the little fountain, near *Wittel's rivier*.

The following days we continued our journey paft two or three colonists' houses, to GEORGE BOTA, at his farm of *Sandvliet*, near *Keerom rivier*, where we refted ourselves a little. In our road we caught a yellow serpent, fix inches long, and not venemous, under some stones.

Of the bark of the *Anthyllis*, the Hottentots have the art of making ropes, by means of which they afcend trees, as by a ladder, when they want to get honey out of them. For this purpofe, they first tie a noofe round the trunk, in which they put one foot, then they fasten another noofe higher up, and when mounted in that, untie the former, and fo on.

Roads, that can be properly fo called, are not to be found in all this fouthern part of Africa; yet the way which people in general take, when they travel, is pretty well beaten in the neighbourhood of the Cape; farther down in the coun-

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try indeed, very often not the leaft veftige of a road appears. Therefore in plains that are either very extensive, or covered with underwood, it may eafily happen that a traveller shall lofe his way; fo that he ought to be well acquainted with, and accurately obferve the marks, by which he may get into the right road again. He must fee then whether there be any sheep's dung in the fields, which shews that there is a farm-house in the vicinity; and likewise, whether he can discover any herds of cattle grazing, or any corn-field.

The country here, in general, confifted of extenfive plains, full of rich pafture, interfperfed with hillocks, and valleys, that abounded in wood and water.

The trees in the woods were large and tall, but for the most part crooked and misshapen, and at the fame time covered with moss, like those in the northern regions.

The Hottentot women here, wore a little cockle-fhell (*nerita biftrio*, and the cypræa moneta) by way of ornament, both on their caps, and round their wrifts, in the form of bracelets. Their cap is a flip of buffalo leather, of a hand's breadth, without any crown, ornamented on the outfide with thefe fhells, in various rows, according to the different tafte and wealth of the owner.

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The Hottentots of this place had a cuftom, which is not general with this nation, of wearing a bag of leather, that hung by a ftrap over their fhoulders, quite down on their hips. At the lower end it was ornamented with thongs of leather, like fringes, to which were tied fhells, that made a rattling noife. This bag ferved to keep various articles in.

Other Hottentot women wore on their heads a ftriped conical cap, made of feveral narrow flips of black, white, and brown lamb-fkins, in their natural flate, fewed together. Thefe caps were alfo, fometimes, decorated with glafs beads, fixed on them in various forms, or hanging down, like ftrings of pearls.

Round their arms and legs they generally wore rings of ox-hides, which I had here the opportunity of feeing made. The flips, cut from the hide, were beaten till they were quite round, and both the ends thuck fo faft together, that it could not be perceived where they were joined. Thefe rings they afterwards forced over their feet, wearing, effectially the women, fuch a number of them, as to cover half the leg, or more. I have alfo fometimes feen them wafh, and afterwards greafe thefe rings.

In the eggs of offriches, as I was informed, a ftone was fometimes found, which was fet, and used for buttons.

There

There are inftances of an European's having married a Hottentot woman, who has then been baptized. But it has more frequently happened, that a colonift, without regular marriage, has had feveral children by a Hottentot miftrefs, and that these children have been baptized when they were feveral years old. .

In many places I obferved the land to have been fet on fire for the purpole of clearing it; though in a very different manner from what is done in the north. Divers plains here, produce a very high fort of grafs, which being of too coarfe a nature, and unfit food for cattle, is not confumed, and thus prevents fresh verdure from fhooting up; not to mention that it harbours a great number of ferpents and beafts of prey. Such a piece of land as this, therefore, is fet on fire, to the end that new grafs may fpring up from the roots. Now if any of these places were overgrown with bufhes, thefe latter were burned quite black, and left ftanding in this footy condition for a great length of time afterwards, to my great vexation, as well as that of other travellers, who were obliged to pass through them.

Almost every day we were wet to the skin, in confequence of deluging flowers of rain, which were fometimes accompanied with thunder. Though at this feafon they have always fine weather near the Cape, it appeared as if winter N 2 and

and the rainy feafon had not yet taken leave of this part of the country. The rain was the more troublefome to us, as, befides that we had no opportunity of getting fhelter here, and the fhort intervals of fun-fhine were not fufficient to dry us when wet to the fkin; the ground, likewife, efpecially of the hills, was now fo wet and flippery, that our horfes, being, according to the invariable cuftom of the country, unfhod, ftumbled continually, and in many places we were in great danger of breaking our arms and legs.

On the 2d of November we were overtaken by fome remarkably heavy flowers, when we croffed *Quaiman's drift*, a river, which like many other rivers here near the fea, rifes and falls with the tide; and after paffing through feveral woody vales and rivers, at length arrived at *Magerman's kraal*, a colony or grazing farm, belonging to FREDERICK SEELF.

More weary and wet, or in a worfe plight, we never could have been, and worfe we could never have been accommodated than at this place. No European dwelt here, but a black female flave, acted in her mafter's abfence as miftrefs of the houfe, and had the fuperintendance over a great herd of cattle, and over the Hottentots that tended them. The houfe was an oblong cottage, conftructed of timber, and daubed all over with clay. In this, I and my companions, with a great

a great number of Hottentots, were obliged to pais the night, happy to have fome kind of fhelter from the rain, wind, and cold.

As in the courfe of the few days fince we had left our waggon, we had made fome collections, and therefore could not poffibly flow every thing upon our horfes backs, we were under the neceffity of taking three oxen from the houfe abovementioned, to carry our baggage, and three Hottentots to lead them.

Oxen are much ufed in thefe parts, when tamed and broken in by the Hottentots, to carry burdens. Thefe oxen have a hole through the cartilage of their nofe, in which is put a flick, at both ends of which are fastened straps, like a bridle, by the help of which the oxen are guided.

In different places we obferved pits dug, like those in which wolves are usually caught, and in which, when well covered over by the Hottentots, buffaloes and wild beafts are taken.

The Hottentots always carry a javelin or two (affagays) with them on their journies. These affagays confift of an iron-fpear hollowed out on each fide about fix inches long, with or without an iron fhaft, which is fometimes round and fmooth, and fometimes grooved. This fpear is fastened with thongs of leather to a stender round stick, five feet long, made of the Affagay wood (Curtifia faginea), and tapering towards the end. N 3 With

With these lances, which they throw with great dexterity to the diffance even of 100 paces, they defend themselves against their enemies and wild beafts, and are able to kill with them, buffaloes, and other animals.

Inftead of China-veffels and calabafhes, poverty had taught them to use the shells of the tortoises, which frequent the bushes in the fandy plains, particularly the *Testudo minuta* and geometrica.

From their frequent befinearing themfelves, as well as from the heat of the climate, the Hottentot women have always very flabby breafts, that hang down very low. And therefore, at the fame time that they carry their infants on their back, they can with the greateft eafe throw the breaft to them over their fhoulder. Thefe in fhape and fize fometimes very much refembled calabafhes; but among the curious fights that attracted our notice in this folitary place, was a Hottentot girl, whofe breafts were fo long, that they hung down as low as to her thighs, and were the largeft that I ever faw among this people.

Here alfo I learned a curious way of baking bread fpeedily without an oven. The flour was kneaded up with water in the ufual manner to dough, of this afterwards a thick cake was made, which was laid in the embers, and covered with them, fo that in confequence of the heat communicated

municated to it, it was foon thoroughly baked; but the afhes that adhered to it made it fo dirty, that, they were obliged to forape it before they could eat it.

The Hottentots always fit before the fire, fquatted down upon their hams, on which occafion the women conftantly lay the covering of their modefty, which here is worn in the form of a fquare, underneath them. The huts in thefe parts were formed of wooden ftakes, round, and were convex and low, and covered with ftraw mats, in the form of a hay-ftack, with a finall aperture in the front, where the fire is made.

At the dawn of day, on the 3d of November, we fet out again on our journey, and croffed feveral rivers, fuch as the Krakakou, Ao, Koukuma, and Neisena. The woods we passed through were narrow and full of prickly bufhes. We could find no other paffage through them than the tracks of the Hottentots, fo that we were obliged almost to creep on all fours, and lead our horfes by the bridle. AUGE, the gardener, having travelled this way before, was now our guide, and we had left the Hottentots with our oxen behind us. In the afternoon we arrived at Koukuma Rivier. We forded over one of its branches, and intended to pass through a thicket to a farm which we difcovered on an N 4 eminence

eminence on the other fide of this thicket, belonging to one HELGERT MULLER; but we had not advanced far into the wood before we had the misfortune of meeting with a large old male buffalo, which was lying down quite alone, in a fpot that was free from bufhes, for the space of a few square yards. He no sooner discovered Auge, who went first, than roaring horribly he rushed upon him. The gardener turning his horfe fbort round, behind a large tree, by that means got in fome measure out of the buffalo's fight, which now rufhed ftraight forwards towards the ferjeant, who followed next, and gored his horfe in the belly in fuch a terrible manner, that it fell on its back that inftant, with its feet turned up in the air, and all its entrails hanging out, in which ftate it lived almost half an hour. The gardener and the ferjeant in the mean time had climbed up into trees, where they thought themfelves fecure. The buffalo after this first atchievement, now appeared to take his courfe towards the fide where we were approaching, and therefore could not have failed in his way to pay his compliments to me, who all the while was walking towards him, and in the narrow pafs formed by the boughs and branches of the trees, and on account of the ruftling noife thefe made againft my faddle and baggage, had neither feen nor heard any thing.

thing of what had paffed. As in my way I frequently ftopped to take up plants, and put them into my handkerchief, I generally kept behind my companions, that I might not hinder their progrefs; fo that I was now at a finall diffance behind them.

The ferjeant had brought two horfes with him for his journey. One of them had already been difpatched, and the other now ftood just in the way of the buffalo, who was going out of the wood. As foon as the buffalo faw this fecond horfe, he became more outrageous than before, and attacked it with fuch fury, that he not only drove his horns into the horfe's breaft and out again through the very faddle, but alfo threw it to the ground with fuch violence, that it died that very inftant, and all the bones in its body were broken. Just at the moment that he was thus occupied with this latter horfe, I came up to the opening, where the wood was fo thick, that I had neither room to turn my horfe round, nor to get on one fide. I was therefore obliged to abandon him to his fate, and take refuge in a tolerably high tree, up which I climbed.

The buffalo having finished this his second exploit, fuddenly turned round, and shaped his course the same way which we had intended to take.

From

From the place I was in, and the eminence I had gained, I could plainly perceive one of the horfes quite dead, the other fprawling with its feet and endeavouring to rife, which it had not ftrength to do, and the other two horfes fhivering with fear, and unable to make their efcape; but I could neither fee nor hear any thing of my fellow-travellers and companions, which induced me to fear that they had fallen victims to the first transports of the buffalo's fury. I therefore made all poffible hafte to fearch for them, to fee if I could in any way affift them; but not difcovering any traces of them in the whole field of battle, I began to call out after them; when I difcovered thefe magnanimous heroes fitting faft, like two cats, on the trunk of a tree, with their guns on their backs, loaded with fine fhot, and unable to utter a fingle word.

I encouraged them as well as I could, and advifed them to come down, and get away as faft as poffible from fuch a dangerous place, where we ran the rifk of being once more attacked. The ferjeant at length burft out into tears, deploring the lofs of his two fpirited fteeds; but the gardener was fo ftrongly affected, that he could fcarcely fpeak for fome days after.

Thus we went back to the very fpot from which we fet out, and after paffing over fome very tirefome hills, arrived at the place of our deftination;

deftination; but as the ferjeant could not crofs the river without a horfe, I took him up behind me, and after having left him my horfe, walked on to the houfe.

Here my first care was to difpach fome Hottentots to the thicket, to take the faddles off the two horfes, which hereafter might be of fervice. Thefe Hottentots armed themfelves with lances, their usual weapons, and informed us that they had before obferved that one folitary butfalo haunted that wood, which, as they faid, was fo fpiteful, that he had been driven away from the herd by the other buffaloes, and was obliged to live alone,

No European was to be found in this place, there being none but Hottentots, nor any other hut than those which were inhabited by the Hottentots themselves, and which, on account of the vermin they harboured, no European, even in a case of the greatest necessary, could ever think of lodging in.

We were therefore obliged, with a ftraw mat under us, a faddle under our head, and a fire at our feet, to pass the night in the open air. Fortunately for us, the fky was very clear and ferene; but at the fame time the cold was fo great, that we could not fleep, being obliged every hour to rife and warm ourfelves all over before the fire, for the purpose of making which we had had the forefight to order a fufficient quantity

quantity of logs and brufh-wood to be brought to the hut the night before.

Hemp (Cannabis Sativa) was cultivated here by the Hottentots in a very fmall inclosure. This is a plant univerfally used in this country, though for a purpole very different from that to which it is applied by the industrious European. The Hottentot loves nothing fo well as tobacco, and with no other thing can he be fo eafily enticed into a man's fervice ; but for fmoking, and for producing a pleafing intoxication, he finds this poifonous plant not fufficiently ftrong, and therefore in order to procure himfelf this pleafure more fpeedily and delicioufly, he mixes his tobacco with hemp chopped very fine. It is furprifing, that this nation, although, before the arrival of the Europeans it had no intercourfe with the reft of the world, and confequently was ignorant of the ufe of tobacco, should, notwithstanding, become fo diftractedly fond of this poifonous plant; and that for it and brandy they could be induced to fell to the Dutch a confiderable portion of their land near the Cape; a transaction which has coft them fo dear, both with refpect to their liberty and to the land of their fore-fathers.

On the 4th we quitted this place, and in the evening reached PETER PLANT's farm, called Melkbout Kraal, near the Deep River.

The

The ferjeant was obliged to put up with an ox by way of nag for two days, as no horfe was to be found hereabouts; this anfwered tolerably well, though it was very fatiguing, as well on account of the breadth of the ox's back, as because he could use no ftirrups.

On the 5th we croffed Pifang River, to go to JACOB BOTA'S farm, called alfo Pifang Rivier.

This farm, which was entirely a grazing farm, was fituated not far from the fea-fhore, and a whole fociety, confifting of more "than fifty Hottentots, were here in the fervice of this farmer, lived in his vicinity, and were fupported by him. The harbour here was very wide and beautiful.

The farmer himfelf was not at home, having fet out for the Cape that very day; but an old faithful Hottentot was in the mean time our kind and attentive hoft, and gave us all neceffary affiftance.

My two fellow-travellers, not having yet got the better of their terror, and wearied out with the many croffes they had met with in the courfe of their journey, now refolved here to fet bounds at once to their dangers and their curiofity, finall, as this latter was, and to make the beft of their way back from hence to the Cape, where they might get more wine to drink, and be lefs liable

liable to be frightened by buffaloes. But when I reprefented to them what a cowardly appearance this would have, and that they had made but a finall collection as yet, likewife that we were feparated from our waggon, our other fellow-traveller, and the reft of our baggage; adding befides, that though they fhould accompany me no farther, I was neverthelefs determined to purfue my journey, they were at laft perfuaded to alter their refolution.

However, I let my doleful companions reft here for a few days, while I vifited the feafhore, and the adjacent mountains, which were covered with fhrubs and bushes of various kinds, and particularly with the Arduina bifpinofa, fo that in feveral places they were impenetrable; and in thefe I was frequently fo much entangled, that I was obliged to crawl for a long way on the tops of the fliff bufhes, which with their fharp prickles tore my hands and clothes quite to tatters. The bare-footed Hottentot who accompanied me, was fo much lacerated and fo bloody, as to be a real object of compassion; but in my fearch after plants, having loft my way in the thicket, we had no other refource left. At the foot of the mountains were flat rocks, on which feals lay fleeping in the fun; a circumstance, whence the mountain has its name of Robbeberg (or Seal Mountain.)

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It projects a great way into the fea, like a peninfula, and is covered with finall fea-fhells (Conch.e.)

The Robbeberg is a fingular mountain, and dif-, ferent from any other that I have feen in Africa. Its middlemost stratum is a very firm concretion of round and irregularly-fhaped pebbles, and indurated lime, about four fathoms broad. It perfectly refembles a piece of mafonry. The uppermost stratum appeared to me to be a brownifh rock. The lowermost is fand-ftone. On another fide of the mountain there is a heap of indurated fand, which the water has fcooped holes into. In fome places the fand had concreted with clay in a tubular form, and large maffes of it had fallen down. The flat foot of the mountain, towards the fea, had various holes in it of different fizes, fome of them as round as if they had been turned, and others oblong. On one fide, the lowest stratum was a whitish-grey quartz, that was greafy to the touch. The mountain had, moreover, long clefts and crevices, in which hung a number of thick stalactites, covered with a fine down-like fubstance, which was fometimes quite green. The fand-ftone was of a very fine grain.

The Strelitfia, with its yellow flowers and blue nestarium, grew near this fpot, and was one of the most beautiful plants, of which the bulbs were

were procured to fend to Europe. The Hottentots were faid to eat the fruit of it.

The Hottentots were at no great pains in dreffing their victuals. Buffalo's flefh was merely cut into flices, and then fmoked, and at the fame time half broiled in the embers over a few coals; this was eaten without bread, though, perhaps, it was in the first flage of putrefaction.

It is a cuftom among the Hottentots, that if a cow is barren, fhe muft be killed; but in this cafe its flefh is eaten by married people only, and not by those that are lingle.

Greafe is the great dainty of the Hottentots, which they are not only fond of eating, but can alfo drink without finding any inconvenience from it.

The finall huts of the Hottentots are at times fo full of vermin, both of the hopping and creeping kind, as not to be habitable by them: they are then forced to remove them to another place, a removal which does not take a very long time, neither is it particularly expenfive. I have feen it performed with the greateft agility and difpatch. First, a few withies were fixed in the earth, and bent in the form of arches to determine the height of the hut, and give it a rotund figure. These are afterwards covered with rushes, or mats made of rushes, (Cyperus textilis) which keep out both wind and

and rain. All round the bottom dung is laid, to make the hut tight and close in that part.

Su Koa (Potteflaan) was the name given by the Hottentots to a drum they fometimes used to beat to their mufic. Over a pot with water in it was extended a fheep-fkin, which had previoufly been well foaked, and was tied round the edge of the pot with a leathern thong. The fingers of the left hand being placed near the edge, and the thumb in the middle, they beat with the two first fingers of the righthand upon the other edge, which produced a dull heavy found, that had nothing pleafing in To this wretched mufic a Hottentot would it. dance in the following manner: holding in his right-hand a ftring fastened to the roof or wall, and remaining on the fame fpot, he hopped first on one foot, and then upon the other, all the while beating time with them. During this he writhed his body in various curves, and threw his head from one shoulder to the other in a femicircular direction; all the while finging, and all this to a certain modulation. One of thefe dances will fometimes last a confiderable time, and throws the dancer into a violent perfpiration. They always wipe the fweat off their faces with a fox's tail.

I observed several things for which the Hottentots had no words in their own language, such as coffee, boufings, company (compagnie).

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The women carried their infants on their backs under the fheep-fkin, which they call a *krofs*; the child was faftened by a leather ftrap that went round the mother's and its own neck, and was farther fecured by another ftrap that paffed over the krofs under its pofteriors, the mother all the while attending to her bufinefs as ufual.

Some of the women here wore ftrings of glafsbeads round their legs, others had the dependent fides of their krofs ornamented with beads, which, among other things, they receive of the farmers for their wages. Others had a tortoifefhell hanging at their backs, in which they preferved either their tobacco or bucku (*diofma*). For want of clay tobacco-pipes they ufe wooden ones.

The farmers themfelves, for want of proper veffels, were often obliged to keep their milk and honey in leathern bags.

The fields hereabouts were full of wild buffaloes, fo that it was not uncommon to fee a hundred or two of them in a herd. They generally lie ftill in the thickets and woods in the day time, and in the night go out into the fields to graze.

The houfe in which we were lodged was roomy and large, well conftructed of clay, with doors, and with fhutters before the window-holes, as glafs windows could not be eafily procured from fo great a diftance as the Cape. The whole roof

in

in the kitchen was hung with thick flices of buffalo's flefh, which, being dried and fmoked, they ate as hung-beef.

Buffaloes were fhot here by a Hottentot, who had been trained to this bufine's by the farmer, and in this manner found the whole family in meat, without having recourse to the herd. The balls were counted out to him every time he went a shooting, and he was obliged to furnish the fame number of dead buffaloes as he received of balls. Thus the many Hottentots that lived here were supported without expence, and without the decrease of the tame cattle, which constitute the whole of the farmer's wealth. The greatest part of the flesh of the buffalo falls to the share of the Hottentots, but the hide to that of the master.

The Hottentots dreffed the buffaloes hides in the following manner: the hide was ftretched out on the ground by means of ftakes, after which warm afhes were ftrewed over it, and the hair fcraped off with a knife or fpade.

For want of the fhoes ufually worn in other places, which could not be procured fo far up in the country, and which frequently even the farmers at the Cape cannot afford to buy, they generally wear here what are called field-fhoes, which the country people ufually make themfelves, in a way peculiar to them, for the moft

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part

part of buffalo leather, fometimes of neats leather, and fometimes, though more rarely, of the ftriped hide of the zebra.

It was pleafing to obferve with what cordiality the Hottentots, as well those who lived upon the farm, as the ftrangers who had accompanied us hither, offered each other the regale of the tobacco-pipe. Having fet themfelves down in a circle, the pipe went from one to the other round the whole company. Each man taking a few large whiffs, at last gets his mouth full of fmoke, a fmall part of which he fwallows, and puffs out the remainder through his nofe and mouth.

From the woods of *Houtniquas* the peafants, who live near the diffrict of *Mufele Bay*, fell both rough and cut timber, notwithftanding the length and roughnefs of the road; but from hence the farmers have nothing elfe to carry to market, except oxen for flaughter, and butter. If any kind of navigation were fet on foot either from this coaft or from *Mufcle Bay*, the carriage would be eafier, and the commodities, efpecially the timber, cheaper; but this has as yet either not been thought of, or elfe, perhaps, it has not been deemed of any ufe.

Our creft-fallen ferjeant having now in fome meafure recovered his fpirits, and procured the loan of a faddle-horfe here, we refumed our journey

journey on the 10th of November, travelling up the country, and towards the mountains, in hopes, on the other fide of them, of meeting with our waggon, and better fortune. Passing by another farm, belonging to BOTA, we went through two rivers to Malagas kraal; and afterwards proceeded up Keureboom's rivier to Jackall's kraal.

At Keureboom's rivier, Houtniquas land terminated on this fide, a land abounding in grafs, wood, and buffaloes. We farther rode over the mountains, and all along them beyond Keureboom's rivier to PETER JAGER's farm,

Here we were refreshed, thirsty as we were, with Hottentots fack-milk, as it is called, which, perhaps, few travellers, unlefs urged by extreme thirst, will be able to prevail on themselves to tafte. It is a very acid, cool, and refreshing milk, remarkable as well for the veffel in which it is kept, as for its great age. I had formerly imagined, that the four milk of Norrland (in Sweden) which is feveral months old, was the oldeft milk in the world, but I now found that the Hottentots fack-milk might at leaft be confidered as grand-mother to the Norrland milk. The veffel in which it is kept, is the hide of an antelope (Eland, Capra oreas) which is fewed up clofe together, and hung up against the wall. Other hides were faid to be not fo fit for the purpofe. In one of thefe facks thus hung up, new 03 milk

milk is put, which turns four and coagulates. Every day more new milk is poured in, which likewife foon coagulates, as the fack is not cleaned out for the fpace of feveral months at leaft, and frequently not for a year or two.

The Hottentots feldom churn any butter; and when they do, it is only to befmear themfelves with. The *Maquas Hottentots* are faid to churn in the following manner: new milk is poured into a leathern bag, which two Hottentots holding by the ends, fhake the milk in it from one end to the other, till it coagulates.

On the 11th, we paffed over the very lofty mountains that lead to Lange Kloof, in our way to farmer MATTHEW ZONDAG'S. Watry clouds hung all over the mountains, by the piercing vapours of which, though it did not rain, we were wetted quite to the fkin. The fides of the mountain that we paffed over, were fometimes fo fteep, and the path fo narrow, that we did not crofs it but at the hazard of our lives, and shuddered when we looked down the precipice. The country on the other fide, or Lange Kloof, was very elevated, in comparison with that from whence we came, and confequently the mountains there were low, when compared with the dreadful height which they exhibited on the other fide, towards the fea coaft.

At

At this farm they made foap from a ley, prepared from the *Canna bufb* (*Salfola apbylla*) which was boiled a long time and infpiffated; when mutton fuet was added till the mafs acquired a proper confiftence. It was then poured out, and formed into long fquares,

On the 13th, we paid a vifit to PETER FRERE; a man, who was a great hunter of elephants, and had made long journies, as far as into the country of the Caffres. Among other particulars, he informed us, that the Hottentots cannot count farther than five in their own language.

On the 16th, going from this man's farm here, called *Mi/gunft* (or Envy) on the banks of *Diep rivier* (or the Deep river) we paffed by another farm of his, near *Aapies rivier*, in our way to *Klipp-drift*, and afterwards acrofs *Krakeel rivier*, to MATHEW STREIDUNG'S.

Here I faw a great number of tombs, confifing of fmall heaps of ftones, I ftrictly enquired after their origin, but no European could give me any account of them, An old Hottentot informed me, that the inhabitants of this tract had died of ulcers, in great numbers, which gave me no fmall reafon to conclude, that this place had been well inhabited, and even populous, and that it was the fmall pox which had made this extraordinary devaftation.

On

On the 171b, after paffing PETER NICKERT'S farm called Onverwagt, we went over Waageboom's rivier, to HENRY KRUGER'S.

The wild Turkey (*Tantalus*) which now began to make its appearance, was faid to quit the country during the winter, and to return in the months of September and October.

The *Meloë chichorei*, with its many varieties, devoured the beans, and other products of the gardens.

In Lange kloof it is very cold in the winter, and fnow falls, just as at the back of Witfen mountain.

On the 18th, we arrived at THOMAS FRERE's, near Kromme rivier (or Crooked river).

The country as far as here, gradually fank lower and lower as it proceeded towards the feafhore, fo that *Lange kloof* was far more elevated than the country about *Kromme rivier*.

On the 19th we arrived at Effebolch, a fine foreft, in almost a plain and level country. It had rained the whole day, and it continued pouring during the evening and night, fo that being wet to the fkin, we were under the neceffity, four of us, to crouch under the tilt of our waggon, in expectation of better weather in the morning. The Hottentots, who accompanied us, were obliged to take shelter under the waggon, as it was quite impossible to keep up any fire.

On

On the 20th, fair weather and fun-fhine; but as we could not get at any dry clothes, we were obliged to let those we had on, dry on our bodies in the fun. We now rode on to Diep rivier, Leuwe bosch rivier, and so on to Zee-ko rivier.

Here we were informed, that lions were fometimes feen in the mountains, and that they had formerly reforted thither in great numbers; but were now moftly extirpated.

The Bread-tree (Zamia caffra) is a species of palm, which grows on the hills, below the mountains, in these tracts. It was of the height and thicknefs of a man at moft, very much fpread, and fingle. I have fometimes feen from one root, two or three ftems fpring. It is out of the pith (medulla) of this tree, that the Hottentots contrive to prepare their bread. For this purpofe, after fcooping out the pith, they bury it in the earth, and leave it there for the fpace of two months to rot, after which they knead it, and make it into a cake, which, in their ufual flovenly and filthy manner, they flightly bake in the embers. I obferved that the tree flood in dry sterile places, between stones, and grew flowly.

At Kromme rivier, a fhell-fifh (Solen filiqua) was faid to be found in holes in the banks, which it is impoffible to catch by digging after it; but the

the method of fifhing for it was, by running a ftake into it, and then drawing it out.

The ridge of mountains, which at Roode zand we had on our left hand, and afterwards in Lange Woof on the right, and which were continued quite from Witfenberg, now terminated here before it reached the fea-shore; whereas the ridges on our left hand were continued farther, and had the Carrow plains behind them.

The berries of the Guarri bufb (Euclea undulata) had a fweet tafte, and were eaten by the Hottentots. Bruifed and fermented, they yield a vinegar, like that made from Pontac.

The Craffula tetragona, as being fomewhat of an aftringent nature, boiled in milk, in the quantity of a handful, is used as a remedy for the diarrhœa.

On the 22d, we arrived at JACOB KOCK's, near the mouth of *Sea-cow river*, not far from the fea fhore, a man whom we now visited for the fecond time in the course of our journey.

The interior coat of the ftomach of fheep dried, pulverized, and taken inwardly, was faid to excite vomiting, and to be ferviceable in fevers.

The blood of a hare was afferted to be a cure for the St. Anthony's fire, if rags dipped into it, and then dried, were worn upon the body, but not applied to the part affected.

Many

Many people here likewife concurred in affuring us, that the blood of a tortoife, ufed externally, as well as internally, was of the greateft fervice to fuch as were wounded by a poifoned arrow.

At this place we ftaid feveral days, as well with a view to regulate and put in order what we had already collected, as to inveftigate all the neighbourhood, and likewife to give reft and pafture to our weary and emaciated cattle,

During this time, however, we made a journey on horfeback to *Cabeljauw rivier*, and from thence to *Camtour's rivier*, which is very broad and deep, and by which alfo *Looris rivier* empties itfelf into the ocean.

Hottentots and Caffres lived promifcuoufly near this river, as on the frontier of the two countries, the real Caffraria beginning feveral miles farther up in the country.

The Caffres that lived here, were taller than the Hottentots, more undaunted and valiant, better made, blacker and ftronger. They wore round their arms, by way of ornament, rings, either of iron or ivory, and were armed with javelins, which they knew much better how to, manage than the Hottentots did. The ivory rings were half an inch in breadth, and they generally wore feveral of them on each arm.

Their

Their dances were extremely curious. Two or more of them placing themfelves fide by fide, or back to back, balanced themfelves on their toes, firiking the ground now and then with their heels; during which, they moved every limb, and almost every muscle, especially their eyes, forehead, neck, head, mouth, and chin, keeping time in every motion. The mulic to this dance was a rough fcreaking kind of finging, accompanied fometimes with a whiftling noife, to produce which, they drew their lips on one fide, fhewing their teeth, from between which the found iffued. The women kept running about all the while, finging and jumping to the fame time, with a continual motion of their head and limbs.

In the tip of one ear they had a hole, in which was fluck a porcupine's quill.

We were fhewn here ear-rings of two different fhapes, made of copper, mixed with filver, which they faid they had obtained from nations living farther up in the country.

Here too we faw bafkets wrought by the Hottentots, that were fo tight and clofe, as to hold milk or water. Bottles alfo made of the bladders of the rhinoceros, were used for the fame purpose.

The Caffres, as well as the Hottentots, have in each village, or horde, a chieftain, on whom they

they frequently beftow the appellation of captain, and who is their leader in their hunting expeditions, and against their enemies.

These nations, though deftitute of fire-arms, neverthelefs kill buffaloes and wild beafts with their javelins, called affagays. When a Caffre has difcovered a fpot where feveral buffaloes are affembled, he blows a pipe, made of the thigh-bone of a fheep, which is heard at a great diftance. In confequence of this, feveral of his comrades run up to the fpot, and furrounding the buffaloes, and at the fame time approaching them by degrees, throw their javelins at them. In this cafe, out of eight or twelve buffaloes, it is very rare for one to escape. It fometimes happens, however, that while the buffaloes are running off the premifes, fome one of the hunters, who ftands in the way of them, is toffed and killed, which, by the people of this nation, is not much regarded. When the chace is over, each cuts off his fhare of the game that is killed.

Befides the wild animals they may chance to take in hunting, the Caffres, who inhabit the moft delightful meadows that can be imagined, along the coaft, poffefs large herds of tame horned cattle. Their oxen are commonly eafy to be diftinguished from others, as they cut them in the lower part of the neck, in fuch a manner, that long flips of skin hang down from it; they likewife

likewife do the fame with refpect to their ears, and force their horns to grow in various fingular forms. The company got formerly from them and the Hottentots, a great number of cattle, fit for flaughter, in exchange for tobacco, brandy, glafs-beads, and bits of iron; but now this is feldom the cafe, although this traffic is prohibited to all the farmers.

The Hottentots, in the fervice of the colonifts, frequently use tobacco-pipes of clay, though thefe are fo fhort, that the bowl of the pipe comes into contact with their lips. They are fhort, becaufe in the carriage of them to fo great a diftance from the Cape, they are apt to break. But otherwife, both Caffres and Hottentots, ufe a pipe, either made of a long, flender, and hollow flick, with a hole near one end of it, in which is put another hollow flick that is fhort, and has at top a cylindrical ftone, which is hollowed out, and is the bowl that holds the tobacco; or inftead of the long flick, an antelope's horn, viz. of the (Capra oryx) near the pointed end of which is bored a hole; in this is put a fhort hollow flick, and upon that the ftone bowl. In fmoking, they ftretch their mouths over the wide end of the horn, and draw in a few large whiffs. The fmoke they keep fome time in their mouths, and then fwallowing a part, puff the rett out again. The pipe then paffes

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on to the next, and fo goes round the whole circle. When ftrangers come to a kraal or village, they are always treated with the tobacco-pipe, which circulates in due form from one to the other.

The Hottentots had boiling veffels of burnt clay, of their own making.

The beans of the Guajacum afrum, though a poifonous fhrub, are boiled and eaten by the Hottentots. Their water they keep in the intestines of animals. The women, who carried their children on their backs, gave them fuck under their arms, by bending the little creatures heads down to the breaft.

Sea-horfes (or Sea-cows, Hippopotamus) were ftill to be feen in great numbers in Camtour's river; though many of them have been fhot of late, and confequently their number has been greatly diminifhed. The proceffus mamillaris of this animal was faid to be an effectual remedy for the ftone and gravel. We wounded indeed feveral of thefe huge beafts, but could not kill them; neither did any of them come up the following night, though we ftaid there till the next morning.

A few Hottentots who had pitched their tent here, for the purpose of confuming a sea-horse that had been shot fome time before, lived in the

the midft of fuch a ftench, that we could hardly pafs by them without being fuffocated.

A great number of the Caffres accompanied us back to *Sea-cow River*, and difplayed various fpecimens of their arts, probably with a view of getting fome of our good tobacco, to which they had taken a particular fancy.

We were told here, that a colonift had been bitten in the foot fome time before by a ferpent, of the fpecies called Ringhals (or Ringneck) as he was walking along in the grafs barefoot, as is the cuftom here, in default of fhoes and ftockings, which the peafants feldom wear, except when they go up to Cape Town or to church. I informed myfelf accurately of the fymptoms produced by the bite. It feems the man was feveral miles diftant from home when he met with this accident. He then immediately difpatched his flave to his houfe to bring him a horfe with all fpeed, on which he went home, after having bound up his leg tight, in order to prevent the poifon from fpreading upwards. On his return home he grew fo fleepy, that his wife could not without great difficulty keep him awake. He alfo became quite blind in an inftant, and remained fo for the fpace of a fortnight. His leg was fwelled to fuch a degree, that the flefh covered the bandage over, like a fheath, infomuch that it could not eafily be removed. An incifion

incifion was made round the wound with a knife, and the foot wafhed with falt-water. He drank new milk copioufly, and that to the quantity of feveral pails full in a night, but caft it all up again. After this the ferpent-ftone was applied to the wound. By means of this he gradually recovered; but ftill, though it is now feveral years fince the accident happened, he has pains in the part on any change of weather, and at times the wound breaks completely out again.

The cattle, which conflituted the farmer's wealth in these plains, were subject to several, and those peculiar, diseases.

The *Tung-ziekte* is a difeafe of the cattle, in which veficles or bladders break out on the tongue, difcharging a thin ichorous matter. In confequence of this diftemper the cattle cannot cat, but grow lean, and fometimes die. The farmers are accuftomed to rub the bladders off with falt.

The Klaw-ziekte is a difeafe, in which the hoofs of the cattle grow loofe, fo that they cannot walk. It appears to proceed from the fummer heats, effecially if the oxen have been driven on journies in the day-time. This diffemper is effecemed here to be infectious. It is certain, that it attacks one ox after another fucceffively, fo that I have feen whole droves affected with vol. 1. P it;

it; but it feems to me rather to proceed from fome common and general caufe, than from infection. At first they are lamed by it, and afterwards become unfit for journies. This difeafe, however, leaves them in general of its own accord in the course of one or two weeks.

I faw fome Chinefe hogs here belonging to different farmers.

A yellow *Chryfomela* devoured, and did great damage to, the culinary vegetables in the gardens.

In the beginning of *Desember* we directed our courfe back again, after we had refreshed our oxen, and visited the country farther up than it has as yet, on that fide of the Cape, been inhabited by Europeans.

In our journey up Langekloof, I obferved at one farm, the no lefs convenient than advantageous contrivances of the hufbandmen to apply the rivulets that ran down from the mountains, to the watering of their vineyards and gardens. The water is always conducted over thefe lands in a channel to the more elevated parts, from whence they let down little rivulets or ftreams between the vines and the beds. When there is no occafion for watering, thefe ftreamlets are ftopped up with a little earth. By the fame methods water was carried to mills, fifh-ponds, and other places

On

On the 6th we returned to MATTHEW ZON-DAG's, and on the 7th arrived at Wolfekraal; on the 8th, having croffed Keureboom's Rivier, we proceeded to Diep Rivier, and on the 10th came to Gans Kraal (Goofe Kraal). Behind the low mountains lay Camenassie Land.

The fickles for reaping corn were jagged at the edge like a faw.

The Lycyper don carcinomale grew here on the ant-hills, the brown powder of which was faid to be used in cancers.

On the 10th we came to Ezelsjagt; on the 11th to Dorn rivier (or Thorn river) afterwards to Groote Dorn rivier, keeping always to the right, and leaving Attaquas kloof to the left.

On the 13th we croffed the barren Carrow plain, and paid a vifit to GERT VAN NIMWEGEN.

The fheep here ate the tender leaves of the Mimofa nilotica.

The *Meloë cichorei* did great damage to the apple-trees and other vegetables in the gardens, the leaves of which they confumed entirely.

A Mejembryanthemum, with a white flower, was chewed by the Hottentots, for the purpofe of quenching their thirst, after it had been fuffered to putrify, and been properly prepared.

A fpecies of *Coccus*, called *Harpuys*, that was found on the branches of trees, was faid to prove mortal to fheep.

P 2

On

On the evening of the 14th, we arrived at GERT CLUTE's farm, at *Slange rivier* (Snake river) which lay fo deep in the cleft of a mountain, that I should suppose no one would expect to find a habitation there.

All this tract of land was exceedingly dry and meagre, the hufbandman's cattle confifting only of fheep.

On the flat rocks that projected from the fides of the mountains, we obferved a great number of tigers, which were more common here, than I have ever feen them in any other place.

The foil was a clay, impregnated with falt; and every where on the hillocks, and on the banks of the river, the falt was cryftalized by the heat of the fun, in like manner as I had obferved it to be on the hills near the Cape.

We had now a dreadful, long, dry and barren plain to crofs, which is foorching hot in the day time, and which, in confequence, its want of water could afford us no place for baiting. We therefore employed a great part of the day in baiting, and in the evening, when it began to be a little cooler, in refuming our journey, we paffed feveral large rivers, the banks of which were covered with wood, but which were now quite dried up; and at length we arrived in the morning to a deferted houfe, fituated on the fide of the mountains to the left.

Here

Here we faw quickfet hedges of the Aloë fuccotrina.

On the 15th and 16th we continued our journey, proceeding to the farms of Welgevunden, Watervall, and Muyfen kraal.

On the 17th we came to a farm belonging to one SMIDT; and on the 18th, after croffing the mountains, we went through *Platte kloof*.

As we proceeded farther on the 20th and 21st, we paffed feveral farms in our way to the company's poft at *Riet valley*.

While we baited here, we paid another vifit to *Grootvader's bofcb*, where various forts of trees are felled for the ufe of the company. I hoped now to find feveral trees in bloffom; but the feafon was not yet far enough advanced.

The *Calodendrum*, however, was then in bloffom, the honeyed juice of which I perceived beautiful butterflies fucking, without my being able to reach either the one or the other. But by the help of my gun, which I loaded with fmall fhot, and fired in among the trees, I got fome branches with bloffoms on them.

On the 24tb we croffed Breede-rivier and Rivier Zonder end (or the River without end) which latter is very deep, and therefore has a ferry for the accommodation of travellers.

Continuing our journey on the 25th and 26th, we passed the company's post at *Tigerbook*, and then proceeded along the *Rivier Zonder end*, to P 3 another

another post of the company's, Zoete melk's valley.

The country was already grown very arid, in confequence of the fcorching fummer heats and the high and drying winds.

Pforalea pinnata (Pinnwortel) was a plant, of which the country people in many places complained, as being the worft weed in the gardens, on account of the roots ftriking deep and firm in the ground, and confequently being difficult to eradicate.

A blue Chryfomela devoured and damaged the corn.

In a diagonal direction across *Platte kloof*, lay the *Elephant's* (*Olyfant's*) warm bath, which I had not now time to visit.

The increase of the fummer heat had caused the flies to multiply in fuch numbers, as to be even extremely troublesome at most of the farms. In order to diminish the number of them in the house, fmall boughs were hung up to the roos, and sprinkled feveral times in the day with new milk; and when the flies had settled on them in great numbers, a long bag was set under them, into which they were shaken down. The bag was then twisted round, so that the flies could not escape.

The Secretary-bird, which is a great deftroyer of ferpents, after having trod them under his feet,

feet, and beat them with his pinions, fo that they cannot hurt him, devours them. This bird eats not only flefh, but roots alfo.

Wild chefnuts (*Brabejum stellatum*) are fo eagerly devoured by the wild boars, that they feldom or ever leave one on the ground to fpring up, unlefs it fhould chance to fall between ftones.

On the 27th we arrived at the warm bath of Zwarte Berg, or what is called the bath agter de berg (i. e. behind the mountain).

The fpring arifes from a hillock at the foot of the mountain, to the weftward of it; and chiefly from two fources. The water is moderately warm, and depofits a great quantity of a light yellow ochre at the bottom of the channels in which it runs. The hillock confifts of an iron ore or a ferruginous lava; and is heavy, black, fhining, of a very clofe texture, and ftrikes fire with fteel. The very road is black, owing to the dust of the broken ore, which lies upon it like foot. The water has a chalybeate or inky tafte, but by no means fulphureous. It became black on mixing Peruvian bark or blue vitriol with it, and white with fugar of lead. The patients here use the water both for bathing in, and at the fame time for drinking, though without any regulations or proper diet. The water is carried by a channel from its fource into a boarded hut, where there are a few fteps, on P 4 which

which the patient may fit as deep in the water as he chufes. The company has caufed a brick house to be built here, the care of which they have left to an old man. The few rooms that are here for the accommodation of the patients, are parted off by means of fail-cloth into many fmall cabins; fome of the patients live in their own tents or waggons, and others lodge at the farm that is fituate at the bottom of the hill, The bath is used the whole year throughout, but moft in fummer, or from August to February. The mountain above it is called Zwarte-berg (or the Black-mountain).

On the 28th we left this place, and came to a farm belonging to one BADENHORST, where they were extremely bufy in threshing out their wheat. Barns for laying up the corn are neither to be found, nor indeed are they wanted in a country, in which at this feafon of the year, there is nothing to be apprehended from rain, fo that the farmers can keep their corn in a flack in the open air. - The great heat makes the Araw fo brittle, that it crumbles to pieces, and therefore cannot be touched at any other time than in the morning and evening, when the air is become formewhat cool. For threfhing, they prepare in the open air, a plain and level fpot, which they fence in with a low and round wall of clay. Here they fcatter the corn loofely about, and then turn in a number

a number of horfes, either loofe, or, as is more frequently the cafe, joined together in a team, in order to tread out the grain. In the center of this area ftands a man, who holds the foremost horfe by a halter, and on the outfide of it another man, who, with a long whip, drives the horfes continually round, and keeps them in a hard trot. Thus the ftraw is trodden quite to chaff, and rendered totally unfit for thatching. In this manner, half a dozen men, with a few horfes, are able to thresh out clean in one day 120 bushels of wheat. Oxen are feldom used for threshing, as their dung would spoil the corn.

Having left this place, we croffed Booter-river, where we faw the fea-fhore, and paffing by little Houtboek, went over great Houtboek and Hottentot Holland's kloof. This mountain is very high, and on the Cape fide there is a road over it, that on account of its precipices has a most dreadful appearance. This, and the road however, that goes over Roode Zand, are almost the only, at least, the most common roads, by which all the inhabitants of the country must pass with their large and heavy loaded waggons. At the foot of the mountain lie feveral pretty farms, which, any more than the mountains and the fea-fhore, I did not leave unvisited.

Here

Here we kept New year's day, and, together with almost all the inhabitants of the neighbourhood, went down to the fea-fide to pass the whole day in mirth and pleasure.

Here we found thrown up by the furge, the Trumpet-grass (Fucus buccinalis) in which they blew like a trumpet.

Finally, having fpent a whole day in croffing the very level and extensive fandy plain that lies between *Hottentot Holland* and the Cape, we arrived at the town on the 2*d* of *January* 1773.

My first care after my return to the town, was not only to look over and put into order the collections of animals, plants, and feeds, that I had made during my four months journey ; but likewife to get them ready for being fent to Europe by the homeward-bound ships. Therefore, after having well dried the feeds, fpread out the plants, and glued them on imperial paper, packed up the birds and infects in cafes, planted the live trees, and laid up the bulbous roots in boxes, I fent confiderable quantities of each to the botanical gardens at Amfterdam and Leyden, by feveral of the homeward-bound Dutch veffels. What I had ftill remaining, I divided into different parcels, and packed up for my patrons and friends in Sweden, efpecially the Archiaters and Chevaliers LINNÆUS and BÆCK, Profeffor BERGIUS

BERGIUS and Dr. MONTIN; thefe I had an opportunity of fending in Swedish ships by the favor of feveral naval officers who honoured me with their friendship,

The following months I paffed as I had done the laft year, in botanizing in the environs of the Cape, and in making fhort excursions into the country, as well as in examining and arranging my collections, and in making descriptions of fuch of them as were new and before unknown.

M. SONNERAT, a Frenchman, who, being an excellent draughtfman, had accompanied M. COMMERÇON in that capacity in his extensive travels round the world, and to many different parts of India, was lately arrived at this town in a French veffel from the Ifle of France. I had foon an opportunity of making an acquaintance with him at the houfe of M. BERG, Secretary of the Police, and more particularly while we refided together at this gentleman's villa in the neighbourhood of *Constantia*, where we remained a few weeks for the fake of botanizing, and of fhooting a great number of beautiful Cape birds for the cabinets of the curious in Europe.

Among the many excursions we made together, we refolved in the middle of January to visit *Table-mountain*, and examine what might be the produce of its summits at this feason of the year. Each of us was surnished with fire-arms, provisions,

provisions, paper, and other neceffaries, which were carried by two flaves whom we had hired in the town for this purpofe. At three o'clock in the morning we quitted our abode, and afcended the foot of the mountain before the fun could rife, and by its fcorching rays render the journey too fatiguing to us. At a little after eight we reached its fummit, where it was moderately and agreeably cool. We were alfo recompenfed for our trouble by a great number of rare plants, efpecially of the Orchideæ, as they are called, which I never afterwards could meet with either here at other feafons, or indeed at all in any other mountain. Among thefe the Orchis grandifiora, or Difa uniflora (BERGII Plant & Capenses) was confpicuous by its beautiful flowers; of the Serupias tabularis we found only one fpecimen; the Serapias melaleuca was diffinguished by its black and white flowers, the most uncommon in nature; and with great difficulty, and at the hazard of my life, I got for the first and last time the blue Difa longicornis, which is as beautiful, as it is fingular in its form. This last plant grew in one fpot only, on a fteep rock, and fo high up, that in order to come at it after we had clambered up the fide of the rock as high as we could, I was obliged to get upon the fhoulders of M. SONNERAT, when, with a long flick, I beat down five of thefe plants, the only fpecimens.

cimens that were then in bloom. M. Son-NERAT, who before had not had an opportunity of collecting as many plants at the foot of the mountain as I had, made in this one day only, a collection of 300 different species; but was fo fingularly unfortunate, though he had brought with him three pair of thoes for this excursion, as to return to town barefooted. The number of fharp angular ftones which are rolled down from the mountain, and lie both at its foot and in the clefts through which the road goes, not only tear the foles, but alfo the upper-leathers of fhoes; fo that your thin French pumps are by no means fuited for excursions upon the mountains, which require fhoes made of waxed leather with thick foles.

Table-mountain has acquired its name from its appearing from the town and harbour, as if it were cut fmooth and level like a table. When one is arrived on the top of it, it appears pretty even in front, but on the other fide it goes off in gradual inequalities, like very broad fteps. In the clefts on the top there are feveral ftreams, which run down to the town and its environs, and fupply them with good, fresh, and cool water. I could not difcover any visible spring, nor any lake with fish in it, as some pretend there are; but all the water that was there, was collected partly from rain, and partly from the clouds,

clouds, which diffufe themfelves over the mountain, without falling down below in rain. On the fummit were feveral mouldered and decayed ftones, of a ftrange appearance, feeming as if they had been erected by art.

The height of Table Mountain is 3350 feet, or, according to the calculation of DELA CAILLE, 3353 feet at the weftern angle, which is the loweft. The *Devil's Mountain* borders upon this to the eaft, and is thirty feet lower, though on account of its peak it appears to be fomewhat higher. Table Mountain conflitutes, with the *Devil's* and *Lion's* Mountains, one mountain, and is connected with them at the bottom, though it is feparated from them by confiderable vales at the top.

One may afcend and defcend Table Mountain in feveral places, in front, behind, and at the fides, all which paths I reconnoitred this and the following years, in the fifteen times that I went up to the fummit in the courfe of my three years abode in the neighbourhood.

In front the mountain is acceffible only by the large cleft, which is diffinctly feen almost in the middle of the mountain. This afcent is the most used, notwithstanding that it is the steepess and particularly near the fummit, where it grows at the fame time very narrow, having, as it were, perpendicular walls on both fides. The foot of the

the mountain, below which the town itfelf is fituated, is about a third part of the height of the whole mountain; which gradually fwells, from gently floping hills, overgrown with thickets, into fteeper eminences, covered with ftones that have rolled down from the fummit; here the cleft begins, which at firft is about fifty or fixty paces broad, but by degrees is contracted to fix or feven, and at the top is almost choaked up with ftones of an enormous bulk. High up in this cleft I found pieces of a fine loofe fandftone of various fizes, which, when rolled lower down, crumbled away into finall gravel and fand.

Table Mountain, as well as the Devil's and Lion's and other mountains, have their strata or layers in common with those of Europe. The uppermost strata are quite horizontal, but the Iower ones lie in an oblique polition. At top the rock appears to be a kind of fand-ftone, or lava; the middle ftratum trapp, and the lowermost flate. On the top of Table Mountain there are found both diffevered ftones, and firm rocks projecting from the furface, which have mouldered away confiderably, not only at the top and fides, but likewife at bottom, fo that large cavities are formed in them. These substances are thus decayed not only by water that has been left in their cavities, but evidently by the very

very air alfo, the moifture of which penetrates into the minute and fubtle crevices of thefe ftones, and diffolves them.

The large ftones which have rolled down, and lie on the hills at the foot of the mountain, and have a very ancient appearance, are a kind of trapp, which have excavations in them of different magnitudes, apparently formed in them by fomething that has undergone a gradual decay. Thefe ftones, as well the large as the fmall, have frequently pieces of quartz both in the infide of them and on their furface, which evidently fhews that thefe latter have not been formed there, but were inclosed in them, as they are not concreted with the ftony matrix, which is tolerably hard, but have a finooth and polifhed furface.

The rock, in the loweft ftrata of which the mountains are formed, is of a loofe texture, of a dark colour, and may be fcratched with a knife. It is fometimes of a lighter, or of an afh-colour. Both air and water are capable of corroding it, fo that laminæ of a hand's breadth appear ftanding erect on their edge like a cock's comb cryftal. Thefe lowermoft beds of flate, which are covered on the outfide with mould and grafs, fometimes conflitute half the height of the mountain. And thefe beds run from fouth to north, not abfolutely in a horizontal direction,

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direction, but funk to the weftward, and rifing to the eaftward, with mouldered and fharp-edged laminæ, which are continued quite below the furface of the water, as is plainly feen by the rocks in the fea, as well those that are above, as those that are under water.

The old hofpital having been for a long time in a ruinous condition, as well as of an inconvenient ftructure, the Company had refolved to build a new one on a larger fcale, and in a more convenient fituation; for which purpofe proper artifts, with the neceffary tools and materials, had been fent from Holland. The fpot for erecting this edifice on was chosen at the eastern end of the town, between Table Mountain and the citadel, where it would be exposed to the fun and wind. The ground-ftone was laid by Governor VAN PLETTENBERG, in the month of November of the preceding year; and the building now went on every day, though but very flowly; a circumftance owing to the interested conduct of those who were appointed to fuperintend it, who not only gained by protracting the work, but alfo employed part of the workmen, as well as of the materials, on their own private buildings,

Two violent winds chiefly prevail on this fouthernmost promontory of Africa. The one blows boisterously almost every day in summer, yol. I, Q which

which is called the Good Seafon (Goede Mouffon); the other in winter, which is called the Bad Seafon (Quaade Mouffon). The foutheast wind is violent, and attended with dry and very fine weather; the north-weft is tempeftuous, and, for the most part, accompanied with showers of rain. The former brings short and violent gales, following clofe upon each other, which often increafe to that degree of force, as to blow up not only duft and fand, but alfo gravel and fmall pebbles into the face of fuch as are exposed to it, who, being neither able to fee nor go forwards, must either stand still, or elfe throw themfelves down upon the ground. On fuch occafions ftrangers frequently exhibit ridiculous fcenes, their hats, wigs, or hair-bags, being carried away by the wind the whole length of the ftreets. Not only boats but fmall craft are likewife fometimes overfet in the road, and the people in them loft, as was three times the cafe this year; in confequence of which, when the wind is high, no boat will venture to go to or from the fhips.

The fouth eaft wind fprings up for the moft part towards noon, after a fine warm, and calm morning; about eleven, twelve, or one o'clock, it rifes higher, and keeps up till three, four, or five o'clock, or even later, frequently leaving the evening ferene and agreeable. Thus the morning

ing may be very warm and require light cloathing; but on the increase of the wind, the air begins to feel colder, and frequently one finds it neceffary to put on a great-coat. These fudden changes are the cause that one is very liable to catch cold here, and that the inhabitants are in general subject to rheumatic pains. This violent wind, though in some respects it renders the fummer less agreeable than it would be otherwise, yet still it makes the heat more tolerable.

Before the fouth-east wind begins to blow, the clouds are commonly feen gathering upon the mountains; and Table Mountain in particular. covered at the top with a heap of light clouds, appears as if it wore a periwig. On the wind's increafing, thefe clouds are feen precipitating down the fore-part of the mountain, without producing any rain. Sometimes, however, it will happen, though feldom, that the wind fhall blow, and no clouds lie on the mountain ; likewife, that all the clouds being diffipated on the fore part of the mountain, the wind shall continue with clear and fine weather. The foutheast wind is a low wind, driving from the most part along the ground. The north-weft wind alfo, is fometimes obferved to drive the higher clouds in a direction contrary to that in which the fouth-caft carries the lower ones, and the Q 2 birds

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birds are feen flying in a calm atmosphere between these two contrary currents of air.

In winter time the north-weft and fouth-weft winds prevail, which bring rain, and are dangerous for the fhipping that lie in the road.

These winds change in April, when by degrees the fouth-east ceases, and is succeeded by the north-west. So that April and May are months of intermission, as well as August and September, and, on the days when it does not rain, the most pleasant in the whole year.

In January and the months following, the road is the moft reforted to by fhips from Europe and the Eaft Indies, for the purpofe of taking in refrefhments at a place where the air is wholefome, and the moft plentiful fupplies to be had of wine and all kinds of provifions. When a fhip has anchored in the road, nobody from the town is fuffered to go on board of her for the first three days, under a penalty of forty rixdollars.

The Cape may with propriety be flied an inn for travellers to and from the East Indies, who, after feveral months fail, may here get refreshments of all kinds, and are then about half way to the place of their destination, whether homeward or outward bound.

Strangers that arrive here from Europe, are fometimes attacked with a diarrhœa, occafioned

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by the many vegetables and fruits with which this country abounds, but which is not of fo dangerous a nature here as at Batavia.

Such ftrangers as are defirous of fettling in this country, are at liberty here, as in Holland, to get their livelihood in what manner they pleafe or are able, either by a handicraft bufinefs or commerce, or, as is most frequently the cafe, by both.

It is a general cuftom in this country to fleep an hour or two in the afternoon, at the time that the heat is the greateft.

At table the uppermoft feat is never given to any of the guefts; but the hoft and hoftefs are always feated at the upper end, one on each fide of the table, and the company all around. The hoft always advances towards the ftranger who is his gueft, and taking him by the hand enquires after his health. If the perfon comes on horfeback or in a carriage, he is invited to alight and walk in. The lady of the houfe does not rife, but falutes him by a nod of the head.

The French were at this time in very little effimation, on the one hand, becaufe they generally came without ready money, and were obliged to trade on credit, or elfe with bills of exchange; and on the other, becaufe the African colonifts feared, that if a war broke out, thefe

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ftrangers

ftrangers would affift in taking the place; in which refpect they thought themfelves more fecure with refpect to the English, with whom. they were in alliance. A French officer, though dreffed to the beft advantage, and frequently wearing a ftar on his breaft, as a mark of his merit and his king's favour, had but little refpect paid him; whereas an English mate of a ship, with his hair about his ears, was much efteemed on account of his being flush of money, and of his nation's being in alliance with Holland. Yet it was the French who most enriched the Cape merchants, as, on account of the credit they took, they were obliged to pay more than others, and at the fame time had occasion for a greater quantity of merchandize, not only for their ships, but also for their garrison in the Ille of France.

The coins current here come either from Europe or the East Indies. The most common from Europe, which is here always termed the Mother Country (Vaderland), are ducatoons, shillings, and doits (Duyten). Ducatoons, either old or new, are, like every other fpecies of coin, of more value here than in Europe, in general 251, per cent. more, that is to fay, twelve fkellings, or feventy-two ftivers. The fhillings are feldom any thing more than feftebalves, fuch as in Holland are worth five flivers and

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and a half. Two-pences (dubbeltjes) and fingle pence (or fivers) are fcarce; as also are ducats, and the gold coin called riders (goude reijers). Dutch gilders are hardly ever feen. The Cape gilders are imaginary, and reckoned to those that receive falaries, at the rate of 16 flivers each. A rixdollar is valued at eight shillings, and a ducat at eighteen. Spanish piastres (Spanse matten) are willingly taken at the rate of nine Dutch fkellings. From various places of the East-Indies, rupees of different kinds are imported, which are equivalent to half a rixdollar, and pafs current with every body. No money is coined, or fuffered to be coined in this country.

The kind of corn generally cultivated in this country is wheat, and it richly repays the labour of the hufbandman. Small quantities have been exported to the Indies for the use of the better fort of people there; but the voyage has been looked upon as too long, and the freight too expensive to fend any to Europe, till the preceding and this prefent year, when fome has been fent to Holland, where it has been found to be much heavier than the European wheat. Poland, the granary of Holland, having for feveral years paft been vifited by war, and partly laid wafte, and the crops having been in general bad all over Europe, the Dutch Eaft India Company determined to fend fome fmall veffels

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veffels to the Cape to import wheat; and laft year they fent one veffel, and this year two frigates. For a freight of wheat, the farmer is paid 18 rixdollars. A freight contains ten *muddes*, or about 20 bufhels.

Rye is fcarcely ever fown here, except in fmall quantities for pleafure, or elfe by fome farmer, who chufes to ufe the ftraw for thatching, inftead of the *Reftio dichotomus*.

The olive-fhrub (Olea Europea) was common on the hills near the town, as well as in other places. The leaves are narrower than in the European olive; and the fruit feldom comes to maturity. For this reafon it is not ufed for preffing oil out of it, but frequently as an aftringent in diarrhœas. In other refpects, this fhrub fo nearly refembles the European, that it cannot poffibly be of a different fpecies.

At the farms and villas near the town, European trees are frequently planted for the fake of ornament and fhade, fuch as the oak, chefnut, pine, myrtle, lemon, and orange trees, which, when in bloffom, diffufed the moft fragrant odour.

The fummer in Europe has a much more agreeable appearance, with its leaf bedecked woods and flowery meads, which after a forlorn and dreary winter, fo infinitely cheer our eyes, than it does here, where no meadows are feen; and the woods are full of prickles, and of a melancholy

lancholy afpect. In the meadows in Europe the ground is covered fo thick with grafs, as to appear like a carpet; but here the ftalks of the grafs are at a confiderable diffance from each other, and exhibit in the intervals between them, the bare and fandy ground.

As there are no forefts in the vicinity of the town, except the few fmall ones that ftand high up in the clefts of the mountains, wood, which is ufed in the kitchen only, is both dear and fcarce. Almost all the fuel ufed here, is brought in by the flaves, who obtain it by digging up the roots of *Proteæ*, and lopping off the branches of the underwood. Of this brushwood, together with the roots, the flave makes two feparate faggots, and tying one to one end, and the other to the other end of a flick, carries them home on his shoulders. Two of these faggots, to make which it is a day's work, fell for two skellings.

Every flave is obliged to earn for his mafter, two fkellings daily, which makes about 80 rixdollars in a year; fo that in a few years the mafter gets his purchafe-money back again, though the flave, by fuch a heavy rental, cannot obtain the remiffion of any part of his flavery, which increafes with his years, and is cemented with his blood.

Tamarinds, on account of the acid they contain, were fometimes ufed inftead of vinegar, in this

this manner: the pulp of them was rubbed on beef, cut into thin flices, which, after being dried a little in the fun, were fried in a frying-pan, and were very tender, and well-tafted.

Cauliflowers, which in the gardens of the Cape, and effectively in *Robben-ifland*, that lies just before the harbour, are brought to fuch perfection, as not to be equalled in any other part of the world, are frequently pickled in vinegar, with Cayenne pepper (or *Capficum*) and afterwards eaten with meat by way of fallad.

Some of the farms near the Cape, had fences made of pieces of iron-ore (Yzer-klippen) which were found in the environs.

The ArEtopus echinatus (Zieke-trooft) a low umbelliferous plant without ftalk, and even with the furface of the ground, grew in common near the town, on the clay hills below the mountains. On account of the hard prickles it bore, as well on its leaves as on its ripe feeds, it was a terrible plague, effectially to the flaves, who go barefoot, and are frequently wounded by it.

One of the fhips belonging to the fleet that arrived at this time from Holland, brought the corpfe of the governor RHEEDE VAN OUDS-HORN, who died on his paffage hither. The admiral's fhip came into port with her colours lowered half-way, to fignify its lofs. The corpfe was brought on fhore, with all the pomp usual

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at the interment of a governor; the bells tolled, and the thips in the road fired a gun every minute, which did not a little contribute to the pomp and awfulnefs of the ceremony. Before the corpfe, two led horfes went in proceffion, followed by the fceptre, and the armorial bearings of the deceafed; and after it came trumpets, kettle-drums, foldiers, and burghers, on horfe-back, commanded by the major. By the death of this gentleman, whofe favour I had previoufly acquired at Amfterdam, I fuftained a great lofs, with regard to the powerful fupport and affiftance which he had given me reafon to expect from him, in his capacity of governor, in my excurfions into the country.

During my flay in town, I vifited feveral times the Leeuwve-kop (Lion's head) a mountain that ftands to the weftward of Table Mountain, and rifes to an almost inacceffible peak; from this peak it runs out in a long floping ridge, and terminates in a curved eminence, called the Leeuwe-staart (Lion's tail). Below its peak, the Leeuwe-kop is fo steep in one place, that if one wishes to ascend to it, a cord must be fastened to the rock, by the help of which, one must clamber up by a side that is almost perpendicular. The uppermost layer I found to confist of a loose red fand, which crumbles away, and falling down, leaves great cavities behind it. On the very

very top of the peak, where a perpetual guard is placed for the purpofe of difcovering the approach of fhips, there is a fmall hut, with a fireplace in it for dreffing provisions; three guns, one of which is fired for every fhip that is feen; and a flag-ftaff to hoift a flag on. By the number of guns fired, government is immediately informed whether it is a fingle ship or a fleet that approaches. In the evening, the fentinel goes down to his houfe, which is fituated in the cleft between Table Mountain and the Lion's head. When the fhips that are defcried, approach, a flag is hoifted on the Lion's back (Leeuwe-rug), and when they enter the harbour, the colours are hoifted on the citadel, till they have faluted it. If any fhip fhould come within fight of the Cape, and afterwards pass by it, the flag on the Lion's back is ftruck, as foon as it disappears. The flag that is holfted varies every month, and is like a watch-word on the field of battle; for the colour of the flag is appointed by the directors in Europe, and made known only to the refpective regencies at Batavia and the Cape, and in fealed letters to the captains of the outward and homeward bound fhips. Thus the captains of the ships may discover, if on a fudden eruption of war, the Cape is fallen into the hands of the enemy, and in fuch cafe, keep away from the harbour. In time of war, when any great

great fleet is deferred making its approach, the whole colony through the interior parts may be fummoned with the greateft expedition, by the firing of guns, the hoifting of flags, and the kindling of fires, which are difpofed at certain places, and diffributed at fuch diffances, that these fignals may always be feen or heard from one place to the next.

Robben Mand is fituated at the entrance of the harbour, about four miles from the town. The fhips that run into the harbour must always pass by this island, which then hoifts the Dutch flag. Sometimes, when a ftrong fouth-east wind prevents the fhips from entering, they anchor befide This island was formerly the refort of a great it. number of feals, whence it alfo derives its name ; but now thefe animals having been driven away from it, it is become the retreat of chameleons, quails, and prifoners for life (called here banditti), who are obliged to collect every day on the fea-fhore a certain quantity of fhells, which are burned to make lime for the buildings erected by the company. These prisoners for life, are not only black flaves who have been guilty of misdemeanors, but also Europeans, who have committed heinous crimes.

Though the Lutherans in this town were numerous, yet they had not a church of their own. The bigotted zeal of the Calviniftic clergy had hitherto

hitherto been able to prevent fo beneficial an inflitution from taking place, as that of an edifice to the glory of that God, whom they themfelves profeffed to worfhip, and for the ufe and convenience of their fellow-citizens. The Lutherans were thus under the neceffity of performing their public worfhip in a loft, which they had fitted up for that purpofe. Still, however, they had not an opportunity of celebrating divine fervice oftener than when any Swedifh fhip arrived, the chaplain of which underftood and fpoke the German language. On fuch occafions alfo the holy communion was celebrated, and the money that was put into the plate, became the property of the minifter.

The fhips now failed in different fquadrons fucceffively for Europe, a few only at a time, as in time of peace may be done with fafety. On the other hand, if peace is at all dubious, or a war breaks out, they go a great many together, in two or three fleets.

It will fometimes happen, and that even by permiffion, that a foldier and a failor fhall change places, and fucceed each other in their refpective fervices.

Before a fhip fails, the account is made out of every man on board, which accounts are fent with the fhip, or elfe may be taken out at the pay-office by fuch as chufe fo to do; fo that every

every one may know what is due to him of his pay. If any one fettles in a place, and gets other employment in the fervice, he may take up his pay every third or fourth month, but the gilder is then effimated at fifteen or fixteen flivers only, fo that the lofs is confiderable. But if he chufes to leave it untouched till the end of the year, his account is made out in the month of August, when the books are closed, which account he may negotiate at eighteen, nineteen, and fometimes twenty flivers per gilder, and thus lofe little or nothing. A bill of this kind is like a bill of exchange, for which the Dutch East-India Company gives the full value in Europe, and which, in the mean time, is readily accepted by merchants, and others who want to remit money to Europe. Otherwife, as 25 per cent. is gained on all money exported from Holland, in like manner 25 per cent. is loft on all money that is carried back in fpecie to Holland.

The effects of the failors and foldiers who have been taken into the hofpital, and died there, are fold by auction, and chiefly at that period, when the greateft number of patients is brought in, and when the greateft number dies. The money is laid out on their interment. In general the corpfe is fewed up in a cloth, and carried out in a hearfe; but if the effects of the deceafed,

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ceafed, after the beft part of them have been embezzled, ftill amount to a finall fum of money, a coffin is beftowed upon him of ten rixdollars value. If what the defunct has left behind him amounts to ftill more money, it is expended in wine at the funeral; and great care is always taken, that nothing fhould be left for his relations and heirs. In general at fuch auctions the whole cheft, opened, but not always thoroughly examined, is fold at a venture.

The Cape lobfter (*Cancer arEtos*) which is caught here, is equal in fize to that (*Gammarus*) which is taken near the Swedifh coafts, but has no large claws, and is craggy all over, and covered with erect prickles. It has a ftrong and not very agreeable tafte.

The Medula's head (Afterias caput Medula), one of the most fingular and curious animals in nature, was fometimes caught in the ocean off the Cape. It is but rarely that it is found thrown dead upon the shore. In order to preferve it whole and undamaged for the cabinets in Europe, it muss be caught far out in the fea by sistermen, who muss take great care that they do not break off any of its limbs, and that the animal do not too much contract and entangle its outermost and most shender branches. The animal, when alive, or just after it is dead, is of a reddish or deep carnation colour; and on

on being dried, turns greyish. It should be dried in the shade, during fine weather, and in an open place, where the wind has free access to it; for in the fun the animal melts away, and, if placed too much in the shade, it might chance to putrify. For this wonderful animal the sistermen frequently get fix, nay, even sometimes ten rix-dollars. It may be sent to Europe in a box filled with carded cotton.

On the fhore just before the town were found various forts of bivalve fhells, and especially many large and beautiful species of *Patellæ*.

Strand dubbeltie was the name given to an Umbilicus veneris, or the upper valve of a cocklefhell, which was covered all over with tubercles.

Below the mountains, and near the fhore, are feveral hillocks of fand of different fizes, which are drift-fand, and fome change their place twice a year, according to the winds that prevail. Some of them have already begun to fettle and acquire folidity, and are covered with fome few plants.

Among these the ridge of fand-hills below the Lion's Tail is remarkable, which seems plainly to indicate the manner in which mountains were formerly produced, and their different strata formed. This ridge of fand, which stands just before the battery, runs from south to north, VOL. I. R and

and keeps in the fame line as the mountains near the Cape and in all the country do, inclining more or lefs to the eaft or weft, and confequently in the fame direction as the winds that prevail here. It increases every year to the northward, quite down to the fea-fhore. At the weftern end it forms a curve, and goes off with a gradual flope, a circumftance which is occafioned either by the adjacent fand-hill that runs in the fame direction, and is folid and firm, and is used for a place of execution, or elfe by the Lion's Tail, which impedes the paffage of the wind. The fand of this ridge is loofe, and driven to and fro in fummer; in winter it is fomewhat firmer from the rain, but still almost as loofe as a heap of drift-fnow. Some parts of it may probably be a little more firm than the reft. Just as the fand is driven, the strata are formed, and they lie here, as in the mountains, inclining obliquely towards the horizon. Some layers are loofer, others again harder, according as the drift-fand was more or lefs pure or mixed before it was hardened by the rain. These strata run either in a straight line, or in waves or ftreaks of black and white fand, which at a diftance give the whole ridge the appearance of an agate. The black fand is thrown up by the fea, as well as the white. The former is in a fmall quantity, and the latter is driven more 1 244 . . toy by

by the wind, and forms hills. This ridge of fand lies directly oppofite to the transverse end of Table Mountain. The top of it is level, and of a middling height; towards the fouth it goes off gradually with a long flope; to the northward it is fteep, where the fand is carried far over the fpot below, which is fheltered by the ridge from the wind. The wind can in the fpace of one day lay fand an inch deep upon its furface, which commonly does not fall equally, but here and there in fpots. Stones and other things that lie in the way, are bare on the fouthern fide, but on the northern are covered with a ridge of fand running out in a point, just as the fnow is difposed in the northern regions, when it falls with a high wind. In the fame manner the ftrata of mountains appear to have been formed by the winds and waves, and to have derived their origin from the fame caufe, viz. from the two predominant winds.

The Testudo Geometrica was known here by the appellation of the Syren (Syrentie). This land-tortoife, which probably is the most beautiful of its kind, was found very common in the fandy downs among the bushes. The shells of fuch as were very small, and confequently the most beautiful, were used for making shuffboxes.

Round the hills near the Cape grew the Cliffortia ruscifolia, and the Borbonia lanceolata, much R 2 refembling

refembling juniper trees, and like the Polygala Heisteria, with their sharp leaves pricking the foot passengers; while the Asparagus Capensis, with its recurved thorns, tore their clothes and retarded their passage, for which reason it has received from the inhabitants the name of Wakt en beetje, Stop a bit.

The *Tulbaghia aliacea* (Wilde knoflook, or Wild garlic) which grew both in the fands near the Cape and in other places in the country, was ufed in hectic fevers, either boiled in water or in fome kind of foup.

At feveral farms near the Cape I had an opportunity of feeing wine made, and of receiving information with refpect to the various forts of wine, which are made here in great quantities. The preffing, which is done in March, is performed in general, for want of proper tools and contrivances, in a more fimple manner here than it is in Europe. The flaves gather the grapes, and put them into a large veffel. For the preffing they make use of a veffel, the bottom and fides of which are bored full of holes; this veffel is fet in the infide of a larger veffel upon a crofs piece of wood laid at the bottom of the latter; this outfide veffel has a fpigot and faucet, through which the juice, as fast as it is preffed out, may run into a tub placed beneath. The grapes being laid in the inner veffel, heaped up to the brim, three or four flaves, after having previoufly

previoully walhed their feet very clean in a tub of water ftanding at the fide, get into the veffel that contains the fruit, and holding themfelves fast by a rope fixed to the cieling, trample upon the grapes, and fqueeze out the juice as long as they are able. In the mean time, the must that runs out is put into large high veffels to ferment. If the aperture is obstructed by grapes or ftalks, fo that the juice cannot eafily run out, they push them away with a stick, to the end of which a few briftles are fixed. The trodden grapes, before they are farther preffed, are put, italks and all, upon a coarfe ftrainer (or the bottom of a bed) made of rattans, on which they rub the fruit with their hands, till the husks go through it; the stalks in the mean. time remaining behind, which are now feparated and thrown away, as they are fuppofed to make the wine auftere and bitter. The hufks are then put into the fermenting-veffel, which the next morning is in full fermentation, during which procefs the thick parts fublide, and the must grows clear, when it is barrelled off, by putting a wicker basket into the bung-hole of the barrel, and filtering the wine through it. The grounds, which remain in the fermenting-veffel. are afterwards put into a fquare veffel or vat, pierced full of holes at the fides and bottom. which vat is placed on a crofs piece of wood in a larger veffel, with a fpigot and faucet at the R 3 fide.

fide. At the top there is a fcrew of wood or metal, by means of which the last drop of juice is preffed out from the hufks. From the dregs and hufks, that remain over from the laft preffing, brandy is diftilled. No yeaft is used for accelerating the fermentation. The white and green grapes yield white wine, and the red, red wine. The mufcadine grape, both red and white, produces the Conftantia wine, and the blood red grape, the wine called Pontac. Names are beftowed accordingly as they refemble more or lefs the products of the European grapes, though the refemblance is not always perfect.

A great number of dogs are frequently kept in the farms; they follow the cattle into the fields along with the flave, keep wild beafts away from the farm, fometimes protect the mafter from the outrages of his flaves, and are ferviceable in hunting and on journies.

The horns of the rhinoceros were kept by fome people both in town and country, not only as rarities, but alfo as ufeful in difeafes, and for the purpose of detecting poison. As to the former of these intentions, the fine shavings of the horns taken internally, were fuppofed to cure convultions and spafms in children. With refpect to the latter, it was generally believed, that goblets made of thefe horns in a turner's lathe, would difcover a poifonous draught that was put into them, by making the liquor ferment till it ran quite

quite out of the goblet. Such horns as were taken from a young rhinoceros calf that had not yet copulated, were faid to be the beft, and the most to be depended upon. Of these, goblets are made, which are fet in gold and filver, and made prefents of to kings, people of diffinction, and particular friends, or elfe fold at a high price, fometimes at the rate of 50 rixdollars a goblet. The horn is of a conical form, thick at the bottom, and truncated at the top, a foot long, frequently in old rhinocerofes, and is placed forward on their fnout. Two or three inches from this, the African twohorned rhinoceros has another fmaller and fhorter horn. In colour, it most refembles the horn of a bullock. When I tried thefe horns, both wrought into goblets, and unwrought, both old and young horns, with feveral forts of poifons. weak as well as ftrong, I obferved not the leaft motion or effervescence; but when a folution of corrofive fublimate, aqua phagædenica, or other fimilar fubftances, was poured into one of thefe horns, there arofe only a few bubbles, produced by the air, which had been inclosed in the pores of the horn, and which was now difengaged from it.

Though few countries can boaft of fo much venifon and game as this colony, ftill here, as in Europe, at a certain time of the year, hunting and fhooting are prohibited. Thus from May to August, nobody is allowed to hunt or shoot, at least near the town.

The

The hospital I very feldom visited, as I could not poffibly derive any improvement from any thing I faw there. I obferved, however, in this place, what I never faw any where elfe, viz. that the attendants on the fick were provided with ropes ends, with which they now and then corrected turbulent patients. Mirum fane morborum remedium! Both in the hofpital and on board of their ships, the company had, for the greater part, ignorant and unskilful furgeons; and, in general, when a fkilful furgeon was found among them, he was a foreigner. When emetics or fuch kind of remedies were prefcribed, they were fometimes written down on the headboard of the bed; and of other medicines, a dofe was commonly administered immediately, which were carried ready made up in a box after the furgeon, when he visited the patients. What most contributes in this place to the recovery of the fick, is the excellent refreshments of fresh meat and vegetables, that are to be had here, The principal furgeon makes his report to the governor every day of the number and flate of the patients.

At Zeeko valley the company has a farm, where ftraw (Reflio tettorum) is cut and prepared for the purpose of thatching, as follows: A bundle or sheaf, after it is cut, is held by the top, and all the shorter stalks that are loose in it, are shaken off from it. The remaining long ones are

are then fpread out in rows to dry, and afterwards tied up in bundles. With this the houfes are commonly thatched both in town and country; and fometimes whole huts are built with it. A roof made of it lafts 20 or 30 years, and would laft much longer if the fouth-eaft wind did not blow a great deal of dirt between the thatch, in confequence of which it rots the fooner.

Near Muyfenberg (or Moufe mountain) the wax-fhrubs (Myrica quercifolia and cordifolia) grew in abundance along the fhore. The berries of them are quite round, full of knobs, foft, and of the fize of a pea. The berries themfelves are quite black, but covered with a farina of a whitifh-grey colour. They are gathered in their ripe ftate in the month of March, and boiled in water till all the white powder is melted off, and floats on the furface of the water like fat; this, when fkimmed off and cooled, grows hard, almost like wax, and is of a greenifh-grey or afh colour. The farmers use it for candles, when they get any quantity of it, and the Hottentots eat it like fo much cheefe.

In the fandy plains near the Cape, and chiefly near the larger farms, the goldfinch (*Loxia orix*) was feen now in the midft of fummer, very beautiful, of a crimfon colour, and in infinite numbers. Juft when the corn grows ripe, he acquires his fummer drefs; his brownifh grey feathers on the throat and back become gradually of

of a red colour, and leave only the wings and tail unchanged. The hen does not come in for her fhare of this beautiful attire, but remains the whole year of a grey-brown hue.

The country people feldom made any cheefe; and when they did, which was chiefly out of curiofity, the cheefes were fmall, thin, and of an indifferent tafte; the caufe of which probably is the milk, which, it must be confeffed, is poor enough compared to the fine rich milk produced in Holland.

The cows, as well as the other cattle, go to field the whole year throughout, being driven home in the evening, and lie within fences in the open air. The grafs which they feed on in those extensive plains, and which is the best and most copious in winter time, in confequence of the rain, and worft in fummer on account of the heat and drying winds, is in general harfh and coarfe. Hence the cows give little milk, and that but indifferent. For this reafon the cattle degenerate to a certain degree in the courfe of a few years. The horned cattle, of which the peafants herds in this country confift, are of Dutch extraction, it is true, but are at prefent greatly degenerated. A Dutch cow that is brought hither, and has coft forty or fifty rix dollars, gives more milk than three others, but its offspring degenerates, and the third or fourth

fourth is exactly like the reft, which frequently give no more than a quart of milk a day.

Fresh butter, which in general is made from new milk, is fold in the town for eight, twelve, or fixteen flivers, and falt butter at two, four, or fix flivers per pound. The price, however, varies with the confumption.

Though the country is inhabited by colonifts, ftill the farms are not all held in the fame manner. That tract of country which is nearest to the town and harbour, or in the vicinity of them, has been fold by the Hottentots for tobacco, brandy, and other commodities. The other extenfive tracts of land were afterwards taken poffeffion of gradually by the colonifts. Thus the farms which are fituated nearest to the Cape, as far as Picquet-berg, and a little beyond it, are freeholds, or lands which are the unconditional property of the colonift, for which he pays no quit-rent, and which he is at liberty to difpofe of. The other farms farther up the country, on the other fide of the mountains, are called copyholds, which the colonifts have occupied with the permiffion of the governor, and for each of which twenty-four rix dollars are paid yearly to the company in fine, which cannot be fold or transferred to any one elfe without the permiffion of the governor. The buildings

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buildings upon the premifes may be fold, it is true, but not the land.

Planks and boards, as well as beams for building, were extremely dear, as they were fcarce, and brought a great way from the inland parts of the country, fo that the greateft part of them muft be imported from Europe or the Eaft Indies. They are generally fold by measure, planks felling for two fkellings a foot.

Sheep's dung was frequently ufed for manuring the vineyards, and horfe dung for the gardens. Sheep's dung often lies in the fheep-folds to the depth of a yard and more.

Wheat-fields, vineyards, and gardens, are very numerous about the farms in the vicinity of the town and harbour, and there they have but few cattle. The vineyards in the neighbourhood of the Cape, the grapes of which being larger and riper, yield the beft and most delicious wine, and confequently are more profitable, occafion the cultivation of wheat to be neglected in proportion, which is relinquished to the farmers that live farther up in the country. The wheatfields are often left fallow for feveral years, as every hufbandman has a great quantity of land, which he can afford to keep unemployed. Whenever either a new field or a field that has lain fallow for feveral years is to be put in order, which is a difficult piece of work, fuch ground

ground is first ploughed in the month of August, and then again in May, after being previously fowed. The African ploughs have two wheels, one of which is smaller than the other.

When a youth is arrived at the age of fifteen, he must be enrolled, and every year he must refort to the place of rendezvous, in order to perform his exercise. On this occasion he must take the oath of allegiance. When a father has two fons in the militia, he himself is exempt from duty. These reviews, both of horse and foot, are held every year, in the town for the burghers, and at *Stellenbosch* and *Zwellendam* for the farmers belonging to the colony. If any one neglects to appear at these rendezvouses, he is fined.

The farmers fell their merchandizes at the Cape, either to the company or the burghers, but are not permitted to difpose of any thing to ftrangers.

Befides the regency which is refident in the town, the country is governed by two courts of judicature, at which a landroft prefides.

Stellenbojch is a village confifting of thirty houfes and upwards, with a church; here a landroft refides, under whofe jurifdiction comes that part of the country which is fituated to the north and north-weft; the other part of the colony that lies to the eaftward is under the fway

fway of the landroft at Zwellendam. Stellenbofch is fituated in a narrow valley between high mountains, which are open to the fouth-weft or towards Falfe Bay. It has two ftreets with oak trees planted in them, and a river running through them.

Franschehock stands not far from Stellenbesch, below the mountains, and in the cleft of a mountain. It is remarkable for being the place, which immediately after the foundation of the town was inhabited by the French refugees, who between the years 1680 and 1690, removed hither from Holland, and first began to plant vineyards in this country.

Drakenstein alfo is a colony in the neighbourhood of the former, and fituate under the fame ridge of mountains. The mountains here extend from north to fouth, just as they do near the town; and this direction of them is the caufe that the farms that are fituated in valleys between two mountains have their day and night at different times. Those who live under the mountains on the western fide, have daylight first, as the fun having reached the tops of the mountains, which are frequently covered with hail, and thence appear white, in an inftant illuminates the whole weftern fide; while, on the other hand, those who live on the eaftern fide of the valley, fee the fun longer in the

the evenings, the other fide at the fame time appearing to them enveloped in darknefs and a light-blue mift, while they themfelves continue to enjoy the moft delightful funfhine.

Next to the Cape, towards the north, and directly opposite to the town, are the *Tygers Mountains*, which are in the fame direction with the *Olyfant's Kop*, and the *Blauwe Berg*, or *Blue Mountains*, all of which are feparated from each other by valleys.

Neither burghers nor hufbandmen have a right to marry till they have obtained the governor's confent. As foon as any perfon has obtained this, which is ufually afked on Thurfdays, the bridegroom receives an order, which in the prefence of the bride he delivers to the jufticiary; who, after having carefully examined matters, and found that the parties are not too near related, gives alfo his confent to the match, and allows the banns to be publifhed three Sundays following, in the ufual manner, from the pulpit.

So that when the farmers take their annual journey up to town to fell their commodities, buy the neceffary articles for their families, and pay their taxes, they muft always take that opportunity of being united in the bands of wedlock, or of having their children baptized at their parifh church.

Should

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Should the governor refuse any one his permiffion to marry, ftill he cannot prevent the parties contracted from living together, who, in fuch cafes, are frequently obliged to put off their nuptials till the arrival of another governor, whole confent they may obtain. Sometimes it happens that the bride has recourfe to the jufticiary, who may think proper to order the marriage to be confummated. In this cafe, if the bridegroom be at that time engaged in the company's fervice, he may have the misfortune to be fent away by the governor to fome place in the East Indies. The fair fex here, in general, marry very young, and as the boundaries of the colony have been much extended of late, the increase of population has likewise been very great.

The country people have provisions in abundance, but are frequently in want of furniture. One frequently fees chairs and tables made by the farmer himfelf, which he covers with calf-fkin, or makes of platted leathern ftraps. The floors in the houfes are formed of earth, beaten down hard and fmooth. In order to make them hard and firm, they are overlaid either with a mixture of water and cow-dung, or with bullock's blood, which renders them at the fame time rather flippery.

Various

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Various forts of fruits, befides raifins, were dried for the ufe of the fhips.

In winter, falt meat is fometimes eaten, though very rarely; but fcarcely any is fold to the fhips.

When a farm is fold in the country, the bargain is concluded, and the farm paid for in gilders, three of which are reckoned to a rixdollar.

The town as well as country-people, look upon this country, or their mother-land, as they term it, to be far fuperior to others, as it produces every neceffary of life in abundance; tho' at the fame time, they are confcious that Europe, their father-land, must furnish them with every thing elfe, even to the very plough-fhare, with which they till this their fertile country.

In the various excursions I made into the country, this as well as the preceding years, I have been more and more convinced, that the whole promontory, called the Cape, is nothing but a mountain; for all the ridges and chains of mountains, as well the greateft as the smalleft, run between fouth-east and north-west, and thus take the fame direction as the violent winds that prevail in this country. They also run parallel to, but at unequal diftances from each other, fo that fome of the vales that are interposed between them, are broad, and frequently inhabited, while others again are very narrow. Towards the north-welt, I have not had an opportunity of VOL. I. S

of feeing their termination; they probably run that way as far as to the fea, without leaving any path for walking on the fhore. Towards the fouth-east, all of them, except Hottentot Holland's mountain, terminate in a gentle declivity, before they reach the fea fhore. It is fingular, that when one goes from the town into the country, from fouth to north, and paffes over a mountain, the country on the farther fide is found to be more elevated ; and if we traverfe the mountains that we meet with farther on, the height of the country ftill increases, and fo on for three or four day's journey. So that the country between thefe ridges is nothing but a vale, which is fo broad as to have obtained the name of a province, and is adorned with feveral farms. On afcending the mountains furrounding fuch valleys, we fee fimilar ridges and valleys in miniature, but much fmaller, and rarely inhabited. The diftances between fome of the ridges may be fix miles and more, between others only two or three, and on the tops of the mountains no more than a ftone's Such a tract of land, however, is not throw. plain and level, like a meadow, but deeper in the middle, where the deepeft rivers, formed by the conjunction of feveral branches in one, run parallel with the ridges of the mountains themfelves, and it gradually rifes higher on each fide, in proportion as we approach the mountains.

Near

Near the Cape, which forms the fouthernmost angle of the triangle of Africa, the mountains have the leaft extent. The farther one advances up into the country, and the broader it grows, the longer are the ridges formed by the mountains. And the farther one proceeds among the mountains, and the higher the country is, the colder one always finds the climate. In winter there falls fnow, or what is more frequently the cafe, hail, the depth of fix inches or more, which lies feveral days, and on the tops of the mountains for weeks together, without melting. In the month of October I obferved the hail ftill lying on the fnow-white tops of the mountains, while the country below was clad in its richeft fummer attire. Likewife in proportion as the cold increafes in confequence of the elevation of the country, all vegetables are later produced. The difference I found here and in fome other places, to amount to as much as two months. Near the Cape, therefore, all plants and flowers make their appearance the fooneft, the country there being lower, and the air milder. In like manner, the whole fouthern coaft, where the mountains go off with a gradual declivity, is always the warmeft, and is for this reafon, the most populous, and best inhabited part of the whole colony.

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This

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This defeription of the extent, appearance, and height of the mountains, together with the nature of the country, I hope may throw rather more light on the geography of this part of Africa, than we had before, at the fame time that it difcovers the reafon why a country fituated in fo good and temperate a climate, is in fome places extremely fertile and cultivated, and in other, abfolutely bare, and in fact, almost defert and inacceffible.

The Dutch officers, both of the outward and homeward-bound ships, especially of the latter, difpofe here of a great quantity of merchandize of different kinds: the former bring for fale, wines, beer, cured hams, cheefe, tobacco pipes, and fometimes haberdashery and hardware ; the - latter, cottons, chintzes, rice, tea, &c. And if they cannot difpose of their merchandize to the dealers feparately, they put them up at public auction. One likewife fees many of the Burghers, who have bought various articles by wholefale, fell them again by auction. Such fales by auction, are frequently held alfo in the fpring and winter months, on the company's account; and government generally takes the precaution not to allow of the auctions of individuals, till the company has disposed of its merchandizes firft.

Of

Of the foreign naval officers, the English and Danish carry on the greatest trade. The former chiefly fell large quantities of fine and coarfe hardware, efpecially failor's knives, fciffars, and other fimilar articles. The latter, in going out, fell Danish ale and tar, and on their return. chintzes from Bengal. The Swedish officers traded for little or nothing; on their return, they only difposed of a few canifters of tea, fome Nankin and Chinefe filks, fearcely to a greater amount, than what they paid at their inn for the few days they were on shore. Otherwise, defirable articles from Sweden are coarfe grey cloth. lumber, copper, iron, brafs, fpades, herrings, and more efpecially tar, charcoal and iron, all which fell to great advantage. The company charges eight rixdollars for r Cwt. of iron, though it is cold-fhire, and inferior to the Swedifh. For all wares and commodities fold by individuals at auctions, 5 per cent. must be paid to the filcal. The money for goods and wares fold by auction, is not to be paid till fix weeks afterwards.

Among all' the different nations that frequented this place, none were fuch bold failors as the English. They would often beat about in the roads with a ftrong fouth-east wind, while the Dutch thips either kept the open fea, or cast anchor under *Robben-Island*, till they got a more S 3 favourable

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favourable wind. The former have for the most part no other rule than their own judgment and experience, and their ships are better failers; whereas the latter have heavier and more unwieldy ships, and are obliged to act according to the company's orders.

Foreign fhips were faid to pay for anchorage only 500 gilders; but all the provisions they want they must pay dear for, owing to the imposts established by the company on meat and wines. Strangers pay two flivers for a pound of meat, which the company has for three *doits*, or about a fifth part of the price.

In the baptifu of children, the Cape clergy confider it as a circumftance of the first importance that the fathers should be known, and be present. If the child is a bastard, and its father does not discover himself, the infant remains unbaptized. If the mother is a Black or a Hottentot, but the father a Christian, who requires it to be baptized, it is baptized. Every christening must be performed in the church, for which reason such colonists as live far up in the country, must take their infants with them when they go to the Cape, though as is fometimes the case, it be but fix months old.

The gardens both within and without the town, fuffer great devastation from three or four different species of rats, which are generally termed

termed moles. One of thefe, called the White Mole (Witte Moll, Marmota Africana), is of the fize of a fmall cat, and white all over, with a fhort tail. The fecond, called the Blazefronted Mole (Bles Moll, Marmota Capenfis), is fmaller, and white with brown fpots. The third fpecies is lefs common, and very beautiful, being of a greenifh colour with a fhining fur. The laft of these (Talpa Asiatica) or the Goldgreen Mole (Blinde Moll), burrows in the gardens under the furface of the ground, throwing up the mould, by which means it ruins both the figured trees and hedges that are made of myrtle and box. The former fpecies of moles alfo are found in the fand-downs near the town."

When the people of the town planted trees before their houfes, they were very folicitous to get a dead dog to put in the hole, by which means they thought the growth of the tree would be much accelerated.

The Bay tree (Laurus nobilis) was in many places observed to form fo close a hedge, that one could fcarcely fee through it. It bent likewife to the violence of the winds without breaking.

The Hottentots who had committed acts of violence against fome colonists living a great way up the country, and had been brought hither fome time before, were now punished, S 4

Some

Some of them were only flogged, others were flogged and marked befides on the back with a red hot iron, and others had the tendon near the heel (Tendo Achillis) cut out befides. After this they were fet free, and fent home again for a warning to others. They had not been taken without difficulty, as they had fortified themfelves in the cavities and crevices of the mountains, where they were out of the reach of firearms. Befides this, they defended themfelves by rolling ftones down upon their enemies. The company had ordered not only the farmers out against them, but also a corporal from the citadel with five men to bombard them with hand grenades. At last they were taken by stratagem, by the Hottentot Captain Kies.

Accounts were now again received from Roggeweld, that the Boshies-men Hottentots had plundered and killed the farmers in that diftrict.

In the month of *March*, when I paffed a whole day on the top of Table Mountain, I was gratified in the evening with a fingular and most beautiful prospect from this confiderable eminence. Table Mountain, like all other mountains in this country, lies in a direction from north-west to fouth-east, thus leaving one of its long fides open to the north-east, and the other to the fouth-west. The fun, rifing in the east,

eaft, does not here proceed towards the fourh, as in Europe, but towards the north, and at laft finks into the ocean to the weftward of the mountain. This makes an earlier morning, and exhibits the fun fooner on the north-east fide, and a longer afternoon, and later fun on the fouth-welt fide. So that on the top of this mountain, about five o'clock in the afternoon. two different worlds, as it were, prefented themfelves to my view, of which the weftern still enjoyed the finest fun-fhine and a clear horizon, while the eaftern was already covered with darknefs and a thick impending mift. This mift, which had exhaled from the heated plain, and was now condenfed in the fuddenly cooled air, was fo thick that no part of the whole country . was to be feen, but the whole region refembled a fmooth unbroken cloud, and did not a little contribute to render the view on each fide of the mountain remarkably different, though a moment before they were much the fame.

In the month of *May*, between the 13th and 19th, in company with Major GORDON and an English gardener, lately arrived, of the name of MASON, I made an excursion on foot round the mountains, fituate between the *Cape* and *Falje Bay*. Having afcended the front of the valley as high as the fummit of Table Mountain, we faw a valley to the right, which runs down to the

the fea-fhore. To the left a fountain was feen bubbling up, and forming a narrow rivulet; but it was fo much overgrown with bufhes, that its fource under a large rock could not be perceived. In all the flat dales of the mountain, both the large and finall ones, there was mould, water, and mofs, which formed a kind of bog. Towards the fouth-eaft it gradually fubfides into valleys, juft in the front of *Hout Baay*.

Through the vale called Babian's Kloof (Baboon's Valley), which, proceeding from Table Mountain, parts the ridge of mountains that runs from Constantia to the farthest point in the fouth, we went to Hout Baay, where there was a farm; to the right we had the little Lion's Head, a peaked mountain, refembling the great Lion's Head near the Cape, and the Karfunkel (or Carbuncle) Mountain, which is oblong, and covered at the foot with a fine white quickfand reaching as far as to the fea-fhore. This latter mountain forms a promontory, the uttermost point of which rifing into a conical protuberance that hangs over the fea, is called the Hang-lip. This is separated, as well as the Lion's Head, from Table Mountain. Table Mountain has a confiderable rivulet at its top, a branch of which empties itfelf into Hout Baay (or Wood Bay). The fea at low water formed, in Hout Baay, rivers, the banks

banks of which were fleep from the fand that had fallen down. At the mouth a river was formed in a crofs direction, the banks of which were likewife extremely fleep from the fallen fand. The whole bay was full of round fandftones, like the fhores of the lake Vetter. To the left was feen Steenberg, or Stone Mountain; at the foot of which, on the other fide, are fituated Great and Little Conftantia, and which runs out into the fea in a promontory called Steenbergenboek, where there is a farm belonging to the company, and known by the name of Muyfenberg, or Moufe Mountain.

From Hout Bay we went over the mountains to North Hoek, where three farms are laid out near a large pool of water. The projecting point itself of the mountain over which we had paffed, is called North Hook, and the oppofite projection the Slange Kop (or Serpent's Head). The downs here confifted all of quickfand, raifed into hills of various heights; those that had been lately formed being ftill bare, and those that were of a more ancient date, overgrown with bufhes, efpecially the wax-fhrub (Myrica.cordifolia), which frequently grew on them low and creeping. A falt-pan that lay to the fouth-eaft, had banks of two or three yards in height; it was now partly filled with water, the furface of which was covered with Flamingoes (Phanicopterus

terus ruber). Its bottom was fandy, or a mixture of fand and clay. In winter time it is filled with water for the fpace of feveral months. It has its water from rain, and not from the fea, from which it is at a confiderable diftance; confequently its water is not increased or diminished by the tide. Duyn-bout, or Zwart-bout, was the name given to a fhrub that has flefhy leaves, and was without bloffoms, Foliis compositis, foliolis cuneiformibus carnofis. It appeared to be an ambelliferous plant. Here we met with the celebrated farmer JAN BRUYNS, one of the beft markimen in the country, and who had made the unfortunate expedition with HEUPNAER to the Rio de la Goa, through the country of the Caffres, when feven of the company were maffacred by the Caffres, and himfelf with only five others escaped.

The Slange bofob (Scriphium) which grew here, was faid, when made into a decoction, to expel worms.

After purfuing our journey farther over the mountains to *Wildfebut's brand*, where we found only one Hottentot hut, fituated in a fine grafs plot on the mountain; we went a little way back again over the fame mountains, and arrived at *Falfe bay.*

The barren mountains, which run from Falle bay out into the fea, are called by the colonists, as well as by the failors, Norweegen, or Norway.

Bay

Bay Falfo, Falfe or Simon's bay, is a name given to the harbour on this fide, where the fhips only touch in winter, and where they are fheltered from the north-weft ftorms, fo dangerous in this feafon to the thips that lie in Table-bay. This harbour is larger than that of the Cape. The fhore is not broad, and in feveral places, by reafon of the mountains jetting out into the fea, there is none at all. The houses fland on the tops of the hills, and are fometimes very unfit for the accommodation of ftrangers. A large round rock in the harbour went by the name of the Ark, another was called the Romancerock; and an island, fituated farther out to the eaftward, Malagas island. Befides a house belonging to the company, in which lives a refident, there are here an hofpital, a warehoufe, a flaughterhouse, and a few farm houses belonging to individuals. The company's garden lay at fome diftance.

From Falfe bay we went over flat and low fands, paffed Muyfenberg and the company's fifting place, back to the Cape. In different parts of the fandy plains there were fmall lakes, as they might be called, of falt water, which had not yet been dried up by the fummer's heat. These plains, abounding as they did in water, ftill harboured in different parts fome Flamingoes, which, with their white and blood-red feathers, adorned

adorned these spots, and devoured the infects and worms in the water. We shot one of them, and broke the wing bone, which prevented the bird from slying; but we had still the greatest difficulty to catch it, as with its long legs it waded through the water, which was a foot deep, much faster than we were able to follow it.

On the 1/t of June, being Whit-Monday, there arofe a very high north-weft wind, with violent hurricanes and fhowers of rain; at night, in this ftorm, the JONGE THOMAS, one of the four fhips belonging to the company, that were ftill in the road, having loft all its anchors, one after the other, was driven on the fands near the fhore, at Zout rivier, and, in confequence of its heavy lading, fplit into two pieces in the middle. The furge role to an amazing height on the fhores towards this fide, and Zout rivier was fo fwollen, that it was almost impassable. It is true, from the middle of May to the middle of August, the company's fhips are prohibited from lying in the road; yet it fometimes happens, that the governor permits it in order to avoid the inconveniences of victualling and lading the fhips in Falle bay. Independently of the loss fuftained by the company, as well in fhips as merchandize, there perifhed alfo unfortunately on this occasion, a number of the crew, who, for want of affiftance, were loft, and met with a deplorable death, DUSTRACE very

very near the land. Only 63 men escaped, 149 being unhappily drowned.

The ship had scarcely struck, which happened just at day-break, when the most efficacious expedients were ufed to fave as much as poffible of the company's property that might chance to be thrown on fhore, though I could not perceive that the leaft care was taken to deliver a fingle foul of the crew from their forlorn and miferable fituation. Thirty men were inftantly ordered out, with a ftripling of a lieutenant, from the citadel, to the place where the fhip lay, in order to keep a ftrict look-out, and prevent any of the company's effects from being ftolen; and a gibbet was erected, and at the fame time an edict iffued, importing that whoever fhould come near that fpot, should be hanged up immediately, without trial or fentence of judgment being paffed upon him. This was the caufe that the compaffionate inhabitants, who had gone out on horfeback to afford the wretched fufferers fome affiftance, were obliged to turn back without being able to do them the least fervice; but, on the contrary were, together with me, ocular witneffes of the brutality and want of feeling fhewn by certain perfons on this occafion, who did not beftow a thought on affording their fellow-creatures, that fat on the wreck perifhing with cold, hun-

ger,

ger, and thirst, and were almost in the arms of death, the least assistance or relief.

Another circumftance contributed to render this otherwife diffreffing fcene ftill more afflicting. Among the few, who were lucky enough to be able to fave their lives by fwimming from the wreck, was the gunner, a man with whom I was acquainted, and met with feveral times afterwards in the town: he had ftript himfelf quite naked, in order that he might fwim the eafier, and had the good luck to come alive to fhore, which was not the cafe with every one that could fwim; for many were either dashed to pieces against the rocks, or elfe by the violence of the furf carried back again to fea. When he arrived on fhore, he found his cheft landed before him ; but just as he was going to open it, and take out his great coat, the lieutenant, who commanded the party, drove him away from it; and though he earneftly begged for leave to take out the clothes neceffary for covering his naked and fhivering body, and could also prove by the key, fastened, according to the failors cuftom, to his girdle, as well as by his name cut out on the lid of the cheft, that it was actually his property, he was; neverthelefs, forced to retreat without effecting his purpofe, by this unmerciful hero, who gave him feveral fmart blows with a cane on his bare back. After he had paffed the whole day naked and hungry, and 5

and exposed to the cold winds, and was going to be taken in the evening to town along with the others who had been faved from the wreck, he again asked leave to take a coat out of his cheft to cover himself with; but this having been previously plundered, he found empty. On entering the town, where he arrived stark naked, he met with a burgher, who took compassion on him, and lent him his great coat: Afterwards he, as well as the other unfortunate wretches, was forced to run about the town for feveral days together, begging for victuals, clothes, and money, till at length they were supported at the company's expence, and taken back again into its fervice.

Another action that does great honour to humanity, deferves the more to be recorded here; as it fhews that at all times, and in all places; there are both good and confiderate people, as well as fuch as have nothing human but the fhape. An old man, of the name of WOLTEMAD. by birth an European, who was at this time the keeper of the beafts in the menagerie near the garden, had a fon in the citadel, who was a corporal, and among the first who had been ordered out to Paarden Ifland (Horfe Ifland) where a guard was to be fet for the prefervation of the wrecked goods. This worthy veteran borrowed a horfe, and rode out in the morning, VOL. I. with

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with a bottle of wine and a loaf of bread for his fon's breakfast. This happened fo early, that the gibbet had not yet been erected, nor the edict posted up, to point out to the traveller the neareft road to eternity. This hoary fire had no fooner delivered to his fon the refreshments he had brought him, and heard the lamentations of the diffreffed crew from the wreck, than he refolved to ride his horfe, which was a good fwimmer, to the wreck, with a view of faving fome of them. He repeated this dangerous trip fix times more, bringing each time two men alive 'on fhore, and thus faved in all fourteen perfons. The horfe was by this time fo much fatigued, that he did not think it prudent to venture out again; but the cries and intreaties of the poor wretches on the wreck increasing, he ventured to take one trip more, which proved fo unfortunate, that he loft his own life, as on this occafion too many from the wreck rushed upon him at once, fome of them catching hold of the horfe's tail, and others of the bridle, by which means the horfe, both wearied out, and now too heavy laden, turned head over heels, and all were drowned together. This noble and heroic action of a fuperannuated old man, fufficiently fhews that a great many lives might probably have been faved, if a ftrong rope had been fastened by one end to the wreck, and by the other to the

the lhore. Along this rope either a balket or a large copper veffel might have been hawled to and from the fhip, with a man in it each time. When the florm and waves had fubfided, the fhip was found to lie at fo fmall a diftance from the land, that one might have almost leaped from it on fhore..

The vigorous measures taken to preferve the company's effects and merchandize, were not; however, fo efficacious, as to prevent certain perfons in office from enriching themfelves confiderably on this occafion. For when whole horfe-loads of iron from the wreck could be fold to the finiths in town, it is eafy to conceive that their confciences would not ftand greatly in their way, if they could lay their hands upon portable and valuable commodities. The foldiers alfo were fo careful when on guard, that nothing fhould be pillaged from the wreck, that they themfelves every night, when relieved, marched into town with their mufket-barrels ftuffed full of folid gold lace, which, though fomewhat damaged by the falt water, anfwered very well when thrown into the melting pot.

Though the hardeft hearts frequently are foftened by the uncommonly fevere misfortunes and diftreffes of their fellow-creatures, and though great and noble actions have at all times been able to excite the gratitude and benevolence of the fel-T 2 low

low-citizens of the perpetrator ; yet (I am forry to fay it) I have it not in my power to conclude this melancholy picture with fome delightful trait of generous compafiion on the part of the governor towards the poor fufferers, and efpecially towards the drowned hero, or of fome noble remuneration of his fon. For when, fhortly after, this young man folicited for the employment of his deceased father, which was a post of fuch fmall importance, that it could neither be confidered as a recompense, nor could it be envied him by any one, it was refused him, and given to another.

This unfeeling bon vivant of a governor, rich in money, but poor in fpirit, permitted him, neverthelefs, afterwards to do what others confider as a punishment, viz. to go to Batavia, where he hoped to find kinder patrons and a wider field for making his fortune in. And here he would doubtlefs have attained his defires, had he lived longer; but in the very unwholefome climate whither he was now gone to fee his only brother, a merchant, he died, before an order arrived from the directors of the company in Holland (which did as much credit to them, as it ought to have accumulated fhame upon the officers at the Cape) viz. that the fons of WOLTEMAD. for the fake of their father, fhould be rewarded and promoted in every way that could poffibly be

be done. On this and fimilar occafions, I have obferved, how much an enlightened mind and a generous heart are to be prized above the gifts of fortune, above riches and honors; and how infinitely thefe latter are exalted by the former, if they are united with them, in which cafe they command every one's effeem,

I now also perceived the reason why the Europeans, both failors and foldiers, are in many respects treated worse and with less compassion, than the very flaves themselves. With respect to the latter, the owner not only takes care that they are clothed and fed, but likewise, when they are fick, that they are well nursed and have proper medical attendance. The former go as they can, viz. naked, or dreffed in tattered clothes, which, perhaps, after all, do not fit them; and when one of them dies, it is a common faying, that the company gets another for nine gilders.

The violent hurricanes from the north-weft have more than once occafioned fhipwreck in thefe roads. In 1692, three veffels, one English and two Dutch, were driven on fhore and lost. From the fame caufe, thirty years ago, in the month of May, feven of the company's ships were faid to have been wrecked and lost.

On the 31 f of July a flave was executed, who had murdered his mafter. The delinquent being T 3 laid

laid of a crofs and tied faft to it, firft his arms and legs were burned in eight different parts with jagged tongs, made red hot; afterwards his arms and legs were broken on the wheel, and laftly, his head was cut off and fixed on a pole. The judge that tries and condemns the criminal, is always prefent, and walks in proceffion to the place of execution, in order to give folemnity to the ceremony. The foldiers form a circle. The place of execution is between the town and the citadel, on a finall eminence.

On the 8th of August, a flave was hanged for fome great crime.

After malefactors have fuffered at the place of execution, within the town, they are always bronght out in the evening to the gallows without the town where they are either hanged, and that generally in irons, in which manner the fkeleton may be preferved for a long time, or elfe drawn and quartered. There are two gallows out of the town, one at the entrance to the harbour, under the *Leeuwe-ftaart* (Lion's tail) on which Europeans are hanged, and the other beyond the citadel, near *Zout rivier*, on which flaves and Hottentots are executed.

Zout-rivier (or Salt-river) is a river of confiderable fize, which derives its fource from Tablemountain, and difembogues itfelf into the harbour. The

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The water here is falt, from the admixture of fea water, and rifes and falls with the tide.

The oak (Quertus robur) and apricot (Prunus Armeniaca) bloffomed in August, the former, just after it had thrown out its leaves, and the latter, before it had any leaves. The alder also, (Betula alnus) as well as the almond and peachtree, were now in bloffom.

In the winter-months, when much rain fell, the water was in fome places feen rufhing like a torrent through the clefts of the mountains, down the higheft, fteep, and bare rocks.

Though the colony is inhabited to a great extent, and the Hottentots are almost extirpated, yet it fometimes happens that flaves run away and hide themselves, and that chiefly in the mountains. But it is very uncommon for a foldier or failor to run into the country, as he would easily be discovered there. When an unconverted flave runs away and is taken, he is beaten by his master or the officers of the police; but if a Christian deferts from the company's fervice, he is hanged. The money laid out in the purchase of the former, faves him from death, but the established laws do not fpare the latter.

For the use of the foldiers in the citadel, cooks are taken into it, who drefs victuals, and fell them out in portions to the foldiers. Every T_4 foldier

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foldier receives from the company three pounds of bread twice a week.

Every foldier pays out of his wages two flivers per month to the courier for boots, and is bea fides obliged to keep guard for him.

Those wretches that are guilty of bestiality, are not put to their trial, or imprisoned, but are immediately drowned, as being unworthy to appear before the judge, or to be visited by a clergyman. In this manner a slave was now executed.

The fifcal is independent in his office, not being fubordinate to the governor, and accountable only to the directors in Holland. When difputes and contentions arife between burghers or others, he fines them. The fine here is not proportioned to the crime of the offenders, but, for the most part, fuited to their circumstances. The fifcal therefore, to whom these fines furnish a confiderable revenue, treats turbulent and offending perfons as a physician does a plethoric patient, of whom he always draws blood in proportion as the ftrength of his habit will permit.

Constantia, confisting of two farms, called Great and Little Constantia, which are fituated below the east-fide of Table Mountain, is celebrated for its highly delicious wine, known by the name of Constantia or Cape wine, which is fold

fold in Europe at fo high a price. This wine is extremely fweet, agreeable, and lufcious, and only fit for the deffert, as, on account of its fweetnefs, if drank in abundance, it lies heavy on the ftomach. Of the red wine, about fixty pipes are made, and of the white about ninety; yet the vintage here, as in other places, is different in different years. These two farms were for a long time the only fpots which, by reafon of their fituation, could produce this delicate wine; but lately fome other farms in this diffrict, and in a few other places, have been able to bring their wines to the fame degree of excellence. But as the company has referved to itfelf the exclusive fale of the Constantia wine, which confequently is confidered as contraband, and is not to be bought or transported to Holland under that name by individuals, they have hit upon the expedient of giving their wine, which in point of goodnefs does not yield to Conftantia, the name of Mag wine (or Stomach) which in general is fold to the naval officers of foreign nations cheaper than the Constantia wine itself.

It is remarkable, that the governor increafes his revenue by every pipe of wine purchafed on the account of the company. The company ufually pays forty rixdollars for every pipe, and the feller gives a receipt for forty, but receives no more than twenty-feven rixdollars, three being

ing deducted for the clergyman's tythe. Ordinary wine is fometimes fold at the rate of tenrixdollars a pipe, as was the cafe one year that I was at the Cape. As a pipe contains about one hundred and twelve gallons, the wine is confequently very cheap. In like manner other perfons in office make confiderable profit on every thing that paffes through their hands, which they are indeed often obliged to do, as their falaries cannot fupport them in a country where moft of the neceffaries of life are many times dearer than they are in Europe. Thus, while the governor makes ten rixdollars of every pipe of wine that is fold, other officers find their advantage in giving leave of absence to people who receive pay from the company without doing any fervice for it. Some make their fortunes by falfe weights, others by damaged goods. A fhipwreck fills the pockets of many. In confequence of the rapacity of the captains and their mates, the failors feldom get their due. The foldiers must yield fomething to their officers. The fick must starve for the support of many that are in health, and the defunct muft leave part of their effects to the first comer.

The governor this year caufed a hot-houfe to be built in the company's garden for pine-apples. This fruit, fo delicate at Batavia, could not arrive here at the maturity and high flavour that

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it does in the Eaft Indies; in like manner the *Pifang (Mufa Paradifiaca*, or *Bananas)* would feldom bloffom in the few gardens where it was cultivated, and never yielded any fruit that was perfectly ripe and high flavoured.

The American Aloe (Agave Americana) imported from the botanic gardens of Europe, was now common on the hills near the town, and blofformed finely every year, without attracting fuch a great concourfe of fpectators as it dees at Amfterdam.

The Porcupine, or Yzer-varken (Hyftrix) whofe ufual food is the root of that beautiful plant, the *Calla Æthiopica*, will frequently deign to put up with cabbages and other vegetables, by which means he fometimes commits great depredations in the gardens.

By the Swedifh fhips that were newly arrived, and brought feveral of my friends, I not only had the pleafure of receiving letters, but alfo the joyful tidings of the happy change of government made laft year in my native country, by which a great and good king, without bloodfhed, and in a manner as noble as his conduct was wife, had been able to put an end to the difcord which for many years had divided his fubjects, to the great detriment of the kingdom.

In my various excursions to Table Mountain, I observed in its crevices both *Dass* and *Baboons*. The former I perceived generally near the top of the mountain, just at fun-rising, when they used to come out to bask in the fun. Whoever wished to shoot them, must cautiously approach them, and with a quick gun take his aim in fuch a manner, as to lay them dead on the spot. If the gun was not quick, they would make off, as soon as ever the prime flassed in the pan; and, if the animal was not instantly killed, it would withdraw into a crevice, so that it could not possibly be got out. The fless is fometimes eaten, and is tolerably well tasted.

The baboons were pretty numerous, and indeed dangerous to travellers; for fitting undifmayed on the tops of the rocks, where they were frequently out of the reach of fhot, they would roll, and even throw down, ftones of all forts and fizes. The use of the gun, however, was on these occasions indispensibly necessary, as by means of it they might at least be driven to fuch a diftance, that the ftones they threw could not do fo much mifchief, It is curious to observe them in their flight. With their cubs on their backs they will often make aftonishing leaps up a perpendicular rock; and it is but feldom that they can be fhot; and even if

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if any one of them is fhot, it is not eafily killed.

In the town, tame baboons are fometimes kept, made fast to a pole. Their agility in climbing, leaping, and dodging any one that offers to strike them, is almost incredible. Though one of these baboons was tied up, still it was impossible at the distance of a few yards to hit him with a stone. He would either catch the stone, like a ball, in his hand, or elfe avoid it in the most furprizing and nimble manner.

The baboons of Table Mountain, befides paying frequent vifits to, and plundering the gardens of the Europeans, feed alfo upon the pulpous bulbs of feveral plants, which after digging up, they peel and eat. Heaps of thefe parings were frequently feen left after them, particularly near the ftones, where they refide. The *Gladiolus plicatus* appears to be the moft favorite plant with those that live near the Cape, for which reason also this plant is known by the name of the *Baboon*. The root of this table is fometimes boiled and eaten by the colonists.

In the fandy plains near the Cape, the great white African mole (*Marmota Africana*) is more particularly to be found, and that in abundance. It makes large holes in the ground, over which it lays little heaps of mould; thefe holes are very

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very inconvenient to people in walking, who flep down into them unawares, and are frequently in danger of falling. The fize of it is nearly equal to that of a cat; it is of a fierce nature, and, when caught, defends itfelf with its teeth. It feeds on feveral forts of bulbous roots that grow in thefe fandy plains in abundance; efpecially *Gladiolufes*, *Ixias*, *Antholyzas*, and *Irifes*. As I have not found this animal delineated by any author, I have given a figure of it here. **PENNANT** mentions it at p. 472, under the name of the *African Rat*.

Those that are but in a finall degree acquainted with botany need not be told, that by the opening and closing of flowers one may frequently know with certainty, as from a watch, what hour of the day it is, as well as if the weather will be fine or rainy. Plants of this kind are common on the African hills.

The Moræa undulata never opens before nine o'clock in the morning, and before fun-fet, at four in the afternoon, it clofes again.

The Ixia cinnamomea (Avondbloem, Canelbloem) opens every evening at four, and exhales its agreeable odours through the whole night.

The approach of rain is announced by the flowers of various bulbous plants, fuch as the *Ixias, Moræas, Irifes,* and *Galaxias*, the tender flowers of which do not open in the morning, if rain

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rain is to be expected foon; and if a fhower is to fall in the afternoon, they clofe fome time before.

Several of these likewise diffuse an agreeable fragrance, particularly at evening or night, somewhat like the odour of pinks, but fainter; such are the *Gladiolus tristis* and *recurvus*, the *Ixia piloja*, *falcata*, and *cinnamomea*.

The Earth-rofe (Aard-roos) was the name by which the inhabitants both of the town and country diffinguished the Hyobanche fanguinea, a plant with a low deep-red flower, which is fcarcely of a finger's length, and has neither branches nor leaves. It grows in winter and fpring in the low fandy plains, both near the town and elfewhere towards the fea-fhore, pufhing only its clufter of blood-red flowers above the ground. The Antbolyza ringens, with its gaping flower, and the ever-varying Gladiolus plicatus, which decorate thefe fandy plains in abundance, have their pulpous bulbs deep down in the fand, and do not raife their flowers much higher than the Hyobanche above the furface of the ground.

During the winter months, three beautiful fpecies of *Gardenia* were blowing in the company's garden. The *Gardenia florida* was probably brought hither from the Indies; at leaft in my travels in this fouthernmost angle of Africa, I never

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never perceived it growing wild any where, but always planted in the gardens, and that even among the colonifts far up in the country: Here it always produced double flowers, and confequently no fruit, which the Chinefe ufe for dying yellow. The Gardenia Rothmannia, which has lefs confpicuous flowers than the former, and of which both the flowers and fruit, on being dried, always turn black. The Gardenia Thunbergia, with refpect to its bloom, one of the fineft trees in the world. This little tree had been brought a few years before from the forefts of the country, where it is fcarce, and grows very flowly, the wood being at the fame time fo hard, that on this account it is used for clubs. This tree, after it has once begun to bloffom, continues to blow for feveral months, producing fresh blossoms every day, as fast as the old ones by degrees fade and droop, and at length fall off. The bloffom is almost fix inches long, white and thick, like the most beautiful wath-leather, of an agreeable odour, and does not lofe its white colour.

If the cold in this country were fevere, and it were abfolutely neceffary for the inhabitants to keep fires in their ordinary apartments, it would be a wretched country indeed, on account of the great want of fuel it labours under. The wood that is ufed for dreffing their victuals in the kitchen is nothing but brufhwood,

brufhwood, being got with no lefs pains than expence from the finaller trees and bufhes. On making fome enquiry concerning this matter, I found that the following were the moft commonly employed for this purpofe; viz. the ftems and roots of the *Protea grandiflora*, conocarpa, fpeciofa, birta, mellifera, and argentea, a few fpecies of Erica, and fome forts of Brunia.

In a country like this, where it is for the moft part impoffible to have recourfe to an apothecary, and the medicines fent from Europe extremely dear, the inhabitants had prudently thought of trying the indigenous plants of Africa; and among thefe they had difcovered various useful remedies in different diseases. As a botanist and physician, I was eager to be acquainted with them, and never loft an opportunity of adding to the flender flock of my knowledge, which often proved ferviceable both to myfelf, and the benevolent and obliging colonists. For when any of these could impart to me, in their plain and artlefs way, a flight notion only of fome ufeful plant, I was able afterwards to give them a more accurate idea of its true ufe in curing difeafes.

Many Gerania, with their red and pulpous roots, grew in the fandy plains near the town; and as thefe roots are of an aftringent nature, vol. 1. U the

the country people used them in the diarrhœa and dyfentery.

The root of the Bryonia Africana was employed both as an emetic and a purge.

The roots of the Afclepias undulata (Bitterwortel) and Crifpa, as well as the whole of the herb Eriocephalus, were used for the purpose of expelling urine in the dropfy.

For the fame purpole also they frequently made use of the root of the Hæmanthus coccineus, inftead of fquills, or the Scilla maritima. This plant is very common on the hills below the mountains, and hence has obtained the name of the Mountain-fquill. Its root is large, white, mucilaginous, fibrous, and fomewhat acrid. After being cut into flices, it is steeped in vinegar, and from this is made a kind of weak Oxymel fcilliticum, which is used in dropsies and afthmas.

The *Polygonum barbatum*, which grows in ditches, and is of an acrid nature, is, like its kindred fpecies, ufed for dropfical and fwelled legs.

A decoction of the leaves of the *Crotolaria* perfoliata was effeemed a powerful diuretic, and, in confequence of this property, to cure dropfies.

The Piper Copense was in fome places used as a stomachic, instead of common pepper; and the

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the Fagara Capenfis (wilde Cardamom) was of great fervice to many people in the flatulent cholic, and the palfy.

The juice of the *Mefembryanthemum edule* was used both as an internal and external remedy: internally for the dysentery and the thrush (*apb-tbæ*) in children, and externally for burns.

They were very loud here in the praifes of the Ofmites campborina, to which they were pleafed to give the name of Bellis (or daify). This plant has certainly great merit on account of its camphorated principle, and its ftrong poignant finell and tafte, both of which evince it to be of a highly refolving nature. The plant itfelf is fometimes used externally, applied in bags to inflammations, and on the ftomach in cholics. But the fpirit diftilled from it, called Spiritus bellidis, was highly effected in coughs and hoarfenefs. In thefe cafes, however, it appeared to me to be too heating; but I used it more than once with advantage in the palfy and apoplexy. The genuine fpecies, or the Ofmites campborina, which is the very beft, I found growing on the top of Table-mountain only; and as it was obtainable only by a few, the Ofmites afteriscoides, which has a fainter fmell and weaker virtues, was used in its stead. As an astringent in the diarrhœa, the rough and auftere bark of the Protea grandiflora was frequently used. In the en-TI 2 virons

virons of the town grew likewife various plants, which the inhabitants had learnt to convert to their own benefit when afflicted with diforders; as, e. g.

The Adonis Capenfis and Atragene veficatoria (Brandblad) used instead of Cantharides: these plants grew on the fides of the mountains and hills; and were exhibited in the feiatica and rheumatifm.

The Adianthum Æthiopicum (Vrouwehaar), a fpecies of maidenhair, grew chiefly on the fides of the Devil's mountain, and was drank as tea, in colds and other affections of the breaft.

The Protea mellifera (Tulp-boom and Zuykerboom) contains in its calyx a fweet juice, which, when infpiffated, was ufed in diforders of the breaft.

The Salicornia fruticofa (Zee koral, or fea coral) grew on the fea-fhore, and notwithftanding its brackifh tafte, was caten by the foldiers and fome few others as a fallad, dreffed with oil and vinegar.

Befides the company's difpenfary which was at the hofpital, another was founded this year in the town, by which means the country people may now have a better opportunity of procuring medicines than they had before, when they were obliged to purchase them of the furgeons at a very high price.

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From the Oxalis cernua (wilde Syring) which grew to the greateft fize and in the greateft abundance of all the fpecies appertaining to this genus, was prepared a good and ferviceable Sal acetofella (or falt of wood-forrel).

Hard-looper (or Fast-runner) was a name given, on account of the fwiftness with which it ran, to the Carabus 10-guttatus; an infect that frequented feveral places, and often the highways themselves. This animal has the fame property as our Swedish gunner (Carabus crepitans), viz. that when it is pursued or caught, it blows out with vior lence from behind a liquid, which has the appearance of a thin fine fmoke, diffusing itself all around, and if it gets into the eyes, making them fmart just as if brandy were fquirted into them. By these means it blinds its pursuers, and gets an opportunity of escaping, while the pain last, which is about a minute or two.

Fifeal and Canary-byter were the appellations given to a black and white bird (Lanius collaris) which was common in the town, and was to be found in every garden there. As it was a bird of prey, though very fmall, it fought its food among the infects, fuch as beetles and grafshoppers, which it not only caught with great dexterity, but likewife, when it could not confume them all, it would flick them up on the pales of farm-yards till it had occafion for them,

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fo that one would have fuppofed them to have been empaled in this manner by human beings. It alfo caught fparrows and canary-birds, but did not devour any more of them than the brains.

A beautiful green thrush (*Turdus ceilonicus*) frequented the gardens of the town, and delighted the ears of the attentive burgher with his fweet fong.

The winter rains having moiftened the dry hills in the environs of the Cape, various beautiful and elegant flowers of bulbous plants began to fpring in the month of August. The plants that were more particularly common were the Ixia bulbocodium, which varied much in the fize and colour of its flowers; the Moræa collina and spathacea, the dependent leaves of which twined round the feet of the perambulator, and frequently threw him down : and the Morea undulata, the flower of which has the appearance of a large fpider, and attracts the flies called blue bottles by its fetid fmell. The elegant family of the irifes, however, efpecially the papilionacea, excelled all others in the fuperb grandeur of their flowers, which was greater than can be expressed.

Caffre-corn (Holcus caffrorum) was cultivated by fome few people in their gardens as a rarity, and grew to the height of a man, bearing large clufters of flowers; confequently it is a very profitable

profitable kind of corn, but requires a great deal of heat.

The Mirabilis dichotoma (Vieruurs bloem, or four o'clock flower) was planted in a few gardens, both for the beauty of its flowers, and its fingular quality of clofing them every evening at four o'clock.

Among the various forts of fifh that appeared on the tables at the Cape, were the *Chimæra* callorynchus (Dod/kop or Jo/epb) the flefh of which is white and well-tafted; and the *Raja miraletus* (or *Rock*). The *Raja torpedo* too (called here *Trill vifcb*) was fometimes caught in the harbour, but not brought to table.

Pelicans with their large claws, called here *Kropgans* (*Pelecanus onocrotalus*), which are not fcarce on the coaft, were also kept in a tame ftate, and lived on fifh, and food of a fimilar nature, by the water-fide.

Of the *Reftio dichotomus* (*Beefem-riet*) brooms were made to fweep the floors with.

The fingular name of King of Candia was given by the inhabitants to the Hæmantbus coceineus and puniceus, one of the largeft and most beautiful flowers that made their appearance towards winter on the hills of the Cape, exhibiting in stately pomp its blood-red clusters of flowers that grew close to the ground, and bare of leaves, which, previously to the blowing of the plant, had

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withered

withered and difappeared. After the flowers, comes the fruit; and this is fucceeded by the leaves alone, which are but two in number, and lie down flat on the ground, like those of the *Amaryllis ciliaris*: which latter plant, with its leaves fringed with black hairs, grew all over this diffrict, though it was never once feen to blosfom.

Befides the chameleon, which changes its colour, there were two lizards, very common on the hills near the town; the *Lacerta fiellio* and *orbicularis*, fitting every where on the ftones, and bafking in the fun. Both of them made a hideous appearance with their protuberant points, and when any body approached them, ran quickly down under the ftones to hide themfelves.

The Hottentots generally elect a chief, whom they call captain; and as they pretend to be in alliance with the Dutch Eaft-India company, the captain whom they have elected, is to be confirmed by the governor at the Cape. One of thefe captains was now come to town, attended by a few Hottentots, to be confirmed in his new dignity, and, agreeably to ancient cuftom, receive fome prefents. As a token of his authority, he is prefented with a flick, mounted with a large brafs head, on which are engraved the company's arms. The captain heads the troops when they take the field, either againft their enemies,

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enemies, or for the purpole of hunting wild beafts, on which occafion he alfo throws the first fpear. In other refpects, very little more regard is shewn to him than to the rest; and the chief difference between them seems to be, that he commonly wears either a calf's or a tiger's so fkin, while the rest are clad in sheep-skins.

In winter, when the north-west wind blows ftormy into Table-bay, whales are fometimes driven in. One of these fish had lately been cast on shore dead. It was above two fathoms long. From its back, which lay above the water, they cut out large pieces, in order to extract train-oil from the blubber.

In like manner, during this feafon, there arrived at the numerous iflands that lie round about the Cape, a great number of feals, which in this part of the world, are commonly called fea-dogs, becaufe while they are bounding up and down in the water, they bear fome refemblance to a dog. There they breed at this time, and bring up their young ones, and are caught in abundance for the company, for the purpofe of making train-oil. It is fingular that the fea-dog, which is, in fact, a marine animal, cannot fiving by nature, as foon as it comes into the world. It is the fame cafe with this as with fome kinds of birds, which cannot fly till they are taught by the mother. Thus it is that the fea-dog learns

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of its mother to fwim. When the young feal is arrived at a certain age, his mother catches him by the neck and throws him into the water, where he plasses about, till at length he begins to fink : the mother then catches him up again, and thus makes him try feveral times, till at last he can fwim and go out to fea.

The farming out of wine and victuals produces to the company a confiderable revenue. The former was now, according to annual cuftom, fold by auction on the laft day of August. And he who bids higheft becomes the farmer-general of the wine-contract, having the exclusive right of felling wine, not only to ftrangers and to the officers of the Dutch fhips, but alfo to the inns and taverns. The owners of vineyards, it is true, may difpose of their wine to the burghers at the Cape for their own confumption : but neither they nor any one elfe are fuffered, under a heavy penalty, to fell a fingle drop of it to any other perfon. By this means the wine comes very high to foreign nations, and at the taverns a bottle cofts feveral times as much, as it does to. private people at their own houses. The farmer of the wines has alone the power of retailing out wine himfelf, or of permitting others, who keep inns, for a certain confideration to do the The revenue from the wine contract fame. amounts yearly to between 30 and 40,000 gilders. The

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The victualling contract is conducted in a different manner. He that bids the loweft at the auction is appointed the farmer general of this monopoly; viz. he that offers to furnish the company with fresh meat for its ships and its other exigencies at the loweft price. From this contract, it is true, the company receives no pecuniary advantage; but then it gets all its meat at a much lower price, than it otherwife could poffibly be obtained. It is in confequence of this contract alfo, that the burghers as well as ftrangers, are obliged to pay an extravagant price for butchers meat. Thus whilft the company gets butchers meat for two doits per pound, the burghers must pay at the rate of four or more, and ftrangers two ftivers: and while a bullock, fit for flaughter, is commonly fold for five Dutch rixdollars, ftrangers must pay at the rate of ten or more. This contract is farmed out for one, two, three, five, or feven years; and certain fpots near Groene-kloof are ceded to the contractor for pasture-grounds without any separate charge.

On this account, as well as on that of the language, which ftrangers do not always underftand, every nation whofe fhips anchor here, is obliged to have a commiffary or broker, who manages their concerns, and also contributes, as far as

as in him lies, to raife the price of every article to them.

Wheat, when it is wanted by foreign nations for exportation, is only to be had of the company. The French fhips frequently exported it in the course of this and the last year to the Isle of France.

Many people, and particularly the failors, inftead of butter, used to purchase the fat that had been melted down from the large tails of the African sheep. One of these tails, weighing twenty pounds, confists of nothing but fat, which is the highest luxury of the Hottentots. This fat is laid down in tubs with some falt and pepper, and used at sea with bread in lieu of butter.

Offriches eggs were mostly purchased by the naval officers. They are in general the perquifites of flaves, who, in tending their cattle, frequently find places in the fands where the offriches have laid their eggs. During the time of incubation, a dozen, and fometimes even a fcore, of these eggs (though for the most part fewer) are to be found in one place. The flaves always use the precaution not to take away the eggs with their hands (in which case the birds, who perceive it by the fcent, are apt to quit the neft); but by means of a long flick they rake them out of the neft as fast as the birds lay them.

them. These eggs fold in general for a skelling a piece, or about fixpence English. They are fittest, and most used for cakes and œufs perdus; and they are particularly good, when eaten with a large quantity of butter. One fingle egg is fufficient for several people. And whereas hens eggs will feldom keep for any length of time on board of ship, and require great pains to be taken with them in order to turn them every day, oftriches eggs are easily preferved at sea, on account of their size, and of their thick and strong shell.

The Campbor tree (Laurus campbora) brought from the East Indies, and planted here, throve very well, though no great pains were taken to increase the number of them, or collect any camphor from them.

In like manner Turmeric (*Curcuma longa*) was cultivated on a fmall bed in the company's garden; the root was fcarcely ever ufed here, though it is fo much in requeft in Europe for the purpofe of dying, and in the East Indies enters into almost all their diffues.

During the whole time that I flaid at the Cape (almost a year and a half) I never obferved that any public fair was kept here. In fact, fairs are not usual in this country. In their flead, public auctions are the more frequently made for all forts of foreign merchandize, efpecially such as is brought here from the various

various factories belonging to the company in the different parts of the Eaft Indies.

The burghers in the town generally make an agreement with fome of the furgeons in the hofpital to attend them and their families, and furnish them with medicines. This is the more neceffary, as they have always a number of flaves, and fometimes dangerous epidemic diftempers prevail among them. This circumftance is the caufe that the phyficians and furgeons, who come as ftrangers to this place, and ftay fome time at it, are fcarcely ever called in, unless they can work miracles. My medical practice in the town confequently was not very extenfive ; neither, indeed, did I ftrive to enlarge it, for fear of being impeded in my botanical purfuits. On the other hand, I had the greater opportunities of affifting the country people in my medical capacity, who were both in greater want of my aid, and more grateful to me for it. Almoft always, and every where, I obferved that my medicines acted with the greateft efficacy as well as certainty upon the flaves, whofe conftitutions were not fo much impaired by improper diet, and were, befides, lefs accuftomed to the use of remedies.

Though flaves are not ufually inftructed in the doctrines of Chriftianity, nor their children baptized, the Dutch East-India company takes care

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care that the children born in the lodges of their own female flaves are baptized, and in fome meafure inftructed in the Chriftian religion. The reafon for this, perhaps, may be, that most of thefe children have European fathers, to whom they frequently bear the most striking refemblance.

The children thus iffued from Europeans, I had frequent opportunities of feeing married to Black women. Their progeny, however, were not always like each other. I once faw iffued from fuch a couple, one fon, who was black, with large eyes, and refembled his mother; another, who was rather of a white complexion, but varied with black fpots fcattered up and down, and, upon the whole, bore a greater refemblance to the father; and a girl, that was half black.

When the Negroes are wounded in any part of their bodies, and thefe wounds heal again, the fcars at first are white, but the skin afterwards grows black by degrees.

I faw an old Hottentot here, who was very much afflicted with an eryfipelas in his leg. The eryfipelas difcovered itfelf by its ufual bluifh-red colour; and on the black ground it had a very frightful appearance. Otherwife it was very rare to find any of thefe people with blemifhes on any part of their bodies, and much more fo, to fee any among them crippled. As they

they not only live fparingly, but also on unfeasoned and unfalted food, they are in general fubject to few difeases. The changes of the climate are almost the only causes of the rheumatisms and fevers which fometimes prevail among them; yet, still these diffempers are much more fearce among the Hottentots that enjoy their liberty, than among those who have entered into the fervice of the Dutch colonists.

As far as I had an opportunity of travelling Haft fummer, both to the northward and eaftward, in this extensive country, I met with but fmall remains of the once more or lefs numerous Hottentot nations, which, as late as the beginning of this century, ftill inhabited thefe vaft plains. It is true, as faft as the colonifts fpread over the country in gradual fucceffion, the Hottentots have been obliged to retire, and make room for the dwellings and cattle of the Europeans; but it is an undoubted fact alfo, that the fmall-pox, a new and to them unknown diftemper, has, like a peftilence, exterminated the greater part of them. Now there are only a few fcattered villages (kraals) or focieties of them to be found, in which flate they either live by themfelves, or are taken into fervice at the company's pofts and grazing-farms, or elfe by the colonifts themfelves. For the most part, thefe focieties, efpecially in the vicinity of the Cape,

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Cape, are far from being numerous; but farther in the country they are both more populous and more wealthy. The few remains of them that still exist, have, in fome instances, retained the names of their tribes; but more frequently those names are retained which formerly diftinguished each nation separately, and are applied to the diffrict itfelf, and to the larger rivers which ran through the country, or form the limits of it. The better the country was provided with water, the more populous were the inhabitants, and the more cattle they poffeffed; ftill, however, the whole nation did not amount to more than a few thousand men, and each of their diffricts formed a fmaller or larger province.

The Gunjemans Hottentots were those that lived nearest the Cape, and on the very point itself; they extended as far as Falfe Bay, the Hottentots Holland Mountain, and from thence to the left as far as Stellenbosch. This country is extensive, but consists in a great measure of a fandy unfruitful foil. These were the first, who, in barter for certain merchandizes, ceded to the Dutch East India company a tract of their country; and of these there are but a few, and I had almost faid none, now remaining.

The Kokoquas nation inhabited the country that bordered upon the Cape on the northern yot. 1. X fide,

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fide, in the environs of *Groene kloof*. In my firft expedition, which was directed towards that fide, I met with feveral of this nation ftill in being, and even received from the company's pofts two of them to attend me on the journey. Their country, like that of the preceding tribe, is low, level, and fandy, is much in want of water, and was formerly not very populous, neither have the colonifts been able to cultivate every part of it. It extends as far as the fhore of the ocean; and has a few fmall hillocks difperfed over its furface,

In continuing my journey to the northward, and to Saldabna Bay, I vifited the Suffaquas Hottentots, fome of whom were ftill remaining. As the country is every where low, fandy, and in want of fresh water, this nation was always very confiderable, and fubfisted by grazing.

The Hottentots that live ftill farther to the northward, and are defeended from tribes that were once numerous, I had not the opportunity of vifiting in this excursion, but proceeded more towards the mountains in the east, and the tracts of land that lay beyond them. However, from the inhabitants in these parts I got particular information concerning the neighbouring nations, which I was in hopes of visiting at fome future period. From these I learned, that

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that all along the fea-coaft, and round about St. Helena's Bay, in a low, fteril, and fandy tract, the Odiquas nation borders on the Suffaquas. The next neighbours to thefe are the Chirigriquas, a more populous and wealthy nation, which inhabits a fine grazing country, watered by the great Elephant's River: and thefe again have for their neighbours two great and famous nations, the Little Namaquas, who live on the fea-coaft, and the Great Namaquas, who refide farther from it.

In the excursion I made the preceding fummer, I visited, in going, and returning, almost all the nations that once inhabited the eastern tract or the coast of Cassiania. After passing the mountain called the *Hottentots Holland Mountain*, I came to a hilly and mountainous tract of land, which was inhabited as far as the hot-bath by the *Koopman's nation*; next to these, on the sea-coast, were the *Sonquas Hottentots*, whom on my return homewards I had to my left. The country of these latter is rather barren, and not much subject to the incroachments of the Europeans.

Next to the Koopmans is the Heffaquage nation; of this but few remain. And more towards the eaft, near the great and deep river Zonder end, is the country once inhabited by the Dunquas Hottentots.

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Gauriquas,

Gauriquas land extends more to the northeaftward: this is a very fine country, and abounds in grafs; it is watered by a confiderably large river, called Goud's Rivier, and was formerly very populous.

Travelling further on, and following the fhores of the ocean, one comes to the *Houtniquas* Hottentots, who in their hilly and woody country have remained the longeft fheltered from the Europeans; and had hitherto fuffered fo little from their encroachments, that of all the Hottentots I had as yet feen, no nation was more confiderable in point of numbers, till I came to Kamtous River.

Farther to the northward, and near the large valley, through which one muft pass in order to go to Lange-kloof and the adjacent country, occurs the diffrict of the *Ataquas Hottentots*, which is mountainous and abounds in grafs.

Still farther to the eaftward, following the coaft, one finds firft the Kamtours nation, then the Heykoms, and laftly the Caffres. All thefe nations are in poffeffion of hilly and extremely rich meadows, interfected by many, and thofe frequently confiderable rivers, abounding in fifh. And as thefe people have not hitherto been fubject to the encroachments of the colonifts, though a few grazing farms have already been laid out here,

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here, they are not only numerous, but also rich and abound greatly in cattle.

All thefe Hottentots, whom I visited in their own country, agreed in this particular, that they were mostly short, thin, and slender, with prominent cheek bones, flat nofes, protuberant mouths, peaked chins, crooked backs, and pot-bellies. The colour of their fkins was yellowifh, but more or lefs dark from greafe and dirt. Their hair is of a fingular nature, curling like wool, and on most of them as short as the knaps of frize cloth, but fometimes, though feldom, of a finger's length, when it looks like twifted yarn; but few of them have any veftiges of a beard; and when they have, it is curling like their hair. The other fex always have their breafts hanging down to a confiderable length. All of them are mad after brandy and tobacco, and find a peculiar pleafure in filth and ftench. They befmear themfelves with greafe, and powder themfelves all over with the fetid fubstance called Bucku, or the powdered leaves of the Diofma. A sheep's skin thrown over their shoulders, and another over their loins, with a fmall bag for the male, and a fquare bit of fkin for the female fex, conftitute almost the whole of their apparel. Befides this, they also wear on their heads a skin-cap, and, by way of ornament, rings of iron

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or copper round their arms, ftrings of beads round their wrifts, and rings of leather round their legs. The huts, in which they live, are low and fmall, and convex like a hay-ftack, They always fit fquat on their hams; are nimble and active, but, in general, extremely lazy, Their furniture is fcanty and mean. Their difhes are tortoife-fhells. The water they have occafion for they keep in the guts of animals; and milk in bafkets and goat-fkins. Their wants, it is true, are not great; neverthelefs their poverty difplays itfelf in every particular.

The Galenia Africana was known under the appellation of Kraal-bosch, and in some places was used for sences about the inclosures for their cattle, when no other bushes fit for the purpose were to be had.

Almonds were fold here, not by the weight, but by the hundred and thousand. They were bought up in great quantities by officers who went to Batavia, where they could fell them to advantage.

Strawberries (*Fragaria vefca*) had been brought from Holland, and planted out in beds in the gardens round the town. They were tranfplanted every third year. They fold at a high price, and to great advantage, and were well tafted, though they had not fo delicious a flavour as those that grow in Europe.

Mulberry-

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Mulberry-trees (Morus nigra) were found at feveral of the farms near the town, and produced ripe and fine fruit, which however was feldom feen in the markets.

In the beginning of September the flaves ufed to weed the corn-fields, both the barley, which is ripe and reaped in November, and the wheat, which is reaped in December.

An unfortunate accident happened about this time. A huntfinan who had accompanied Major Baron VON PREHM, the commander of the garrifon here, in a fhort excursion into the country, loft one of his hands in confequence of the burfting of his gun, and was brought into the citadel. He had taken aim at a Koor-baen, and probably loaded his piece too high. Accidents of this nature are not uncommon in this country, where found and good guns are extremely fcarce. Many other people had loft a hand in the fame manner; and the late Governor TULBAGH, who from the condition of a private foldier had rifen to the higheft post of honour, had lost one of his eyes by the burfting of a gun. The fame misfortune had like to have befallen me alfo this winter, as I was fhooting in the harbour at fome of the pelicans, which fly over it every evening in large flocks. On the firing of the gun, the whole ftock was broken into a thousand splinters, X 4 feveral

feveral of which wounded my face and hands. To prevent fuch an accident from happening to me again, the celebrated Captain EKEBERG, who commanded a Swedish ship, that anchored this year in the road, prefented me with a handfome and found Swedish gun, which ever after, during my residence and travels in Africa and the island of Java, was a safe and constant defence to me.

The Loxia Aftrild, on account of its red beak, was called Rood-beckje, or *Red-beak*, and was found in great numbers in the farmers gardens. They ufually flew in large flocks; and lighted in the grafs, fo clofe to the ground that they could not be feen, though on account of their multitudes, one was fure to kill a great many of them at one flot, notwithftanding that it is a bird of the fmalleft fize.

Turtle-doves (*Columba riforia*) were common in this country, particularly in places where there was much under-wood. They were feldom eaten by the country people. It is remarkable, that this bird cannot remove from one place to another without laughing afterwards. This laughing noife, as well as its cooing, always betrays its place of abode. The flefh of it tafted rather dry.

' Green Mountain fwallows (Merops apiaster) were also to be seen near some of the farms, and

and that frequently in the greateft numbers. Thefe birds are extremely beautiful in their yellow and fea-green attire. In the day time they feek their food, which confifts of infects, in the fields; but in the evenings they return in flocks, chirping in fuch a manner as perfectly to deafen one. They then affemble together by degrees in the gardens, and at length go to rooft in the branches of orange and other trees before it grows quite dark.

The month of September was already begun, and the beautiful and flowery fpring making its appearance, put me in mind of preparing for a long journey up the country. But here more obftacles and difagreeable circumftances threw themfelves in my way than I could ever have imagined. The trifling viaticum I had brought with me from Europe, I had long ago confumed, and in the feventeen months which I had paffed here, I had received no fupplies from Holland. At Amfterdam, indeed, I had great and powerful patrons in the Burgomafters Ryx TEMMINK and VAN DER POLL, together with the Privy counfellors VAN DER DEUTZ and TEN HO-VEN, by the perfuafions and at the exepence of whom I had undertaken this long voyage; but to my great misfortune, both of the governors, TULBAGH and RHEEDE VAN OUDSHOORN, to whom I was ftrongly recommended, and from whom

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whom I had reafon to expect every fupport, had departed this life, the one dying previously to my arrival at the Cape, and the other in the voyage thither. I was therefore a ftranger, in an unknown place, and left to myfelf and to my fate till my friends at Amfterdam could be informed of my fituation, and endeavour to better it. Misfortunes feldom come fingle; and I had now my double portion of affliction. For when I intended to take up my falary from the company, it appeared, that the fhip in which I had arrived, was come without its muster-roll. This was therefore first to be brought from Europe, before any one could receive his pay. When the fhip failed from the Texel, the vifitation officers in their hurry had forgot to deliver in the mufter-roll, and the captain to demand it. The confequence of this was, that none of all those that were engaged on board the fhip, could, during the fpace of two or three years, either obtain their pay or leave to go home. The vifitation officers (kruyd leefers) are two of the company's fervants of the loweft rank, who are flationed in each fhip during the time that the fhip lies at anchor in the Texel : thefe people have the infpection over every thing that is brought on board, and the care of providing the fhips with what they want every day, till they go out to fea.

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fea. Thefe, who in order to keep account of the officers and crew, had the mufter-roll in their pofferfion, were interefted fcoundrels, and more intent upon being treated and bribed, and felling and bartering their cheefe and butter, than they were fober and vigilant in the performance of their duty.

The preceding year I had been obliged to contract debts to a confiderable amount, and had now no other refource left than to increase them, efpecially if I were to be enabled to undertake another expensive journey into the country, and not to remain an idle spectator at the Cape. I therefore again had recourse to M. BERGH, the secretary of the police, who had not only hitherto kindly affisted me with his purfe, but also generously opened it to me on this occasion, and thereby enabled me to make another excursion into the interior part of the fouthernmost point of Africa.

My equipage was in most respects the fame as that of the foregoing year, with this difference, that inftead of the old broken cart, I had a new one, which was tilted with fail-cloth. I was also now the fole possession of it, and avoided being incumbered with the ferjeant and gardener, who the year before greatly contributed to render a small cart still more infussion for my wants, Besides boxes, paper, amuni-

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tion,

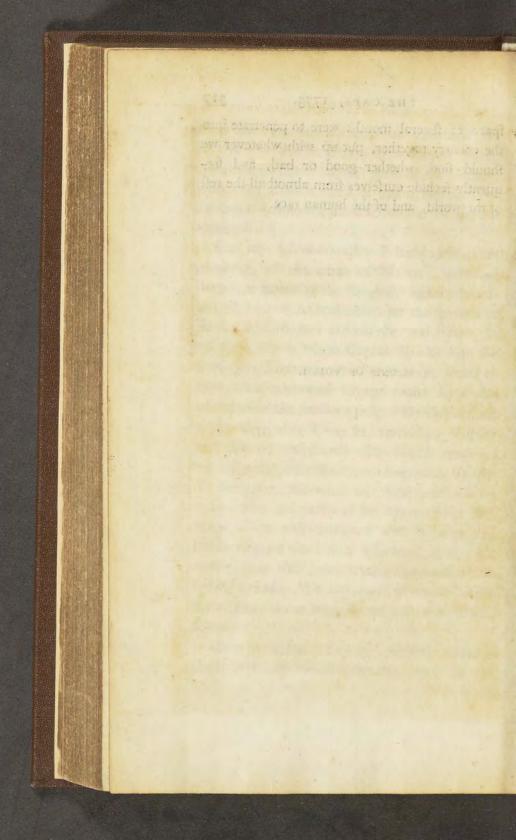
tion, and other neceffaries, I alfo took with me this year feveral medicines to diffribute among the colonifts in the interior parts of the country, who might ftand in need of them, and had before upon various occafions fhewn me the greateft kindnefs.

For my fellow-traveller I had an English gardener, of the name of MASON, who had been fent hither by the King of England to collect all forts of African plants for the gardens at Kew. Mr. MASON arrived the year before, in the fame ship in which Captain Cook, with the Professors Forster and SPARRMAN, were to make their celebrated voyage round the world, and towards the fouthern pole. He had arrived at the Cape after I was fet out on my journey to Caffraria; and fhortly after this he made an excursion into the country, accompanied by Mr. OLDENBURG, who went with him, partly as his companion, and partly as his interpreter. Mr. MASON was well equipped with a large and ftrong waggon tilted with fail-cloth, which was driven by an European fervant, upon whom he could depend. We had each of us a faddlehorfe, and for our waggon we had feveral pair of oxen.

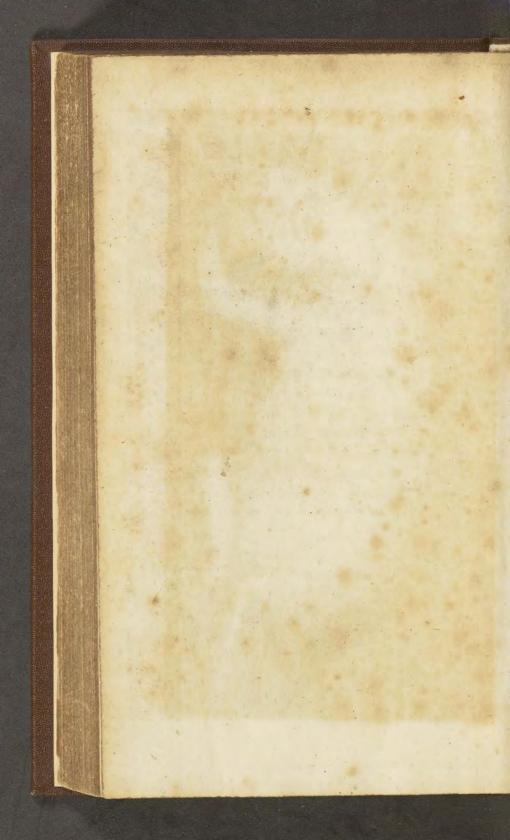
Thus we formed a fociety, confifting of three Europeans and four Hottentots, who for the fpace

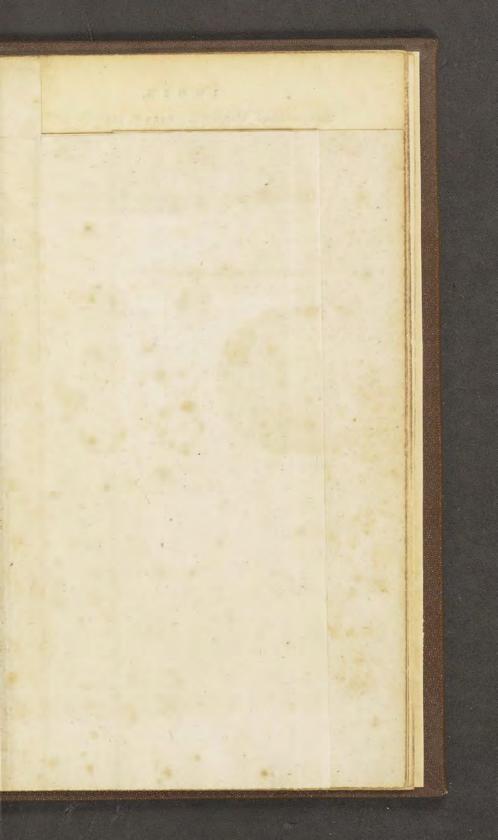
fpace of feveral months were to penetrate into the country together, put up with whatever we fhould find, whether good or bad, and frequently fectude ourfelves from almost all the reft of the world, and of the human race.

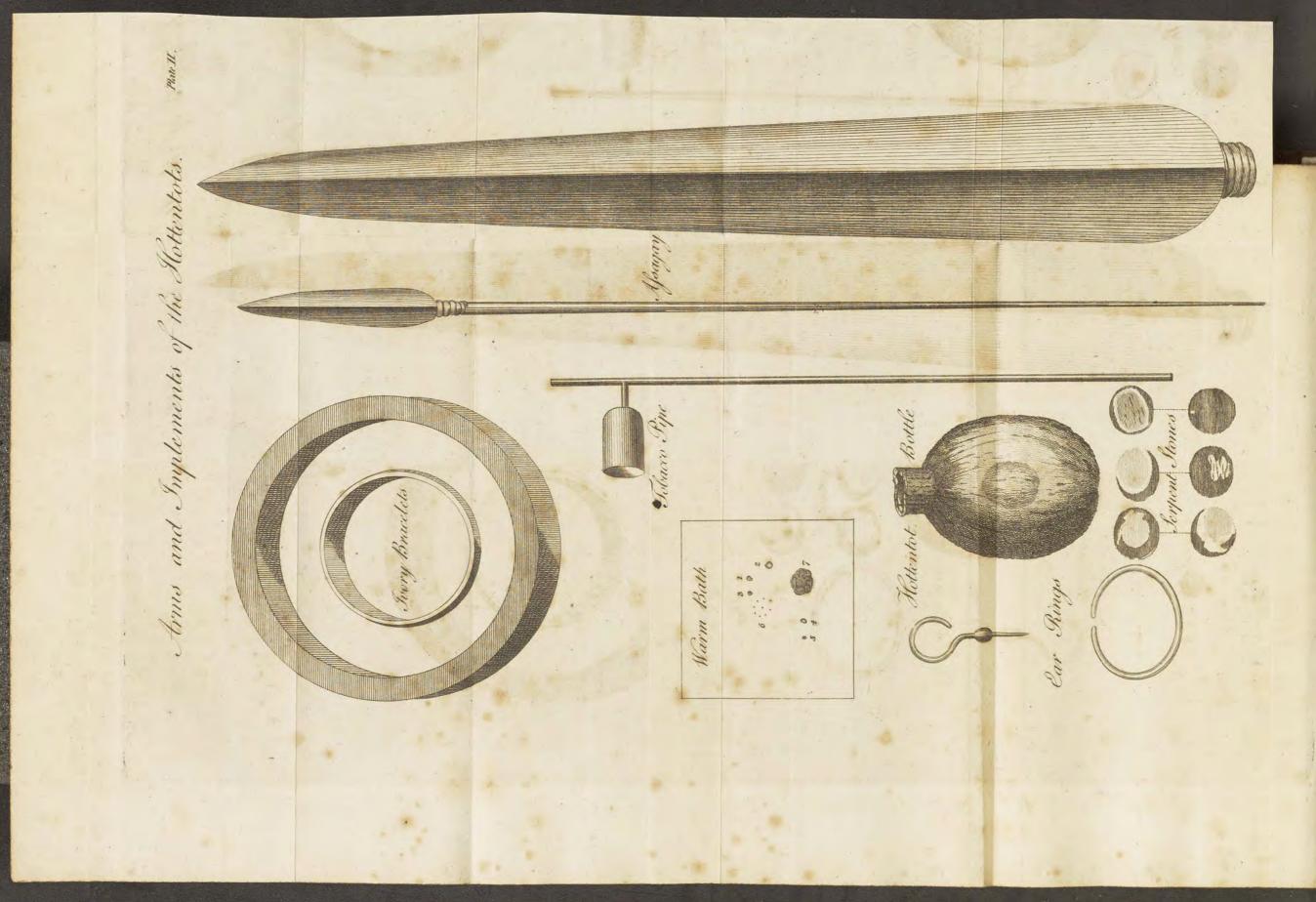
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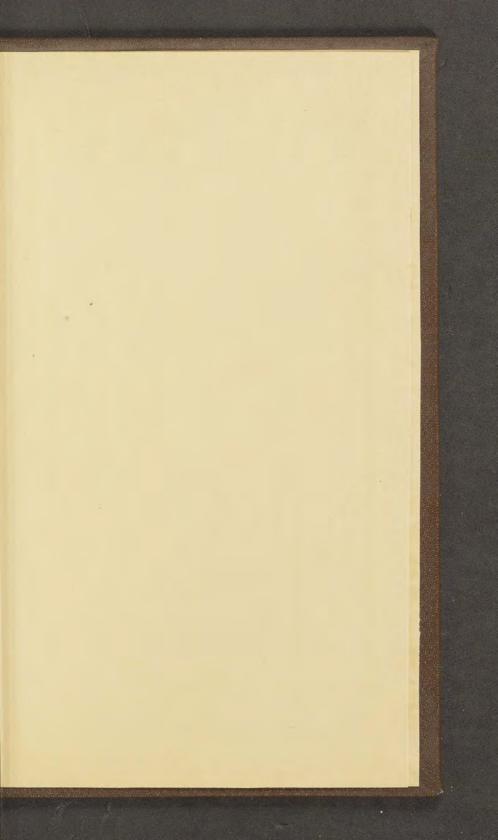
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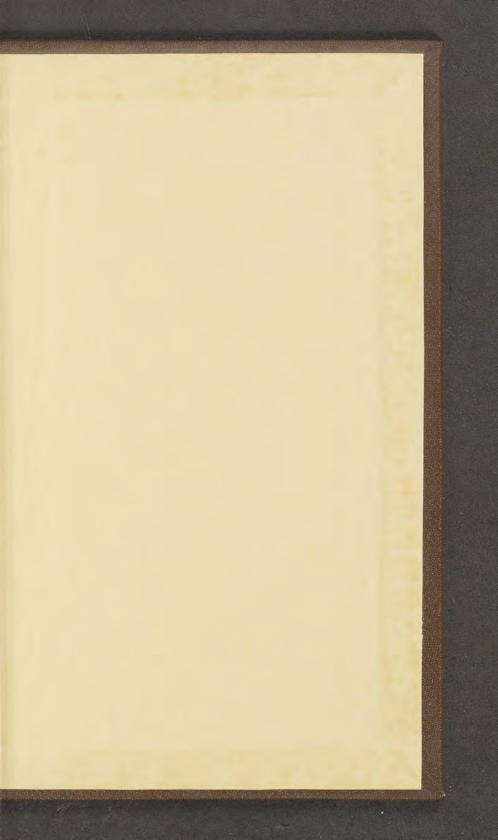
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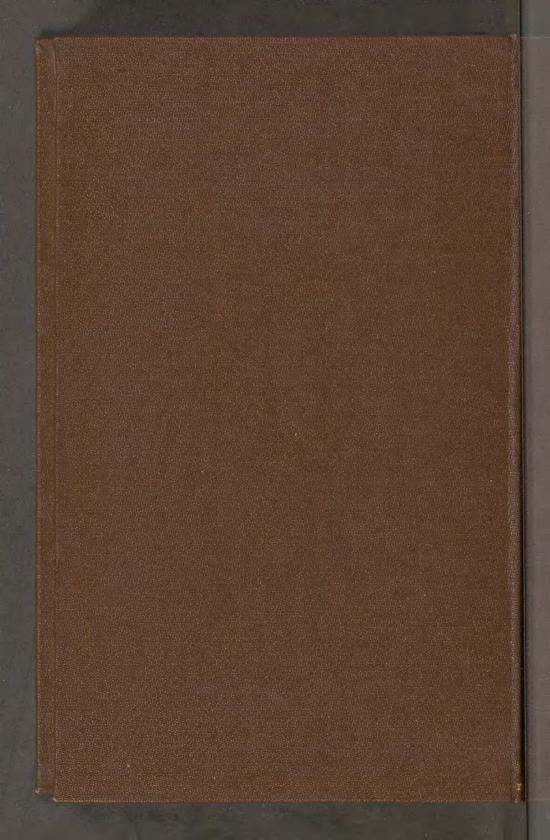
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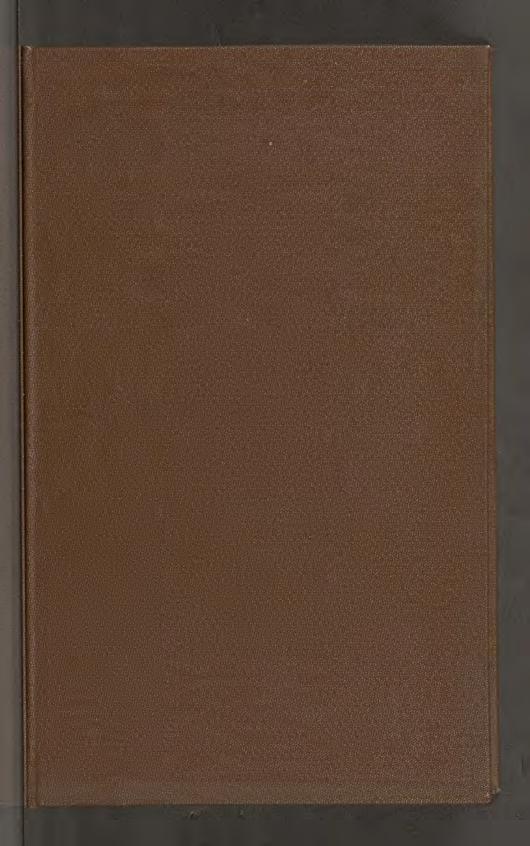
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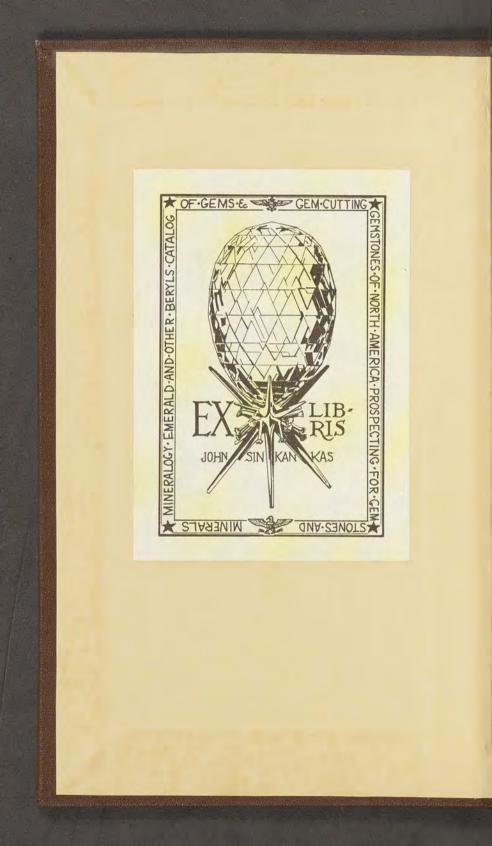


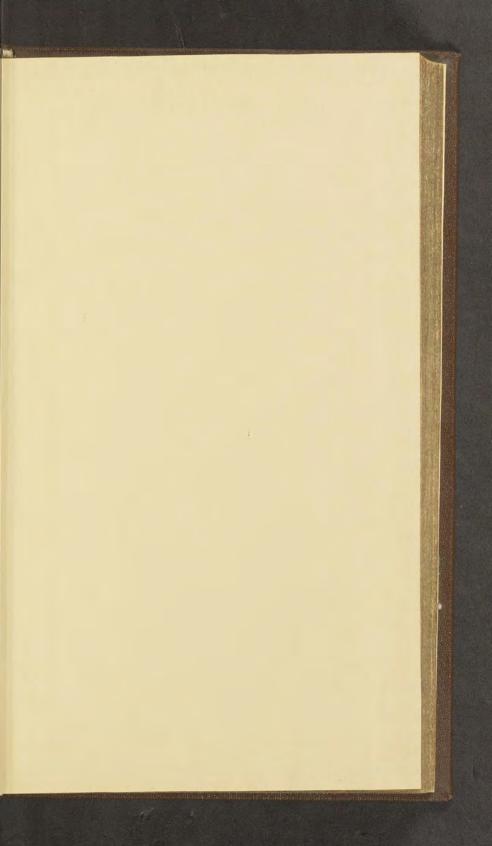














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TRAVELS

IN

EUROPE, AFRICA, AND ASIA,

MADE

BETWEEN THE YEARS 1770 AND 1779.

IN FOUR VOLUMES.

VOL. II.

CONTAINING TWO EXPEDITIONS

TO THE INTERIOR PART OF THE COUNTRY ADJACENT TO

THE CAPE OF GOOD HOPE,

AND A VOYAGE TO THE ISLAND OF JAVA; PERFORMED IN THE YEARS 1773, 1774, and 1775.

THE SECOND EDITION.

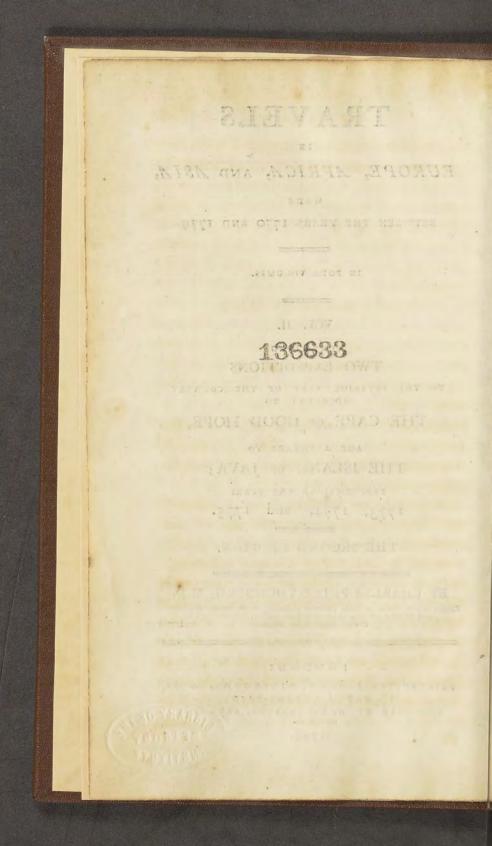
BY CHARLES PETER THUNBERG, M.D.

Knight of the Order of Vafa, Professor of Botany in the University of Upfal, and Member of various Academies and learned Societies both in Sweden and other Countries.

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1795.



TO THE

SECOND VOLUME.

I HAVE now the pleafure to prefent to the public this fecond volume of my Travels, in hopes that it may find as many candid and indulgent cenfors as the first.

It contains my refidence during a winter at the Cape, two long journies to the eaftward and northward of the fourthernmost point of Africa, a voyage to Java, and my refidence at Batavia.

In the beginning of this prefent century, or in the year 1705, a thefis was published in quarto by M. SIMON MELANDER, under the infpection of professor HARALD WALLERIUS of Upfal, on the fubject of the Caput Bonæ Spei, or Cape of Good Hope. This differtation treats of the fituation of the Cape of Good Hope, and, at the fame time,

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time, gives a geographical defcription of it; i alfo gives fome account of the external appearance of the natives, their drefs, mode of living, religion, government and manners, as far at leaft as, in those times, the Europeans could arrive at the knowledge of thefe particulars; although it must be confessed that the annexed wooden print, reprefenting the Cape mountains, cannot boaft of any high degree of elegance. Since this period, much more light has been thrown on this part of the extensive continent of Africa, and a great variety of more certain and authentic details, concerning the country and its animal and vegetable productions, have been communicated to the curious and inquifitive inhabitants of Europe.

VALENTYN alfo, in the fifth part of his extenfive work, has given an account of this fouthernmost point of Africa; but as he only took a flight view of this place in paffing by it, he neceffarily derived the chief of his knowledge from the relations of others, upon which, as being of various degrees of credibility, different degrees of dependance were to be placed.

Mr. Mason, a fkilful English gardener, who accompanied me in both my journies into the interior part of the almost unknown continent of Africa, has, it is true, on his arrival in England, given a fhort account of both thefe voyages, in a letter to Sir JOHN PRINGLE, then Prefident of the

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PRBFACE.

the Royal Society at London, which is inferted in the Philosophical Transactions, Vol. LXVI. for the year 1776, P. I. page 268, together with the relation of his first journey in company with M. OLDENBURG. But as that narrative is very short, and the transactions of the fociety could not admit a more full and ample detail, it is hoped that this part of my narrative will not be confidered as superfluous.

In fo wild and almost defert a country as this part of Africa may justly be called, I have attempted to depict nature as she really is, and as she has exhibited herself to me after an attentive furvey. And I have taken particular care to point out the appearance of the *mountains*, their extent, height, strata, &c. the knowledge of which is frequently of as great utility to the natural philosopher, as that of the fituation of harbours, of their external appearances and anchorage, with feveral other particulars, is to the wary and cautious navigator.

Besides the two warm baths, of which I make mention in the first volume, I have here given a short account of two other warm medical fprings in the African mountains, which are equally remarkable, and which yet no one hitherto has ever seen either simoaking or in a state of eruption; neither can any one say with certainty, A 4 that

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PREFACE,

that this promontory was ever shaken by an earthquake.

I have also here taken the opportunity of prefenting the reader with an account of the fingular *Salt-pans* which this country contains, and which, perhaps, are not to be paralleled in the whole world.

I have frequently added remarks upon Animals, the manner of catching them, their ufes and noxious qualities, at the fame time that I have avoided tiring the reader with prolix deferiptions of them, and the fynonima and relations of other authors.

The *distempers of the cattle*, which are frequently different from those that are incident to the cattle in other countries, I have carefully observed and briefly described.

I have likewife in this volume, with a view to promote a knowledge of the human species, investigated, and delineated the mode of living, manners, ceremonies, marriages, funerals, amusements, music, musical instruments, arms, languages, &c. of the Hottentots and other Indian nations; to which I have added a short account of the foundation of the colony at the Cape, its progress and present state, as also of the various caravans, or expeditions, which have been at different times established by the government and colonists, for the fake of exploring the country.

I have

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I have dedicated a few pages to the *Hottentot* and *Malay languages*, both of which are almoft equally unknown at the great feats of learning in Europe. To many of my readers, thefe may poffibly prove neither entertaining nor ufeful; but I flatter myfelf that by fome philologifts at leaft, they will be found neither difagreeable nor abfolutely ufelefs.

A defcription of the Island of Java has before been given by VALENTYN, in his large and extenfive hiftorical work on the Eaft-Indies, Vol. IVth, as alfo by feveral other travellers; but, on making the comparison, the reader will find a very wide and important difference between us; as the chief aim of my refearches has been to difcover and examine what is beautiful and useful in nature, as alfo to inveftigate the manners and genius of foreign nations.

In order to give a better idea of the different utenfils and weapons which are deferibed in this fecond volume of my travels, I have likewife embellifhed it with a few plates. Books of travels generally abound with plates of caftles, palaces, and other ftately monuments of art; but there are frequently wanting in them the neceffary delineations of habits, utenfils, coins, weapons, and other particulars, on the fubject of which it is not lefs important to be informed with refpect to foreign nations. Of thefe I have given fome engravings; although,

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although, on account of the want of good engravers at Upfal, they are not fo complete as I could wifh; and have chofen fuch fubjects withal as are not, to my knowledge at leaft, to be found in other authors.

The different forts of coins, old and new, occurring in the various kingdoms of the East-Indies, of which few travellers have fpoken, and which I have been at great pains and expense to collect, I have here either barely mentioned or briefly defcribed, as I was willing to referve the engravings of them for a feparate and more circumftantial treatife.

Although my materials in this volume have frequently been of no very pleafing nature, yet I have endeavoured to make the detail of them as agreeable as poffible. But that the truth might not fuffer in confequence of this procedure, I have rather chofen to ufe a fober and ferious, than a too lively ftile; like phyficians, that fometimes mix fugar with their most bitter medicines, but are careful, at the fame time, not to deftroy by too much fweetness all their falutary qualities.

As esculent and fit for food among the Hottentots, there occur in this volume the Cyanella Capensis, the roots of sennel, the Iris edulis, Stapelia incarnata and articulata, the gourd called Coloquintida, Haliotis, Zamia caffra, Karup, the

the Hottentots' Water-melon, the Hydnora; and, among the Indians, feveral delicious fruits, fuch as Ananas, Pifang, Gojavus, Carambola, Bilimbing, Mangoes, Mangoftines, Arbufes, Cocoa-nuts, Jambo, the fruit of the Ratan Salac, Catappa, Papaija, Nanca, Annona, Boa Lanfa, Nephelium, Solanum Melongena and Birds' nefts.

As Sweet-meats and Spices, the Indians ufe Betel, Areck, Cayenne pepper, the root of Schoenanthus, Turmeric, the root of the Bamboo, Ginger, Cardamoms and Cloves.

For quenching thirst, likewife a scooling and refreshing, and for producing intexication, some of the Hottentots use the Mesembryanthemum emarcidum, the Kameka, Gli, and Water-melons.

As *falutary* and approved *Remedies*, are ufed the Vifcum æthiopicum, Indigofera arborea, Boa ati, Dodonæa anguftifolia, Jambolifera, Durio, Carambola, Bilimbing, Citrus decumanus; and, as a ftrong *Poifon*, the Amaryllis difticha.

In rural and domestic Oeconomy, as well among the Hottentots as the Indians, feveral articles occur very ufeful and neceffary; for inflance:

For mats to fit on, for the roofs of houfes, and for covering waggons, the Cyperus textilis and Aender ratans.

For Lanthorns; Calabashes. For Quivers; the Aloe dichotoma. For Catching flies; the Fly-bush.

For

For making charcoal; the Mimofa nilotica, and Protea grandiflora.

For Wood for bows; the Rhus.

For all forts of Furniture and Joiners'-work, there are many kinds of wood in the African forefts and groves; fuch as the Ilex crocea, Camaffiehout, Roode Peer, Cunonia, Ekebergia, Curtifia, Stinkhout, Olea Europea and capenfis, the Gardenia Thunbergia and Rothmannia, the White afh, the Royena villofa, Sophora capenfis, Amandelhout, Mimofa nilotica, Leepelboom, Protea grandiflora and fpeciofa, with others.

For *Dying*, the Morinda citrifolia, the rind of Manguftines, the Indigofera nila, and the Hibifcus Rofa finenfis.

In treating of foreign countries it frequently, happens, that fuch words and terms occur as are not univerfally intelligible. As a few of thefe are to be found in the following fheets, I thought I could no where better explain them than here.

A Valley is nothing more than a rivulet, which is fometimes over-grown with rufhes, and is broad in fome places, and narrow in others.

Brak-water, is water ftagnating in vallies and low places; it contains a kind of brine, and taftes more or lefs faltifh.

A Drift is that part of a river, where the water

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water is shallowest, and, confequently, where it can be croffed in a carriage.

Hoek, added to the end of certain words, fuch as Mosterts-hoek, denotes a projecting angle, or point of a mountain.

Kloof fignifies a valley, or fuch a cleft in the mountains as is either inhabited by the Colonifts, or admit of a paffage through it on horfeback or with a carriage of any kind.

In this fecond volume I have finished the relation of my three years refidence at the Cape, having difplayed the advantages which that country poffeffes with refpect to climate, and to the improvements it has received in confequence of culture; and, at the fame time, given fome account of the poor and much to be lamented natives, who pass their lives in the most simple and artlefs manner, fcarcely differing from the wild beafts with which they are intermixed, without arts and fciences, or any ufeful inftitutions; without connexion with any other than their nearest neighbours, who are equally ignorant with themfelves: without either commerce or war with their more remote neighbours; without the leaft knowledge, or even idea, of the magnitude of the earth, its external appearance and nature, or of the celeftial bodies which give them light, and yet pafs almost unnoticed over their stupid heads.

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The colony, which receives a daily increase from the Europeans, is even now very confiderable, and it is in confequence of their attention and industry that feveral fpots in it already refemble an earthly paradife, and that the country produces almost every thing that is necessary for the Support of life. Neverthelefs, many advantages of which Europe can boaft, are here ftill wanting. This country has no lakes, no navigable rivers, no other fifheries than those that are near the fhores of the ocean, or the mouths of rivers; no woods of any confequence or real mility, not even one pleafant grove; no verdant nor flowery meadows; no chalk hills; no metals worth the labour of extracting them from the ore ; no tooms nor manufactures ; no univerfities nor fchools; no poft; no poft-horfes nor inns; nay, in to extensive a country as this, there are ftill, in many places, wanting both judge and courts of judicature, both clergy and churches, both rain from the heavens and fprings. in the earth, with many uleful and indifpenfibly neceffary inflitutions, which both now and hereafter may merit the confideration and care of a well-informed and prudent government.

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Explanation of the Plates

For the Second Volume.

PLATE I.

- Fig. 1. A Caffre's NECKLACE of fhells, with a turtle fhell depending from it.
 - 2. A Javanese KRIS in its scabbard.
 - 3. A Hottentot mufical inftrument called *Korà*.

PLATE II.

- Fig. 1. A WUDONG, or Javanese Knife, in its sheath.
 - 2. The blade of a WUDONG drawn out of its fheath.
 - 3. A Javanese strait KRIS drawn out of its scabbard and damasked.
 - 4. A Javanese undulated KRIS drawn out of its scabbard.
 - 5 & 6. A Javanese BADI, or Dagger, with its sheath.

PLATE III.

Fig. 1. A Javanese SABRE in its scabbard.

- 2. The SCABBARD, when the fabre is drawn out of it.
- 3. A Hottentot STRING of differently coloured glass beads to wear about the neck.

PLATE IV.

- Fig. 1. A Hottentot string of Beads to wear about the body, formed of cylindrical pieces of glass of various colours.
 - 2. A Hottentot ftring of glass beads of various colours.
 - 3. Pinang Scissars,

Explanation of the Plates For the second Volume.

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 A Javanele Kups in its feabbard.

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A Wapone, or Javancie Knile, in its sheath.

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A Javanele drait Keis drawn out of its feablard and damatted.

A Javanete undulated Kiers drawn out

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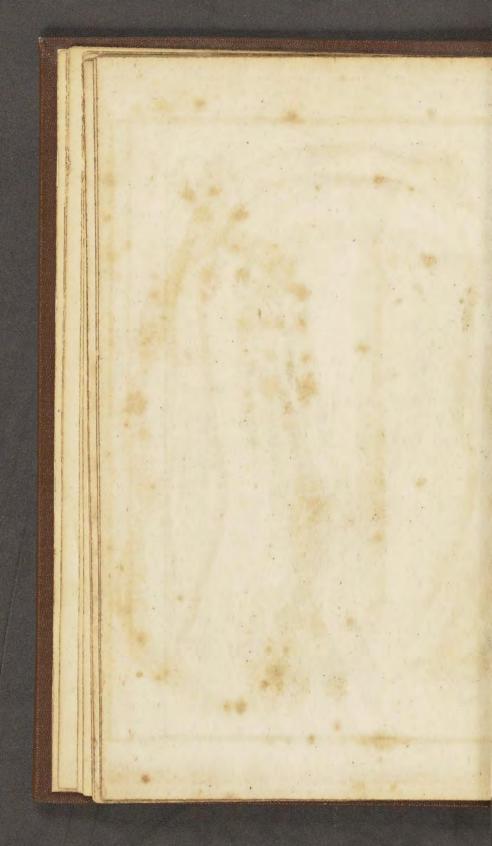


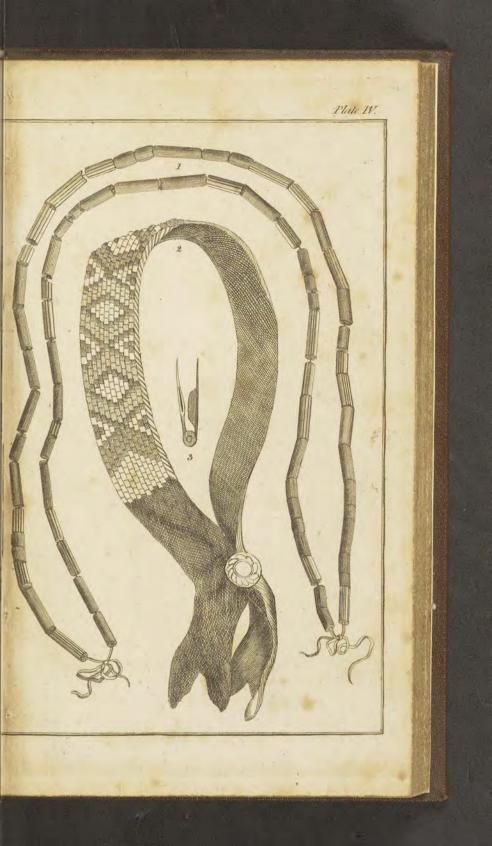


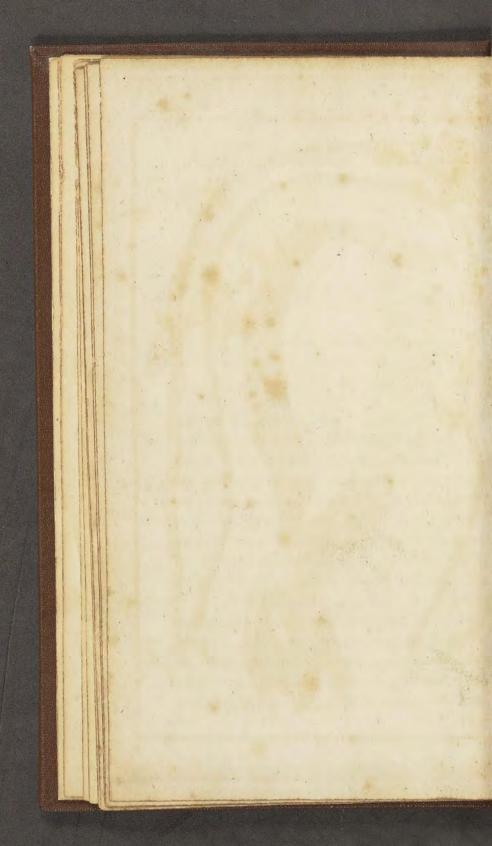












TRAVELS

i N

EUROPE, AFRICA, AND ASIA.

SECOND JOURNEY INTO CAFFRARIA, 1773.

WITH fo flender an equipage as the beforementioned, and in fuch a mountainous and defert country as Africa, I had refolved to make an expedition this fummer into the country, to the North-eaft-ward, as far as the Snow mountains; and first directing my course to the northward, to pass afterwards through Camdebo, and other most uncultivated tracts; without taking the nearest and most beaten road.

This refolve was indeed rather extravgant; yet I would not leave it unfatisfied, particularly as it was a matter of indifference to me what parts of the country I vifited, provided only they were fuch as I had not feen before, vol. II. B and

SECOND JOURNEY

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and where I might collect animals and plants hitherto unknown.

My fellow-travellers and I having fet out from the Cape, on the 11th of September, 1773, we arrived first at one of the Company's posts, called JEAN BESIS Kraal, and then at Rietvalley, a farm where cows are kept, folely for the Governor's use, and for the purpose of furnishing his table once a week with fresh butter. For this reason, all that travel this road are forbidden to suffer their horses or oxen to graze in the neighbouring pastures; whereas otherwise all Africa resembles a common, in which any one is at liberty to turn his cattle out wherever he pleases.

On the right, as we paffed along, lay the *Tiger Mountains*, and, on our left, the *Blue Mountains*; over one extremity of which we paffed on horfeback. Thefe, juft before they rife, have a few fand-hills fcattered in the front of them, and contain no ftones at all that are vifible; fo that they appear, for the greater part, to be merely huge fand-hills, formed by the drift-fand from the harbour.

The whole country was covered with fand and downs, and abounded in fwamps (valley), which having been filled with water during the winter, now began to produce fine pafturage for the cattle. For this reafon the farmers here

INTO CAFFRARIA, 1773.

here graze only, and fow but a finall quantity of wheat, but pay no attention to the vine. The water is for the most part brackish, and even this, for the greatest part of the year, is very fcanty.

Turtles were feen here and there in the ponds; and fometimes they were kept in the houfes in glafs veffels full of water, for the purpofe of being conveyed to other places. At the approach of rainy weather we were informed that the turtles always role higher in the glaffes.

Towards evening we arrived at Mrs. Mul-Ler's farm.

Among the bushes in the fands we frequently faw land-tortoifes crawling, and the young ladies in the house had ordered the flaves to bring feveral of them home of various' fizes for our repast. The Testudo pusilla was the most common species here, and it was this which was now laid upon the fire for our eating. I flipped into the kitchen on purpofe to fee the mode of dreffing it, and found that the girls were cruel enough to lay the poor animal wide open on the live coals, where, fprawling with its head and feet, it was broiled alive, till at length it burft to pieces with the heat. The eggs, which were in a great number, and confifted of yolk only, were the most luscious and desirable part of it.

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SECOND JOURNEY

The roots of *Fennel* were roafted and eaten in the fame manner as those of *Anife*.

The bulbs of the Iris edulis, a plant which grew here in abundance, and decorated the fields with a variety of white, yellow, and blue flowers, were brought in great quantities by the flaves. They were eaten either roafted, boiled, or flewed with milk, and appeared to me to be both palatable and nourifhing.

On the 13th, we arrived at the Company's post in Groene kloof, having passed by Daffenberg, Burger's-post, and Groene kloof mountain. At Berger's-post, as well as on Koberg, there stands a cannon near a high flag-staff, for the purpose of summoning the colonists on this side of the country to the Cape on any sudden approach of danger.

The country here was a deep fand, and full of downs, which made the roads very heavy. The houfes, for want of wood, were built of unbaked clay, formed into bricks, and dried a little in the air.

The cattle were infefted with the ftranguary. This diforder was remedied by thrufting a ftraw into the urinary paffage, by means of which the clod of gum, *Euphorbia*, which had fettled there, was removed. This operation however was not performed without lofs of blood. It was told us for certain, that unlefs this obftruction

INTO CAFFRARIA, 1773.

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tion was removed, the bladder would burft, not from the acrimony of the gum, but from the great quantity and preffure of the urine.

Having refted a few days, we continued our journey on horfeback by *Ganfekraal* to the fea fhore.

The inhabitants caught a *Haliotis*, a kind of cockle, which as well as mufcles, they ate boiled.

Both the variegated, and the white Sandmole, (Marmotta capenfis and africana) frequented the fandy plains; and were alfo faid to do great damage to the gardens. They are caught either in traps, or by digging; in the latter cafe, they dig a hole first before, and afterwards behind that made by the animal, or else, after stopping up the animal's hole behind, they dig another directly opposite to her.

Charcoal, though it is but feldom made in this country, which is bare of trees, fo that the finiths muft be fupplied from Europe, I faw prepared in the following manner: the wood was placed on one end, as ufual, but in fuch a manner that the finaller and larger pieces were mingled together. Round this pile were laid reeds, and the whole was covered with turf. In the middle, and alfo at the fides, was put fome refinous wood, by means of which the pile was fet on fire. This being done, the B 3 aperture

. SECOND JOURNEY

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aperture at the top was covered up closely with turf. All around the bottom feveral air-holes were left, which, as foon as the fire began to blaze forth, were fucceffively ftopped up, and the fides were gradually preffed more and more clofely together. In a few days when the operation was finished, the pile was opened, and what fire remained was thoroughly extinguished with water. The whole pile was no larger than a hay-ftack.

The Bucku (Diofma) which was collected here by the Hottentots, was first dried in the fhade, and afterwards over the fire, before it was pulverized.

I alfo vifited the Salt-pan, which was fituate at a fhort diftance from the fea fhore. It was at this time full of water. The name of Saltpans is given, in this country, to large collections of falt water; which, when the winter rains have ceased, partly in confequence of the heat of the fun, and partly of the violence of the winds, gradually evaporate, and precipitate a falt, which the colonifts collect for their own ufe. The cryftallization is the most powerful in the months of November and December, and in the middle of the day, between the hours of ten and three. During that time, one may plainly fee the falt, fomewhat like the cream of milk, first crystallize on the furface, till, in confequence

INTO CAFFRARIA, 1773.

quence of its own weight, it finks to the bottom. This faline incrustation is very fine, and yields a fine falt, which must be collected as fast as it crystallizes, and is driven by the fouth-east winds towards the north western fide. Unless this be done the incrustation will fall to the bottom in feveral different firata, forming a thick bed of a coarfe-grained falt, which is frequently of a grey colour, from the admixture of dirt; and is used for falting fish and meat. On the other hand, the fine falt, being cleaner and whiter, is used for the table only, and for falting fresh butter.

On the 19th of September we fet off from Groene kloof, leaving to the right the chain of mountains called Burger's-post, and, to the left, Groene kloof mountain. Before us, a little to the right, we had the Reebok/kop, and, in front of that, we defined the Konterberg, behind which we faw the Baboons Mountain.

Having paffed thefe mountains, the level country prefented to our view Ribeck Kafteel, Four and twenty Rivers Mountain, and Piquet Mountain, together with a great number of roebucks, (Capra) bart beafts (Capra dorcas) steenbocks (Capra grimmia) and diving bucks (Duykers capra) befides korrbaens and offriches.

We paffed by *Papenkuyls* fountain, and *Uyle-kraal*, to a farm belonging to JAN SLABBERT.

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On

SECOND JOURNEY

On the 22d, we arrived at Saldahna Bay, which has many iflands and dangerous fhoals, fome of which have only three fathom water. On Foundling Ifland, train oil is prepared from feals, in earthen pans, in which it is first exposed to the heat of the fun to evaporate. After this, it is boiled in a kettle, at first with wood, and then with fuch remains of the blubber as will yield no more oil. There are feveral islands lying near this harbour, fuch as Fundling Eyland, Taxen Eyland, Jutland, remarkable for its large hills of ftone, Meuwen Eyland, Daffen Eyland, and Schaapen Eyland, all of which are very ftony, and, on account of their rocks, difficult of accefs to the fhips.

In Taxen Island, rabbits have greatly increafed fince they were carried thither, and are now to be found in great abundance.

Daffen Island, in particular, is an afylum for the penguins (*Diomedex*), a kind of fea fowl, which cannot fly at all, but dive the better on that account, and pafs most of their time out at fea,

The fhips but feldom enter this harbour, and then no other than fuch as come too clofe under the coaft, fo that they cannot make the road of the Cape. The harbour makes feveral windings, and various winds are requifite for fhips to fail out of it.

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INTO CAFFRARIA, 1773.

On the 28th, we purfued our journey to Witteklipp, an eftate belonging to TOBIAS Mos-TERT, which received its name from a little mountain, or large infulated rock, fituated near it, and of a fingular appearance, on account of its bare and white furface, formed, not by lime, as the inhabitants of the place imagined, but by a white mofs (Byffus lastea). In front, on the fide next to the houfe, this rock had a large excavation, in the form of a crefcent, with a vaulted roof. It was no eafy matter to come at this fingular cavity, as the part of the rock that ftood before it was not only very fteep, but alfo convex, and at the fame time very flippery, except a few channels that ran longitudinally downwards, and were formed by the rain water. I had, neverthelefs a ftrong inclination to reconnoitre it, as I faw a few fwallows that had their nefts there flying into it, and, as I imagined, that fome curious plants might be found there. I therefore took off my fhoes and ftockings, and made a fhift to clamber up thither barefoot, but found more difficulty in getting down again; and, as no other descent was practicable, I slid down the rock upon my breech by the fame way. This cavity, which probably feldom receives fuch vifitors, had nothing remarkable in it, befides a dead fwallow (Hirundo apus), the fingularity of its form, and the difficulty of its accefs.

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It was about four fathoms from the foot of the rock, nearly in the middle of it, and a couple of fathoms wide and high.

Offriches were very common in this tract. It was faid that a male Offrich makes a neft with three or four females, which, together, lay 20 or 30 eggs, on which they fit by turns in a hole they have made with their feet by trampling in the fand.

A kind of wild dogs, which were here called jackalls, and are the fame as Samfon's foxes mentioned in fcripture, frequented thefe plains in large troops. They caught a great number of the wild goats (or antilopes) that abound here, as well as of oftriches, in the hunting of which they fet up a regular cry, furrounding the game first at a distance, and approaching nearer to it by degrees. They likewife committed great havock among the farmers' fheep, unlefs thefe were carefully guarded by fhepherds furnished with fire arms.

It is only in the fpring and in the beginning of fummer, that thefe low fandy plains are adorned with flowers. After the fouth-eaft winds and the drought have fet in, the feeds of thefe flowers are quickly fcattered over the fields, often before they are quite ripe. For this reafon I was obliged, when making collections for the botanical gardens of Europe, efpecially

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cipecially of the annual plants, to gather the feeds in an unripe ftate, and lay them up in paper to dry and ripen gradually.

On the 30th, we arrived at Honingklipp, a farm belonging to NICHOLAS KLEIN.

The crows (*Corvus Hottentottus*) here were feen fitting on the backs of the cows, and picking infects (*Acari*) out of them, by which at times they were much infefted. Thefe creatures alfo were accuftomed to picking the wheat out of the fields immediately after it had been fown.

Here I faw a tame griefbok or greybuck, (Capra) of the fize of a middling lamb, that had been caught in the fandy fields. Both this fpecies, and that called *fteenboks*, were reported to hide their heads, in the idea that nobody can fee them, for which reafon alfo they feldom run out from among the bufhes, till one is come quite clofe to them.

The thickets in the fandy plains confifted folely of tall and flender fhrubs from four to fix feet high. Their trunks and branches were frequently fo fmall and flender as to be unfit for fuel, though they afforded fufficient retreats for various fpecies of game. To me they were often very troublefome, in hiding from me a number of fmall birds, which I had fhot down from their fupple twigs.

We

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We continued our journey, passing Patryfberg, and came to a farm of PETER LOSPER's, called Rofendal.

On the 1st of October, we visited another effate of LOSPER's. This country, fituated between the bays of Saldahna and St. Helena, near the sea shore, was low, abounding in fand-hills and pools of water, now swelled by the winter rains and by Mountain-river.

We intended to have arrived at Mountainriver on the 2d of this month, but could not attempt it by reafon of the depth of water in the above mentioned pools, and thus we could not get to the eftate of one MELK, for which purpofe we otherwife might have croffed the river in a boat; we were therefore obliged to go on to BRANDT's house on the Salt-river, and from thence to an eftate of his fon's near Matje's fountain.

This Salt-river (Zout rivier) is different from that near the Cape, and which, from the fame quality, derives the fame name. It happens frequently, that iflands and mountains, as alfo effates, in different places pafs by the fame names, a circumftance which caufes a great confusion in the Geography of this country. As to the effates, the names of which are proposed by the farmers, and confirmed by government, this might eafily be remedied, if the governor paid a little more attention

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attention to fuch a vaft colony, the extent of which many times exceeds that of the Seven united provinces in Europe. But confidering that the whole colony, as well as the town, though founded near 150 years ago, as yet pass by no other name than that of the Cape, which fufficiently shews great carelefsness and a bad police; it is not surprising that the farms often obtain the most absurd names.

The Hottentots had fuch a quantity of leather thongs about their legs, as even to reach above their calves, infomuch that by them they were freed from the danger of being bitten by venomous ferpents, for which purpofe I fuppofe it probable they wore them.

The goldfinches (Loxia orix) were faid first to devour the bloffoms of the wheat (Autheræ triciti) and afterwards the corn itfelf. They are feen here in innumerable flocks, efpecially near fuch rivers as are overgrown with tall reeds, on which they build their nefts, from whence their chirping, efpecially towards evening when they come to rooft, is heard at a great diftance. The hen is always of a grey colour; but, from the month of July till January, the bloodred feathers of the cock gradually make their appearance. This bird is fomewhat fmaller than the Loxia capenfis, and has fmaller eggs, which are perfectly green; whereas the Loxia capenfis lay grey

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grey eggs with black fpots, and fomewhat larger: This bird is, like the whole genus of *loxia*, very ftupid, and confequently the more difficult to frighten from the wheat fields, where the mifchief it does to the hufbandmen is often great. Though confiderable number of them are flot, yet they immediately return, heedlefs of danger.

The korrhaens were obferved to devour the buds of the *Cotula turbinata*, which was common in all the low and fandy plains.

On the 3d, we arrived at the effate of FLORIS FISHER. This tract from the Groene kloof (Green valley) and ftill farther, was called Zwartland, and had a church of its own. Ever fince the death of the vicar, which at that time was three years, this had been vacant, no one being arrived from Holland to fucceed him. Neverthelefs, fervice was performed here once a month by a clergyman from the town: the farmers had a long way to church, fome of them two days journey.

We penetrated, on the 5th, farther up into the country, along and beyond the Black Mountain to STOFFEL SMIDT'S. The fand-hills vanifhed by degrees, and the country became both more lofty and of a firmer nature.

The Cyanella capenfis (Raapuyntjes) a kind of onion, was roafted for the table of the farmers. The

The Viscum æthiopicum was used in diarrhœas, and also for tea.

On the 6th, we arrived at young STAE-BERT's, and had *Picketherg* behind us to the left.

When one is at the Cape, this part of the country rifes to the view, like a ridge of contiguous mountains; but, on approaching them, I difcovered, that the hills are divided, and form feveral diftinct ridges. *Ribeck Kafteel* is a ridge of mountains, extending from eaft to weft, till the Zwarte-berg, or (*Black Mountains*) clofe the ridge. Thefe therefore do not run parallel with the long tract of mountains that lie higher up the country.

We proceeded farther to CORNELIS GOSEN'S farm, who is a faddler, and where I was obliged to leave one of my oxen that proved lame in the loins, and was rendered unfit for the journey. The great mountain river (*Berg rivier*) to which we were now arrived, had, through the great quantity of rain that had fallen become impaffable at the ufual fording place near *Vleer*muys, fo that we croffed it on the 7th, in the ferry near PIT JUBER'S farm.

This man keeps the ferry in order and going, and thereby gets a fnug fum of money yearly; for, each farm fituated on the oppofite fide contributes eight gilders per annum, and

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befides this, he has the advantage of cafual paffengers. It is to be observed, that every farmer is obliged to pay his quota towards the keeping of this ferry, let him be rich or poor, and whether he uses it or not; for many of them do not, but repair to town with their goods in fummer, when the water is low and fordable, eafily by their waggons.

From hence we directed our courfe to Jo-HANNES LIEBENBERG'S where we began to fee vineyards and gardens with lemon and orange trees. The road was now perfectly hard, confifting of reddifh rocks, and the fields were tolerable well covered with grafs.

On the 8th, we proceeded to CHRISTIAN LIEBENBERG's farm, and, on the 9th, to GERT KEMP's, near Daffi Klipp, and afterwards paffed by FREDRIK LEIBENBERG'S, croffed the difficult paffage of Kartous kloof to WIL-HELM BURGER's, where we arrived in the evening wet and terrified, the rain having continued during the whole time of our paffing the mountains, which were befides fo fteep as none but those who have travelled over them can well conceive. Kartous Kloof, which croffes the fame ridge as Roode Zand Kloof, but lower down towards the northern end, is alfo confidered by the husbandmen as one of the most difficult roads that go across the African mountains. It ic

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is not very high at the weftern part, but becomes the more terrifying on that account to the eaftern fide, being there very fleep and the road very ftony and narrow, with an abyfs to the left. The driving a hand's breadth only out of the track may demolifh waggon, oxen, and driver, and the paffing was now made more difficult from the frequent flumbling of the cattle, owing to the flipperinefs of the road, which was occafioned by inceffant rains. The farm was fituated juft at the foot of the mountain where we arrived, to the great aftonifhment of the farmer and his wife.

This fpot is like Roode Zand, a broad valley furrounded by mountains, watered by a rivulet, called Olyfant's (or Elephant's) rivier, and abounding in grafs. It is entirely feparated from Roode Zand by Winterhoek and other ridges of mountains. However it differs thus far from Roode Zand, that it lies much lower, and is likewife confiderably narrower, being only a few mufket fhot broad.

On the 10th. Happy to find our vehicle in a tolerable condition, after fo dangerous a journey, we fet out to SKALK BURGER's, and croffed the Elephant's river, which we afterwards had to the left.

After taking a hearty breakfaft, we fet out for the warm bath, fituated at a finall diftance from the farm.—The road thither was very low, vol. 11. C fwampy,

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fwampy, and troublefome, till we approached the foot of the mountain. This Olyfant's warm bath is alfo called Engel Bath, after the attorney-general ENGELMAN, who caufed it to be cleaned and dug, and erected a handfome ftone building at the company's expence, for the accommodation of the bathers. The veins of this fpring arife from the eaftern fide of this long tract of mountains fomewhat above the foot of them, in a cleft which inclines to the fouthward, and there forms a crofs cleft. Of thefe veins there are many, but three of them in particular carry the water into feveral fmall huts, for the colonifts, flaves, and Hottentots, for each of these separate huts. All of them have three or four fteps going down into the water for the bathers to fit on, and are alfo floored on one fide for them to lie on, whilft they are fweating. This water is not boiling hot, but lukewarm, has no tafte, leaves no fediment, but had only fome green vegetable matter (Conferva) growing in its runnels. It lies on the fame fide of the fame range of mountains, and is of the fame nature with the warm bath already defcribed at Brand Valley. With this water as well as with the former, linen may be washed without being stained, and victuals dreffed without any difagreeable tafte being imparted to them by it; the blue colour of fugar paper is not changed.

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changed. The farms here have vineyards and orchards, and excellent fodder for cattle.

The mountains to the right divide Bocke-veld from this valley, and feem to form five confiderable ridges feparated by deep valleys, which, when we fired, gave reiterated echoes, like thofe that are heard after thunder. A high and flat mountain here, with two heads at each end, was called the little *Table Mountain*.

On the 11th, we rode paft ANDREW LUBBE's to a farm belonging to PETER GAUS.

Lions and other beafts of prey are, at prefent, fo effectually fcared and routed out of thefe mountainous tracts, that the farms are feldom vifited by them : neverthelefs the farmer continues paying to the Company the old tax, called Lion and Tyger Money. This tax is paid by each burgher, at the rate of four rix dollars for lion, and two gilders for tyger-money; out of which fund, at the time when the colony began to extend itfelf, and when the colonifts were much infefted by wild beafts, a certain premium was paid to every one who killed or caught any of thefe animals. At first, government paid fixteen rix dollars for a lion, and ten gilders for a tyger, after which the fum was diminished to ten rix dollars for a lion's, and fix gilders for a tyger's fkin; but, at prefent, thefe animals being C 2 fo

fo far extirpated that there are feldom any of them to be feen, the premium is difcontinued, excepting in cafe they are brought alive to the Cape, which is hardly practicable. This tax, neverthelefs, is not abolifhed, although its inftitution has had the defired effect, and the caufe has ceafed; but, in the fame manner as in many other countries, has affumed the nature of taxes and funds.

Befides the annual tax which the farmer pays for his farm, he pays alfo for wax candles four rix dollars a year, for every horfe, one fliver, and for every hundred fheep, one gilder. Each farmer, whether he be rich or poor, whether poffeffed of a large or finall farm, pays for mending the roads and ftreets. The bridge and ferry money all pay alike, let their road lead them that way or not; but then they are exempt from all billettings, crown duties, tithes, clearing the roads, furnifhing horfes for travelling, day labour, &c.

I faw here a girl that had had the measles three years before, which had left behind them black and blue marks on her forehead, and under her eyes (Sugillationes) which were of a greenish caft. They generally remained two or three weeks, then went away, and afterwards returned. The parts above-mentioned were particularly affected by these spots, though they appeared

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peared also in other places, as for inftance, in her hands and arms.

A farmer advanced in years, likewife had fallen into a decline after the meafles; however, he was perfectly reftored by what I ordered him.

On the following days we proceeded along the valley to BARENT LUBBE's farm, paft *Pickenier's kloof* and MATTON's farm which lay to the left of us.

On the 14th, the country began to grow hilly, and we arrived at young BARENT LUBBE's, at the end of the cleft.

The root of the fpecies of Stoebe, which grew here, finelt quite like Valerian (*Valeriana phu*) and might poffibly have the fame effect as this plant has in the epilepfy.

On the 15th, we proceeded on our journey, furnished with a few days provision, and meant to get over the mountains to K15 KOOPMAN'S farm, from thence to SPANNENBERG'S, over the river Dorn, and, finally, as far as CLAS LOSPER'S farm, which is fituated in the lowermost Bocke-veldt; but we had not got far up the mountain before a missfortune befel us, through the carelessifies of the driver. Our cart overturned, and one of the shafts were broken; fo that it was impossible for us to proceed any farther across these uninhabited

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mountains. We were therefore under the neceffity of remedying the evil as well as we could, by tying the fhaft up with cords, and returning to the farmer, to alter the plan of our journey.

After having ftill more completely repaired our fhattered vehicle, we refolved to let both the waggon and cart go flowly back, through Pickenier's kloof, and afterwards, up the country, through Roode Zand's kloof to Roode Zand, there to reft and wait for our arrival. In the mean time, I and my English travelling companion made a tour on horfe-back farther back into the valley to GAUS's farm, and paffed through the long vale, called Eland's Kloof, acrofs the mountains to BERNARD FORSTER's, in the Koude Bockeveld, as it is called, or Cold Goat's-field. Eland's kloof was very broad, and had a large river in it. This country, which is fituated between the lowermost, or Warm Bockeveld, and between Olyfant's kloof and Carroveld, lies very high, and is, in the winter, very cold, although not fo cold as at Rogge-veld. which lies farther to the other fide of the Carrow, and whofe inhabitants, for feveral months in the year, that is, from April to September, are obliged, on account of the fnow and cold, to remove down to the lower and warmer Carrow, which, at that time, is plentifully fupplied with water by fhowers of rain, attended with thunder.

thunder. Those that inhabited this Bocke-veld fometimes remove across the mountains with their cattle to Carrow, though this is strictly prohibited.

A ferpent, called Boomflang, was faid to get into the trees, and fwallow the birds it found there; and the *Roodbeckjes* (Loxia aftrild) made great havock in the gardens, where they devoured both bloffoms and feeds.

The wild goats (Steenbocks), and particularly the diving goats (Duykers) damaged the gardens greatly, where they ate off the buds of the trees. The leaping goats (Springboks) alfo do a great deal of mifchief in the wheat-fields, efpecially as they come in troops, and cannot be caught eafily either by fnares or fpring-guns, but muft be fhot with rifle-barrelled guns in the corn fields when they come there. This is done in the following manner; a man digs a hole in the field, where he can fit unfeen, till the animal approaches near enough to be fired at with a rifle-barrelled gun.

The cold Bocke-veld is nearly as broad as Olyfant's kloof, furrounded by high mountains on all fides, which clofe together to the northweftward, leaving only a narrow paffage to a finall plain, fituate on the other fide of it. Snow fometimes falls here, and lies for a while undiffolved.

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As cold as this country is, still it was formerly much more inhabited by the Hottentots than it is at prefent by the Europeans, who only occupy a few farms in it. All over the country the Hottentots live together, many in a community, fometimes to the amount of feveral hundreds in a village, feed on roots, and the flefh of wild beafts, and of their own herds (which have the whole country open to them for their pafturage) and at the fame time are fatisfied with a little. On the other hand, every colonist has a farm to himfelf, part of which must be laid out in wheat-fields and vineyards, befides which his herds of cattle must be large and numerous. Wild beafts are deftroyed without mercy, confideration, or œconomy, in fo much that fome are killed for amufement, and others are deftroyed on account of the damage they do, and for their fkins or hides.

As for the reft, the Bocke-veld is tolerably fmooth, without trees or bufhes: except a few low rhinoceros bufhes, which are feldom to be met with, it bears only grafs, and in fome places a kind of tall rufhes. Near the mountains are fometimes feen a few low and fcattered trees of the Protea grandiflora fpecies (*Waageboom*).

The whole of this country has received its name from the Spring-bocks (*Capra pygargus*) which refide here in fcattered herds, and, in certain

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tain years, migrate hither from the more remote tracts of the continent in aftonifhing numbers.

The mountains which lie on each fide are quite barren, like an old wall, and rife up boldly without any foot projecting from them, or any hillocks lying directly before them, as is ufual with other mountains. They feem to be greatly worn and confumed by the operation of the air upon them, and will probably in time undergo confiderable alterations in their extenal appearance. The air deftroys the cohefion of fome parts, and caufes them to crumble away into finall particles, which are afterwards carried off by the rain, not to mention larger fragments, which fometimes fall off from the main body and the cavities formed by the ftagnation of the rain water on their furface.

The rocks, which had many fharp projecting points, were fometimes composed of quartzofe ftones, quartz-rubble, and fandftone cemented together. From moifture these crack, and, getting loofe, fall out, and roll down in large pieces. Hence the mountains look, as though they were torn afunder, and themfelves proclaim their own vast antiquity and decay. These mountains differ greatly in the hardness of their rocky parts; and confequently they must differ in their diffolution. In many parts of them pebble-ftones were found inlaid in large

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large clufters, fometimes to the amount of a hundred and more. Here were likewife to be feen large hills confifting of fand-ftone, which at the bottom was as white as chalk, and friable, and at the top yellow, with a mixture of yellow and red tints. In the valleys and near the rivulets was found the fineft fand, which muft doubtlefs have been brought down from the mountains and their adjacent hills by the rain water. In the Bockeveld mountains to the eaftward, the ftrata lie obliquely, as if one fide of the mountain had funk down; the broader ftrata alfo were lower to the north-weft than to the fouth-eaft end.

Thefe large and high chains of mountains therefore, which lie in feveral rows, divided by broader and fmaller clefts and openings, are the Alps of the fouthern parts of Africa.

The Spring buck (*Capra pygargus*) does not refide in the mountains like the roe-buck, nor in the thickets like the fteen bock, or duykers bock, (where the hounds would eafily catch him, as he could not run very faft there) but in the open fields, where he makes the fineft and most furprifing leaps that can be imagined, frequently above fix feet high.

Among the few fhrubs that grew in the mountains, I found here that curious fhrub the flybufh (Roridula dentata) the leaves of which are covered with fine hairs, and a tough glutinous fubftance

fubftance to which finaller infects adhere. It is placed in the houfes for the purpose of catching flies.

On the 18th, we rode to ISAAC VISAGE's; the fheep here are counted morning and evening, viz. when they are turned out and brought home, and are marked in one or both ears, that they may be known again when they come to be mingled with others. This counting of the fheep was always the miftrefs's bufinefs, who had alfo given to each fheep a particular name. An excellent memory and daily practice had fo fharpened her attention in this refpect, that, if one amongft feveral hundred fheep were abfent, the miffed it immediately.

On the 19th, we paffed Nicholas Jansen's farm, in our way to Carl van der Merwell.

A Table mountain which ftands fingle and alone in the middle of the country, is, to the northweft, flat at top, and fteep on the fide, but, to the fouth-eaft, it is convex, flopes off gradually, and is very high. The wheat here had not yet got into the ear, which however we faw it had already done on the other fide of the mountain, and the peafe were now fowing. Here they both fow and reap a couple of months later than they do nearer the Cape, and in the country which lies lower on the other fide of it.

Although the husbandman, that inhabits these mountains, lives so high, yet he always (though very

very improperly) calls it travelling up to the Cape, where the country lies much lower.

The great wheel of the African plough has eight fpokes, and is fo made (at the fame time that it is provided with an iron plate) that it cannot be taken off. The fmall wheel to the left, has only four fpokes, and runs always on the grafs ridge, and thus keeps the plough even.

On the 20th, we travelled on to WILLIAM PRETORIS's, whofe farm ftands in a very good fituation; but the weather, in the months of June, July and August, is so fevere, that much show falls, fometimes for days together, and icicles are formed and adhere to the eaves of the roof. All the calves, lambs, and goats that are brought forth during the frost, die of cold and hunger in the stables in which they are kept shut up, without a possibility of their being turned out to grafs.

We travelled afterwards, paft two farms belonging to JAN RASMUS and VAN HEERE, to that of JACOB PINARD'S, where was a finall wood. The mafter and his wife were not at home, but only two flaves and fome Hottentot children; we were therefore obliged to content ourfelves with having a dry covering over our heads for the night, without any thing to eat or drink, although we had travelled without food all the

the day long, and had feveral miles to go to the next farm.

As no entertainment was to be had here, we fet out early the next morning, being *the 21ft*, to SKALK VAN HEERE'S, where we were kindly received, and entertained both with breakfaft and a tolerable good glafs of wine of the growth of the country.

Here commenced the warm Bocke-veld, which was fcreened from the cold by high mountains and hills, fome of which were very fteep, and which we had this day defcended.

The warm Bocke-veld lies therefore much lower, and, in proportion to its fituation, is much lefs cold. In the cold Bocke-veld, the vine can only be cultivated in two places, and then does not arrive at perfect maturity, but, in the warm, it thrives better and yields better wine. The warm Bocke-veld is a finall tract of land, neither very broad nor very long, but rather of a round form, and encircled by mountains. The out-let from it is by a narrow opening near Moftertshoek and Hex-rivier. The land is level, all over covered with grafs, and has but a very few fpring bucks left, which have been for the moft part hunted out of the country.

As two young farmers were this day to travel on horfe back, the neareft way acrofs the high mountains to Roode Zand, that lies on the other fide

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fide of them, we determined to embrace the opportunity, and accompany them thither; but my travelling companion, after we had got to a little diftance up the mountain, finding he had forgot his faddle bag, was obliged to return for it, and our weary horfes not being able to go very faft in that mountainous country, we were left in the lurch by our guides, and, lofing the track, were obliged to return to the farm by the fame way as we came. From thence we rode through a great part of the Warm Bocke-veld, and before evening arrived, to a handfome farm abounding in cattle, milk, and butter, which belonged to PETER FUNERE.

From hence we had no other road to Roode Zand than by Mofterts-hoek, through a valley which was very narrow and low, between very high mountains projecting on each fide. But this journey was hazardous at fuch time of the year when the large and wide rivulets which we had to ford in the dale were brim full.

In order to pass with fafety over this dangerous fpot, we hired a fervant, who, being acquainted with the country, was to precede us on horfeback, and point out to us the most fhallow places.

On the 22d of October we fet out on our journey.

On our entering of Mofterts-hoek, the road was very ftony, mountainous, and fteep, and we

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we had afterwards feveral ftreams to ford and branches of rivers, fuch as Brug-drift, Stroomdrift, Elfe rivier, and Diep-drift, befides feveral fmaller branches of brooks, which, uniting, form the great Breede-rivier. These places were the more dangerous to crofs, as the water not only ftood up to the horfes fides, but the bottom was full of large round ftones, that had rolled down from the mountains, fo that the horfes could fcarcely get on; and frequently the rapidity of the ftream was fuch that they could with great difficulty keep the tract.

Near these ftreams grew feveral fhrubs, efpecially fome of the Geranium kind, that fent forth a pleafant, ftrong, and refreshing odour.

At length we arrived fafely at DE WETT's at Roode Zand, where our oxen had already refted themfelves, and gathered ftrength and flefh for our intended journey.

On Winter-boek, a mountain which terminates Roode Zand to the northward, and divides it from Olyfant's kloof, there ftill lay a great deal of hail.

Gli is, in the Hottentot language, the name of an umbelliferous plant, the root of which, dried and reduced to powder, they mix with cold water and honey in a trough, and after letting it ferment for the fpace of one night, obtain a fpecies of Mead, which they drink in order to throw

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themfelves into a flate of intoxication. A couple of glaffes are faid to be fufficient for the purpofe, and no head-ach enfues. Of the pulverized root, two handfuls only are taken.

This year I examined the mountains at Winterhoek much more narrowly than I had done laft year, and as high as to their very fummits. The fly-bufh grew here in abundance, and the fcarce plant, called Protea nana, the flower of which refembles the dog rofe, was found only in this place. On one fide of the mountain was a fine cafcade that fell down a perpendicular precipice, under which there was a hollow in the mountain filled with feveral bufhes. My inclination called me thither, and I muft have gone a very round-about way to it, had I not ventured to take a leap of about twenty or twenty-four yards in height, which I did without being hurt in the leaft, the bufhes preventing me from making a hard fall. Among other rare plants alfo which I found here, was the Difa cœrulea.

In thefe mountains were found an elegant red flate, confifting of thin laminæ, and difpofed in broad ftrata. The fame fubftance was alfo to be feen in large pieces that had fallen down from the higher parts of the mountain, and difpofed in ftrata with other ftony matter, like a marble. It appeared ftrange to me, that I did not

not, either here, or in any other mountains, meet with any lime ftone, or calcareous hill, nor with any marble nor flint, excepting a radiated Gypfum, which I found in the mountain near Hex-river. Here I faw a farmer's wife, who, through good living and indolence, was grown to fuch a fize, and was fo fat withal, that, excepting one more in another part of this country, I never faw her equal. On her way to the Cape, fhe had fuffered herfelf to be weighed; and fhe then weighed 334 lb. or 26 ftone, horfeman's weight.

That Roode Zand is nothing but a valley between high mountains, running nearly parallel to each other, I could clearly perceive, from this circumftance, that, in the hollows, where the torrents of water had fwept away the earth, and dug out channels of one or two fathoms depth, the ground appeared to confift of the naked rock, with it's ftrata, that ftood up on their edge almost perpendicular, and only a little inclining to the fouth-east. These ftrata were much softened by the water, of a loose texture, and whitish, refembling an indurated clay; in their interffices, they harboured fand, which the water had carried down and discharged there.

The farms hereabouts are not very far afunder, and the colonifts are in general in good circumftances. The vineyards were numerous; vol. 11. D of

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of wheat there was a great quantity fown, and orchards were planted every where, fo that the country produced the moft profitable articles, fuch as wine, wheat, oranges and lemons. The cold might neverthlefs be very fevere here at times; and, it was reported, that its intenfenefs the laft year had done great damage to the vines, and, in fome places, abfolutely deftroyed them.

As to cattle and fheep, more are kept here by the farmers than are wanted for their own confumption and ufe; and draught-oxen they fometimes buy from other places.

A finall dove (perhaps the finalleft of the dove kind) called Maquas Duyv (*Columba capenfis*) frequented the gardens, and there fought its food, which confifted moftly of feeds.

The *Ixia bulbifera*, a bulbous plant with a red flower, grew here in the greateft abundance. When one approached the place where it grew, it feemed to be but thinly fcattered over the field, but, at a diftance, the ground appeared as if it were covered with fcarlet cloth.

In like manner, here and here only, was found befide the brooks, a green variety of the Ixia maculata, another tall bulbous plant, which is as elegant as fingular, with its long clufter of green flowers growing out like an ear of corn, and is fo extremely fcarce all over the world.

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On the 28th. Proceeding on our journey, we croffed Breede rivier; the branches of which went meandring on fo far before us in our route that we were obliged to ford them feveral times before we could reach JAN SLABBERT'S farm, where we took up our night's lodging.

On the 29th, we came to PHILIP PLAISIR'S near Saffraan's kloof, a place where there is a foot-path acrofs the mountains, along which one may go on horfe-back.

Travelling ftill farther, we arrived at JAN DE Tot's. The country now began to grow broader and flatter. Toi's kloof again is the name of the foot-path here, leading over the mountains; which also may be travelled over on horfe-back, and brings one to Drakenstein, directly opposite Paarl.

We now left Breede-rivier to the right; and the level flat country which here lies about the ftream, and is at times inundated by it, is called *Goudena*.

Farther on lies *Brand valley*; opposite to which, on the other fide of the mountain, stands *Stellenbosch*.

On the 30th, we rode past DE PLOI's farm, and, over Hex-rivier, to KEYSER's estate.

The field was here of the Carrow kind, and the fheep were faid to feed on those fucculent plants, the Mesembryanthemams (vygebosches), D 2 which

which were fuppofed to render the dung of thefe animals unfit for manure. Now likewife, the farther we advanced, the more hilly the country grew.

On the 31/t, we arrived at ALOWEN SMIDT's farm, which lies opposite to Hottentot's Holland. The country here had many hills and, ridges of mountains, which lay across our road.

November 2d. We rode over one of the ridges that lay before us to Mrs. BRUEL's farm, when we feemed to be in quite another valley.

The mountains to the left now took a fomewhat different direction, and ran more to the E. S. E.

Proceeding farther, we came to PHIDIP BO-TA's, whole farm lay opposite to Tyger-hoek, which is fituated behind the mountains that project out from Hottentot's Holland mountains.

The chain of mountains which had continued from Witfenberg, feemed here to turn off to the eaftward, and, as it were, entirely to dwindle away; but, upon a clofer examination, it was found to extend ftill farther on, and to be continued by the ridges of mountains which only lay fomewhat farther inwards, in connexion with the fame chain.

After this, we paffed CLAS VOGT'S rivier, fo named from CLAS VOGT, a colonift, who had been trampled to death by an elephant, and that in

in to fhocking a manner that fcarcely the veftige of a bone was to be feen in his remains.

On the fame day, continuing our journey, we arrived at GERT NEL'S farm near KOCKMAN'S kloof and rivier.

Mat-ware (*Matjefgoed*) is the name given here to a kind of rufh that grew in the river, and of which mats were made, that were ufed by the hufbandmen for the tilts of waggons, and alfo to lie on. Thefe mats were foft and pliable, and the rufhes from which they were made, were a fpecies of grafs, which I called *Cyperus textilis*, of about four feet and more in height, almost as thick as a tobacco pipe, and hollow within.

On the 3d, we fet out for DROSKI'S farm. In this tract, as well as in the whole of the interior part of the country, it was faid to rain with the wind at S. E. quite the contrary to which is the cafe at the Cape.

The farmers cultivated their farms here with their own flaves, and thefe flaves were not only chaftized by their mafters for mifdemeanours and petty faults that merely affected the family, but alfo, in cafe of trefpaffes of a more ferious nature, by the officers of police belonging to the landroft.

It fometimes happens, that on the hufbandman finding himfelf under the neceffity of complaining to the magiftrate of his flave, either on account of flagrant crimes committed by him, or of incu-

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rable idlenefs, or exceffive careleffnefs; in which cafe, this latter takes a liking to the flave, however ftrange it may appear, the owner, *nolens velens*, is obliged to fell him.

November 4th, we arrived at the celebrated JACOBUS BOTA's, a man who was now eighty-one years of age, and, from twelve fons, had a progeny of one hundred and ninety perfons, all alive. It is not this circumftance however, as fingular as it otherwife may be, that has given him fo much renown, in a country where they marry early, and where the population is very great, but a misfortune that befel him in one of his hunting expeditions. When he was forty years of age, he fhot, in a narrow pafs in a wood, a lion, which immediately fell, without his obferving that there were two of them together. The other lion rufhed immediately upon him, before he had time to load his piece, and not only wounded him with its fharp claws to fuch a degree that he fainted away, but also gnawed his left arm and fide, and lacerated him in fuch a terrible manner, that he lay for dead on the ground. The lion, that in general is poffeffed of too noble a fpirit to revenge itself on a dead man, if not impelled by hunger, left him in this fituation, fo that he was at length carried home by his fervants. His wife, a ftirring and active woman, immediately fetched feveral herbs, which she boiled in water, ar.d.

and, with the decoction, daily washed, fomented, and bound up his wounds, fo that he was at laft reftored to perfect health. He was fo much difabled however in this arm, that he could never afterwards handle a mulquet. He had been the first fportfman in the colony, and, by killing elephants and felling their teeth, had acquired a tolerable fortune. This man informed me that, in its infancy, the colony had fo fmall an extent, and the Hottentots in it were fo numerous, that the chriftian fettlers could not without danger venture as far as Zwellendam. At that time too the elephants abounded fo much, even near the Cape, that in travelling to and from the Cape, one might kill a great many of them. Thus he had often fhot four or five in a day, and fometimes twelve or thirteen. Twice in his life, when he was out in purfuit of thefe animals, he had deftroyed with his gun, twenty-two elephants each day. A good fportfman always kills the elephant at one fbot, but, should he hit any of the fore-legs, fo as to break it, two fhot must be fired: the hunter always takes his aim in fuch a manner as that the ball fhall pass through the lungs. The ball is always mixed with one third of tin, and weighs a quarter of a pound; the piece is in proportion to this, and rather heavy. Each elephant's tooth weighs from thirty, to one hundred and thirty pounds. They are D'4 bought

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bought up by the Dutch company, at the rate of one gilder per pound.

The country here began to be very hilly, and abound with grafs, and at the fame time had a fufficient number of rivulets, and fome wood in the clefts of the mountain.

These mountains which extended from Hottentot's Holland, now began to be (higher up the country) more and more low, and afterwards appeared like broken ridges, and at last totally vanished.

On the 5th, we went to JURGEN BOTA's, who is a fon of the old man already mentioned, and paffed BLANKENBERG's farm in our way to ROCK's, near Keureboom's rivier.

Here we faw a monkey from Houtniquas wood, fomething like the Simia fabæa. The legs were all black, and the tip of the tail brown; the tefficles of the colour of blue ftone, or vitriol of copper.

From hence we went to Zwellendam, and afterwards to the Company's poft, near Buffel jagt rivier, where we refted a few days.

The colony of Zwellendam, which is fubject to its own peculiar landroft, had been founded about thirty years before. It took its name from Mr. ZWELLINGREBEL, who was at that time vicegovernor, or Secundu's (Tweede) at the Cape. The first landroft here was RENIUS, the fecond ORACK,

ORACK, who was ftill alive but had refigned, and the third was the prefent landroft, whofe name is MENTZ.

The Company's post had at first been establifhed, for the fake of protecting those colonifts who had fettled on this fpot, and farther up in the country, in order to cultivate the land and rear cattle. It was therefore at first laid out as a fort, and provided with feven men and a corporal; but, after the country came to be more inhabited, and the Hottentots guitted it, all thefe fortifications were found to be quite unneceffary and fuperfluous. Inftead of this, a grazing farm is now eftablished here, and the foldiers are employed in the wood, called Groot Vaders bosch, or (Grand-father's Wood) in felling, for the ufe of the Company, different forts of timber for joiners work, &c. of which timber a waggon load is fent to the Cape every three months, befides what the people of the colony, in order to affift in maintaining them, are allowed to carry up and fell themfelves.

For the fervice of this farm, those Hottentots are used that still remain here, the reliques of former numerous hordes. This year I contrived to procure fome information concerning their mode of living, their manners, and their customs.

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On the first night of the new moon one may fee the Hottentots run about, pull off their hats, and curtfey.

The ceremony is not quite laid afide of making youth, at a certain age, men; from which time they are feparated from the women, and affociate only with men. After the youth has been befprinkled, according to cuftom, with urine, fome animal is killed, and its omentum, or cawl, is tied about his neck. The men never drink milk that has been drawn by the women. The women here have frequently a real hufband, and a locum tenens, or fubftitute. The men likewife often take two wives. The marriage ceremony is frequently performed, by the bride and bridegroom, after obtaining the permiffion of the parents, fleeping together till late in the morning. The dead are interred in graves, over which are fet a tortoife-fhell filled with fome odoriferous powder, and three twigs of fome fhrub or other; and, after this, the company that forms the procession makes merry. Of game that has been hunted and killed, no one is fuffered to eat before he is invefted with the dignity of man; nor must man and wife eat any part of this animal's heart, or pericardium.

The Hottentots, at prefent, eat their meat either roasted, or else boiled in a pot in the ordinary

ordinary way; but not long ago, before they had got veffels of this kind from the Europeans, they ufed to put their meat into leathern bags, filled with water, and afterwards threw in redhot ftones, which, by their heat, caufed the water to boil.

The Hottentots use bows and arrows, not only for their defence against their enemies, but likewife for the purpofe of killing wild beafts; but at prefent they have rarely need to employ them on either of these occasions. The bow is a round flick of about an inch thick, and fomething more than two feet long, and is bent by a finew. The arrow is made by a kind of reed or cane, as thick as a goofe-quill, and fcarcely a foot long, to the end of which is fastened, with a fine ftring or finew, an iron point, fhaped like a lancet, which is befmeared with the poifon of ferpents. Several of thefe arrows are kept in a quiver, which is of the thickness of a man's arm, and about two feet in length, with a lid at the top, that turns upon hinges of leather.

Rabekin is a mufical inftrument, fomething like a guitar, made of a calabafh and a narrow board, with three or four ftrings, which may be ftretched or relaxed at pleafure, by means of fcrews. On this inftrument the Hottentots play with their fingers.

Kora

Kora was a wind inftrument, which however was feldom ufed.

A mountain called *Potteberg*, was feen directly opposite the farm, near the fea shore, which was faid to be about twenty-four miles distant.

A curious grafshopper, of a reddifh colour, of the class of Hemipteræ, was feen in great numbers feeking its food on the bufhes. When taken, it preffed out from beneath a sheath that lay under its breaft, a flimy, frothy fluid, like foap lather, which covered both the infect and the fingers of the captor. This was repeated as often as the liquid was wiped off with a linen rag. From the manner in which this animal endeavours to liberate itfelf, I-called it Gryllus Spumans. The Larvas, or half-grown grafshopper, or the fpecies called Pneumora, were feen in the greateft abundance both here and elfewhere on the bufhes; but in the day time, neither I nor any of my companions could find one of them in a perfect flate and winged, which aftonished me much.

Ree-boks, Rietboks (*Capra*) and Bonteboks (*Capra fcripta*) frequented much thefe hilly and werdant fields. In thefe antilopes both fexes are furnished with horns; and the young Bonteboks are at first of a reddish brown colour, but, in time, become spotted with white, though,

on account of the opennels of the country and the fhynels of the animal, it is difficult to get within gun-fhot of the Bontebok, yet we were lucky enough to fhoot one. It is always dangerous to come near one of these creatures when fhot, because, if he is not quite dead, he makes use of his horns, and may put the huntsman in danger of his life.

Here too I had an opportunity of obferving a curious fact. It happens fometimes, that when a duck is flot in any of the rivulets, it either immediately difappears, and is feen no more, or it is found again with its feet eaten off. This is done by the water turtle that inhabit thefe waters, which prey, not only on the larger ducks, but alfo on their young, which they feize by the leg.

On the 10th, paffing by PETER BOTA's farm, called *Rietkuyl*, we croffed *Kerremelk's* and *Slange* rivers to the widow FORE, near Duyvenbeek's rivier.

In the whole tract of country through which we had paffed all the way from Hex rivier, I observed that the banks of all the rivers were planted with the very prickly tree called *Mimofa nilotica*.

The mountains, which extended from a projecting point at Zwellendam, ran now in the direction of due east and west.

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On the 11th of November, having taken an early leave of our worthy hoftefs, we went down to Duyvenhoek's river, which was at a fhort diftance from the farm. The late rains had filled this rivulet, fo as to make it dangerous to crofs. The rivulets of this country, however, have ufually fome fhallow places, where, even in the greateft flood, one may crofs them with waggon and oxen. To fhew us one of thefe drifts (as they are called) our hoftefs had been fo kind as to fend a flave with us; but, as he neither underftood nor fpoke Dutch, he was obliged to communicate his inftructions to us by figns, which, either from ignorance or malice, he entirely perverted, as he pointed out to us a circular track over the river to the right, which we ought to have taken to the left. I, who was the most courageous of any of the company, and, in the whole course of the journey, was conftantly obliged to go on before and head them, now alfo, without a moment's confideration, rode plump into the river, till, in a moment, I fank with my horfe into a large and deep fea-cow hole, up to my ears. This would undoubtedly have proved my grave, if my horfe had not by good luck been able to fwim; and I, who have always had the good fortune to poffefs myfelf in the greateft dangers, had not, with the greateft calmnefs and composure, guided the animal, (which

(which floundered about violently in the water) and kept myfelf faft in the faddle, though continually lifted up by the ftream. After having paffed over this hole, I was likewife fuccefsful in my attempts to get fafe out of it, though the edges of thefe holes are in general very fteep, in fo much that they feldom afford one a fure footing. Holes of this kind which the Hippopotamus treads out for its refting place, occur in a great many rivers, though the animal itfelf perhaps is no longer to be found there, but has either been fhot, or made to fly to fome other more fecure retreat. All this time my fellow travellers flood frightened on the oppofite bank and aftonished, without daring to trust themfelves to an element that appeared to them fo full of danger. However, as foon as I had got off my horfe and let the water drain off from me a little, I ordered my Hottentots to drive across the river, according to a better direction that I gave them, after which the others followed.

I had the greateft reafon to be thankful to the divine Goodnefs, which had preferved me in this imminent danger, and the more fo, as it happened on the anniverfary of the day on which I came into the world thirty years before.

After our waggons were brought over the water, I did not allow myfelf time to change my clothes,

clothes, as I muft have been at the pains of unpacking my trunks; but we continued our journey the whole day without farther interruption, and paffing by CHRISTOPHER LOMBART'S farm, went to another belonging to DANIEL PLAISIR, where we arrived before evening, and were kindly received.

Here my first care was to examine my pocketbook, watch, and other things subject to be damaged by the water.

A kind of *Corvus*, (or crow) called *Spreuw*, was found both here and in feveral other places in great plenty. It was lefs than a black bird, and black with a white rump: this bird always accompanied the larger cattle and the fheep, efpecially in the mornings and evenings, before they are driven out to field, and after their return. Its occupation was to pick away the infects (*Acari*) which, dropping from the bufhes upon the animals, and biting deep into their fkins, flick very faft to them, and occafion them great pain.

This bird is very wild and fhy, fo that when it obferves any body to approach it, it immediately flies away, and with many cries warns the others, which inftantly take wing and endeavour to fave themfelves by flight. This bird is faid to make its neft in the fides of the rivers and brooks, for which purpofe it digs holes in their banks. Thefe

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These Acari which teazed the cattle, were not lefs troubless for the our horses. Frequently, while I was riding through the thickets, for the purpose of gathering flowers and feeds in these places, my horse, and particularly his head, was so thickly covered by these blood-fuckers, that neither his ears nor any other part of him could be seen, and I was sometimes obliged to make my Hottentots free him from these troubless guess, before they had time to enter too deeply into the skin.

On the 12th, we went to CLAS BRUYN'S farm, and on the 13th, to Peter de Wett's.

The whole of this tract produced aloe trees in abundance, which in fome places entirely covered the hills and the fides of the mountains, where they appeared at a diftance like a numerous army. The trees are of the height of a man, with their ftems quite bare below, and a crown at the top of broad, thick, and flefhy leaves.

I observed every where the flaves bufy in tapping and preparing gum aloe, the virtues of which, in medicine, are well known. DE WETT, the owner of the farm, was the first that prepared the gum in this country, for which reason he was faid to have the exclusive privilege of delivering and felling it at a certain price to the Company. Several farmers have fince learned the art of preparing it, and at prefent frequently fell it at the Cape to strangers at less than half this price. VOL. II. E The

The mode of preparing it is quite plain and fimple. It confifts, in the ufual phrafe of the peafants, in the tapping, or drawing off of the juice, and boiling it. The tapping may be performed at all times in the year; but during, and immediately after, the rainy feafon, the leaves yield a more copious but thinner juice. Those days that are calm and clear, are chiefly felected for the operation of tapping, as windy weather fhrinks the leaf, fo that lefs juice is produced, and it hardens too foon. On this work, for the most part, either flaves or Hottentots are employed. A leaf is first cut off, and laid on the bare ground to ferve for a channel, upon which feveral other cut leaves are afterwards placed on each fide, with the large end inwards, and over thefe again others, to the amount of a dozen, or more, fo that the juice drips from them into the hollow of the first leaf. The leaves which were cut off not too close to the trunk, were not cut into fmaller pieces; as, according to what the farmers afferted, they would not yield the more juice on that account. In this manner feveral heaps of leaves are laid one after the other, as fast as they can be cut off. When the juice ceafes running, the leaves are taken away, and the juice is poured into calabashes, which, here as well as in many other places, are used by the poor as bottles ... The greateft quantity of juice that can be thus collected

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collected by a man in one day is a large calabafh or finall pail full. The juice is afterwards boiled down at home in Englifh iron pots, to fuch a confiftence, that it will not run off a ftick that is put into it. All impurities that fwim on the top of the liquor are fkimmed off in the boiling. The juice thus boiled down to one half, is then poured out into wooden boxes, in which it afterwards grows hard. The juice yields generally one third of folid gum, and each box weighs from three to five cwt. each pound of which is fold to foreign nations for three, or four, and fometimes two, ftivers.

On the 15th, we proceeded on our journey to DANIEL PINARD's, across Goud's rivier. This river is one of the largeft in this country. Its banks on the weftern fide were extremely fteep. The farm was fituated on the other fide on a tolerably high hill. This ftream runs far up into the country, and confequently is fupplied with water from the mountains, which are at the diftance of feveral days journey from hence, and which border upon particular tracts that, at certain times of the year, are deluged by heavy fhowers of rain, accompanied with thunder. From fuch a caufe this river may be very fuddenly filled, and rife to a great height, at the fame time that at this place there shall be the finest weather imaginable. And for the fame reafon this E 2

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this river is extremely dangerous, fo that the traveller ought not to take up his quarters too near its banks, nor in the lowlands adjacent to it. The water now came up to our horfes faddles.

This day we proceeded as far as to DIDELOF's farm.

On the 16th, we rode paft feveral effates, fuch as those of DIRK MARCUS, BERNARD the fon and the younger PLANT, and hastened on to Musclebay, to a delightfully situated farm belonging to old BERNARD.

The harbour here is very large, but no fhips ever make it, except they are obliged fo to do by ftrefs of weather.

A Danish ship, called the Kron-prinsels, commanded by Capt. SWENFINGER, was stranded here and lost, and the remains of it were even at this time to be seen.

On the 18th, after having, in the course of the day that we refted there, visited the sea coast and its fandy hills, which in all probability was formerly occupied in great numbers by Damaquas Hottentots, we rode past CLASS MEYER'S and JACOBUS TUNISSON BOTA'S estates, and returned to DIRK MARCUS near Hagelkraal, an old man and great elephant-hunter.

Thongs made of the hides of animals were every where used by the farmers instead of cords and ropes, both for the tackling of waggons and other purposes.

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purpofes. Here we faw thefe thongs made pliable and fit for ufe, by greafing them, and rubbing them brifkly against a tree.

On the 19th, we travelled up towards the mountains, and into Hartequas kloof, to a refting place called *Groote paarde-kraal*, where we, for the first time in the course of this journey, took our night's lodging in the open air.

On the 20th, we examined diligently the mountains that furrounded us on all fides, and in the afternoon, continued our route through Hartequas kloof to Zaffraan kraal, when we got into a more plain and level country, called *Canna land*, by fome *Canaan's land*, and at the fame time paffed the heights of Canna, [*Cannas boogte*].

Here what I had heard before was confirmed to me, viz. that feveral female offriches lay their eggs in one neft; and that, if any one touches their eggs, the birds, that difcover this by the fmell, never lay any more eggs in the fame place; but, if the eggs fhould chance to be left behind, trample them to pieces under their feet.

On the 21st, we paffed AKER HEIN's farm, and took up our quarters in the evening near *Klipp-rivier*. The land between the mountains was many times broader than Roode Zand, very dry like the Carrow, and much higher than Houtniquas land, that lay on the other fide of it.

That piece of land, which lay on the other E 3 fide

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fide of the mountains to the left, was called Kankou.

On the 22d, crofling Brack rivier and Matjes drift, and going through Matjes kloof, where Lange kloof begins, we rode paft HELBECK'S farm to VAN STADE'S.

Here we observed on the plain high and long, diffinct and separate, mountains, which had the fame direction as the large chain of mountains before mentioned.

On the 23d, we paffed Buy's eftate in our way to GERT VAN ROIJEN'S, near Diep rivier.

The mountains which here formed Lange kloof, were, to the right, the long range of mountains fpoken of above, and, to the left, a connected ridge, which began near Matjes kloof, and was lower than the long chain of mountains that lay by the fide of it, and whofe tops could plainly be difcovered. The land which lay on the other fide of the laft-mentioned low ridge, and the higher ridge, is called Camenaffie, a tract of land, which is likewife already peopled by the induftrious colonifts. The country behind that higher range of mountains is a poor, flat, and dry Carrow-field, which borders on the Eaftern Olyfant's rivier.

The mountains in general ftretched E. N. E.

On the 24th, we arrived at TUNIS BOTA'S farm. Here the ridge of mountains, over which we paffed to the left, divided and formed a vale, where

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where nothing but ridges of mountains lay before us, and which was not more than about two mufquet fhot in breadth. The vale which we left to the right, goes to Houtniquas mountains, over which one may get on horfeback to Houtniquas woods.

Proceeding on our journey we paffed on to HANS OLOFSON'S farm : here was a carriage road that led to Camenaffie-land, and Olyfant's warm bath.

On the 25th, we rode farther on in Lange kloof to MAT ZONDAG'S.

The land in Lange kloof is bare, and without any fhrubs or bufhes, but abounds much in grafs.

The cold in winter is very fevere in this vale, and fnow fometimes falls here which lies on the ground three or four days,

As the year before I had pretty narrowly examined this fpot, and had gathered the few plants that grew upon it, I was now determined to climb up to the higheft fummits of the mountains, in order to obferve the direction in which they ran; but I could not poffibly have had a better reward for my pains, than the glorious profpect that now lay before me, in which a tract of mountains of a great many leagues (as it appeared to me) in breadth, divided into feveral ridges, with their intervening vales, was ex-E 4 tended,

tended, like a map, before my eyes, and fhewed me plainly that the greateft part of the road I had travelled lay over various ridges of mountains, and along various dales, on a confiderable breadth of hilly country, where many thoufands of men, and millions of other animals find both food and fhelter; while, on the other hand, the more plain and level land, in this fouthernmoft part of Africa, for want of water, can feldom exhibit a fingle quadruped, or afford water to one folitary bird.

I also observed, that the ranges of mountains to the eastward, diverged more and more from each other, so that those that lay to the left, the farther they went into the country, the more easterly was their direction.

Want of house furniture, and a turn for œconomy, had induced the husbandmen here to make lanterns out of calabashes, which was done by cutting feveral holes in them.

On the 26th, we fet out for PETER FRERE's, a bold and daring fportfman, and one of the beft elephant-hunters in the country; a man who fpoke the Hottentot language fluently.

Opposite to this fpot ended the Camenafie country, and a waggon road went from thence across the mountains.

In all this tract of country, no other business was carried on than that of grazing; and a great quantity

quantity of butter was fent from hence to town, where the farmer received no more than from three to fix flivers per lb. although it flands the Company in as much as two fhillings.

The hufbandman, on his journey to and from the Cape, refts in the day, and travels in the cool of the night; but we were obliged to do just the reverse of this, if we wished to collect any plants and other things which conftituted the whole object of our expedition. We took care therefore to turn our oxen out to grafs at night, at every place where it could be done with fafety. Thus, one evening here, we had turned our oxen out to graze in the plain, but not far from the farm. The evening was darker than ufual; the dogs made a terrible noife, and the whole herd of oxen thronged towards the houfe, without our being able, as the night was fo dark, to go to their affiftance with fire arms. In the morning, we found that the cattle had been purfued by a tyger-wolf (Hyana maculata) and that one of our oxen had been bit in the groin, and a portion of the fkin, fix inches broad, had been torn away; but that the inteftines did not hang out, nor were they otherwife hurt. The hyæna is a bold and ravenous animal, which frequently eats the faddle from under the traveller's head, and the fhoes from off his feet, while he lies fleeping in the open

open air. When one of these creatures gets into a sheepfold, it not only commits great havock amongst the sheep, but terrifies them to fuch a degree, that they run all together in a heap, and squeeze each other to death.

On the 27th, having paffed STEPHANUS FRERE'S, we came to MATTHEW STREIDUNG'S; and, on the 28th, to PETER NYCKERT'S; and, afterwards, to ANDREW DE PRE'S.

Eland-boks (*Capra orcas*) were fometimes to be met with and fhot in the mountains. This goat is as large as a middle-fized horfe, and its flefh has an agreeable tafte. The tongue, however, which, when falted and dried, is frequently carried up to the Cape for fale, is reckoned ftill more delicious, and is not inferior to a rein deer's tongue. This goat was faid not to butt with his horns, when wounded, as the Bonteboks and Gemfe-boks (*Capra oryx*) do.

I faw the kid caught of a very fmall and extremely fcarce goat, called *Orebi* (*Capra monticola*). It was of a brown colour, fcarcely larger than a cat, and very handfome. This animal was faid to inhabit the plains in Lange kloof; and, it was afferted, that neither fex have horns, though, it is highly probable, that the male has.

Kouka lay directly opposite on the left hand, and was a narrow piece of land between the mountains, which was already invaded by the colo-

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colonifts, although it was fo finall as to have only two farms on it.

I was every where told that this extensive country came more and more under the dominions of the Dutch colonist, to whom the Hottentots were constantly obliged to give way, and retire farther into the country. The Dutch always took possession at first of the best and most fertile parts of the land, in the wider valleys, leaving to the Hottentots, for a little while longer, the inferior tracts, between mountains, in the narrower vales, till, at length, the poor favages were driven even out of these, and obliged entirely to quit their native plains.

On the 29th we arrived, towards evening, at THOMAS FRERE's, after a very troublesome day's journey. The roads were very flippery and heavy, in confequence of the great rains that had fallen; and the rivulets that ran in the middle of the valley, and which we were feveral times obliged to crofs, were of an unufual depth, fo that the proper place for fording them could not always be found. This occafioned my driver, unfortunately for me, to mifs the right path, and he drove fo deep into the river, that the water rofe up to the middle of the cart, and wetted my plants, both dried and fresh, my infects, clothes, &c. quite through; fo that, when we arrived at the farm at night, I was obliged

obliged to look over, with incredible pains, and dry before the fire, a great multiplicity of articles, many of which, however, were quite fpoiled. I alfo now travelled in the cart myfelf, as my horfe had loft much flefh, and was fo much wearied by the journey that I had been obliged to leave him behind at the laft farm. The water not only came up to my middle in the cart, but the bottom of the river likewife was full of mud, which was ftirred up by the wheels, and which was fo thick and heavy that it was with the greateft difficulty that the oxen could drag the cart through.

On the day following, being the 30th, we proceeded to Effebosch, a pretty little neat wood, which has acquired its name from the large trees Effenboom, (or Ash trees, Ekebergia capensis) that grew here; the leaf of which greatly refembles that of the European ash (Fraxinus). Large fig-trees too (Ficus capensis) the fruit of which is eaten by the baboons, grew here in abundance. As there was no farm as yet laid out hereabouts, we took up our night's lodging in the open air, at the fide of a few bushes, and our faddles ferved us for pillows.

On the ift of December, we went down Krommie-rivier country, which takes its name from Kromme rivier (the crooked river) that runsmeandring through it. This valley is nothing but

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but a continuation of Lange kloof; but finks lower by degrees, and is likewife narrower, being fometimes no more than a gun-fhot in breadth. It has fcarcely any level ground; but flopes off entirely from the mountains on each fide to the middle, where the finaller ftreams that run down from thefe mountains are collected, and form a large river.

Lange kloof and Kromme rivier, in which there are at prefent but few of the ancient inhabitants remaining, were formerly, in all probability, inhabited by the Heykom Hottentots, in great numbers.

At the end of this valley, to the right, the heads of the mountains began to approach clofer to each other, and to be lower, till, at length, they quite difappeared, without reaching to the feafhore. The mountains too were bent out of their courfe in fuch a manner on each fide, that they now chiefly flretched towards the fouth-eaft.

We rode paft VERMAR's eftate, where Lange kloofs and Kromme-rivier mountains came to an abfolute termination on the left; and the country now appeared very broad between the feafhore and that chain of mountains which extended ftill farther to the left, paft Olyfant's warm bath: in this manner, that both the mountains to the right, and those to the left, which had hitherto extended from Bokke-veld, now came to a termination; and, to the left, were

were only feen the Olyfant mountains, ftretching about E. N. E. within which there were a few ranges of mountains that ran moftly E. or N. E. but were of no great extent.

So that the Olyfant mountains were feen to continue their courfe; but of thefe feveral ridges were plainly difcerned, which at laft terminated gradually in fingle points. The neareft vifible range to the left is called Zeeko riviers-berg, and comes to a termination near ISAAC MEYER's farm, where we afterwards arrived. Behind it was feen another ridge, called Meulen-riviers Mountain, which terminated near Koks's farm, where we ftaid and refted ourfelves feveral days, as this farm was almost the farthermost of the colony on this fide. Behind the laft-mentioned ridge, another was feen to peep out farther on, which was called Kabeljaw-riviers-berg, and was terminated by the river of the fame name.

Zeeko (or fea cow) river, which at a finall diftance from the farm runs into the fea, is, in the part near the fea, tolerably well fupplied with fifh. The fifhes found in this and other rivers all come up from the fea; higher up fifh are feldom to be met with in the rivers of this part of Africa; fo that there is no fifhing carried on at the mouths of the rivers, and then it is done with nets, and by thofe only whofe farms lie near the fhore. One day when my landlord's fons

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fons went down to the fea fhore a fifting with a few Hottentots, I accompanied them thither for the purpose of botanizing. The river was very broad here, it is true, but fo choaked up with fand banks that had been caft up from the fea, that when one went into it, the water did not come up higher than one's middle. I walked about for feveral hours quite naked, as well for the fake of bathing, as of collecting infects and fhrubs that grew there on the banks, with nothing but a handkerchief about my waift, not fufpecting that the fun beams would have any bad effect upon me. But, in a fhort time, I found that all that part of my body which was above the water, was red and inflamed. This diforder increased to fuch a degree that I was obliged to keep my bed for feveral days, and could not even bear a fine calico fhirt on my body (efpecially over my fhoulders, which were the parts most exposed to the fun's rays), till I had anointed myfelf with cream, in order to lubricate my parched fkin.

The fields here abounded in grafs, and confequently were proper for the rearing of horned, cattle, which, with butter, were the only articles they could difpofe of at the Cape.

They churned here almost every day, and the butter-milk, which was very feldom confumed by the cattle, formed rivulets, as it were, in the places where it had been thrown out.

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The Hottentots in this farmer's fervice were numerous; among thefe, the girls that were employed in churning were obliged to wafh themfelves, and keep themfelves clean, at leaft their hands and arms.

A curious and handfome fpecies of Bulfinch, (Lang staart Loxia macroura, the long-tailed grofsbeak of LATHAM) was found all over these fields, efpecially in fuch places as were boggy, or overgrown with rufhes. It refembles the goldfinch in its red velvet fummer drefs, in which the cock at this time of the year was fplendidly attired; but differed much from that bird by its long tail, which was much longer than its body. In winter the cock is grey, as the hen, who has not a long tail, is all the year round. It was curious to fee this bird fly, with its long dependent tail that feemed to weigh it down, infomuch that it could never fly ftraight forward, but always zigzag up and down. In windy weather its flight was much impeded by the length of its tail, fo that it could not direct its courfe at will, but was frequently thrown out of its direction. Its flow flight (the heavieft I ever faw in the bird kind) made it eafy to fhoot, and when it rained, as well as in windy weather, one might almost catch it with one's hands.

The Hottentots that live hereabouts, and even those that are in the fervice of the Europeans, intermarry without any ceremony or regularity. A woman too here has fometimes a husband and a substitute.

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fubflitute. If a married Hottentot at any time goes on a journey, his wife may in his abfence marry another, a circumflance that happened to my driver, who, on his return home, with all that he had earned in his expedition, found himfelf a widower.

Last year I had feen at different places, that the Hottentots who have no horfes, made use of draught-oxen for riding and carrying burthens; and I now had an opportunity to learn how thefe oxen were broke in. An ox that is defigned for riding must be accustomed to bear its rider a few weeks after it is calved, for which purpofe first a skin is tied over its back, with which it is turned into the field along with the cow. Afterwards little Hottentot boys are fet upon its back, and when the animal is thus broke in a little, another calf, quite a novice, is tied fast to its fide, in order to tame it the better. This calf-riding, which was always done galloping, was entertaining enough, and the fport generally ended in the calf throwing its rider.

A finall grey fpecies of grafshopper (Mantis faufta) was found both here and at other places, which has obtained the name of the Hottentots God, and is fuppofed to be worfhipped by them. I could not perceive any reafon for this fuppofition, but it certainly was held in fome degree of effecm; fo that they did not willingly hurt it, and deemed VOL. 11. F that

that perfon or creature fortunate on which it fettled, though without paying it any fort of adoration.

As water-turtle are found here, I caught one for the fake of the blood, with a view of trying its virtues against the poison of ferpents, as likewife to keep by me for occasional use. A very fmall quantity of blood was procured from a turtle that was not larger than the palm of one's hand. After the head was cut off, and the blood had run out, the ferum was feparated, and the red part that fwam at top, was dried upon paper, when it fcaled off and turned black.

As the fpecies of palm called the bread-tree (Zamia caffra) was found in these parts, we looked for the fruit, which is very fcarce, and gathered the feeds. Certain trees produce only male flowers, in a large cone without feeds, and other trees again yield a fimilar cone, as large as a man's head, with genuine feeds. To the under part of the fcales of the male cone are fixed an infinite number of antheræ, which burft, and contain a white toughifh pollen. On the female cone, feeds, as large as jordan almonds with the fhells on, are contained between the fcales, furrounded with a reddifh pulp, which is good to eat. The fruit fprang out of the very top of the palm, frequently before there was time for the ftem to be formed above the furface of the earth. The feed was fuppofed to come up best after being planted out,

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out, if it was covered with ftraw, which was to be fet on fire, and burnt down clofe to the ground ; or if the feed was previoufly fteeped in warm water:

In the whole of the extensive tract of country which we had traverfed, from Roode Zand to Camtous rivier, populous as it now is; not a church is to be found. The farmers indeed had requefted to have one, and, although all the reft of the clergy; as well in the town as in the country, are paid by the Company, had offered to pay the clergyman themfelves, provided the church were erected in the middle of the colony, in a place most convenient for them all; propofals likewife had been given in for this purpofe, and even permiffion afked for them to build one at their own expence near Kafferkuyls rivier, by which place most of them must pass in their journey to the Cape : but this well-meant and pious undertaking had been now for feveral years without fuccefs, owing to the oppofition of the landroft and a few of his neighbours, who wifhed to have the new church built near his refidence of Zwellendam, although it lies at one end of an extensive colony.

Our landlord was an elderly man; and born in Europe: he was one of the keeneft fportfmen in the country, and had made long journies at various times into the interior part of the coaft of F 2

Caffraria,

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Caffraria, in order to fhoot elephants, by the fale of whofe teeth he had acquired a tolerable fortune, and had finally fixed his abode here in a pleafant and advantageous fpot. He related to me upon his honour feveral circumftances to which he had been an eye witnefs, and which a traveller is fo very feldom fortunate enough to have an opportunity of feeing himfelf. Once, for inftance, when he was out a hunting, having obferved a fea-cow (Hippopotamus amphibius) that had gone a little way up from a neighbouring river, in order to calve; he, with his fuite, lay ftill and concealed in the bushes, till the calf made its appearance, when one of them fired, and thot the mother dead on the fpot; the Hottentots, who imagined that after this they could catch the calf alive, immediately ran out of their hidingplace to lay hold of it, but, though there were feveral of them, the new-born calf, which was ftill wet and flippery, got away from them, and made the best of its way to the river, without having previoully received any inftructions from its mother, either relative to the way it should take, or to this most natural means of faving itfelf. He alfo told me that the female elephant always kneels in the act of copulation, and that therefore the male can never line her, excepting when fhe is hot. Concerning lions, the mode of hunting them, their nature and manners, he knew much

much from his own experience; and I took the more pains to procure information relative to thefe matters, as I now had defigned to wander for a long time through a country where the fky would be my only canopy, and an open plain, inhabited by wild beafts, my lodging; and as at the fame time I was very fenfible that it was of no little fervice to a traveller to be acquainted with the nature and difpofition of the wild beafts, which he is carefully to avoid.

A lion may lie in a bufh without moving when a man is paffing by, fo that the man feems only to take no notice of it. It may likewife perhaps fart up, without doing any harm, if the man do but ftand ftill, and not take to his legs. A hungry lion, however, is much more dangerous, and lefs merciful; yet it is not fond of attacking a man, at leaftit is very nice in the choice of its prey, fo that it prefers a dog to an ox, and had much rather eat a Hottentot than a chriftian, perhaps becaufe the Hottentot, being befmeared, always ftinks, and becaufe, as he never uses falt or fpices, the juices of his body are not fo acrid. It likewife rather attacks a Hottentot or flave than buffalo-beef that is hanging up; thus it happened to our landlord one night, that the lion paffed through the bushes where beef of this kind was hung up, in order to feize a fleeping Hottentot. In a wood, to climb up into a tree is a fure way of avoiding F 3 the

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the lion, but not the tyger, which frequently, when warmly purfued by the hounds, runs up into a tree, and finds a fafe afylum there. On meeting a lion, one ought never to run away, but ftand ftill, pluck up courage, and look it ftern in the face. If a lion lies ftill without wagging its tail, there is no danger, but if it makes any motion with its tail, then it is hungry, and you are in great danger. If you are fo fituated that there is a pit between the lion and yourfelf, you may then fire on it, as it will not venture acrofs the pit, neither will it purfue any one up an height.

In proportion as the farmers have cleared the land, and laid out farms in the interior parts of the country, the lion and other fierce animals have neceffarily been put to flight and deftroyed. This our hoft knew not long fince by woeful experience, but now lived in fome degree of fecurity with refpect to his flocks and herds. The lion is poffeffed of fuch immenfe ftrength, that he will not only attack an ox of the largeft fize, but will very nimbly throw it over his shoulders, and leap over a fence four feet high with it, although at the fame time the ox's legs hang dangling on the ground. No animal however is eafier to extirpate than the lion, notwithftanding its great ftrength, agility, and fagacity. After having difcovered by the track, how many lions there are in the troop, the fame number of mulquets

mulquets are placed on the fpot whither it is fuppofed that the lion will come; after this a piece of carrion is tied to a ftrong cord, which is fastened to the trigger of one of these guns; the inftant that the lion touches the carrion, the gun goes off, which is fo placed as to fhoot the beaft through the head. The other lions that are prefent are fo far from being fcared away by the report, that it may happen that one of them fhall go towards the fmoke, and fix its claws into the difcharged gun, and all the reft, one after the other, fall be fore the other guns, infomuch that fometimes the whole troop is deftroyed in one night. But fhould a lion chance to be only wounded, and not killed on one of these occasions, he will never more approach a fpring-gun, and the lion thus wounded will attack a man without being impelled to it by hunger.

The hoof-diftemper began now, as the heat of the fummer increased, to appear amongst the horned cattle, and some of my English fellowtraveller's team were affected with it, infomuch that he was obliged to exchange them for others that appeared to be healthier.

My oxen had no other complaint than hunger, and they were fo emaciated and worn out that it would feem as if no diffemper could lay hold on their lean ribs and finall fhanks. In the mean time, after our cattle were refted, we fet out to F_4 continue

continue our route as far as the mountains called the Snow-mountains. And as the country through which we were to pafs afterwards was either inhabited by Hottentots only, or quite uninhabited, we refolved to take with us fome Hottentots as interpreters, guides, and guards, and at the fame time to lay in a fmall flock of provision.

Our worthy hoftefs, therefore, put up for us a parcel of wheat-bifcuits, a few loaves of wheaten bread, and a fmall tub of butter, and likewife killed a large fheep, which was falted, and fewed up in its own fkin,

The Hottentot language is not every where the fame, but has very different dialects; all of them, however, are commonly pronounced with a kind of fmack, or clacking of the organs of fpeech. This clacking I obferved to be made in three different ways, which renders it almost impossible for the Europeans to speak it properly, although their children, who have been brought up among those of the Hottentots, learn to speak it fluently. The first of these modes of clacking is the dental, in which the tip of the tongue is ftruck against the teeth. The fecond is the palatial, when the noife is made by the tongue firiking against the palate. The third, or guttural, is the most difficult of all, and performed quite low down in the throat, with

with the very root of the tongue. Thefe clackings are the more difficult to perform, as they must be made at the very instant of uttering the word, and not before nor after. They occur not only in the beginning, but likewife in the middle, of a word; and fometimes two clackings occur in a word of two or three fyllables. When feveral Hottentots fit converfing together, the found is very like the clacking of fo many geefe. That the pronunciation of the language is troublefome to them, was very evident to me, from the gefticulations they made, and from the circumstance that they wearied their lips. They could talk, however, with a tobacco pipe in their mouths, but in very fhort fentences only. The language of the Caffres I obferved was much eafier, and was fpoken with much lefs clacking, which was heard in fome few words only.

So that the inhabitants of this fouthernmoft promontory of Africa have a regular language; but, in other refpects, are fo rude and uncultivated as to have no letters, nor any method of writing or delineating them, either on paper, in wood, or on ftone. It is in vain, therefore, to feek for any kind of learning, or any antique records, among them; and few nations in the world, perhaps, are lefs enlightened than they. Thus too the Hottentots could

could not name in their language feveral things in ufe among the colonifts, fuch as bafon, the bow of a yoke for draught oxen, a kettle, to-bacco, &c.

As I was fometimes, for feveral weeks together, among the Hottentots, out of the bounds of the colony, I was obliged to learn fomething of their language; and, the better to recollect what I had learned, I formed a finall vocabulary, and, with three different marks, diftinguifhed the three ufual clackings; of which the dental is marked with the letter a, the palatial with A, and the guttural with á.

KOLBE has a long lift of words in the Hottentot language; and Profeffor SPARRMAN has even given us feveral dialects of it: and, as fome part of what I have taken down, differs from theirs, I have here annexed it, for the ufe of those that are curious on the fubject of languages.

1	 	Ko ISE
2	 	Ka MSE
3	 	ARUSE
4	 	GNa To I
5	 	METUKa
6	 	KRUBI
7	 	GNA TIGNA
8	 	GNINKA
9	 Final I	TUMINKMA
01	 	GOMATSE

Dog

INTO	CAFI	FRARIA,	1773.	75
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Dog	ARIKÆ, TUTU, TUP
Bitch	Tus
Flea	a TTF
Milk	BI,BIP
Bread	Brè -
Give bread	Brè Marè
Butter	BINGèI
Good day	Dabè, Dabetè
Hemp - '	Dákhan
Fire	eI,eIP,NeIP
Make fire	eI Koa Kòl
Which is the way to the	DANNA HAA SE
next village?	JaKroi aDu
Where is?	DEMMA '.
Cow	GóS,GóOSA -
Cow's milk	GóSBIP :
Good evening	GoI MOTSKI
Dwelling place	Geihep
Bad weather	HoMA
Come hither	HÆVA HA, KÓNG
Come hither, my friend	HAGATSCHI-
Ox	HóGó, KUMAP
Bring hither	HANKA
Horfe	HAKVA, HAAP
Where is the horfe ? -	Накуа Демма на?
Bring the horfe hither	HAKVA SEO -
Table	Heip.
Wife	HoNNES, KUS
Water	Камма -
Lyon	Ка́ма -
Mouth	KAM
Nice, delicious -	Kanji
Good morning -	KoA Mostschi
Tobacco pipe	Kop

Man

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4.6.5			2
Man		-	KuPP
Drink	-		Ka
Foot-path	-	-	Kudu
House, farm	-	-	Комма
It is good	-	-	Kal HEM
Buffalo	-		Kaw
Seacow	-	- /	KoU
Hole	-1.00	-	KóU, Twap
To beat	- 2	-	KOA
Gun		-	Кави
Penis	-	-	Hop
Glans penis		-	KoUTERE
Father	-	-	AMBUP, TIKKOP
Mother		-	ANDES, TISSOS
Sifter	-	è.	KANS, TIKANDI
Brother	-	-	KARUP, TIKAKWA
Fine weather	4.000	-	Там
Pot, drum	-	(eni	Su
Caffre corn	-		Semi
Warm		÷ .	SANG
To eat		-	SINNo
Knife	-	-	NóRAP
Chair	-	- 0	NENaMHoP
To fleep	-	-	O M
To fow with a	needle, t	o darn	Ом
Houfe	- 0 -	-	Омма
Eye	-	-	Mu
Give		-	Maré
Money	-		MARE
Eyes	-		Mum
Hat, cap		-1	Кава, Тава
Wolf	~		KoKA
Egg			Кавіка
Cock	-		KóUKEKURR

Cold

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Cold -	-	Korosa
Waggon -	-	KROI, KROJIM, KULE
Red glafs beads	-	{KRAKWA (by the Caffree KITI KITI)
Elk antilope -	-	Ken
Female elk -	-	Kens
Elks, a troop of	-	Kanna
Meat, flefh -	-	Kop
People -	-	KEUNA
Tooth -	-	KoM
Nofe -	-	KoYP
Iron, copper -	-	KoRUP
Breast of a woman	-	. SAMMA
Where is the waggon	2	HAVA KROJIM?
Here is the waggon	-	HÆVA KROJIM
Mare -	-	HASS
Fox -	-	GIEP
Run away -	-	Su se K6N
Tiger -	-	GVASSUP
Ichneumon -	-	eP
Sheep -	-	GONA
Cheft -	-	GEIP
Hart beaft -	-	Каммар
A rock -	-	Oip
Have you feen?	-	Musko
Drove of oxen		MANQUA
If you pleafe -		KuMSEA, HUNKOP
Turn about, drive ba	ck	KARRA
A Hottentot drefs	-	NAMKVA
Euphorbía viminalis	-	KUIJOP

The children, which among the Hottentots are numerous, at first wear rings about their legs made of rushes, instead of those that are formed of

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of hides, till they become accuftomed to them. In like manner I obferved, that the Caffre boys at first exercised themselves in throwing a pointed flick, till in process of time they were able to manage the javelin.

The Hottentots are much inclined to believe in witchcraft, and when any one falls lick, or dies, they confider him as bewitched.

The Hottentots univerfally wore a bag just before the parts of fhame, which was made of the grey part of the back of the Cape fox, and was fastened round the body with a thong. The Caffres wore a bag fimilar indeed to this, but made of another kind of skin, and at the same time fo small that it fometimes did not cover more than the foreskin.

At the entertainments which the Hottentots made, and particularly those made to divert us, I had an opportunity of seeing their card-playing, and a kind of an inftrument called Korà. It refembled at first fight a fiddless fick, and was made of a wooden stick, over which was extended a string. At the end of this was fastened the tip of a quill, and upon this they played with their lips; blowing as if it were a wind inftrument, fo as to make it produce a jarring found. What they called card-playing, was a particular sport, in playing at which they talked, stapped their fingers, and laughed.

Having

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Having laid in a ftock of provisions for our journey, and put our fire-arms in good order, on the *9th of December*, we took the road to Cabeljaus rivier, where the laft farm now laid out was looked after by a fervant, and belonged to VAN RHENEN, a rich burgher at the Cape.

On the 10th, we croffed Cantous rivier, which at this time formed the boundaries of the colony, and which was not fuffered to extend farther. This was ftrictly prohibited in order that the colonifts might not be induced to wage war with the courageous and intrepid Caffres, or the Company fuffer any damage by that means. The country hereabouts was fine, and abounded in grafs.

Proceeding farther we come to *Looris rivier*, where the country began to be hilly and mountainous, like that of Houtniquas, with fine woods both in the clefts of the mountains, and near the rivulets; here and there we faw large pits that had been dug, for the purpofe of capturing elephants and buffaloes. In the middle of the pit ftood a pole, which was very fharp at the top, and on which the animal is impaled alive, if it fhould chance to fall into the pit.

The Hottentot captain that refided in this neighbourhood, immediately on our arrival, paid us a vifit in the evening, and encamped with part of his people not far from us. He was diftinguifhed

guished from the reft by a cloak, made of a tyger's fkin, and a ftaff that he carried in his hand.

On the 11th, we paffed Galgebosch in our way to VAN STADE's rivier, where we lighted our fires, and took up our night's lodging. The Gonaquas Hottentots that lived here, and were intermixed with Caffres, vifited us in large bodies, and met with a hearty reception, and, what pleafed them moft, fome good Dutch tobacco. Several of them wore the fkins of tygers, which they had themfelves killed, 'and by this gallant action were entitled to wear them as trophies. Many carried in their hands a fox's tail, tied to a flick, with which they wiped off the fweat from their brows. As thefe people had a tolerable ftock of cattle, we got milk from them in plenty, milked into baskets which were perfectly watertight, but for the most part fo dirty that we were obliged to ftrain the milk through a linen cloth.

On the 12th, in the morning, we paffed VAN STADE's rivier, and arrived at two large villages confifting of a great many round huts, difpofed in a circular form. The people crouded forward in fhoals to our waggon, and our tobacco feemed to have the fame effect on them as the magnet has on iron. The number of grown perfons, appeared to me to amount to at leaft two or three hundred. When the greateft part of them had received a little tobacco they 4 retired

retired well pleafed, to a diftance in the plain, or elfe returned home. The major part of them were dreffed in calf-fkins, and not in fheepfkins, like the Hottentots.

We had brought with us feveral things from town, with which we endeavoured either to gain their friendihip, or reward their fervices, fuch as fmall knives, tinder-boxes, and fmall lookingglaffes. To the chief of them we prefented fome looking-glaffes, and were highly diverted at feeing the many pranks thefe fimple people played with them: one or more looking at themfelves in the glafs at the fame time, and then flaring at each other, and laughing ready to burft their fides; but the most ridiculous part of the farce was, that they even looked at the back of the glafs, to fee whether the fame figure prefented itfelf as they faw in the glafs.

These people, who were well made, and of a fprightly and undaunted appearance, adorned themselves with brushes made of the tails of animals, which they wore in their hair, on their legs, and round their waist. Some had thongs cut out of hides, and others strings of glass-beads, bound several times round their bodies. But upon no part of their dress did they fet a greater value than upon small and bright metal plates of copper or brass, either round, oblong, or square. These they scowered with great care, and hung VOL. 11. G them

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them with a ftring, either in their hair, on t'eir foreheads, on their breafts, at the back of their neck, or before their pofleriors; and fometimes, if they had many of them, all round their heads. My English fellow traveller had brought with him one of those medallions struck in copper, and gilt, that had been fent by the two English fhips, which were at this time failing towards the fouth pole, to be diffributed amongst the different nations in that quarter of the globe. This medal was given to one of the Caffres who was very familiar with us, and who was fo well pleafed with it, that he accompanied us on the whole of our journey and back again, with his medal hanging down glittering just before the middle of his forehead.

Some of thefe people had hanging before their breafts a conic purfe made of the undreffed fkin of an animal, which was faftened about the neck by four leathern thongs, and ferved them for a tobacco pouch. Some of them wore about their necks a necklace made of fmall fhells, called ferpents fkulls (*Cyprwa moneta*) ftrung upon a ftring, and to this hung a tortoife-fhell, for keeping the bukku ointment in. Moft of them were armed with as many javelins as they could well hold in one hand.

The huts were covered over with mats made

of

of rushes, which, with their milk-baskets, were fo close that no water could penetrate them.

The range of mountains which, during our whole journey, we had hitherto had to the left, now came to a termination; and, to the right of us, was feen the fea. A larger range of mountains, however, proceeded farther into the country to the left.

The country hereabouts was full of wild beafts of every kind, and therefore very dangerous to travel through. We were more particularly anxious concerning our cattle, which might eafily be feared away by the lions, and loft to us for ever.

We were likewife too few in number, and not fufficiently armed, to protect ourfelves againft the inhabitants, whofe language our Hottentots now no longer perfectly underftood. We therefore came to a refolution to intice from this village another troop of Hottentots to go along with us, which we accordingly did, by promifing them a reward of tobacco and other trifles that they were fond of, as alfo to kill for them a quantity of buffaloes fufficient for their fupport. This promife procured us a great many more than we wanted, and our troop confifted now of above an hundred men.

The 13th. The country in which we now were, was called *Krakakamma*, and abounded with G 2 grafs

SECOND JOURNEY

grafs and wood, as well as wild beafts of every kind, which were here ftill fecure in fome meafure from the attacks of the colonifts; thefe were chiefly buffaloes, elephants, two-horned rhinocerofes, ftriped horfes and affes, (Zebra, Quagga) and feveral kinds of goats, particularly large herds of hartebeefts, (Capra dorsa).

We travelled first to *Krakakamma valley*, and afterwards from hence farther downwards to the fea shore, where there was a great quantity of underwood, as well as wood of a larger growth, filled with numerous herds of buffaloes, that grazed in the adjacent plains.

In the afternoon, when the heat of the day abated, we went out with a few of our Hottentots a hunting, in hopes of killing fomething wherewith to fatisfy the craving ftomachs of our numerous retinue. After we had got a little way into the wood, we fpied an extremely large herd of wild buffaloes, (Bos eaffer), which being in the act of grazing, held down their heads, and did not obferve us till we came within three hundred paces of them. At this inftant the whole herd, which appeared to confift of about five or fix hundred large beafts, lifted up their heads, and viewed us with attention. So large an affemblage of animals, each of which taken fingly is an extremely terrible object, would have made any one fhudder at the fight, even one who had not,

INTO CAFFRARIA, 1773.

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not, like me, the year before, had occasion to fee their aftonishing ftrength, and experience the rough manner in which they treat their opponents. Neverthelefs, as we were now apprized of the nature of the animals, and their not readily attacking any one in the open plains, we did not dread either their ftrength or number, but, not to frighten them, flood still a little while, till they again flooped down to feed; when, with quick fteps, we approached within forty paces of them. We were three Europeans, and as many Hottentots trained to fhooting, who carried mufquets, and the reft of the Hottentots were armed. with their javelins. The whole herd now began to look up again, and faced us with a brifk and undaunted air; we then judged it was time to fire, and all at once let fly among them. No fooner had we fired, than the whole troop, intrepid as it otherwife was, furprifed by the flash and report, turned about and made for the woods, and left us a spectacle not to be equalled in its kind. The wounded buffaloes feparated from the reft of the herd, and either could not keep up with it, or elfe took another road.

Amongst these was an old bull buffalo, which came close to the fide where we stood, and obliged us to take to our heels, and fly before him. It is true, it is impossible for a man, how fast foever he may run, to outrun these animals;

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nevertheless we were so far instructed for our prefervation, as to know that a man may efcape tolerably well from them, as long as he is in an open and level plain; as the buffalo, which has very fmall eyes in proportion to the fize of its head, does not fee much fide-ways, but only ftraight forward. When therefore it is come pretty near, a man has nothing more to do than to throw himfelf down on one fide. The buffalo, which always gallops ftraight forward, does not observe the man that lies on the ground, neither does it mifs its enemy, till he has had time enough to run out of the way. Our wounded bull came pretty near us, but paffed on one fide, making the beft of his way to a copfe, which however he did not quite reach before he fell. In the mean time, the reft of our Hottentots had followed a cow that was mortally wounded, and with their javelins killed a calf. We, for our parts, immediately went up to the fallen bull, and found that the ball had entered his cheft, and penetrated through the greateft part of his body, notwithstanding which he had run ' at full fpeed feveral hundred paces before he fell. He was far from being young, of a dark grey colour, and almost without any hairs, which, on the younger fort, are black. The body of this animal was extremely thick, but his legs, on the other hand, fhort, When he lay on the ground, his

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his body was fo thick, that I could not get on him without taking a running jump. When our drivers had flaved him, at leaft in part, we chofe out the most fleshy pieces, and pickled fome, and at the fame time made an excellent repart on the fpot. Although I had taken it into my head that the flefh of an old bull like this would have been both coarfe and tough, yet, to my great aftonifhment, I found that it was tender, and tafted like all other game. The remainder of the bull, together with the cow and the calf, were given to the Hottentots for their fhare, who were not at all behind hand, but immediately made a large fire on the fpot, and boiled the pieces they had cut off without delay. What they preferred, and first of all laid on the fire, were the marrowbones, of which, when broiled, they eat the marrow with great eagernefs. The guts, meat, and offals, they hung up on the branches of trees; fo that, in a fhort time, the place looked like a flaughter-houfe; about which the Hottentots encamped in order to broil their victuals, eat, and fleep.

On the approach of night, my fellow travellers and I thought it beft to repair to our waggons, and give orders for making our cattle faft, before it grew quite dark. In our way we paffed within a few hundred paces of five lions, which, on feeing us, walked off into the woods.

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Having tied our beafts to the wheels of our waggons, fired our pieces off two or three times in the air, and kindled feveral fires round about our encampment, all very neceffary precautions for our fecurity, as well with refpect to the elephants as more particularly to the lions, we lay down to reft, each of us with a loaded mufquet by his fide, committing ourfelves to the care of God's gracious providence. The like precautions we always observed in future, when obliged to encamp in fuch places where man indeed feemed to rule by day, but wild beafts bore the fway at night. These free denizens of the earth, for the most part, lie quiet and still, in the shade of woods and copfes during the day, their time for feeding being in the cool of the evening and at night, at which time lions and other beafts of prey come out to feek their food, and devour the more innocent and defenceless animals. A lion cannot by dint of ftrength, indeed, feize a buffalo, but always has recourfe to art, and lies in wait under fome bufh, and principally near rivulets, where the buffalo comes to drink. He then fprings upon his back with the greateft agility, with his tremendous teeth biting the buffalo in the nape of his neck, and wounding him in the fides with his claws, till, quite wearied out, he finks' to the ground and dies.

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On the 15th, in the morning, I went out to fee whether the trees of the woods, of which this part of the country confifted, had yet any bloffoms upon them; but found that the fummer was not far enough advanced, and that the trees were fo clofe to each other, and fo full of prickles, that without cutting my way through them, I could not advance far into the wood, which, befides, was extremely dangerous, on account of the wild beafts. Here, and in other places, where it was woody, we obferved near the wateringplaces, the fresh tracks of buffaloes, as also the tracks and dung of elephants, two-horned rhinocerofes, and other animals,

In the plains there were feriped horfes and affes (Equus Zebra and Quagga), hartebeefts (Capra dorcas), koedoes (Capra firepficeros,) &c.

We therefore got ready and fet out for Zwartkop's rivier, and the Salt-pan, not far diftant from it, where we baited during the heat of the day. Near this Salt-pan, as it is called, we had the fineft view in the world, which delighted us the more as it was very uncommon. This Salt-pan was now, to use the expression, in its best attire, and made a most beautiful appearance. It formed a valley of about threequarters of a mile in diameter, and floping off by degrees, fo that the water in the middle was fearcely four feet deep. A few yards from the water's

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water's edge this valley was encircled by a mound feveral fathoms high, which was overgrown with brush wood. It was rather of an oval form, and took me up a good half-hour to walk round it. The foil nearest the valley was fandy; but, higher up, it appeared to confift, in many places, of a pale flate. The whole Salt-pan, the water of which was not deep, at the fame time that the bottom was covered with a fmooth and level bed of falt, at this juncture, being the middle of fummer and in a hot climate, exactly fefembled a frozen lake covered with ice, as clear and transparent as cryftal. The water had a pure faline tafte without any thing bitter in it. In the heat of the day, as fast as the water evaporated, a fine falt crystallizing on the furface first appeared there in the form of glittering fcales, and afterwards fettled at the bottom. It was frequently driven on one fide by the wind; and, if collected at that time, proved to be a very fine and pure falt. The Salt-pan had begun to grow dry towards the north-east end, but to the fouth-westward, to which it inclined, it was fuller; to the weftward it ran out into a long neck.

It appeared to us fomewhat ftrange, to find, fo far from the fea, and at a confiderable height above it, fuch a large and faturated pool of faltwater. But the water which depofits this falt, does

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does not come at all from the fea, but folely from the rains which fall in fpring, and totally evaporate in fummer. The whole of the foil of this country is entirely falt. The rain-water which diffolves this, runs down from the adjacent heights, and is collected in this bafon, where it remains and gradually evaporates; and the longer it is evaporating the falter it is.

The colonifts who live in Lange kloof, and in the whole country extending from thence towards this fide, as alfo in Kamdebo, Kankou and other places, are obliged to fetch their falt from this fpot.

It was faid, that not far from this there were two more falt-pans, which however yielded no falt till they were quite dry.

Several infects were found drowned in the falt water, fome of which were fuch as I could not meet with on the bufhes alive, during the few hours that I ftaid here and walked about the copfes, which my curiofity induced me to do, aithough it was a very dangerous fpot, on account of the lions.

Our Hottentots, of whom we had now but a few in our fuite, and whom we had left to take care of our oxen that were turned out to grafs, we found faft afleep, overcome by the heat of the day. Towards evening, we drove a little farther on, and arrived at *Kuka*, where the brook was

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was already a mere ftagnant puddle, and had only a brackifh water in it; neverthelefs we took up our night's lodging here.

We were furprifed to find here a poor farmer. who had encamped in this place, with his wife and children, by ftealth, in order to feed and augment his fmall herd. And indeed thefe poor people were no lefs aftonished, not to fay terrified, at our arrival, in the idea, that we either had, or might, inform the government against them, for refiding out of the appointed boundaries. The farmer had only a finall hut made of branches of trees for his family, and another adjacent to it, by way of kitchen. We vifited them in their little manfion, and, at our requeft, were entertained by them with milk. But we had not been long feated before the whole bafon of milk was covered with a fwarm of flies, fo as to be quite black with them; and the hut was fo infefted with flies, that we could not open our mouths to fpeak. Within fo finall a fpace I never beheld, before nor fince, fuch an amazing number of these infects.

We therefore haftened to our carts; and having kindled our fires, and pitched our camp at a little diftance from the hut, liftened the whole night to the howling of wolves, and the dreadful roating of lions.

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On the morning following, being the 16th of December, we proceeded to great Sunday-river, the banks of which were very fteep, and the adjacent fields arid and meagre.

The major part of our ample retinue of Hottentots had now left us, after having got, in the courfe of the journey, venifon enough to feaft on, and, as we were approaching nearer and nearer to a country which would foon be changed to a perfect defart, where no game nor venifon was to be hoped for; and where it was expected that want of water would be in the higheft degree experienced. And, indeed, we now not only found ourfelves almost alone, but the oxen belonging to my English fellow-traveller were fo afflicted with the hoof diftemper, that feveral of them were lame, and fome of them were hardly fit to be put any longer to the waggon.

In confequence of this we held a council with the drivers; and, after mature deliberation, refolved (though fore againft our wills) to turn back, not finding it practicable to proceed, with emaciated and fick cattle like ours, through a barren and defart country, to the Dutch fettlements near the Snow mountains and in Camdebo.

We did not, however, neglect previoufly to enquire of the Gonoquas Hottentots concerning the nature of the country, the watering places for cutile, the wild beafts there, &c. and found

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and found that the plain was already very much dried up, and that long and forced marches (to use the expression) must have been made between the few brackish watering places that were to be met with in the way.

It is however not always very eafy to get the truth out of the Hottentots. One must never attack them with queffions to the point, when one wifhes to know the truth of any thing; but it must be fished out of them by degrees, and as it were difcourfing upon other fubjects. The Hottentots are alfo extremely referved, and wish before hand to know whether their visitors are good or bad people. Befides, as the Hottentots had now left us, we were deprived of the interpreters we fhould want, should we chance, in our road, to fall in with the Caffres or other nations. The Caffres, it is true, are not bad in themfelves : but, as they are in great want of iron, they are fometimes fo greedy after it, as to make no confcience of murdering a Christian for the fake of getting the iron from off the wheels of his waggon, which they forge and grind to make heads for their javelins. These Caffres, a few years before, had murdered HEUPNAER and fome of his company, who, in order to barter for elephants' teeth, had travelled into the country of the Caffres and Tambukki.

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The Snow mountains (Sneeuwberg) whither we had intended to direct our courfe, is a tract of land which lies very high, and, as it were, on a mountain, with other elevated tracts lying near it. It has acquired its name from the cold which prevails there, and the fnow that falls upon it. Sometimes the fnow lies there from one year to the other; and then the colonifts are obliged to remove from thence to the Lower-lands, as it is called. To the eaftward of the Snow-mountains, and farther to the northward, above the country of the Caffres, lies that of the Tambukki; and, to this joins a people that are whiter than the Hottentots, with curling hair, and are called Little Chinefe.

The Caffres, whofe country properly begins near the Great Fifh-river (*Groote Vifch-rivier*), raife a kind of peafe and beans, and a fpecies of Holcus, and, at the fame time, are in pofferfion of large herds of cattle.

As foon as the afternoon began to feel cool, and we had, in fome degree, inveftigated the plants which were to be found here, near Kukakamma, we fet out on our journey homeward, not by the fame way by which we had come, but by the upper road to VAN STADE'S *rivier*, and from thence to *Zeeko rivier*, where we arrived fafe on the 20th of December.

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In the environs of VAN STADE's river, were the fineft woods I had feen in the whole country. Few of the trees, however, were as yet in bloom. The affagay tree (*Curtifia faginea*) of which the Hottentots and Caffres make the fhafts of their javelins, grew here in abundance, and began now to develope its diminutive bloffoms. A great number of butterflies (*Papiliones*) that are otherwife fo very fearce in this part of Africa, flew round about the tops of the trees, without our being able to reach them.

On one fide of our road, I observed a heap of boughs of trees, on which most of the Hottentots threw a few twigs as they passed, and, on enquiring the reason, was told that it was the grave of a dead Hottentot.

On our return we paffed a few days before Christmas, with our old friend JACOB KOK, where we found fufficient employment in drying, and getting in order, the thick-leaved and fucculent plants which we had gathered in our laft expedition up the country, and where our oxen in fome measure recruited their firength and flesh. The Calvinists do not keep Christmas, but every one goes about his business as usual; but Newyear's day is thus far kept as a holiday, that on this day neighbours visit each other.

A fmall vineyard was planted here, as likewife at a few more farms near Kromme rivier; but the grapes

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grapes did not ripen very well, on which account the wine was rather four, and fometimes fo four that it could not be drank, but was only ufed for diftilling brandy, from a procefs which, by fome farmers, was carried on with profit.

In the Chriftmas holidays, we proceeded on our journey up towards Kromme rivier, and Lange kloof, where, opposite to THOMAS FRERE's farm, is a waggon road across the mountains to Sitfikamma.

Inftead of wheel-barrows, for which timber was wanting, the hufbandmen ufed calf and fheepfkins made into bags, in which they carried their manure to their gardens.

On the 28th we arrived at HANNES OLOFson's farm, and from thence, turning to the right, rode over the mountains to ANDERS OLOFSON'S near *Riet-valley*, in *Camenaffie* land, a tract of country that lay between the mountains, was narrow, and exhibited feveral fcattered mountains' and eminences. It feemed to be as high as Lange kloof, and the foil was dry and poor.

The Hottentots called by the name of Nenta, a plant (Zygophyllum herbaceum repens), which was faid to be poifonous to fheep, as alfo another, a fhrub of the fame genus, (Zygophyllum feffilifolium.)

On the 29th, we rode from this fpot to PETER JORDAN's estate, situated near Obsfant's warm-bath, and the river called (the Eastern) Elephant's-river. VOL. 11. H The

• The broad tract over which we travelled, was Carrow field all over, exhibiting a few bufhes, no grafs, and very little water.

Kon, was a name given by the Hottentots to a fhrub that grew here (Mefembryanthemum emarsidum) and was famous all over the country. The Hottentots come far and near to fetch this fhrub with the root, leaves, and all, which they beat together, and afterwards twift them up like pig-tail tobacco; after which they let the mass ferment, and keep it by them for chewing, efpecially when they are thirsty. If it be chewed immediately after the fermentation, it intoxicates. The word kon, is faid to fignify a quid; the colonifts call it Canna-root. It is found in the drieft fields only, and is gathered chiefly by the Hottentots, who live near this fpot. Thefe afterwards hawk it about, frequently to a great diftance, and exchange it for cattle and other commodities. No Hottentot or Caffre in the whole country has either money or any thing of a fimilar nature to trade with; but all their commerce confifts in bartering either with cattle or other commodities.

On the 30th, we visited the warm-bath, which rifes at the foot of the large ridge of mountains, and at a few fathoms distance from it. The stones at the foot of the mountain formed a very black iron ore, somewhat like the slag of iron, and the earth

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earth near it was brownifh. The top of the mountain contains a great deal of white quartz. The water is very warm, but not boiling hot; fo that one may fit in it at its fource. It has indeed three fources; the largeft bubbles up to the Eaftward out of a great number of fprings of different fizes, the cavity of it being above two yards acrofs, and it is this that is most used. The fecond lies a few fathoms to the left, and boils up out of one fingle cavity. The third and leaft lies a few fathoms from the fecond. On the furface of the water, was feen a thin and fine blue pellicle, and on the twigs of trees and ftones that were near it, was precipitated a faffron-coloured ochre. It had an inky tafte, but hardly any fmell; from an infusion of tea, the water became bluish, and the powder of bark made it blackifh, which fhewed that it contained iron. It was not fit for dreffing victuals; but as it was faid, might be used for washing, without staining the linen. The earth that lay near, and round about the veins of the fpring, was of a very loofe texture and a brownish colour, and at the fame time contained a portion of falt, and minute fhining particles of iron. The cryftals of the falt were extremely minute and fine, and were found not only in the loofe earth, but alfo on pieces of wood that lay in the earth. On feveral pieces of wood that lay in the water were found, befides the H 2 ochre

ochre above mentioned, thin and brittle fcales, which glittered a little, and, by the farmers, were thought to be filver, but feemed to be nothing more than fcales of iron. When one fits in the bath, the circulation of the blood is greatly increafed, and one is in danger of fwooning. The water, it is true, is chiefly ufed for bathing in; fome people however drink it likewife. The water never receives any increafe either from rain, or drought, though, as the farmers teftified, it does from thunder. The time for ufing the water, is a little before or at funrife, and late in the cool of the evening, as the water is too hot during the heat of the day. The invalids fit directly over the veins of the fpring, and more or lefs deep in them.

In order to have a view of the country on the other fide of the mountains, I climbed up to their higheft fummits, and faw, at no great diftance, a tidge of mountains, which was lower than this that I flood on, and, between thefe, the country was as broad as Lange kloof, and confifted of hills and vallies. The tract of country. that lay behind the lower ridge was flat and poor Carrow-land, and fo long and broad, without any mountains, that the eye could not reach its boundaries. There were no farms nor houses on this extensive plain, over which the farmers travel from Camdebo across Hex-rivier, to the It was faid however that farther on there, Cape. were

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were mountains, which probably extend from Roggeveld to the Sneeuw-berg.

Here therefore were the last ridges of that tremendous mass of mountains, which extend from Houtniquas land and Hartequas kloof, and again to the northward from Roode Zands and Kartous clefts, directly across the Carrow that lies on the other fide of the Bokke-veld. And indeed it, is not only along the foot of this range of mountains that the colonifts have laid out their beft and principal farms, but they have also got between the ridges of the mountains, and fet themfelves down in all the intermediate valleys.

That immenfely dry Carrow-plain, which commences behind the laft mentioned mafs of mountains, and extends in length from the N. W. to the S. E. end of the fouthern-moft point of Africa, and in breadth to Roggeveld, and the Snow-mountains, for want of water, cannot be inhabited; and fcarcely any animals refide there, except for a fhort time, in or immediately after the rainy feafon, when a little falt water is found here and there in fome of the hollow places. Those colonists therefore that have farms on the other fide of this tract, either in Roggeveld, or the Snow-mountains, are obliged to wait for that time for croffing fo defart a country, when they are under the neceffity of pitching their camp near fuch places where

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where a little water is to be had, between which fpots, fometimes a journey of ten or twelve hours long, must be performed with all possible speed in the night. It is therefore neceffary to know thefe watering places well; becaufe, if one fhould meet with any Hottentots, they would not readily inform one, even if they knew of any watering place, but keep it a fecret to themfelves, in order to be able to hide themfelves, in cafe they fhould at any time with to run away. Grafs is hardly to be met with in this tract, fo that it is with difficulty that a horfe can find fodder there, but the oxen put up both with brackifh water and the falt leaves of the fhrubs and bulhes. In the day time, when the fun fhines out hot, if one cafts one's eye over a fmooth and arid plain like this, the eye is affected by a tremulous motion in the air, just as though one were looking at a flame.

The Hottentots who traverse these dry Carrow fields, use feveral means, not only to assure their hunger, but more particularly to quench their thirst. Besides the above mentioned plant called Kón or Gunna, they use two others, viz. one called Kameka or Barup, which is faid to be a large and watery root; and another called Ku, which is likewise, according to report, a large and fucculent root.

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The plants as well herbs as bushes, ftand very thin in the Carrow-veld; and, in fuch a burning hot climate, where not a drop of rain falls for the fpace of eight months at least, it is almost inconceivable how they can thrive at all. Their ftems and branches likewife have the appearance of being brittle and quite dried up; but the leaves, on the other hand, are very thick and filled with a briny fluid, and remain green all the year through. Thefe fresh and eververdant tops and leaves, however, may perhaps receive from the air, which at night is cool, fome moifture for their prefervation' and nourifhment. The ground appears quite burned up, is of a yellowifh red colour, and confifts of clay with ochres of iron and common falt.

1774. On the 1st of January, directing our course homewards, we arrived at JAN VAN STADE's farm, and afterwards passing an estate belonging to one GERT VAN ROYEN, and another belonging to a VAN FORS, came to the villa which GERT VAN ROYEN occupied himfelf.

We let our drivers and Hottentots go on with the carts through Hartequas kloof, with orders to wait for us at the Company's post at *Rietvalley*; and I, with my English fellow-traveller, determined to go on horseback over the dry Carrow, which lay to the right, and afterwards H 4 proceed

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proceed through *Platte kloof*. But this expedition did not end very fortunately; for, as in this level plain, which is feldom vifited by travellers, there were no tracks to follow, we miffed our road, and the longer we travelled the farther we went aftray, fo that at laft we could not even find our way back again. We rode on however, as faft as our horfes could go, and the fun began to go down without our having perceived the leaft trace of a houfe or farm. At length the fun being fet, and no hopes left, we retired a little way back to a valley, where there was a fmall brook, with a few trees on its borders; and, in this brook, there was ftill fome water.

Here we thought it adviseable to take up our lodging for the night. Accordingly we unfaddled our horfes, and tied them up, with the halter round one of their legs, that they fhould not run away; and then, by means of our guns, we made a large fire of Canna-bushes (Salfola aphylla). After this we lay down near the fire, with the faddles under our heads; but could not get a wink of fleep, on account of an intolerable fenfation of cold, which, though not fo very intense in itself, yet, by reason of the burning heat we had endured in the daytime, was feverely felt by us, and forced us to rife feveral times in the courfe of an hour, in order \$200001F 4 11

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order to mend the fire, and warm ourfelves all over. We had derived this advantage from our guns, that we could always make a fire; but we had no hopes of finding any thing in this plain to fhoot, by which we might fatisfy the cravings of our ftomachs. I had therefore taken the precaution to put into my fhooting-bag a few bifcuits and pieces of fugar-candy, which were extremely welcome to us at this juncture.

As foon as it was morning, we looked about us for our horfes, but found that they were vanifhed, which did not a little add to our concern, fituated as we were in a defart, where our fate was uncertain. After having fearched the valley all around, we went up upon the heights, and behind thefe we at laft found our horfes, which without doubt were upon the point of going farther, to look out for better fodder. Having faddled them, we directed our courfe obliquely towards the mountains, where we arrived towards evening, at the houfe of a farmer, who was fo poor as fcarcely to be mafter of any thing more than the roof over his head.

Here we took up our night's lodging, and afterwards made our way to *Hartequas-kloof*, where we met with our people and our carts.

Near Hartequas-kloof, a new range or ridge of mountains commences, which joins the former, the cleft ferving as a band of connexion between them,

them. So that the Carrow-veld can be feen behind the first ridge, when one rides into the cleft through the next range of mountains near Groote Paardekraal.

It is not long fince that this whole tract of land from Hartequas-kloof down to Camtous-rivier, . which is now filled with fettlements, was first peopled; and twenty-three years ago there was not a fingle farm, when, in the year feventeen hundred and fifty, Governor TULBAGH fent a caravan out to this coaft, with a view to gain certain intelligence with refpect to the country and its inhabitants. TULBAGH, who still lives in the grateful hearts of the inhabitants of the Cape, was a governor, who confidered that he was raifed to the elevated station he enjoyed under government, and appointed to be ruler over an extensive country, not merely to live in luxury, pamper his pride, and accumulate riches, but to unite with the company's lawful interefts the happinefs of the colonifts, and the advancement and welfare of the colony. This gentleman was alfo anxious to have the country by degrees farther explored; for which purpofe, in the year feventeen hundred and fifty, he fitted out a caravan, confifting of one hundred and fifty foldiers from the caftle, and two burghers, of which an officer of the name of BEUTELAAR was appointed the commander. With these were fent, at the Company's expence, eleven waggons, a great number of

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of draught-oxen, and of others for killing, and a confiderable quantity of ammunition and provision. The expedition was to be made into the country of the Caffres, and afterwards up towards that of the Tambukkis, and then back again, through the Snow-mountains and Camdebo: but, on account of the haughtinefs and flupidity of the commander, little was done in the bufinefs, for which reafon, on his return home, he was fent away out of the country; a punifhment he richly deferved. He was a ftrict and rigorous commander, and punished with feverity. He likewife beat the drum all the way, infomuch that all the game that was to have been fhot fcared away, particularly by the two farmers who went in his fuite; and his people at length grew extremely mutinous. When he encamped any where at night, the waggons were all placed in a ring, within which the cattle and other animals were put, and the tents alfo pitched. At laft, when he arrived at the country of the Caffres, he gave the Caffre captain, Paloo, a grenadier's cap, and another to his brother, which is faid to have excited a war amongft the Caffres. The only thing he did for the benefit of the Company was, that in the harbour near Zwartkops river he fet up the Company's arms, cut in ftone. This journey lasted eight months. At that time there was not a fingle farm on the other fide

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fide of Hartequas-kloof; but the roads were founknown and unbeaten, that the waggons were often obliged to be dragged, by the people to whom they belonged, across the most difficult places.

Being come from Hartequas-kloof to Goudsrivier, we ftaid a day there in order to reft our cattle, which befides were fo grievoufly afflicted with the hoof diftemper, that my companion was obliged to leave one of his oxen behind here, which could get no farther. Here too the weather was amazingly warm, warmer indeed than I have ever felt it, either before or fince, infomuch that the farmers flut both the doors and windowflutters, in order to keep the fun out, and their houfes cool. The birds could fcarcely fly, and the air was almost too hot to be breathed. The heat was without doubt feveral degrees above 100 by FAHRENHEIT's thermometer.

The following days, continuing our route, we arrived at *Riet-valley*, one of the Company's pofts, where we remained a few days to reft ourfelves, and particularly for the fake of paying another vifit to Groote Vader's bofch, (or *Grandfather's-wood*) and feeing if the different kinds of trees there were come into bloffom, as we had already got pretty far into January, and confequently the fummer was farther advanced than it had been at any time before, when we had vified this wood.

On

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• On the 14th of January accordingly, we went thither, but were not more fuccessful now than we had been before with respect to finding the trees in bloffom, much less with fruit on them; fome of them, however, were on the point of budding.

Here were, at this time, for the Company's account, two wood-men, who, after felling the trees, dragged them to fuch fpots from whence they might be taken up and put into waggons. The trees were chiefly got out of the wood by oxen, by means of a cord faftened round the body of the tree; as no vehicle of any kind could poffibly be ufed there.

As I had no hopes of ever vifiting this place again, I made a point now of collecting and laying up to dry branches with leaves of every fpecies of tree, and at the fame time of becoming perfectly acquainted with the ufe they made in this country of each fpecies.

The uses of the different forts of trees that grew in and round about the wood, were as follows:

Black iron wood, (Zwarte Yzerbout, Gardenia Rothmannia) is hard and ftrong: it is used for axle-trees and the poles of waggons.

Yellow wood (*Geelbout*, *Ilex crocea*) is of a yellow colour, almost like box, of a close texture, and handfome. It is used for planks and beams in the construction of houses, for tables, doors, cupboards, window-frames, and butter-churns.

Camaffie

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Camaffie wood (*Camaffie-hout*), is merely a fhrub, and confequently produces finall pieces only, which ferve for veneering, and to form borders on furniture, as likewife for making planes and other fine and delicate tools. This is one of the fineft and heavieft kinds of wood,

The wood of the Red pear-tree (Roode peer) is used for making the bodies, under and upper axle-trees, and the lower parts of waggons.

The Bucku-tree (Bucku-bout, Olea Capenfis) is the best wood for making wheels and waggons.

The Red alder (*Roode Elfe*, *Cunonia capenfis*) is likewife very proper for making waggonwheels, the naves of wheels and chairs.

The Ath (Effenhout, Effenhoum, Houtniquas Effen, Ekebergia capenfis) is a large tree, hard, and of a close texture, and is used for making tools and implements of various kinds.

Of the Stinkbout there are two forts, the white and the brown. The brown is very beautiful, being of a dark colour with bright ftreaks and dafhes, much like walnut-tree. Of this are made clothes-prefies, defks, chairs, tables, and other coftly kinds of furniture. When it is first cut down it ftinks, a circumflance from which it has obtained its prefent name; but, in procefs of time, when it has been exposed to the open air, the difagreeable odour vanishes.

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The wood of the Olive tree, (Olyve hout, Olea Europxa) is very heavy, and of a brown colour. I have often feen at the farmers' houfes chairs made of this wood, which felt very heavy in the hand. This ftrong wood is also used in the conftruction of mills.

Wild Catjepiring (Gardenia Thunbergia) is a hard and ftrong kind of wood, and on this account ufed for clubs.

Witte Effen (or white ash) is used for planks, for waggon-racks, and for the boards in waggons, for boards for shoe-makers to cut leather on, and sometimes for cupboards.

Zwart-baft (*Royena villofa*) is used for the bodies of waggons, and to make yokes for draughtoxen.

Keurhout (Sophora capenfis) is used for wheels and the bodies of waggons.

The Almond tree, (Amandelbout) is used for the heels of fhoes, and for fhoe-maker's lasts.

The Affagay tree (Affagay boom, Curtifia faginea) is used for the poles of waggons, and as shafts for the Hottentots' javelins.

Dorn-hout (*Mimofa nilotica*) is used for Lockfboes, to put under waggon wheels, as likewife for the bows of yokes for draught oxen, and for making charcoal.

The Waageboom (*Protea grandiflora*) for fuel and making charcoal.

The

III

The Kreupelboom (*Protea fpeciofa*). The bark is used by tanners for dreffing and tanning leather.

The Leepelboom is made into fpoons and wooden bowls.

The largeft trees in the African woods, as well in this as in others, were the following : the Geelhout (*Ilex crocea*), the Bucku (*Olea capenfis*), the Tarchonarithus camphoratus, and arboreus, the Roode-elfe (*Cunonia capenfis*) and the Wite-elfe, the Stinkhout, the Affagayhout (*Curtifia*) the wild Chefnut (wilde Caftanien, brabe*jum ftellatum*) the wild Fig tree (wilde Vygeboom, *Ficus capenfis*) the Keureboom (*Sophora capenfis*) the Mintofa nilotica and the Effe-boom (*Ekebergia capenfis*).

On the hills grew the Ornithogalum altiffimum, which was now in full bloffom, and decorated the plain with its long and crouded fpikes of flowers. It was faid to be very common every fourth year, and, in the intervening years, hardly to be feen.

On the 18th we passed through Zwellendam to STEINS farm.

On the 19th we croffed over at the ferry, where Breede-rivier and Zönder-end unite, and. then went over Heffaquas kloof, and paft GYL-LENHUYSEN'S effate to VOLLENHOVENS. At Breede-rivier, where the river Zonder-end unites with it, ends that mountain which firetches out

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out from Roode Zand, and directly oppofite this place the Zwellendam mountains form an angle.

On the 20th, proceeding on our route, we went paft MELK's farm to the Company's poft at Tigerhoek, where not only a great number of cows are kept for making butter on the Company's account, but likewife in the adjacent woods a quantity of timber is felled for making all kinds of implements for the Company's own ufe.

The workmen are at liberty to cut down and fell fome wood and timber, by way of affifting to fupport them, but no hufbandman is fuffered to fell any here. In Houtniquas and other woods indeed, the hufbandman is at liberty to cut timber, but in fome places, not without the fpecial permiffion of government, and paying a contribution of five rix-dollars.

In this tract refided the Blue goat, as it is called, (*Blauwe bok*, *Tfeiran*, *Capra leucophaa*), which is one of the fcarceft in the whole country: it is white, intermixed with black hairs. The blue goat is faid to be very neglectful of her young, infomuch that they are often devoured by wild beafts; and this is the reafon that is given for its being fo fcarce. Its fleft had a better tafte than that of the other fpecies of goats.

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Here were alfo a great many Zebras or ftriped horfes (*Equus zebra*). There is a penalty of fifty rix-dollars on fhooting one of these animals; and if any one can be caught alive, it is to be sent to the governor. The old ones are hardly ever to be caught, and are never tamed. The young ones seldom live, and although seemingly tame, are by no means to be trusted.

After this paffing by JURJIN LINDE'S farm, we arrived at a post of the Company's, near Zoete-melks valley, where twenty-four men and a fergeant are kept for the fole purpose of felling timber in the adjacent woods. From this place the Company receives the greatest part of its ship and common timber, of which three large waggon-loads are fent every month up to the Cape. The labourers here also are permitted to cut a reasonable quantity, and sell it on their own account. The large pieces of timber, such as beams, &c. are dragged out of the wood by oxen, and, it must be confessed, not without the greatest difficulty.

To the fmaller pieces, fuch as wedges, handles for axes, gun-ftocks, wheel-timber, axletrees, &c. the form is given before they are carried out of the wood. When a very large tree is felled, it is left for fome time to fplit of itfelf; then it is cloven and cut up.

Here

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Here I had an opportunity of feeing how they prepared the wheat-ftraw ufed for thatching. The fheaves with the ears on were ftruck againft a block, till the grain run out and the ears dropped off. The bufinefs goes on much flower in this method of thrafhing than when the corn is trodden out by horfes; but the ftraw is preferved whole by it and even.

On the 24th, we paffed by the Ziekenhuys (or hofpital) a finall post of the Company's, which is fubject to the former post near Zoete Melks valley, and in which there are only two men, and went forward to GROENEWAL's farm, and afterwards to GYLLENHUYSEN'S near Zwart-rivier, (the Black-river). The Black-mountains which commenced near GROENEWAL's farm, came to a termination here. They were not very high.

On the 25th we travelled on to BADENHORST's and BEVER's effates, near Booter-rivier.

Here I fhot a cat fpotted with black (*Viverra*); the fkin finelled fo ftrong of mufk, that when it was hung up in the cart to dry, I could not endure the ftench of it. It is in confequence of this ftrong finell that the animal is not eafily caught by the dogs.

The ridge of mountains which we had feen terminate near Heffaquas kloof, began at the fide of Kleine Houthoek, behind Fransche-hoek. Within the mountains of Groote Hout-hoek,

I 2

a ridge

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a ridge was alfo feen to fhoot out along the feafhore, which went almost as far as Muscle-bay. Within this last, another ridge projects, which comes to a termination between GYLLENHUY-SEN'S and GROENEWAL'S farms, and, directly opposite to BADENHORST'S farm, has a high peak, called the *Tower of Babel*. These two ridges are not united with the other mountains, but leave an open space, near Booter-rivier.

On the 26th, paffing over Grootehout-hoek, Palmit's and Steenbrasemey rivers, we arrived at the Hottentot's Holland mountain, on which there are feveral farms.

Baboons, a fort of large and ill conditioned monkies, with tails no longer than their thighs, are found in thefe mountains. This animal is long a growing, and, when full grown, is almost as large as a blood-hound; at this period, it should not be kept tied up with a string only; for, without an iron chain, it bites every thing afunder. Several dogs together, indeed, may catch a baboon, but one or two feldom can; because if the baboon, which is surprisingly quick and nimble, gets hold of the dog by the hind feet, he fwings it round, till the dog is quite giddy, and as it were drunk. With his large teeth he bites violently, and defends himself obstinately.

Finally, we went down the mountain, over its fteephills, and then over the level plain to the Cape:

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THE CAPE, 1774.

BEING arrived in town fo late in the year, after a journey of five months, I was obliged to use dispatch, in order that I might be able to embrace the opportunity of fending, in the beginning of this year, 1774, to the Botanic gardens of Amsterdam, Leyden, and Leeuwarden, by the homeward-bound ships failing for Europe, a considerable quantity of bulbous roots, herbs, seeds and growing plants; and also, to my other patrons, a great number of bulbous roots, feeds, infects, stuffed birds, and other fcarce animals.

The four first months in the year are the most bufy at the Cape, when the Dutch sips, as well as those that belong to foreign nations, return from the East Indies, and others arrive from Europe; fo that there are at this time about twenty or thirty sin the road. The first Dutch homeward-bound fleet too now lay ready, and I had an opportunity of fending part of my collections by it, and the remainder afterwards, as fast as they were ready, by the sips that failed later.

A fhip from Holland, the Bekvliet, arrived I 3 here

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here, after a long and unfortunate voyage. Through the captain's neglect and ignorance, the ship had got fo much under the African coast as to lofe its proper winds, and to be obliged to make Angola, after first making Waalvisch bay, with only nine men in health on board. During this long voyage the fcurvy had raged among the crew, which was faid to have been very generally as well as plentifully bled, fo that the greateft part of it had died. Complaint was made both against the furgeon and the captain for not having underftood their bufinefs. The former died on the paffage, and the latter received the punishment he richly deferved. The fick had not only been fupplied with improper medicines, but alfo, in other refpects been treated with great negligence. One morning four men were reported as dead; one of whom, just as they were going to few him up in his hammock, was found alive by the fail-maker, although he foon after breathed his laft. Another morning five men had been reported dead, all of them had been fewed up in their hammocks, and two had already been thrown overboard, when the third, the inftant he was put on the plank, called out, ' Master Boatfwain, I am alive still!' to which the Boatfwain, with unfeafonable jocularity, replied, - ' You alive, indeed ! what, do you pretend to know better than the furgeon?'

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For every fick man fent to the hofpital the captain pays two fkellings, and he keeps back, in return, the man's allowance on board.

The building of the new hospital was not very far advanced this fummer, neither indeed could the work go on very fast. Of ninety men who were allotted for this purpose, few were at work, and a great part of them were on furlough, or were set upon other work on the hospital's account.

Befides a handfome houfe, built in the Company's garden in town, the governor has alfo one at *Rondebofch*, and another at *Nieuwland*, both out of town, to which he may retire at pleafure, and unbend his mind when opprefied with the cares of ftate. Another fuch houfe was now to be built likewife for his accommodation at *Baay-fals*.

The Company has very fine gardens both at Rondebofch and Nieuwland, from whence the ships and the hospital are supplied with vegetables.

Since the Governor VAN DER STELL, in the biginning of this century, had appropriated to himfelf a confiderable portion, and that the beft, of the land; and the fame had been done by feveral of the Company's fervants, to the great prejudice of the burghers and colonifts, they lie under a ftrict prohibition against holding any farms. In lieu thereof, after being obliged to I 4

difpofe of their farms, feveral perquifites have been allowed them; fuch as, to the difpencier or purveyor, five per cent. upon imported, and the fame on exported, wares; as likewife upon grain, butter, &c. The collector has two and a half per cent. on the monies, the flore-keeper four, the commiflary of the hofpital five, the infpector of the auctions five per cent. on all goods and merchandize fold by auction; and all this, befides their ufual monthly falary. So that it is only fome few of the higher people in office that have a fmall villa for their pleafure near the Cape, but, from whence, no commodities muft be carried out and difpofed of.

The fhips that arrived here, brought the news that Baron VAN PLETTENBERG had been nominated Governor of the Cape and the Coloriy, and had been fhortly after inftalled in his office.

The governor, together with feven counfellors of police, has the fupreme direction and command, as well with refpect to the Company's traffic here, as alfo to the whole æconomy of the colony, without being fubject to the government of Batavia, which have otherwife the fupreme command over all the factories in India.

All criminal caufes come under the cognizance and jurifdiction of the grand court of juftice. In this the commandant of the garrifon prefides, and the governor has nothing to do

do with it, excepting merely to fign his name to death-warrants.

Finally, there are two other courts of judicature in the colony. One of these is at Stellenbosch, to which four parishes are subject, with their churches, viz. Stellenbosch, Drakenstein, Zwartland, and Roode Zand; the other is at Zwellendam, and comprehends one very large and extensive parish, which, however, has not yet been provided either with a church or minister.

The Cape of Good Hope, although it was first discovered by the Portuguese above three hundred years ago, was frequented by them for the fpace of one hundred years and upwards, and, afterwards, by the Dutch Eaft India Company's fhips for more than half a century, before poffession was taken of any part of the country, or any cultivation was beftowed upon it, fo that the colony is not above a hundred and twenty years old; for, in the year 1650, when the Dutch fhips, on their return from the Indies, touched here and took in refreshments. for which they bartered with the Hottentots, the country was, for the first time, furveyed with any degree of attention, by a furgeon of the name of JAN VAN RIEBEEK, who belonged to the fleet, and had fome knowledge of botany; and as he found both the climate and the

the foil adapted to the cultivation of culinary vegetables and fruit trees, on his return home he proposed to the directors to establish a colony here.

On mature deliberation the propofal was agreed to, and JAN VAN RIEBEEK was fent out as admiral and commander in chief, with four fhips, which were flored with materials for building, carpenters, and feeds of all kinds. On his arrival at the Cape, he treated with the Hottentots for the purchafe of a piece of ground, on which was erected a fortrefs, florehoufe, and hofpital; and, at the fame time, the firft foundations were laid of this great and flourifhing colony, which does more honour to mankind than all the victories of ALEXANDER the Great, and much more than all the important conquefts the Dutch arms have been able to make in every other part of the world.

The fum for which the first piece of land was purchased, is very differently reported, as well as the quantity of the land itself. The first purchase fum is faid to have amounted to 50,000 gilders in wares, and by another purchase to have been augmented with 30,000 gilders more; which, although it may actually be so great in the Company's books, yet it feems to me absolutely incredible, that the Hottentots should ever have received the major part

part of it. The laft purchase is faid to have extended as far as Moffelbaay, but this is the lefs true, or even probable, as during the time that VAN RIEBEEK was governor of the Cape, as he afterwards was, his fartheft difcoveries reached only to that mountain, which is called after him, Riebeek's cafteel, and stands at a good diftance within the long range of mountains. In my opinion, the land purchased at first was no more than that tract of country which lies between Table-mountain and Zout-rivier, from whence the colony has fince been continually more and more extended in the fame manner as it is now daily enlarged and augmented. The citadel was at first built of wood and earth ; and it was not till the year 1664, that, together with its fortifications, it was built of ftone. Near Zout-rivier, (Salt-rivier) a small fort, called (Keer de koe) Turn the cow, was also erected for the purpose of protecting the Company's cattle that grazed in the field, which it commanded, and to hinder them either from going across the river to the Hottentot's lands, or from being ftolen by the natives of the place. With this view, therefore, near the fort a stable was built for fifty horses, with which the Hottentots, who were very fwift of foot, and disappeared in an instant, might be purfued with all poffible fpeed. This, together with a farm near Conftantia, laid out by VAN RIEBEEK, was without doubt the first and inconfiderable

fiderable commencement of this fettlement. This infant establishment was probably not meant to extend fo far as it has done fince, but was intended only for the cultivation of fuch articles as were neceffary for fupplying the fhipping that arrived there with refreshments. But, on a clofer examination of the climate, the fertility of the foil, and the weakness of the natives, it was refolved to extend the fettlement, and feveral Europeans were perfuaded to emigrate and fettle here, and to cultivate a confiderable tract of land, which was granted to them and their heirs for ever. Shortly after this marriageable girls were fent out from the orphan-houfes, for the purpose of still more increasing the colony; the inhabitants of which got at first, on trust, implements that were neceffary for the cultivation of the land, and fpread themfelves out to Stellenbofch and Drakenstein, (where the French Protestant refugees in particular strengthened the fettlement) and afterwards on the other fide of the mountains to Roode Zand. The whole of Zwartland was afterwards peopled, though a fandy and more meagre foil. In fine, within thefe laft 30 years the colony has increafed to fuch a degree, and with fuch rapidity, that not only the country from Roode Zand and Hottentot's Holland mountains, has been occupied and inhabited as far as Zwellendam, but alfo as far as Moffelbaay, Houtniquas.

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Houtniquas, Lange-kloof, Kromme-river, and all the way to Camtous-rivier, the Bokke-and Rogge-velds, Camdebo, and the Snow-mountains.

The colony of the Cape takes in the town with its parifh and church, Paarl with its parifh and church, the Tyger-mountains, &c. and extends as far as Moffelbanks-rivier and Baay-fals.

The colony of Stellenbolch was founded by the governor SIMON VANDER STEEL, in 1670, like a cottage, and provided with a court-house and church, at the distance of eight miles from the Cape. It extends from the Tyger-mountains to Hottentot's Holland, and nearly to Baayfals, and, at the northern end, to Paarl and Mosfelbank.

Drakenstein was founded in 1670, with a very fmall church, and stands fo close to Stellenbosch, that it might with great propriety be subject to it. And indeed this was confidered as a separate colony, more out of compliment than necessity.

The Company paid only four fkellings for a live fheep, and the Burghers in the town paid one fkelling (rather more than fix-pence English) for twelve pounds of mutton.

A great many officers belonging to the ships lodged in the fame house with me. A mate paid less per diem than a captain, as his pay was less, although he was equally well lodged, and equally free

free from reftraint, and had the fame table and attendance; and this regulation appeared to me in many refpects as equitable as it was handfome and delicate.

Charcoal is a very dear article at the Cape, and is generally carried thither from Europe. For a chaldron of charcoal, which ought to contain thirty-fix fchepels, (or bufhels) of which, however, only thirty-two are delivered out to the purchafer, the blackfmiths pay eighteen rixdollars, and eight rix-dollars for one hundred weight of iron.

Bulbous plants, in all probability, repofe at times, or they are not feen every year in equal quantities. In fome places one fees them in one year in great abundance, and another year fearcely any.

When a flave plays any knavifh trick, or does mifchief to any of the neighbours, the farmer who owns him is generally obliged to make good the damage, and frequently to pay one half of the value of the flave, though at the fame time the flave likewife may chance to undergo corporal punifhment for it.

When an inferior fervant of the Company trefpaffes, he ufually undergoes corporal punifhment; but a burgher is fined. The former contributes to the reformation of manners, and the latter to lining the Fifcal's pockets.

The

The laws refpecting marriage at the Cape differ in many refpects from those that are in force at other places; and divorces frequently happen here, attended with fingular circumftances. The wife of one SARDYN, who had been a foldier seventeen years, and at this time kept a public house and a dancing house for the reception of the common people, was proved in court, by the evidence of two witnesses, to have had a criminal connexion with a drummer. The profecutor was allowed, it is true, to part with his wife, but then she was exempted from all farther punishment; while he, on the contrary, was flogged and fent to Batavia, without being fuffered to receive the least benefit from his property.

A certain hatter in the town, who was a bachelor, had got two of his flaves with child. For the child he had by one of them, he, in quality of its father, demanded baptifm, and accordingly this was baptized, and confequently free; while the other girl's child remained unbaptized and a flave.

The winter of this year, in the months of June, July, and Auguft, was very cold, with a great deal of rain; and on the 6th of July particularly, both the Devil's-mountain and Tablemountain were covered with fnow and hail. In feveral places, the vines, as well as many ve-4 getables

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getables in the kitchen gardens, had been killed or greatly damaged by the froft.

In the Company's garden there was a very beautiful covered walk, formed of chefnuttrees, which were now very thick and large. It was this year cut down root and branch by order of the governor, for the purpofe of making different kinds of furniture of its elegant wood; and in its ftead were planted oaks, which, however, are as little likely to reftore the beauty of the garden, as those curious animals are to return thither, which the highly respectable Governor TULBAGH had taken pains to collect together there, from the interior parts of Africa; but which, after his death, were turned out by his fucceffor to become a prey to ravenous beafts.

The fruit of a fpecies of Mefembryanthemum was fometimes brought to the town as a rarity, and was called *Rofa de Jericho*. When it is put into water, it gradually opens all its feed-veffels, and exactly refembles a fun; and when it becomes dry again, it contracts itfelf and clofes by degrees. This is no lefs a neceffary than fingular property, which points out the admirable inftitution of an all-wife Creator; in as much as this plant, which is found in the moft arid plains, keeps its feeds faft locked up in time of drought; but when the rainy feafon comes, and the feeds can

can grow, it opens its receptacles, and lets fall the feeds, in order that they may be difperfed abroad. The water in which this fruit has lain is fometimes given to women that are near their time, and is thought to procure them an eafy delivery.

Ordinary public houfes are much more rarely to be met with here than they are in Europe, and taverns still more fo, as every body has a quantity of wine in his own house, fufficient for himfelf and his friends. Some there are however for the lower class of people, though very different from those which abound fo much in our more refined quarter of the globe; being defigned not fo much for drinking and tippling, of which drunkennefs, noife, and riotous diforder are the frequent concomitants, as for mere diversion and recreation. The inferior kinds of public houfes therefore are at the fame time dancing houfes, where every evening mulicians are to be found, and the guests, by paying for their wine only (but at a very dear rate) have an opportunity of dancing. No card playing is fuffered, and the dancing is over at a certain hour in the night, when every one goes quietly home, without making a noife or affrighting others, which would not be eafily tolerated by the night-watch, nor go unpunished by the government.

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At

At my leifure hours I never neglected to vifit the hills, mountains, and fields, near the town. For the purpofe of carrying a book and other things neceffary for putting up my feeds and plants, I ufually took with me a hired flave. This year, through the kindnefs of the furgeon, I got a man out of the hospital to carry my apparatus, who had been brought by a fingular deftiny to this fouthernmost point of Africa. He was born in Germany, and, for the fake of trafficking, had travelled much, and had lived for fome time in Holland, France, and England, where he refided laft, and carried on a finall trade in certain drugs, and fome chemical preparations. In the courfe of this bufinefs, having embarked for France, the fhip was driven by a frorm towards the coast of Holland, where it was wrecked, and he loft all his little property. On getting a-fhore, he fold his knee-buckles, and, with the triffing viaticum produced by them, fet out for Amsterdam, where he met with an old acquaintance, who offered him his affiftance; and, under the pretext of procuring him a lodging, took him to a kidnapper's. Here his friend called for brandy, victuals, and wine, of which they both partook. At length, when -he and his friend parted, he observed that the landlord gave the latter two ducats. Immediately upon this he himfelf was prevented from going

going out; he then found, to his coft, that he was kidnapped; and, being no ftranger to the Dutch language, threatened the kidnapper to lodge a complaint against him, if he did not inftantly fet him at liberty. The kidnapper then began to make fome inquiries about his refidence, means of fupport, &c. and, as he could not pay his reckoning, abfolutely refused to let him go. When muftered on board of fhip, whither he had been carried, without having been previoufly taken to the East-India house and received there, he complained to the director; but, as the poor fellow could not poffibly pay for what the kidnapper had received of the Company to fit him out, he was obliged, nolens volens, to fail for the Cape, where he arrived fick and was taken to the hofpital. This poor man accompanied me twice in my excursions; but foon regained his liberty by running away, and getting on board of one of the English ships that lay in the road.

Pomegranates grew in feveral of the gardens, but were not exposed to fale, nor much eaten in the town. But chefnuts (*Æfculus pavia*) were fold here in plenty, and eaten by way of defert, roafted, with a little butter.

By the fhips that arrived from Europe, I had not only the pleafure to receive letters from my patrons in Amfterdam, intimating their fatis-K 2 faction

faction at what I had fent them, but also received a confiderable fum in ducats, for the purpose of paying off part of the debt I had contracted during the two last years.

There had arrived from England, in order to proceed to Bengal, Lady Ann Monson, who had undertaken this long and tedious voyage, not only for the purpose of accompanying her hufband, who went out as colonel of the regiment in the East Indies; but alfo with a view to indulge her pafiion for natural hiftory. This learned lady, during the time fhe staid here, made feveral very fine collections, and particularly in the animal kingdom. And, as I had frequently had the pleafure, together with Mr. MASON, of accompanying her to the adjacent farms, and, at the fame time, of contributing greatly to the enlargement of her collections, fhe had the goodnefs, before her departure, to make me a prefent of a valuable ring, in remembrance of her, and of the friendfhip with which fhe had honoured me. She was a lady about fixty years of age, who, amongst other languages, had alfo fome knowledge of the Latin, and had, at her own expence, brought with her a draughtfman, in order to affift her in collecting and delineating fcarce fpecimens of natural hiftory.

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The government at the Cape had refolved to fend, this year, a veffel called a Hoeker, to Madagafcar, to barter for flaves; and the Governor Baron VAN PLETTENBERG had the kindnefs to offer to fend me out as furgeon to the fhip. But although I had much withed to vifit fo large and remarkable an ifland, ftill my inclination to fee the northern part of Africa was much more prevalent. I therefore begged to be excufed from making this voyage; and recommended a friend and countryman of mine, Mr. OLDENBURG, who had been practiling botany for the fpace of two years that he had accompanied me in my excursions, to go as furgeon's mate. My recommendation was taken; and Mr. OLDENBURG even made feveral collections of plants; but did not live to return from fo unwholefome and fcorching a climate.

This winter Alderman BERG fbewed me a very curious Fungus (Hydnora) which had been fent to him, as a great rarity, by a farmer, from the interior part of the country. This fungus, which was called Jackhal's kost (or Jackall's food) being, on examination, found to be, with refpect to the parts of fructification, the most extraordinary plant of any hitherto known, confirmed my refolution of vifiting the northern parts of the Cape; and excited in me a

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wifh to examine this fungus, with feveral other plants, in their native foil, however arid and barren.

I fitted myfelf out as in the preceding year, in the month of September, and again had Mr. MASON, the Englifh gardener, for my fellowtraveller, although he was not much inclined to make any long excursion this year.

JOURNEY TO ROGGEVELD.

ON the 29th of September, 1774, I fet out with my fellow-traveller, on my third journey to the interior part of Africa. After croffing Zout rivier and Moffelbank's rivier, we arrived at Vifcherschoek, a corn-farm of the Company's, occupied by the Governor. This year eighty barrels of feed had been fown.

The ftranguary raged amongft the cattle here, and was occasioned by the *Euphorbia* genistoides. As a fovereign remedy for this diftemper,

diftemper, the farmers gave the cattle a tea-cup full of powdered offrich egg fhells mixed with vinegar. The refinous clot of Euphorbia, which fluck faft in the urethra, was fometimes extracted, when it appeared quite white, and about half a finger in length.

On the 30th, we rode paft ENGELAAR's farm to MATH. GREEF's, near Moffelbank's river. In thefe low fandy plains, and in the dwarf-bufhes upon them, there were hares in abundance, infomuch that one might fhoot as many as one chofe; but no body fet any value upon this kind of game, the flefh of which had fo dry a tafte.

Here I heard much talk of a Hottentot Watermelon, which is faid to be a large and fucculent root, called Kou, by the Hottentots, who grind it down to meal, and bake it like bread.

On the 2d of October, we croffed Moffelbank's river to JURGEN KUTSE's, and from thence proceeded to ABRAHAM BOSMAN'S, near *Paarls-berg*.

Paarl Mountain is neither very high nor of great extent in length; but it abounds in water, fo as amply to fupply the farms that lie on each fide, and a large mill fituated at the foot of it.

The church stands on the east fide of the mountain.

The farmers here chiefly cultivated vines, the flocks of which are often of fifty year's K 4 growth,

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growth, and produce a delicious and full-bodied wine. Wheat was not much cultivated here, and the quantity of culinary vegetables was but finall, as was also the number of the cattle.

Here we ftaid a couple of days in order to inveftigate the mountains with due care and accuracy. Having arrived at the top from the eaftern fide, we obferved a place called the Company's Cellar (*Kelder*). This confifted of a fomewhat concave and large rock, which had fallen over another rock inclining towards it. Thefe two rocks together formed an arched cellar, as it were, open at both ends, and poffeffing an agreeable coolnefs.

The Paarl diamonds were two very large, bare, fleep, and almost conic, mountains, the foot of which was fo wide at bottom, that it required an hour to walk round it.

On the 5th, we proceeded to HANNES VAN AARDE'S, near Paardeberg, which is a little higher than Paarl mountain; this ftands feparate, and has taken its name from the wild Cape Horfes (or Zebras) which formerly were to be feen here in great numbers. At this time there was only a dozen of thefe beautiful animals, and thefe were protected by government, and were far from being fhy.

On the 7th, we paffed on to Losper's eftate, and

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On the 8th, paffing by PETER LOSPER's and JOHANNES WALTHER'S farm, we came to DREYER'S effate, near *Riebeek caftle*, a large mountain, fo named after VAN RIEBEEK, the founder and first governor of this colony. The mountain was very high, and its fides were steep.

My fellow traveller and I, one day, climbed up to the high tops of this mountain, whilft our oxen, which we had ordered to be taken off from the waggons, kept grazing at the fide of it. We were obliged to make almost the whole circle of the mountain before we could get to the peak we wished to afcend. When arrived upon this fummit, we perceived our waggons flanding at the foot of the mountain; but faw, at the fame time, that we were feparated from them by fuch fleep precipices on this fide, that it appeared to us impoffible to reach them, without returning by the fame way that we had come, which was nearly three miles about. However, whilft we were fearching here after fome curious plants, and laying them up in our books, I flumbled upon a very near, but, at the fame time, dangerous way, to get to the other fide of the mountain's perpendicular flanks. This was a chink of a few fathoms length, and fo narrow as to be capable of admitting a middle-fized man only. Through this I ventured to

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crawl on my hands and feet, and was fortunate enough to get fafe over to the other fide, from whence it was only the diftance of a mufquetfhot to our waggons. My fellow-traveller, together with his dog, ftood aftonifhed at my adventurous exploit, the one howling, and the other almoft crying; and, at the fame time, vexed to think that he fhould be obliged to go alone a long way round about, without once daring to take the direct path. My courage was rewarded with a fmall plant which I got in the chink, and which I afterwards fought in vain in other places.

On the 11th, we came to Vliermuys drift and ferry, after having passed LOMBART's and OWER-HOLSEN's estates, and Honingberg, which is a low mountain, and of a small extent.

On the 12th, we arrived at WILHELM BUR-GER's grazing farm, near Matje's drift and rivier, where our waggon and cart were conveyed over by boats, and the oxen fwam acrofs.

On *the 13th*, I observed a rainbow, which was extremely pale, with the dulleft colours imaginable, being formed merely out of a rising fog.

On the 14th, we arrived at HANEKAMP's farm, near *Picquet-berg*, which here ftretched N. and S. but on the eaftern fide, to the northward, had feveral bendings, the ridges of which ran

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ran S. E. and N. W. Towards the northern end, the mountain goes up almost to the long chain of mountains, from whence a point projects, forming a new range of mountains, the ridges of which run on to the fea-shore. From this it should feem, as if Picquet-mountain had a different direction from all other mountains; but it is only on the eastern fide that fuch a ridge runs, and, at the northern end, the mountain is continued farther, and runs a great way out to the S. E. and N. W. This mountain is higher than Riebeek Castle, and, in the east and north, has a great many steep and inaccessible rocks, with flat and level furfaces at top.

Here grew a fhrub called Zand-olvye (Dodonæa angustifolia), the wood of which was of a hard nature. This was dried, and a decoction of it was drank in fevers, by way of a purgative.

Tygers infefted the bufhes in thefe fandy plains; and I faw feveral perfons that had been bitten by them, though nobody had been killed. I was affured by many people, that a tyger preferred a wild goat to a fheep. The tyger is fuppofed to be more treacherous, and lefs magnanimous, than the lion. He feldom fails to rufh upon a man who paffes the thicket where he lies concealed; and it is impoffible for him to hear the cry of *fa*, *fa*, without attacking

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tacking the perfon that utters the found. I was told of a flave in Madagafcar, who having ftepped behind a thicket to eafe nature, was attacked by a tyger, and wounded fo feverely that he fainted away through lofs of blood; but, feizing the tyger at the fame time by the throat, quite ftifled him, fo that the tyger was found dead, and the flave near him in a fwoon. The Cape tyger is fmall, and about the fize of a dog.

Elephants were formerly very numerous in these parts; but, at present, they are quite extirpated. The best method to escape from these large beasts, whose height fometimes reaches to eighteen feet, is either to fly to the water, or to get into some fiffure of a rock.

Near Picquet-mountain we, for the first time, difcovered and shot a dove (Roode Turtelduyv, Columba Senegalensis). This bird is generally found farther up the country, and is faid not to have been seen for high up towards the Cape till within the last seven years.

The *Stapelia incarnata*, a very branchy plant without leaves, was found in the vicinity of the mountains, though it was rather fcarce; the Hottentots ate it, after peeling off the edges and prickles.

Vogel-valley was a kind of fwamp, which lay at the foot of the mountain oppofite *Paarl*, and was frequented by fea-fowls and fnipes,

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All the roads here were fandy and heavy, like those about Saldahna-bay.

Near Picquet-berg to the northward, ftood Captain Kloof's mountain, and within this, farther to the northward, Drie Fonteins-berg, and then Babians-berg, or the Baboons mountain, which, with its feveral different heads, ftretched on to the fea-fhore.

Travelling farther on we came to CARRELS-PECK's farm, fituated under Picquet Mountain; from thence to GERDT SMIDT's, and afterwards to DIRK KUTSE's, where *Verlooren-valley* has its origin, and fprings from a mountain belonging to the long chain of mountains; and, finally, to AND. GREEF'S.

The eftates in this tract are embellished with vineyards, corn-fields, and beautiful gardens.

Here I met with a lemon, which contained another within it, furnished with a red rind. Neither of these two lemons had any seed, and the rind of the inner lemon was said to have even a sour taste.

Here I also faw a goofe's egg, which contained another egg inclosed within it. The external egg had a yolk, but the inner none.

Offriches abound in all these parts. They frequently do great damage to the farmers, by coming in flocks into their fields, and deftroying the ears of wheat, fo that nothing but the bare

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bare ftraw itfelf is left behind. The body of this bird is not higher than the corn, and when it devours the ears, it bends down its long neck, fo that it cannot be feen at a diftance; but, on the leaft noife, it rears its head and long neck, and can thus forefee its danger in time, and make its efcape, before the farmer gets within gun-fhot of it.

When this bird runs it has a proud and haughty look, and feems not to make much hafte, although it be in great diftrefs, efpecially if the wind is with it; and when the wind blows a little, it flaps with its wings, which greatly affifts it in its flight. It is then impoffible to overtake it with the fwifteft horfe, except when the weather is exceedingly warm and at the fame time calm, or when its wings have been flot off.

One morning, as I rode paft a place where a hen offrich fat on her neft, the bird fprang up and purfued me, with a view to prevent my noticing her young ones, or her eggs. Every time I turned my horfe towards her, fhe retreated ten or twelve paces; but as foon as I rode on fhe purfued me again.

The farmers here likewife informed me, that a ftone or two is fometimes found in the oftrich's eggs, which is hard, white, rather flat and fmooth, and about the fize of a bean. These ftones are cut and

and made into buttons; but I never had the good fortune to fee any of them.

Partridges (*Tetrao*) abound here and in many other parts of the country. They did not immediately take wing when we rode full trot after them, but they ran fo fwift along the road that we could hardly keep pace with them; at length they took flight fide-ways, with loud and violent fcreams.

Ferlooren-valley is the name given to a rivulet that derives its fource from the above-mentioned range of mountains, and empties itfelf into the fea. Its banks are in many places over-grown with reeds and rufhes (Carex, Arundo), which fometimes shoot up to the height of feveral yards, infomuch that the rivulet, in fuch places, cannot be feen. In these impenetrable recesses an innumerable multitude of birds have their haunts and places of refuge, fuch as different forts of herons (Ardea major and Carulea), Ducks (Anates), and Coots (Fulica). In fome places it was narrow, and in others broad; but in particular it grew wider and wider the nearer it approached to the fea. In fome places there were large holes and deep refervoirs. It runs into the ocean to the northward, and, when it is low, the mouth appears dry, and the current there intirely choaked up with the fand and fragnating. The nearer it approaches the fea, the deeper it grows in

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in the middle, and the freer it is from reeds. It has many windings, and, in its courfe, runs between two tolerably high mountains. The water is fweet and good; but near the fea, from the intermixture of the falt water, and efpecially in the dry feafon, it grows faltifh. We encamped feveral days along its banks in the open air, till we came to its mouth, in a fandy and barren field, where no colonifts dwelt, and where there were only a few places for grazing cattle, which were moftly committed to the care of the Hottentots.

At the beginning of Verlooren-valley, oppofite the end of Picquet mountain, projects a ridge of mountains, which runs all the way down to the Strand, where Verlooren-valley ends, and forms the heights on one fide of this rivulet.

From Picquet-berg fome ridges of mountains alfo project, which terminate on the other fide of Verlooren-valley.

The large and long range of mountains which extends from Cape Falfo, near Hottentot's Holland, acrofs the whole country, terminates here in fcattered and broken hills and eminences, fo that it was not neceffary to crofs the above-mentioned range at this northern end, as at Roode Zand and Pickenier's kloofs.

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Near

Near a farm where Hottentots only tended the cattle, we experienced the inconveniency of being infefted with vermin. We encamped, it is true, at a confiderable diftance from their habitations; but before our arrival, they had fpread their fkin-coverings, which fwarmed with vermin, upon the adjacent fields, and our pillows, on which we ufed to fit in the fhade of our waggons, were prefently filled with them, fo that after feveral days painful labour we could hardly get rid of our hungry and troublefome guefts.

Serpents abounded greatly in thefe fandy and bufhy plains. Not a day paffed that we did not catch feveral, and put them into the brandykegs. Whilft we were fitting on the ground to eat our homely meals, they ran acrofs my legs and thighs as well as those of my fellow travellers, without once biting any of us. A ferpent once twifted round my left leg, and, without biting me, fuffered itfelf to be gently fhaken off. Another came creeping out from under my body, whilft I lay on the ground, and afterwards crawled, as cold as ice, over the bare leg of one of the company that fat near me, without doing the leaft hurt to any of us. From this it may plainly be inferred, that ferpents do not attempt to bite, unlefs in felf defence, when trampled upon, or otherwife hurt. Many times did ferpents Vot. II. L

ferpents run across the road, and not unfrequently between the horses' feet, without doing the horses any injury.

The fand-moles, of which here were vaft numbers, had made fo many holes in the ground that it was with great difficulty and danger the traveller could get on, as his horfe fometimes fell deep into them, and very frequently fumbled.

From Verlooren valley we travelled on to Lange valley, which is a river fimilar to the former, but much lefs; and from hence we had a very long and dry carrow-field to traverfe before we got near the mountains again, and to a place called the Gentlemen's hotel (Heeren logement.)

The heights were very fandy, the country dry, and the grazing farms fcarce, at which the farmers themfelves likewife did not live, but only kept fome hired Hottentots to tend their cattle, which is here the only thing they attended to; as the drought and the barrennefs of the foil prevent them from growing corn or planting orchards.

On the 25th, before we reached the Gentlemen's hotel, we paffed feveral fmall vales in our way of a very triffing depth, which, from the heat of the weather, were already quite dried up. Thefe had a ftrange and fingular appearance, as the clay which, during the rainy feafon, had been diffolved

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diffolved and agitated in water, was now deposited in various strata, or laminæ of different degrees of thicknefs, which had fplit in confequence of the heat, and were feen very diffinctly. The lowermost layer was the coarfest, and contained a great quantity of extraneous particles, which, in confequence of their weight, had fettled there The uppermoft layer was both purer and firft. finer, and fo dry as to flick to the lips and tongue like a new tobacco pipe. This, as well as other African minerals, I collected, and have prefented them to the royal academy at Upfal for their collection of minerals.

In my way to the Gentlemen's hotel, I found a fcarce and long-fought for plant, viz. the Codon Royeni, but did not fee more than one fhrub of it, which however I think I never shall forget. It was one of the hotteft days in fummer, and the heat was to intolerable, that we were afraid that our beafts would grow faint and drop down quite exhaufted. By this infufferable and tormenting heat our bodies were fwelled up, as it were, and the pores opened in the higheft degree. The bushes we met with, were covered all over with white, brittle, and transparent prickles, which, when my fellow traveller and I fuddenly fell upon them, and ftrove which fhould pluck the most flowers with our naked hands, fcratched them in fuch a terrible manner, that for L 2

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feyeral days we experienced great pain and inconvenience.

At length we arrived quite exhausted to the Gentlemen's hotel, which was a vale between the mountains, with a pretty high hill. Up this hill we had to drive before we could get into another tract of country, which however was not very fertile.

This place, which is pleafant, being ornamented with a finall wood and a rivulet of frefh water, is called the Gentlemen's hotel, becaufe on one fide of the mountain there is a large cavern to the weftward, like a hall, formed by two rocks, which were hollowed out by the hand of time. I climbed up to it, and found the names of feveral travellers written on the fides. Near this was another hollow vault, but fomewhat lefs.

In the former of these caves there was a fmall fifture, in which a tree, probably the *Sideroxylon*, had taken root, and stood in a very stourishing condition, being above eight feet in height; although it had no more water for its nourishment and support than the trifling quantity that was retained by the fifture in the rainy seafon.

Upon the whole, the mountains hereabouts were dry, barren, and of a brittle texture, appearing as if they had been burned, and containing a great number of large, bare, and loofe ftones.

Whilft

Whilft we refreshed ourselves here and our wearied cattle, a farmer arrived on horseback from Olyfant's rivier, who informed us that a lion inhabited the spot by which we were to pass, and that it had lately been seen upon the road, and had purfued a Hottentot there.

However, as we had no other way than this dangerous one to chufe, we fet out on the following day, viz. the 26th, and, the better to be on our guard, we rode the whole day with our guns, laid acrofs our arms, cocked and loaded with ball; and late in the evening, when it was quite dark, arrived at PETER VAN SEELE's, near Olyfant's-river, where we ftaid a few days, as the fituation was comfortable and the people obliging and hofpitable.

The road was almost every where fandy, and the heights we rode over prefented nothing but bare rocks, with a red fand ftone, intersperied with pebbles, that appeared to have been inclosed in the fand-ftone before it had hardened into a rock, in like manner as their furface feemed to have been polished, before their inclosure, to the degree of fmoothness they now exhibited, by the violent motion of the waves.

Here were feveral mountains flat at top, like the Table mountain, which terminated behind Olyfant's river, before they reached the fea-

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shore,

fhore, between which and the mountains it is faid to be a day's journey over a broad and level plain.

The Bokke-veld mountain alfo ended near the fea-fhore, on the other fide of Olyfant's river; they are of a confiderable height, and do not go off with a gradual flope.

Kamerup was the name given here to the Hottentot's Water-melon, a large fucculent root.

Karup again fignified the root of a fpecies of Lobelia, which was eaten by the Hottentots.

Moor-wortel is an umbelliferous plant, from the root of which and honey the Hottentots make, by fermentation, an intoxicating liquor.

A wild goofe (*Anas ægyptiaca*) took up its refidence in great Olyfant's river immediately below the farm, and did great damage to the farmer's wheat-fields. It had been fired on before, and wounded with fmall fhot, but efcaped alive. This made it fo fhy and cautious, that on the flighteft view of the people of the houfe it would fly to the other fide of the river, fo that no body could come within gunfhot of it. I being a ftranger, it feemed to be lefs fearful of me, a circumflance which, one day, as it came on the fide of the river next the houfe, gave me an opportunity of fhooting it, to the great fatisfaction of my hoft.

- As we now had to travel through a dry and barren defart, we took care to lay in proper provision

vilion here for the journey, viz. bifcuits, bread, butter, and frefh meat, with which our worthy hoftefs very obligingly furnifhed us. We fent all our baggage over Olyfant's river which was pretty broad, in a finall boat, and afterwards made the oxen fwim acrofs with the waggons. The river was deep in feveral places, and a beautiful wood, confifting of trees of various kinds, efpecially the Mimofa nilotica, adorned its banks.

After this, on the 30th, we rode down by the foot of the mountains, the first and largest projecting point of which was called Windboek, and the other Maskamma. We arrived at a grazing farm, which belonged to one RAS, and was called Trutru. Here, on fome of the leffer hills, I found the Hottentots water-melon, which I had been long in fearch of, and defirous of knowing. The root was almost as round as a ball, above fix inches in diameter, of a yellowifh colour, and about as hard as an ordinary turnep. The tafte of it was agreeable and refreshing. It is much eaten by the Hottentots. Its bloffom was not quite full blown; but it feemed to me to belong to the order of the Contorta, and I thought it might be referred more efpecially to the Ceropegia, or the Periploca genus,

The field was always dry; in the clefts indeed, and fometimes at the foot of the mountains, there

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was water; but the land was fo poor, that no farms could be laid out there.

We faw the Bokke-veld mountains lying before us, which extended far towards the fea-fide, and that with feveral projecting points, just like fo many ranges of mountains.

On the 31st, we proceeded through the defart; in which the farther we advanced, the drier it grew. Our journey through the defart lasted three days at least: and in the whole of this tract we found only three places which at this time afforded a little falt-water. But these were the more difficult to find, as they did not lie near the road, but at a good diftance from it. A ftranger eafily paffes, by them, and thus endangers his own life and that of his cattle. Very happily for us, we fell in with a farmer from the Cape that was travelling the fame road; but with our weak cattle we could not keep pace with him. We therefore requefted, that he would fet up a flick with a linen rag on it at the places where we ought to bait, and in the neighbourhood of which we might look for fo extraordinary a phenomenon as falt-water is in these thirsty plains. The first night we luckily hit upon the watering place called Single Dornboom's rivier, but not the fecond, fo that our cattle were nearly exhaufted by heat and thirft, before we reached, which

which we did not do till the third evening, the Bokke-land mountains, where we baited all night near a finall rivulet of fresh water, called Dornrivier, after having passed a place called (Leeuwedans, or Leeuwejagt) Lions-dance.

In the winter, when it is fet in for rain, the farmers remove for fome time with their cattle to this part, which is at this time the most proper for breeding of fheep, but not always for other cattle. And indeed the fheep in thefe barren fields grow fometimes fo fat, that their flesh cannot be eaten. The leanest are therefore always felected for flaughter. When a butcher has purchased a flock of sheep, and driven them 130 or 150 miles to the Cape, they are generally reckoned fat enough to be killed.

All the mountains here ftretched N. N. E. towards the fea, and S. S. W. into the country, where they grew very flat; towards the furmits they were quite level, as if their heads had been lopped off.

To the left a ridge of mountains was feen to commence, which ran along the fea-fhore, and was not very high.

In this Carrow-land grew the most fingular Mefembryanthemums, and those in the greatest quantity; on the other hand but very few Craffulas, Euphorbias and Cotyledons,

On the 2d of November, we rode up the Bokke-land mountains with two pair of oxen, with which the farmer, who had paffed us, kindly affifted us, ours being quite fatigued and difabled, and the mountains fo fteep that feveral Hottentots were obliged to hold the waggons faft with cords, to prevent them overfetting. This mountain was not only very fteep, but likewife very hilly, and abounded with flate; above there was a fteep ridge, and the fides of the crown itfelf were almost perpendicular. At the top of all the mountain was level, the air colder, and the plain abounded in grafs.

Bokkeveld lies between the 30th and 31ft deg. South of the Equator.

In afcending this mountain, we difcovered a fpecies of Aloe (*Aloe dicbotoma*) the ftem of which, when of a proper thicknefs, is hollowed out, and used by the Hottentots as a quiver for their arrows.

Weary, but not a little pleafed, we afterwards arrived at CLAS LOSPER'S farm, whither we intended indeed to have gone the preceding year,' but were prevented by an accident. In this honeft farmer, during the few days ftay we made with him, we found as generous a hoft as we had before found in him a faithful guide and kind affiiftant. He was the richeft grazier in the whole

whole country; and was at this time in pofferfion of at leaft 12,000 fheep, and above 600 fullgrown horned cattle, befides about 200 calves.

We now left a tract of land to the left, nearer to the fea, which is occupied and inhabited by two rich and powerful nations, the little and great *Namaquas*. Thefe are occupied in grazing; and their cattle appeared to me to be of quite a different kind from those of the Caffres and colonists, being for the most part long legged, large, and without a bunch on the back.

Bokke-land, or Goat-land, which we had now reached, is nothing elfe than a tolerably high mountain, which is level at the top, and towards the edges of its fummit forms a variety of projecting angles, pointing to the fea fide. It confifts of different ftrata; the uppermost of which is fand-stone, in many places interlarded with polished round pebbles. The fand-stone is for the most part laminate like slate, and moulders away into pieces by rain.

This country being all over exceedingly barren, and confequently not much frequented by the colonifts, there were feveral finall focieties of Hottentots, fcattered up and down in it, who were in pofferfion of fome very inconfiderable herds of cattle; and a great many of them were employed as fervants by the few farmers that lived here, who repaid their fervices with cattle and other trifling gratuities.

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With these as well as other Hottentots who live farther up the country near Roggeveld, and who were once more numerous and rich than they are at prefent, the Dutch Company formerly carried on a bartering trade; but, on account of the injuffice and violence which the factors that were fent to them were guilty of, and which the governors frequently connived at, not deeming it their duty to contend for the rights of nature and humanity, when neither the Company's nor their own private interest was concerned, it has now almost entirely ceased. When a corporal was fent out by the governor with a few men to barter with the Hottentots for their oxen, against arrack, glass beads, iron and tobacco, he not only got their oxen for flaughter, but their calves, cows, and fheep. And this exchange was not always with the Hottentots' good will and confent, but by compulsion, and frequently by force. Befides this, they were bafe enough to dilute the arrack with water, and thus to adulterate it. This mode of bartering occafioned by degrees fuch a difgust, that fome of the Hottentots neglected to augment their flock, and others entirely left the places of their refidence, and ran away ; after which they fometimes stole cattle from the farmers, who by degrees feized upon their land. Not long ago, Corporal FELDMAN procured by barter 500 oxen, with the

the greateft part of which he enriched himfelf, returning only fifty into the Company's flaughterhoufe. This bartering traffic, which was not very advantageous to the Company, but unjuft and cruel towards the Hottentots, has now quite ceafed as well in this North Weftern, as in the South Eaftern part of Africa, efpecially fince the land is well peopled, and the farmers, who abound in cattle, are now capable of delivering as many foever as may be wanted. Should fuch traffic ever take place again, it ought to be with the Caffres and Namaquas, who are poffeffed of a great quantity of cattle, and whofe lands have not hitherto fuffered in the leaft by the encroachments from the colonifts.

From Bokkeland we faw the Roggeveld mountains to the eaftward, and, nearer hand, the Hantums mountains to the northward, and ftill farther to the northward, a range of mountains, behind which lay, according to report, an immenfe long plain without mountains, but furnifhed with feveral falt-pans, and inhabited by Bofhiefman-Hottentots. All the above-mentioned mountains lay high, and at the top as it were of the Bokkeland mountains.

The Boshiefman Hottentots inhabit the most indifferent, poor, bare, and cold part of this fouthernmost point of Africa, towards the N. and E. from Namaquas-land, across Roggeveld, and

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as far as the Snow-mountains. And indeed this nation is the pooreft and most defiitute of all. They have feldom or ever any cattle, and frequently no fixed abode, but wander about the country, and fupport themfelves by plunder and theft. They often live without either clothes or huts; and I was informed by fome farmers worthy of credit, that these people fometimes creep down at night into caverns and holes in the earth, many together till the cave is full, when the uppermost covers himself with the skin of a Dassi (Cavia capenfis) to keep out the cold and bad weather. They are of a yellowish brown colour, and fomething lefs than the Hottentots, with very fmall and delicate limbs. The belly, which projects extremely, conftitutes almost the whole of the man.

These Boshiessen had, for the space of several years, molested the colonists here, as likewise in Roggeveld and near the Snow-mountains, stolen their cattle, murdered many of the colonists themfelves, and set fire to their farms. At different times parties had been sent out to disperse them, and last year in particular, three large parties had been sent into three different quarters.

A party confifting of a hundred men, of which thirty-two were christians, and the rest Hottentots in their fervice, had been sent out against fome Namaquas Boshiesmen, and now met us on their

their return. In this expedition they had killed about a hundred, and made prifoners of twenty, chiefly fmall children, fome of whom they at this prefent juncture had with them. It was faid that in a fimilar expedition in 1765, 186 had been killed. None of the chriftians that went on this expedition were either killed or wounded.

The Hottentots are confidered as allies, and not fuffered to be made flaves of; but fuch Hottentots as are taken prifoners in war, efpecially if young, are for fome time the property of the captor, and obliged to ferve without wages, but are not to be difpofed of to others. If any of the colonifts take an Hottentot orphan to bring up, it must ferve, it is true, without wages, till it is twenty-five years old; but, on arriving at that age, it is at liberty to go where it pleafes, or to continue in fervice at a ftated falary.

Although this Bokkeland, which alfo has the name of the Lower Bokkeveld, lies very high, yet it is faid that fnow very feldom falls here.

For the protection of the property of the colonifts against the ravages of the Hottentots, the Company had, to the eastward, established feveral posts one after another; but to the westward, on the other fide of the mountain, not one was established, although it is there that fuch posts are most necessary and important. The farmers towards this coast must therefore themselves be armed

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armed in order to defend themfelves against these plundering Boshiesmen; and on this occasion the more wealthy farmers generally supply the other with powder, ball, and men. One of the farmers is commonly chosen for their leader, who is then exempted from all other borough fervice. When a large party is fent out, the government supplies them, on the Company's account, with brandy, hand-cuffs, powder and shot.

The Boshiefmen exercise their violence and depredations not only on the christian colonists, but have, previous to this, by their thefts, ruined the major part of the Hottentot natives, many of whom have fince gone into the fervice of the colonists.

When any ftrangers arrive at a farm, the Hottentots belonging to it always give each of them a name fuited to his appearance, profession, or other external circumstances; this happened in feveral different places to me and my companions.

When we were encamped in the open air, which was frequently the cafe, and had forgot to procure fire by means of our guns, the Hottentots made use of another method, which was no lefs curious than infallible. They took two pieces of hard wood, one of which was cylindrical, and the other flat, with a hole in it; the flat piece was laid down on the ground, and the foot

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foot placed on one end of it to keep it faft; after which fome dry grafs was laid round the hole, and the cylindrical flick being put into the hole, it was twirled round between the hands with fuch velocity, that the friction arifing from it fet the grafs on fire.

When we flewed our meat in the open field the Hottentots would fometimes come, after it was taken out of the pot, and first befmear themfelves all over with the greafe, and afterwards rub the foot of the pot all over their bodies.

The Boshiefmen fometimes make use of javelins, but the shafts are shorter and thicker than those of the Caffres Affagays; which they use not only to throw, but likewife, and indeed chiefly, for the purpofe of killing the cattle they have ftolen; but their principal arms, which they use in war and for their own defence in general, are bows and poifoned arrows, and thefe they are taught to handle with great dexterity. The arrow is armed with a thin triangular piece of iron, fastened with a string to a bone of a finger's length, to the end of which again is fastened a reed. This iron as well as the bone is afterwards rubbed with poifon extracted from ferpents. The Boshiefmen are the most expert marksmen of all the Hottentots, and are faid to be able to fhoot their arrows to the diffance of 280 paces. They also know how to avoid -YOL. II. M the

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the arrows of others with the greateft nimblenefs and dexterity, juft as baboons do when ftones are thrown at them; and if they could but fee the mufquet-balls of the Europeans, they would think themfelves able to efcape them likewife. To running the Bofhiefmen Hottentots are fo inured, as not to be excelled in it by any others; but can almost hold out longer than a horfe. On the level plains they are easily overtaken by a man on horfeback; but very feldom if the road be ftony, and never in mountainous places.

They can endure hunger a long time; but when they have a plentiful fupply, will eat fo immoderately as to diftend their bellies to an amazing fize. When oppreffed by hunger, they tie a belt round their bodies, which they gradually draw tighter, till the naval is brought clofe to the back-bone.

When a Boshiefman has caught a ferpent, and killed it, he does not, according to report, cut off its head, but bites it off, and then cutting out the vesicle containing the poison, dries it in the fun till it becomes viscid and tough, and then mixes it with the juice of a poisonous tree, (frequently the *Cestrum venenatum*), which makes the poison adhere the faster to the arrow.

The Hottentots and Boshiefmen are faid to fortify themselves against poisoned darts and the bite

bite of venomous animals, by fuffering themfelves to be gradually bitten by ferpents, fcorpions, and other venomous creatures, till they become accuftomed to it; but thefe trials fometimes coft them their lives. The urine of an Hottentot thus prepared is effecemed an excellent antidote or counterpoifon, and is therefore drunk by fuch as have been bitten by ferpents.

When it thunders, the Boshiefmen are very angry and curfe bitterly, thinking, that the form is occasioned by fome evil being.

Poifonous bulbous plants, (Giftbolles, Amaryllis difticha) grow in feveral places common, with their beautiful clufters of flowers. The root, which is poifonous, is almost as big as one's fift. The Hottentots use it chiefly for poifoning the arrows with which they shoot the smaller kind of game, such as Spring-bucks (Capra pygargus) and the like. Those bulbs that grow in the shade are thought to posses a stronger poifon than those which are exposed to the fun.

On the following days we rode along Bokkeland to Hantum. The country inclined gently and gradually towards it. The Hantum country began with fcattered ridges of mountains; farther up the country ftood a high mountain, which was more particularly called *Hantum mountain*, and had a cut, or open cleft, through which we rode. The mountain was fmooth and level at M 2 the

the top, and in height appeared equal to Roggeveld.

After we had got to the end of Bokke-land, the country grew, the farther we travelled, a drier Carrow, with confiderable rivers, which had ftill brackifh water in them, but in fummer are quite dried up.

In Hantum we paffed VAN RHEN'S grazing farm, near *Riet-fontein*, and afterwards rode by HENDRIK LAU'S grazing farm, to ABRAHAM VAN WYK'S farm. This VAN WYK was a lufty, fat man; as foon as the dogs, by their barking, announced the arrival of ftrangers, he ftood at the door to bid us welcome. My fellow traveller and I were not a little furprifed, in a country fo extremely barren, and through which we had travelled feveral days without feeing a fingle living creature, now to find fo lufty and corpulent a man, and one that did fo much credit to his keeper.

In this tract we found the Fungus we had fo long fought and wifhed to fee, (Hydnora Africana) which without doubt is one of the moft extraordinary plants that have been difcovered of late years. It always grows under the branches of the fhrub, Euphorbia tirucalli, and upon its roots. The lower part of it, which is the fruit, is eaten by the Hottentots, Viverræ, Foxes and other animals.

On the 13th we proceeded to CHRISTIAN Bock's, and

On the 14th, to Rhonnoster-rivier, where we were obliged to unyoke our cattle and ftay all night; although a lion had two days before killed a zebra near this fpot, which it had not yet had time to devour.

The lions have their haunts in every part of thefe mountains; and are, on account of the farmers' herds of cattle, as difagreeable neighbours as the Boshiefmen. And indeed there were feveral people here who had been in danger from these dreadful beasts of prey. Amongst others was mentioned a farmer of the name of KORF, who lived not far off.

A lion had flationed itfelf amongft the rufhes of a rivulet that ran near the farm, fo as to deter the fervants from going out to fetch water, or tend the cattle. The farmer himfelf therefore, accompanied by a few terrified Hottentots, refolved to attack it, and endeavour to drive it away. But as it lay concealed in the thick rushes, he could not fee to take aim, but was obliged to fire feveral fhot at random into the rushes. The lion, enraged at this, rushed out upon the farmer, who, having fired off his piece, was now quite defencelefs, and at the fame time deferted by his fugitive Hottentots. As foon as the lion had laid hold of him, he plucked up cou-M 3 rage,

rage, and thruft one of his hands down the lion's throat, which faved him from being torn to pieces, till at length he fainted away from lofs of blood. After this the lion left him, and retreated into the rushes again for a few days. When the farmer at last recovered, he found that he was not only terribly wounded in his fides by the lion's talons, but one of his hands was fo much torn and lacerated by the animal's teeth, that there were no hopes of its being healed. On entering the houfe and being a little revived, he took an ax in his hand, laid the wounded hand on a block, put the ax on it, and ordered one of his fervants to ftrike the ax with a club. Having thus cut off his own hand, he dreffed it with cow-dung, and tied a bladder over it, and at length healed the wounds with the ufual falve, made of a decoction of odoriferous herbs, lard, and a little wax.

I heard another anecdote of an old farmer, who, together with his fon, had gone out in order to drive away a lion from his farm. The lion had fuddenly leaped upon the old man's back, and in that fituation, before it had had time to kill him, was fhot dead by the fon.

Another inftance was related to me of the widow of one WAGENAAR, near the Snow-mountains, who had gone out to fcare a lion away from her cattle; when the beaft feizing on her, firft

first ate off one of her arms, and at length, when she fainted, devoured her head. After this it had likewife devoured a Hottentot maid fervant. who had ran to her miftrefs's affiftance. The children who had feen this fhocking fight through the crevices of the door, dug themfelves out through the earth under the back wall of the houfe, and from thence ran away to the neareft farm.

From this dangerous place we went to Daunis, where the fettlement had been deftroyed by the Boshiesmen by fire, and the owner with his people forced to run away.

The country here was level, with feveral mountains running N.E. and S.W. Directly before us lay the Roggeveld mountains.

Moorwortel, (an umbelliferous plant) was alfo fpoken of here as a root, from which, with water and honey, the Hottentots prepare an intoxicating liquor. This root is faid to be taken up principally in the months of November and December.

On the 15th we rode along Drooge-rivier, where we were informed by two farmers who overtook us, that a lion had followed our track the day before, but, on feeing fome fheep, had turned about in purfuit of them.

On the 16th we travelled along the foot of the Roggeveld mountains, and then, through a valley formed

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formed by them, called *Port*, and at laft went up the mountain to WILHELM STENKAMP's farm.

Here the country was called the Lowermost Roggeveld, not because it lies lower than the other Roggevelds, (Ryefields) but because it lies farthest from the Cape. These as well as the others have been so named from a kind of rye which grows wild here in abundance near the bushes.

The winter is very cold, with froft and fnow, for which reafon no cattle can be kept here, inftead of which they are driven down to Carrow. The fettlers in the lowermoft Roggeveld, who are in poffeffion of good houfes, fometimes pafs the winter there; but thofe who live in the middle Roggeveld, always remove from thence.

The whole country is defitute of wood, and has only a few finall fhrubs and bufhes of the Mefembryanthemum, Pteronia, Stoebe kinds, and a few others, fuch as Othonnas, &c. The country produces good fodder for fheep and horfes only, of which there are great numbers, but very little horned-cattle, on most of the farms.

The uppermoft ftratum of this mountain is fand-ftone, which is hard and breaks in large pieces, and very fit for building of houfes. The middle ftratum is flate, which may be difcerned

cerned in the clefts, and this bed is wider than the former. The lowermoft ftratum is red fand and clay, interfperfed with round ftones of different fizes.

Roggeveld is a mountain which has been inhabited by the colonifts for thefe thirty years paft. It confifts of eminences and vallies, and has no ridges of any remarkable height, fo that it cannot be called level, but hilly.

The farms are not fituated far up the country, but near the edges of the fummit of the mountain and all along it, fo that the part inhabited is yet very fmall.

The foil in the lowermost Roggeveld is a dark brown mould, intermixed with a fmall quantity of loofe and brittle clay. It does not rain either at Roggeveld or at Camdebo in winter, but only in fpring and fummer; and the rain is then always accompanied with thunder forms.

On the 18th we proceeded to JACOB LAUE's, and,

On the 20th, to ADRIAN LAUE'S farm. From the edge of the fummit of the mountain here we faw the Carrow lying underneath us, as alfo Windhoek, Mafkamma, the Table-mountains near Olyfant's rivier, the cold Bokkevelds, and Roode-Zands Winterhoek, all in a row.

The Roode Zand and Bokkeveld mountains were lower than Roggeveld. Carrow lay between

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tween thefe, higher than that Carrowfield which we had paffed through between Olyfant's rivier and Bokkeland, and almost as high as Maskamma and the Bokkeland mountains.

On the 21st we came to GERT VAN WYK's.

The above-mentioned farms were always fituated in vallies between the heights.

Although the fummer drew near, it was very cold and froze at nights. The afternoon's breeze alfo was always cold.

On the 23d we arrived at THOMAS NEL'S farm; and afterwards to ADRIAN VAN WYK'S, near the edge of the top of the mountain, where a tremendoufly deep valley extends down to Carrow; from hence a road leads to Carrow and Moftert's hoek.

Here I faw a Hottentot female fervant that was born with the left arm imperfect, and ending near the elbow. The mother was for murdering this child at the birth, (according to the cuftom of the Hottentots, it being a cripple) but was prevented by a humane colonift.

I was furprized to find that the Hottentots, who were in the fervice of the farmers, and were moftly naked, could endure the cold here fo well. They had no other covering than a fheepfkin about their backs; the woolly fide being worn next to the fkin in the winter, and the fmooth fide in the fummer. It was but feldom that

that they had fhoes to their feet. It fometimes happens, however, that they are frozen to death.

It is a cuftom with the Hottentots in thefe parts to bury their dead in the clefts of the mountains; and fuch as fell into a fwoon, had the hard fate to be buried immediately. Wild cucumbers is the name given to the Coloquintida (*Cucumis colocynthis*). They were faid to be eaten by the Hottentots, and even by the colonifts, after being pickled with vinegar, although they tafte very bitter. The fheep feed eagerly on them. The *Stapelia articulata repens*, a thick plant without leaves, is eaten by the Hottentots as alfo by the colonifts, after being pickled in the fame manner as cucumbers.

Karré-hout (*Rbus*) is a kind of wood which the Hottentots in this part of the country used for making bows.

The road all over Roggeveld was rough, and full of round and fharp loofe ftones.

The fpring-bok comes hither fometimes from the interior parts, and goes as far as the Bokkevelds, or fomewhat farther. At the expiration of a certain number of years they emigrate in the fame manner as the Lemmings in Swedifh Lapland, arriving in troops of millions, and going in a long field one after the other, eating away all the herbage wherever they pafs, and fuffering nothing to obftruct them in their march. If any

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of them bring forth on the road, they leave their young behind. If any of the farmers fire amongft them, they continue their route neverthelefs without interruption, and are not even intimidated by lions and other beafts of prey, who follow the herd, and make great havock amongft them. After they have paffed through any farmer's grounds, hardly any thing is left for his cattle to eat, nor any water to drink. The corn-fields muft be watched night and day, otherwife they would entirely deftroy the corn, and the farmers would be reduced to want.

On the 24th, we came to a fpring in the open field, where we encamped all night, and,

On the 25th, we croffed the mountain to PAUL KERSTE's near Kreutsfontein. In the afternoon, when we were ready to fet out from hence, and our horfes were faddled, my horfe had the misfortune to be bitten in the breaft by a ferpent, as they were watering him at the brook just below the farm. In confequence of this his whole foot grew fliff and fwelled as I rode on, and the fwelling increafed to fuch a degree, that, before I had got a ftone's-throw from the farm, he could proceed no farther, and I was obliged to leave him on the fpot. A fmall ferpent not quite fix inches long, which was faid to be very venomous, and was found here in abundance, was supposed to be the perpetrator of this mischief. Here

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Here began the *Middle Roggeveld*, which was only divided from the former by means of a few mountainous ridges.

On the 26th we arrived at CORNELIUS KUTSE's.

His fon had a fhort time before been bitten in the hand by a venomous ferpent. His hand had been fcarified immediately, and a cupping-glafs applied, in order to extract the poifon from it. After this it was fteeped in a folution of vitriol, which was faid to have been rendered quite black by it. An onion was next applied, and afterwards turtle-blood. This latter, when laid on the wound in a dry ftate, was faid to diffolve and turn to a fluid blood, that exhibited figns of effervefcence: as the poifon of ferpents has a ftronger attraction for turtle-blood than for human blood, fo as to attract the poifon to itfelf.

Every farmer travelling from Roggeveld to the Cape through Mosterts-hoek, pays annually a certain fum towards repairing the roads. The farmers who live far up the country, have generally the misfortune to be poorer, and to be fubject to greater expense than others.

We fell in here with another party, that had been in purfuit of the Bofhiefmen quite up into Roggeveld. This party confifted of about ninety odd perfons, of whom forty-feven were chriftians. They had killed and taken prifoners nearly

nearly 230 Boshiefmen. One of the colonists had been shot in the knee with an arrow, which had cost him his life. The third detachment, which had been sent to the Snow-mountains, had killed 400 Boshiefmen; of this party seven had been wounded by arrows, but none died.

It fometimes happens, that the Boshiefmen take away at once the farmer's whole herd whilft grazing, and frequently even kill the herdfmen. They afterwards drive their booty higher up into the country, night and day, as fast as they can, till they arrive at a place where they think themfelves perfectly fecure. What they cannot take with them they kill with their javelins; and, in their flight, place fpies on the heights of the mountains, to look out carefully, and fee whether they are purfued by the colonists. These spies are relieved by others, and give intelligence if the party is purfued; in which cafe they all hide themfelves, if poffible, in the mountains. In their flight they kill, roaft, and eat by turns. When they have ftolen a confiderable number of cattle, and are arrived at fome place where they think themfelves tolerably fecure, they encamp there with their cattle, and make huts (Kraals) of Melembryanthemum bushes or of mats, in which they live together as long as their food lasts. The detachment had feen one of these Kraals, or encampments formed of huts in two rows,

rows, like a village, in which they had counted on one fide upwards of fifty huts, from which all the Bofhiefmen have removed.

In Roggeveld alone the Boshiefmen had, in the last two years, stolen more than 10,000 sheep, besides oxen, and murdered many of the colonists, their flaves, and Hottentots.

When the Boshiefmen are purfued by the colonists on horfeback, they retreat to the mountains, where, like baboons, they post themselves on the edges of the summits and in the inacceffible places, and are always associated of the plains. They fometimes creep into the clefts, and from these bulwarks let fly their arrows.

The weapons with which they defend themfelves against their enemies, are bows and poifoned arrows. By way of defence against these, the colonists cause a skin to be held before them, in which the arrows stick fast, that frequently come like a shower of rain. The Boshiessmen, when they perceive that their arrows do not penetrate, do not fire a second volley. A Boshiesman who is mortally wounded by a ball, is never found either crying or lamenting in any shape whatever.

These people first chew Canna (Mesembryanthemum), and afterwards smoke it. They befinear themselves with greasfy substances, and over that with red chalk; in times of scarcity they feed on ferpents,

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ferpents, lizards, the flesh of zebras, lions, and baboons, upon bulbous roots, ants' eggs, &c.

On the 29th we rode along Vifch-rivier paft OLIVIER'S farm, to JACOBUS THERON'S. A misfortune, which I leaft expected on a fmooth and plain road, attended me however this day. Thro' the careleffnefs of my Hottentots, who drove against a ftone that lay in the road, my cart overturned, the tilt over it was torn afunder, and many of my boxes and packets of herbs were loft.

I here faw necklaces and ornaments for the waift, which the Hottentots had made of the fhells of oftriches' eggs, ground in the form of fmall round rings, and which made a very fine appearance.

The cold in this Roggeveld is very intenfe in winter, and fnow falls with froft. The farmers, therefore, live here only a few months in the year, viz. from October to May; build here their houfes and fow their wheat, which they are obliged to leave to the mercy of the Bofhiefmen, during the time that they remove down to the Carrow-field below, where it rains certain months in the year, fo that they can remain there with their cattle till the approaching dry feafon obliges them to remove up the mountain to Roggeveld again.

On the 1st of December, we travelled farther on to ESTERHUYSEN'S farm, where we were obliged

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obliged to ftay a couple of days, on account of the ftormy, inclement weather, which continued with froft, rain, hail, and fnow, for the fpace of twenty-four hours, and not only confined us to our room, but obliged us to put on our greatcoats, as a defence against fuch an unexpected and unufual degree of cold, which was partly occafioned by the height of the mountain, and partly by the violence of the north and northweft winds.

The mountain, compared to the Carrow-field below, was at leaft as high as Table mountain is at the Cape, and a high road for carriages runs from hence to Carrow.

On the 3d, in the morning, we fet out from this cold place to go down the mountain, and could not, as we had wifhed, continue our journey farther up Roggeveld, as our beafts were too poor and too tender footed, to continue longer on this fharp and rugged mountain.

In the morning when we fet out, the ice ftill lay on the fummit of the mountain, as far as to its very edges, of the thickness of a rix dollar.

The road down the mountain lay over feveral fteep heights and abrupt declivities like very high and broad fteps, for which reafon not only the two hind wheels were obliged to be locked, but the waggon itfelf to be held faft by the Hottentots, by means of ropes, in order to prevent it from overvol. II, N fetting

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fetting and falling down upon the oxen. The uppermost declivity was the steepest, and called (Uytkyk) Look-out, on account of the extensive view it commanded; the other was called Maurice's heights.

While we were on the heights of the mountain, it was intenfely cold; but, the lower we defeended, the calmer and warmer the air became, till in about three hours time we got down to Carrow, when the heat began to grow intolerable.

We had now before us a very large and extenfive field in the dry and barren Carrow to traverfe, before we could reach an inhabited place. We had therefore fupplied ourfelves at the laft farm, with as much provifion as was neceffary for a few days, and with this fet out on our journey through a fcorching defart, fo deftitute of water that even a fparrow could not fubfift in it, and fo devoid of every living creature, that only a few rats were to be feen here and there in holes in the earth, which probably find, in the fucculent leaves of the fhrubs in thefe parts, fomewhat that ferves both to appeafe their hunger and quench their thirft.

Sun-rife called forth every morning thefe earthrats, whole nefts always ran flanting downwards, with their entrance facing the eaft. We tried to fhoot fome of them as they popped their heads out, but found them, to our great furprife as

as well as difappointment, inexpreffibly quick in with-drawing into their holes as foon as they faw the flafh of the pan. I tried feveral times with an excellent gun to hit one of them, but found it impracticable, till I fell upon the method of putting a piece of paper before the pan, which prevented them from feeing the flafh of the prime.

On the 4th, fetting out from MEYBURG'S farm which lay at the foot of the mountain, we came to Goudblom's kloof, and, on the 5th, through finaller vallies to the river of Misfortune (Ongelucks rivier), fo called on account of a farmer having been quite eaten up here by a lion. Here we refted two days, waiting for the arrival of a farmer, who was going to the Cape, and who had promifed to affift us with his oxen across the dryeft of all the Carrows whch lay before us. But as he did not arrive according to his promife, and this baiting place was fuch that both man and beaft ran the rifk not only of flarving for want of food, but likewife of dying of thirft, we were obliged to use all our efforts, and, on the 7th, from eleven o'clock at night to the next morning, make a long journey to a little rivulet that ran before a mountain called Paardeberg, which was finall and folitary.

The tract of country which we had left behind us, was full of fmall mountains and ridges of N 2 mountains,

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mountains, fome detached, others connected to gether, and running W. N. W. towards Roggeveld and the Bokkeveld mountains. The finall quantity of water which was here to be found in a very few places and in finall cavities, was not only falt, but likewife fo thick and turbid with clay and other impurities, that we were obliged to lay a handkerchief over it, in order to fuck a little of it into our mouths.

There is another road indeed farther down, which is lefs mountainous and finoother, but atthe fame time alfo affords lefs water.

On the 8th we paffed the above-mentioned Paardeberg in our way to Dorn-rivier. Hitherto the Carrow had with few exceptions led down with a gradual defcent all over its furface, inclining from the Roggeveld to the Bokkeveld mountains, and was almost every where free from buffes.

On the 9th, we left Dorn tivier, and taking the road through the valley formed by the mountains between Carrow and Bokkeveld, arrived at laft at a fettlement and farm belonging to WANDER MERVEL'S widow.

This good houfe-wife ufed a curious method of feparating lentils from the wheat with which they were mixed. She threw it all to her fowls, who carefully picked up every grain of wheat, and left the lentils behind untouched.

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The leaves of the *Indigofera arborea* were boiled, and the decoction was faid to be a good remedy against the gravel and stone.

The firata in the mountains, as they were feen in the vallies, inclined very much here, and were even fingularly crooked. The ridge of mountains also inclined here confiderably to the eaftward.

On the 11th we departed from hence, having first bought a large ram, which we falted in its own skin. Our route continued till we arrived at a place called *Verkeerde valley*, which is one of the pleafantest spots I have seen in the whole country. It is fituated between two rows of mountains with great plenty of grass, and a fen abounding in water, almost like a small lake. As we wanted leifure to inspect and look after our collections, and our cattle stood in greater need of rest and refreshment, we agreed to remain in this pleafant though uninhabited spot for a few days, and eat our falted mutton in folitude,

On the 14th we passed through a valley in the mountains, called (Straat) Street to DE Vos's eftate near Hex-rivier.

We were now returned, as I may fay, to Chriftendom, or to those tracts in which the settlements lay closer to each other; after having for the space of several weeks, for the most part wandered in defarts, often encamped in the open

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air, and in the most dangerous places, and feveral times been in want of the necessaries of life.

Near this farm a branch of Hex-rivier takes its rife in the mountains, which branch unites within the vale with the larger branch that runs here, and likewife fprings out of the mountains.

On the 16th we rode past JORDAN's farm to VAN DE MERVEL'S estate, and,

. On the 17th, through Hex rivier's kloof to Roode Zand.

Hex rivier's kloof has no heights, is quite level and fmooth, and we were obliged to crofs the ftream feveral times. On the tops of the moun_{τ} tains which ftood on each fide, there ftill lay a great deal of fnow or hail.

Roode Katt is the name here given to a kind of red lynx, with long locks of hair at the extremities of its ears, and the tip of its tail black, PENNANT calls it a Perfian cat, and BUFFON Caracal. Hift. Nat. de Quadr. Tom. ix. Tab. 24. The fkin of it was faid by the farmers to be very efficacious, as a diffutient when applied to parts affected with cold, or rheumatifm.

In the mountains, between the clefts of the naked rock, refides a kind of jumping rat (*Jerboa capenfis*) which the farmers confidered as a fpecies of hare, and called it *Bergbaas* or *Springbaas*. This animal is of a curious make; its fore feet being extremely fhort, but the hind feet nearly

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as long as the whole body, which enables the creature to leap to a furprifing diffance.

The firata of the mountains were fometimes wreathed, and fometimes very much inclined.

The ridge of mountains therefore which we had to pass through, was, all the way from Carrow-field hither to the outlet of Hex rivier near Roode Zand, very broad, interfected with narrower vallies both length-ways and across.

From Roode Zand we took the ufual way through it's kloof, which has a confiderable eminence that must be croffed; but the rest of the road runs along the fide of the mountain.

Roode Zand is, as it were, the key to the whole country behind the chain of mountains, which runs across the whole point. Most of the farmers therefore, who travel annually to the Cape, pafs this way, except those who take the road acrofs Hottentots Holland. On this occafion a furgeon had eftablished himself at Roode Zand, and fet up a finall apothecary's fhop, which brought him in a handfome income. The medicines were all well paid for, infomuch that a purging powder did not coft lefs than half a rix dollar. Sometimes they brought the fick hither, as well colonifts as flaves, and left them under the furgeon's care till their return. Several in the abundance of their friendship endeavoured to perfuade me to establish myself here. But the

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love I bore to botany and my native country prevented me from accepting the offer.

Riebeck cafteel was now observed to extend with a long tail much lower than the mountain itfelf, towards the fouth eaft.

We took our route afterwards paft *Paardeberg* through *Koopmans* rivier, a rivulet, which is a branch of Berg-rivier, and farther through Burger's drift acrofs *Berg-rivier*, and paft *Elfs Kraal* to the Cape, where I arrived fafe and found on the 29th of December, with a heart filled with the deepeft adoration of that divine Being, which, during my three years travels in this country, had not only preferved my life and health, but alfo permitted me to make feveral ufeful difcoveries in it, to his glory and the future benefit of mankind.

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HOTTENTOTS is the common denomination of all those nations which inhabit the fouthern angle of Africa, and are extended on each fide of the Cape of Good Hope. How far the country of these people extends is not yet accurately known; but though they are divided into a multitude of tribes, which differ from one another in many respects, yet it is clearly to be perceived that they all originate from one and the same stock; and that they differ widely from the negroes and moors who inhabit the other coasts of Africa.

The Hottentots in general are fhort, efpecially the women, although fome among them are found that are five or fix feet high. Their colour is neither black nor white, but yellowifh; and their

their exterior black appearance is owing to the filth which adheres to their bodies in confequence of their befinearing themfelves.

The form and lineaments of the face characterize this as well as other nations. Their cheekbones are very prominent, which makes them always appear meagre and lean; the nofe is flattened towards the root, and thick and blunt at the tip, but not very fhort; their lips are rather thick, their hair jet black like fpun wool, and feldom thick, more frequently thin, refembling the nap upon cloth. They have very little hair upon their chin and privy parts. The fpine in particular is very much bent, fo that I never faw any one fo hollow-backed as the Hottentots. I have feen fome of them whofe backs were bent in, and their buttocks projected to fuch a degree, that two people might fit on them. And although the Hottentois are very lean, yet the conftant practice of befmearing themfelves diftends their fkin, and efpecially the womens' breafts, to an inconceivable degree, fo that, in this particular; they can challenge all other nations. The Boshiefmen have more prominent bellies than the reft.

The patriarchal form of government has from time immemorial exifted amongft them, and ftill obtains with many; and this has been the origin of the many larger and fmaller tribes and families,

lies, into which they formerly were, and their furvivors still are, divided. Such tribes formerly were the Gunjemans, Kokoquas, Sussaquas, Odiquas, Chirigriquas, Koopmans, Hessaquas, Odiquas, Dunquas, Damaquas, Gauris, Attaquas, Heykoms, Houteniquas, and Camtours Hottentots, of which few exist at prefent; and fuch at this time are the little and great Namaquas, Gonaquas, Caffres, Boshiessnen, &c. Of these probably fome may in former times have been fubdivided into still scale free tribes.

The Hottentots love filth in the higheft degree; they befmear their bodies with fat and greafy fubftances, over which they rub cowdung, fat, and fimilar fubftances. By this means the pores are ftopped up and the fkin covered with a furface, which defends them in fummer againft the fcorching heat of the fun, and from the cold in winter. Amongft their ointments they mix the powder of a ftrong finelling herb, which they called Bucku, (a fpecies of *Diofma*, frequently the *Pulebella*), and which gives them fo difagreeable, fo fetid, and at the fame time fo rank an odour, that I fometimes could not bear the fmell of the Hottentots that drove my waggon.

Their drefs is very fimple, most of them wear a fheep's skin thrown across their shoulders, and another over their loins, the hairy fide being worn next the body in winter, and the other fide

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in fummer. These fheep-fkins prepared, cover the body behind, but leave it almost entirely naked before. The women, by way of covering, use a short, square, and sometimes a double piece of skin, that reaches half way down their thighs, and the men a case of sox's skin, like a purse, tied with a thong about their bodies. The Gonaquas Hottentots and Caffres use such a dress of calf-skin, and their chiefs of tyger-skin.

Their legs are bare, and their feet for the moft part without fhoes; but round rings made of the hides of animals adorn their legs, effectially those of the women, from the instep to the calf of the leg, and prevent them from being bitten by ferpents. In time of need they likewise ferve them for food, when they broil these rings and eat them.

Their heads are frequently without any covering at all; but fometimes they wear a conical fkin-cap, and the women in fome places make use of a broad wreath of Buffalo's fkin, ornamented with fmall fhells.

Their necks and waifts are ornamented with different coloured glafs beads, which they procure by barter from the Europeans. To the necklace they fometimes faften a turtle-fhell, in which they keep Bucku. The Caffres put Porcupine's quills into their ears (Hyftrix), and fome of the women that live fartheft to the eaftward, use ear-rings of copper, to fet off their brown beauty.

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The Caffres wear ivory rings, and frequently feveral of them on the left arm; and fome, in default of thefe, wear rings of brafs, or iron. All the Hottentots, but more effectially the Caffres, fet a great value upon fhining plates of copper, brafs, or iron, which they hang in their hair, or on other parts of the body.

They are all graziers, except the Boshiefmen, and are fometimes in poffession of numerous herds of cattle, efpecially the Caffres and Namaguas people, upon whofe domains the Europeans have not yet been able to make any encroachments. These subsit on their flocks and herds, and hunt different wild beafts, especially Buffaloes and wild goats of various forts, (fometimes very large ones), with Sea-cows and Ele-They live befides on the roots of phants. feveral plants, fuch as Irifes, Ixias, Moreas, Gladiolufes, and others, the beans of the Guajacum afrum, &c. The men use likewife cow's milk, which they milk themfelves, and the women sheep's milk. To quench their thirst, they mostly drink water, milk and water, and, when urged by neceffity, chew Meiembryanthemums, Albucas, and other fucculent herbs. The mens' bulinels is to go to war, hunt, milk, kill the cattle, and fabricate arms; the womens', to look after the children, fetch wood, dig up bulbous roots, and drefs the victuals. The meat is

is eaten both roafted and boiled, but for the molt part half raw, without falt, fpices, or bread. They make a fire by rubbing two pieces of hard wood quickly against each other.

The Caffres are the only people in this part of Africa that apply themfelves in the leaft to agriculture. They cultivate Caffre-corn (*Hol*cus) beans, hemp, &c. The reft do not till the earth at all, except fome few who now and then fow a handful of hemp.

Their huts are built with fprays of trees, which are fixed in the ground, and bent in arches, fo as to make the hut round at top, and about four feet high. Thefe are afterwards covered with mats made of rufhes, and on one fide an opening about two feet high is left at bottom, which ferves the double purpose of a door and chimney, the fire-place being near the opening. Such huts as thefe, built in a circle of a greater or fmaller extent according to circumftances, form a village, within which the cattle, at least the sheep, are kept in the night, and fecured from beafts of prey. As long as the grafs lafts on the fpot they live there without removing; but as foon as it fails, or any one dies, the whole village removes to another place : fo that the Hottentots, like the Laplanders and Arabians, are Nomades, or wandering fhepherds. A few of them live together in one of these huts, and lie coiled up with their

their knees drawn up to their heads, difperfed around the internal walls of it.

The language, which frequently is almost the only thing that diffinguishes the indolent Hottentots from the brute creation, is poor, unlike any other in the world, is pronounced with a clack of the tongue, and is never written.

With respect to houshold furniture, they have little or none. The fame drefs that covers a part of their body by day, ferves them also for bedding at night. Their victuals are boiled in leathern facks and water, with stones made red hot, but sometimes in earthen pots. Milk is kept in leathern facks, bladders of animals, and baskets made of platted rushes, perfectly water-tight. These, a tobacco-pouch of skin, a tobacco-pipe of stone or wood, and their weapons, constitute the whole catalogue of their effects. Their defensive weapons against their enemies and wild beasts consist of darting-sticks (Kirris) javelins (Affagay) and bows with poisoned arrows.

To the use of intoxicating fubftances they are much addicted. From a decoction of certain indigenous roots and honey, they prepare an inebriating kind of mead. They are very fond of arrack and brandy, and take delight in finoaking tobacco, either pure, or mixed with hemp, and, when they cannot procure thefe, wild Dakka (*Philolmis*) or the dung of the two-horned Rhinoceros,

noceros, or of Elephants. The inhabitants of the fouthern part of Africa contract marriage early, and with little ceremony. When the fuitor has made his intentions known, and obtained the girl's and her parents' confent, a day is fixed for the wedding, which is folemnized by the prieft belonging to the village, who befprinkles the bride and bridegroom with his urine. After that an ox or fheep is killed, according to the circumftances of the parties, and the company entertained; the men and women fitting in feparate circles, according to their cuftom, and always fquat on their heels, as they have neither chairs nor fofas. One circumftance however attending their weddings is highly laudable, which is, that though at other times they are much given to drunkennefs, they never drink on this occafion; neither do they dance and play upon mufical inftruments.

To their new-born children they give a name, which is generally that of fome wild or domeftic animal.

A youth is not fuffered to marry till he is made a man, which is at the age of eighteen; when the village mafter of the ceremonies befprinkles him with urine, and feparates him from that time forward from his mother and other women.

Formerly the Hottentots, according to KOLBE, used castration. This operation was generally

generally performed, the left tefticle being cut out, that they might not beget twins, and that they might be enabled to run with greater eafe.

A Hottentot fometimes takes two wives, and it frequently happens that a woman marries two hufbands, although adultery under certain circumftances is punished with death. A widow who marries a second time, must have the first joint of a finger cut off, and loses another joint for the third, and so on for each time that the enters into wedlock.

Idlenefs is fo predominant amongft the greateft part of the Hottentots that few of the brutes furpafs them in that vice. Some fleep out all their time and are only awakened by the urgent calls of hunger, that forces them at length to rife and feek for food. When they have killed any wild animal, they lay themfelves round a fire in common, to broil their meat, eat, and fleep by turns, as long as there is any thing left to eat, and till hunger drives them from it again.

In confequence of this extreme fupinenefs they have little or no religion. It fhould feem indeed that they were not intirely ignorant of the exiftence of a powerful fupreme Being, and they appear alfo to acknowledge the immortality of the foul after its feparation from the body; but they have no temples, pay no kind of worfhip to any divinity, and give themfelves no thought about rewards or punifhments after death. They you, 11. O have

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have much clearer notions of an evil fpirit, whom they fear, believing him to be the occafion of ficknefs, death, thunder, and every calamity that befalls them.

At the new and full moon they dance and make merry; but it does not appear very probable that their rejoicing thus is any kind of religious ceremony, or that they worfhip the moon.

A fmall infect, an inconfiderable Grafs-hopper, (Mantis faufta) is by many confidered as an animal of a fortunate omen; but I never found that any worfhip was paid to it, nor could I learn it with a certainty from others.

Circumcifion is a ceremony used by many, and may probably be of high antiquity, although not commonly practifed at prefent.

Several barbarous ufages and cuftoms are ftill to be found amongft those who live in their native ftate of wildness, and without intercourse with the christians. Old and superannuated perfons are buried alive, or elfe carried away to some cleft in the mountains with provision for a few days, where they are either starved to death, or fall a prey to fome wild beaft.

In like manner children are exposed and left to their fate on various occasions; as for instance, when a woman dies, either during her lying-in, or immediately after it, the child in fuch cases is buried along with the mother, as no one can bring

bring it up amongst people who have no notion of nurses. If a woman brings forth twins, and thinks herself not able to rear them both, one of them is exposed. If they are both boys, the strongest and most healthy is kept: if one of them is a girl, it is her lot to be exposed; as is likewise the fate of any one that comes a cripple into the world.

Such as live near the European colonifts, bury their dead in the ground, while others lay them in the clefts of mountains or in caves. The corpfe being taken out of the hut through a hole in the fide, and not through the door, is wrapped up in the fheep-fkin drefs the defunct wore while living, and is carried away in hand by three or four bearers. A proceffion of men and women in two feparate bodies follows with loud cries; after which if the deceafed was a perfon of any property, fome animal is killed and eaten.

They are very fuperfitious, and put great faith in witch-craft. If any one falls fick, they think that he has been bewitched; and confequently thriek and pommel him with their fifts, in order to keep life in him, or make him well. If he dies, their cries increafe, the corpfe is buried in a few hours, and the whole village removes to fome other place.

The eldeft fon is fole heir to his father's property.

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In arts and fciences they are as rude and uncultivated as they are in every other refpect. The Caffres are the only tribe among them that till the ground at all. The major part of them have herds of cattle. Some have neither houfe nor home, nor indeed any fixed abode whatever. The Namaquas Hottentots, who, in their country, have mountains that produce copper and iron ore, know how to extract thefe metals in the most fimple manner, which they afterwards forge for ufe: Their traffic is not extensive: indeed it confifts only in bartering certain commodities against others. They have therefore no money nor cein of any fort, neither do they fland in need of any.

To guard their herds, they employ very ugly, but bold and fpirited dogs.

Greafy fubftances conftitute the greateft dainties of the Hottentots. They drink the blubber of Sea-cows like water, and the tail of a fheep, which confifts intirely of fat, they prefer to any other part.

They hunt both fingle and in parties. Every one hunts and fhoots what he can for his own ufe; but general hunts are undertaken by whole villages, either against large troops of wild animals, or when they are annoyed by beasts of prey that commit rayages among their herds, on which

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which occasion every man quits his hut, and goes out armed, as against a common enemy.

Their grand feftivals are generally accompanied with finging, and different forts of inftrumental mufic, as alfo with dances, that are extremely fingular, and indeed peculiar to themfelves. They have likewife a droll uncommon ceremony of driving whole herds of fheep through the fmoke, right acrofs the fire, to fecure them from the attacks of wild dogs.

In a people fo deeply plunged in floth, and fo overwhelmed with filth, as the Hottentots actually are, one would not expect to find the leaft trace of pride. It is however to be found even among thefe, the moft wretched of the human race; for they not only adorn their bodies with all manner of finery, as they conceive it to be; but when they are vifited by ftrangers, paint their faces with various figures of brown and black paint.

Of the new year, a period which most nations and even the heathens themfelves almost all over the face of the earth, obferve and celebrate with more or lefs rejoicing and feftivity, the Hottentots do not feem to have any knowledge, neither do they take the least account of the course of nature. The only thing they remark is, that every year they fee the bulbous plants push out of the ground, bloffom and decay, and, according to this almana k, they reckon their own ages, which O 3 neverthelefs

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neverthelefs they themfelves feldom or never know with any certainty. It is therefore in vain to try to afcertain their age, or to fearch for antique relicks and monuments, in order to difcover the antiquity of the country, how long it has been peopled, whence its first inhabitants came, and what changes and revolutions it has undergone. The country has no ancient ruins, either of fubverted palaces, demolished castles, or devaftated cities. The people neither know the origin nor reafon of the ceremonies and cuftoms in use amongst them, and few of them can give an account of any thing that has happened before their father's time. Since the Europeans have begun to inhabit this angle of the fouthern part of Africa, the country has undergone many changes. The natives have by degrees, in part become extinct, in confequence of the ravages made by various epidemic difeafes, and in part retreated farther up the country, and a colony of the children and progeny of Japhet has propagated and multiplied to a great extent in their place. In a country where, 150 years ago, among a vaft number of other wild animals, the most favage beafts of prey reigned fovereign and triumphant, one may now for the most part travel fafely without fear or dread; and where formerly herds only grazed, one now fees feveral Indian and most of our European feeds cultivated. vineyards

vineyards and orchards laid out, and culinary vegetables planted. A multitude of tame animals has been imported hither from Europe, fuch as horfes, cows, hogs and feveral kinds of fowls; in like manner as many useful products of the vegetable kingdom, have been naturalized under the industrious hand of the colonists and a kind climate. The peafe and beans here are very good. Afparagus, peaches, apricots, have a tolerable flavour, as have alfo apples (and efpecially rennets) plums, pears, oranges and ftraw-berries. The grapes as well as the raifins, and the wine that is made of them, are of different degrees of goodnefs, and fometimes excellent. Melons, water-melons. Gojavus, pomgranates, are alfo tolerably good ; but goofe-berries, currants, cherries and nuts do not thrive. Mulberries, almonds, figs, walnuts, chefnuts and lemons, do not yield in point of goodnefs to the European. Efculent roots and culinary vegetables thrive in general well in this country, and often grow up fuperior to the European, from whence the feed of the greatest part of them is brought every year. Turneps. turnep-rooted cabbages, potatoes, alliaceous plants of every kind, fallads, cabbages, and efpecially cauliflowers, are cultivated therefore in great quantities, as alfo wheat, not only for the ule of the inhabitants, but for the fupply of the many fhips that touch here in their way to and 04 from

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from India, fince the Chriftians first made a fettlement at the Cape of Good Hope. Several fhorter and longer journies have been made, from time to time, into the interior parts, both by individuals and on the Company's account, with a view to gain authentic intelligence of the country and its inhabitants. Thefe journeys have been undertaken by different parties, fome larger and fome fmaller, fome to the northern and others to the fouth-east fide of this angle of Africa. Those that have come to my knowledge are the following: in 1669, a journey was made to Saldahna bay, which was then for the first time taken poffeffion of by the Dutch Company. In 1670, two ferjeants, KRUYDHOF and CRUSE, were fent out to Moffel baay and Helena baay, which were at the fame time taken poffeffion of. In 1683, Enfign OLOF BERG made a journey to the country of the Namaquas, and in 1685 the governor SIMON VAN DER STEEL, with fifty-fix Europeans, two Macaffars, three flaves, and fix burghers, equipped with two pieces of artillery, eight carts, feven waggons, (befides those belonging to the burghers, one boat and a great quantity of draught-oxen, horfes, provision, powder, mufkets and commodities for bartering, made a long voyage into the country of the Namaquas, as far as the tropics. This expedition had chiefly the copper mountains for its object, to examine whether the

the ore there was worth working, and whether there was fufficient wood and water for that purpofe, or any harbour near at hand, from which the ore might have been brought in veffels. This journey lafted fifteen weeks.

During the time that the bartering traffic with the Hottentots was allowed the fettlers, long journeys were frequently made into the interior parts of the country : as for inftance, in the year 1702, by forty-five burghers with four waggons into the country of the Caffres; in 1704, into that of the Namaquas, and in 1705, by thirty or forty farmers, each accompanied by his Hottentot, farther up into the fame tract of country.

In 1705, the landroft STARRENBURG, made a journey by order of government, into the country of the Namaquas, particularly for the purpofe of bartering for a large quantity of cattle for the use of the Company. He was accompanied by a corporal, and HARTOG a gardener, besides flaves and a great many Hottentots.

In the year 1761, governor TULBAGH fent to the northern fide of the country, which I was now exploring, a caravan, confifting of feventeen chriftians, fixty-eight Hottentots, and fifteen waggons, which had been given in charge to a burgher of the name of Hop. On this fame expedition were fent out, at the expence of the Company, BRINK a land furveyor, AUGE a gardener,

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dener, and RYKVOET a furgeon, with three waggons, a large boat, powder, fhot, iron, tobacco, &c. This caravan was fent out in confequence of a farmer who had travelled far into the country on this fide, having given intelligence to the governor, that he had been told by a Hottentot of a people who lived farther up the country, and who wore linen clothes, were of a yellow colour, and went in and out of the mountains there, near a large river. Hence it was concluded that fome Portugueze fettlement was established on the coast, which government ought to find out. Part of the company fet out from the Cape on the 16th of July, and the reft joined them near Olyfant's rivier in thirty-one deg. forty min. lat. and thirty-eight deg. eighteen min. long. They proceeded on their journey till the 6th of December, 120 1/2 miles due north from the Cape, to twenty-fix deg. eighteen min. lat. and thirty-feven deg. thirty-feven min. long. from whence they returned and arrived at the Cape on the 27th of April, 1762, without having difcovered the yellow nation they had been told of. This is the longeft journey ever attempted by Europeans towards this fide, where the country is very dry, deficient in water, and mountainous, and the roads fometimes very ftony. On this journey the governor had not fent any of the military, who before, very little to his fatisfaction, had made an expensive

expensive journey to the eaftward; but only burghers and farmers. This journey, however, did not terminate fo well as might have been expected, the private intereft of individuals having laid many obftacles in the way. Want of water and ftony roads without doubt made the voyage both difficult and troublefome; as the feet of the draught-oxen were greatly hurt, and many of them died in confequence of this circumftance; but the permiffion which the farmers had from government to barter with the Hottentots, during the journey, for frefh beafts, without any expence to them, and of which they made a very imprudent ufe, may have contributed to render this journey abortive.

In fact, the farmers, through motives of covetoufnefs, and a wifh to lighten the waggons of the heavy load of iron they had brought with them for the purpole of barter, began to traffic extensively at their first fetting out, instead of referving this advantageous trade for their return. In confequence of this procedure the caravan was overflocked with a drove of oxen. numbers of which were obliged to be left behind on account of the heaviness of the roads, while the reft ferved greatly to diminish the fcanty supply of water for the oxen that were neceffary for drawing the waggons along. It is true, the vicegovernor KLOPPENBORC had alfo a few years ago, in company with a land-furveyor, a merchant, and 6 a fur-

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a furgeon, made a journey to the northward of the Cape; but, as this expedition did r ot extend beyond the bounds of the colony, it was of no confequence, nor in any other way remarkable.

Beautiful as the country is to the eaftward, fertile, abounding in grafs, and well peopled, it is equally dry, barren, uncultivated, and uninhabited to the northward of the Cape, and the farther you proceed, the more barren and defertlike it grows.

After paffing three or four ridges of mountains to the northward, you arrive at a country fomething higher than the Cape fhore, but lower than the vallies which lie between the ridges of mountains you have just left behind. This land is called Carrow, or Carrow-field. It feems to go like a broad belt over the whole of this angle of Africa, from the fea-fide at the north-western end, to the ocean on the fouth-eaftern fide. I do not fuppose the breadth to be alike all over; but in fome places it requires fix whole days (or rather long nights) journies. The fun is quite fcorching here in the day-time, and the nights are rather cold. The great want of water here for the fpace of eight months, during which tin e not a drop of rain falls, together with the aridity of the foil, is the caufe that this defart produces nothing but a few herbs and bushes with thick fleshy leaver, fuch as Craffulas, Mefambryanthemum, Cotelydons, Cacalias, Stapelias; and that neither man nor

nor beaft can live there in fummer, as alfo that no grafs can grow, nor any ufeful grain be cultivated. The foil confifts of clay impregnated with iron ochre and a great quantity of fea-falt.

During the time I fpent in travelling through different parts of this defart, I did not fee a fingle fparrow, much lefs any quadruped there, excepting rats in holes in the earth, which probably can fubfift a long time without water, and quench their thirft with the fucculent and faltifh leaves produced by the buffnes.

After croffing this extensive and dry defart. which to the eye appears very nearly level, or at most rising a little and flowly to the northward, you encounter a very high mountain, the top of which it would take almost a whole day's journey to reach. This Roggeveld mountain has very little earth on it, exhibiting in most places the fmooth and naked rock; neither does it flope off like other mountains, but is for the most part level, and extends in this manner fo far to the northward, that the end of it is not known to the colonifts. The climate at this height, although feveral degrees nearer than the Cape to the fun and the Equator, is not only cold, but the cold is fo intenfe that the ground in winter is for a long time covered with fnow, hail, and ice.

According to my usual practice the preceding years, as foon as I arrived in town, I made it my first

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first care to fend to Europe, by the returning ships, the collections I had made during my last tour.

The veffel too which had been fent the preceding year to Madagafcar, in order to purchase flaves for the Company's fervice, was now arrived. Amongst other articles which fome of the crew brought with them, were in particular a large quantity of the Cypræa tigris, a handfome thell, which is used for making fnuff-boxes, another of the Buccinum rufum, and of the creatures known by the name of Madagafcar cats, Lemur catta. With respect to the latter, I was curious to fee whether the eyes were fuch as the late Profeffor LINNÆUS has defcribed them, viz. with one pupil oblong and the other round. In this both the pupils were round and very fmall in the day time, like those of other animals. This fpecies of Lemur fomewhat refembles a cat, with its long tail, diverfified with black and white ringlets; it is very nimble, and when tied to an upright pole, up and down on which it runs on all fours with the greatest celerity imaginable, affords a very amufing fpectacle.

M. MELK, a rich and wealthy farmer, had, fome years before, built a houfe of ftone, below the town near the beach, lower down than the lion's-tail, under pretext of using it for a ftorehoufe; but when it was finished, he made a prefent of it to the Lutheran congregation here for a church,

a church, after having furnished it with fuitable windows. Happy would it be if the congregation, which is numerous, could likewise have a Lutheran clergyman of its own, and hear the word of God preached in its original purity, and at the fame time enjoy the benefit of the facraments.

I never knew diforders in the throat more common or refractory than they are at the Cape, and efpecially in the town. They are occafioned by the fudden changes of weather from heat to cold. The glands of the throat fwell with fuch violence, that the patient is in danger of being fuffocated, and they almost always come to fuppuration. Some are infested with this malady feveral times in a year, and neither fex is exempted from it.

The fides of the fireets in the town were planted with great numbers of European oaks (Quercus Robur) which ferved both to adorn and fhade the houfes.

The finoking of tobacco in the ftreets was now feverely prohibited, as in confequence of it fires had broke out here, as has been the cafe in other places.

The fky of the fouthern hemifphere wore an afpect in a great measure ftrange to me. Some of the known constellations had a different fituation from what they have north of the Equator, and some were absolutely missing. Charles's-wain, which

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which in winter fo truly and faithfully points out to the farmer how far the night is advanced, was here funk below the horizon, and the Cape clouds, as two dark fpots in the firmament are called, feemed to be a fimilar token to the inhabitants here. I was extremely forry, however, that I had not taken more pains to learn fo noble a fcience, and would with pleafure have exchanged for one fingle conftellation all those definitions with which I had formerly burthened my memory, together with a great number of words in the dead languages, the learning of which had taken up the best part of my younger days, that might have been better employed in fludying this divine fcience.

I now received from Amfterdam not only a fum of money, but alfo letters of recommendation to the Governor-general VANDER PARRA at Batavia, in confequence of which I had to prepare for a voyage to the Eaft Indies, and as far as the empire of Japan. In the three years I had paffed in the fouthern parts of Africa, I had travelled over as much both of the defart and inhabited part of the country as the nature of my equipment, which was below mediocrity, would admit. I had alfo, during the fame time, received many favors from the governor and other gentlemen in the adminiftration, as likewife much friendfhip both from my own countrymen and the

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the other inhabitants of the place, and could, therefore, not without the greateft gratitude and heart-felt acknowledgment, recollect the many kindneffes they had fhewn me, which, as long as I live, I fhall never forget.

But, previous to my departure, I had the good fortune to get acquainted with M. HOLMBERG, a worthy countryman of mine, and one of the council, who was on his voyage homeward from Surat, where for feveral years he had been in the fervice of the Dutch Eaft India Company, to the great fatisfaction of his fuperiors, and had acquired fuch a knowledge of commerce as few poffefs, or know how to value. This gentleman honoured me with his particular friendfhip, and alfo furnifhed me with letters of recommendation to M. RADERMACHER, one of the council at Batavia, which proved of much greater utility to me than I had reafon to expect.

P

VOYAGE

VOYAGE TO JAVA, 1775.

ON the 2d of March, 1775, I left the Cape that was fo dear to me, and (not without the moft tender regret at taking leave of fo many friends) embarked for Batavia on board the Loo, commanded by Captain BERG, in the capacity of furgeon-extraordinary.

On board the fame fhip failed also a young man, who gave himfelf out for a Prince of the imperial family, and Count of LEUWENSTEIN, who unfortunately had been kidnapped and fent off to the Cape, and was now obliged to accompany us to Java; the government at the Cape not daring, (for reafons to me unknown) to fend him back to Holland. According to his own account, he had arrived with his fervant at Nimeguen, and where he lodged at a kidnapper's, who had

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had robbed him of his property that was contained in a large trunk; and had locked him up for three days, after which he had fent him to a kidnapper in Amsterdam: At this latter place he with his fervant were locked up faft, as prifoners; for the fpace of three weeks, and at length fent to the Texel, without having previoufly been at the India-house, or passed any kind of muster. His fervant had; during the voyage, fuffered much by ficknefs, and he himfelf had inlifted for a foldier; all that was left of his property being only a fuit of red and a valuable ring. He had been laid up fick during the whole voyage, and in this condition was put into the hofpital at the Cape, where he happened to be known and recognized by fome of his countrymen. The government at the Cape, however, after having examined into his cafe, gave orders that he should make the voyage to Batavia as a paffenger, and dine at the officers' table.

We continued our voyage to the fouthward with a fair wind to lat. forty deg. after which we fteered to the eaftward, when our watches loft above a quarter of an hour in the four and twenty, in proportion as the wind increased and as we failed quick.

On the 5th of April, in the afternoon, faw St. Paul. The night following we paffed between P 2 that

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that island and the isle of Amsterdam, which latter we had still in fight on the 6th-

The Dutch ale, which the company fends out for the ufe of the officers, was now divided between them, after the fecond mate's propofal had been rejected of felling it and dividing the money. Wine and ale, and other articles, which the Company fends out for the ufe of the officers' table, are feldom ufed at meals, as they ought to be, but are either totally embezzled by the captain and chief mate; or, if they are given out, it is either after they are damaged, or elfe exchanged for worfe articles of the fame kind. This circumftance renders it neceffary for every one to fupply himfelf with feveral articles, concerning which on board of other fhips he need not give himfelf any trouble.

On the 2d of May we faw Mone island, and on the 3d, difcovered land from the top-mafthead, which, on the day following, we could likewife fee from the deck.

The nearer we approached to a warmer climate, the more did the number of our fick increafe. The major part were afflicted with the fcurvy, and feveral had got rheumatifms, from the change of climate.

At length we came in fight of the ifland of $\mathcal{J}a$ oa, and were highly pleafed to arrive at a country which was the main object of the wifnes of many,

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many, but which was also defined to be the grave of the major part of them.

The mountains of Java, as well as those of the furrounding islands, were all cloathed with verdure and overgrown with wood, prefenting to the eye a pleasing and lively prospect. Those mountains which lay farther up the country were here, as in other places, always higher, and the land itself rose gradually higher from the water-fide.

On the 9th we paffed Klapper island.

The ftreights of *Sunda* we entered between *Java* and *Prince ifland*. Here we had a calm, which greatly retarded us. On every fide we faw fcattered iflands of different fizes; the water was often very fhallow, and in the night we let go the anchor.

On the 12th, the fupercargo was fetched away by a yacht, together with the Company's letters and other papers, in order to be difpatched to Batavia. In confequence of fuch procedure, the government is always informed of every thing before the veffel gets into the road.

On the 14th, feveral Javanefe came in their fmall boats, or *Praws*, to the fhip. Thefe praws had a deck or floor of loofe planks, and under it a great many partitions were made, in which they carried with them for fale, bread, eggs, pineapples, cocoa-nuts, pifang, gojavus, fallad, radifhes, and other fruits and culinary vegetables. P 3 Some

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Some of them ftaid in the boats, in order to throw up the articles they fold, whilft others came on board to receive what was thrown up, together with the money for it. It was no unpleafing fight to fee how dexterous they were at their bufinefs, and how nimbly they caught the eggs without letting any of them fall. Thefe Javanefe were very circumfpect with refpect to the money which they received, and endeayoured to get new coin that had not loft its glofs by wear.

The fhip's crew was cautioned not to eat too much fruit, or too many greens, and was more particularly defired to refrain from that delicious but unwholefome fruit the pine-apple, as this fruit would be very apt to produce a diarrhœa or dyfentery, in habits like theirs infefted with the fcurvy, and in ftomachs not accuftomed to much diet.

During our voyage through the *freights*, we very often let go the anchor and hove it up again; we were obliged to let it fall for want of wind, that the fhip might not be driven aftern by the ftream.

We failed paft *Bantam*, which lay on our right. This is the refidence of a king of that country, who folely and intirely depends on the Dutch East India Company. The town is fortified, and has a citadel with a garrifon of 300 Dutch foldiers, who are kept there at the Company's expence,

pence, under pretext of being the king's lifeguards, but are fet in fact to keep a watchful eye over him, that he may not undertake any thing against the Company's interest, or fell any pepper to other nations.

The ifland of Java is about 140 leagues in length from E. to W. and from 20 to 25 leagues in breadth. It lies in fix deg. fouth latitude from N. to S. and about 124 deg. E. longitude.

On the 18th, we arrived fafe in Batavia road, and to our great joy let go the anchor there; the road is extensive, with a muddy bottom. The ships lie not very far from the town, up to which you fail in boats along the river. The road is not very deep, and this, as well as the water near the shore, is rendered shallower every year.

The day following I went on fhore with the captain, and put up at the *Heeren Logement* (as it is called, or *Gentlemens' hotel*) which is a very large house for the accommodation of ftrangers.

On one fide of the river, and near its mouth, ftands an edifice called a Water caftle, intended to command the road; this was at that time very much out of repair, fo that large pieces of it fell daily into the river, and were carried away by the ftream.

The town is ftrongly fortified, intirely furrounded with walls, and furnished with feveral gates, near which a number of foldiers lie on guard, and which are locked at night. The

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walls, however, are not particularly ftrong, nor very thick. The citadel is fituated at one end of the town, and near the fea fide, is tolerably large, and contains the town-hall, a dwelling-houfe, a warehoufe, and feveral other neceffary buildings.

Without as well as within the town there are canals, the fides of which are lined with brick. Through thefe boats pafs, both large and finall, and convey pot-herbs, fruit, and other articles for fale, to different parts of the town, as alfo fresh grafs for horses. The canals are feldom above four feet in depth, and empty their water into the road.

The town is remarkably large and well built; the houfes are moftly of ftone, and are elegant, with fpacious rooms, which are open to the free air, in order that they may be refrefhing and cool in this burning climate. The ftreets are not paved; as the ftones being heated by the fcorching rays of the fun, would hurt the feet of the flaves, who go bare-footed, as alfo of the horfes, which here are not fhod. A row of flat ftones, however, is frequently laid for the accommodation of the Europeans.

Here, just as in Amsterdam, is to be found a mixture of all nations and languages. Here are fome of almost every nation in India, who carry on a profitable traffic in this capital of the East Indies.

Exclusive

Exclusive of the Javanefe, who are the original inhabitants of the island, the Chinese confritute the major part of its inhabitants, and live not only in the town and its suburbs, but also in the country. These people carry on, like the Jews in Holland, a very extensive trade, and cultivate most of the arts and handicrast professions. They dress for the most part here in the same manner as in China, in frocks, with their heads shaved, and only a round spot left at the crown, the hair of which is platted into a long queue.

It is true, Dutch is the current language of the Europeans here; but the flaves and other Indian nations chiefly use the Malay tongue, which is fo common all over the eastern and some of the western part of the East Indies, that a man can make his way with it every where, as is the case with the French language in Europe.

I had already fent off from the fhip the letters of recommendation which I brought with me, viz. to the governor-general VAN DER PARRA, from the burgomafter TEMMINK in Amfterdam, to M. RADERMACHER, one of the council, from M. HOLMBERG, and to Dr. HOFFMAN, from Dr. LE SUEUR at the Cape. My first business now was to wait upon them all, and they feemed to vie with each other in shewing me every possible attention, friendship, and favor, which will, ever endear their names to me.

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As

As the governor-general gives audience, receives reports from all perfons in office, and iffues orders every day between feven and eight o'clock in the morning, before the heat becomes infupportable, and as I did not get on fhore before noon, I could not have the honor to wait upon him till four o'clock in the afternoon, when he received me in the moft friendly manner, and affured me of his protection and affiftance in every thing I fhould want for my intended voyage to Japan. The governor lived now at his country houfe at a finall diftance from the town, where the air is frefher and wholefomer.

The fame evening I waited on Dr. Hoff-MAN, but did not find him at home. The next morning, before I went out, he called on me at my inn, gave me an invitation to live with him and make use of his table, and carried me in his coach to the Company's difpenfary, where he lived and which he had under his care. Befides the letter of recommendation from Dr. LE SUEUR at the Cape, I had borrowed a fum of money from that gentleman to pay the debts I had contracted there, which fum I had engaged to pay to Dr. HOFFMAN out of my falary which I was to receive at Batavia. From this circumstance the gentleman faw clearly that I was not one of those travellers who had amaffed Indian riches, and that during my three years ftay at the Cape I had been

been more fuccefsful in accumulating plants and natural curiofities than gold. This he alfo mentioned to M. RADERMACHER, whofe phyfician he was, and this gentleman immediately gave him fifty ducats for me, before I had had time to wait on him, and even before he was become perfonally acquainted with the man, for the narrownefs of whofe circumftances he felt fo nobly.

The many, and I might almost fay daily, visits I paid this gentleman, whose table I was obliged to use at least twice a week, gave me an opportunity of observing, with pleasure and fatisfaction, his elevated mind, and his great zeal for the arts and sciences, which he not only cherished and admired in others, but also himself cultivated and posseffed, in a country where otherwise Mammon is the fole idol and object of their worship.

As the fhips deftined for Japan were not to fet fail till after the expiration of three months, I feized the opportunity of getting information as well concerning the country, and more efpecially its natural hiftory, as with refpect to the profitable trade of the Company; Batavia being the capital and centre of their commerce between Holland and their numberlefs factories, offices, and fettlements in India.

In the mean time I was, on the first meeting of the council, appointed furgeon to the largest of the ships destined for Japan, called the Admiral ship,

fhip, and the chief commiffioner of commerce who was to go this year to the fame place, received orders to retain me there, and to allow me to accompany him as phyfician of the embaffy on his journey to the imperial court, whither he was to go in quality of ambaffador during his ftay in that country.

Through the kind attention of M. RADERMA-CHER, I had, for a companion and guide in my botanical excursions, a well behaved fensible Javanefe, who was pretty well acquainted with the Malay names of trees and herbs, and their medicinal virtues and uses, amongst his countrymen, which he always communicated to me, and which I noted down in my pocket book.

All the ftreets in the town were planted on each fide with large trees, which, in the heat of the day, afforded a cool and refreshing shade. These trees were generally the *Inophyllum calophyllom* and *calaba*, *Canarium commune*, and some others still scarcer. In the yards I faw very high and thick trees of the *Guettarda speciofa*. The largest tree I ever saw was a *Casuarina* equisetifolia, which stood near the rivulet, and extended its spreading branches to a vast diftance.

Although the heat, as appears from Fahrenheit's thermometer, which generally ftands between eighty and eighty-fix degrees, is not fo very intenfe,

tenfe, it is neverthelefs exceedingly troublefome and difagreeable; first, from the fituation of the town which lies low near the water-fide, and then, in confequence of the exhalations from the fea and bogs flagnating the air, and from there being little or no wind to difperfe these vapours and purify the atmosphere. Towards the evening indeed a light breeze springs up from the land, but of little or no fignification. Hence one has but a weary life of it here; as it is impossible to be out or at least to walk between nine and four o'clock in the day, without being quite overcome with heat and diffolved in fweat, though one's drefs be ever so light and airy.

The clothes worn by the Europeans are made exactly in the European fashion; but the waistcoat and breeches are generally of white cotton, or of black fattin, and the frocks of thin Indian filk. Though the whole drefs fometimes does not weigh above a pound or two, yet one's coat is a heavy burthen in this hot climate; and the violent perfpiration renders it necessary for one to change one's shirt and drawers once or twice a day, although they be made of fine cotton, which abforbs the perfpirable matter.

All the people in office, after they have been at the governor-general's levee, whither they go at a very early hour, transact their business, it is true, between nine and twelve o'clock; but then

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it is within doors, where it is in fome degree cool. And, if they are obliged to be out during that time, they use coaches. These coaches are finall and light, furnished with thin filk curtains instead of windows, which keep out the rays of the fun and admit the air. The horses used here are for the most part small. Some content themfelves with one horse chaises.

As in every other thing, fo likewife in their equipages, great attention is paid to etiquette, and none, except fuch as are of a certain rank, are allowed gilt carriages; others that are inferior to thefe use painted, or even plain, coaches. The gentlemen of the council have running footmen.

Many of the Europeans here, it is true, wear wigs, but most of them wear their own hair, and that in general quite plain and without any frifure; and a powdered head is feldom feen in this country.

The ladies here wear neither caps nor hats; but tie up their hair, which is only anointed with cil and has no powder in it, in a large knot on the crown of their heads; and adorn it with jewels and wreaths of odoriferous flowers.

In the evenings when the ladies pay vifits to each other, they are decorated in a particular manner about the head with a wreath of flower's of the NyAanthes fambae, run up on a thread. These flowers are brought every day fresh to town

town for fale. The fmell of them is inconceivably delightful, like that of orange and lemon flowers; the whole houfe is filled with the fragrant fcent, enhancing, if poffible, the charms of the ladies company and of the fociety of the fair fex.

In fo fcorching a climate as this we cannot wonder, that a general cuftom prevails amongft the Europeans, of taking a nap for a couple of hours in the afternoon during the hotteft part of the day. At this time a flave generally ftands before the fofa, who, with a large fan, keeps off the gnats, and procures his mafter an agreeable and cool repofe.

The days and nights are nearly of equal length the whole year round, and the fun paffing almost vertically over head, rifes and fets about fix o'clock morning and evening. And as the fun fets perpendicular, here is no pleafing appearance of twilight after fun fet, as there is in the northern countries. As foon as the fun is below the horizon it grows immediately dark, and the air is cooler throughout the whole night.

The great pleafure which the coolnefs of the evenings would otherwife afford, is indeed here almost totally destroyed by the uneafinefs and trouble which the musquitoes generally occasion. These infects not only disturb one's repose by a continual buzzing in one's ears, but their sting is venomous and occasions large tumors, in confequence of which the face and hands

hands are totally disfigured, and fometimes a temporary blindnels enfues. This circumftance is attended with another inconvenience, which is, that the doors and windows of the bed-chambers are obliged to be kept fhut, or, if they are left open, the mulquitoes must be driven out in the evening. It is remarkable, that ftrangers are more than others liable to be pestered by these mulquitoes, and fuffer more from their fting; but, after a few weeks stay in the country, they are less perfecuted by them. The mulquitoes either must find their fcorbutic fluids more relishing, or elfe their faline and foul humours must occasion a greater fwelling.

The bed-clothes confift generally of a matrafs, fome few pillows, a fheet, and a counterpane of fine cotton.

In the evenings, from fix to nine, parties are formed among the Europeans throughout the whole town, who then banifh their cares by converfation, inceffant fmoaking, and a good glafs of European wine, generally red. Every one calls on his friend without invitation; and, as foon as the clock ftrikes nine, each retires to his refpective home, unlefs he is afked to ftay to fupper. When a gentleman goes to pay a vifit he generally has a coat, wig, hat, and fword on, a flick in his hand; and is attended by a flave who carries a large umbrella. As foon as the ufual compliments

compliments are paffed he takes off his wig, and puts on his fhorn head a thin white cotton nightcap; after which he takes off his coat, and gives his fword, hat, and flick, to his flave, who carries them home again. The evening is then fpent on an elevated platform within the fteps and on the outfide of the houfe. The first reception is generally a glass of Dutch ale, after which the health of every perfon in company is drank round, till each has emptied his bottle, or fourteen glaffes, and fometimes more, but feldom lefs. If a ftranger should happen to come in at fuch times, he is always welcome. Sometimes a card party is formed. When it ftrikes nine, one or more flaves arrive, if it be dark, with torches, to light their mafter home.

Hospitality is in great esteem here. The better fort of people keep open table once or twice a week, to which both the invited and not invited are welcome. A stranger, who is to stay a short time, needs only hire a small house, and buy a flave to attend him. And, after having formed one or more acquaintances, he needs not take much care about food, because, besides having free access to his patron's table, he will always be asked to dinner if he pays a visit to any body between eleven and twelve o'clock. At this time the place-men return home from their offices, when they take a whet either of arrack, VOL. II. Q geneva,

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geneva, or white French wine, or else Japanese facki.

Although I lived at Dr. HOFFMAN's houfe, and had free accefs to his table, I was obliged twice a week to dine with M. RADERMACHER, at whofe table there was a felect company of moft of the gentlemen in office, who had acquired in Europe any remarkable degree of knowledge in fome ufeful fcience.

The water is not very wholefome nor good to drink, being impregnated with faline particles, which generally occafion diarrhœas, and fometimes even the bloody flux, in ftrangers who are newly arrived and afflicted with the fcurvy. The inhabitants of the town, therefore, let it fland to fettle for fome time in large Japanefe earthen jars, after which they plunge red-hot iron bars in it, when it may be drank without any bad confequences, and is for the moft part ufed for making tea or coffee, or drunk mixed with red wine.

The fuburbs, which lie to the land fide, are very large and handfome, and are inhabited by Europeans, as well as Chinefe and other Indian nations.

Somewhat farther up the country flands a great : number of pleafure-houses, with the finest gardens to them, where the most respectable and wealthy part of the inhabitants pass their leifure hours,

hours, the air being here more pure and wholefome than in the town. At feveral of thefe houfes I faw large earthen veffels filled with water, in which feveral beautiful gold fifh, difplaying their refplendent forms, glide fportively along under that fingular herb the *Piftia ftratiotes*, which had been planted there in order to afford the fifhes fhade. This herb, the roots of which do not take firft hold in the ground, I faw in great plenty floating in all the pools and ditches.

The Europeans are commonly waited on by flaves from feveral Indian iflands, of whom they keep great numbers in their houfes, as the heat of climate will not permit two flaves to do as much as one at the Cape. The ladies efpecially are attended by a great number of female flaves, and feldom pay a vifit without a whole retinue of thefe attendants.

The Javanefe, the original inhabitants of the country, are pretty tall, of a yellow complexion, and their lineaments not difagreeable. They are not fuffered to be made flaves of, but are a free people, governed by their own emperor, kings, and governors. They fpeak a language different from the Malay, and for the most part profess the doctrine of Mahomet, which is kept up among them by their own national priefts, of whom fome have visited Mecca, and others not.

Befides Dutch, the language in current use here

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is the Malay, which is a dialect of the Arabic, and is written with Arabic characters. Into this language the bible is translated, various vocabularies and grammars have been drawn up, and prayer books and other books of a religious nature written in it. The language is eafy to learn and to fpeak ; quite fimple and artlefs, and pleafing to the ear. The Company has built a church, and keeps priefts in the town, for the different nations who underftand this language and profefs the Chriftian religion. The Company likewife keeps in its fervice a translator both of the Malay and the Javanese language. A kind of broken Portugueze is alfo fpoken here, as well as in moft of the Indian fettlements, where the Portugueze used formerly to trade, and whither they had diffufed their language; on which account there is ftill a Portugueze church and congregation in the town, befides one fupported at the Company's expence, to which a number of black Chriftians refort, who have feveral doctrinal books printed in that language.

The Malay books that I could procure, were the following:

Malaica Collectanea Vocabularia, or Malay Dictionary, Pars I. Batavia, 1707, 4to.

Dictionarium Malaico-Latinum & Latinomalaicum opera & Studio Davidis Hex, Bataviæ, 1707, 4to. A Malay and Latin, and Latin and Malay Dictionary.

Dictionarium

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Dictionarium of te Woord ende Spraak Boek in de Duytfche en de Maleyfche Tale, F. de H. Batavia, 1707, 4to. a Dutch and Malay Dictionary.

Tweede Deel van de Collectanea Malaica Vocabularia, Batavia, 1708, 4to. Contains two Malay Distionaries printed together.

Maleifche Spraak-Kunft; or *A Malay Gram*mar, by George Hendric Werndly. Amfterdam, 1726, 8vo.

Elkitâb, ítu, Segala Surat, Perdjandjian lama dan baharuw, Amfterdam, 1733, 4to. Or the Holy Bible translated into the Malay language. The New Testament follows, bound up with it in the same volume, printed in 1731.

Sj JXR Segala Masmur p Dâûd, or David's Pfalms. Amsterdam, 1735, 4to.

Ta X Limu-l Dini'l Mefe H H i ji, ijâ itu, Pang 'adjaran 'agama, Amfterdam, 1735, 4to.

Nieuwe Woordenschat in Neder duitsch, Ma-. leidsch en Portugeesch, Batavia, 1780, 8vo. A Dutch, Malay, and Portugueze Distionary.

The Portugueze books which came to my hands, were the following:

Do Vehlo Teftamento, o Primeiro Tome, Batavia, 1748, 8vo.

Do Vehlo Teftamento, o Segundo Tomo, Batavia, 1753, 8vo.

Q Novo Testamento, Batavia, 1773, 8vo.

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Catechifmo. Colombo, 1778, 8vo.

Os CL. Pfalmos David, or The Portuguez Pfalm book fet to Music, used in India, printed at Colombo, 8vo. The latest edition is that of 1778, and was fent to me from Batavia after my return home. All these printed books in the Malay and Portugueze tongue, I presented to the Royal Academy at Upfal, in whose library they are kept, as also several other scarce and valuable books, printed in the Cingalese, Malay, and Tamullish languages.

The Malay language being abfolutely neceffary to fuch as intend to ftay for any length of time in India, and efpecially to those who are to travel through feveral places in that country, it is indifpenfible for every ftranger to make it his fludy, as he cannot even have a flave to attend upon him, before he has learned the most . common words of it. My first care, therefore, at Batavia was to learn this language, and, for the better affifting of my memory, to form a fmall vocabulary of fuch words as I fuppofed would most commonly occur. This fmall dictionary is not very extensive, but may perhaps be of use to fuch as in their voyage to China touch at Java, for other places; and I have thought proper to infert it here, in hopes either to give pleafure, or render fervice to those who have fome knowledge of other oriental languages.

1

A

A

i.

Rest

ABOVE	-	-	Diatas
Afraid	-	-	Takkot
Again	-	-	Kombali
to get	back a	gain	Dappat kombali
to Agree wi	th		Jadi famaratta
Alone		*	Sandiri
Alfo	-	-	Ratta
Altogether,	every o	ne -	Samonja
Angry	-	-	Jahat
Animal	-	-	Binatang -
to Anfwer	-	-	Menjaut
Arm, coat fl	eeve	-	Pundak
Afhes	-	4	Aba
to Afk, to q	ueftion	-	Tanja
to d	lefire	-	Minta
to Attend up	oon	-	Jaga
Aunt	-	-	Bibi
Avaricious	-	-	Kikir
Awry	-	-	Mara guícar

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Bank

Bank of a river	+	Pingir
to Baptize -	-	Kria sarani
Bason, slop-bason	-	Mankock
Battle -		Prang
to Be, he is -	-	Ada, dia, ada
To Bear, to carry	-	Pikol
Beast -	-	Binatang
Beard -	-	Jingot
to Become -	-	Tinjal
Bed, bedstead	-	Tampat tidor
Behind -	-	Diblakkan
to Bend -	-	Menjumba
Beneath -	-	Dibauwa
to Begin -	-	Mulai
to Believe -	-	Pertjaja
Better -	-	Lebi bai
Big -	-	Befar
to Bind -		Ikat
Bird, bird's neft	-	Burong, ruma burong
to Bite -	-	Pigit
Bitter -	-	Pait
Black -	-	Ittam
Bladder -	-	Tjop
to Bleed, let blood	d -	Kular darat
Blind -	-	Buta
Blood -	-	Dara
Blue -	-	Biru

B

Bong

Bone		-	Tulang
Body	-	-	Badang
Bofom	- 1	-	Panko
Brain	-	-	Ottaknia
Brafs	-	-	Tambaga Koning
Bread	-	-	Rotti
to Break	-	-	Pitja
to Break upon	the whee	el	Pukkul biffi
Breath	-	-	Napas
Breeches	-	-	Tjelana
to Brew	-	-	Jambatan
Bride	-	-	Panganting
Bride-groom		-	Tunangan
Bridge	-	-	Somor
to Bring, to b	ring hith	ner	Bauwa
to Bring, or b	reed up		Piara
Briftle	-	-	Dada
Broad	-	-	Lebar
Broom	-	-	Sapapo
Brother	-	-	Sudana laki
Buffalo	-	-	Banting
to Bury	-	-	Tanam
to Burn	-	-	Angus
to Build a hou	lfe	-	Kria ruma
Butter	-	-	Mantega
Button	-	-	Kantjing
to Buy	-	-	Bili
By degrees	•	-	Abifitu nanti

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C

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to Call -	-	Pargil
Camel .	-	Onta ,
Candle -	-	Liling
Candle-flick	-	Tampat liling
Cannon -	-	Marian
Capacious -	-	Lebar
Capon -	-	Ajam Kabiri
Cards -	-	Pendek
to take Care of	-	Simpang
Carpenter -	-	Tukan kajo
Carry, bring hither	-	Bauwa
to Carry, to bear	-	Pikol
to Caft -	-	Saling
to Caft out -	-	Lempar, buang
Caftle -	-	Benteng
Cat -	-	Kotjing
Cavern, Hole	-	Lobang
Caufe, Occasion	-	Jangdern pandanja
to Ceafe, end	-	Suda
Century -	-	Salamanja
Chair -	-	Karoffi
Chalk -	-	Kapor hollanda
to Change -	-	Tukkar
Cheefe -	-	Kas
Cheap -	-	Mura
Cheft -	-	Petti
to Chew -	-	Mama

Child

Child	-	-	Beranak
Child-bed		-	Tampat tidor beranak
to Choofe	-	-	Pili
Church	-		Mefigit
Cinnamon	-	-	Kajomanis
to Cleave, to S	Split	-	Beladua
to Climb, clin	nb up	-	Najik
to Clothe	-	-	Pakki
Clothes	-	-	Pakkian
Cloves	-	-	Tjinke
Coarfe	-	-	Kaffar
Coach	-	- ^	Padate
Cock	-	-	Ajam lakj lakj
Colour	-	-	Dinta
Comb	÷	-	Sifir
to Come	+ *	÷	Dattang
to Command		-	Suru
Company	-	4	Sobat Sobat
Comrade	-	-	Tanan
to Concern	-	-	Faduli
to Confide	-	-	Pertjaja
Cook	-	-	Tukan-maffak
to Cook, or dr	els victu	als	Maffak
Cool	-	-	Arang
Copper	-	-	Tambaga
Corner	-	-	Ujong
Courage	-	-	Tiappe
Countenance		-	Mukka
to Count, to r	eckon	-	Bilang
to Cover	-	-	Selimo
Corpfe	-	-	Banke

- Cow

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Cow		-	Sampi
Crippled		-	Pintjang
Crocodile	-	-	Buaja
Crooked	-	-	Blako
to Cry	-	-	Manangi
to Curtfy	-	-	Menjumba
to Cut	-	-	Pottong

D

to Dance -	- Mingibing	
Dark -	- Glap	
Dark (thick) weather	er Hari glap	
to Darn -	- Tiffi	
Daughter -	- Anak prompuang	
Day -	- Hari	
Dead -	- Maut	
Deaf -	- Tuli	
Dear, not cheap	- Mahal	
Deep -	- Dalam	
Deformed (maimed) - Pintjang	
a Defart -	- Utan	
to Desire, request	- Minta	
to Die -	- Matti	
to Dig -	- Korek tanna	
Diligent -	- Radjing	
Dirty, dirt -	- Kotor tai	4
Diforder, not in or	der Banjier	

Ditch

Ditch to Divide Dog to Do one's needs Door Double, twice Dough --Dove to Drag, to carry to Dream a Dream to Drefs Drink to be Drowned Drunk to Dry Dumb

Kuntji Bagi Anjing -Barrak Pinto -- Dua kali - Tupong - Burung dara Pikol -- Minimpi Jari befar -Pakki -Minum - Mattj di aijer Makkak Kring 2 Bado 1.4

E

Ear _ Early, too early Earthquake to Eat Egg to Embrace Emperor Empty to Endeavour to Endure

- Koping - Siang, talalu fiang Gojang tanna Makkan Tellor Polok -Sufutunang -- Coffong Mentjoba -Tan

Enough

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BATAVIA, 1775.

Enough	-	-	Sampe
Entrails	-	1417	Uffus
Even		14	Keper
Evening, aft	ternoon	1.1	Sore
Every where		14	Dimanna manna
Excufe	-	-	Ampon
Eye	-		Matta

F

Face, counten	ance	-	Mukka
to Fall		ei/	Jatu
Father	-	43	Bappa
Favour, kindn	efs	-	Ampon
to Feel, be fer	fible of	-	Kanal rafa
to Fetch	-	-	Ambel
Fever	-	*	Demam
Figs	-	-	Bualo
Fine, not coa	rfe	-	Allus
to Find, to ge	t		Dappat
Finger	-		Jare
Fifh		-	Ikkan
Fire	-	-	Api
Fire place	-	-	Kras
Flefh	- 1	-	Dagin
Flour, meal	-	=	Tupor
to Fly	-	-	Terbang
Fool	-	-	Gila
Foot	-	-	Kakki
to Forbid	-	-	Larang
1 martine and			

to Force

1.15 1

κ.,

to Force one,	compel	-	Bakfa
Fork	-	-	Tuffuk
Fortune, luck		-	Ontong
Frolickfome	-	-	Sukante
Fruit	-	-	Boa, buabua
Full		7	Punu

G . Internet and land

· and

to Gape	-		Bukka mulut
Garden			Kobon
to Get	-	6 ÷.	Dappat
a Ghoft	-	4	Matatingi
to Give, giv	e back	40	Kaffi, kaffi kombali
Glad		-	Suka atj
to Go out	-	-	Kaloar 🥪
He Goat			Kambin, prompuang
God	-	-	Alla
Gold, gold-	linith	· m	Mas, tukan mas
Good	-	+	Baj
Gnat	-		Jamok
Great	-	+	Bezar
Green	. *	-	Ifo
Ground	-	-	Tanna
to Grow	-	-	Minjadi timbul
Gums	~	-	Dagin gigi
Guts	-	-	Prutnja

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Hair

Å

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10 Fp -

Hair -	- Rambut
Half -	- Saparo
Hand -	- Tangan
Handsome, beautiful	- Bagus
to Hang -	- Gantong
Hangman -	- Allegootji
Hard -	- Daper
Hat -	- Toppi tjappeo
Hatred -	- Bintji
to Have -	- Ada
He -	- Dia
Head -	- Kappalla
to Heal -	- Brobat
to Hear -	- Dengar
Heart -	- Ati
Heaven -	- Saorga
Heavy -	- Brat
Hell -	- Duraka
to Help -	- Fulong
Hen -	- Ajamp rompuang
Hereabouts -	- Difini
to Hew, (to cut)	- Pottong
Hide, bark of a tree	- Kulit
High -	- Tingi
Hire -	- Serva
to Hoift up	- Parreknaik
to lay Hold on	– Pegan

Hole

Hole		Lobang -
Hot		Pannas
Hot in temper	-	Bengis
House, to build	d a houfe	Ruma, Kria ruma
Hunger	- , -	Lappar

I I

T			Dates him
~		-	Betta, kitta
Jewels	-	-, 1	Intan
Jeweller	-	-	Tukan Intan
Immediately	-	-	Sabantar, betul
Impudent	-	-	Jang ter taw malu
Indigo	-	-	Nila
In	-	-	Didalam
to Include, o	r inclofe	-	Mendangan
Inheritance,	to inherit		Pufakan, dappat pufakan
Ink	-	-	Tinta
Ink-ftand	-	-	Tampat tinta
Inteftines	-	-	Prutnja
to Invite	-	-	Tauwa
Iron	- :	-	Biffi
lfland	-	-	Pulo
to Itch	-	-	Gatal
Judgment	-	-	Ingatang
Ivory	-	-	Gaiding
Juft	-	-	Butul

R

Kernel

K

Kernel	-	-	Bidji
Key	-	· -1	Kuntji
to Kill	-	-	Buno
King	-	-	Radja
Kitchen	-	-	Dappor
Knee	-	-	Lutok
Knife	-	-5	Piffuk
to Knock	-	-	Pukkul
to Know	-	-	Kanal, rafa
to Know (f	cire)	-	Taw

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L

-	-	Bini Nonje
-	-	Tanna
-	-	Tanga
-	-	Baaffa
-	-	Tikkar
-	-	Lama
-	-	Diblakkan kali
-	-	Bareeng
-	-	Talalu lama
-	-	Tatauwa
-	-	Pamalas

Lead

Lead	-	-	T-ima +
Leak (in a shi	p)	-	Botjor
Lean, meagre		-	Kurus
to Learn	-	-	Mengadji
Lemon	-	-	Jeurok
to Lend	-	-	Pinjang
Lefs	-	-	Lebi kurang
Letter		-	Surat
to Let, permi	t	-	Biar
to Lick	-	-	Gilat
Lie, a falfity	-	-	Penjuita
to Lie, tell a l	lie	-	Panjusta
to Lie in wait		-	Menguinte
Life	-	-	Kahidopan
Light, eafy		-	Trang eteng
to be Like	-	-	Turut
Limb, membe	er	-	Panton
Lime	-	-	Kapor
to Limp	-	-	Prentjang
Linen	-	-	Kajin
Lion	-	-	Singa
Lips	_	-	Bibir
Little, a little		-	Kitjil-fediki
too Little	-	-	Talalu fedekit
to Live, living		-	Idop
to Load	-	-	Muet
Long	-	-	Panjan
to Look, to fe	e	+	Leat
to Look about		-	Balek tengok
Loofe	-	-	Talappas
to Loofe	-	-	Ilang
Loufe	-	-	Kutu
		R	2

to Love

to Love - Tjinta Low - Dibauwa

Μ

	-		- 1
Man (homo)		-	Orang
Man (vir)	-	-	Laki laki
to Make, or de	0	-	Kria
Married	-	-	Jang fuda kawin
to Marry, mar	riage	-	Kawin
a Mark	-	-	Tanda
to Mark	-	-	Tarrotanda
Mafon	-	-	Tukan batu
to Meafure	-	-	Ukur
Me	-	-	Kitta, betta, faja
a Medicine	-	-	Obat
Medicine cheft	, apotheo	ary	's fhop Tampat obat
to Meet	-	-	Katombu
Merchant		**	Dagang
Merchandize	-	-	Bedagangan
Merry	-	-	Suka ati
Milk	-	-	Sufu
Misfortune	-	-	Tjilaka
Miscarriage, il	ll fortune		Gugur annak
Money, coin	-	-	Wang
Monkey, ape		-	Monjet
Month	-	-	Sa bulang
Moon	-	-	Bulang

Moor,

Moor,	blackamoor	-	Kadja -
More	-	-	Lagi lebi
Mornin	g -	-	Bezok
Mornin	ng early, the	dawn	Pags ari
Mother		-	Maa
Mother	's brother, u	incle	Sanak
Mounta	ain –	-	Gunong
Mouth	-	-	Mulut
Much	-	-	Banjer
too Mu	ch -	-	Talu banjer
Mud	-	-	Lumpur -
Murder		-	Bunu –

N

Nail (on th	e finger)	-	Kuku
Nail (iron)	pin)	-	Pakel
Naked, bare		-	Talanj
Nape of the	neck	-	Meima
Narrow	-	-	Kuran
Near	÷	-	Dikka
Nearer	-	-	Lebi d
Neatly fittin	ng	-	Kabetu
Neck	-		Ler
Needle	-	-	Jarong
Negro	- 1	-	Kadja
Neft	-	-	Rumar
New	-	-	Baru
Nice, well	tafted	-	Ennak
		T	

Talanjang Meimang Kurang leba Dikkat Lebi dikkat Kabetullan Ler Jarong manjei Kadja Rumanja Baru Ennak R 3

Night

246 Night No Noor Nofe Not

BATAVIA, 1775.

1

Night	_	- Malam	
No	-	- Trada, tida-	
Noon	-	- Satenga ari	
Nofe	-	- Idom	
Not		- Bulong	
		-	

0

Oath	-	-	Sumpain
Obedient	-	-	Ormat
Oil	-	-	Minjak
Old	-	-	Tua
One-eyed	-	-	Satu Matta
Onion	2	-	Bawang
Open, to open	n	*	Tabukka, bukka
Out, without	-	-	Luar, diluar
to Overturn	-	-	Kria jatu
Own, one's o	wn	-	Kandiri, jang ponja
Owl	-	-	Kukublu
Ox	14	-	Sampi

P

Part	-	-	Bagian
Paffionate			Bengis
Pay	-	-	Bajar
Pearls	-	R.	Mutjara

Pepper

Pepper	-	-	Lada
Phyfician, furg	geon	-	Guru
to Pickle with l	orine	-	Tarro azin
Pillow	-	-	Tjium
Pimple	-	-	Biful
to Pinch	-	-	Jipit
Plate	-	-	Piring
to Play	-	-	Main
to Pleafe	-	-	Mauw
to Pluck	-	-	Pingan -
Poifon	-	-	Jang fuda kawin
Poor, in want		-	Mifkin -
Poverty	-	-	Kafiakan
Powder	-	-	Obat
Powder, gunpo	owder	-	Obat paffan
to Pour	C	-	Saling
to Pray	-	-	Menjumba
Prieft	-	-	Pandita
to Print	-	-	Tindis
to Promife	-	-	Janji
Prophet	-	-	Nabei
Proud	-	-	Kabeffaram
to Provoke	-	-	Parreknaik
to Pull	-	-	Pingan
to Pufh down	-	-	Kria jatu

Q

to Quake for fear to Quarrel - - Semetar - Geger R 4

to Quench

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BATAVIA, 1775.

to Quench, to quench one's thirst Banuhaus Quick - - Lakas

R

to Rain			Ujang
Rat			Tikkus
to Read		-	Batja
Ready		-	Trangt
to Rear	-	-	Piara
to Receive, to	get .		Dappat
Red			Mera
Rhenish wine (four wind	e)	Angor affam
Rice	-	-	Bras
Rich	-	-	Kaja
to Rife (from h	oed)	7	Bangong
to make rife, t	o awaken		Kria bangong
River, rivulet		-	Kali
to Roaft		-	Goring
Rock	÷. 1. 1%	-	Batu karang
Roe (of a fifh)	-	-	Tellor ikkan
Roof	-	-	Genting
Rope	-	-	Tali
Round	-	-	Rundar
to Run	-	-	Belumpat
to Run, to ru.	n away	-	Larri, pigi

to Sail

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Ş

to Sail	-	-	Balajar
to Salute, falut	ation		Kaffi tabe
Salt	-	-	Garang affin
Sand	-	-	Paffir
Safh	-	-	Tajam
Sciffars	-	-	Gunting
to Scratch	-	-	Garok
Sea, fea-fhore		-	Laut, pingir laut
Seal, fignet	-	-	Tjap
Seafon	-	-	Muffin
to See	-	-	Leat
to Seek out	-	-	Pili
to Sell	-	-	Djuval
to Send	-	-	Kirim
Senfible (under	ftanding)	Bifa
Serpent	-	-	Ular
to Set, place	-	-	Tarro
to Sew	-	+	Manjei
Shallows, foun	dings	-	Tjeper
Shameful, fhar	ne	-	Mula
Shamelefs		~	Jangter taw malu
to Shave	-	-	Tjukkur
to Shew	-	-	Unjuk
Ship	-	-	Kapal
Shoe, fhoemak	er	-	Sapato, tukan fapato
to Shriek	-	-	Geger
to Shut	-	-	Mendangan

to Shut

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BATAVIA, 1775.

to Shut in -	-	Tuto
Sick -/	-	Sakkit
Sign -	-	Tanda
Single, alone -	-	Sakali
Silk -	-	Sutra
Silver -	-	Perak
Silverfmith -	-	Tukan perak
to Sing -	-	Manjanji
Sifter -	-	Sudara prompuang
to Sit -	-	Duduk
Skin, bark of a tree	-	Kulit
Sleepy -	-	Mengantok
to Sleep -	-	Tidor
Slow, tedious -	-	Palan
Small-pox -	-	Tjatjar
Smith -	-	Tukan bisfi
to Smoke -	-	Tjum
Snuffers -	-	Gunting liling
Sometimes -	-	Barankali
Soft -	-	Lembek
Son -	-	Annak lakki
Sorrowful -	-	Sufa ati
Sour -	-	Affam
Spacious -	-	Lebar
Spawn of fifh -	-	Tellor ikkan
to Speak -	-	Katta
Speech, language	-	Baaffa
Spices -	-	Bumbu
Spider -	-	Lawa
to Spit, fpitting bason	-	Luda tampat luda
Spoiled (damaged)	-	Rufak
Spoon -	-	Sundek

Spoon

peffan ujong

Sportfman	-	-	Tukan peff
Square		-	Ampat ujor
Stand	-	-	Bediri
Stake	-	-	Ambara
Star	-	-	Bintan
to Steal	-	-	Mantjuri
to Stick, to cle	eave	-	Melenket
to Stick, to fta	ab	-	Tuffuk
Sticky, adhefin	ve	-	Litjin
Stomach	1	-	Prut
Stone	-	~	Batu
Strength, force	e	-	Kuat ,
to Strike		-	Pukkul
Strong	-	-	Kras
to Stuff, to dar	'n	-	Tiffi
Sugar		-	Gula
Sulphur	-	-	Tjollak
Sun (the eye of	f the day	()	Matta ari
Sweet	-	4	Manis
to Sweep	-	-	Sapu
to Swim	-	-	Bernang
Sword	-	-	Pedang
	Square Stand Stake Star to Steal to Stick, to ele to Stick, to ele to Stick, to fa Sticky, adhefn Stome Strong to Strike Strong to Stuff, to dar Sugar Sulphur Sun (the eye o Sweet to Sweep to Swim	Square-Stand-Stake-Star-to Steal-to Stick, to cleaveto Stick, to ftabSticky, adhefiveStomach-Stone-Strength, forceto Strike-Strong-to Stuff, to darnSugar-Sulphur-Sun (the eye of the daySweet-to Sweep-to Swim-	Square-Stand-Stake-Stake-Star-to Steal-to Stick, to cleave-to Stick, to flab-Sticky, adhefive-Stone-Stone-Strength, force-to Strike-Strong-to Stuff, to darn-Sugar-Sun (the eye of the day)Sweet-to Sweep-to Swim-

T

Table	-
to Tafte,	tafteful
to Take 1	medicines
to Tear to	o pieces

Meja Ennak Minom obat Subek

That

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BATAVIA, 1775.

That	- 11		Itu
to Thank, that	nks	-	Tramma kaffi
There	-	-	Difitu
There below	-	-	Difitu bauwa
There above	-	-	Difitu atas
Therefore	-	-	Dari itu
Therefore not	-	-	Dari itu tida
They	-	-	Dia orang
Thick	-	-	Kaffar
Thin	-	-	Tippis
Thing	-	-	Karon
to Think	7	-	Ingat
Thunder	-	-	Geontor
Tiger	-	-	Matjan
Time	-	4	Waktu
Too much	-	L.	I alalu banjer
Tooth	-	-	Gigi
Tongue	-	-	Lida
Town	÷	-	Kotta
to Treasure up		Ŧ	Simpang
Tree, wood	-	-	Pohon, Caju
to Try	-	-	Tjoba
to Turn	-	-	Balek

U

Ugly - - Rupa buffuk Uncle (by the mother's fide) Sanal Under - - Dibauwa to Understand - - Mananti

Unknown

Unknown	-	-	Hada kanalan
Unmarried	-		Bujang
Un-ufed		-	Trada biafa
Upper edge,	t'other	fide	Sabran
Us	+	-	Kitta orang

V

Vexatious	-	1.4	Sajang	
Vein	-	-	Urat	
Victuals	-		Makkanang	
Vinegar		-	Tjuka	
Virginity	-	-	Prawang	

W

Waggon, cart	-	-	Padati	
the Waift	-	-	Miawak	
to Wait on, to	attend	-	Jaga	
to Wait for	-	-	Nanti	
to Wake one	-	-	Kria bangor g	
to Walk	-	-	Jalang	
to take a Wall	s.	-	Kuliling	
Wall	-	-	Tembot	
it is Wanting	-	-	Kurang	
War	-	-	Prang	
Warm	-	-	Pannas	
to Wash	-	-	Tjutji	
Water	-	-	Aijer	
Way, road	-	-	Jallang	

Weak

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BATAVIA, 1775.

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Weak -	- Enting
Weed in the fields,	-
Weight -	- Timbangan
to Weigh -	- Timbang
Welcome -	- Slammat
Wet -	- Bafa
What -	- Appa
When -	- Kappan
Whence -	- Derimanna
Which -	- Sappa
to Whiftle -	- Tjop
White -	- Putti
Whole -	- Interu
a Whore -	- Sundal
to debauch, make a	Whore Befundal
Why -	- Manappa
Why not -	-/ Manappa tida
Wild, woody -	- Utan
Wildernefs -	– Utan
to Will, be willing	g – Maw
Wind -	- Angin
Window -	- Jenella
Wine -	- Angor
Within -	- Didalam
With -	- Dengan
to Wonder -	- Erran
Wood -	- Kaju
World -	- Dunia
to Work -	- Kria
to Write, writer	- Tulis, jurre turlis
Wrong, injury	Sala
wrong, mjury	Dala

Yarn

Y

Yarn	-	-	Benang
Year	-	-	Taun
Yeaft	-	-	Panko
Yellow	-	-	Koning
Yefterday	-	101	Kalamari ari
You	-	-	Lu
Young	-	1	Muda
5			

In counting, the following words, are used.

I	Sato	II	Saplas
2	Dua	12	Duablas
3	Dika	20	Duapulo
4	Ampat	21	Duapulo fato
5	Lemma	30	Dika pulo
6	Anam	40	Ampat pulo
7	Tujo	50	Lemma pulo
8	Telappan	100	Sarattos
	Sambilan	1000	Serrives
1			

10 Sapulo

There

There are feveral words that do not occur in the Malay language : thefe have been taken with the things they fignify, from the Dutch and Portuguefe, as

Table cloth Glafs Telescope Kettle Lanthorn Cap Tobacco-pipe Beer Stockings Seltzer water Soup to Iron (linen) Lady, madam Sir or mafter Rix-dollar Paper

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Doek Glas Kyker Ketel Lantarn Karpoes Pipa Bier Kous Aijer hollanda Soep Strika Nonje Sinjor Real Kartas

The

The Malay language is written with Arabic letters, which the Malays adopted at the time when they carried on an extensive traffic in the neighbourhood of the coafts of India. With refpect to declenfions, conjugations, and other grammatical affections, this language is one of the most simple and least artificial; nevertheless both Indians and Europeans are able perfectly to understand each other. In order to give an idea of the genius and construction of it. I have thought proper to annex the following fhort dialogues, which may poffibly be of ufe to fome future traveller, and may be eafily looked over, or elfe entirely omitted, by the reft of my readers.

What is it o'clock? Pukkul brappa? It has already flruck eight. Sudabis pukkul telappan. If it be fo late, why have not Kalu bigitu lama, manappa you fet the house in order lu orang bulong fapu ruma? vet? Baro betta orang fuda bangon. We are but just now rifen. It does not become a flave to Trada patut famma budak fleep fo late. jang tidor bigitu lama. I cannot rife earlier, when I Kalu betta bigitu lama pigi go to bed fo late. tidor, kitta trabuli bangon lebi fiang. Hold! I will teach you how Lain kali nanti betta ajar itu to behave another time. famma lu. For this time I beg your par- Ini fa kali kitta minta ampon pardon, madam. famma, Nonje. S VOL. II.

Is

Is not the water boiled yet? Ajer bulong fuda maffak? Not yet, but it will boil im- Bulong, tappe fabantar nanti mediri. mediately. Who is to blame, that I have Sappa punje fala, jang betta no coffee yet? bulong dappat koffi? The cook is to blame. Tukkan maffak punje fala itu. How fo? Manappa? Becaufe he let the kettle with Darri dia fuda kria jatu ita with the water overfet. ketel dengan ajer. How did that happen? Bigimanna itu fuda jadi? I did not fee it. . Kitta trada leat. How do you know it then? Bigimanna lutan itu? I only heard it from himfelf. Kitta tjomma fuda dengar itydarri dia kandiri. Dimanna dia ada? Where is he? I believe he is in the kitchen. Betta kira, jang dia ada di dappor. Let him come to me himfelf, Bear dia kandiri dattang dif. then. fini famma betta. I will call him. Nanti betta pangil famma dia. Why is water wanting, when Manappa ada korang ajer, I am to drink coffee ? kappan betta mau minom koffi? The water was already boil- Ajer fuda ada maffak pagi ed at fix o'clock this mornari pukkul anam. ing. Where is it now then? Dimanna ada Sakirin? Overfet, by which means I Suda jatu, darri itu kitta lagi. fcalded my foot. fada bakkar betta punje kakki.

It is your own fault. I feel it yet. Itu ada lu punje fala kandiri. Sampe fakarin kitta ada rafa itu.

Be

Be wifer another time.

Lain kali lu muste ada lebi bifa.

Very well, madam.

Baij, nonje.

Lebi darri fari fari?

You are this day to drefs a Ini ari lu muste kria banjak great deal of victuals. makanna.

More than ufual (daily)?

Certainly, becaufe here will Sungo, darri banjak orang dattang makkan diffini. be many people (to eat) to entertain.

- What do you order me to Appa nonje furu, jang kitta drefs, madam? mufte maffak?
- fifh, and fowl-curry.

What fhall I roaft? Two capons and a piece of Dua ajam kabiri dengan fa mutton.

Is that enough?

- Yes, it is enough; but you Sampe juga; tappe lu mufte kinds (to eat) for this en- makkan dibblakan kali. tertainment.
- madam ?
- Precifely at twelve o'clock. Betul pukkul dua blas. What are you doing, girl?

I am fewing my mafter's fhirt. Kitta ada Manjei Sinjor ponje

And what are you doing elfe? Lu lagi apa kria? I am darning flockings. Whom do they belong to? Sappa punje?

Soup, a piece of falt meat, Sup, fa pottong dagin azin, ikkan, dengan kerri affam punje. Appa betta muste goring?

pottong dagin kambing punje.

Sampe itu?

- must go into the garden, pigi di kobong, ambel and fetch fruits of various banjak rupa bua bua pur
- At what time will you eat, Pukkul brappa Nonje mau makkan?

Appa lu, budak prompuang, ada kria?

kameja.

Betta ada tifli kous.

S 2

They

They belong to my mistrefs. Nonje punje. When did you take them to Kappan lu fuda ambel in darn? puer tiffi? Laft night. Kalamari pagi. Are they not ready yet? Bulong abis? Not yet. Bulong. You are too lazy. Lu ada talalu mallas. No, madam; but I have got Trada nonje; tappe kitta feda many holes to darn. dappat banjak lobang puer tiffi. You have always fomething Lú fari fari ada fatu appa puer to fay. katta. I alfo yesterday ironed (the Kitta kalamari lagifuda Brika things) the linen. itu barang. Barang appa? What (things) linen? Thofe which the washerman Jang manatu kalamari daulo brought (to the houfe) fuda bauwa di ruma. home the day before yefterday. Have you first counted the Suda bilang itu barang lebi things ? daulo? Yes, I have counted them, Suda bilang, ada lagi betul. and found them right. I do not believe you; I will Betta trada pertjaja famma lu, count them myfelf. kandiri betta mauw bilang. Very well, madam, here are Bai Nonje, diffini ada itu the (things) linen, and the barang dengan dia punje (letter) inventory of it. furat. Look; how you have counted! Leat; bigimanna lu fuda bilang Is there any thing wanting? Ada korang barang? Certainly; one fhirt, two Sungo; fatu kameja, dua pair of drawers, and two tjillana dibaua punje, denpillow-cafes. gan dua farong bantal. Madam.

- Madam, shall I call the Nonje Maw, jang kitta pigi wafherman? pangil famma menatu?
- Run, and call him.
- fhall I tell him?
- Tell him, that if I do not Bilang juga, jang kalu betta he must pay for it.
- him?

If fo, you will tell him that Kalu bigitu, lu mufte bilang · he fhall never more wafh my (things) linen.

What more?

- That I shall keep back the Jang betta nantj pegan itu money which I owe him for this month.
- How much is he to pay for Brappa dia muste bajar puer the linen?
- For the fine thirt four rix- Itu kameja allus ampat real. dollars.

For the other things?

For the two pillow-cafes, Itu dua farong bantal, jang which were coarfe, one rixfuda ada kaffar, fatu real dollar and five fkellings. dengam lima fatali.

What more ?

two rix-dollars and a half.

mands, madam?

Larri juga, pangil famma dia. If he will not come, what Kalu di tra mau dattang, appa kitta nanti bilang famma dia

get back what is wanting, trada dappat ita barang, jang ada korang, dia mufte bajar iru.

And if he will not do that, Kalu dia tra mau itu, appa what am I then to do with kitta nanti bekin famma dia ?

> famma dia jang dia jangan kira puer tjutje betta punje barang lagi.

Appa lagi?

vang, jang kitta ada ulang famma dia puer ini bulang.

itu barang?

Puer itu lain? Lagi?

For the two pair of breeches, Itu dua tjillana dua real fatenga.

Have you any more com- Nonje ada lagi fatu appa puer furo?

\$ 3

Na

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No, get you gone; but return Trada, pigi; tappe dattang foon. lakas kombali. I go. Kitta ada pigi.

On the merchandize which the officers of the fhip had brought with them from Holland and the Cape on their own account, they gained, for the moft part, a confiderable profit. The price of goods is here, as well as in other Indian places of trade, fubject to many changes, becaufe when feveral fhips arrive from one place, a large quantity of certain articles are brought, the price of which then falls. And again, if the fhips ftay away late, certain articles are much called for, in great requeft, and well paid. Infomuch that thirty-fix Dutch rix-dollars have fometimes been paid in Batavia for a ham. In general, however, the profits are computed to be from thirty to fifty, and even a hundred per cent.

There are certain commodities from Holland for which there is always a great call, and which are bought up by the Europeans refident here, fuch as finoaked hams, Dutch cheefe, Dutch beer, and feveral forts of wine, efpecially red, and feltzer water. The wines are brought hither in bottles well corked; but the beer is carried on board in barrels, and fold here by the barrel, and bottled off after it is brought a-fhore, and

and has flood quiet a day or two in order to fettle. It not only keeps during the voyage, but alfo after it is bottled. Several other articles are alfo fold to great advantage, fuch as jewellery, ftuffs and fhags for lining coaches, failors' knives, and other kinds of hard ware, &c.

From the Cape of Good Hope not many articles were brought for fale, but almonds and raifins, which were bought up for the ufe of the hofpital, were fold with fome little profit. But iron feemed to me to be the moft lucrative branch of commerce. Some of the fubaltern officers had bought from the finiths at the Cape a parcel of iron, the greater part of which was confidered by the latter as being unfit for ufe, fuch as bits of iron of different fizes, which had been cut off in forging. Thefe bits of iron, which had been bought at the Cape at two ftivers a pound, were here fold to the Chinefe at the rate of five flivers.

So that all over the East Indies every kind of commerce is more precarious than in Europe. The principal commercial speculations, therefore, turn upon knowing what wares are most in request, or have not for some time been brought to any particular part.

Cuftom-houfes and tolls.—Inftitutions which, in countries where commerce is expected to flourifh, are not fuffered to lay any obftacles in

S 4

the way of either buyer or feller, are not known either here or in other commercial places in the Indies; but a certain duty is to be paid to government on all commodities that are fent from the fhip and fold on fhore. And this duty was now farmed out to a company of Chinefe, who, in a decent and becoming manner, fearched the larger chefts, but let trunks and chefts with clothes pafs untouched.

The current coins at Batavia were either Indian or European. Dutch ducats were rather fcarce; but ducatoons and piastres, as alfo fkellings, efpecially thip's fkellings, and doits coined by the company, were very common. The latter, with the Company's arms on the one. fide, as well half doits as whole ones, ferved as change to buy fruits and greens with, and were more current up the country among the Indians. Gold and filver rupees, but particularly the latter, and half, and ftill more, whole rupees coined in different places, were the most current coin. A golden rupee was worth ten rix-dollars, and a filver one half a rix-dollar. It was faid, that at the infligation of the Company both a whole and a half rupee in gold, and a whole one in filver, had been coined here in the prince of Madura's name. This was known by the year marked on it agreeable to the Chriftian æra, and the golden coin was very pale, ĩ

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pale, in confequence of the filver that was mixed with it. New, and particularly old Spanifh dollars, were frequently to be met with, and were much liked by the Indians. Angular and cut piaftres, coined in America, and brought hither from the Manilla iflands, were also often to be met with, in whole, half, and fimaller pieces, confifting of very fine filver. Sometimes also I faw fome imperial filver dollars, rather lefs than a piafter, and thefe were chiefly bought up by fuch as returned to Europe, as there was hardly any thing lost on them. Ducatoons, especially the ftriped, went here at the rate of eighty flivers.

The inhabitants have, as well as their neighbours in Sumatra and Borneo, a coin peculiar to themfelves, made of lead, roundifh, and lefs than a farthing, with a few letters on one fide, and a round hole in the middle, through which a ftring may be run upon occafion. It is thinner than a farthing, of very little value, and current in the interior part of the country only.

Near the canals, within the town, are fmall forts built of ftone, and furnifhed with cannon, for the purpofe of bombarding the foffes and ftreets in cafe of an infurrection. And at the fame time proper measures are taken, that, on fuch occasions, cannons may be brought out at the fhortest notice, and placed at certain distances in the ftreets, in order to compel the Indians and

and flaves to keep within their houfes. Thefe preparations for defence, abfolutely neceffary for a people who are very far from being numerous, and refide in an invaded country, make the town not very agreeable, and excite, in the thinking mind of the philofopher, rather unpleafant ideas refpecting the mode in which thofe manifold delicacies and luxuries, thofe coftly garments, and elegant articles of furniture, are, with fo much voluptuoufnefs and fenfuality, procured from thofe diftant places.

The Chinese are reckoned the most numerous of all the ftrangers. They retain their national character, cuftoms, and manners, are the most industrious people in the whole country, and indefatigable in every thing they undertake. Some of them travel to and from China for the fake of commerce, but most of them live conftantly here. Stout and tall, and of a yellow colour, they are particularly diffinguifhed from other people, by their fmall and oblong eyes. Some few wear their beards; the greatest part of them are shaved, and the hair, which is left growing on the crown of their heads, is plaited in one or three long plaits, either hanging down their backs, or coiled up round their heads. Their cloathing is thin and wide, confifting of a jacket, which is buttoned on one fide, and long trowfers. They have fhoes with thick foles, and without buckles in them; and

and they wear no ftockings. A handkerchief generally hangs down the thigh on the right fide, and on the fame fide they carry a filver box, to put finall money in, or elfe a purfe. Their heads are covered with a hat in the form of a cone, or with an umbrella, and they have commonly in their hand a fan.

The gardens about the town are chiefly taken care of by the Chinefe, who carry about fruit and culinary vegetables, for the ufe of the inhabitants and the fhipping, and vend them at a low price. They likewife farm the arrack diftilleries, are fkilled in almost every handicraft businefs, carry on an extensive commerce, cultivate the fugar-cane, coffee, and indigo, and, in fhort, are indifpensibly necessary.

As no women are allowed to be brought out of China, the Chinefe are under the neceffity of intermarrying with the Javanefe women.

Befides the Chinefe who carry wares and merchandize about the ftreets, one is fometimes vifited by thofe that offer their fervice in cleanfing the ears, an operation to which the chirurgical art in Europe is an utter ftranger. By means of fome fine inftruments which they ufe, they have the art of cleanfing the ears of wax, and other impurities that may have accumulated there, without caufing any difagreeable irritation.

The Indians chew betel in common, and confider

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confider it as impolite to address any body without having a quid of it in their mouths. The betel leaves, called Siri (Piper betel), are therefore brought in fresh every day for sale, and are fometimes used by European ladies, especially fuch as are born in the country. Into one of these pepper leaves a piece of the Areek-nut, (Areka cathecu), being put, and fometimes a little lime, the leaf is folded together, and kept for fome time in the mouth, till all the ftrength is drawn out of it. When lime is added, the faliva, lips, and teeth grow red, and at laft of a dark colour. A perfon who is accuftomed to betel, and first begins to use it, grows giddy and drunk as it were, and in time, from the force of habit, cannot do without this fpice, which produces a painful fenfation in the mouth, ulcerates the tongue, and affects its nerves in fuch a manner as almost to deprive him of all tafte. It is faid to cure bad breath, clean the teeth, and ftrengthen the gums.

Among the many fpices which the Indies produce, none is more commonly used than Cayenne pepper, (*Capficum*), with which almost every difh is feasoned. Rice mixed with the powder of this spice, is frequently eaten without any other addition; fometimes cocoa-nut is added, when it makes a complete meal. To fish, flesh, and all kinds of fauces, this hot spice is always added; and in the soup called *Karri* or *Currie*,

Currie, Cayenne pepper is the chief ingredient. This currie foup, a difh much ufed in the Indies, is a common meat-foup, to which are added feveral forts of fpices, fuch as Schoenanthus, (or Limon grafs), turmeric, and in particular Cayenne pepper. This elegant foup, dyed yellow by the turmeric, is rendered fo hot and fiery by the Spanish pepper, that a perfon that is not used to it, imagines his mouth and throat to be on fire. In time this dolorous fenfation becomes lefs perceptible, and the foup not only acceptable, but even highly defirable. It irritates the nerves of the Indian tongues, rendered torpid by the ufe of betel, firengthens the tone of the ftomach, and affifts digeftion. However, in order to diminish the heating qualities of the currie foup, it is mixed up with boiled rice, according to every one's palate or fancy.

The usual European grains neither thriving, nor indeed being cultivated in India, the Indians have neither wheat nor rye bread. The bread, of which the Europeans in the town eat very fparingly, and particularly to their meat, is made from the wheat which is brought hither from the Cape of Good Hope. Initead of this the Javanese use rice, which is cultivated on the low and inundated lands in abundance, and with great advantage. It is used to all dishes instead of bread, for which purpose it is simply boiled; and,

and, after it is ftrained off, ferved up on large pifang-leaves: the way of eating it is to take fome of it up with the three first fingers and put into the mouth.

The flefh of the buffalo-oxen of this island is called *Karbou*. It was fometimes used as food for the flaves and failors; but confidered, at least by the farmer, as coarse food, unfit for this hot climate. Otherwise the greatest part of the meat confumed here was of the feathered kind, fuch as hens, ducks, and geese, and particularly a great quantity of fish of different kinds, which is easier digested, and makes the body less inclined to putrefaction and putrid fevers.

Of European fruits, roots, and culinary vegetables, one finds few cultivated here, fuch as cabbages, turnips, Jerufalem artichokes, and Windfor beans. But, on the other hand, the country abounds with other fruits, roots, bulbous plants, different fpecies of beans, and other vegetables, which are daily ferved up at table.

The cocoa-nut (*Cocos nucifera*) is daily eaten by the Indians. It is brought down more or lefs ripe from the crown of the palm-tree, and, after it is opened with a knife, the liquor contained in it is firft drunk, which taftes fweetifh, and quenches thirft. The white almond-like kernel is afterwards eaten either alone or with rice. The Europeans grate the kernel, and make a kind

kind of almond emulfion, from which they prepare currie foup and other palatable diffues.

Pisang is the appellation given by every one to the fruit of the tree of paradife, (Mula paradifiaca), of which there are feveral forts, different in fize and quality. The fruit is generally gathered unripe and green, it is then hung up to ripen, and grows yellow. The leffer kind is called Pilang radja, and may juftly be confidered as one of the most delicious and wholefome fruits in the world. The thin coat which covers the fruit is eafily peeled off, and the inner and pulpy part, which is fweetifh, almost melts in one's mouth. Though one eats much of it, one is hardly ever fatiated with it. It is fomewhat of a mealy nature, and one of the principal articles of the Indians' food. It is eaten raw both by the Indians and Europeans; but the latter drefs it befides in various different ways, either by roafting or flewing it. Sometimes it is flewed in red wine, like pears, or it is peeled and boiled in a decoction of a red fpecies of amaranthus, by which it is turned quite red, in the fame manner as if claret had been added to it. Fried in oil, it grows rather hard, and has a very agreeable tafte. In both thefe proceffes it is previoufly peeled and cut into long flices. These flices are fometimes dipped in batter, and fried like applefritters, and thefe I frequently faw the Europeans cat

eat at their afternoon collations, when tea was drunk at the ufual hour. One fingle tree produces a large quantity of fruit, but never bloffoms more than once; after which it dies, and propagates by new fhoots fpringing out from the root. This tree, though it grows wild in the country, is yet very generally cultivated, almost indeed in every garden. It attains to the height of a man, and has no branches. The leaves of this tree are the largest in the world, of fuch as are undivided and do not lie in folds.

The pine-apple, or fruit of the Bromelia anamas, has been confidered by many as the most delicious of all fruits. The odour of it is agreeable, and fills the whole room. The tafte of it likewife deferves the higheft commendations; it has a mixture of fweet and four in it, which is extremely agreeable. But it contains alfo fomething acrid, fomething which is noxious, fo that it ought to be eaten by way of defert only, and not as food; it is as big as a man's head. When the outer coat is taken off, the fruit is cut into flices croffwife, which are taken into the mouth and chewed a little, when the liquid part only is fwallowed, and not the fibrous. Its agreeable tafte feems to penetrate the tongue itfelf. The Europeans eat it either with falt, fugar, or red wine, in order to prevent any bad confequences that may arife from it, and feldom more

more than one or two flices are eaten at a time. Slices of this fruit cut into fhreds are fometimes put into fyrup, and eat, like fweet-meats, with tea. I have likewife feen thefe flices flewed in red wine and foft fugar. When it is not quite ripe, it is acrid and poifonous. If eaten in great quantities it caufes the diarrhœa and dyfentery, efpecially among the failors and foldiers, who are afflicted with the fcurvy on their firft arrival.

Gojavus (*Pfidium*) is eaten, when ripe, both raw, and flewed in red wine and fugar.

Jambo (Jambolifera indica) is alfo eaten raw, and, when cut into flices and the feeds taken out, flewed in red wine. Of this fruit there are different kinds: the common Jambo fruit is fmall, and not larger than a fmall plum; Jambobol is as large as a pear; Jambo ayer Mauer both fmells and taftes like rofe-water. All thefe have fomething dry in their tafte, but are not in the leaft aftringent. The juice of it is fometimes ufed with Tjampaka (Michelia) water and rofe-water, for inflammations of the throat and mouth, and alfo in the thrufh.

Mango (Mangifera indica) is an egg-like fruit, of the fize of a goofe's egg, flat, of a green or yellowish colour, and is frequently eaten without any other preparation than the taking off the rind with a knife or the finger. The inner pulp, which furrounds the kernel, is the part vol. 11. T which

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which is eaten. This fruit is very common at the tables of the Europeans, and I often eat it with fugar, cut into flices and dipped in its own liquor. Preferved in fugar, it is not unfrequently ferved up at the tea-table. When unripe it is very four, and in this flate, boiled with fugar, butter, and eggs, it yields an acrid fauce that taftes like boiled apples or goole-berries. The Javanefe boil the unripe fruits in brine, which tafte, and are ufed, like olives; others boil them, and fleep them in vinegar and pepper, to eat with meat like cucumbers.

The Catappa (*Terminalia catappa*) is a tree which fheds its leaves like the Bombax. The fruit of it is oblong and rather flat. The outermost fhell is green, and grows yellow as it ripens. Within it lies one or two kernels, as fweet as almonds, which are eaten both raw and made into tarts, and are very nourifhing.

The fruit of the Papaya (*Carica papaya*) is at first green, but afterwards grows yellow, like a pear, and is as large as a final melon. Within the exterior shell there is a yellow pulp, which is eaten, and has nearly the same taste as a melon. This fruit is boiled, when green and unripe, and is in general stewed with some dish or other of meat.

Among the fruits which may be more properly faid to ferve the Indians for food, is that called

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called the *Bread fruit*, Boa Nanca, (*Raderma-chia*), and that fetid fruit, the *Durio*. This latter is extraordinary on account of its naufeating and intolerable corpfe-like fmell, which is perceived at a great diftance, when the fruit is brought into the town for fale. Neverthelefs it is reckoned delicious, and is eaten eagerly, even by the Europeans. Each of thefe fruits is as large as a child's head, and larger, and covered with a thick fkin, which is prickly, like that of a hedge-hog, and is thrown away; of both the inner part only is eaten, and that either raw or ftewed. The Durio is confidered as diuretic and fudorific, and as ferviceable in expelling wind.

Salac is a fingular kind of fruit on account of its finall imbricated feales, which lie like fhingles one on the other. It is fold in every market and ftreet, but is feldom eaten by the Europeans. It is like a pear, and of the fame fize; within it has a kernel, which is white, and divided into feveral pieces, and is the part which is eaten. It is nutritious and well tafted.

The Annona is one of those fruits which I often faw exposed to fale in the markets, but feldom on gentlemens' tables. The pulp, which is inclosed within a thin shell, and furrounds the feeds, is to be fucked out with the lips. It is fweet, of a mealy nature, and an agreeable taste. Two forts

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of it mostly occurred, as large as apples, viz. the Annona fquamofa, and reticulata.

Among the various forts of fruits which were ferved up at the tables of the Europeans, were the Carambola and Bilimbing (Averrhoa). The former of thefe is an egg-like yellowish fruit, with five corners, and sharp projecting edges, and is of the fize of a pear, or a hen's egg. It has an agreeable tartness, and is eaten raw as well as stewed. Some of the trees bear fruits that have a more acid and fomewhat rough taste. The latter fruit is oblong, of the thickness of one's finger, and so four that it cannot be eaten alone. It is therefore cut into pieces, and put into soups, or preferved in fugar. Of the juice of this and fugar is prepared a fyrup, which is a cooling and refreshing remedy in fevers.

Boa lanfay is the Malay name for the fruit of a tree, from which I could not procure a bloffom, and which as yet is unknown to the botanifts. The fruit hung down in long clufters; they were round and funall, like goofe-berries, yellowifh and hairy. Within their thin fhells they include a thin juice, which is white and tartifh, and which is fucked out with the mouth. The fruit begins to ripen in March, when it has a fweetifh acid tafte, and is in no great effimation among the better fort of people.

The fruit of the Ratan (Calamus rotang) I faw once

once or twice expofed to fale, and I obferved it was bought up by the Indians. When ripe, roundifh, as large as hazel-nuts, and like falac chip, they are covered with finall fhining fcales, laid, like fhingles, one upon the other, and always difpofed in large clufters. The Indians generally fuck out the pulp (which is fubacid, and furrounds the kernel) by way of quenching their thirft, and fometimes it is pickled with falt, and eaten at tea-time.

The Rambutan (*Nephelium lappaceum*) grows in large clufters, and is very generally eaten. The external rind is thrown away; the white and vifcid juice contained within is fucked out with the lips, has a tart fubacid tafte, and quenches thirft. Each fruit is fomewhat oblong or roundifh, red, and hairy all over, and lefs than a plum. The rind is eafily taken off, and is white on the infide. The pulp is white, loofe, and almost transparent, tough, and difficult to tear afunder with the teeth. It has a fweetish acid tafte, like that of lemon juice and fugar, and is tolerably pleafant; the kernel, which is within, is not eaten.

Rambutang ati is to the full half as big again, with thicker and longer hairs, and its rind feparates more eafily from the pulp. This is eaten, like the former, but is fcarcer and dearer.

The Mangustine, (Mangostanos, Garcinia mangostana), is brought to Batavia from Bantam, and s only to be had at a certain time of the year, T 3 which

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which is in January and the months following. The rind is of a purple colour on the outfide, and pale within, foft, of an aftringent nature. It is used by the Chinese for dying black. The fruit is quite round, like a ball, and divided within into five compartments. When it is eaten the rind is generally pared off all round, and the pulp on the infide, which furrounds the feeds, and is white, foft, fweet, and inexpreffibly delicious, is put whole into the mouth, in which it melts like whipped cream. It has a most pleasing mixture of acid, with a fmall degree of fweetnefs in it, which does not incommode the ftomach, neither is one eafily fatiated with it. It is, in my opinion, the most delicious and wholefome fruit in all the East Indies.

At their tables they frequently had, by way of defert, water-melons, and fometimes fhaddocks, Of both thefe there is a white and red fort, and both will keep on board of fhip for weeks together, to the great benefit of navigators. The fhaddock (*Citrus decumanus*) is a large lemon of the fize of a child's head, with a moderately acid and refrefhing juice. The peel is thick, but is eafily taken off, and the fruit is afterwards eafily feparated into feveral pieces, and, at the fame time, is fufficient for feveral people. The juice quenches thirft, and is cooling, antifeptic, and antifcorbutic.

Water

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Water Melons, or *Arbufes*, grow every where in India. The red are confidered as the beft. The juice is very watery, thin, cooling, and refreshing, melts in the mouth like fugar, and is eaten after meals, either by itself or with fugar, or elfe with a little falt.

A kind of fresh beer, which is called (*Klein Bier*, or) small beer, was sometimes prepared by the Dutch, in order to drink in the evenings. It was used while in a state of fermentation, and made a loud report every time the Calabash or vessel containing it was opened; it frothed briskly in the glass, distended the bowels, and kept the body open. It tasted agreeably; but as there were no hops in it, it would not keep above twenty-four hours,

In the Indies, where the inhabitants live on fruits and greens, and drink nothing but water, I muft confefs I did not expect to find any body afflicted with the Stone. However a flave belonging to my hoft had the misfortune to harbour a very large one in his bladder, which at length coft him his life. After his death, my hoft opened the body in my prefence, and the ftone was found to weigh two ounces and a quarter,

My hoft, Dr. HOFFMAN, had the Company's difpenfary under his care, from which all the medicines were fetched for the fick in the hofpital; but, for the fhips which go to Europe and to the Indian fettlements, medicines are delivered

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out purfuant to a certain arrangement and to the length of the voyage from out of another florehoufe, (*Winkel*), to which there are two overfeers, who have a confiderable annual income.

There are two hofpitals; one within the town (*Binnen hofpital*), into which all the fick from the town and from the fhips are received. Three phyficians and two furgeons have the care of the fick here. The other flands out of the town, (*Buyten hofpital*), to which the fick are brought from the former as foon as they begin to recover, in order to have wholefome air there, and more exercife.

Befides thefe two hofpitals appropriated to the Company, there are two more in the town, one of which belongs to the Moors, and the other to the Chinefe.

The heat which conftantly prevails here, and the heavy fogs that hang in the air, without foon difperfing, contribute to make the country, and in particular the town, very unwholefome, and the mortality fo great, that the town has been called the European grave. The ftench which arifes from fubftances of different kinds, that are imprudently fuffered to be thrown into the rivulet, and the irregular diet of the Europeans, do not a little contribute to the devaftation which annually are apt to take place amongft them. The poorer fort of people commit exceffes in eating fruit, and in the improper ufe

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of arrack; and the rich indulge more than they ought in fo hot a climate, both with respect to ftrong food and heating liquors; the latter are, for the most part, hastily carried off by putrid fevers, often within the fpace of three days, and fometimes even in twenty four hours. Dyfenteries and putrid fevers deftroy the former; and moft of those who are able to get over these diforders have a large and diftended ftomach, with an obftruction in fome of the interior parts, (Placenta febrilis), which feldom difperfes or difappears, if the patient be not fent to fome other fettlement, where the air is more wholefome and cooler. Those who appear to be the healthiest and most vigorous, die the fooneft; while fuch as are weakly, as alfo women, hold out longeft and beft; although those who come from Europe with rofy cheeks, lofe this fpecies of beauty in a fhort time, and are afterwards as pale as a corpfe.

The winds that prevail here the whole year throughout, are naturally either fea or land-winds, change according to the feafon. In the weft, *mouffon* or rainy feafon, which is alfo here confidered as the winter, and commencing in November, or the beginning of December, lafts till the month of March, the land-winds blow from S. W. and the W. after which, about noon, a fea breeze fprings up from the N. W. In the good feafon, or *Mouffon*, as it is called, the land-winds fhift

fhift S. E.—E. afterwards to N. E. and at last to N.

Near the ditches before the town I found the Coftus Arabicus grow, the aromatic root of which is carried to different parts of India, and there fold to advantage,

In the very fame manner I found ginger (Amomum Zingiber and Zerumbet), growing wild farther up the country, in the dry fandy fields, and fometimes near the roads; both thefe are, perhaps, one and the fame fpecies; (at leaft there is very little difference between them) as the floral fpike, which at firft is round, grows out by degrees, and becomes longer. The Chinefe, however, apply themfelves to the cultivation of ginger; and the root, cleanfed from the adhering earth, is boiled up with fugar, and fold in the Indies as well as Europe. In India it is frequently ufed with tea, to ftrengthen the ftomach, and in Europe moftly in hoarfenefs, coughs, and other diforders of the breaft.

I alfo faw a kind of cardamom (Amomum compatium), with roundifh feed-veffels, reared in a garden. The feeds of this was like the cardamoms which are ufually brought to Europe, and are perhaps collected from feveral plants: the clufters of flowers grew very low down near the root, and the leaves refembled those of the common flag, but had a point like a fine thread at the end.

Arrack,

Arrack, which in India is used instead of brandy, which here, as well as in every other part of the world, is reckoned the best ingredient for making punch, and which has a peculiar tafte and fmell, very different from those of any other diftilled liquor, is beft made at Java. For the diftilling of this feveral confiderable diftilleries have been erected out of the town of Batavia, which, together with the privilege of preparing arrack, are farmed by the Chinefe only, Rice is the chiefeft ingredient from which this fpirit is diftilled, of three different degrees of ftrength, in large pans, after a previous fermentation with water, treacle from the fugar-houfes, and the juice of the cocoa-trees. The weaker fort of arrack is drank warm by the Chinefe, out of cups, at their merry meetings. The white arrack, which is called Kneip, and is immediately bottled off, is ftronger, and is used chiefly in India. The arrack, after it is put into wooden veffels to be tent to other places, acquires a colour from the wood, and is the brown arrack that is commonly fold in Europe.

Cotton and filk are the chief materials throughout all the Eaft Indies, from which the Indians make their clothes, and of which they fell annually an immenfe quantity to the Europeans. Silk indeed is not manufactured in the island of Java; but of cotton two different kinds occur in the country. One grows on a very high tree, with a large

large fpreading and handfome top, and is called Bombax pentandrum, or filk-cotton tree. The cotton which enclofes the feed in the capfule, is called Kapock, and is not used for fpinning, but for making mattraffes, bolfters, and pillows. The other is the produce of a fhrub, which, in the fpace of half a year, grows to the height of a man, and afterwards dies within the year (Goffypium berbaceum). This produces, from its feed-veffels, a much better and finer cotton (Kapas), which is fpun and woven into an infinite number of cotton and calicoe pieces, of various degrees of finenefs. I faw the cotton cleanfed from the feed, by being laid on extended cloths, and beaten with flicks, till all the feed was perfectly feparated from it.

Neither coffee-houfes nor taverns are to be met with in this large and populous town, but all ftrangers, as well thofe who arrive by the Dutch fhips, as thofe who come by vefiels belonging to other nations, are obliged to put up at the Gentlemen's Hotel, which is a very large and handfome houfe, with a great number of apartments. Here they have not only attendance, a room, and bed and board, for a ducatoon, or a rix-dollar and a half, a day, but alfo coffee, wine and ale, by paying extraordinary for them. There is befides in this houfe a very large hall for the boarders to meet in and converfe together, long galleries open on one fide for them to walk or fit in

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in under the fhade, and a billiard-table for their amufement. No burgher, nor perfon that has a poft under the Company, is fuffered to lodge or board ftrangers for payment; but, if they choofe to harbour a friend gratis, there is no prohibition to the contrary.

The rice (Oryza) which is cultivated on the low lands of the ifland of Java, is remarkably white, and ranks next to the Japanefe in point of goodnefs. Some rice is alfo cultivated on the higher parts of this ifland, and needs not be under water, which this fort of grain otherwife ufually requires. Before rice was brought hither, and became common in the country, the Javanefe lived on (*Geerft*, as it is here called) the feed of a plant with a blackifh bloom, of the *Panicum* or millet kind, which was cultivated by them, but was neither fo good nor fo profitable.

Befides rice, I faw cultivated here in different places Turkish wheat (Zea mais), and the Holcus forghum.

The burning heat of the air, and exceflive perfpiration, make bathing very neceffary: and indeed a day feldom paffes without one's feeing the Indians fplashing about in the water. For this purpose they choose fuch places, either in the rivulets or creeks, where they are fecure from the crocodile. By these means their bodies are cleansed, and their pores opened: befides this the cold water strengthens their bodies,

fo that they afterwards perfpire lefs, and grow more light and lively.

The fpice trade, it cannot be denied, brings the Dutch Company the greateft profits of any; no private perfon therefore, whether he be an officer on the civil lift, a burgher or a naval officer, is fuffered to have any thing to do with it; but the Company has engroffed the whole to itfelf. If any one is caught fmuggling in this article, it always cofts him his life, or at leaft he is branded with a ted hot iron, and imprifoned for life.

Opium, which is commonly called Amphion, is confidered as being contraband in the higheft degree; the commerce in it likewife is entirely referved to the Company alone, and the punifhment, in cafe of trefpafs, extremely fevere. This commodity is chiefly brought from Bengal, and brings the Company an immenfe profit, A great confumption of opium is made in Java, and the adjacent islands. The Indians use it very much, but not fo commonly for chewing as the Turks, but, in its stead, make it into an electuary, with which they befinear the top of their tobacco, after they have put it into their pipes. This, when they have imoaked a few whiffs of it, makes them delirious, and, as it were, drunk; and if they imprudently use too much of it, they are quite befide themfelves, and raving, fo as even to be ready to murder every one they meet. When a man,

man, thus rendered furious by opium, comes into the ftreet, they call out Amok, Amok, and everyone has a right to kill him, as he is to all intents and purpofes an outlaw. The privilege to fell opium is ufually farmed out to fome people, (for the most part men high in office), who are the farmers general, and who pay very large fums for it. These again retail out their privilege to others, or, to fpeak more properly, they fell opium by wholefale at a very high price, to fuch as difpofe of it in finall quantities to the Indians. And as fome of the first people here have an interest and fellow-feeling in the trade, a particular ftrict watch is kept, to prevent it from being fmuggled into the country; and the offender is fure to be punished according to the utmost rigour of the law. Birds' nefts, which I had also feen at the Cape before, were here more uled in foups, as nourifhing and delicious. They are composed of glutinous fibres, and diffolve into a transparent jelly, when put into warm water. They were faid to be found in abundance in the Javanefe mountains, and to be a profitable article of commerce, efpecially in China. This trade is alfo monopolized by the Company, and is generally farmed out to the highest bidder. These nests have hardly any tafte, but are nourifhing, and eafy of digeftion.

Subattes

Subattes was the name given by the inhabitants to feveral fpecies of a curious kind of grafshopper (Mantis, efpecially the precatoria and religio/a), whofe thorax was as long as the reft of its body, and which always lifted up its fore-legs, like the Indians, when they falute, or are requefting any thing. As this animal is extremely indolent, and feldom ftirs, and the thorax perfectly refembles the ftalk upon a leaf, and the wings, with their dark veins, look exactly like a leaf. Another fpecies of it (the Mantis gongylodes), was therefore called the walking or living leaf. The Indians confider them as holy, or at leaft, as animals that brought good luck.

The buffaloes in Java were much unlike those that I had feen in the African woods. These were grey, fmaller, and wallowed themselves in pools of muddy water. Although they always retained more or less of their native wildness, they nevertheless fuffered themselves to be tamed; and I frequently faw them used for drawing large carts.

I obferved that the chefts, as well in the dwelling-houfes as in the warehoufes, were generally fet upon bottles. The ftagnation and unfrequent renovation of the air, and the confequent mouldering and fpeedy decay of moft fubftances, rendered this precaution neceffary; as otherwife, not only the bottoms of the chefts, but the goods alfo

alfo contained in them, would in a fhort time be fpoiled and intirely rotten.

In the road of Batavia there are a great many iflands which not only make it fecure in ftorms, but are also of great utility to the Dutch company. On these islands the Company has wharfs, ftore-houfes for goods, and many other conveniences.

The Javanefe were feen rowing to and fro' in the harbour in amazingly narrow but long boats, the gun-wale of which for the most part lay as fteady and as level as a looking-glafs. Thefe boats are hollowed out of a tree, of a breadth merely fufficient for one man to fit in them, but feveral yards long, and without fails.

Slender ratans, (Calamus rotang) are in very common ufe among the Javanefe as cordage, and with thefe, either whole or cut into thin flips, they had the art of tying up any thing whatever with great dexterity. I likewife faw both ftrong and neat bafkets made with them, as also broad mats for fitting on, which were very pretty.

The Bamboo tree is one of the most useful trees to the Indians in this part of the country. Of this they make almost every thing they want with the greateft expedition. With it I faw houses built, chairs, tables, bedsteads, ladders, poles for carrying goods on, as alfo veffels and TI houfe

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house utenfils made, which were neat, ftrong, and light.

In the gardens of the Europeans fituated out of the town, feveral thrubs and plants made a moft elegant appearance; fome with their variegated leaves, and others with their large and beautiful flowers. Amongft the former were the Nyctanthes picta, and the Erythrina corallodendrum; and amongft the latter the Hibifcus Rofa finenfis, the Muraya exotica, &c. The Hibifcus rofa finenfis was called Kambang Sapato (*the Shoe flower*); and, in fact, the bloom of it yields a very black pigment. On this account it is faid to be ufed for blacking the fcabbards of their hangers, (*Kris*), as alfo for blacking fhoes.

The Morinda citrifolia, is called *Bengado*; and the juice of its root is used by the Javanese for dying red.

Indigo (*Indigofera nila*) grew wild every where, and was in fome fmall degree cultivated by the Chinefe.

Of crocodiles there is a very great abundance near the mouths of the rivers, and in the ftreams of this ifland. This creature grows to a confiderable length. In my botanical excurfions I frequently faw them lying on the beach, bafking and fleeping in the fun. Sometimes they are taken by the Javanefe with a hook, a circumftance which feems almost incredible. The

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The mouth of this animal is very wide, and the teeth in both his jaws as fharp as chiffels; fo that with the greatest eafe he can bite asunder the ftrongeft rope. In order to catch him, the Javanefe ufe a very loofely twifted cord of cotton, at the end of which a hook is fastened with some carrion or fresh meat on it. When the crocodile, after having fwallowed the hook, endeavours to bite the cord afunder, his teeth get faft between its loofe fibres, fo that he is not able to bite it in two. The hook that he has fwallowed likewife prevents him from tearing the cord to pieces. The hook, as I was told, is made of wood; and as foon as the crocodile is observed to have fastened, people come to affift his antagonifts, and kill him with other inftruments. So that it is possible indeed to catch Leviathan with a hook ; it must not however be done by dint of ftrength, but by artifice and ftratagem.

The kernel of the fruit of *Boa ati* has a very bitter tafte. It is ufed, pounded, in the colic, both by the Malays and Javanefe.

The Javanese must not be made flaves of; but I was informed that it sometimes happens that they pawn each other; though I must confess that I could not get sufficient intelligence on this subject.

The kernel of the pinang ($Nux \ arece$) which is fo commonly and almost daily used with Siri, in chewing betel, was cut to pieces with a pe-U 2 culiar

culiar pair of fciffars made for the purpofe, which I frequently had an opportunity of feeing, particularly when in company with the European ladies. The kernel was generally divided into fix parts, and one of thefe parts was taken each time as a quid.

The Sugar-cane (Saccharum officinarum) is planted in great abundance at Java; and foft fugar is exported from hence to most other parts of India. All the fugar used in the East-Indies, is either fugar-candy or fost fugar. The refining it to loaf-fugar is not fuffered here, but must be done in Holland. The chief trade to Japan is in this commodity. The fugar-candy is used with tea and coffee; and the fost fugar for dreffing victuals, and preferving fruits of all forts and berries, fuch as cloves and half-grown nutmegs, which are eaten by fome people with their tea, in order to ftrengthen their weak and relaxed ftomachs.

Nellika, or Boa Malacca, is preferved in the fame manner, as is alfo a fruit called Cherimelle. In this ftate the former taftes quite foft and tender, and is as large as a hen's egg. The pulp has a fubacid tafte.

Cherimelle is lefs; it is pricked all over with a needle, and laid in water, and at length boiled up with fugar, and kept with fyrup in glafs bottles. Thefe fruits are often eaten with tea. They are fometimes eaten unripe with a little falt, and may likewife, when in that flate, be

be preferved in falt. Sometimes they are eaten ripe, and have then a fubacid tafte.

Fokke Fokkes was the name by which the fruit of the *Solanum Melongena* was diftinguifhed, which grew here both in a wild and cultivated ftate. It is of an oblong form, fomething like a pear, of various fizes, of a quite fmooth and fhining exterior, and of a purple blue colour. The fruit has an agreeable tafte when boiled in foup, or elfe boiled up with wine and pepper. It is diuretic, and expels gravel, and is in general ufe among the Europeans as well as the Indians.

Various roots, fruits, culinary vegetables, and other eatables, fuch as fifh, &cc. are preferved in vinegar. Thus preferved thefe articles are commonly called *Attjar*, and are ufed with roaft meat and other difhes, for the purpofe of creating an appetite, and ftrengthening the ftomach. The vinegar is rendered more actid and ftronger by the addition of cayenne pepper, fo that thefe pickles are rendered very hot and fiery. In this manner are preferved cucumbers, the rind of melons, and the aromatic roots of the bamboo tree, which latter are even carried from China to Europe.

Within the town of Batavia ftand fix churches, two Calvinifical, one Lutheran, one church belonging to the hofpital, and one in the citadel, as alfo a Portugueze church out of the U_3 town,

town, which have their clergymen from Holland, who are much refpected here and well paid.

The Moors, who live at Batavia, are, as they are elfe where, chiefly merchants, and diffinguifhable by their peculiar and handfome mode of drefs. They are frequently ftout and tall men, with long black hair, which they fold up in a white cloth, like a turban, and wear whifkers. Some of them wear a cap, or round hat, on their head. Their drefs is a large and wide gown or fhirt, for the moft part of white cotton, which is tied with a ftring or broad ribbon under the breaft, and is wide at bottom, at the fame time reaching down to the feet. Their fhoes are wide, and terminate in a long flender point, which is turned up, and, by the richer fort, they were frequently embroidered with gold.

The Javanese always st cross-legged on a straw mat laid on the floor or on the ground itself. On the road, or in the street, they fit on their heels. They compliment each other and falute in the fame manner as most other Indian nations do, viz. by clapping their hands together, and lifting them up against the forehead. They take hold of their victuals with their fingers, without using either knife or fork. Their dress consists of a handkerchief, which they twist about their head; a waistcoat with many small buttons on it; and a garment (*Kajin*), which they fasten about their waist,

waift. The waiftcoats of the better fort of people are frequently very handfome, and elegantly worked. They wear flippers, but go barelegged. Their flippers are quite fquare at the toes and turn up. . Some wear a cylindrical cap cut off fquare, as it were at top, and made of very white cotton, and fo much loaded with rice ftarch, as to be ftiff and quite transparent. The women wear a garment, which, after covering their bodies, reaches down to their feet, and is folded together about their waifts; and over this they wear a half fhirt. The hair is wreathed up in a coil upon the crown, and faitened with a pin. People of quality wear flippers alfo, which are often very richly embroidered.

The children of these people, like those of many other Indian nations, are educated in a very fimple inartificial way. They are feldom heard to cry. I faw them frequently left by their mothers on a mat fpread on the earth, to amufe themfelves, and crawling about on all fours till they could walk. They are never laced nor fwaddled, and I did not fee one deformed child or cripple among them.

The principal people among the Javanefe live in great fplendor, and are attended by feveral domeftics, one of which carries a pinang box, the fecond a tobacco pipe, and the third tobacco, the fourth a fpitting bafon, the fifth an umbrella, &c. U A

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nay, the ladies are even carried in chairs mounted with filver, and the chieftains have fometimes filver or gold fcabbards to their fide arms.

The Javanefe are of a yellow colour, with black and rather prominent eyes, the nofe very flightly turned up, but yet fhort and blunt; the hair long and black, the mouth by no means large, but the upper lip of a moon-like figure, turned up, thick and rather pouting. They are mostly of the middle fize, or rather tall than otherwife.

The Indians fet a great value upon their hair, which is black; and fo long as to reach down to their loins. Not a day paffes without their anointing it, and combing it, and putting it up in the manner of their country.

It may indeed with juffice be alledged, that the inhabitants of the warmer climates have a dull torpid brain, and are lefs keen and fharp than the Europeans. They have the power of thinking, but not profoundly; and confequently converfation among them is rather trifling. They are in general idle, fleepy, heavy, and lafcivious. To thefe qualities the heat of the climate itfelf inclines them. And, without infulting the greater part of the dark-brown inhabitants of the Eaft-Indies, one may truly fay, that there is a greater difference between them and the Europeans, than between the monkies and them.

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The heat of the climate has that influence likewife on the Europeans who arrive here, that in time they become heavy, inactive, and lefs lively than they are in the colder climates; fo that the most industrious man, against his inclination, frequently finks into a state of inactivity and idlenes.

Surnames are never used by the Javanese; and the prænomen is often changed by them according to circumstances. As soon as a father has a son, he changes his own name, and instead of the son being called after his father, as in Europe, the source called after his son; for example, if the son is called Choso, then the father's name is changed to Bappa Choso (or Choso's father). If he afterwards has more sons, he constantly takes his name after the youngest.

The weapons used by the Javanese are of various kinds. The Kris is a kind of Coteau de Chasse, which is usually worn by all ranks and on every occasion. The blade is about a foot long, and is either strait or wavy like a serpent, two singers in breadth, sharp pointed, and two-edged. It is frequently of the colour of lead, with lighter stripes in it. Sometimes it is inlaid with flowers, and in general poisoned. It is kept in a wooden scabbard, which sometimes is painted, and sometimes, when the owner is a man of property, is covered with a thin plate of filver or gold, which is

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is loofe, and can eafily be taken off. The hilt is of wood, and is of a peculiar fhape. This Kris is worn in a belt, which is tied about the body, on the right fide near the back, and frequently quite at the back, efpecially among the lower clafs of people.

Another kind of fabre I frequently faw fold in the markets: it was thick in the back, heavy, and above two feet in length, with a horn or wooden hilt.

Badi was the name of a finall Couteau de Chaffe, or rather dagger. It was about fix inches long, with a crooked handle, and was fometimes worn, like the former, in a belt.

Wudong is another weapon, which I faw worn by the loweft clafs of people only, and chiefly by men fervants. It was faid to denote obedience and attachment. The blade was fhort and broad, and refembles a chopping-knife, with a convex edge, and a thick back. The fcabbard in which it was kept was made of wood, with a horn fpring on one fide, by means of which it was held faft in the girdle round the body, where it was fluck in near the back. It was fix inches long and three broad. This inftrument ferved alfo to cut with, and to clear the roads in the thick woods of Java.

Among the Javanefe both fexes can be ennobled; fo that if a nobleman marries a commoner,

moner, the lady becomes ennobled, and vice verfa.

Java is not governed by one fole monarch, but by feveral, although the ifland is not fo very large as to be divided into different kingdoms. At Bantam there is a king, at Madura a regent, or prince; at Surikarta an emperor, and at Djokjakarta a fultan.

Cock-roaches (Blattæ), and ants are as common as they are troublefome in India. The former, however, are more destructive on board of fhip, and the latter there and every where elfe, efpecially the fmall red ants, which devour or deftroy every thing. Thefe are fo diminutive as hardly to be perceived, and penetrate into the fmalleft crevices. If an infect is caught, and put into a box, it is immediately eaten up by thefe finall animals, fo that the wings only remain. The ants are particularly fond of fugar, and affemble in fuch numbers as intirely to cover the veffel in which it is kept. I found the beft means of expelling cock-roaches out of chefts of clothes, was to lay camphor among the clothes; and, for keeping out the fmall red ants, the Oleum Cajeput and Kulit Lavang were the most powerful remedies. They cannot endure the fmell of thefe oils, but die very fpeedily. With the Cajeput oil, which is more volatile, I made feveral trials, in order to fee in how far I fhould

I thould be able, by means of it, to preferve my collections of infects from the ravages of India's all-devouring ants. Having made a ring on the table with cajepu oil, and put a few ants within it, I perceived that the ants did not venture to pafs it, but foon grew giddy from the vapor of it, ftaggered about, and at length died. When any of my infect-boxes was anointed with the oil, and fome ants were put into it, in a few feconds they were fearcely able to crawl, and foon afterwards died. In like manner, fooner or later, it killed other infects; fo that I plainly perceived that this oil was as dangerous and fatal to infects in general, as it was an efficacious remedy in feveral diforders.

Formerly, and at the first establishment of the Company's commerce, few people of any refpectability failed for thefe parts, which were confidered as dangerous as the voyage itfelf. The major part of the crew, in all probability, confisted of fuch as, having committed fome crime in Europe, had been obliged to leave their native country; or elfe, in confequence of a feries of misfortunes, and with nothing but the most difagreeable prospects before them, had been necessitated to go to fea. These in the mean time made their fortunes, arrived by degrees at the highest employments, and fome of them returned home, from time to time, in affluent circumstances, and a laden

laden with the fpoils of India. Thefe again encouraged others to try their fortunes, and fuch an alteration gradually took place in the face of affairs, that, at prefent, men of birth and education go thither, and fometimes noblemen. who generally go out as writers, in order to wait for an opportunity of getting into a profitable employment. Although fuch men of family are fent out every year with many recommendations and great expectations, yet I doubt very much that by this (to all appearance) fo ufeful an alteration, the Company's intereft is more promoted; as it is not birth and rank that are required here, but abilities and affiduity. For although one would be apt to fuppofe that, in confequence of having received a better education than ordinary, they had acquired fome degree of knowledge, which however is frequently little enough, yet it is not fo much the Company's intereft as their own that they have at heart, and to obtain fuch posts as they may make their fortunes in with fpeed, as likewife to be enabled to return with their booty as foon as poffible to Europe, there to live on the interest of their fortunes in a ftyle fuitable to their high rank and dignity. With fuch views arrived, in the fhip that brought me from the Cape, the young baron S** de L**; and a count B. proudly paraded the ftreets of Batavia, whilft he waited with impatience for fome vacancy,

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vacancy which might fatisfy his ambition as well as his other wants.

Within the citadel are the Company's ftorehoufes for the keeping of grain, rice, fpirits, and wines, and other neceffaries, not only for this town, but for almost all their factories in India; as alfo fpices and other merchandizes for Europe and other markets.

Here are also the Company's accounting offices, treasury, arfenal, laboratories, &c.

In the chemical laboratory I faw tolerably good oil diftilled from damaged cloves, although they did not yield a great quantity of it.

• A printing-office is also established here for the Company's use, together with Archives, and a handsome library, the catalogue of which was printed as early as in the year 1752.

The governor-general makes a very great and princely figure when he goes abroad in his large gilt coach of ftate. He has his mafter of the horfe, mafter of the ceremonies, and a life-guard confifting of twelve horfe-men, alfo two trumpeters, and a coach-man, all dreffed in an appropriate drefs. The guard rides, for the moft part, before the coach, with drawn fwords, and befor them two trumpeters, a European and four black running foot-men, and an officer at the fide of the coach. Sometimes fifty or fixty armed horfe-men attend the carriage, led by a cornet or

or ferjeant. All ranks of men, except the gentlemen of the council, are obliged to pay obeifance to the governor wherever he paffes; those that are on foot ftand ftill, and those that are in carriages alight. In the council, which generally meets every Tuefday and Friday, are, befides him, a director-general, and five counfellors in ordinary, who have the power both to advife and determine. There are befides feveral counfellors extraordinary, who are competent only to advife, but have no voice. Nobody is fuffered to enter the council with his fword on. which is always left in the anti-chamber, to the care of the guard. The governor-general has an abfolute regal authority and power: whatever he thinks proper to do, is generally agreed to by the reft; and, fhould they be againft him, he can neverthelefs carry the matter into execution; but in that cafe becomes alone refponfible for the iffue. He has also power to enter into treaties with the Indian princes, to make war or peace, and fometimes, when the Company's intereft requires it, he affumes that of dethroning kings and princes, and of putting others in their place. The director-general has the chief management of the Company's trade, goods, and ftore-houfes. Each gentleman belonging to the council has the feparate infpection over fome of the other Indian factories, and is at the fame time frequently

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quently prefident of fome of the colleges in the town. When a gentleman belonging to the council paffes any body in his carriage, who has two running footmen before his coach, he muft ftop whilft they falute. When the Governor-general's lady goes out, two yeomen of the guard ride before the coach, and fometimes twelve horfemen behind it.

In the town there were feveral coach-jobbers, or burghers, who kept horfes and carriages for the use of strangers and others who could not afford to keep any of their own. Such coaches might be hired by the week, month, or day, or for a certain time, but the terms were very high; the owners generally grew rich in a short time.

I viewed the aftronomical obfervatory, which the famous preacher Moor had built out of the town for the advancement of the fciences; after his death, however, it was no longer ufed, but ftood as a teftimonial of the zeal and affiduity of its refpectable founder.

Amongst other exotic plants that were cultivated here, I faw likewife the Cajeput-tree (*Melaleuca leucadendra*), from the leaves of which that famous and excellent oil, called Cajeput oil, is diffilled; as alfo the Cacao-tree (*Theobroma cacao*), the flowers of which grow on the stem and larger branches, and whose fruits contain the kernels, from which chocolate is manufactured.

Dragons

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Dragons (*Draco volans*) flew about in the environs of the town in great numbers during the heat of the day, like bats in a fummer's evening in Europe, without injuring me, who fometimes caught them in their flight, or any one elfe.

In the road, which is large and wide, but, at the fame time, fhallow and muddy, lies an old guard-fhip, on board of which watch is kept for four nights fucceffively, in turns, by all the furgeons that arrive here in the fhips; and to this guard-fhip are brought all fuch as are taken ill in the night, or meet with any accident during the time that the town-gates are fhut. A man, however, may get excufed from keeping this watch by paying a couple of ducatoons, which are given to fome other furgeon that does the duty in his ftead.

As at Batavia, as well on board of the fhips as alfo in the hofpitals and with the regiments, there is a great number of furgeons in the Company's fervice, a furgeon-general is appointed, who, with the concurrence of the governor-general and council, orders each of them to fuch places, either on board the fhip or on fhore, as he is moft wanted in.

Amongst the many articles with which the ships were fupplied here for their intended voyage, were pickled fish, fowls, ducks, geefe, and eggs, also water-melons, shaddocks, and vol. 11. X cocoa-

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cocoa-nuts, and thefe not only in great abundance, but alfo at a very low price, as likewife arrack and rice.

Milk also was daily brought to town for fale, and used in the houses.

Sheep were fome of the most fcarce animals on this ifland; their woolly coat made the climate infupportable to them. When a live fheep, therefore, arrived from the Cape, it was for the most part fent immediately farther up the country to the Blue Mountains, where the country is higher and the air much colder.

The fig-tree, of which this ifland has feveral different forts, I often faw growing out of the very cracks in the walls; and those fo dry, that I was amazed to find that the trees could be kept alive by the trifling quantity of moifture that might be left in fuch places by the rain.

The military confifts partly of Europeans and partly of Indians, who are taken into regular fervice and exercifed, befides the burghers and Chinefe, who likewife, in cafe of a war breaking out, muft do duty. The officers here, and all over India, are confidered as fervants, whom the Company has engaged, in confideration of a certain ftipulated pay, for the defence and fervice of the country. They have, therefore, no fhare either in the administration of government, or in the carrying on of commerce, nor do they rank above

above the gentlemen in the higher departments of office, who, on account of the most advantageous trade that is carried on by their means, are confidered as being of greater utility. The foldiers, the number of whom, on account of the ravages committed by difeafes and the arrival of the fhips, differs greatly in the course of the year, are frequently treated very ill and with great injustice. Such as are fent out by the kidnappers, have no pay for a long time, and when they get their pay, they receive no more than thirteen flivers in the gilder, of which the greatest part is deducted for cloathing. After recovery from illnefs, they wander about as pale as a whitened wall, and are frequently fo lean that one may almost fee through them.

I had feveral opportunities of feeing the Javanefe dances, and, at the fame time, of hearing their mufic.

These dances are performed with various motions of the body, and particularly of the arms and feet. The Malays call these dances *Tantak*, and the Javanese *Rongé*. On these occasions there is always some well-dressed and decorated female, who begins the dance with one of the company, and afterwards continues, one at a time, with such of the others as find a pleasure in dancing; and these her partners always put a piece of money into her hand before the dance

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is over. A female dancer of this kind is called *Rongin*, and the money given is divided between her and the muficians.

The mufic confifts of feveral different inftruments, which, when well played on, have not a bad effect at a finall diftance. The inftruments moftly in ufe are a kind of violin with only two ftrings, a drum which is beat at both ends with the fingers, a kind of an organ, confifting of pieces of wood of different lengths (according to the different tone to be produced) and laid on a hollow block: thefe are beaten with a wooden hammer; a copper kettle, which is beaten as it is fufpended in the air, and two copper bowls, which are held in the hand and ftruck againft each other.

The titles of the reigning princes in Java differ according to their different dignity. Those that I could arrive at the knwledge of, with any degree of certainty, were as follows.

The Emperor in Surikarta is called,

Sufu bunang, Pako buna, i. e. Sovereign prince. The world's (*nail*) fupport.

Senapati ingalaga, Abdul rakman, Sajidin panatagama, The Sultan in Sulthan, Land, or field-colonel. Holy prieft.

n panatagama, Defender of the throne. The Sultan in Djokjakarta is called,

> i. e. Prince or king. Haming

Haming kubana, Regent of the world. Halifa tolab, God's ftadtholder; and Sennapatti ingalaga, Abdul rakman and Saydin panagatagama.

The Regent in the island of Madura is ftiled Panembaham Adipatti, a free prince or regent.

A prince is called *Pangerang*. A hereditary prince *Pangerang adepatti*; a queen *Ratu*; and a princefs *Radin Aju*.

Patti is the denomination given to an intendant of a province, or any large tract of land, among the Javanefe. Of thefe there were feveral in the territories fubject to the Dutch company. Thefe are appointed, it is true, by the governors, but must be confirmed by the government of Batavia, in like manner as are the kind of regents called captains, who are fet over the Chinefe in that country.

Tommegomme, is the appellation given to the overfeer or head-man of fome finall diffrict or large village; and if one of these governors marries a princes, he is stiled *Radin tommegom*.

There is a very fcarce coin amongft the Javanefe, which I had a great deal of difficulty in procuring, though I paid a filver ducatoon for it. It was made of brafs, and was about as broad as a Swedifh rix-dollar, but was not of above twice the thicknefs of a half-penny. There is a fquare hole in the middle, which ferves for ftringing

ftringing them together. It is called Pettis kantang, and was faid to be found at prefent on the eaftern extremity of the island only, e. g. at Suribaija and Banjermaffing. A broad raifed border furrounds the edge. In the middle ftands a tree with fpreading branches, and on each fide of this a mil-fhapen human figure like a fkeleton. This figure, like all others which they draw or carve in wood, is disfigured, as the Mahometan religion prohibits them from making any true likenefs. For the reft, the coin is caft.

At Batavia there is likewife a coin ftruck in copper, by governor ZWARDEKROON (though. it was faid to be more current at Coromandel than here) which is of the fize of a Swedish fliver, or an English half-penny, and of the thickness of a farthing. On one fide is a doublemargin, on which is ftamped Batavia, with the date of the year, and in the middle a fword. On the other are reprefented the Company's arms, and over these is stamped half a stiver.

I alfo met with a Javanefe doit as large as a farthing, and of the fame thicknefs. It was made of copper, ftamped on one fide with Javanefe characters in three rows, within a dotted circle, and exhibiting on the other fide a wreath of flowers, within which were the words Duyt 7avas, 1783, likewife in three rows.

The Chinese Petjes, caft in brafs with a fquare hole

hole in the middle, were current here alfo, and that even amongft the Europeans. This coin is ftrung to a certain number on a ftring, is as large and thick as a common farthing, and is brought hither from China by the Chinefe merchants.

Garing is a name given to a large Cicada, which, fitting on the trees in the Javanefe woods, is heard to make a noife as fhrill and piercing as if it proceeded from a trumpet. This animal is not eafily feen nor caught. It fits on the trunks of the trees and the larger naked branches, and is with difficulty perceived by the eye. On a clofer approach it becomes filent by degrees, and at laft fuddenly flies away. It is beft caught with an infect-net, which is fet before it, or, by the Indians, with bird-lime at the end of a long rod, which was brought gently to the back of the wings, and made them flick together.

I observed two forts of peas eaten by the Javanese, by which their breath was rendered extremely offensive. They were therefore called by the Dutch stink beans, and by the Javanese the small leaved fort *Petté*, and the other *Chenkol*.

The name of *Dranguli* is given to the fruit both of the Caffia Javanica and fiftuloia, the pods of which are cylindrical, black on the outfide, and contain a black laxative pulp within, and hang down from the tree like long flicks.

Daun kitji was the name of a herb which I never

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never could fee in bloffom, but it feemed to me to belong to the order of Afperifoliæ, and was, by fome, confidered as a *Saxifrage*. They endeavoured to perfuade me, that it was not only able to diffolve the ftone in the human body, but alfo that if fmall pieces of porcelain were put into it, it would make them brittle. And indeed when little bits of porcelain were wrapped up in it, it was eafy to bite them afunder with the teeth; but the fame might be done by wrapping them up in linen, or any thing elfe that would counteract their flipperinefs, and prevent them from hurting the teeth.

Wild boars were to be found in the woods in abundance, and enjoyed amongft the Javanefe, who are followers of the Mahometan doctrine, the most perfect freedom and fecurity, although they made great havock in the rice grounds and fugar plantations. In fact, they are neither killed nor eaten by the natives.

Sometimes, though very feldom, I faw fences erected for defending the cultivated lands againft the wild boars, and thefe were, for the moft part, weak, and made of bamboos. On the outfide of thefe fences near the fugar plantations, twigs a foot high were frequently placed with a cotton rag at the end of them. Thefe rags the Javanefe watered with their urine, which was faid to have this good effect, that the wild boars who finell the

the fcent, and cannot bear the odour of human urine, do not break into this feeble fence.

The court of judicature at Batavia, which is composed of a few members who have their appointment from Holland, are, as well as the Fifcal, independent of the great Indian court; but these members of the council are poorly paid, fo that it has not fallen to their lot to accumulate riches here. From the acquaintance I had occasion to form with some of them, as well as from other circumstances, it appeared to me, that justice was not here an object of commerce.

Befides this court which judges the Company's fervants of every degree, even in matters of life and death, finuggling and other criminal cafes, the town has its own court of judicature, or Stadthoufe, at which one of the members of the grand Indian court prefides, and feveral of the burghers fit as aldermen (*Scheepen*) to judge in fuch cafes as come before them, and even those that regard the lives and properties of the Indians. These places in the council are in the gift of the governor general, and are frequently well paid for by fuch as thirst after honours, and cannot acquire rank by any other means.

The Sabandar, M. BOERS, who frequently vifited at M. RADERMACHER's houfe, and was his friend, fhewed me much friendship and kindness. He held an employment which was very Y lucrative

lucrative and brought him in a large income, as every ftranger who arrived here with the fhips was obliged to wait upon him, and take from him every thing they wanted, as well with refpect to provifions as other neceffaries. Amongft other kindneffes fhewn me by this gentleman, he lent me above 1000 rix-dollars on Bottomry, with which I purchafed unicorns horns, (Unicornu verum), which it was thought would fell well at Japan.

The intereft of money borrowed on Bottomry is very high, but differs in proportion to the length of the voyage, and the dangers of the feas to which the fhip is bound. The navigation to Japan is confidered as the moft dangerous of all the Indies. The intereft therefore amounts to twenty, or twenty-five, per cent. which is paid on the return of the perfon to Batavia, fhould the voyage prove fuccefsful; but fhould the veffel be ftranded, or loft, all claims are null and void, and the debtor is for ever exempted from any demands refpecting the loan, which, in confideration of a high intereft, is made at all hazards,

The commiffary appointed over the inhabitants, has perhaps one of the moft profitable places that can well be imagined; as he alone has any concern with the inhabitants on the ifland, and furnifhes all the merchandize, coffee, fugar, birds nefts, &c, which are the natural products of Iava.

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Java. By thefe articles, which the natives are obliged to fell to him at the loweft prices, as well as by advancing them money at the higheft and most unreasonable interest, he makes an astonishing income,

On the 24th of May, the cannon round the town were difcharged, in commemoration of the taking of Jaccatras, which happened on the 13th of May, 1619, according to the old ftile, or 156 years ago.

Jaccatra, which is now only a fortrefs, or outpost, was formerly one of the capitals of the island, before it was conquered by the Dutch, and the prefent flourishing city of Batavia founded nearer to the fea-fide.

On the 1st, 2nd, and 3d of June, the Chinese celebrated one of their seftivals by a rowing match on the river, which runs through the town down to the harbour. This was performed by two boats that rowed against the stream. The first that arrived obtained the prize, which was set up on a green pole, and chiesfly confisted of handkerchiess, fans, filver coins, or a filver box. This contest was repeated several times, with music, accompanied by a kettle-drum, and beating on brass cymbals.

The time now approached when the fhips were to fail for Japan. And, although M. RADERMA-CHER, who had conceived a high degree of friendfhip

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fhip for me, tried to perfuade me to remain at Batavia, and to accept the appointment of phyfician, which was vacant, the income of which was computed to amount to 6 or 7000 rix-dollars yearly, yet, on account of the promifes I had made in Holland, I preferred my duty to my interest, and the rather, as I had had fufficient opportunities of observing, during my short stay in the place, that no great advantages are to be reaped here honeftly. I therefore heartily thanked my kind benefactor, and, by way of preparing for my intended voyage to Japan, befpoke feveral neceffary articles relative to my apparel, fome of filk and others of cloth, with lace and other decorations of drefs, in order that I might exhibit myfelf with propriety among the Japanefe, who view the Europeans with greater attention than any natural philosopher can possibly examine the most rare and uncommon animal.

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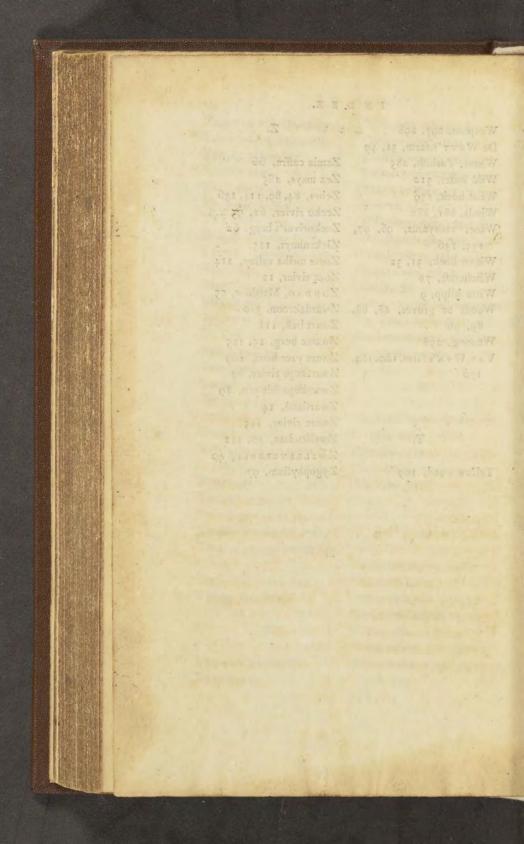
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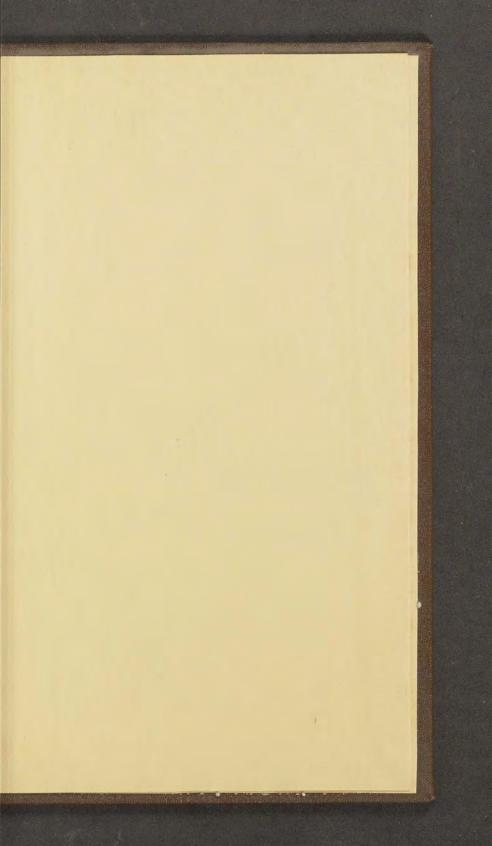
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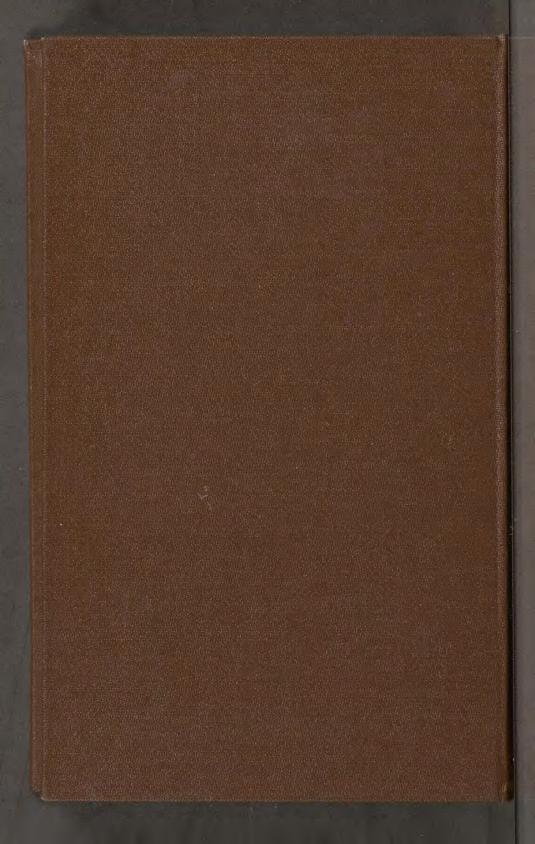
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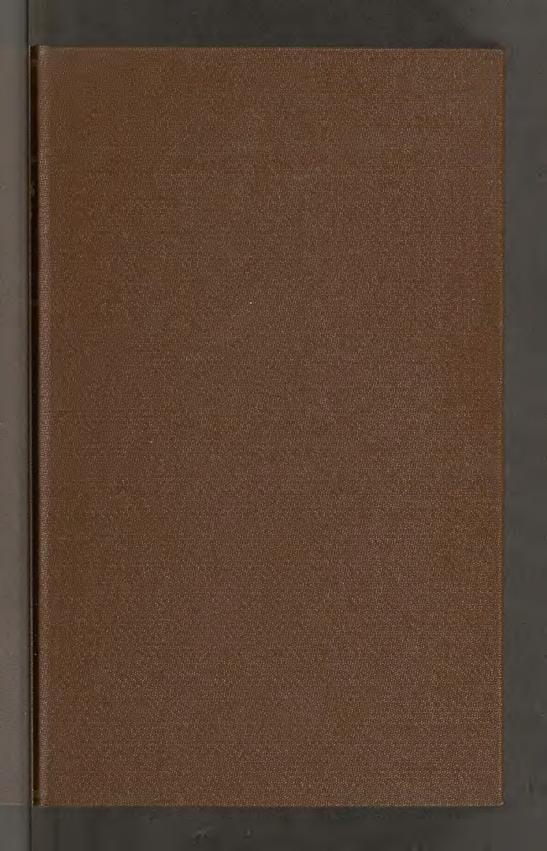


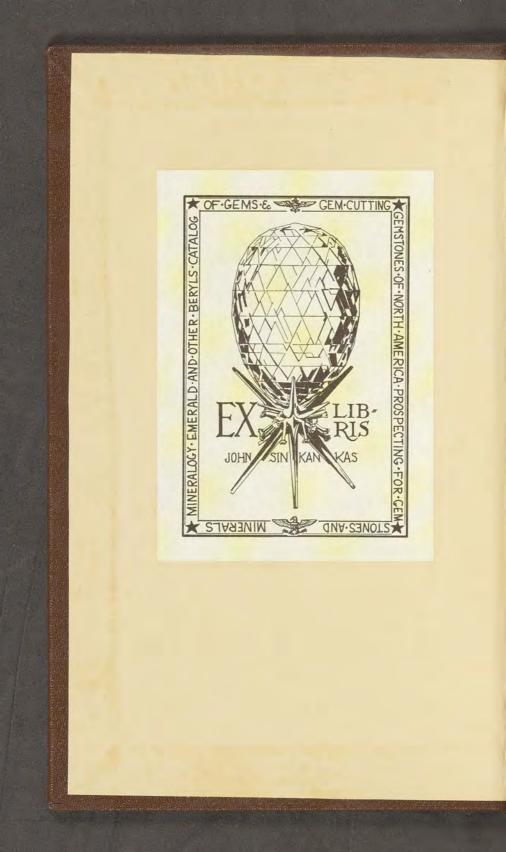


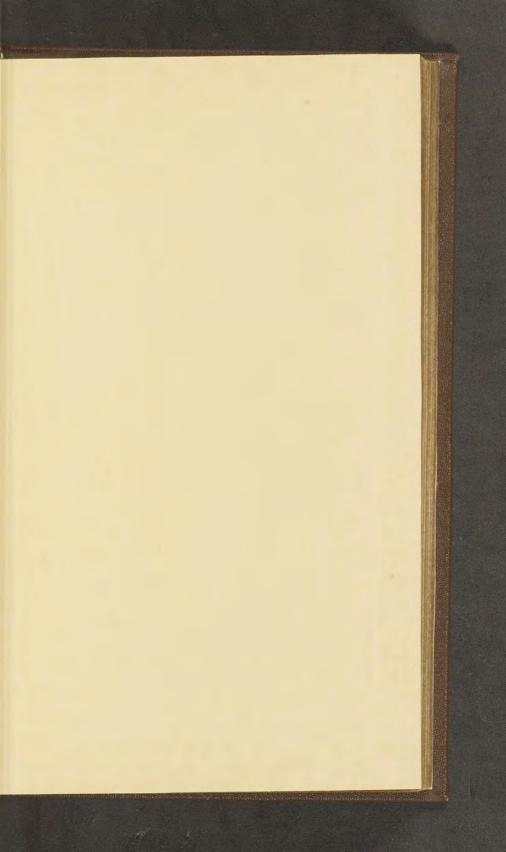














TRAVELS

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IN FOUR VOLUMES.

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AND

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IN THE YEARS 1775 AND 1976.

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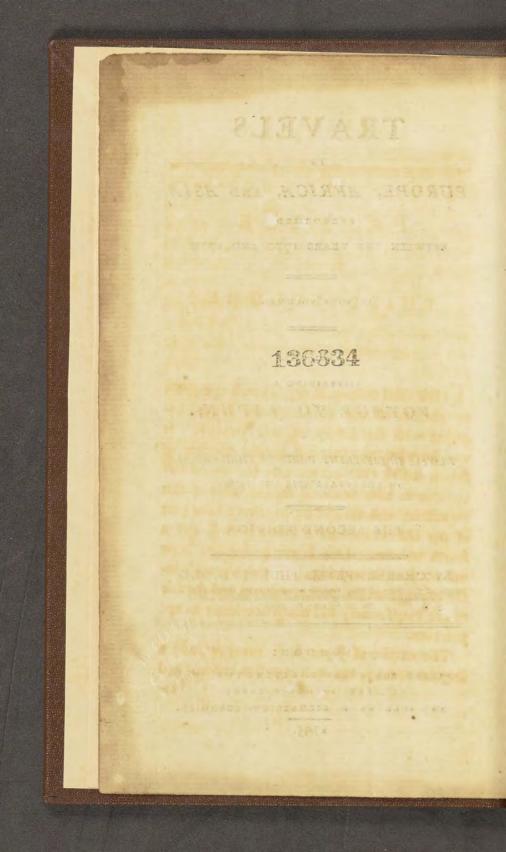
BY CHARLES PETER THUNBERG, M.D.

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TO THE

THIRD VOLUME.

THIS third volume of my Travels comprifes an account of my adventures in Japan, together with the hiftory of that country. It was intended to contain a greater number of fheets, and to clofe my journal; but feveral circumftances have rendered the execution of this impoffible, and obliged me to referve fome part of my obfervations for a future period, and a fourth volume. This I am inclined to hope will not long be wanting; my countrymen's inclination to read this prefent volume, and the fale of the two former, will much accelerate its appearance.

The empire of Japan is in many refpects a fingular country, and with regard to cuftoms and in-

inflitutions totally different from Europe, or, I had almost faid, from any other part of the world. It has therefore ever been a fubject of wonder to other nations, and has been alternately extolled and decried. Of all the nations that inhabit the three largest parts of the globe, the Japanefe deferve to rank the first, and to be compared with the Europeans; and although in many points they must yield the palm to the latter, yet in various other refpects they may with great juffice be preferred to them. Here, indeed, as well as in other countries, are found both useful and pernicious establishments, both rational and abfurd inftitutions; yet, still we must admire the fteadinefs which conflitutes the national character; the immutability which reigns in the administration of their laws, and in the exercife of their public functions; the unwearied affiduity of this nation to do, and to promote what is useful, and a hundred other things of a fimilar nature. That fo numerous a people as this, fhould love fo ardently and fo univerfally (without even a fingle exception to the contrary) their native country, their government, and each other; that the whole country should be, as it were, inclosed, fo that no native can get out, nor foreigner enter in, without permiffion ; that their laws should have remained unaltered for feveral thousand years, and that justice should he

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be administered without partiality or respect to perfons; that the government can neither become defpotic nor evade the laws in order to grant pardons or do other acts of mercy; that the monarch and all his fubjects fhould be clad alike in a peculiar national drefs; that no fashions should be adopted from abroad, nor new ones invented at home; that no foreign war should have been waged for centuries paft, and interior commotions fhould be for ever prevented; that a great variety of religious fects should live in peace and harmony together; that hunger and want fhould be almost unknown, or at least known but feldom, &c. All this must appear as improbable, and, to many, as impossible, as it is ftrictly true, and deferving of the utmost attention.

I have endeavoured to delineate this nation, fuch as it really is, without, on the one hand, too highly extolling its advantages, or, on the other, too feverely cenfuring its defects. I put down daily upon paper whatever came to my knowledge; but feveral fubjects, fuch as their internal *acconomy*, *language*, government, public worfhip, &cc. I have fince collected and drawn together from different parts of my journal, for the purpofe of treating of them in one place, and in order to avoid fpeaking of them feparately on different occafions.

VII

No country in the world, perhaps, undergoes fewer changes than Japan, which has been both well and amply defcribed by the learned Doctor KÆMPFER, in his hiftory of this country. Some, neverthelefs, I have found; and have committed to writing the few alterations which have occurred in matters of fmaller moment at leaft, during the fpace of nearly a hundred years.

But as natural hiftory has in a particular manner engaged my attention, I have not only endeavoured diligently to collect the minerals, animals, and plants of this country, but alfo to render them in fome degree ufeful and advantageous to Europe, and the country that gave me birth. O! how great would be my joy, without the leaft tincture of arrogance, could I but in any measure arrive at this conftant object of my most fervent wishes!

In a feparate treatife, under the title of *Flora Japonica*, I have defcribed fuch plants as I have found on the Nipon islands, and at the fame time indicated their uses. But in this account of my travels, I have made mention of fuch only as exhibit fome remarkable use in rural and domestic economy, and in the art of healing.

Thus, for *food* are ufed, befides a great quantity of fifhes, and other marine animals, the Polygonum fagopyrum, Diofeorea Japonica, Vicia faba, Pifum fativum, Phafeolus vulgaris and radiatus.

VIII

radiatus, feveral of the Ulvæ and Fuci, the Oryza fativa, Arum efculentum, Juglans nigra, Fagus Caftanea, Mefpilus Japonica, &c.

For *dreffing victuals* feveral oils expressed from feeds are made use of, which oils also ferve for burning in lamps; such as the oil procured from the Brassica orientalis, Dryandra Japonica, Melia azedarach, Sefamum, &cc.

As *fpices*, and by way of *deffert* at table, are used Onions, the roots of Bamboos, the Amomum Mioga, Conomon, and Menyanthes nymphoides.

Clothes are made of Cotton, the Morus papyrifera and filk, and cordage of different forts of Nettles.

Into *boufe-furniture* and various implements are wrought up feveral ufeful forts of wood: fuch as the Lindera, the Deutzia, Pinus Abies, Box, Cupreffus, &c.

Materials for dying are taken from a species of Betula, and from the Gardenia slorida.

Quick-bedges are formed of the Lycium Japonicum, Citrus trifoliata, the Gardenia, Viburnums, Thujas, Spiræas; and *arbours* are made of the Dolichos polyftachyos.

By way of *ornament*, Skimmi is placed in the temples, and for a particular purpose in rural œconomy the Haliotis is used.

Medicines

IX

Medicinas are prepared of the Polygonum multiflorum, Convallaria Japonica, Chenopodium feoparia, Acorus calamus, Dracontium polyphyllum, Inula helenium, the Root of China, the Corchorus Japonicus, and the Lacerta Japonica.

OF THE

TRANSLATOR.

THE merits of the Chevalier THUNBERG are too well and too univerfally known, to need any recommendation from the Translator of his Travels to the Reader. In fact, it is notorious that this illustrious naturalist, not content with having attained to the fummits of natural history, has contributed greatly to the advancement of its boundaries, by investigating the natural products of a great variety of countries fituated in three different quarters of the globe; infomuch that he may almost exclaim with the hero of Virgil,

" Quæ regio in terris noftri non plena laboris ?"

And

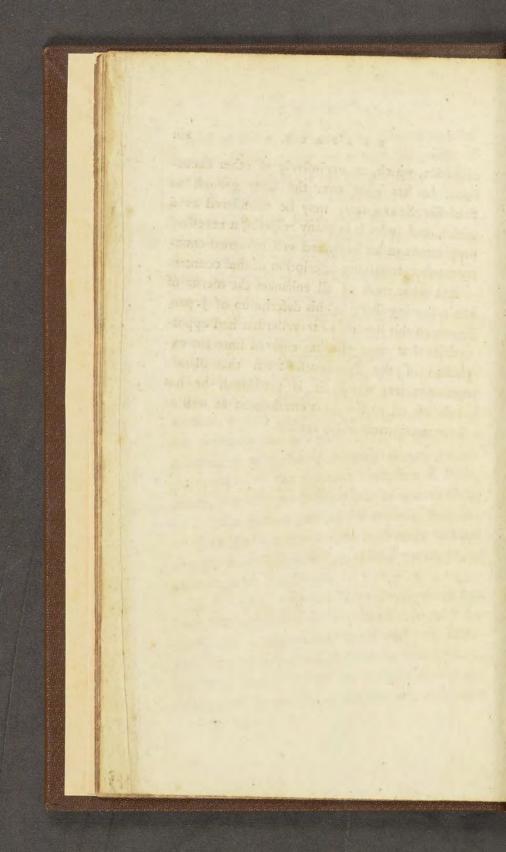
And as the Author muft be allowed to have feen much, he cannot be denied the praife of having related what he has feen, if not with the greateft elegance and precifion, yet with the ftricteft regard to truth, and an exactnefs not often found in writers of travels. In delineating the manners of nations indeed, the learned Profeffor muft yield the palm to many of his concurrents; but in inveftigating the natural productions of the different countries he has paffed through, he will, perhaps, be found to be equalled by very few, and excelled by none.

In the account he has given of his peregrinations through various parts of Europe, our Author, it must be confessed, has been frequently too circumstantial and particular: of this, in the original, a remarkable instance occurs in his enumeration of the different Professions in Paris, which, not only as it is absolutely uninteresting to far the greater part of his readers, but also as fince the late revolution in France a total change has taken place in that department, is omitted in the translation.

If, however, this too fcrupulous writer has been fometimes led by his exceffive regard for truth, and an almost inordinate defire of accuracy into tedious details and minute obfervations, the fame charge cannot be brought against the relation of his travels in the fouthern extremity of of Africa, which, as, exclusively of other excurfions, he has gone over the fame ground as Profeffor SPARRMAN, may be confidered as a useful, and indeed, in many respects, a neceffary fupplement to his lively and well-informed countryman's entertaining description of that country.

But what most of all enhances the merits of the following sheets is, his description of J. pan, for which this inquisitive traveller has had opportunities that none else has enjoyed since the expulsion of the Portuguese from that island; opportunities, which, it is presumed, he has made use of, to the great emolument as well as the entertainment of his readers.

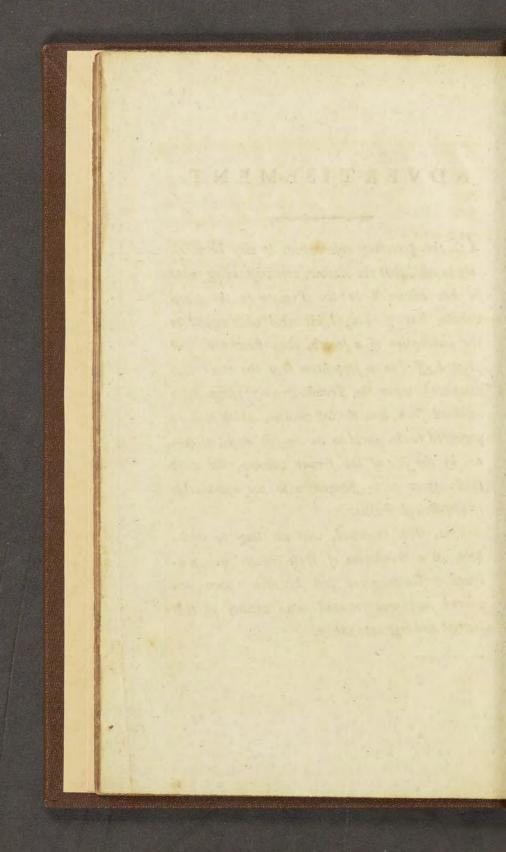
XIII



ADVERTISEMENT.

To the preceding observations it may be necessary to add, that the Author, notwithstanding what he has advanced in the Preface to the third wolume, having changed his mind with respect to the publication of a fourth, these sheets were just printed off (on a supposition that the work was complete) when the Translator very unexpectedly received from him the last volume, which will be presented to the world in an English dress, as soon as, by the sale of the former volumes, the work shall appear to be stamped with the approbation of the British Public.

This, it is prefumed, will not long be withheld, as a translation of these travels was published in Germany, as fast as each volume appeared, and was received with avidity by that learned and ingenious nation.



TRAVELS

IN THE STICLE IN DILLES

Withour times

EUROPE, AFRICA, AND ASIA.

A VOYAGE TO JAPAN, 1775.

ON the 20th of June, 1775, I went on board of the Stavenije, one of the three-decked veffels bound from Batavia to Japan. For fome time paft the Dutch Eaft India company has fent two fhips only to that empire, which fhips are felected by the government in Batavia for this purpofe, one of them, and generally both, being large three-deckers from the province of Zeeland; as the navigation of thefe waters is accounted the most dangerous in all the Indies.

I had engaged myfelf as principal furgeon on board of the fhip during this voyage, and, on my fafe arrival at Japan, was to remain there a year, and at the fame time to accompany the Dutch ambaffador on his journey to the imperial court at Jedo, the capital of the country, in VOL. III, B quality

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quality of physician to the embasily. This was my station in the Dutch East India company's fervice; but I had befides, at Amsterdam, undertaken to collect, for the Hortus Medicus there, and fome gentlemen of diffinction, as far as I could get liberty and opportunity in this diftant country, feeds and growing plants, particularly of fhrubs and trees, to be fent to Europe by the returning thips, for the purpole of transplanting. The ship was commanded by Captain Von Ess, and on board of her now embarked M. FEITH, in quality of conful, and likewife ambaffador, for the fourth time, to the Imperial court, who brought with him, as affiftants in the commercial line, M. HA-RINGA, the fupercargo, together with four writers.

The other fhip which lay ready to accompany us was fomewhat lefs, and was called the *Bleijenberg*. It had on board a fupercargo and a writer.

All the officers on board, who were to remain a year at Japan, carried with them one or more flaves, as fervants, during the voyage, and their flay at that place. This has been allowed by the Japanese for more than one hundred years back, though the flaves are not fuffered to go out of the factory, or the adjacent town, Nagafaki.

On

3

On the 21/*t*, about ten o'clock in the forenoon, we weighed anchor, faluted, and got underway in the road of Batavia; but came again to anchor, for the purpole of putting every thing in proper order previous to our intended voyage.

The chief allowed a free table for all the officers, both now and during the voyage, as alfo liquors, beer and wines, partly at his own, and partly at the company's expence.

On the 26th, in the morning, by the aid of a light breeze and the tide, we were in the ftraits of *Banta*, which are nearly as broad as the British channel. We faw the land of Sumatra to the left, the shores of which are even and low, and the land of Java to the right, both overgrown with wood.

On the 27th, we remained at anchor, and waited the arrival of the other ship, which being a dull failer, lagged behind.

On the 28th, we weighed anchor and got underway.

On the 30th, we got fafe through the found into the open fea, and were faluted by the *Bleijenberg*, which compliment being returned, we wished each other a fafe passage.

July 3d, croffed the Line.

On the 8tb, faw the rock Pulo Sapato, which at a diftance appears like a fhip, and, on a B 2 nearer

1.

nearer view, like the hinder part of a fhoe, cut in two acrofs the inftep. Its name fignifies *Shoe Ifland*; *Pulo*, in the Malay tongue, fignifying an ifland, and *Sapato* a fhoe. This ifland has been fo called, from its refembling the heel of a fhoe.

On the 10th, faw the Chinese coast, which is a pleasing fight to every Japan trader, as it affords an evident proof that the vessel is pretty far advanced on its voyage.

On the 12th, a hard gale. In this latitude gales are very common. Our captain (who was a very careful and fagacious man) ordered immediately to fhorten fail, lower the top-mafts, and take down the yards. This precaution was afterwards obferved during the whole voyage, when we were fimilarly circumftanced, and the event shewed that it was extremely judicious. The Bleijenberg, on the other hand, being a-ftern of us all this time, carried all her fails, till the topmafts went, and during the gale fhe loft her lower mafts alfo. In fine, the fhip, in confequence of its rolling, was fo much shattered, and proved fo leaky, that it was with the greatest difficulty that fhe was prevented from finking and carried into the port of Macao, from whence fhe was afterwards taken to Canton, in order to be repaired, being unable to proceed on her voyage to Japan. The cargo, which chiefly confifted of foft fugars, was almost entirely spoiled.

On

On the 17th, a most tremendous gale, accompanied by fevere hurricanes, and a great deal of rain, which lasted for eight and forty hours, but no thunder.

On the 20*tb*, the gale having abated, we faw a Chinefe fifhing-boat with her keel upwards. The fifhermen belonging to it were fuppofed to have been loft.

On the 22d, faw again the Chinefe fhore. Four fifting-boats came to us, and brought with them feveral forts of fifth. Amongft others, there was the beautiful and transparent shell-fifth called Oftrea pleuronestes, one of the shells of which is white, and the other red; and on this account it is called by the Dutch Maan-fchulp, or Moon-muscle. There were likewise found among them several Sepiæ, fome large Crabs, and the Cancer mantis. The whole of this we purchased, with some rice and arrack, with which the fifthermen seemed highly pleased.

Since our leaving Batavia, the feamen had been very much troubled with intermitting fevers, but as foon as the cold weather and winds increafed, the malady abated. BONTIUS obferves, that in his time agues were feldom heard of in the Eaft Indies; but at prefent no fpecies of fever is more common. The difference in the degrees of heat, however, was, in fine weather, not very remarkable. The thermo-B 3 meter

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meter flood at Batavia between eighty and eighty-fix degrees, and in the northern latitude, in which we now were, it was at feventyeight or feventy-nine degrees, by Fahrenheit's fcale.

The very heavy rains which accompanied the last gale, were not less troublesome than the hurricanes, as every thing we had was wet, and on laying them out to dry, fome articles were found quite useless. The Crabs (Canceres) and Marine animals (Sepiæ) which I had collected for the purpole of drying and preferving, afforded me at night, as foon as it grew dark, a most delightful spectacle, the former of these in fpots, and the latter with almost the whole furface of their bodies, illuminating my little cabin with a bluifh phofphoric light. The light proceeding from the Crabs, in particular, was fingular, as it appeared upon them in fpots, and not covering any part entirely : a spot, perhaps, on the one fide of the tail giving a light, when there was none perceptible on the other. The glimmering continued for the fpace of two days, and when the animal was brought upon deck and exposed to the open air in the day-time, it gave no light at all. With the naked eye I could neither difcover marine infects, nor any thing elfe that might occasion this phenomenon; and when I fcratched any of the fhining fpots with my

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nail, the light neither difappeared, nor was it in the least diminished.

The Chinefe fifting-boats are remarkably large and long, built of thin boards, and decked, and bluff both at the head and ftern. Abaft however, they are much wider; the deck is open, where the rudder traverfes, and they have only one maft and fail. In thefe, generally four or five men to each boat, go far out into into the fea, and there fifth night and day. The officers of the fhip, who had been feveral voyages, informed me, that fometimes in fine weather fuch numbers of them were feen, as to darken the horizon.

On the 23d, a great number of the fifh called Pilots were this day feen.

On the 26th, paffed the island called Med zyn Gatt, and made towards Formofa Sound.

On the 29th, faw the island of Formofa, which formerly belonged to the Dutch East India company.

This island is long, large, and very fruitful. Formerly all ships bound for Japan touched at this place, which made the voyage more commodious and less dangerous; as, in case of hard gales, they have now no port to run into,

The citadel, called Zeeland, was furrendered in the year 1662, after a fiege of nine months, by the then governor, Coijer, to the Chinefe rebel, Coxinia, who had been driven out of B China

China by the Tartars. The hiftory of this transaction may be seen in *Het verwaarloofde Formofa*, by C. E. S. printed at Amsterdam, 1675. This island is at present in the hands of the Emperor of China, but no traffic is carried on there with the Europeans.

On the 30th, we had fevere fqualls with rain, but of no long continuance,

August the 4th, hard gales, with a high sea and fome rain, which lasted till the seventh; the sea being in such agitation, that we could carry nothing but the main stay-sail. During the whole time I kept as much as possible on the deck.

On the 10th, for the fifth time on this flort paffage, a hard gale with rain, which lafted twenty-four hours. Hence it appears, how troublefome and dangerous the voyage to Japan is, and how boifterous and fubject to gales the fea is on either fide of Formofa, even in the proper feason of the year, which is the only time when fhips may ride for three or four months with fafety in the havens of Japan.

Whoever wifnes for a more explicit account of the gales to which these feas are subject, may peruse Dr. KEMPFERS History of Japan, the folio edition, pages 49 and 50.

The voyage to Japan is reckoned the most dangerous in all the Indies, and the Dutch India

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India company always confiders one out of five of the fhips that are fent thither, as loft. That this calculation exactly agrees with the experience of more than a hundred years, is evident from the following lift of loft fhips, with relation to fome of which, it has never been known when, where, and how they were loft. In 1642, were loft two fhips in the narrows of

Guinam, viz. the Buys and the Maria,

1651, De Koe. 1652, De Sparwer, 1653, Het Lam. 1658, De Zwarte Bal. 1659, De Harp. 1660, The Hestor, which, however, blew up in an engagement with the Chinefe. 1664, Het Roode Hart. 1668, The Achilles. 1669, Two, de Hoog Cafpel and Vrydenburg .. 1670, De Schermer. 1671, The Kuylenberg. 1697, The Spar. 1708, The Monster. 1714, The Arion. 1719, Three, viz. the Meeroog, Catherine, and het Slot van Capelle. 1722, The Valkenbos. 1724, The Apollonia. 1731, The Knapenboff.

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1748,

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NO VOYAGE TO JABAN, 1775.

- In 1748, Het Huys te Perfyn. 1758, The Stadwyk.
 - 1768, The Vreedenboff.
 - 1770, The Gansenboff. The fame year, the Burg was, in confequence of having fprung a leak, rendered unfit to proceed on her voyage, and obliged to go to China,
 - 1772, The Burg, though fhe had been unfuccefsful in the former voyage, was nowfent again to Japan, and had the Chief on board; but became fo difabled in a gale of wind, that fhe was abandoned by the crew; and drove on fhore on the coaft of Japan. On the 30th of July, in a hard gale from E. N. E. off Meaxima, which lasted two days, she loft her mafts, bowsprit, head, quartergalleries, &c.; and fpringing a leak, had a great quantity of water in the powder-room and hold. The chief, M. DANIEL ARMENAULT, and Captain EVEICH, faw, on the 1st of August, the other ship, viz. the Margaretta Maria, commanded by Captain STEENDEKKER. A council was held, in which it was refolved to quit the fhip. On the day following they went on board the other flip, taking with them their money and valuables,

II

This

valuables, and, leaving the fhip to the mercy of the wind and wayes, arrived on the 6th in Nagafaki harbour. In the courfe of a few days the veffel, that had lately been quitted, was difcovered driving towards the gulf of Japan by fome fifhermen, who towed her on fhore, and found no other live animal on board of her than a boar-pig. It must have been in confequence of the greatest negligence that the fhip was not towed to land, or, agreeably to the regulations previously made, fet on fire.

1775, The *Bleijenberg*, in confequence of having fprung a leak, and fuftained great damage, was obliged to go to China; where fhe was repaired, and afterwards returned to Batavia.

On the 13th, early in the morning, we faw the ifland of *Meaxima*, with its lofty and peaked mountains. In the afternoon, we faw the land of Japan, and at nine o'clock in the evening anchored in the entrance of Nagafaki harbour, where the high mountains formed a roundifh internal harbour, in the fhape of a half-moon.

On the mountains, by order of the Japanefe government, were placed feveral out-pofts, which were provided with telefcopes, that the guard might difcover at a diftance the arrival of fhips, and immediately report the fame to the governor of Nagafaki. Thefe out-pofts now lighted up feveral fires.

This day all the Prayer-Books and Bibles belonging to the failors were collected, and put into a cheft, which was nailed down. This cheft was afterwards left under the care of the Japanefe, till the time of our departure, when every one received his book again. This is done with a view to prevent the introduction of Chriftian or Roman Catholic books into the country.

A bedftead was now placed upon deck, with a canopy over it, but without curtains, for the Japanese fuperior officers to fit on, who were expected to come on board.

A mufter-roll of the fhip's company, confifting of about one hundred and ten men, and thirty-four flaves, was made out, mentioning the age of every individual, which roll was given to the Japanese. The birth-place of each individual was not marked in this lift, as they were all fuppofed to be Dutchmen, although many of them were Swedes, Danes, Germans, Portuguese, and Spaniards. According to this mufter-roll, the whole fhip's company is muftered immediately on the arrival of the Japanese, and afterwards every morning and evening of fuch days as the ship is either discharging or taking in her cargo, and when there is any intercourfe between the ship and the factory. By these precautions the Japanele are affured that no one can either get away

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away without their knowledge, or remain in the factory without their leave.

On the 14th, it blew fo very hard, that we could not get the anchor up; at eleven o'clock, therefore, we were obliged to cut the cable, and got under fail.

We now perceived a boat coming from thore to meet us. The captain therefore dreffed himfelf in a blue filk coat, trimmed with filver lace, made very large and wide, and fuffed, and furnished in front with a large cushion. This coat has for many years past been used for the purpofe of fmuggling prohibited wares into the country, as the chief and the captain of the ship were the only perfons who were exempted from being fearched. The captain generally made three trips in this coat every day from the fhip to the factory, and was frequently fo loaded with goods, that when he went ashore, he was obliged to be supported by two failors, one under each arm. By these means the captain derived a confiderable profit annually from the other officers, whofe wares he carried in and out, together with his own, for ready money, which might amount to feveral thousand rixdollars.

The laft-mentioned boat brought from the factory one fupercargo and three writers, deputed from the chief to congratulate us on our arrival,

14 ARRIVAL AT JAPAN, 1775.

arrival, to enquire about the fhip's cargo, and to know the news from Batavia, &c.

In the mean-time we difplayed on board a number of different colours and pendants, in order to give a certain degree of fplendour to our entry into the haven.

As foon as we approached the two imperial guards, which are placed on each fide of the port, one of which is called the Emperor's, and the other the Emprefs's guard, we fired our cannon to falute them.

During the whole time of our failing up this long and winding harbour, we had a moft delightful profpect of the furrounding hills and mountains, which appeared cultivated to their very fummits; a view which is fo very uncommon in other countries.

We at length came into good anchorage, and at noon let go the anchor, at the diftance of a mufket-fhot from the town of *Nagafaki*, and the adjacent finall ifland of *Dezima*, in which is fituated the Dutch factory.

Soon after the above-mentioned gentlemen, who had been deputed from the factory, returned on fhore, carrying with them the company's letters, and those of private perfons, the chief, who had this year remained at Japan, came on board, and with him returned to the factory

NAGASAKI HARBOUR, 1775.

factory the newly-arrived chief, the captain, fupercargo, and writers.

The intelligence we received was by no means agreeable; as the ftricteft orders had come from the court for the prevention of any illicit commerce. First, That the captain and chief should in future be fearched, as well as others, without regard to perfons, which had never been the cafe before. Secondly, That the captain should for the future drefs like others, and lay afide the large furtout, which had hitherto been ufed for the convenience of fmuggling. Thirdly, That the captain should either remain constantly on board, or, if he should chuse to go ashore, he fhould be permitted to go on board twice only during the whole time of our flay there. This latter point was, nevertheless, in a great meafure given up, and the captain had liberty, after a lapfe of two days, to go on board, and moor the thip. The permiffion for this purpole was obtained from the governor of Nagafaki, partly by follicitation, and partly by threatening him, that if any accident befel the fhip, the lofs would be put to the emperor's account; and, if the emperor should treat the affair with neglect or indifference, the company would certainly, in that cafe, refent the affront.

Thefe

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NAGASAKI HARBOUR, 1775.

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These strict orders were issued from the court in confequence of a discovery that was made in the year 1772, when the Burg, having been abandoned by her crew, had driven assored the coast of Japan, and, on discharging her cargo, was found to have on board a great quantity of prohibited goods, which principally belonged to the captain and the chief.

The Burg was, as before mentioned, in 1772, fo leaky, in confequence of the fevere gales fuftained on her paffage to this place, that, on a council being held upon her, fhe was abandoned ; and it was confidered as fo certain that fhe would fink in a few hours, that fhe was not fet on fire, agreeably to the company's orders in fuch cafes. Notwithstanding this, the ship drove for feveral days towards the fhore of Satfuma, where fhe was found by the inhabitants, and towed into Nagafaki harbour. The Japanefe having thus the fhip at their difpofal, difcovered all her corners and hiding places, as alfo a great number of chefts belonging to the principal officers, which were full of the most prohibited goods, and marked with their names. They . were particularly provoked on finding a cheft, belonging to the chief, full of ginfeng-root, which is by no means allowed to be imported into the country. The cheft therefore, with its contents, was burnt before the gate of the factory. Befides

NAGASAKI HARBOUR, 1775. 17

Befides the difgrace accruing to the chief from being fearched, the captain lofes a confiderable fum yearly that he gained by fmuggling for the other officers, and the officers are deprived of the profit they made by their wares.

For many years paît the captain was not only equipped with the wide furtout above defcribed, but alfo wore large and capacious breeches, in which he carried contraband wares afhore. Thefe, however, were fulpected, and confequently laid afide; and the coat, the laft refource, was now, to the owner's great regret, to be taken off. It was droll enough to fee the aftonifhment which the fudden reduction in the fize of our bulky captain excited in the masjor part of the ignorant Japanefe, who before had always imagined that all our captains were actually as fat and lufty as they appeared to be.

As foon as we had come to an anchor, and had faluted the town of Nagafaki, there came immediately on board two Japanese superior officers (Banjofes) and some subaltern officers (under Banjofes), as also the interpreters and their attendants. The banjoses went and placed themfelves on the bedstead prepared for their accommodation, upon which was laid a thick Japanese straw-mat, and over that a callicoc overing; and all this was sheltered by a canvas awning vol. 111. C from

from the rain, and a foot-flool being placed before it to facilitate the afcent. After taking off their fhoes, they flept up, and fat down fquat on their heels, with their legs placed under them, according to the cuftom of that country. Being ufed to fit in this poflure; they could endure it a long while, but it was eafily feen that it proved threfome to them at length, by their rifing up, and fitting for fome time like the Europeans.

The bufine's of these banjoles was, during the whole time of our fhip's lying in the road, to take care that all the wares, and the people which went on shore, or came on board, were furify fearched; to receive orders from the governor of the town; to fign all passforts and papers which accompanied the merchan dize, people, &c.

The way in which they paffed the time while they fat in this tirefome pofture, was in fmoking tobacco, now and then exchanging a few words with each other, drinking tea, and taking a fip of European brandy. For this purpofe, the captain fet before them a couple of decanters, filled with different liquors, and two glaffes. Some fweet cakes, likewife, were fet before them on a plate, for them to eat with their liquors, although they did not confume much of the liquors, which they only tafted.

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The harbour is about three miles long, and four gun-fhots broad, inclining a little at the end towards one of the fhores. It extends north and fouth, has a muddy bottom, and is very deep, fo that fhips may lie within a gun-fhot of the factory.

After having feveral times fired our cannon, viz. on paffing the imperial guards; on the arrival on board, and departure of the committee; on the arrival of the chief, and on the officers leaving the fhip; we were obliged to commit to the care of the Japanefe the remainder of our powder, as alfo our ball, our weapons, and the abovementioned cheft full of books. For this purpofe were delivered in a certain quantity of powder, fix barrels full of ball, fix mufkets, and fix bayonets, which we made them believe was all the ammunition we had remaining. All thefe articles are put into a ftore-houfe, till the fhip leaves the road, when they are faithfully reftored by the Japanefe.

The Japanese have of late years had the fense to leave the rudders of our ships untouched, and the fails and cannon on board. They were likewise weary of the trouble with which the fetching of them back was attended, and which was by no means inconfiderable.

The Japanese having thus, as they suppose, entirely difarmed us, the next thing is to mus- C_2 ter

ter the men, which is done every day on board, both morning and evening, when the veffel is difcharging or taking in her lading. They reckon always from one to ten, and then begin with one again; a method which is alfo obferved in counting out wares and merchandize. Each time the number of the men that are gone afhore is fet down very accurately, as well as the number of the fick, and the number of those that remain on board.

On all those days, when any thing is carried on board or taken out of the fhip, the upper banjos, the under banjos, the interpreters, clerks, and fearchers, are on board till the evening, when they all go afhore together, and leave the Europeans on board to themfelves. On fuch occafions the flag on board the fhip is always hoifted, as well as that on the factory; and when two fhips arrive here fafe, bufinefs is tranfacted on board of one or the other of them by turns every day. The fhip's long-boat and pinnace were alfo taken into the care of the Japanefe, fo that both the people and the merchandize are carried to and from the fhip by Japanefe feamen, and in Japanefe boats.

To prevent the Dutch from coming from the fhip, or the Japanese from going to it, and trafficking, especially under covert of the night, and when no Japanese officers are on board, several

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feveral large guard-fhips are placed round the fhip, and at fome diftance from it; and befides this, there are feveral fmall boats ordered to row every hour in the night round the fhip, and very near it.

I obferved that the tide in this harbour was very confiderable, as alfo that the furrounding mountains were very fteep, and the fhore confequently very bold, and almost perpendicular.

On our arrival, we found in the harbour eleven Chinefe veffels (or *junks*) lying fo clofe to the fhore, that when the tide was at ebb, they lay only in the mud. Some of thefe veffels were by degrees loaded, and failed, but feven remained there all the winter. Each of thefe veffels generally carry with them a great number of people, frequently from feventy to eighty men. Hence it is, that there commonly remain here all the winter about fix hundred men, on a fmall ifland, fituated on one fide of the Dutch factory, and directly before the town of Nagafaki.

On the 15th, we fent the beafts afhore, fuch as calves, oxen, hogs, goats, fheep, and deer, which are brought every year to this place from Batavia. The Europeans not being able to procure fuch animals here, are obliged to carry them with them, partly for frefh pro- C_3 fions

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fions for the factory, and partly for flock on the homeward-bound voyage. They are kept conftantly on the ifland in ftalls, which in fummer are open, and in winter are clofed up. They are fed with grafs and leaves, which are gathered and brought them twice a day by Japanefe fervants. In winter they are commonly fed on rice and branches of trees, as also on rice ftraw.

This fodder of the cattle I examined three times every day, and felected out of it the rare and uncommon plants it contained, for the purpofe of drying them for the botanical collections of Europe; plants which I was not at liberty to gather in the adjacent plains, in a country where the inhabitants are fo fufpicious, that our pigeons, which yet roved much farther, were lefs fufpected and watched, and lefs liable to be made captives than the Europeans, who, for the fake of lucre and commerce, had come thither through fuch manifold dangers, and fo far from their own homes.

The Japanese have neither sheep nor hogs, and very few cows and oxen. The latter, which are extremely small, are only used, and that but seldom, for the purpose of agriculture. Their flesh is not eaten, nor is their milk made use of in any shape.

On the 16tb and the following days, the clothes, furniture, flock of provisions, wine, ale,

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ale, &c. belonging to the officers, were fent on thore; which is always done by itfelf, and before any of the merchandize is fuffered to be landed: this is commonly done on the three first days.

September 4, the fhip was fearched by the Japanefe, after fuch private property, as was not to be fold, had been fent afhore. All the private property which had been entered for fale, was this day fent off, and if in the hurry of removal any article had been forgotten, it was not afterwards fuffered to be landed or fold. The fhip was thoroughly and clofely fearched, except in the part neareft its bottom, and in the powder-room.

The remaining part of this month was fpent in difcharging the merchandize belonging to the company.

A great number of labourers (Kulis) were ordered to attend to the difcharging and loading of the boats, and bringing them to and from the fhip, others being fet as infpectors over them. The former ufed conftantly to fing when they were employed in lifting a weight or carrying a burden, as alfo when they were rowing; and that in a peculiar tone of voice; their fongs being befides modulated to a certain tune and meafure, and the words lively and cheering. The Dutch formerly took the liberty to punifh and correct with blows thefe day-labourers, who

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were of the lowest class of people, but at prefent this procedure is absolutely, and under the feverest penalties, forbidden by the government, as bringing a difgrace upon the nation.

When an European goes to or from the fhip, either with or without any baggage, an officer is always attending with a permit, on which his his name is written, his watch marked down, &c.

As foon as one half of the fhip's cargo was difcharged, we began to take in wooden boxes filled with bars of copper. This year, as no more than one fhip arrived, one loading and a half of copper, or 6700 boxes, was taken in, each of 120lb. weight, or one pickel.

On those days when there is nothing done towards discharging or loading the ship, no Japanese officers, nor any other Japanese, come on board, neither do any of the Dutch themfelves go to or from the ship on such days. The gate of the island also, towards the waterfide, is locked at this time. Should an urgent occasion require any of the officers to come on board of the ship, such as the captain or the furgeon, which is signified by the hoisting of a stag, in such case leave must be sign obtained from the governor of the town; and should this be granted, so the perfor to whom leave is granted

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granted, is conducted by interpreters and officers through a finall part of the town to a little bridge, from which he is taken on board in a boat, after having gone through the ftrict fearches already mentioned. The banjofes and interpreters, who accompany him, do not however go on board of the fhip, but wait in their boats till he has transacted his business on board. from whence he is conducted back to the factory, after having gone through the fame ceremonies. In the town, while he is paffing through it, a great concourse of people affemble together to look at the traveller, and a confiderable number of children, who by their cries fignify their aftonishment at the large and round eyes of the Europeans (Hollanda O -- me).

We were visited one day by some of the princes, and by the two governors of the town of Nagafaki. They came on board of us out of curiofity to see our first-rate ship, which was very large and handsome; nor had its equal been seen at Japan for many years. One of the interpreters affured me, that during the thirty years that he had served in the Dutch factory, he had not seen a Dutch ship of that size and state.

About this time we loft one of our failors, who had been fent afhore amongst the other fick to the hospital on the island. After the governor

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of Nagafaki was informed of his death, leave was granted for his burial. The corpfe, after having been ftrictly examined by the Japanefe appointed for that purpofe, was put into a wooden coffin, and carried by the Japanefe to the other fide of the harbour, where it was interred. Some afferted, that it was afterwards taken up by the Japanefe and burnt, but with refpect to this matter, I could not arrive at any degree of certainty.

Cuftom-houfes are not known either in the interior part of the country or on its coafts, and no cuftoms are demanded either in imports or exports of goods, either from ftrangers or natives. A particular happinefs and advantage, which few other countries poffefs ! But that no prohibited goods may be fmuggled into the country, fo clofe a watch is kept, and all perfons that arrive, as well as merchandizes, are fo ftrictly fearched, that the hundred eyes of Argus might be faid to be employed on this occafion. When any European goes afhore, he is firft fearched on board, and afterwards as foon as he comes on fhore. Both these fearches are very ftrict; fo that not only travellers pockets are turned infide out, and the officers hands paffed over their clothes, along their bodies and thighs ; but fometimes even the private parts are felt of people belonging to the lower clafs. As to flaves,

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flaves, the hair on their heads is likewife examined. All the Japanefe that go on board of fhip are in like manner fearched, excepting only the fuperior order of banjofes. All articles exported or imported undergo a fimilar fearch, i.e. first, on board the ship, and afterwards in the factory, except large chefts, which are emptied in the factory, and are fo narrowly examined, that they even found the boards, fuspecting them to be hollow. The beds are frequently ripped open, and the feathers turned over. Iron fpikes are thrust into the butter-tubs, and jars of fweetmeats. In the cheefes a fquare hole is cut, in which part a thick pointed wire is thruft into it, towards every fide. Nay, their fufpicion went even fo far, as to induce them to take an egg or two from among those we had brought with us from Batavia and break them. The fame fevere conduct is obferved when any one goes from the factory to the fhip, or into the town of Nagalaki, and from thence to the island of Dezima. Every one that paffes must take his watch out of his pocket and fhew it to the officers, who always mark it down whenever it is carried in or out. Sometimes too, ftrangers hats are fearched. Neither money nor coin must by any means be brought in by private perfons, but they are laid by and taken care of till the owner's departure. No letters to be fent to or from the fhip

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thip fealed, and if they are, they are opened, and fometimes, as well as other manufcripts, muft be read by the interpreters. Religious books, efpecially if they are adorned with cuts, it is very dangerous to import; but the Europeans are otherwife fuffered to carry in a great number of books for their own ufe, and the fearch was the lefs ftrict in this refpect, as they looked into a few of them only. Latin, French, Swedifh, and German books and manufcripts, pafs the more eafily, as the interpreters do not underftand them. Arms, it is true, are not allowed to be carried into the country; neverthelefs, we are as yet fuffered to take our fwords with us.

The Dutch themfelves are the occasion of these over-rigorous fearches, the ftrictness of which has been augmented on feveral different occafions, till it has arrived at its prefent height. The captain's wide breeches and coat, and a hundred more artifices, have been applied to the purpose of bringing goods into the factory by ftealth, and the interpreters, who heretofore had never been fearched, ufed to carry contraband goods by degrees, and in fmall parcels, to the town, where they were fold for ready mo-This they have often endeavoured to. nev. do with fo much art, as to hide fmaller articles under their private parts, and in their hair. Some

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Some years ago a parrot was found hid in the breeches of one of the petty officers of the fhip, which, whilft they were fearching the man, began to talk, and was thus diffeovered. Thus year were found upon one of the writers, feveral rixdollars and ducats, hid in the drawers that he wore under his breeches.

To all this may be added, the pride which fome of the weaker-minded officers in the Dutch fervice very imprudently exhibit to the Japanefe, by ill-timed contradiction, contemptuous behaviour, fcornful looks, and laughter, which occafions the Japanefe in their turn to hate and defpife them; a hatred which is greatly increafed upon obferving in how unfriendly and unmannerly a ftile they ufually behave to each other, and the brutal treatment which the failors under their command frequently experience from them, together with the oaths, curfes, and blows, with which the poor fellows are affailed by them.

All these circumstances have induced the Japanese, from year to year, to curtail more and more the liberties of the Dutch merchants, and to search them more strictly than ever; so that now, with all their finesse and artifices, they are hardly able to throw dust in the eyes of so vigilant a nation as this.

Within the water-gate of Dezima, when any thing is to be exported or imported, are feated,

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in like manner as on board of fhip, head banjofes and under banjofes, head interpreters and under interpreters, before whole eyes the whole undergoes a ftrict fearch. And that the Europeans may not forape an acquaintance with the fearchers, they are changed fo often, that no opportunity is given them.

This puts a ftop to illicit commerce only, but not to private trade, as every body is at liberty to carry in whatever he can difpose of, or there is a demand for, and even fuch articles as are not allowed to be uttered for fale, fo that it be not done fecretly. The camphor of Sumatra, and tortoise-fhell, private perfons are not permitted to deal in, because the company has referved that traffic to themselves.

The reafon why private perfons prefer the fmuggling of fuch articles as are forbidden to be difpofed of by auction at the public fale, is, that when wares of any kind are fold by auction, they do not receive ready money for them, but are obliged to take other articles in payment. These articles, confifting of either porcelain or lacquered ware, are, in confequence of the yearly imports at fo low a price at Batavia, that they fometimes get less for them than the purchase price. But when the commodities can be difposed of underhand, they get gold

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gold coin, and are often paid twice as much as they would have had otherwife.

Some years ago, when fmuggling was fill in a flourifhing flate, the greateft part of the contraband wares was carried by the interpreters from the factory into the town, but fometimes they were thrown over the wall of the Dezima, and received by boats ordered out for that purpofe. Several of the interpreters, and other Japanefe, have been caught at various times in the fact, and generally punifhed with death.

Smuggling has always been attended with fevere punifhments; and even the Dutch have been very largely fined, which fine has of late been augmented, fo that if any European is taken in the fact, he is obliged to pay two hundred catjes of copper, and is banifhed the country for ever. Befides this, a deduction of ten thousand catjes of copper is made from the company's account; and, if the fraud is difcovered after the ship has left the harbour, the chief and the captain are fined in two hundred catjes each.

The company's wares do not undergo any fearch at all, but are directly carried to the ftorehoufe, on which the Japanese affix their feal. In these ftorehouses they are kept till they are all fold and fetched away.

The

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The interpreters are all natives of Japan, and fpeak with more or lefs accurracy the Dutch language. The government permits no foreigners to learn their language, in order that by means of it they may not pick up any knowledge of the country, but allow from forty to fifty interpreters, who are to ferve the Dutch in their factory with respect to their commerce, and on other occasions. These interpreters are commonly divided into three classes. The oldeft, who fpeak the Dutch language beft, are called head interpreters; those who are lefs perfect, under interpreters; and those who stand yet more in need of instruction, bear the denomination of apprentices, or learners. Formerly the Japanefe apprentices were inftructed by the Dutch themfelves in their language, and this office fell more particularly to the doctor's lot; but now they are taught by the elder interpreters. The apprentices had alfo before this, liberty to come to the factory whenever they chose, but now they are only fuffered to come when they are on actual fervice. The interpreters rife gradually and in rotation to preferments and emoluments, without being employed in any other department. Their duty and employment confift in being prefent, generally one, or fometimes two of each clafs, when any affairs are tranfacted

tranfacted between the Japanese and the Dutch, whether commercial or otherwise. They interpret either viva voce, or in writing, whenever any matter is to be laid before the governor, the officers or others, whether it be a complaint or request. They are obliged to be present at all fearches, as well at those that are made on board of ship, as at those that take place in the factory, and likewise to attend in the journey to court.

Some of the oldeft interpreters express themfelves on ordinary fubjects with tolerable clearness and precision in the Dutch language, but, as their own tongue differs fo widely from the European languages, in its phrases and conftruction, one frequently hears from most of them very laughable expressions and strange idioms. Some of them never learn it well.— When they write Dutch, they use instead of a pen a particular kind of pencil, Indian ink, and their own peculiar paper; they write, however, from the left-hand to the right, like the Europeans, and generally in very fine and elegant Italian characters.

The interpreters are extremely fond of European books, and procure one or more of them every year from the merchants that arrive in this country. They are not only in poffeffion, but make diligent ufe of them, and retain **VOL. 111.** D ftrongly

ftrongly in their memory what they learn from them. They are befides very careful to learn fomething from the Europeans, and queftion them without ceafing, and frequently fo as to be irkfome, upon all fubjects, effectially relating to phyfic, natural philofophy, and natural hiftory.

They are obliged to apply themfelves particularly to the ftudy of phyfic, and are the only perfons in the country who practife this art after the European manner, and with European remedies, which they can eafily procure from the Dutch doctors. This gives them an opportunity both to make money, and to acquire rather more reputation than they otherwife would, and fometimes likewife to take apprentices for inffruction.

Formerly the interpreters were allowed to go whenever they chofe to the Dutchmen's apartments, but now this was prohibited, in order to prevent finuggling, excepting on certain occafions, when they were accompanied by an Ottoman or two.

The interpreters are always accompanied, as well to the fhips as to their college in the ifland of Dezima, by feveral clerks, who take an account of every thing that is fhipped or unloaded, write permits, and perform other offices of a fimilar nature.

My

My first care, as foon as I arrived ashore, was to get acquainted with the interpreters, and to infinuate myfelf as much as poffible into the good graces of fuch of the officers as most frequented our little commercial ifland. As physician, I had a good many defirable opportunities of attaining this purpofe; as, belides that my behaviour towards the Japanefe was always in the higheft degree friendly, and without the leaft deceit, I had frequent opportunities of ferving them and their fick relations, friends, and dependents, by good advice and well-chofen medicines. Moreover, not being in the commercial line, I was lefs fufpected than others; and my knowledge, particularly of the medical art, was often of the greateft utility to them, and proved ftill more beneficial afterwards, when I had gradually difcovered many powerful remedies in the plants that grew wild in their own country. Both by means of the interpreters, and of the officers on the ifland, I tried to obtain permiffion to botanize in the plain that encircles the town of Nagafaki, and to feek plants that were to be found there, and to gather their feeds, a liberty, which otherwife is not granted to any European. In this attempt I feemed in the beginning to be tolerably fuccefsful, and actually obtained the governor's permission for this purpose; which, however, D 2 fhortly

fhortly after was revoked. The motive for this was ridiculous enough, and was as follows: the Japanefe are in the higheft degree fufpicious of the Europeans, and the governor is at all times very fearful of granting them any thing without a precedent. Having requefted leave to botanize, the Japanese journals were searched to fee if any Dutchman ever had obtained fuch a privilege, and upon finding that a furgeon, a long time before, had had that liberty at a period when diforders prevailed, and that there began to be a fcarcity of medicines, leave was granted me, without hefitation, to wander about the town of Nagafaki in order to collect them. But on a clofer examination, it was found that this furgeon had been only a furgeon's mate, and that confequently I, as principal furgeon, could not enjoy the fame privilege. So trifling a circumstance is often of great moment in the eyes of the Japanefe, who with fo much zeal endeavour to fulfil their duties, and blindly obey the laws iffued forth by government, without understanding or explaining them in their own way, or making new ones fuited to their own liking and circumftances.

For my part, I did not confider this circumftance as trifling. Of all the calamities that had hitherto befallen me, I had found none bear fo hard upon me as this, without defpairing however

ever of fuccels in future, although it grieved memuch to reflect that the autumn was all this while advancing with hafty ftrides. In the mean time I encouraged the interpreters, whom I daily inftructed in medicine and furgery, to gather the leaves, flowers, and feeds of all the plants they could find in the adjacent hills, and endeavoured to convince both them and the officers, that between a furgeon and a furgeon's mate there was little or no difference, that a furgeon is first a mate, and that in case of his death, the latter fucceeds him in the appointment. This had fo great an effect, that I again obtained the governor's permiffion; but fo very late, that I could not make any use of it before the beginning of February.

During this time I endeavoured to acquire fome knowledge of the language, notwithftanding that fuch a ftep is ftrictly prohibited, and that the difficulties attending it were at this time greater than they had ever been before. For this purpole, I enquired of the interpreters if any dictionaries, vocabularies, or other books calculated to facilitate the learning of it, were to be had printed in their and the Dutch language. After having made feveral enquiries in vain, I at laft found an old dictionary, in the Latin, Portuguefe, and Japanese languages. Ambrose Calepin's dictionary bad

had been adopted by the Portuguese fathers as the foundation of their undertaking. There was no title-page to it; fo that I could not find out in what year it was printed; but I learned from the preface that it was the fruit of the joint-labours of the Societas fratrum Europæorum fimul & Japonicorum at Japan. The book was in quarto, printed on Japan paper, and contained, exclusive of the title-page and the last leaf, which exhibited the errata, nine hundred and fix pages. The book looked old, and one corner of it was a little burnt. It belonged, to one of the elder interpreters, who poffeffed it as a legacy from his anceftors; and I have the more reafon to believe it to be very fcarce, as neither I nor the Chief could procure it in any way or at any price, either by purchafe or barter.

Nagafaki harbour is the only one in which foreign fhips are allowed to anchor; though the Dutch and Chinese are the only nations in the world who are permitted to land here and trade. Should any strange fhip, by stress of weather or other misfortune, be driven on the coast of Japan, or run in any where for the fake of getting a supply, the circumstance is immediately reported to the court at Jedo, and the ship ordered to the harbour of Nagafaki. The town is one of the five towns called imperial;

perial; and, on account of its foreign commerce, is one of the greatest commercial towns in the empire. It belongs feparately to the fecular emperor; the revenues flow into his treafury, and a governor commands in his name. Formerly two governors refided in the town at one and the fame time; and, indeed, at prefent two are always ordered, but one of thefe only rules at a time, and relieves the other every year in the month of October. The one that is free from his charge returns to Jedo, and remains with his family, which is always left behind as a hoftage for his fidelity. A governor's yearly falary amounts to ten thoufand rixdollars, exclusive of extraordinary revenues, out of which, however, he cannot fave much, by reafon of the many prefents which he is obliged to make at court, and the heavy expences there, and likewife on account of the great number of attendants, of different degrees of rank, which he is obliged to keep at his own expence. The governor bears fovereign fway in the town, and over the Dutch as well as the Chinefe factories. The town is furrounded on the land-fide with high mountains, that flope off gradually towards the harbour, and are of a confiderable breadth and extent. In the harbour are a great number of Japanese vessels of different fizes, from fifty to one hundred and D4 more,

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more, befides a multitude of fifhing-boats from the adjacent places. Their boats are not rowed, but always wriggled with one or two oars. The oar is large, and for that purpofe obliquely writhed. This way of working with oars does not appear to be very fatiguing; but drives the veffel on with great fpeed.

The island of Dezima is let by the town of Nagafaki to the Dutch company, and is confidered merely as a ftreet belonging to the town. The town therefore builds all the dwelling-houfes, and, when they ftand in need of it, repairs and makes alterations in them. Every houfe-keeper, however, at his own expence, puts in windowframes, papers the rooms and cieling, white-walhes, and makes other arrangements for his own convenience. The island is joined to the town and the main-land, and at low water is feparated from it only by a ditch. At high water it becomes an ifland, which has a communication with the town by means of a bridge. The fize of this ifland is inconfiderable, it being about fix hundred feet in length, and one hundred and twenty in breadth. It is planked in on all fides, and has two gates, the one towards the town near the bridge, and the other towards the water-fide. The latter gate is opened on fuch days only as the fhip is difcharging or taking in her cargo; the other is always guarded in the day-time by the

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the Japanese, and locked at night. Near it alfo is a guard houfe, where those that go in and out of the town are fearched. Lengthways upon this island are built, in form of a fmall town, the company's feveral ftore-houfes, their hospital, and separate houses for their fervants two ftories high, of which the upper ftories are inhabited, and the lower used as flore and lumber-rooms. Between these houses run two ftreets, which are interfected in the middle by another. Excepting the company's large and fire-proof ftorehouses, the houses are all built of wood and clay, and covered in with tiles, and, according to the cuftom of the country, have paper windows and floor-mats of ftraw. Some people have of late years brought with them from Batavia, either a few finall windows, or elfe fome panes of glafs, in order to throw more light into the rooms, and to enjoy the view of external objects. By the fea-gate are found in readinefs every kind of apparatus for the prevention of fire, and at the other end a pleafure and kitchen-garden, and a large fummer-houfe two ftories high. For the purpofe of keeping a vigilant eye on the Dutch, feveral officers, interpreters, and guards are kept on the ifland. There are watch-houfes built in three corners of it, in which watch is kept during the time that the fhips lie in the harbour. When

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When they have failed, only one is made use of. This watch patroles day and night, like ordinary watchmen about the island.

The interpreters have a very large houfe on the ifland, called their college, in which, during the trafficking feafon, a great number of them affemble, but after the fhips are gone, only one or two come there, who are regularly relieved once a day, generally at noon, in order that they may reach their refpective homes before the evening.

There is also another house for the Ottomas, as they are called, or reporting magistrates, who during the trafficking feason assemble to a confiderable number, but asterwards only one or two keep watch, and are relieved in like manner as the interpreters. Their business is to take notice of every occurrence that takes place on the island, and to inform the governor of the town of it. Within this small compass the Dutch are obliged to spend their time, which, for those who flay here the whole year through, is a very disgreeable circumflance.

The Chief for the Dutch commerce is changed annually, fo that one arrives every year from Batavia, and the other returns. Formerly, when the trade was in a flourishing flate, and the profits large, the Chief feldom made more than two voyages hither; but at prefent he is obliged

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liged to make three or more voyages without being able, however, to make as large a fortune as before. M. FEITH, who arrived this year, now made his fourth voyage hither, as chief, to fucceed M. ARMENAULT. Befides the chief, at the departure of the fhips, twelve or thirteen Europeans remain here (not to mention the flaves) and three of thefe make the tour to the imperial court at Jedo.

The Dutch and the Chinefe are the only nations that are fuffered to trade to Japan. The Dutch now fend hither annually two fhips only, which are fitted out at Batavia in the month of June, and return at the latter end of the year. The principal articles carried from hence are Japan copper, raw camphor, and lacquered wood-work ; porcelain, filks, rice, Sakki, and foy, make a very inconfiderable part of the private trade. The copper, which contains more gold, and is finer than any other in the world, is caft into bars fix inches long, and a finger thick, flat on one fide, and convex on the other. and of a fine bright colour. These bars, amounting to 125lb. in weight, are put into wooden boxes, and each fhip's load confifts of fix or feven thousand fuch chefts. The articles which the Dutch company fent this year were a large quantity of foft fugars, elephants teeth, fappan-wood for dying, also a large quantity of tin

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tin and lead, a fmall quantity of bar-iron, fine chintzes of various forts, Dutch cloths of different colours and degrees of finenefs, fhalloons, filks, cloves, tortoife-fhell, China root, and Coftus Arabicus. The few articles which were brought in by private perfons, confifted of faffron, Venice treacle, Spanish liquorice, ratans, spectacles, looking-glaffes, watches, unicorns horns, and the like. For the company's account was imported a certain fum of money in filver ducatoons, but private perfons were not suffered to carry in any coin, although the importation of it might have been attended with fome profit.

The Portuguefe, who made the first difcoveries in the East Indies, found out by accident alfo the Japan islands, being driven upon these coasts by a storm about the year 1542. These were well received, and carried on a most profitable trade for near one hundred years. After the union of Portugal with Spain under one fovereign, the Spaniards participated in this lucrative commerce. The English alfo trafficked for fome time with these distant islands, till the Dutch, by a written agreement made with the Emperor in the year 1601, monopolized this trade to themselves; a trade, which in the beginning was extremely beneficial to them, but

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of late has become more and more confined, and is attended with very little profit.

In the beginning the Dutch enjoyed very extenfive liberties; not only that of running with their fhips into the harbour of Firandos, but alfo that of fending hither feveral, often five, and fometimes feven, fhips; as likewife that of trading to an unlimited amount, and to carry out of the country large quantities of filver, gold, and other commodities, which have been fince abfolutely prohibited. At length in the year 1641, they were ordered to establish their factory on the island of Dezima, near the town of Nagafaki. A certain fum was fixed, above which their yearly commerce was not to go: only three, and at length, from the beginning of this prefent century, not more than two fhips were fuffered to come annually hither, and their privileges and the quantity of their wares were by degrees diminished; fo that the quantity of goods in trade, which formerly amounted to feveral millions, was now reduced to two millions of gilders. On the arrival of a rich Dutch fleet in the harbour, in the year 1685, the ftricteft orders, on the part of his Imperial Majefty, were received from the court, that the Dutch, in confequence of the permiffion already granted them, should be at liberty to bring into the factory fuch goods or quantity as they should think proper, but that hereafter, no more were to

to be fold annually than would amount to the fum of three hundred thousand thails or rixdollars, and the remainder fhould be kept till the following year. Befides this fevere ftroke to the commerce of the Dutch, one of the governors, who was lefs partial to them than his predeceffors, had fallen upon two other methods farther to leffen their profits, by which many of the people in office belonging to the town, and the townfmen themfelves, reaped confiderable advantage. One was, that before any Dutch goods were fold, a certain fum per cent. was laid on them, which was therefore to be paid by the purchafer; and as this duty was to be raifed from the goods, the natural confequence was, that lefs was paid for them than before, and that foreigners fuffered a confiderable lofs. The other was, that the value of the coin was raifed to the Dutch in this manner, that a kobang, which paffes current: in the country for fixty mas, was reckoned to them at fixty-eight, fo that eight mas on each kobang, which they loft, became a new and confiderable income to the town of Nagafaki and its inhabitants, as alfo to fome of the people in office there. Thus the Dutch company, having a right to dispose of merchandife to the amount of three hundred thousand thails, did not actually receive more than two hundred and fixty thousand thails worth for

for exportation. The deficient forty thousand thails, therefore, were raised from such private perfons as hitherto had been allowed to fell their wares in such quantities as they thought proper, and at such prices as they were able to get, so that this sum had been divided between the chiefs, merchants, captains of ships, writers, and others.

The traffic to Japan was formerly fo very lucrative to individuals, that hardly any but favorites were fent out as chiefs, and when thefe had made two voyages, it was fuppofed that they were rich enough to be able to live on the interest of their fortunes, and that therefore they ought to make room for others. At prefent a chief is obliged to make many voyages. His fuccefs is now no more to be envied, and his profits are thought to be very inconfiderable.

After all the merchandize, as well that which belonged to the company as that of individuals, had been fearched and carried into the ftore-houfes, and notice of the fame had been given to the merchants of the country, the fale commenced. Formerly the merchandize was fold by public auction. Samples were fhown to the merchants, and the governors of Nagafaki, of all the different articles, that they might make their propofals with regard to the quantity they wanted, as well as to the price.

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The merchants, or their deputies, afterwards went for feveral days to the ftore-houfes on the ifland, for the purpofe of examining the merchandize more accurately. After which certain commissioners made the Dutch their offers, without previoufly afking what they demanded for each fort. The first time they bid very low. If the owner cannot take it, the fecond time fomewhat more is bid; and should he refuse this likewife, they bid a third time. If the owner is not then fatisfied, he is afked how much he wifhes to have. The vender then commonly asks a little more for his commodity than what he can fell it for, that he may be able to abate fomething. And if the Japanefe are in great want of the article, the price is generally then made agreeable to both parties; but if they are not, the wares are kept till the next year's fale, or they are allowed to carry them back to Batavia. The Japanefe always bid in males, and not in catjes; for inftance, for one mas of unicorn's horn, eight mas of filver, and fo on. After the fale is concluded, the merchandize is weighed, and carried into the town, where the country merchants have the liberty to purchafe it at a dearer rate. The Japanese pay much less now for Dutch goods than they did before, as 15 per cent, and more must at prefent be paid under the name of Fannagin (flower-money) to the 212 1

the town of Nagafaki, which is divided between the fervants of government and the citizens. Amongft the articles which were imported by the officers for fale this year, were camphor, fmall ratans, tortoife-fhells, fpectacles, unicorns horns (unicornu verum) manufactured glafs, watches of different fizes, chintzes, faffron, Venice treacle, Spanifh liquorice, Ninfi-root, Nuremberg manufactures, fuch as looking-glaffes, &cc. Books on different fciences in the Dutch language were not fold at the fale, but were often exchanged with the interpreters, and that to confiderable advantage.

Unicorns horn (unicornu of the Monodon" monoceros) fold this year on Kambang very dear. It was often fmuggled formerly, and fold at an enormous rate. The Japanese have an extravagant opinion of its medical virtues and powers to prolong life, fortify the animal fpirits, affift the memory, and cure all complaints .---This branch of commerce has not been known to the Dutch till of late, when it was difcovered by an accident. One of the Chiefs for commerce here, on his return home, had fent from Europe, amongst other rarities, to a friend of his, who was an interpreter, a large, handfome, twifted, Greenland unicorn's horn, by the fale of which this interpreter became extremely rich, and a man of confequence. From VOL. III. E that

that time the Dutch have written to Europe for as many horns as they could get, and made great profit on them in Japan. At first each' catje was fold for one hundred kobangs or fix hundred rixdollars, after which the price fell by degrees to feventy, fifty, and thirty kobangs. This year, as foon as the captain's wide coat had been laid afide and prohibited, and no fmuggling could be carried on, all the unicorns horn was obliged to be fold on Kambang, when each catje or 31b. fetched one hundred and thirty-fix rixdollars, at the rate of one mas of Japan filver for eight mas and five conderyns of horn. If any of it could be fold clandeftinely on board of the fhip, it fetched from fifteen to fixteen kobangs. The thirtyfeven catjes four thails and fix mas of horn, which I had brought with me, were therefore very well difposed of for five thousand and feventy-one thails and one mas; which enabled me to pay the debts I had contracted, and, at the fame time, to expend one thousand two hundred rixdollars on my favorite fludy. Ninfi root, called by the Japanefe Nifii, and by the Chinefe Som, fells here at as high a price as unicorns horn. The Chinese are the only people who bring it genuine and unadulterated to this country. It grows in the northern part of China, and chiefly in Korea. A baftard kind is often.

often brought hither by the Dutch, who ufually mix it with the genuine root, by way of adulterating it. The baftard kind was faid by the French to be brought from America to China, and is perhaps the Ginfeng root. The genuine ninfi fold this year for a hundred kobangs per catje, if it was large and the root old. The fmaller fort fold at an inferior price. The baftard kind, of which fuch pieces as are forked and white are the beft, and with which the genuine is used to be adulterated, is ftrictly prohibited here, infomuch, that it is not fuffered to be imported at any price, but must be burned, in order to prevent any fraud being practifed with it.

Several other things are prohibited for exportation, as well to the company as to individuals, fuch as Japanefe coin, charts and maps, books, at leaft fuch as contain an account of the country and its government, all forts of arms, but particularly their excellent fcymetars, which in ftrength and goodnefs furpafs the manufactories of every other country.

The copper which was brought hither from the interior and diftant part of the country, was kept in a feparate ftorehoufe; and as foon as the ship was in part discharged, the loading of it with the copper commenced. This latter was weighed, and put into long wooden boxes, 1

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a pickel weight in each, in prefence of the Japanefe officers and interpreters, and of the Dutch fupercargoes and writers, and was afterwards carried by Japanefe fervants (kulis) to the bridge, in order to be put on board. On fuch occafions a few failors always attended, to watch that the porters did not fteal any of it by the way, a thing which would not be the leaft burden to their confciences, efpecially as they can fell the ftolen copper to the Chinefe, who pay them well for it.

The Japanese porcelain is packed up in straw, fo well and so tight, that very feldom any of it is found broken. This porcelain is certainly neither handsome nor neat, but rather, on the contrary, clumsy, thick, and badly painted, and, therefore, in these respects much like the china which is brought from Canton. This has the advantage, that it is not easily affected by heat, even when set on glowing embers.

The weights at Japan are thus regulated: one Pickel makes one hundred and twenty-five pounds, one Catje fixteen Thails, one Thail ten Mas, and one Mas ten Conderyns.

The money current in trade is reckoned in the fame manner; fo that one Thail, which nearly anfwers to one Dutch rixdollar, is equal to ten Mas, and one Mas to ten Conderyns.

Kambang

Kambang money, or the fums due for wares that are fold, is never paid in hard cafh, as the carrying it out of the country is prohibited; but there is merely an affignment made on it, and bills are drawn for fuch a fum as will be requifite for the whole year's fupply, as alfo for as much as will be wanted at the fair of the island. This Kambang money is, in the common phrafe of the country, very light, and lefs in value than fpecie, fo that with the money which is thus affigned over, one is obliged to pay nearly double for every thing. All these Kambang bills are paid at the Japanese new-year only. Every man's account is made out before the fhips fail, and is prefented and accepted at the college of the interpreters, after which the books are closed. All that is wanted after the new year, is taken up upon credit for the whole year enfuing.

When the Dutch do not deal here for ready money, their commerce can hardly be confidered in any other light than that of barter. With this view, a fair is kept on the ifland about a fortnight before the muftering of the fhip, and its departure for *Papenberg*, when certain merchants, with the confent of the governor, and on paying a fmall duty, are allowed to carry their merchandize thither, and expose them to fale in booths erected for that purpose.

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54 DEZIMA, 1775. DUTCH COMMERCE.

The commodities which were bought up this year by private perfons, were chiefly large brown earthen jars, that would contain feveral pails full of liquor, for keeping water in, foy in wooden veffels, alfo fome fakki, fans, Japanefe filken night-gowns, lacquered works of feveral kinds, porcelain, both coarfe and fine, or white and painted, narrow filks, and fowas-work, as alfo fine rice, put up in paper parcels of about a pound weight each.

Copper is the principal article which the company carries out from hence. This copper is better and finer than any other, and the major part of it is difpoled of on the coaft of Coromandel to great advantage. Each bar weighs about one-third of a pound.* Next to copper in point of quantity, raw camphor is carried out, packed up in wooden tubs. The reft confifts of large filken night-gowns, quilted with filk wadding, a finall quantity of porcelain, foy, fakki, preferved fruits, &c.

The Chinefe have, almost from time immemorial, traded to Japan, and perhaps are the only people from Afia that have engaged in the trade. Indeed they are now the only nation, except the Dutch, who are allowed to go thither with their veffels and trade. Formerly they ran with their veffels into Ofacca harbour, although it is very dangerous

* Vide p. 43, 1, 19.

dangerous on account of rocks and fand-banks. The Portuguese showed them the way to Nagafaki, where they are at prefent always obliged to go. At first the annual number of their trading veffels might amount to one or even two hundred, each manned with fifty men or more. The Chinefe and Japanefe, though they are near neighbours, differ, nevertheless, in many refpects: the former wear frocks or wide jackets, and large trowfers; the latter always make ufe of night-gowns; the former wear boots made of linen, and fhoes with upper-leathers; the latter go bare-legged with focks and fandals; each of these nations has a diffinct and separate language, and quite different religious tenets. On the other hand, they are alike in colour and look, write after the fame manner, and have feveral religious fects and cuftoms in common. A great many years ago emigrations were very frequent from China to Japan, efpecially to its fouthern islands, called Liquejo, which are fubject to Japan, but make annual prefents to the Emperor of China.

The liberty which the Chinefe formerly enjoyed with regard to commerce, is at prefent greatly curtailed, fince they have been fulpected of favouring the Catholic miffionaries at China, and fince they were fo imprudent as to introduce into Japan Catholic books printed in China,

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At prefent they are as much fufpected, and as hardly ufed here as the Dutch, and in fome particulars more fo. They are flut up in a fmall ifland, and ftrictly fearched whenever they go in and out. They enjoy, however, the advantage over the Dutch, of having in the town and frequenting a temple dedicated to the worfhip of the Deity, and, at the fame time, of having for their daily expences Japanese money, with which they themfelves buy at the gate provisions and the other neceffaries of life.

When a veffel is arrived from China, and has anchored in the harbour, all the people are brought afhore, and all charge of the veffel is taken from them, till fuch time as every thing is ready for their departure. Confequently the Japanefe unload it entirely, and afterwards bring the veffel afhore, where, at low-ebb, it lies quite dry. The next year it is loaded with other goods.

The Chinese are not fuffered to make a voyage to the imperial court, which faves them confiderable fums, that the Dutch are obliged to expend, as well during the expedition, as in presents at court and to the grandees. The Japanese interpreters are as necessary for the traffic of the Chinese as for that of the Dutch, because these two neighbouring nations speak languages so different, as not to understand each other.

It is true, the Chinefe are allowed to trade for twice as large a fum as that granted to the Dutch; but as their voyages are neither fo long nor fo dangerous, they are obliged to contribute more largely to the profperity of the town of Nagafaki, and therefore pay more per cent. as far even as to fixty, in *(fannagin or)* flower-money.

Their merchandize is fold at three different times in the year, and is brought hither in about feventy veffels. That is, the first fair takes place in the fpring, for wares brought in twenty veffels; the fecond in the fummer, for wares imported in thirty veffels; and the third in the autumn, for wares brought in twenty veffels. Should any more veffels arrive within the year, they are obliged to return, without even being allowed to unload the leaft article. The principal trade of the Chinefe confifts of raw filk, various drugs, which are imported as medicines ; fuch as ninfi-root, turpentine, myrrh, calumbacwood, befides zink and a few printed books, which must be read through, and approved by two learned men, before they are fuffered to be fold.

Although their voyages are lefs expensive, and they are not under the neceffity of keeping directors or other fervants for their trade, yet on account of the greater value per cent. deducted from their merchandize, their profits are lefs than those of the Dutch; and as they are no longer

longer allowed to carry away any fpecie, they are obliged to buy Japanefe commodities for exportation, fuch as lacquered-work, copper, &c.

When their veffels are loaded, and ready for failing, they are conducted by a number of Japanele guard-fhips, not only out of the harbour, but likewife a great way out to fea, in order to prevent their difpoing to the imugglers of any of the unfold wares that they may have been obliged to carry back.

The Chinefe veffels are flightly built, very high, and furnifhed with ftill higher galleries, very much turned up at the ftem and ftern, especially at the ftem. The rudder and fails are very large, and aukward to handle.

Obsolver the 14th. The Dutch fhip was conducted from the town of Nagafaki to the Papenberg, as it is called, there to remain at anchor, and take in the remainder of her cargo. It became my duty to follow her, and to flay on board of her till I could be relieved by my predeceffor, who was to return in her to Batavia. A few days after, when the fhip has anchored in the harbour, the governor points out the day when fhe is to fail, and this command must be obeyed fo implicitly, that were the wind ever fo contrary, or even if it blew a hard gale, the fhip must depart without any excuse, or the leaft fhadow of oppofition. And indeed the

DEZIMA, 1775. NAGASAKI HARBOUR. 59

the wind was fo contrary, and blew fo hard this day, that above a hundred boats, large and fmall, were employed in towing the fhip. All this fmall craft placing themfelves in feveral long rows, dragged with ropes this huge fhip along, which had an uncommon, as well as curious, appearance, and was accompanied by the cheering fong of feveral hundred Tapanefe rowers.

Before the fhip leaves the harbour, the powder, arms, and the chefts of books that were taken out of her, are returned. The fick from the hospital too are put on board. Whilft she is failing out of the harbour, the guns are fired, to falute the town and the factory, and afterwards the two imperial guards,

The Chinese veffels alfo, after having taken in part of their cargo, anchor under this mountain till they can depart with a fair wind.

During the time that the fhip flaid here, we took in, every other day only, part of the copper and camphor, and all merchandize and other things belonging to individuals; when the officers and interpreters were obliged to come almost a league by water, in order to be prefent on board. Here is also taken in water and other articles of refreshments for the voyage. There are also guard-ships here, to have an eye to the Dutch, but they lie at a great diffance. Sec. al.

60 DEZIMA, 1775. NAGASAKI HARBOUR.

As there are feveral islands of different fizes, and in the environs of this place, the Dutch, after they have got their boat again, may row to them for their pleafure, without any hindrance from the Japanefe. Though, if they ftay long on fhore there, efpecially on any of the larger iflands, that are inhabited, they are generally followed by one of the guard-fhips, the officers on board of which, without preventing the Dutch from walking about, will merely accompany them. And if one fhould happen to arrive at any of the villages, which fometimes are very large, an incredible number of grown people and children will affemble to ftare, with a clamorous noife, at a people fo ftrange in their opinion as the Europeans. They are particularly delighted with our large and round eyes, and therefore always call out Hollanda O-me.

All these opportunities I diligently embraced during the time that I was obliged to be with the ship, and botanized on these islands and their mountains, and this autumn gathered different feeds of rare and uncommon herbs, shrubs, and trees, which I sent to Batavia in the homewardbound ship, to be forwarded to Amsterdam.

Papenberg is a fmall island, covered to the very brink of its shores with a peaked mountain, and which may be ascended by two of its sides, and that in about a quarter of an hour's

DEZIMA, 1775. NAGASAKI HARBOUR. 61

hour's time. The two other fides are very fteep. It is faid to have acquired its name at the time that the Japanese perfecuted and drove out the Christians and Portugueze, and threw down many of the Portugueze friars from these heights into the sea.

Vifchers Eyland, or the Fifherman's Ifland, lies on one fide of Papenberg, and has only one flat, and rather oblong, hillock, with which it is covered to the very firand, and is, like the former ifland, uninhabited.

In the months of September and October, the diarrhæa, attended with a tenefmus, prevailed on board of the fhip, and particularly in the town of Nagafaki. Amongit the fhip's crew this diforder was occafioned by the great heat in the day-time, and the coolnefs of the evenings. In the town another caufe fupervened, viz. the exceffive eating of the fruit of the Kaki (*Diofpyros kaki*) which was at this time ripe, and had an agreeable tafte, not unlike that of yellow plumbs.

During my walks on *Kofido*, and the iflands before-mentioned, I difcovered feveral remarkable plants, amongst which the following were most beneficial and most in use:

China root (Smilax China) grows every where in great abundance, although the Japanefe buy annually large quantities of it from the Chinefe. The

62 DEZIMA, 1775. NAGASARI HARBOUR.

The root is used in decoction, as a purifier of the blood, and by the Japanese in many more maladies. The interpreters were highly pleased at the discovery they had made by my means of this useful root's growing in their own country, as it is come fo much into common use, and they pay annually large sums of money for it to the Chinese.

Wild figs (Ficus pumila and eretta) were chiefly found amongst the rocks and near stone walls, where they infinuated themselves between the stones. The sign are sometimes eaten; but are finall, like plumbs.

The *Ipomæa triloba* grew both wild and planted. The roots of it were either white or black. The latter were used as laxatives.

The Fagara piperita (or Pepper-bufb) was common every where, and had now ripe berries. The leaves, as well as the berries, have a fpicy tafte, are heating, and at the fame time rather difagreeable to the palate. The rind of the fruit, taken inwardly, expels wind, and is fometimes found ferviceable in the cholic. Both the leaves and the rind of the fruit are very commonly ufed in foups inftead of pepper; but the leaves by themfelves, beaten up with riceflour to the confiftence of a poultice, are applied to abiceffes and limbs affected with the rheumatifm, inftead of the common blifter-plafter. The

DEZIMA, 1775. NAGASAKI HAREOUR. 63

The Rubia cordata is used here by the country people for dying, in like manner as madder (Rubia tinstorum) is in Sweden.

Cordage and lines, even of the thicker kind, which might ferve on board of the veffels, are made, not of hemp, but of nettles, of which different forts grow wild on the hills, and that frequently to a confiderable fize. Those species which were mostly used were the Urtica Japonica and nivea, the bark of which, when prepared, produced ftrong cordage, and some yielded threads so fine, that even linen was made of them. From the feeds of the Urtica nivea (the leaves of which on the under-fide are as white as chalk) an oil was expressed.

In the beginning of November, and after flaying feveral weeks on board, I was at laft relieved by the doctor, who was now to return with the fhip to Batavia, in order to make room for me, who intended to remain here a year at leaft. Not long after this the fhip failed, and left behind fourteen of us Europeans, among fome flaves and Japanefe, in folitude, and, it might in fome fort be faid, confinement, we being now flut up within the narrow circle of this little ifland of Dezima, and feparated not only from Chriftendom, but, in fact, from the whole world befides. An European, that remains here, is in a manner dead and buried

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an obfcure corner of the globe. He hears no news of any kind; nothing relative to war, or other misfortunes and evils that plague and infeft mankind; and neither the rumours of inland or foreign concerns delight or moleft his ear. The foul poffeffes here one faculty only, which is the judgement (if, indeed, it be at all times in poffeffion of this faculty.) The will is totally debilitated, and even dead, becaufe to an European there is no other will than that of the Japanefe, by which he must exactly fquare his conduct.

The European way of living is in other refpects the fame as in other parts of India, luxurious and irregular. Here, just as at Batavia, we pay a visit every evening to the chief, after having walked feveral' times up and down the two ftreets.

These evening visits generally last from fix o'clock to ten, and fometimes eleven or twelve at night, and constitute a very difagreeable way of life, fit only for fuch as have no other way of fpending their time than droning over a pipe of tobacco.

Not having much to do, I employed my time in collecting, examining, and préferving infects and herbs, and in converfing with the interpreters, whofe curiofity and fondnefs for learning I perceived, and willingly inftructed them

them in different fciences, but particularly in botany and phyfic. Many of them had an extenfive and profitable practice in the town under my direction; and fome of them brought to me on the island various plants of this country's produce, which were not only beautiful and fcarce, but likewife hitherto totally unknown. Some of thefe they had collected themfelves, and others they had got by means of their friends from the interior parts of the country. At the fame time I procured by degrees, fome information concerning their government, religion, language, manners, domeftic and rural œconomy, &c. I also received from them feveral books, and curiofities of various kinds, the greatest part of which I wished to be able to carry with me to Europe.

To wait about their own perfons the Dutch make use of the flaves they have brought with them, but for all other purposes Japanese are appointed, such as compradors, or purveyors, of different forts, who provide provisions, and every thing else that is necessary in house-keeping; cooks, who dress victuals in the Dutch manner; fervants that, although they are natives of Japan and not interpreters, have learned to speak the Dutch language. Four such as these are left with the chief, one with the fecretary, and one with the doctor, who together make the vol. III. F

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trip to the court. Should any artizans be wanted from the town, they have a fpecial permiffion from the governor to go to the ifland. The Dutch here, as well as at Batavia, confume a great quantity of rice; neverthelefs, there is wheaten bread baked for their ufe in town, which is brought to the ifland new every day.

The cold began now to grow very troublefome at times, and was quite piercing, with an eafterly or northerly wind. We began therefore to keep fires in the rooms, though neither the windows nor the doors were over and above clofe. Our fires were made with charcoal, which was brought from the town in a large copperkettle with a broad rim; and this kettle being placed in the middle of the floor, warmed the whole room for feveral hours together.

Of the Europeans that remain here, the officers, fuch as the fecretary, doctor, and writers, have each two or three handfome rooms, befides the ftorehoufe, which they occupy without paying for them, but ornament them themfelves with carpets and other furniture. They dine and fup with the Chief gratis, at the company's table, fo that their ufual expences do not amount to much, except they fquander away their money on the fair fex, or make expensive entertainments, and give fuppers to each other.

An

An unexpected misfortune, which in the beginning feemed of no confequence, but was productive of great confusion and alarm, happened to me in this our filent retreat. As I had not, when at Batavia, money fufficient to purchafe a flave that might accompany me to Japan, the fupercargo had the goodnefs to lend me one of his till the next year, when he expected to return hither. This flave, who had a wife and children at Batavia, and who had flattered himfelf with the hopes of returning home in the courfe of the year to his connections, became, on account of this difappointment, very much difcontented, and at length quite melancholy. At laft he takes it in his head to hide himfelf, and difappears, without any one's knowing either where or wherefore he had hid himfelf. He was immediately fought for by the other flaves, but to no purpofe. The day following the interpreters and fome other Japanese on the island made a ftill ftricter fearch for him. At length, on the third day, there arrived from the town, by order of the governor, a number of interpreters, headbanjofes, and under-banjofes, and a multitude of other attendants, to fearch for him, nor could they find his hiding place till towards the evening, when he was difcovered lurking in an old ftorehoufe. If he had not, to our great joy, been found, a ftricter fearch would have been F 2

made

made by order of the governor, all over the ifland, and even in the apartments of every individual; and if he had not even then been found, orders would have been iffued throughout the kingdom to apprehend the deferter, and the cafe reported to the Court. About fo trifling a matter are the Japanefe capable of making a great rout, fearing left any one fhould fteal into the country, which however it is very difficult, and indeed almost impossible to do. The flave was afterwards punished for his mifbehaviour, by being bastinaded and put in irons, after which all this ferment fubfided.

Amongst other things which were brought to us on the island, and fold for food, I observed fomething like the row of a fish, which had been falted, gently preffed together and dried. It had the appearance of a piece of cheese, and was eaten raw, like Caviare.

Matskaja, a kind of fish (Sciana) each of the belly fins of which, confisted of a thick and bony prickle. The skin, which was very hard and of a bony nature, was flayed off. The start wards boiled and used for food. Its start firm and palatable.

Kitama Kura, was an appellation very properly given by the Japanese to another fish (Tetraodon bi/pidus) which was so poisonous, that, when eaten, it proved frequently mortal, and therefore, according

according to the fignification of the Japanese name, made the north one's pillow; it being a custom with these people, to turn the heads of those that are dying, towards the north.

Kami Kiri Musi, was the name of a large black Cerambyx (Cerambyx Rubus) with white stripes on its elytra.

Ote Gaki, which fignifies a falling Oyfter, becaufe, like others of this genus, it does not adhere faft to the rocks, was a very large and oblong Oyfter, much ufed as food by the inhabitants, and fometimes brought to the Dutch for fale. It was well tafted, but being of a great fize, was generally boiled or flewed, and eaten with fome kind of fauce.

A beautiful Perch (*Perca*, which by the Japanefe is called *Ara*) adorned with feven white ftripes, was also brought amongst other fish to our kitchen.

For washing linen they neither used foft nor hard foap, but in its stead the meal or slour of a species of Bean, which, when ground very fine, yields an extremely white powder.

The interpreters told me amongst other things, of a very fingular worm, which in the fummer was a crawling infect, but in winter a plant. It was brought hither by the Chinese amongst other medicines, and faid to be possible of cordial virtues. As foon as I was able to pro-F g cure

cure a drawing of it, and afterwards the drug itfelf, I plainly faw, that it was nothing elfe than a Caterpillar, which against its approaching change to a Chryfalis, had crept down into the ground, and there fastened itself to the root of fome plant. It was called with much acuteness Totfu Kaso.

To light up their rooms in the winter evenings, the Japanefe ufe candles and lamps. The former, however, are but little ufed ; and the latter are most common throughout the whole country. The candles are fmall ; being fix inches in length and one inch thick at the upper end, and tapering as they go downwards; they are therefore quite the reverse in shape to those that are used in Europe. In the upper end is the wick, made of paper rolled together, and covered on the outfide with another whiter and finer paper rolled over it in a fpiral form. In the lower end is a hole fo large, as to leave room to introduce a nail, fixed to what is termed a candleftick. These candles are made of oil procured by expression or decoction from the feed of the varnish tree (Rhus vernix and succedanea) which tree is called Fasi no ki, and grows in many districts of this country, producing a great quantity of feed. These candles when fresh, are of a whitish colour, inclining to yellow within, and covered externally with a white coat. The oil grows hard by expofure to the cold air, and acquires the confistence of tallow.

tallow. In time it turns rank, and is then of a yellowifh colour. Thefe candles burn well, but run like tallow candles. When thefe candles are fold, they are neatly put up in paper, which is folded at the lower end, and at the upper end twifted round the wick, and about two inches above that left open, fo that it exactly refembles a long rocket.

The apartments are most commonly illuminated with lamps, to the number of one or two in each apartment: the oil burned in these lamps, is expressed from mustard feed.

They ftrike fire with a fteel (which is very fmall) and a rough greenifh quarze-ftone. For tinder they use the woolly part of the leaves of Wormwood (*Artemisia vulgaris*) which is prepared fo as to form a brownish coloured wool. This substance catches fire much quicker than Moxa. They use matches, which are short, of about a finger's length and a nail's breadth, truncated and covered with brimstone at the ends. These are tied together in bundles, and bent in a femi-circular form.

The Japanese have the bad custom of very frequently breaking wind upwards, and is by no means thought indecent as in Europe; in other matters they are as nice as other polished nations.

About the new year two merchant veffels or junks, arrived here from China, which brought with them feveral Japanefe, who had been driven

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in

in a gale of wind on the Chinese coast. These Japanese were immediately conducted to their native places, from whence they will not be easily suffered to depart.

Our chief in like manner had brought hither a Japanefe, who fome years ago, whilft he was fifhing at fea, had been driven away from the land, and had for feveral years been abfent from his country. At laft he arrived at Batavia, dreffed like a Malay, and fpoke fluently the Malay language.

Agreeably to the Eaftern cuftom, the Japanefe neither visit each other nor the Dutch, without fending fome prefent previous to their coming. These presents are made more for form fake, than for their value, which generally is very triffing. They frequently confift of a fresh fish or the like, but are always prefented with fome degree of pomp; for inftance, on a finall table made for the purpose, and covered with paper folded in fome particular shape. When the grandees of the country, who are confidered as princes, were on board to fee our ship, each of them fent our captain a prefent, which confifted of a tub full of Sakki, and a few dried spotted Sepiæ, a kind of fifh which is in great requeft with the Japanefe and Chinefe.

1776, Jan. 1, we kept new year's day. Many of the Japanese affisted us in celebrating it. The cold was now very severe and intense, although

though the ground was quite bare. According to cuftom, this day about noon most of the Japanefe that had any thing to do at the Dutch factory, fuch as the head and fub-banjofes, the Ottonas, the head and fub-interpreters, the furveyors, and others, came to with us a happy Dreffed in their holiday clothes, new-year. they paid their respects to the chief, who invited them to dine with him. The victuals were chiefly dreffed after the European manner; confequently but few of the difhes were tafted by the Japanefe; neverthelefs, every thing was fo contrived, that there were no bafkets full of fragments gathered. Of the foup they all partook ; but of the other diffies, such as roafted pigs, hams, fallad, cakes, tarts, and other pastries. they ate little or nothing; but in their flead was put on a plate a little of every difh, and when this plate was full, it was fent to the town with a paper on it, on which was written the owner's name, and this was repeated feveral times. Salt beef and the like, which the Japanese do not eat, was fet by, and used as a medicine. The fame may be faid of the falt butter, of which 1 was frequently defired to cut a flice for fome of the company; it is made into pills, and taken daily in confumptions and other diforders. After dinner, warm fakki was handed round, which was drank out of lacquered wooden cups.

On

D IZIMA, 1776.

On this feftive and joyful occasion, the chief invited from the town feveral handfome girls, partly for the purpose of ferving out the fakki, and partly to dance and bear the girls company who were already on the ifland. After dinner too, these girls treated the Japanese with several of their own country meffes, placed on finall fquare tables, which were decorated with an artificial fir-tree, the leaves of which were made of green filk, and in feveral places fprinkled over with white cotton, in imitation of the winter-fnow. The girls never prefented the fakki ftanding, but always, according to the cuftom of the country, fitting. In the evening they danced in their own country fashion; and about five o'clock the guefts took their leave.

In moft of the Japanese towns there are commonly, in some particular street, several houses dedicated to the worship of the Cyprian Goddess, for the amusement of travellers and others. The town of Nagasaki is no exception in this respect, but affords opportunities to the Dutch and Chinese of spending their money in no very reputable manner. If any one defires a companion in his retirement, he makes it known to a certain man, who goes to the island every day for this purpose. This fellow before the evening procures a girl, that is attended by a little fervant-maid, generally known under the denomination

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nomination of a Kalbro, who fetches daily from the town all her miftrefs's victuals and drink, dreffes her victuals, makes tea, &c. keeps every thing clean and in order, and runs on errands. One of these female companions cannot be kept lefs than three days, but fhe may be kept as long as one pleafes, a year, or even feveral years together. After a shorter or longer time too, one is at liberty to change, but in that cafe the lady must appear every day at the town gate, and inform the banjofes whether fhe means to continue on the ifland or not. For every day eight mas is paid to the lady's hufband; and to herfelf, exclusive of her maintenance, prefents are fometimes made of filk night-gowns, girdles, head ornaments, &c.

Without doubt, the Chriftians, who are enlightened by religion and morality, ought not to degrade themfelves by a vicious intercourfe with the unfortunate young women of this country. But the Japanefe themfelves, being Heathens, do not look upon lafcivioufnefs as a vice, and leaft of all in fuch places as are protected by the laws and the government. Houfes of this kind therefore are not confidered as an infamous refort, or improper places of rendezvous. They are often frequented by the better fort of people, who wifh to treat their friends with fakki. Neverthelefs, the inftitution carries on its very face

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very face that which is derogatory to human nature, and even to the leaft polified manners. Parents that are poor, and have more girls than they are able to maintain, fell them to one of thefe fellows at the age of four years and more. During their infancy they ferve as maids to the houfe, and particularly to wait on the elder ladies, each of whom has her own girl to attend her. When one of thefe damfels arrives at the age of twelve, fifteen, or fixteen, fhe is then, with much feftivity, and frequently at the expence of her on whom fhe has waited the preceding years, advanced to be one of thofe ladies that are exempt from waiting on others, or from any kind of employment.

It very feldom happens that one of thefe ladies proves pregnant by any of the Europeans; but if fuch a thing happens, it was fuppofed that the child, efpecially if it were a boy, would be murdered. Others again affured me, that fuch children were narrowly watched till the age of fifteen, and then were fent with the fhips to Batavia; but I cannot believe the Japanefe to be inhuman enough for the former procedure, nor is there any inftance of the latter having taken place. During my ftay in this country, I faw a girl of about fix years of age, who very much refembled her father, an European, and remained

mained with him on our fmall island the whole year through.

The most curious circumstance in this affair is, that when these ladies, after having ferved a certain term of years in those houses to which they were fold from their infancy, regain their perfect liberty, they are by no means confidered as being dishonoured, and often married extremely well.

In other refpects, modefty is a virtue to which thefe people are not much attached; and lassification and lassification in the prevail. The women feldom took any pains to cover their nudities when bathing in open places, (which they fometimes did) not even in fuch spots where they were exposed to the fight of the Dutch, or where these latter were to pass.

As no Japanefe has more than one wife, and fhe is not locked up in the houfe as in China, but is fuffered to keep men's company, and walk abroad when fhe pleafes, it was therefore not difficult for me to get a fight of the fair fex of this country, in the ftreets as well as in the houfes. The fingle women were always diftinguished from the married, and fome of them were even painted.

The colour with which they paint themfelves is called *Bing*, and is kept in little round porcelain bowls. With this they paint, not their cheeks, as the Europeans do, but their lips,

lips, and lay the colour on according to their own fancy. If the paint is very thin, the lips appear red; but if it be laid on thick, they become of a violet hue, which is here confidered as the greater beauty. On a clofer examination I found that this paint is made from the Carthamus tinetorius or bastard faffron.

That which chiefly diffinguished the married women from the fingle were their black teeth, which in their opinion were extremely beautiful, but in most other countries would be fufficient to make a man take French leave of his wife. To me, at leaft, a wide mouth with black fhining teeth, had an ugly and difagreeable appearance.

The black which is used for this purpose is called Obagur or Canni, and is prepared from urine, filings of iron, and fakki: it is foetid and corrofive. It eats fo deeply into the teeth, that it takes feveral days and much trouble to fcrape and wash it away. It is fo corrolive, that the gums and lips muft be well covered while it is laid on, or it will turn them quite blue. Some begin to make use of this ornament as foon as they are courted or betrothed.

January 20. This day the monies were paid on account of the Dutch, and all their affignments fettled, which is done only once a year. For this purpofe there affembled at the treafury in

in the town, interpreters, fervants, merchants, purveyors, and all others who had any demands. Every one who had money to receive was obliged to be there in perfon, or he could not be paid.

February the 7th. Having been fortunate enough to receive from the governor a fecond time, his permiffion to botanize, I, for the first time, took a walk about the town of Nagafaki. I was accompanied by feveral head and fubinterpreters, head and fub-banjofes, purveyors, and a number of fervants. This numerous train, did not, it is true, impede me in my quick progression up mountains and hills, but yet it made my diurnal expeditions rather expensive, as it became incumbent upon me towards evening to regale my wearied companions at fome inn or other, which amounted each time to fixteen or eighteen rixdollars. As often as the weather permitted, I made use of the liberty thus accorded to me, at least once or twice a week, till fuch time as I accompanied the ambaffador to the imperial court.

Hard by the cottages and farms in the vicinity of the town, but chiefly on rifing grounds and by the road-fide, I faw a great number of tomb-ftones erected, of various forms. It was faid, that for every one that died, a ftone of this kind was erected, and before it I frequently found placed

placed one or two thick bamboo canes, filled with water and either leaves or flowers. The ftones were fometimes rough and in their natural flate, but more frequently hewn with art, with or without letters engraved on them, and these either gilt or not gilt. These buryingplaces are frequently seen from afar, on account of the great number of flones erected.

I found alfo here and there, by the fide of the roads, large holes dug, in which the farmers collected urine and manure that had been dropped and fcattered about, which they very carefully accumulated, and ufed for the improvement of the land, but which gave out a difagreeable, and often intolerable, ftench to the traveller.

The town of Nagafaki is in its fituation very much expoled; it has neither citadel, walls, nor foffé, but it has crooked ftreets, and a few canals dug for the purpofe of carrying off the water from the furrounding mountains, which reach quite to the harbour. Before the time of the Portugueze it was only a village; but has fince, by the emigrations that have been made thither on account of commerce, been extended to its prefent fize. There are a great number of temples, and the prettieft fpots imaginable on the heights furrounding the town. At each end of the

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the ftreets there is a wooden gate, which can be locked, and by this means all communication with other ftreets cut off. At night they are always locked. In each ftreet, which is feldom more than thirty or forty fathoms in length, and contains about the fame. number of houfes, there is always an officer appointed to fuperintend and inspect it; and in like manner in each ftreet there is a house, in which an apparatus is kept for the prevention of fire. The houfes are fearcely ever two ftories high, and when they are, the upper ftory is generally low. The town is governed by four burgomafters, who have under them a fufficient number of (Ottonas), attendants of diff ferent ranks and degrees, by which means good. order and fecurity is procured, and maintained in the beft and moft ample manner.

In the gardens, as well in as out of the town, I obferved feveral European culinary vegetables cultivated, and of thefe I had already feen fome carried on board of the Dutch fhip and to the factory. Of this kind, were Red Beet (*Beta* vulgaris), the root of which was of a deeper red than any I had ever feen at any other place out of Europe; Carrots (*Daucus Carota*), Fennel (*Anethum feniculum*), and Dill (*Anethum* graveolens), Anife (*Pimpinella Anifum*), Parfly (*Apium petrofelinum*), Afparagus (*Afparagus officinalis*); feveral bulbous plants, fuch as Leeks, VOL. III. G Onions,

Onions, and others (Alium fiftulofum, Cepa); Turnips (Brafica rapa), Black Radifhes (Raphanus), Lettice (Lattuca fativa), Succory and Endive (Cichorium Intybus & Endivia), befides many more.

On the hills out of the town I observed, that near every village large ranges of floping grounds at the foot of the mountains were planted with Batatas roots (Convolvulus edulis), which were mealy, and agreeable to the taste. The plants with their stalks and leaves lay close to the ground, and had not a single flower on them. They are much more agreeable to the taste, and easier of digestion, than potatoes (Solanum tuberofum (which they have tried to cultivate here, but with very indifferent success.

The Juniper tree (Juniperus communis) which is generally indigenous to the north of Europe, I found also here fcattered up and down in different parts, chiefly near fome temple, but very fcarce.

1 likewife found the Calamus aromaticus (Acorus calamus) growing wild here in moift places. It was confidered by the Japanefe, on account of its flrong aromatic tafte, as a medicine of great powers, but they did not know its true and proper ufe.

A kind of Ginger (Amomum mioga) grew wild in fome few spots out of the town, though in

in very fmall quantities. The root is tolerably hot and acrid, and nearly as good as common ginger, and was faid to be fometimes used in its stead.

Ivy (*Hedera*) grew up in feveral places green and handfome. At first, I thought it unlike the ordinary European Ivy, on account of its having, for the most part, entire and undivided leaves; but in process of time I perceived a great alteration both in the form and fize of the least.

'The Box-tree (*Buxus virens*) was not uncommon: it was found both in a wild and cultivated ftate." Of its fine and clofe wood, combs were made, which, when covered with red varnifh, were ufed by the women to ftick in their hair by way of ornament.

The Bamboo (Arundo bambos) which is the only kind of grafs that grows to the fize of a tree, grew in many places, and differed much both in height and thicknefs. The root of it is made ufe of here, as well as on the India iflands, for (Atjar) pickling with vinegar. The thicker ftems were ufed for carrying burthens, and the finer branches as fhafts for pencils, and when flit up, for fan-fticks, and for many other purpofes.

Near fome farms, and particularly near the temples, I found a very curious fhrub of fix or G 2 eight

eight feet in height, and of the Celastrus kind (Celastrus Alatus), which had projecting, blunt, and compressed borders all along its branches, and was now full of ripening fruit. I was told that the branches of this shrub were used by lovers, to fasten to the outside of the door of the house in which the object of their desires refided.

The Chenopodium Scoparia was faid to be used by fome people in this country as a medicine.

The Alcea rofea and the Malva Mauritiana were frequently found cultivated in fmall gardens in the town, for the fake of their large and elegant flowers.

The Mentha piperita, which grew wild in many places about Nagafaki, and the Ocymum crifpum, which ftill adorned the hills, were ufed as a tea or infufion in colds. This latter herb, when boiled, yields a red decoction, with which the Japanefe frequently gave a red colour to black radifhes and turnips.

Several kinds of fweet potatoes (*Diofcorea*) grew wild in the environs of Nagafaki, but I did not obferve that any of them were ufed as food, except the *Diofcorea Japonica*, the roots of which being cut into flices and boiled, had a very agreeable tafte.

Common Hemp (Cannabis Sativa) grew in many places, both in a wild and cultivated flate. I found

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latter

I found here two forts of Spanish pepper, chiefly in a cultivated state. The most common was the *Capficum Annuum*, which the Japanese feldom use themselves, but fell it for the most part to the slaves in the Dutch factory. The other was the *Capficum groffum*, which was kept in jars, and confined so as to grow small and distorted, properties which the Japanese particularly fancy in many plants, a fancy peculiar to themselves, and in which they differ from all other nations.

Tobacco (*Nicotiana Tabacum*), grew alfo in fome places, but fo fparingly, that no large plantations of it were to be obferved. This herb, fo agreeable, and now become fo indifpenfibly neceffary to many millions of men, was first brought hither by the Portugueze, and is almost the only relique left behind them in this country. The Japanese have no name for it in their language, but call it Tobacco, and simoke it, cut as fine as the hair of the head, in fmall metal pipes.

I found a *Convallaria Japonica* at this time in fruit. The knobs at the roots of this plant were preferved in fugar, and were highly commended by the Japanese and Chinese as good in different diforders.

Buck-wheat (*Polygonum fagopyrum* and *Multiflorum*) was not uncommon near the farms and on the hills, the former in a cultivated, and the

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latter in a wild ftate. From the former, flour was prepared, of which fmall cakes were made, which were boiled; thefe were commonly coloured, and fold to the lower clafs of people. The root of the latter was faid to be a cordial, and was used for that purpose quite raw. I was told it tafted beft when roafted in the embers.

Windfor beans (Vicia faba) and Peas (Pijum Sativum), as also fome species of French beans (Phaseolus vulgaris & radiatus) were common among the farmers; and the latter fort was very much cultivated in the gardens, from whence they were carried for fale both into the town and to the factories.

February the 11th. The time drawing near for our journey to the court, we began to prepare for it by degrees.

Although the ambaffador himfelf goes by land, yet a great part of the luggage is fent by fea to Simonofeki, Fiogo, and other places. This day were put on board of a tolerable large veffel, feveral chefts with different forts of wine in bottles, liquors, ale in bottles, kitchen furniture, and fome empty chefts, for carrying merchandize in on our return. This veffel was to fail for Simonofeki, and on our arrival there, to carry us on to Fiogo.

This and the following days, the prefents which we were to carry with us were prepared, confifting of cloths of different colours and qualities,

lities, chintzes and filks, with other articles. Thefe prefents were intended for the reigning fecular emperor, the hereditary prince, the privy counfellors, and other perfons of diffinction at the court, and were packed up in large chefts, which, that they might not be left to the mercy of the winds and waves, were carried the whole way for the fpace of 320 miles.*

The 18th of February was, with the Japanefe, the laft day of the year. On this day, therefore, and yesterday, all accounts between private perfons were to be closed; and these, as well as all other debts to be paid. Fresh credit is afterwards given till the month of June, when these must be a settlement again. Among the Japanese, as well as in China, in case of loans, very high interest is frequently paid, viz. from 18 to 20 per cent. I was informed, that if a man did not take care to be paid before new year's day, he had afterwards no right to demand payment on the new year. Happy the people, who at the beginning of every new year, can reckon themfelves free from debt, and owe no man any thing.

The 19th was the new year's day of the Japanefe and Chinefe, when every one dreffed in his holiday clothes, wifhes his neighbour joy, goes about vifiting with his family, and diverts himfelf almost the whole of the first month.

• In fpeaking of Japan, the Author computes by Japanele miles, which nearly correspond with the French leagues. G 4 The

bezima and Nagasaki, 1776.

The year is divided according to the courfe of the moon, fo that fome years have twelve and others thirteen months; and the new year makes its entry in February or March. They have no weeks confifting of feven days, or of fix working days, and day of reft; but the first or fifteenth day in each month, is, in fact, a fabbath, or a day of reft. On thefe days no mechanic works, and even the profitutes buy their freedom for that day, confidering it as the greateft fhame to be obliged to receive the careffes of men. On new year's day, as we faid before, they go about in their holiday drefs, which is composed of fine blue and white check. . The night and day taken together, is divided into twelve hours only; and the whole year through, they regulate themfelves by the fun's rifing and fetting. The hour of fix they reckon 'at fun-rife, and the fame at fun-fet : mid-day and mid-night are always at nine.

Time is not meafured by watches or hourglaffes, but by burning matches, which are twifted like ropes, and divided by knots: when one of thefe, after being lighted up, has burned down to a knot, which denotes the elapfe of a certain portion of time, it is made known in the day time, by certain ftrokes on bells near their churches, and in the night by ftriking two pieces of wood against each other, which is done by the

the patroling watch. Children are always deemed to be a year old, at the end of the year in which they are born, whether this be at the beginning or latter end of it: fo that if a child is born in the laft month, it is reckoned a year old on the new year's day enfuing. Their year commences with Nin—o, or 660 years before the birth of Chrift.

A few days after the Japanese new year's day, the horrid ceremony was performed of trampling on fuch images as reprefent the crofs, and the Virgin Mary with the child. Thefe images, which are made of caft copper, are faid to be about twelve inches in length. This ceremony is performed for the purpole of imprinting on every one, an abhorrence and hatred of the Chriftian doctrine, and of the Portuguefe, who attempted to propogate that doctrine, and at the fame time to difcover, whether any remains of it be yet left in any Japanefe. The trampling is performed in fuch places, as were formerly most frequented by the Chriftians. In the town of Nagafaki, it continues for the fpace of four days; after which period, the images are carried to the adjacent places, and at last are laid by till the following year. Every one, except the governor and his train, even the finalleft child, is obliged to be prefent at this ceremony; but that the Dutch, as fome have been pleafed to infinuate,

finuate, are obliged to trample on these images, is not true. At every place, overseers are present, who affemble the people by rotation in certain houses, calling over every one by his name in due order, and seeing that every thing is duly performed. Adults walk over the images from one side to the other, and children in arms are put with their seet on them.

The figns of the Zodiac are here, as elfewhere, twelve; but they have different names from those of the Europeans; e. g. 1. Ne, the Rat. 2. Us, the Ox. 3. Torra, the Tiger. 4. Ow, the Hare. 5. Tats, the Dragon. 6. Mi, the Serpent. 7. Uma, the Horse. 8. Tsitsuffe, the Sheep. 9. Sar, the Ape. 10. Torri, the Cock. 11. In, the Dog. 12. T, the Bear.

Certain years derive from these signs also their names : thus the year 1774 was the Horseyear of the Japanese, and 1776 their Ape-year.

The months, which in confequence of the unequal courfe of the moon, never perfectly correfpond with our's, have their refpective names according to numerical order; and as, during our flay here, we were obliged to regulate ourfelves by the Dutch, as well as by the Japanefe almanacks, we formed every year an almanack common to both, which fhewed the relation of thefe two different modes of reckoning time. Of this I here prefent the reader with a brief abftract only,

only, from which the names of their months, at the fame time, may be found.

1776, or Ape-year, has 355 days.

		033 1	
SJOGUATS,		July, —	I
corresponds with		- man	
FEBRUARY.		ROKGUATS.	-
I February, I	9 I	July, —	16
11 2	9 16		31
12 March, —	1 17	August,	I
30 1	9 29		13
NIGUATS.		Sitsguats.	
I March, 20	I	August, -	14
12 3	1 18		31
13 April, —	1 19	September,	I
29 1	7 30		12
SANGUATS.		FATSGUATS.	
1 April, — 1		September,	13
13 30		and the party	30
14 May,	1 19	October,	I
30 1'			II
SIGUATS.		KUGUATS.	
1 May, — 1	I constant	October,	12
14 - 3	1 20		31
15 June, -	21	November,	I
29	30	Corner and manager	10
GOGUATS.		SJUGUATS.	
1 June, - 16		November,	
15 39	20	2 200 20	30
1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -			21

21	December,	a room	30	- 9
30		10	SJUNITSGU	ATS.
	SJUITSGUAT	s.	I January,	10
I	December,	II	22	- 31
21	1. <u></u>	31	23 February,	I
	1777.	98 11	29 —	- 7
22	Tanuary.	T		

In this manner, the months are reckoned by the name of the 1ft, 2d, 3d, and fo on to the 12th; and the years contain an unequal number of days. Every fecond or third year is leapyear, of which there are feven in the fpace of 19 years.

There are feveral grand feftivals in the year, which are kept one or more days together: but the celebration of the feventh day, as a Sabbath, is unknown here; and confequently, the months and year are not divided into weeks of feven days each.

The moft remarkableholidays in the year 1776, during the time of my refidence here, were the following: In Goguats, the 5th day or the 20th of June, the Pelang feftival; in Sitfguats, the 7th day, or the 20th of August, the Star-feftival; and the 13th, 14th, and 15th of the fame month, or the 26th, 27th, and 28th of August, the Grand Lantern feftival; in Kuguats, the 7th, 8th, and 9th, or the 12th, 19th, end 20th of October, Matsuri was celebrated for three days

days together. There were befides the following remarkable days, viz. In Sjoguats the 4th, and following days, when the images of the Virgin Mary and the crofs were trampled under foot by the Japanefe. The 15th of the fame month, or the 4th of March, when the Dutch ambaffador fet out on his journey to Jedo. Fatfguats the 1ft, or the 13th of September, when the Japanefe fair (faffak) was kept; in Kuguats the 15th, or the 26th of October, when the Dutch fair (faffak) commenced; and in Kuguats the 19th and 20th, or the 30th and 31ft of October, when firft one and afterwards the other fhip, were obliged to fet fail on the days appointed from Nagafaki for Papenberg.

On the 22d of February, and the following days, was performed in Nagafaki, and the adjacent places, the ceremony already defcribed of trampling on the copper images, concerning which, I endeavoured to gain every poffible information. Of the officers that were at this time on the ifland, there was but one, who profeffed having once had an opportunity of feeing it is his way, when fent by the chief to the governor of the town, about fome matters refpecting the preparation for the intended journey to the court.

On December the 25th, the chief, accompanied by feveral fupercargoes, writers and interpreters, went

went to the town, to take leave of the governor, previous to their fetting out.

March 2d. Mine, and my fellow travellers' chefts, with clothes, together with the medicine cheft, were examined on the island, then fealed, and immediately fent to the storehouse; where they were kept, till the day that we fet out on our journey. The medicine cheft is large, and is furnished with medicines from the dispenfary, which is under the doctor's care, and is fituated near his apartment.

The Japanefe use no fealing-wax for fealing; but twift and tie a paper about such things as they wish to fecure, in such a manner, that they can easily perceive if it has been touched. In this way, they feal up the locks of the florehouse itself, placing less dependence on their locks, than on their curious paper knots.

JOURNEY TO THE COURT IN 1776.

ON the 4th of March, 1776, the ambaffador fet out from Dezima, on his journey to Jedo. The 15th or 16th of the first month of the Japanese year, is always fixed for commencing this journey. There were only three Dutchmen, or rather Europeans, who took this journey, viz. Mr. FEITH, the an baffador, as chief in the com-

JOURNEY TO THE COURT, 1776. 95

commercial department; myfelf as phyfician to the embaffy, and the fecretary Mr. KOEHLER. The reft of our retinue, which confifted of about 200 men, were merely Japanele place-men, interpreters, fervants, and valets. In paffing the guard on the bridges, which join the town to the factory, we were clofely fearched; but our chefts and other baggage, which had already been fearched and fealed, went through free: we were also attended through Nagafaki, by the Dutch belonging to the factory, as likewife by a multitude of fuch Japanefe, as have any office in, or bufinels with the factory. The latter accompanied us to a temple out of town, where we baited a fhort time, and treated our jovial company with fakki. On our leaving this place, all thefe Japanefe who were now to part with us, had placed themfelves in groups, according to their different ranks and conditions of life, for above half a mile in length, on both fides of the road, along which we were travelling, which not only made a very fine appearance, but likewife did us great honour. Thefe Japanese confifted of the Ottonas of the town and island, the head and fub-interpreters, with the learners, head and fub-purveyors, head and fub-banjofes, culi-mafters, and feveral others who in any fhape were connected with the Dutch.

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A banjos was, by the governor of Nagafaki, appointed leader of the whole caravan, and ordered every thing both in going and returning. He was carried in a large Norimon, and a pike was borne before him, to denote his authority and high command. To execute his orders, feveral inferior Banjofes were appointed. The chief interpreter, who is generally a man advanced in years, is carried in a Cango, has the care of the cash, and the management of every thing during the journey, paying all expences for the Dutch Company's account, and that generally with fuch care and parfimony, that he is fometimes a confiderable gainer by it, fo that this journey is always fuppofed to be very profitable. Two Japanefe cooks accompany them from the factory, for the purpose of dreffing the victuals, that are to be ferved up at the ambaffador's table; alfo fix Japanefe fervants, who understand and speak Dutch, to serve as waiters, befides those fervants that are fent by the governor of Nagafaki, to attend on the Dutch, and who do not underftand nor fpeak their language. The cooks were fent before during the whole journey, in order to get the victuals ready by the time we fhould arrive at the inn, where we dine. With them were fent the neceffary provisions, a camp table, three camp chairs, table linen, and table furniture, which were

were always ready and in order, on our arrival at dinner or fupper. Some clerks attended the cooks, to order what was requifite at the inns for the whole retinue, and to keep an account of the expences.

The ambaffador, as well as his phyfician and fecretary, travelled in large handfome and lacquered Norimons. In KÆMPFER's time, the two latter gentlemen were obliged to perform the journey on horfeback, exposed to cold, rain, and all the inclemency of the weather. These Norimons or Sedan-chairs, are made of thin boards and bamboo canes, in the form of an oblong fquare, with windows before, and on each fide. The fide-windows are fastened to the doors, through which one may get in and out of the carriage on both fides. Over the roof runs a long edged pole, by which the vehicle is carried on the bearers' shoulders. It is fo large that one may fit in it with eafe, and even lie down in it, though not without, in fome meafure, drawing up one's legs. It is not only adorned on the infide, but likewife covered on the outfide in the most elegant manner, with the most coftly filks and velvets. At the bottom lies a matrafs covered with cut velvet, and it has a flight covering over it, either of the fame materials or of fome coftly filk ; and behind the back, and on each fide, hang oblong cufhions, alfo co-VOL. III. H vered

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vered with velvet; in the place where the feat should be, a round cushion is laid with a hole in the middle. In front, there is a shelf or two, for putting an ink-stand, books, or other small articles on. The windows at the fides may be let down, when fresh air is wanted, and they may be closed both by filk curtains, and by rolling curtains made of bamboos, when the perfon in the carriage wifhes not to be feen. The travelling in this chamber is very commodious; fitting long in it feldom proves tirefome. The porters that bear this light vehicle on their fhoulders, are in number according to the rank of the perfon they carry, from fix to twelve and more; and when there are more, fome of them walk leifurely by the fides, for the purpofe of relieving each other during the journey. While they are bearing the norimon, they fing fome air together, which makes them keep up a brifk and even pace.

Befides those articles which had been fent from Nagafaki by water, were carried partly on horseback and partly by porters on foot, our fmall chefts of clothes, lanterns to use in the dark, a stock of wine, ale, and other liquors, for our daily confumption, and a Japanese apparatus for tea, in which we could boil water while we were on the road. The Europeans, however, very feldom used this great relaxer of the stomach, but preferred a glass of red wine

NAGASAKI, 1776.

wine or Dutch ale; we therefore provided ourfelves with a bottle of each of thefe, which were put into the fore part of the norimons, at our feet; as alfo a fmall oblong lacquered box, with a doubled flice of bread and butter, of the fame form. Every one that travels in this country, always carries his bed with him. We were therefore obliged to do the fame during the whole of the journey, both coming and going. And as it was neceffary to make a great flow in every refpect, in order to fupport the dignity of the Dutch company, the bedding, of courfe, confifted of coverlits, pillows, and matraffes, covered 'over with the richeft openworked velvets and filks.

On the other hand, the Japanefe, who either went on foot or on horfeback, were provided with a hat in the form of a cone, and tied under the chin; a fan, which at the fame time ferved as a guide, an umbrella, and fometimes a very wide coat made of oiled paper to keep out the rain, which is as light as a feather. Thofe that travelled on foot, fuch as fervants, hoftlers, and the inferior order of fervants, were likewife provided with thin fpatterdafhes, feveral pair of ftraw fhoes, and wore their night-gowns tucked up.

The whole of this numerous caravan, compoled of fuch different people, and travelling in fuch different ways, formed a delightful fpectacle for an eye not used to fimilar fights, and H 2 was

was to us Europeans the more pleafing, as we were received every where with the fame honours and refpect as the princes of the land, and were befides fo well guarded, that no harm could befal us, and at the fame time fo well attended, that we had no more care upon our minds than a fucking-child: the whole of our bufinefs confifting in eating and drinking, or in reading or writing for our own amufement, in fleeping, dreffing ourfelves, and being carried about in our norimons.

On the first day, passing by Fimi, two leagues from Nagafaki, we proceeded to Jagami, one league farther on, and from thence to Isafaia, yet four leagues farther, where we took up our first night's lodging.

At Jagami, where we dined, we were received by the hoft in a more polite and obfequious manner than I ever experienced fince in any other part of the world. It is the cuftom of this country for the landlord to go to meet the traveller part of the way, and with every token of the utmoft fubmiffion and refpect bid them welcome; he then hurries home, in order to receive his guefts at his houfe in the fame humble and refpectful manner, after which fome trifling prefent is produced on a finall and low fquare table; and then tea and the apparatus for finoking, which, however, we did not ufe. Being fhewn into the rooms prepared for us, we found the table-

ISAFAIA, 1776.

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table-cloth laid; when after taking a dram* to whet our appetites, we dined, drank coffee, and then prepared for fetting out, after those gentlemen that were fond of finoking had lighted their pipes.

Here we received for the commiffaries account fifty Japanefe thails, amounting to about the fame number of Dutch rixdollars, for defraying the triffing expences which we might be obliged to make individually in the courfe of the journey, and which were fo exactly calculated, as not to leave any overplus. Thefe were the first Japanese coins which fell into our hands, and which came under my infpection. The first disburfement we made was in new-year's gifts to our fervants and valets at Dezima, as alfo to the bearers of our norimons, which, for my fhare, amounted to fomewhat more than ten rixdollars.

On the following morning, being the 5th of March, we proceeded on our journey, taking the road for Omura, where we dined, at the diftance of three leagues, and then went on to Sinongi, where we flept, fituated five leagues from thence. In the year 1691, when KÆMP-FER went on the journey to the court, the ambaffador took another route to Sinongi, viz. acrofs the bay near Omura, to avoid which we took a round-about way to Ifafaia, but without

* A very prevalent cuftom in Sweden, and fome other countries in the north of Europe. In the original Appenits fup, or Appetite dram. [T.]

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failing across the large bay by Simabara, which is the road that KÆMPFER took, when, in the year 1692, he went, for the fecond time, the fame journey to the Imperial Court.

On the fixth, in the morning, after travelling three leagues, we arrived at Orifino, where is a fulphureous warm bath. After having viewed the bath, we travelled three leagues and a half, before we got to dinner at Takkiwo. After dinner we paffed by Swota to Oda, three leagues and a half; and then went two leagues and a half farther on to Otfinfu, where we flept.

The warm bath, which was abfolutely boiling hot, was walled in, and had a handfome houfe near it, for the accommodation of the invalids that used it. The hot water was distributed by means of conduits, to feveral places, where the fick could fit down, and, by means of two different cocks, draw off, accordingly as it fuited them beft, either hot or cold water ; which latter was conveyed hither by art. Befides this, there were feveral accommodations for the patients to reft and refresh themselves after bathing, as also for walking, all which were very neat and clean. The Japanese use this and other fimilar baths, with which the country abounds, in venereal complaints, the palfy, itch, rheumatifm, and many more diforders.

Swota is remarkable on account of the large jars (the largest, indeed, in the world) which are

SWOTA, 1776.

are made here: they are composed of a brown clay, well burned, and of such an enormous fize, as to hold feveral pails full of liquor. The Dutch buy annually a great many of them, and carry them to Batavia, where, as well as in other parts of the East-Indies, they are used for holding water, and fell to advantage. In these, the water that is used for their daily drink, is kept cool, at the fame time that the fediment fettles at the bottom, fo that the water, by this means, becomes more pure and wholesome.

The road which we had travelled the preceding days, was very rugged and tirefome; but, after we got into the province of *Fifen*, the country appeared more fertile, finer, more thickly inhabited, and more populous. The villages here were nearer to each other, were much extended in length, and were fometimes two together, each of them half a league long, and only diffinguifhed from each other by means of a rivulet, a bridge, or by the difference of name.

The country was cultivated all over ; exhibiting the fineft fields, loaded with rice and other grain.

The province of *Fifen* is, befides, well known on account of its beautiful and valuable porcelain: I had, before this, feen fome of it, in the Dutch factory at the fair, and had now an op-H 4 portunity

portunity of informing myfelf farther concerning it. It is made of a perfectly white clay, which in itfelf is very fine, neverthelefs is wrought with the greatest diligence and pains, and inexpressibly well; fo that the vessels and ornaments which are made of it, become transparent and extremely beautiful, and at the fame time are as white as fnow.

The day following, being the 7th, we had a league to go to a tolerably large river, called *Kaffagawa*, over which we were to pafs, and another league to the town of *Sanga*, which is a league and a half long. From thence, we proceeded three leagues to another finaller town called *Kanfaki*, paffing by *Fiofabara*, which was fituated about half-way to it. Here we dined; and, going farther on, paffed *Nakabara*, at the diftance of two leagues, and *Todoriki*, fomewhat above a league, till we came to *Tayfero*, one league farther, where we flept.

Sanga, which is the capital of the province, has a caftle, which is furrounded by foffes and walls, and has guards at its gates. This, like most of the towns in this country, is regularly built, with straight and wide streets. There are also several canals, by which water is conveyed through it.

The towns, in general, in this country, differ chiefly from the villages, which are also very long,

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ITSKA, 1776.

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in having one fireet, while the towns have more: befides, the towns are furnished with gates, and furrounded by fosses and walls, and, fometimes, a citadel.

The people, and efpecially the women, are of a fmaller fize in this province than in the former; and the married women, although, in other refpects, they are handfome and well-fhaped, diffigure themfelves by pulling out all the hairs of their eye-brows, which, with them, ferves to denote the marriage-ftate, in like manner as black teeth do at Nagafaki.

We lay at *Tayfero* that night; although KÆMPFER, in his Hiftory of Japan, mentions that this was confidered in his time, as portending misfortune, and was therefore prohibited. The reafon for this was, that, in the courfe of one of these journies, a banjos and one of the head-interpreters had quarelled, and the former, after having killed the latter, had likewife made away with himfelf.

March the 8th, we travelled nearly ten leagues to It/ka town; paffing, in our way, by feveral villages, large and finall, and over many very high mountains. We arrived first at Farda, two leagues off, and afterwards at Jam 190, one leagues more, where we dined. The road from thence went over a high mountain, and conducted us a league and a half down to Fiamitz, a pleafing fpot, where we baited fome time, regaled

regaled ourfelves and officers with fakki, and made the landlady a fmall prefent in money, to the amount of feven maas and five conderyns, which is cuftomary at this place. After this, we went a league and a half farther on, to Utfini, where we also gave our bearers a little reft.

This day, in paffing through the province of *Tfikudfen*, we were conducted by an officer who had been fent by the governor of the province to welcome and conduct us through his territories.

How much foever the Europeans are defpifed in their factory, and in however contemptible a light the Japanefe, are used to confider all foreigners, yet it is not more furprizing than true, that, in the courfe of our journey to and from the court, we were every where received not only with the greateft politeness and attention, but with the fame respect and efteem as is shown to the Princes of the country, when they make their journies to the imperial court. When we arrived at the borders of a province, we were always met by an officer, fent by the Lord of it, who not only offered us, in the name of his employer, every affiltance that might be required with refpect to people, horfes, veffels, &c. but alfo accompanied us to the next frontiers, where he took his leave of us, and was relieved by another. The lower class of people, alfo, showed us the fame tokens of veneration and refpect, as to Princes ;

UTSINI, 1776.

Princes; bowing with their foreheads down to the ground, and even at times turning their backs to us, to fignify, that they confider us in fo high a light, that, in their extreme infignificance, they are unworthy of beholding us.

The roads in this country are broad, and furnished with two ditches, to carry off the water, and in good order all the year round; but efpecially at this feafon, when the Princes of the country, as also the Dutch, take their annual journey to the capital. The roads are, at this time, not only ftrewed with fand, but, before the arrival of travellers, they are fwept with brooms; all horfe-dung, and dirt of every kind, removed, and, in hot, dufty weather, they are watered. Their care for good order. and the convenience of travellers, has even gone fo far, that those who travel up the country, always keep to the left, and those that come from the capital, to the right; a regulation which would be of the greatest utility in Europe, enlightened as it is, where they frequently travel upon the roads with lefs difcretion and decorum. The roads here are in the better order, and last the longer, as no wheel carriages are used, which do fo much damage to the roads. To make the roads ftill more agreeable, the fides of them are frequently planted with hedges, and on this and the

the preceding days, I obferved them formed of the tea fhrub.

Mile-pofts are fet up every where, which not only indicate the diftance, but alfo, by means of an infeription, point out the road. Similar pofts are alfo found on the crofs-roads, fo that the traveller in this country cannot, eafily, lofe his way.

Attending to all thefe circumftances, I faw, with aftonifhment, a people, which we confider, if not in a ftate of barbarifin, at least as unpolifhed, exhibit, in every inftance, vefliges of perfect order and rational circumfpect reflection; while we, in our more enlightened quarter of the globe, are every where deficient in efficacious, and, in fome places, in almost every regulation tending to the convenience and ease of travellers. Here I found every thing tend to a good end, without boast and unneceffary parade; and no where did I observe on the mile-posts the name of the Governor who had crected them, a circumstance which, in fact, fo little concerns the traveller.

All the miles are meafured from one point only of the kingdom, viz. from Niponbas, or the bridge in the capital of the country, Jedo.

No post-coaches, or other kinds of wheelcarriages, are to be found in this country for the fervice of travellers; therefore, all those that are poor, travel on foot, and fuch as are able to

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UTSINI, 1776.

pay, either ride on horfe-back, or are carried in Kangos or Norimons. Inftead of their long night-gowns, they often wear trowfers, or linen breeches, which reach down to the calves; and travelling foldiers tie thefe half-way up their thighs. Such as ride make, for the most part, a ftrange figure; as, frequently, feveral perfons are mounted on one horfe, fornetimes a whole family. In this cafe, the man is feated on the faddle, with his legs laid forward over the horfe's neck; the wife occupies a bafket made fast to one fide of the faddle, and one or more children are placed in another backet on the other fide: a perfon always walks before to lead the horfe by the bridle. People of property are carried in a kind of fedan chairs, that differ from each other in point of fize and ornament, according to the different rank of the owners, and, confequently, in point of expence. The worft fort are finall, infomuch that one is obliged to fit in them with one's feet under the feat; they are open on all fides, covered with a finall roof, and are carried by two men. The Kangoes, more commonly called Kagoes, are covered in, and closed on the fides; but they are almost fquare, and far from being elegant. The largeit and handfomeit are called Norimons, are used by perfons in the higher departments of office, and are borne by feveral men. At the inns in every town and village, there is a number

number of men who offer their fervices to the traveller.

These Norimons and Kango-bearers can carryvery heavy burthens to a great distance, and not only travellers but goods, which they carry tied to each end of a pole or bamboo across their shoulder; they generally go a Japanese mile (or league) in an hour, and from ten to twelve of these miles in a day.

On the 9th of March, proceeding on our journey, we arrived at Nogata river, at the diftance of three leagues and a half from the place we had fet out from, which river we croffed, and travelling a league and a half farther, dined at Koijanoffa. From thence we proceeded to Kurofacky, at the diftance of three leagues, and going three leagues farther ftill, came to a large and rich commercial town, called Kokura.

Kokura is efteemed one of the largeft towns in the country, and carries on extensive trade; but at prefent, the harbour is fo filled up, that only fmall veffels and boats can get up to the town. This town is a Japanefe mile (or league) in length, forming an oblong fquare, and has a river which runs through its ftreets down to the fea. The gates are guarded by officers and foldiers. At one end of the town, and along fide of the river, ftands the prince's citadel, which makes a very handfome appearance, is well fortified in the fashion of this country, furrounded by fosfices

KOKURA, 1776.

foss and walls, and receives additional strength from a high tower. In this the prince of Kokura refides, and keeps his court.

Before we entered into Kokura, we were met in the name of the prince, received, and conducted through the town to the inn, by two noblemen from the caftle. Here we were exceedingly well lodged, and remained till the next day in the afternoon.

According to ancient cuflom, the fervant which was fent with us by the governor of Nagafaki, to wait on us during the journey, received here a fmall prefent of one thayl and five maas, equal in value to about a rixdollar and a half.

Here, as well as at all the other inns, we were lodged in the back part of the houfe, which is not only the moft convenient, but the pleafanteft part, having always an out-let and view into a back-yard, larger or finaller, which is embellifhed with various trees, fhrubs, plant, and flower-pots. At one fide of this fpot, there is alfo a finall bath for firangers to bathe in, if they chufe. Amongft other things that were common in feveral places, fuch as the *Pinus Sylveftris, Azalea Indica, Chryfanthemum Indicum*, &cc. I alfo found here a tree, which is called *Aukuba*, and another called *Nandina*, both which were fuppofed to bring good fortune to the houfe.

The front part of the house is generally either a shop for the sale of goods, or a workshop; and just behind this, is the kitchen and the apartments occupied by the family, so that strangers occupy the most commodious part of the house, and are the farthest removed from the noise of the streets.

The houfes are very roomy and commodious, and never more than two ftories high, of which the lower ftory is inhabited, and the upper ferves for lofts and garrets, and is feldom occupied.

The mode of building in this country is curious, and peculiar to the inhabitants. Every house occupies a great extent of ground, is built in the flile of frame-work, of wood, fplit bamboos, and clay, fo as to have the appearance of a stone house on the outside, and covered in with tiles of confiderable weight and thickness. The whole houfe makes but one room, which can be divided, according as it may be found neceffarv, or thought proper, into many fmaller rooms. This is done by moving flight partitions, confifting of wooden fiames, pasted over with thick transparent paper, which flide with great ease in grooves made in the beams of the floor and roof, for that purpole. Such rooms were frequently partitioned off for us and our retinue, during our journey; and when a larger apartment was wanted for a dining room, or any other pur-

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purpofe, the partitions were in an inftant taken away. One could not fee, indeed, what was done in the next room, but one frequently overheard the conversation that passed there.

As the Japanese never have any furniture in their houfes, and confequently no bedfteads, our matraffes and beds were laid on the floor, which was covered with thick ftraw mats. The Japanefe, who accompanied us, lay in the fame manner, but had no pillows; inftead of which, they used oblong lacquered pieces of wood. With the above apparatus for fleeping, the Japanefe's bed-chamber is put in order, and he himfelf up and dreffed, in the twinkling of an eye; as, in fact, a longer time is fcarcely requifite for him to throw the night-gown over him, that has ferved him for bed-clothes, and to gird it round his waift. And as they have neither chairs nor tables, they fit on the ftraw mats, with which the floor is covered, with their legs under them : and at dinner, likewife, every one of the difhes is ferved up feparately, to each of the guefts, in lacquered wooden cups with covers, on a fmall fquare wooden falver.

During our ftay here, we were not allowed to walk about the town, and acquire a more accurate knowledge of it.

On the 11th of March, in the evening. we croffed in a yacht over the bay, to Simonofeki, a vol. 111. I trip,

trip, which was reckoned to be about three leagues. Here we took up our night's lodgings at an inn.

Between Kokura and Simonofeki, a low oblong rock was vifible, which at low water appeared a little above the furface, but was quite covered at the tide of flood. A fhip was faid to have ftruck on this rock, that was carrying over the Emperor TAYKO, and to have been loft: The Emperor was faved; but the Captain of the veffel, in order to wreak vengeance on himfelf, according to the cuftom of the Japanefe, ripped up his own belly. In memory of this difafter, a fquare hewn ftone, about twenty-four inches high, has been crected on this rock.

Simonofeki is not the feat of a Prince, nor, indeed, one of the largeft towns in the country; but its fituation renders it a place of note, and it has a very good and much-frequented harbour, where frequently from 200 to 300 veffels are feen riding at anchor. Generally fpeaking, all fuch veffels run in here as are bound from the Weftern to the Eaftern coaft, or vice verfa, either for the purpofe of difcharging fome of their wares here, or of making a good port in cafe of a ftorm.

On account of the great number of people who flock to this place from all parts of the kingdom, the trade here is very brifk. As wares

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wares and commodities are brought to this port from other parts, a great number of articles are to be had here that are not to be procured elfewhere. In a place where fo many people are affembled together, from all parts of the country, public flews were undoubtedly, according to the ideas of the Japanefe, highly neceffary; and houfes of this kind have, therefore, been eftablifhed, for the accommodation of travellers. Thefe the Dutch were not even fuffered to fee; but when we had liberty to walk about the town, the gates of that fireet where they flood, were carefully locked.

This town is fituated at one end of Nipon, which is the largeft of all the islands, and contains the two capitals of the kingdom, in which also there is a road to Jedo; this however we did not take, it being very bad, and mountainous.

A fpecies of Ulva (or fea weed) was gathered on the fea beach here, which was called *Awa Nori*, and which, when dried and roafted over the coals, and afterwards rubbed down to a very fine powder, was eaten with boiled rice, and fometimes put into Mifo-foup.

For a cold in the head, which one eafily gets in this country, at the change of weather from warm to cold, the Japanese made use of a very fine kind of fnuff, like Spanish. This shuff is I 2 brought

brought them by the Chinefe, in fmall opake bottles of green glafs.

Laxa, is the denomination given to a kind of thread or ftring, about four yards long, which is fold rolled up almoft all over the country. It is made of wheat or buck-wheat-flour, and is fold by weight. That which was made from Buck-wheat, was in a more peculiar manner called Sabakiri, by the Japanefe. This ftring is cut into fmall pieces, and mixed with foup, to which it gives a very agreeable, and fomewhat glutinous tafte, without diffolving in the liquor, and is very nourifhing. When put into foup, with leeks and force-meat balls made of fifh, this difh is called Niomen; but, if it be mixed with Cayenne pepper or foy, it is called Somen.

We now befpoke, against our return home, either for our own confumption or for fale, two commodities in particular, which were rice, of which they have here the very best fort; and charcoal, which we wanted for the purpose of dreffing our victuals, and warming our rooms in winter.

Here they do not reckon by thayls, but by maafes, fo that for one thayl they count ten maafes; and for ten thayls one hundred maafes: and in order to make their payments agreeably to this mode of reckoning, they have feveral forts

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forts of coins, large and finall, made of gold, filver, copper, and iron. There is no reprefentative or paper money in this country; but it is all in fpecie, coined and ftamped by the government: though the filver coin is not always of the fame fize, for which reafon the merchants never fail to weigh it before they take it.

On the 12th of March we embarked on board a large Japanese vessel of ninety set in length, which is hired annually upon the Dutch company's account, at the rate of four hundred and eighty rixdollars, for the purpose of conveying the ambassiador to Fiogo. This voyage is about one hundred leagues in length, and with a good wind is sometimes performed in eight days. Another similar vessel accompanied us, which carried our baggage and retinue.

We took up our quarters in the cabin. Our banjos had his room partitioned off to himfelf on one fide, and the Dutch had the greateft part on the other. This fide was divided into two rooms, a very fmall bed-chamber for the ambaffador, and a larger apartment for me and the fecretary, which was also used as a dining-room. The reft was occupied by the interpreters and other officers.

A veffel of this kind ranks amongst the largest that are built in this country, being I 3 about

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about twenty-five feet broad, and very fquare at the ftern, with a wide and large opening there for the rudder, which can eafily be unhinged. Agreeably to the ftricteft orders, all veffels muft be in this form, with a view to prevent the fubjects from going to fea in them, and quitting the country : they are frequently built of fir or cedar, but are not nearly fo ftrong as the European The keel has a tern upwards fore and veffels. aft. They have only one maft, and in a calm they are rowed. When we arrived in any of the harbours, our maft was put down, and refted on poles fixed for that purpole; after which, in cafe it rained or was very cold, the fail was fpread out by way of awning, fo as to cover the whole veffel, and completely shelter the people in it from the weather. It had indeed, properly fpeaking, only one deck; but the cabin with its poop formed, in a manner, a fecond, on which we could walk, and acrofs which the maft lay. The cabin therefore, on board of thefe, as well as all the pleafure-boats in Japan, is very large and roomy, and is capable of holding a great number of people. This, in the fame manner as other rooms in their houfes, can be divided into finall compartments, all handfomely papered, and the floor covered with mats made of rice-ftraw. The most furprizing circumstance is, that the cabin projects on each fide over

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over the veffel's fides, and is therefore broader than the veffel itfelf, which has not a peculiarly elegant appearance. Along its fides there are feveral windows.

From Simonofeki we failed to Kamiro, which is thirty-fix leagues, and after having left this place, and proceeded feven leagues farther, we met with contrary winds, and were obliged to anchor off Nakaffima. But the wind continuing contrary, and the ftorm increafing, we were obliged to weigh anchor, and fail fourteen leagues back to Kaminofeki, in order to get into a better and fafer harbour. Here we were under the difagreeable neceffiry of ftaying almost three weeks, before we got a good and prosperous wind to carry us on our voyage.

All this time we lay conftantly on board, but had feveral times, neverthelefs, an opportunity to go afhore and amufe ourfelves in the inns and temples.

Whilft the florm lafted, the air was very cold; fo that we were forced to keep fires in the rooms; notwithftanding which we were tormented with colds and catarrhs.

The country all over this coaft was mountainous, but, neverthelefs, in the higheft degree cultivated, infomuch, that the mountains in feveral places refembled beautiful gardens.

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Here,

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Here, as well as at Simonofeki, there were certain young men, whom the burghers ceded to the burgomafter to wait upon him, for a fhorter or longer time. Thefe youths, who were known by the name of *Kodom*, were the burghers own fons; they were well dreffed, wore long trowfers, like people in office, and after a fhort time were relieved by others.

The women here wore a ftrange kind of cap, which covering the fore-part of the head, projected at the fides, and was tied under the chin. It was made of white Chenille, and by means of pafte rendered quite fmooth and fleek. These caps were faid to be used only in winter; though, for my part, I could not conceive that they were capable of imparting any warmth.

Not only the ladies of pleafure, but ladies of reputation likewife, are in the habit of painting; and the married women had every where pulled the hairs out of their eye-brows, which amazingly difguifed even the most beautiful countenances.

I faw feveral kinds of fruit, the produce of this country, either dried or preferved in yeaft, in a mode which is, I fancy, only practifed at Japan or China. The fruit that was only dried, fuch as plumbs and the like, was called *Mebos*; but fuch as was preferved either whole, or elfe, if it was very large, cut into flices, was termed *Meneratfki*. For this purpofe

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purpose the yeast of fakki is used, a liquor prepared from rice. The acid of the yeast penetrates into the fruit, gives it in some meafure a taste, and preferves it the whole year through, or longer. Me fignifies fruit; Nara the place in Japan where the fruit is thus preferved in fakki yeast, and *fuki* fignifies to preferve. Konomon is a kind of large cucumber, which is for the most part preferved in this manner, is transported in firkins to other places, and eaten with roast meat, or other diffues. It tastes much like pickled cucumbers.

The long time that we were obliged to lay at *Kaminofeki*, on account of contrary winds, the Japanefe paffed away with games and fports of various kinds. With refpect to fuch of them as were my friends, I filled up their time by giving them lectures on the art of healing; and fometimes by queftions about their country, its government, and regulations in point of rural œ-conomy, but particularly with refpect to their language, which furnished me with the means of entirely completing the Vocabulary I had previous to this period already begun.

Siobuts was a kind of game which by the interpreters was called, in Dutch, the game of the goofe (Ganse-speel). In playing this game they made use of a thick checkered paper, with different figures delineated upon each square. A die

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die was thrown, and each player had a wooden flice, or fomething of the kind, with which he marked up his throw on the figures.

Cards are by no means a favourite diversion with the Japanese; besides, they are very strictly prohibited. I faw them played on board of the vessel formetimes, but never on shore. The cards are made of thick and stiff paper, two inches long, and one inch or more broad: they are fifty in number, black on the under fide, and dissimilarly marked on the upper. The cards were laid in different heaps, and on each heap the money; after which they were turned up, in order to see who had won. So that this game very much refembled that which with us is called Sala bybika.

During our ftay here I made myfelf acquainted with the Japanese compass. This infrument is divided into twelve points: that is, first, into the cardinal points, E. N. S. and W.; and afterwards, each of these into three more. The points bear the name of certain animals, such as for the NORTH, which is in their language called *Kitta* 1. the Rat, in the Japanese language Ne; 2. the Cow or Ox, Us; and 3. the Tiger, Tora; for the EAST or Figasi; 4. the Hare, U; 5. the Dragon, Tais; 6. the Serpent, Mi; for the South or Minzami, 7. the Horse, Uma; 8. the Sheep, Final the Ape, Saru;

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for the WEST or Nis, 10. the Hen, Ton; 11. the Dog, Inu; and 12. the Wild Boar, I.

Some peculiarities occurred in their language, which to me appeared to be worth attending Iquang fignifies with them a thousand, to. but is not used on any other occasion than in counting out money; one hundred thayls or a thousand manas, therefore, is always denoted by Iquang me. Mono fignifies both a human being and goods; but thefe two different fignifications are denoted by different letters when the word is written. Sjugi fignifies Cedar wood (Cupref-*(us and Juniperus)* and the particle over ; both are founded alike, but written differently. In like manner, Kang fignifies warm as well as cold. Fas has a threefold fignification; that is, firft, the fmall and round lacquered flicks with which they eat, inftead of a fork; fecondly, a bridge, and laftly (margo) the edge of a table, or of any thing elfe. Yefterday, or the preceding day, they express three different ways : viz. Kinno, Senjits, and Sakkufits.

The people in office at this place, who wore two fabres, were called *Samrai*; and fuch as were entitled to wear but one, were called *Tjonen*.

At last, after waiting a long time, we weighed with a more favourable and profperous wind, and failed to *Dline Kameru*, where we again let fall our

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our anchor. All around us, as before, we obferved iflands of various fizes, betwixt which we failed; thefe waters being filled with them.

At every place where we anchored, the Japanele were very anxious to go on fhore, in order to bathe. Cleanlinels is the conftant object of thele people, and not a day paffes in which they do not walh themfelves, whether they are at home or out upon a journey. In all towns and villages, inns and private houses, therefore, there are baths. The poorer fort of people pay a trifle only for bathing; but as many of them are apt to use the fame water without changing, it frequently happens that they catch the itch and other contagious diffempers.

Of children, there were here, as well as in the villages in other parts, great numbers, and it was thefe only that called out after us, when at any time we landed. I obferved every where that the chaftifement of children was very moderate. I very feldom heard them rebuked or fcolded, and hardly ever faw them flogged or beaten, either in private families or on board of the veffels; while in more civilized and enlightened nations, thefe compliments abound. In the fchools one might hear the children read all at once, and fo loud, as almost to deafen one.

Our

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Our coafting voyage was again continued to Miterai, between a number of fmall islands, and in a narrower channel between two large provinces. The harbour here is large and fafe; on which account this place is always fought as an anchorage by a great number of veffels.

In all the fea-ports great care has been taken to eftablifh a brothel (and for the most part feveral) even in the fmalleft villages. They were commonly the handfomeft houses in the place, and fometimes were even fituated near their idol's temples. In fo finall a place as *Dfino Kameru* there were faid to be no lefs than fifty women; in *Kaminofeki* there were two houses, both which together contained eighty ladies, and in *Miterai* there were no lefs than four of thefe reputable houses.

Amazed at fuch a vicious inflitution amongft a people, in other respects to fensible and judicious, I was at fome pains to find out from the interpreters when, and on what occasion, this inflitution had originated, and afterwards been diffused all over the country. In answer to my enquiries I was informed, that this diffolute establishment had not subsisted here in ancient times; but had first taken rise during the civil war which was carried on, when the fecular emperor, as generalissimo of the army, difpossible the Dairi of the imperial power, except that

that, which he still holds in ecclesiastical matters. At that time the Dairi was obliged, being as yet very young, to flee, with his foster-mother and his court, to Simonofeki. The Dairi's domeftics confifted then, as they do at prefent, of none but the fair fex, and he is even now confidered as o holy, that no male may approach him. In this flight over fea, being purfued by the enemy, his fofter-mother leaped with him into the fea, where they both perished. His female fervants who arrived at Simonofeki, and had nothing left to fubfift on, were under the neceffity of adopting a rather difhonourable mode of gaining their livelihood. This, as feveral people affured me, gave the first rife to houses of this kind; the number of which has fince, during the civil war and diffurbances of many years continuance, gradually increafed.

The interpreters told me likewife, that thefe women are not called by the fame name every where, or alike regarded. In Simonofeki they are ftill more peculiarly called *Joruffi*, and this name was before, and ftill is borne by the Dairi's concubines, who, befides his real wife, are twelve in number. All others out of Simonofeki are are ufually called *Keife* or *Kefe*. The name fignifies a caftle that is turned upfide down, and therefore is perfectly well adapted to thefe women, who have made the transition from chaftity

FIOCO, 1776.

to diffonour. The Faifats are a lower fort, who are at any man's fervice, viz. for eight konderyns. Fai Gin was a coin formerly in circulation, of very bad filver, and of the value of a konderyn. Eight of thefe Fai gins, therefore, have given them their prefent name. The Ofiakv were deferibed as being of the loweft clafs, who ran about the ftreets begging. Thefe were faid to have received their denomination from a woman of that name, who was a lunatic, and alfo an idle good for nothing huffey. The thinking part of the Japanefe however could not but allow, that thefe inftitutions were indecent, and a feandal to the nation.

Sigaki are a kind of oysters which are caught at Miterai, and are well tasted.

Here and at feveral other places I faw in what manner the Japanese preferved their craft against the ravages of that destructive worm, the *Teredo Navalis*. After having dragged the vessel up on the strand, they burned both sides of it as high as the water usually reaches, till the vessel was well covered with a coat of charcoal. This may perhaps contribute to preferve them likewise from rotting.

Proceeding on our voyage, we again fet fail with a more favourable wind for *Fiogo*, where we arrived after a difagreeable and dangerous paffage of twenty-fix days. As often as the Japanefe

Japanese went on shore, they always took care to kill geese, ducks, and fowls, which were dreffed for our table; but when they are out at sea, they are so superstitious, as not to kill any living creature. Therefore, that we might not for several days together be without roassed birds, I was obliged to take upon myself the office (which was not very troubless indeed) of killing them.

In fine weather feveral forts of ducks, and particularly the Anas Galericulata (or Chinefe Teal) were affembled in thefe waters (where they are never fcared away by the gun) in fuch numbers, that at a diftance they appeared like large iflands, and were not in the leaft afraid of us as we paffed them, not even of me, who was their daily butcher.

Fiogo is fituated about ten leagues (or thirteen fea-leagues) from Ofaka, directly oppolite to it in the fame Bay. It has a large balon, which however is open to the fouth, and was therefore formerly confidered as uncertain and dangerous towards that fide. This difagreeable circumftance has neverthelefs been removed by the Emperor FEKI, at an incredible expence, and with great labour and difficulty, in undertaking which great numbers of people are faid to have perifhed. This emperor caufed a dam to be made to the fouthward of the harbour, in order

F10GO, 1776.

order to prevent the fea from breaking into it. The dam round which we failed appeared at first fight like a fand bank, and was not much below the furface of the water. Several hundred veffels, befides ours, had taken shelter here; on which account this harbour is of the more confequence, as the water as far as Ofaka is but shallow, and does not admit of large veffels getting up thither. The town, like Nagafaki, is built along the shore of the harbour, and then on the rising ground that slopes off gradually from the mountains. The concourse of people here is very great, and the town tolerably extensive and handsome.

KÆMPFER makes mention, that he went in fmall boats from Fiogo to Ofaka; but although we were here obliged to quit our larger veffel, we travelled from hence by land to Kanfaki, from which place we were carried over in veffels three leagues to Ofaka.

On the 8th of April, in the morning, we fet out for Ifinomia, in order to dine there; after this we went to Amagafaki, a fortified town on the fea coaft, where, after a journey of two leagues, we refted a little, and then went a league farther on to the village of Kanfaki, near a large river. From this place we ordered ourfelves to be fet over in boats to the mouth of that large ftream which runs through the town of Ofaka VOL. III. K down

down into the bay, and which is about the diftance of three leagues.

Our new hoft was the first who came in a boat to meet us on the river, and then conducted us up the fame through the fuburbs, which had been built all along its banks, and which were covered by feveral hundreds of veffels, that bore witnefs to the great and extensive traffic of this town. After we had passed feveral bridges, the gates, and the guard-houses that stood on each fide of these latter, we perceived that we were come into the town itself.

Here we were extremely well lodged and treated. Shortly after our arrival, our hoft entered, dreffed in his best clothes, and, with a joyful countenance and the most respectful demeanor, congratulated us, through the interpreter, on our fafe arrival after fuch a long and tedious voyage, and brought with him one of his fervants, who produced, as ufual, a fmall fquare table with a prefent, which was likewife decorated in the most fuperb manner. This prefent confifted of feveral oranges of the common fize, but with a thick rind, a few Micans, or fmaller oranges with a thinner rind, and a few dried figs. On the top of this prefent was laid a folded paper, tied over with red and gilded paperthread, at the end of which was pasted a strip of Sea-weed (Fucus). Round about it also were laid

OSAKA, 1776.

laid feveral fquare pieces of the fame fea-weed. All this is according to the etiquette; and is a demonstration of the highest respect for the travelling stranger.

Among other things, we had for fupper a kind of fifh called *Abrame*, which was extremely well tafted.

The first thing we had now to do, was to teftify our gratitude to the Captain who had brought us fafe in the large veffel to Fiogo, and, together with fome of the crew, had borne us company hither, and taken care of our baggage. For my part, I had to pay him fix thails, and to the failors feven maas, five konderyns. In like manner, we were each of us obliged to pay three thails to thofe who had guarded and taken care of our Norimons, and to the fervant fent with us by the Governor, fix thails, amounting altogether to about fixteen rixdollars.

In Ofaka, we ftaid that day and night only; and, in the mean time, were vifited by feveral merchants, from whom we befpoke feveral articles, corresponding with the samples which they shewed us, and which were to be ready at our return. Such were, in particular, infects of copper, and artificial trees varnished, fans of various kinds, writing paper, paper for hangings, and fome other rarities.

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Ofaka,

Ofaka is one of the five imperial towns. which belong to the fecular emperor ; it is governed in his name, and, in like manner as Nagafaki, by two governors, one of whom goes to the court every other year, and in the intermediate year exercifes the functions of government. This is, at the fame time, one of the greatest commercial towns in the empire, on account of its fituation near the coaft, and almost in the center of the country. In confequence of the incredibly great fupply of every article from all parts of the country, provisions are here very cheap, and the most wealthy artists and merchants have established themselves here. The river Jedogawa, up which we failed to the town, runs through the ftreets, and is divided by means of canals into feveral branches. The citadel, which flands on one fide of the town, is almost one league square, and, in the style of this country, well fortified. Across the river, which runs, through the town, not only expensive bridges of cedar are built, but they are alfo numerous, and fome of them very long, from 300 to 360 feet. In almost every house, the front of the ground floor is either a workshop or a large fale-fhop, where the goods are hung out to the view, to entice purchafers. Many rich people retire to this place, to fpend their fortunes, as this town is the most pleafant in all Japan; fothat

JODO, 1776.

that it is in Japan, what Paris is in Europe, a place where an inceffant round of amufements is to be had. The governor of the town poffeffes no authority over the citadel; but it is under the care of two other governors or commandants alternately, who relieve each other every third year, and who have no command in the town. One of them refides always at court, and when he goes down to relieve his predeceffor, the exchange is attended with this particular circumstance, that these two are not to speak to each other; and when one enters, the other must go out, and immediately proceed to the court, to give an account of his administration.

As it was thirteen miles from Ofaka to Miaco. we were obliged to fet out early in the morning on the 9th of April. We were awakened, therefore, before it was day-light; and after having drank a difh of coffee, and got ready our bread and butter for breakfast, proceeded on our journey; the Japanefe who went before with a great number of torches to light us on our way, almost continually cheering us with their enlivening fongs. After travelling two miles, and arriving at a large village called Morikuts, we and our bearers repoled for a while. After this, we proceeded three leagues to a larger village, viz. Firakatta, where we again refted and took fome K 3 refresh-

refreshment. After which, we went on to another refling place, viz. Jodo, one league farther, and dined rather late at Fusimi, to which it was more than a league. Jodo is a small, but handfome town, and has plenty of water. Its bridge, called Jodo bas, is one of the largest in that kingdom, being 400 paces in length. The town is defended by a citadel, situated on one fide of it, in which a prince keeps court. Fusimi is, in fact, nothing more than a village; but then it is three leagues long, and reaches quite to the imperial capital, Miaco, of which it may be confidered as the suburbs.

Excepting in Holland, I never made fo pleafant a journey as this; with regard to the beauty and delightful appearance of the country. Its population too, and cultivation, exceed all expreffion. The whole conntry on both fides of us, as far as we could fee, was nothing but a fertile field, and the whole of our long day's journey extended through villages, of which one begun where the other ended, and which were built along the road.

This day, I faw feveral carts driving along the road, which were the firft I had feen, and indeed, were the only wheel-carriages ufed in and about the town of Miaco, there being otherwife none in the country. Thefe carts were long and narrow, with three wheels, viz. the two ufual

FUSIMI, 1776.

ufual wheels, and one before. The wheels were made of an entire piece of wood fawed off a log. Round the felly was put a cord, or fome fuch thing, to prevent the wheel from wearing away by friction. Nearer the town, and in it, thefe carts were larger and clumfier, fometimes with two wheels only, and drawn by an ox. Some of these carts too were like those of Europe, with naves and fpokes, but not mounted with iron, and very liable to be broken. None were allowed to drive thefe carts, excepting on one fide of the road, which, on that account, feemed much broke up. For this purpofe, too, a regulation was made, that the carts fhould fet out in the forenoon, and return in the afternoon, in order that they might not meet each other.

Small cakes made of boiled flour of rice, fometimes coloured green and fometimes white, were to be purchafed at all the inns, and likewife in the villages; thefe were bought by travellers, and particularly by the norimon carriers, who ate them with their tea, which was every where kept in readine's for the convenience of travellers.

Near the river Miacos, dwelt a great number of *Pelicans*, who had made their nefts in pine-trees all along the road, as had alfo ducks and other wild-fowl; notwithftanding that, even the banks of the river were not left free for K_4 them

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them to dwell on, but were every where inhabited and cultivated.

I had imagined, that during to long a journey, in a country to which Europeans have feldom any accefs, I fhould have been able to colleft a great number of fcarce and unknown plants; but I was never in my life fo much difappointed. In most of the fields which were now fowed, I could not discover the least trace of weeds, not even throughout whole provinces. A traveller would be apt to imagine, that no weeds grew in Japan: But the industrious farmers pull them diligently up, fo that the most sharp-fighted botanist can hardly discover any uncommon plant in their well-cultivated fields. Weeds and fences were equally uncommon in this country; a country furely, in this refpect, inexpreffibly fortunate. The feed is fown on fmall beds of about the breadth of a foot, and feparated by a furrow above a foot broad. On these small beds, wheat or barley is fown, either croffways in rows, at a fmall diftance from each other, or elfe lengthways in two rows. After the corn is grown up to the height of about twelve inches, earth is taken out of the furrow, which is thus converted into a ditch, and this earth is carefully laid about the borders, which, by this means, receive fresh nourishment and manure.

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In

FUSIMI, 1776.

In confequence of fo laborious an operation, the corn fields bear the exact appearance of cabbage-beds, which makes the view of the heights in particular enchanting, thefe being bordered at the foot with a ftone wall, fo that they have all the appearance of being furrounded by ramparts. If thefe heights are fown, which is not feldom the cafe, with rice, then the water which is collected on their tops from the clouds and the rain, is conducted from them to the lowermoft parts, fo that they are laid under water by means of a wall raifed at the bottom, of an equal height, through which the water may be let out at pleafure.

In the beginning of April, the farmers began to turn over the ground that was intended for rice. This, by means of its raifed borders, lay now almost entirely under water. The ground was turned up with a hoe, that was fomewhat crooked, with a handle to it, and was a foot in length, and of a hand's breath. Such rice-fields as lay low and quite under the water, were ploughed with an ox or cow, for which work thefe animals only are used in this country.

The other fields which were fown with Eaft-Indian kale (*Braffica Orientalis*) appeared now in the month of April, gilded all over with yellow flowers, and gliftened even at a great diffance. The feeds of this kind of kale, called *Natanni*,

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are commonly preffed; and the oil expreffed from them (*Natanni abra*) is used all over the country for burning in lamps. The feed is ripe in May, and the root is not used.

In feveral places I faw a kind of Muftard (Sinapis cernua) cultivated. The Japanese feldom use the feed of it to their victuals; but it was that kind which was fold to us now during our journey, and to the factory, for common mustard.

The hufbandmen who were occupied in digging, were always followed by feveral beautiful whitifh herons (*Ardex*), which cleared the fields of worms, and were very tame. On account of the fervice thefe birds are of, they are confidered here as privileged, and are not fcared away nor molefted by any one.

In the town of Miaco we were lodged in the upper flory, which is not cuftomary in other places, and we remained here four days. Our great chefts were also opened, that we might take out a change of linen and other clothes, and neceffary provision for the remainder of the voyage.

During this time we had an audience of the chief juffice and the two governors of the town, who had all prefents made them from the Dutch company. We were carried in our norimons to their palaces, and treated with green tea, tobacco, and fweetmeats. The chief juffice (groot rechter) is almost the only male at the Dairi's or eccle-

MIACO, 1776.

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ecclefiaftical emperor's court. He is, as ti were, his. vicegerent or court marshal, who, in the name of his great mafter, regulates and orders every thing about the court, and more efpecially in ecclefiaftical matters out of the court. He grants paffes to all those who travel higher up the country, or to the fecular emperor's court. This much-respected man is, nevertheless, not appointed by the Dairi, but by Kubo, and is generally an elderly man, and one whofe understanding is ripened by age and experience. Some trufty old man, who at the fame time is poffeffed of a tolerable portion of wealth, was faid to be chofen for this office by the fecular emperor; and as the income of this place is trifling and infufficient, he genarally grows very poor in time with his high appointment.

The Dairi's court and palace is within the town, and, as it were, in a feparate quarter of it, forming of itfelf a large town, furrounded by foffes, and a ftone wall. We had not the good fortune to get a fight of it, otherwife than from a confiderable diftance. Within it lives the Dairi, with his concubines, a great number of his attendants, and priefts. Within this palace all his pleafure lies, and here he paffes his whole life, without once going out of it. When the Dairi at any time leaves his apartments in order to walk in the gardens, it is made known by figns, to the

the end that no one may approach to fee this country's quondam ruler, now merely its pope, vefted with power in ecclefiaftical matters only, but who is confidered as being fo holy, that no man muft behold him. During the few days we ftaid here, his holinefs was pleafed once to inhale the pure air out of doors, when a fignal was given from the wall of the caftle.

Although Kubo, the temporal emperor, as generalifiimo of the army, had wrefted to himfelf the chief power, ftill, however, the greateft honours were left to the Dairi. For fome time after the revolution, Kubo made alfo annually a journey to Miaco, in order to pay his refpects to the Dairi. But of late years thefe vifits have been now and then neglected, and are now faid to be entirely laid afide.

Miaco is not only the oldeft capital, but alfo the largeft commercial town in the empire, an advantage, for which it is indebted to its central fituation. It ftands on a level plain of about four leagues in length, and half a league in breadth. Here are eftablifhed the greateft number, and, at the fame time, the beft of workmen, manufacturers, and artifts, as alfo the moft capital merchants, fo that almost every thing that one can wifh or defire is to be purchafed here: velvets and filks wove with gold and filver, wrought metals and manufactures in gold, filver, and copper;

OITS, 1776.

per; likewife, fowas, clothes, and the beft of weapons. The celebrated Japanese copper, after being roasted and smelted at the smelting house, is refined and manufactured here. All the coin too is struck here and stamped. And as at the Dairi's court all kinds of literature are encouraged and supported, as at a royal academy, therefore all books that are published, are printed here.

Here the fuperior interpreter delivered to us a fum of money in new kobangs, for us to lay out during our journey in rarities and merchandize, or in what manner foever we might chufe. The fecretary and I received each of us three hundred rixdollars, but which we were afterwards obliged to refund from our kambang flock in Nagafaki.

After befpeaking from those merchants who were permitted to visit us feveral articles, such as fowas-work, fans, and lacquered ware in particular, to be ready by our return,

On the 14th of April we fet out on our journey. Before we had travelled one league we arrived at Keagi, where we made a fhort halt. We had not much farther to go from hence to Jaco Tiaia, where we again refted a little. To Fafiri it was fomewhat more than a mile, and about the fame diffance from thence to Ifiba or Oits, where we dined. Oits is fituated near a lake of the fame name, whic

which, in proportion to its length of forty Japanefe miles, is very narrow. Ancient histories relate, that this lake was formed in one night only by an earthquake, in which this whole tract of country gave way and disappeared. This lake is very convenient for the conveyance of goods and merchandize by water to the adjacent places, and is likewife remarkable from the circumftance, that, though it is only a freshwater lake, it contains falmon; a species of fifh which is otherwife fo very fcarce, and, indeed, hardly ever to be feen in the East Indies. Some falmon were brought to us to buy for our table, which were very delicious. The largest that I had an opportunity of feeing weighed about ten pounds. Finding in the course of our journey that we often had this fpecies of fish brought to us, we ordered fome to be fmoked against our rcturn; however they were not to be compared to our European falmon, either in fatnefs, fize, or the mode of curing them.

In the afternoon we continued our journey one league to *Tjetta*, one league to *Skinova*, and fomewhat more than a league to *Kufats*, where we took up our night's lodging. This village has at leaft five hundred ground-plots. At *Tjetta* we croffed the river over a very long bridge. The bridge refted on a fmall ifland, which wasfituated

SEKI, 1776.

fituated nearer to the town than to the opposite shore. It was about three hundred and fifty paces in length; built, according to the usual mode of this country, in a magnificent stile, and furnished with balustrades.

The next morning, being the 15th of April, we had above eleven leagues to travel to feveral. villages and towns, which flood quite clofe to each other, in a large, rich, and fertile diffrict, called Omi. Among the most remarkable of thefe were, Menoki, Iffibe, Nafumi, Minacuts, Ono, Matfu, Fitsjoma, Ino fana fawa, and Sakanofta. We dined at Minakuts, which is a large inland town. Here, as well as at the other places, were fick people, who had come from the adjacent parts for advice from the Dutch phylicians, in their chronical complaints. Thefe complaints were frequently either large indurated glands in the neck, and cancerous ulcers, or elfe venereal fymptoms, which had generally taken too deep root.

Towards evening we were come into the diffrict of *Ifi*, where we paffed through feveral villages, and at laft arrived at the town of *Seki*, where we took up our night's lodging.

On the 16th of April our journey was not lefs agreeable than it had been the day before, and, indeed, hitherto in general; by reafon that the

the country of In was very closely inhabited, fertile, and populous, infomuch that we paffed through very long villages, which lay upon the road, and at very fhort diftances from each other. We were, neverthelefs, whenever we paffed through any village, fubject to an inconvenience which embittered all our pleafures. and obliged us to keep the windows of our norimons fhut. A privy, which is neceffary for every houfe, is always built in the Japanefe villages towards the fireet, and at the fide of the manfion-houfe; it is open downwards, fo that the paffengers may difcharge their water from the outfide into a large jar, which is funk on the infide into the earth. The ftench arifing from the urine and the ordure, as alfo from the offals of the kitchen, all which were very carefully collected together for the lands, was frequently in hot weather fo ftrong and infupportable, that no plug introduced into the nofe could difpute the paffage with it, and no perfumes were fufficient entirely to disperse it. Useful and beneficial as, in other respects, I every where found this branch of the over-strained ceconomy of the Japanese, it was equally hureful to the eyes. For by the exhalations of this intolerable vapour, to which the people had gradually accuftomed themfelves, the eyes became fo much affected, that a great many, and particularly

KWANA, 1776.

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ticularly old people, were afflicted with very r ed, fore, and running eyes.

This day we travelled about ten Japanefe miles; and dined at *Tfiakufi*, after having paffed through *Nofin*, *Kamirujammi*, *Moirinofta*, and *Sono*, and in the evening arrived at a famous large town near the bay, called *Kwana*, after having paffed through *Sutfki*, *Ojiwaki*, *Jokaits*, a large town, *Tomida* and *Matfdera*.

At Jokaits we were come again to the fea fhore, which we followed almost all the way to the capital, Jedo; and in our way had many large and dangerous streams to ford, over which no bridges could be thrown, on account of the great increase of the waters in the rainy seasons.

On our way from Jokaits, we were favoured with the company of three mendicant nuns, one of which followed each of our norimons, in expectation of obtaining fome money from the Dutch. They accompanied us with an even pace for feveral hours, conftantly begging, although at the very beginning they had received a handsome piece of filver from us. Their drefs was neat and clean, but their inceffant begging extremely troublefome. We therefore changed a piece of gold into pieces of fmall copper coin, which were ftrung on a ribbon by means of, a fquare hole made in the middle. One or two of these copper coins, called Seni, we dif-VOL. III. L tributed

tributed now and then, fo that the expence became more fupportable to us. The girls were of different ages, from 16 to 18 years, decent in their behaviour, except the circumftance of their begging with fuch pertinacity, and were faid to be the daughters of priefts of the mountains, a fort of monks in this country, called *Jammabos*. The interpreters told us alfo, that their chief fupport was begging, that out of their alms they were obliged to pay a certain tribute to the temof *Ifi*, and that they were not quite fo well behaved and chafte, as, from what we faw, we might fuppofe them to be. They were called *Komano Bikuni*.

Kwana is a large and ftrongly fortified town, in the province of Owari, which is rich, and of great confequence amongst the princely provinces of this empire. Here we took up our night's lodging, in a handfome and commodious inn. The town has two forts, and is furrounded by fosses and walls. The citadels have high towers, which efford a pleasing sight, and in every part of them, and of the walls, small oblong openings are visible, through which the besieged may discharge their arrows, under cover of the walls, against the enemies shot.

On the 17th of April, in the morning, we fet out from Kwana in a veffel, and croffed the bay to Mia, which was reckoned feven fea leagues But

MIA, 1776.

But this voyage was one of the most extraordinary that ever was made. We embarked with our retinue and baggage on board of large vessels at Kwana; but when we approached near the harbour of Mia town, the harbour grew so shallow, that we were obliged to make use of small boats in order to disembark; nevertheles we could not get up to the town otherwise than by being pushed over the mud by the hands of two men fording it in very little water. So that we might rather be faid to go by land than by water, and that a good way up to the town.

Mia therefore, though fituated near the bay, is a very indifferent harbour, and unfit for larger, and even for finaller kinds of veffels; notwithstanding which, a confiderable number of them lay here at anchor. The town has neither walls nor forts, but is extremely populous, and has great traffic. There is befides an extraordinary circumstance with respect to Mia, that the middle street projects full two leagues out of the town, all along the large river, up to the town of Nagaja, which is fortified, and is the capital of the province of Owari.

After having dined in Mia, we fet out again on our journey, and paffing through Kalfadera, Marumi, Singo, and Imo Kawa, to Tjiriu, where we put up at night, making in all four leagues.

On the morning following, being the 18th of April we proceeded through Ufida, Ofama and L 2 Jafagi

Jafagi to Okafaki, a fortified town in the province of Mikawa. Here we dined, after having viewed and paffed over the remarkable bridge which is laid acrofs the river near the town, and is confidered as the longeft bridge in the whole empire, being 158 fathoms long. It is built of wood, and is faid to have coft 30,000 kobangs, or 300,000 rix-dollars. The Prince of the province refides in the fort, which is well fortified, and adorned with a high tower and walls.

In the afternoon, paffing through Kaginoies, Fusikawa, Motosiku, Akasiki, Goju, Diokasen, and Jootsia, we travelled somewhat above seven leagues farther on to Joots Sida or Josida, where we staid all night.

The country appeared this day more mountainous than it had for fome time before, but was interfperfed with level plains and vallies which were well cultivated. In this month the rice was tranfplanted. It is firft fown very thick on feparate beds, like cabbage or other rooted plants, and, when grown to about a hand's breadth in height, taken up, in order to be tranfplanted out in the fields. For this purpofe feveral roots are taken together, and with the hand put down firm into the ground, which is about fix inches under water. Each bundle is fet a hand's breadth or more afunder. This tranfplantation is generally the women's bufinefs, who on this occafion ar:

JOSIDA, 1776.

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are used to wade half a leg deep in water and mud. After this, the rice ripens, and is cut down in the month of November.

The rice, the grain of which is furrounded with a hufk, is afterwards cleaned in various ways, till the grain is totally deprived of all extraneous matter. In the course of my travels I faw feveral of these different methods. Sometimes it was beaten with blocks which had a conical hole in them. These blocks were placed in two rows, generally four on each fide, and raifed by water, in the fame manner as the wheel of a mill. In their fall they beat the rice fo that the grain feparated from the chaff. Sometimes, when there was no opportunity for crecting fimilar waterworks, a machine of this kind was worked by a man's foot ; who, at the fame time alfo ftirred the rice with a bamboo. In private families I fometimes faw rice pounded in fmall quantities, and for daily use, in the fame manner as on board of the fbips and at other places in the East Indies ; that is, in a hollowed block with a wooden peftle.

Fucus Saccharinus (Komb or Kobu) was thrown up on the fea-fhore in these provinces. I found it of a confiderable breadth as well as length. Otherwife it was faid to come from the great ifland called Matimai, which lies to the northward of Japan.

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Japan. This Fucus, when dried and c'eanfed from fand, falt, and other impurities, is used by the Japanefe, on feveral occasions. As tough as it may appear to be, yet it is eaten occafionally, and particularly when they meet together to make merry, and drink Sakki. In these circumstances it is cut into pieces and boiled, upon which it grows much thicker than before, and is mixed with other food. It is fometimes eaten raw, after being fcraped till it is white, and in fuch cafe is generally cut into flips of a nail's breadth, and two inches in length, then folded up in the form of a fquare, and tied over with a finer flip of the breadth of a line, and three inches in length, cut out of the fame fucus. These folded squares are eaten with or without Sansjo (Fagara piperita.) When prefents are made, about half a fcore or even a fcore of these squares are strewed about on the small table. When any prefents are made, which is cuflomary here on many occafions, and is deemed neceffary, it makes part of the ceremonial to accompany the prefent with a complimentary paper, as it is called, which is folded in a fingular manner and tied. To each end of this paper, a flip is always pasted of this fucus, an inch broad and a quarter of an inch long. This fucus is by fome called Nofi.

In feveral of the villages we paffed through, I faw the manner in which the oil of the Dryandra Cordata

JOSTDA, 1776.

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Cordata (*Abrafin*) was expressed for the purpose of burning in lamps. The press lies down on the ground and confists of two blocks, between which the feed is put and crussed, and the oil expresfed. One of the blocks is fixed and immoveable, and against this the other is forced by means of graduated wooden wedges, which increasing in fize at the foremost end, are driven in with a very long wooden club. At the fide is an opening to let out the oil, which is received in a vessel placed underneath.

Screens, eight feet high, are contrived fo commodious, that they may be put up together in feveral folds, and are used every where to fet before the beds when feveral perfons fleep in one chamber, or when the occupier wifnes to conceal any thing in his own room. They ferve alfo to divide the apartments; to fet before the windows by way of keeping off a draught of air; to put before the fire-pot in the winter, fo as to make the room warmer within the space thus intercepted, and on many other occafions. Thefe fcreens are of different fizes ; they are often handfomely painted, and covered over with thick painted paper; for the most part, they are composed of fix different frames, each about two feet broad.

There is nothing which travellers wear out fo faft as fhoes. They are made of rice ftraw, and platted, and by no means ftrong. The value of L_4 them

them too is trifling, infomuch, that they are bought for a few copper coins (Seni). There is nothing therefore more commonly exposed to fale in all the towns and villages, even in the fmalleft through which the traveller generally paffes. The fhoes, or rather the ftraw flippers which are in the most general use, are without strings; but fuch as are used on journeys, are furnished with a couple of ftrings made of twifted ftraw, fo that they may be tied faft about the foot, and do not eafily fall off. And that these ftrings may not chafe the inftep, a linnen rag is fometimes laid over it. On the roads it is not unufual to fee travellers who carry with them one or more pair of fhoes, to put on when those that are in use fall to pieces. When it rains, or the road is very dirty, thefe fhoes are foaked through, fo that the traveller is obliged to walk wetfhod. Old worn-out fhoes are found lying every where by the fide of the roads, efpecially near rivulets, where travellers, on changing their fhoes, have an opportunity at the fame time of washing their feet.

Small fhoes or flippers of ftraw, are used for the horfes all over this country, instead of iron shoes. These are tied above the hoof with straw strings, to prevent their set from being hurt by stones; and when the roals are strong hurt by stones; from stumbling. They are not very strong, cost but little, and are to be had every where.

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JOSIDA, 1776.

I faw a curious and peculiar method practifed here of conveying the water in times of great drought to the fubjacent corn-fields. The rivulets, it is true, are both large, and fwell much in rainy weather; but, at the fame time, they run off very quickly into the fea, and are then greatly diminished. In order to reap the benefit of thefe, the farmers throw up banks of feveral yards in breadth, and of an immenfe length, over which they carry the water to a great diftance, and draw it off as fast as it is wanted from the fides on to the fields that lie below. Several of the rivulets rife in the rainy feafon fo high, and with fuch rapidity, that no bridge can refift the force of the current. These ftreams, therefore, must either be passed in boats, if that be feafible, or elfe forded. The bearers who are used to this bufiness, and fure-footed, carry the travellers either on their fhoulders, or fitting in their norimons; both which ways, to me, frequently bore the appearance of being very dangerous. Some of these rivulets afterwards dry up, fo that they may be paffed dryfhod in the fummer.

In the villages were planted in a great many places Almond and Peach trees (Amygdalus communis and Perfica) and Apricot trees (Prunus Armeniaca), which all blofformed this month on the bare branches, before the leaves had time to burft

burft forth from the bud, They furnished a most pleasing fight to the eye, on account of the number of blossons which covered the whole tree, and even at a distance made a glorious appearance with their fnow-white petals. These, as well as the Plumb trees (*Prunus Domestica*), Cherry trees (*Irunus Cerasus*), Apple and Pear trees (*Pyrus Malus* and *Cydonia*) bore at this time both fingle and double flowers. On the latter, as well as on other deformities of this kind, the Japanese fet a great value.

On the 19th of April, at noon, we arrived at a fmall and open town, called Arraij, and fituated on the borders of a large bay which runs in at that place from the fea. If its bottom anfwers its appearance and fituation, it fhould feem to be the fafeft and best harbour in the world; and, if fortified in the European manner, would be impregnable. We had about five leagues journey hither, palling Imuri, Ftagawa, Jetfuri jama mura, Sirafka, and Moto Sirafka. This place is very remarkable, on account that here the merchandize and baggage of every traveller are fearched, efpecially the baggage belonging to the princes who travel upwards to the court. This fearch is made by perfons appointed by the emperor, and invelted with full powers for the purpose, whose duty it is to fee that no women nor arms are introduced, by which the

OYGAWA, 1776.

the tranquillity of the country might be interrupted. After we had dined, and our baggage had been fearched, though by no means ftrictly, we went to pay our refpects to the imperial commiffioners, and then proceeded on our journey, one league acrofs the bay, in flat-bottomed veffels, to a town fituated on the other fide of it, called *Majsakki*, from whence we proceeded in the afternoon by the way of *Sinowara*, *Nimbutfdo*, *Tammamats*, a large and confiderable town, *Tinsjenmats*, acrofs *Tindingawa* river in boats, and farther on paft *Ikeda* and *Daifoin* to *Mitfke*, in all about feven leagues.

On the following morning, being the 30th of April, we went on past Mikano, Fukuroj, Nakuri, and Furagawa, to a large and fortified town called Kakagawa. Before noon we had travelled four leagues, and here we dined. After this we continued our route, passing Jamma fano, Niffaka, Kikugawa, and Kanaja, to the river Oygawa, in all four leagues. The river Ojingawa is one of the largeft and most dangerous in the whole country. It does not only rife high, like others, in rainy weather, but its courfe towards the fea is inconceivably rapid, and the bottom of it is at this time frequently covered with large ftones, which the violence of the ftream has carried with it from the mountains. At all thefe large rivers, where no bridges can

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be built, the goverment has taken care that the traveller fhall be attended, fo as to be enabled to pass them without danger, either in boats or carried by other people. At this dangerous place, where neither bridge nor boat can be ufed, the care has been redoubled. Here, therefore, is ordered a great number of fuch men as not only know the bottom well and accurately, but are also used to carry travellers across, and are paid by them according to the height of the water, and confequently according to the danger. These fellows are likewise answerable with their lives in cafe of any finister accident happening. The polition in which we were carried over, fitting in our chairs, was exceedingly alarming, although the water was not remarkably high, and did not reach much above the bearers knees. Several men on each fide bore our norimons, and others went along-fide of these to support them, and prevent their being carried away by the force of the ftream. In a fimilar manner the horfes were taken over, with feveral men on each fide of them, as was also all the reft of our baggage. By way of payment for taking over our norimon bearers, we here diffributed to each of them a couple of pinches of ftrung copper coin. Being arrived fafe over, we had not much more than half a league to our quarters for the night in Simada, a village about one-fourth of a league

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FAKONIE, 1776.

in length. Having refted here two days and nights, we fet out again on the 23d of April, paffing by feveral villages, fuch as Cetto, Fusida, Avumi, Okabe, and Utsnoja, till we came to Mariko. After dining here, we passed the river Abikawa, and then through Futsjo and Guribara to our defined night-quarters in Jeseri, after having travelled in the course of the day above ten leagues.

On the 24th of April we were obliged to fet out early in the morning, as this day we had thirteen leagues to go. After having travelled four leagues, and paffed Jeferi Roakits, Okits no, Frafawa, and Jui, we dined at Kambara. During a journey of five leagues, in the afternoon, we paffed in veffels a large river, called Fusikawa, and then thro' Moto Itsiban, or Siro Sakki Jostwaro, Kastwabara, Ipon mats, Farra, Numatso, and Kistgawa, to Misma.

Hitherto we had followed the fea coaft; but at Ferra again a tract of land appeared, which was very mountainous, and over which we were to travel. The country here too abounded more in pines and other forts of wood. Fufikawa River is very dangerous, and is faidnot to be paffable any where but just at the fpot where we croffed it. It is rather deep, and uncommonly broad, and rapid in its courfe, fo that our rowers, though they pulled with all their might, could not take us ftraight over.

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At Josiwara we were nearer than any where elfe, in the courfe of our journey we poffibly could be, to the mountain of Fufi, the top of which we had already defcried feveral days before, it being the higheft mountain in that country, and almost the whole year round covered with fnow, with which its white fummit gliftens far above the clouds. The Japanese reckon the height of it, in the ascent from the foot to the top, to be fix leagues. In fhape it greatly refembles the one-horned rhinoceros, or a fugar-loaf, being very thick and fpreading at the foot, and pointed at the top. When the Japanefe at any time vifit this mountain, where they believe that the god of the winds (Æolus) has his refidence, they generally take three days to afcend it. In the defcent they are not fo flow, as it is faid to be fometimes performed in a few hours, when they make use of fmall fledges constructed for that purpose, of straw or halm, and tied before their bodies.

In this neighbourhood I faw feveral boys turn round on their hands and feet like a wheel, all along the fandy road, in order to get a little money from us; for this purpofe we had before-hand provided ourfelves with fome finall copper coin, which we threw out amongft them.

After this we arrived at our night-quarters, but not till late in the evening, and, it being very dark, by the light of lanterns and torches,

On

FAKONIE, 1776.

On the following day a very fatiguing and troublefome route lay before us over the *Fakonie* mountains. The whole forenoon was employed in getting up to the top of them, where we refted ourfelves, and afterwards fpent the whole afternoon in getting down on the other fide to the foot.

This day I was feldom in my Norimon ; but, as often as I poffibly could, walked up the hills, which were pretty thickly covered with bufhes and wild trees, and were the only hills that, except those which lie near the town and harbour of Nagafaki, I have been allowed to wander upon and to examine. But in the fame degree as 1 eafed my bearers of their burthen, I rendered the journey troublefome to the interpreters, and more particularly to the inferior officers, who by rotation were to follow my fleps. I was not allowed indeed to go far out of the road; but having been previoufly used to run up rocks in the African mountains, I frequently got to a confiderable diftance before my anxious and panting followers, and thereby gained time to gather a great many of the most curious and fcarceft plants, which had just begun to flower, and which I put up in my handkerchief.

After we had arrived to the top of the mountain, we defeended again for about a quarter of a league,

a league, and afterwards continued our route to *Fakonie* village, where we dined, befpoke againft our return feveral pieces of lacquered wooden ware and other merchandife, and viewed this beautiful fpot, fituated fo extremely high as it is, and on a very extensive mountain. Here was also a lake of a tolerable fize, with an island in the middle. The water of it was fweet, and amongst other forts of fish it contained falmon, which was fet upon our table.

Although the road went up hill continually all the forenoon, nevertheless the country was cultivated and inhabited in feveral different places. From *Misina* we travelled through *Skawero*, *Jamma Nakka*, and *Kapto Jes*.

One of the handfomeft and largeft trees that I faw here; was the fuperb and incomparable *Thuja dolabrata*, which was planted every where by the road fide. I confider this tree as the handfomeft of all the fir-leaved trees, on account of its height, its ftraight trunk, and its leaves, which are conftantly green on the upper, and of a filver-white hue on the under part. As I did not find it in flower here, nor any of its cones with ripe feed in them, I therefore ufed my endeavours to procure, through the interpreters and others of my friends, a few feeds and growing plants of it, which I afterwards fent over to Holland by the firft conveyance.

A

FAKONIE, 1776.

A fhrub grew here to which I gave the name of *Lindera*; its wood is white and foft, and the Japanefe make tooth-brufhes of it, with which they brufh and clean their teeth, without injuring either the gums or teeth in any fhape whatever. Thefe are fold as common as matches in Europe.

The Barberry bufh (Berberis vulgaris) both the Swedifh and that from Crete (B. Cretica) grew here, and were now in bloffom.

The Ofyris Japonica, that was found here, is a curious fhrub, which had feveral flowers on the middle of its leaves, a most rare circumstance in nature.

Amongst the bushes grew a great number of the *Deutzia Scabra*, a shrub, of which the leaves were forough, that the joiners used them univerfally, in the same manner as we do the shavegrafs for polishing wood.

The northern and mountainous part of Japan being very cold, I found here feveral genera of trees and fhrubs, which are otherwife inhabitants in Europe, although, for the moft part, they were a new fpecies. Thus I found here two or three kinds of Oak, fome Vaccinia, a few Viburna, and trees of the Maple kind, (Aceres) together with a wild fort of Japanefe Pear (*Pyrus* Japonica).

Near the farms, as well here as at various places, feveral other plants were cultivated, fome vol. 111, M for

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for hedges, fome on account of their beautiful flowers, and fome with a view to both these intentions. These were,

Several new fpecies of *Viburnum*, with both fingle and double flowers (*flores radiati*) fo that fome exactly refembled the Gueldres rofe (*Vibu-r* num opulus.)

Of the Spirea kind I very frequently faw the Chamædrifelia, and the Crenata used for hedges, which, with their fnow-white flowers, made an elegant appearance.

The *Citrus trifoliata* with its hard and fliff thorns, of the length of one's finger, was not fo generally ufed for hedges. Its bare branches were now in full bloom, and the leaves had hardly begun to fhew themfelves. The fruit was faid to be of a laxative nature:

For beauty nothing could excel the Maples indigenous to this country (Acer diffectum, Japonicum, palmatum, feptemlobum, pictum, and trifidum); which here and at other places were found cultivated. They had but just then begun to putforth their bloffoms; and, as I could no where get any of the ripe feed, I was obliged to befpeak. fome fmall plants in pots, which, with a great deal of trouble and expence, were forwarded to Nagafaki.

That beautiful plant, the Gardenia florida, which I faw here both with double and fingle flowers, and

FACONIE, 1776.

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and which is fo feldom to be had in other places, was alfo a bufh ufed for making hedges, altho' by the principle people of the country only, and near their dwellings. The feed veffels of it were fold in the fhops, and ufed for dying yellow:

A long and flender Lizard (Lacerta Japonica) which the interpreters confidered as a Scincus marinus, and which was called by the Japanefe, in their language, Sans jo no iwo, was very commonly feen running in the tracts of the Faconie mountains. I afterwards faw the fame animal hanging out for fale and dried, in almost every shop in this part of the island; feveral of them were fpitted together on a wooden skewer, that was run thro' their heads. It was used in powder as a ftrengthening remedy; it was alfo exhibited in confumptions; and to children that were infefted with worms. The Arum dracontium and dracunculus, and the Dracontium polyphyllum, with its large flowers, that diffused around a cadaverous odour, were feen difperfed up and down in different fpots, as also the Arum efculentum, which was cultivated in feveral places. The roots of all these plants are very acrid. The root of the Dracontium polyphyllum is used by diffolute women, for the purpose of procuring abortion ; but the root of the Arum esculentum, when divested of its acrimony, and cut into pieces, is a good and nutritious food. PA 2 The

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The village of Fakonie lies on the borders of lake Fakonie above mentioned, which is furrounded by mountains on all fides. This village confifts of at leaft one hundred and fifty houses, altho' it lies fo high up the mountains as hardly to admit of cultivation. The lake is faid to be one league long, and three quarters of a league broad. In fome places it appeared to me to be of the breadth of two musket shots at most. Stroemings, a fpecies of Herring fo common in the Baltic, and which, according to Kampfer, is to be found here, I had not an opportunity of feeing; but fome falmon was now ordered to be fmoked against our return. This lake was faid to have been produced by an earthquake, which in this country, and efpecially in the northern parts of it, is no uncommon phænomenon. This is the more probable, as from the bottom of the lake the divers still bring up large cedar trees, which had formerly funk down thither with the land itfelf.

Cedars (Cupreffus Japonica) grew in great plenty hereabouts, as well as in most of the other provinces; but no where, perhaps, can they be found finer, or in greater numbers. These are indeed the straightest and tallest of all the fir-leaved trees. Their trunks run up as straight as a candle, and the wood lasts long without being subject to decay. It is not only made use of for the construction of bridges, ships, boass.

FAKONIE, 1775.

boats, and other forts of wood-work to be kept under water, but of it is made alfo joiners work of all kinds and dimensions, which, when lacquered, shews all its veins through the varnish. This wood, when it has lain for fome time under-ground, and is foaked through by the water, acquires a bluish colour, and, when covered with a transparent lacquer, is extremely handsome, and much of it is fold from this place.

We now left this beautiful fpot, and proceeded on our journey down the mountain, during which time I did not neglect diligently to fearch for and collect the flowers and feeds of the plants and bufhes that grew by the road-fide. In our way we faw a great many pretty artificial cafcades and aqueducts from the lake, made by the inhabitants, for the benefit and convenience of their eftates. But before we reached the foot of the mountain, we came to an imperial guard, by whom we were narrowly fearched, in prefence of the fitting imperial commissioners.

This is the fecond guard which travellers, coming from the weftern diffrict, must pass, when they intend to go to Jedo. The fituation of the country hereabouts is fuch, that every one must travel over mount *Fakonie*, and pass this narrow place, which is guarded and shut up with gates. The duty of the commisfioners is particularly, to take great care that no M_3 weapon

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weapons are carried this way up the country, nor women downwards, efpecially fuch as are conftantly kept in Jedo as hoftages for the fidelity of their hufbands in the exercise of their offices, and for their loyalty to the emperor. This place is therefore like a frontier to the northern part of the country, and for the fecurity of the capital. It is here that travellers shew their passforts, and in default of fuch are detained.

Fatta, Kawa batta, Jomota, and Kafamats, were the villages which we paffed through before we arrived at Odowara, where we ftaid all night, after more than five hours journey. In Jomoto the interpreters told me, that not far from thence there was a warm bath.

On the 26th of April, we arrived early in the morning at a large and rapid river, called Sakkawa, which we croffed in flat-bottomed boats, with thin bottoms. After this we followed the coaft to the river and town of Fufifawa.

We went through Mifawa, Kofinkfikf to Koifo, four leagues from Odowara. Here we dined, and then travelled on for the fpace of about feven leagues to the town of Totfka (where our quarters were befpoke for that night) paffed Firafka, over the river Banningawa, and then paffed Nango, Kwada, Fufifawa town, and Fokanofikos.

SINAGAWA, 1776. 16

Banningawa is one of the larger, rapid, and dangerous rivers of this country, over which no bridge can be built. We croffed it therefore in flat-bottomed boats conftructed for the purpofe. Here ended the mountainous tracts, and a level plain lay open to us, as far as we could fee.

The town of *Tot/ka* was lituated in the interior part of a country, which projects in a very mountainous angle towards the fea; but we foon got to the fea coaft again, and followed its thores quite up to the capital.

We fet out on our last day's journey on the 27th of April, and had about ten leagues to go to Jedo. On this, as on the preceding day, we travelled through an extremely well inhabited and cultivated country, where one town or village almost joined another, and where travellers, in large troops, near the capital, as it were, jostled each other. We arrived first at Sinamo, and then at Odogaia, Kanagawa, Surumi, and Kawafakki, where we dined. Asterwards we came to the river Rokogawa, to Omuri, Obotoki, Okido, and Sinagawa.

On the coaft, which in different parts was well fupplied with oyfters, and was covered with a great many fhells of different forts, of which I had no opportunity to get any in the courfe of M 4 this

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this day. I obferved how both (Fuci and Ulvæ) green and brownifh Sea-weed were collected to ferve thefe induftrious people for food. After thefe weeds, which were naturally not a little tough, had been well wafhed and freed from falt, fand, and other impurities, they were cut into fmall pieces, which were again wafhed and fqueezed, till they were fit to be made into fmall cakes and eaten.

Sinagawa and Takanava are two fuburbs to the imperial refidence town of Fedo, the former commencing about two leagues from thence, and being continued along the fea fhore. We refted a full hour in Sinagawa, took fome refreshments, and enjoyed the delightful view afforded us by the largeft town in the empire, and probably on the whole face of the earth, as well as that of its beautiful harbour. This latter, however, it must be confessed, is excessively shallow and muddy. The largest vessels frequently lie at anchor at the diftance of five leagues from the town, others lefs than two leagues, and the fmall craft and boats in feveral rows within each other, to the amount of fome hundreds, according to their different fize and burthen. The town is by thefe means well fecured from the attacks of an enemy by fea; befides that, infurmountable obstacles lie in the way in cafe of

jedo, 1776.

of the transportation of merchandize from other places.

With the fame curiofity as we beheld the town, harbour, and adjacent country, the Japanefe beheld us and making up to us in fhoals, if I may ufe the expression, formed around us, shut up, as it were, in our norimons, a kind of encampment. Amongst the rest were feveral ladies of distinction, who had been carried to the spot in their norimons, and seemed displeased when we at any time let down the curtains. These norimons, when set down on the ground around us, seemed to form a little village, whose small moveable mansions a short time afterwards disappeared.

Having paffed through the fuburbs of Sinagawa and Takanava, composed of only one ftreet, I perceived by the guard, the increased number of people, the filence of our bearers, and their fleadier gait, that we were in the capital. Not long after we passed over Niponbas, a bridge of forty and odd fathoms in length, and from which all the roads in the kingdom are measured. After having passed the guardhouses at the entrance of the town, we were carried a full hour along a large and broad ftreet before we arrived at our usual inn, where we were carried through the back gate, and through a narrow passed to the other end of

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the houfe. The first entrance into this lodging did not feem to promife us any thing very great or elegant; but being shewn up one pair of flairs, we found our apartments tolerably neat, though not fuch as I expected for an embaffy from fo diftant a part of the world. A large room formed our anti-chamber, drawing-room, and dining-room; a feparate room for the ambaffador, and another that could be partitioned off for the doctor and the fecretary, together with a fmall room for bathing, made the whole of our private conveniencies, with which we were obliged to put up during our flay here. The view was towards a fmaller ftreet, which was feldom free from boys, who conftantly called out and made an uproar, as foon as they caught the leaft glimple of us, nay, and fometimes climbed up the walls of the oppofite houfes in order to fee us.

Thus we had with health and pleafure finished our long journey; and without any one being indisposed (except the fecretary, who, when at fea, fuffered an attack from the gout) were fafe arrived at the capital of this country, fituated in the remotest corner of the east.

The road by which we were conducted, was at fome few places altered from that which the ambaffador took in KÆMPFER's time, and a few other inns, different from those which we called

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at, were ufed for refting and dining at. The voyage, which lafted almost a whole month, rendered this journey to court uncommonly tedious to us, and made our arrival at Jedo later than, perhaps, had ever happened before. This circumftance, however, was quite in my favour, as by this means the fpring paffed away the fafter, and the fummer approached the nearer, fo that more trees and plants had time to bloffom, than I should otherwife have feen and collected, if the journey had been a month shorter, and we confequently had returned a month fooner to the factory at Nagafaki.

In our way, we had an opportunity of feeing how feveral of the princes of the country, as well the greater and more opulent as those that were less confiderable made their annual journey to the imperial court, with a retinue proportioned to their rank and income. Few of them met us in their return. Moft of them paffed us on their way thither. For fuch as were of great confequence, we were obliged to ftop while they paffed us, unlefs we could get on to fome inn before them; and when their retinue was very large, we frequently fuffered the inconvenience, especially when we met them in places where there were nothing but fmall villages, of being obliged to put up at very indifferent inns. It even happened to us once, that we were compelled to leave the inn

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inn we had already engaged in the town, and go to one of the temples fituated out of it, where we flaid two days, before we could get proper bearers, horfes, and other neceffaries for the continuation of our journey.

Several hundred men, fometimes even to the amount of one or two thousand, frequently conflituted the train of one of these princes, who travelled with great flate, order, and magnificence. A confiderable quantity of their baggage was carried by them, or elfe on horfes backs. Their coats of arms and infignia were always borne at a greater or lefs diftance from their norimons. A beautiful led horfe or two generally went before, and fome had one or more falcons, trained up to the fport, which were carried on the arm, with a chain fastened round one of their legs. Belides this, large and finall chefts, bedding, the equipage of the tea table, and even an umbrella, fan, hat, and flippers, were carried by different fervants, in order to have every thing ready at hand. Wherever they paffed a profound filence was observed; the people on the road fell proftrate on the ground, in order to fhew their respect. The norimonbearers wore their mafters livery, and every thing elfe was marked with the owners coat of arms. When they paffed us, the curtain was generally down; fome of them however had the politenefs

politenefs to draw it up, and even to bow tous, and fome fent their attendants to compliment us. If at any time we arrived before them at a town, or village, we had an opportunity of feeing, from fome houfe which had been already befpoke for us in the main ftreet, the whole fuite pafs by, when the curtain of the carriage was generally drawn up, and we had a fight of the prince fitting in his norimon, in appearance and complexion exactly like the common people, dreffed in the fame manner, and, except in the great ftate he exhibited, in no wife differing from other men.

On the frontiers of every province through which we paffed, we had always been well received indeed, and complimented, but were not allowed to pay the princes a vifit, although we paffed thro? the very town in which they refided; nor were we once visited by them. The former of these could not be done, becaufe it would have coft us confiderable prefents, which, after the manner of the country, are always fent previoufly to the visit being made. Neither is the latter fuffered . for certain reasons; for belides that this is prohibited, in order that the Dutch may not form any acquaintance with the princes of the country, which in one respect or another might prove prejudicial to it, the very dignity and greatnefs of the princes do not allow it, who, if this was done.

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done, must appear in all their state. One evening, neverthelefs, we happened to have the honour, as unexpected as it was unufual, of being vifited at our inn by a great perfonage, who came to us incognito, accompanied only by two of his gentlemen, and ftaid till late at night, difcourfing with us on different fubjects. He feemed to be as curious and inquifitive as he was friendly and engaging. He examined our furniture, and every thing belonging to us that was at hand, with great attention, and the conversation turned not only on the affairs of Japan, but also on those of Europe. Sometimes, it is true, we had rain, but not too often, and the cold was fupportable, altho' in fome few places we were obliged to moderate it in our apartments by means of a fire. The Japanese themselves bore cold better than rain, which did not altogether agree with their bare feet and heads. If it rained hard, they did not willingly go out and expose themfelves to it; otherwife, when on a journey, they covered themfelves with an umbrella, hat, and cloak. Their umbrellas are made of oiled paper, fuch as are usually brought from China; their hats are round, and deep in the crown, and made of fine grafs, platted ; they are very thin and light, and are tied under the chin with a ftring. Their cloaks being made of oiled paper, keep the

the rain out, and are inconceivably light, and at the fame time do not grow heavier by the rain, as the clothes of the Europeans do. The poorer fort of people, who could not afford a cloak of the kind, hung a piece of flraw-mat on their backs, which was generally finooth, but fometimes rough on the outfide, from the projecting and depending ends of the flraw.

In our journey hither we had passed through fourteen provinces, viz. Omura, Fisen, Tsikungo, Tsikudsen, Budsen Jammasiuo, Omi, Ist, Owari, Mikawa, Tootomi, Surunga, Sagami, and Musasi; besides passing by eight more on the coast in our voyage, viz. Nagatto, Suwo, Aki, Bingo, Bitsju, Bidsen, Farima, and Sidsju.

RESIDENCE IN JEDO, 1776.

IMMEDIATELY on our arrival at Jedo, we were vifited by great numbers of the Japanefe, altho" we were not fuffered to go out before the day of audience. However, no one had liberty to pay us a vifit, except fuch as had received express permiffion from the government. At first we were vifited by the learned and the great men of the country; afterwards even merchants and others were numbered among our vifitors.

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Five phyficians and two aftronomers were the very first, who after obtaining leave from the council of the empire, in a very ceremonious manner came to fee us, and teftify their fatisfaction at our arrival. The ambaffador in perfon, as alfo the fecretary and myfelf, received them in our faloon, and had feveral hours converfation with them; although I, as being more travelled in the extensive fields of fcience, was, after the first general compliments had paffed, almost folely engaged with their queftions, to which they requefted fatisfactory answers and illustrations. The aftronomers were SAKAKI BONSIN and SUBO-KAWA SULO, both elderly and fedate men. Thequeftions chiefly regarded eclipfes, which I found that the Japanefe could by no means calculate to minutes, and frequently not even to hours. As all queftions and answers were obliged to be made through the interpreters, it often happened that we did not clearly underftand each other; befides. I was not fo well verfed in the fcience that treats of the celeftial bodies, as I could have wifhed, and neither they nor I had any book at hand, that could be of the least affistance to us in this point. With the phyficians, it was much eafier to converse, as two of them understood Dutch a little; likewife the interpreters were not totally ignorant of the art of healing. The phyficians were as follows: OKADA JEOSIN, a man

man above 70 years of age ; he generally took the lead in the conversation, and amongst other things particularly requefted me to give him fome information concerning the cancer, broken limbs, bleeding at the nofe, boils, phimofis, ulcerated throat, tooth ach, and the piles. Kuri-SUKI DOFA, was a young phyfician, who accompanied the former. AMANO REOSIUN and Fokusmoto Dosin were the names of two others, who in general were only hearers. All thefe did not often repeat their vifits, which afterwards indeed were not made with any parade, particularly to me. But two of the doctors not only vifited me daily, but fometimes staid till late in the night, in order to be taught and inftructed by me in various fciences, for which they had great predilection, fuch as natural philosophy, rural œconomy, and more particularly botany, furgery, and phyfic. One of these gentlemen, KATS-RAGAWA Fosju, was the emperor's body phyfician; he was very young, good natured, acute and lively. He wore the imperial arms on his clothes, and was accompanied by his friend NAKAGAWA SUNNAN, who was fomewhat older, and was body phyfician to one of the first princes of the country. Thefe two, and particularly the latter. fpoke Dutch tolerably well, and had fome knowledge of natural hiftory, mineralogy, zoology, and botany, collected partly from Chinefe and VOL. III. N Dutch

Dutch books, and partly from the Dutch phyficians, who had before vifited the'e re ions. Both of them were inexpreffibly infinuating, and fond of learning; and were the more defirous of engaging me in conversation, as in me they found that knowledge which had been fought for in vain in others, and as the interpreters had long before our arrival fpread thereport, that this year a Dutch doctor would arrive much more learned than those who ufually came thither, and who frequently were very little better than farriers. The fine fet of inftruments that I had brought with me from Paris and Amfterdam, ferved to confirm them ftill more in the good opinion they had already conceived of me. Although I was often wearied out by their queftions, yet still I cannot deny, that I have spent many an hour in their company, with equal fatisfaction and advantage. They frequently brought to me at the inn, either as prefents or elfe for my infpection, fmall collections of drugs, minerals, and various fresh plants, both with and without flowers. Of the latter, which I put up in paper, dried and laid by, they gave me the indigenous names, together with their different ufes; and I communicated to them in return, the Latin and Dutch names, and the more rational uses which the Europeans make of them. Their principal books in botany were, JOHN-STON's Historia Naturalis, and DODONAUS'S Herbal; and

and in phyfic, Woyr's Treafury (Gazophylacium) which books they had purchafed from the Dutch. In furgery, they had HEISTER translated into Dutch, and I fold to them at this time amongft other books, a very fine edition of MUNTINGIUS'S *Phytographia*.

The doctors were diftinguished from others, by the circumftance that they fometimes shaved their heads all over, and fometimes kept their hair on, without taking, like others, part of it off.

In all the Japanese towns, the utmost care is taken to prevent fires or other cafualties. A trufty, vigilant, and fufficiently numerous watch, is therefore appointed at all places, and is fet early in the evening, as foon as it is dark. The first night it excited my attention, and ever afterwards took care to be very diffinctly heard. This watch was double in Jedo ; that is, one of them only gave intelligence with refpect to the hour ; which was done by ftriking two pieces of wood against each other. These strokes were given very frequent, and almost at every house, by the watch, as they went their rounds. The two laft ftrokes followed very quick upon each other, for a token that no more were to be expected. Such a watch was kept for the moft part in every ftreet: The other watch is particularly appointed for the prevention of fires, and is known by the circum-N 2 fance

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flance of his dragging along the ftreets a cleft bamboo, or an iron bar, in the upper part of which there is an iron ring, that produces a fingular and difagreeable found. At the end of every freet, where it can be fhut with gates, there is always a high ladder, on which the watch can mount, to fee if there be any where an appearance of fire. At the top of every house, there is a square place furrounded with railing, where a vat with water always ftands ready at hand in cafe of fire. In a great many places are crected, near the houfes, ftorehouses of stone that are fire proof, in which merchandize and furniture may be faved. On the fides of thefe, I obferved feveral large iron hooks fixed in the wall, which ferved to hang wet mats on, and by that means to moderate the force of fire.

For the reft, the houfes in Jedo are, as in other towns, covered with tiles, and two ftories high, the uppermoft of which is feldom occupied.

As the houses are very liable to take fire, conflagrations very often happen in Jedo, that lay wafte whole rows of houses and entire ftreets. During our ftay here, fires broke out feveral times, but were very foon extinguished. Our ambassiador gave us the history of a terrible fire which happened during his ftay here in the month of April, 1772. The fire broke out at twelve

twelve o'clock at noon, and lafted till eight in the evening of the following day, infomuch that the devaftation made by it extended fix leagues in length, and three in breach. On this occafion the inn occupied by the Dutch, was burnt down, and they were removed three times that night from the vicinity of the fire, and laft of all to a temple.

Earthquakes were felt feveral times during our refidence in the capital, although they were not very fevere, and more were faid to have taken place, though we were not able to perceive them.

We now diffributed gratuities to those who had brought us hither. The man that waited on us had four rixdollars; the norimon bearers three; those that walked by the fide of us allo three, and two other fervants three rixdollars, feven maas, and five konderins.

Exclusively of the usual current specie which I had feen during my journey, I was at fome pains to collect, by means of the interpreters and physicians, every fort of ancient and scarce coin. The most common current coins were as follow: The New Kobangs, which are oblong, rounded at the ends, and flat, about two inches long and a little more than two broad, and scarcely thicker than a farthing, are of a pale yellow colour; the die on one fide confists of feveral crofs lines stamped, and at both ends there is a N 3. paral.

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parallelogrammical figure, with raifed letters on it, and, befides, a moon-like figure, with a flower on it in relief. On the other fide is a circular ftamp, with raifed letters on it; and within the margin, towards one end, two fmaller funk ftamps with raifed letters, which are different on each kobang. The value of it is fixty maas or fix rixdollars. Itjib is called by the Dutch Golden beans (Boontje) and is made of pale gold, of a parallelogrammical figure and flat, a little thicker than a farthing, with many raifed letters on one fide, and two figures of flowers in relief on the other. The value of this is five maas or onefourth of a kobang. Nandio gin, is a parallelogrammical flat filver coin, of twice the thickness of a halfpenny, one inch long and half an inch broad, and formed of fine filver. The edge is ftamped with ftars, and within the edges are raifed dots. One fide is marked all over with raifed letters, and the other on its lower and larger moiety, is filled with raifed letters, and at the fame time exhibits a double moon-like figure. This I found paffed current on the island of Nipon only, and especially in the capital towns of the empire; its value was feven maas and five konderins.

Itaganne, and Kodama, were denominations by which various lumps of filver, without form or fashion, were known, which were neither of the same fize, shape, or value. The former of these, however

ever, were oblong and the latter roundifh. for the moft part thick, but fometimes though feldom flat. Thefe pafs common in trade; but are always weighed in paffing from one individual to another, and have a leaden caft. They differ with refpect to the letters inferibed on them; and thofe that have the figure of the God of riches on them, are called *Daikokus ganne*. A more particular defeription of thefe, and the reft of the Japanefé coins, illustrated by figures, is to be found in the Speech I made before the Royal Academy, of Sciences at Stockholm, in the year 1779,

Seni is a denomination applied to pieces of copper, brafs, and iron coin, which bear a near refemblance to farthings. They differ in fize, value, and external appearance; but are always caft, and have a fquare hole in the middle, by means of which they may be ftrung together; and likewife have always broad edges. Of these are current, Sjumon Seni, which, however, at prefent is fcarce, and paffes for ten common feni, or half a maas. Simoni Seni, of the value of four common feni, is made of brafs, and is almost as broad as a halfpenny, but thin. I found it current in the ifland of Nipon only. It is eafily known by its yellow colour, and by its raifed arches on the under fide. The common Seni are of the fize of a farthing, and made of red copper; 60 of them make a maas. Doofa Seni, is a caft iron coin, in appearance like the laft, and NA. of

of the fame fize and value, but fo brittle, that it is eafily broken by the hand, or breaks in pieces when let fall on the ground. This was caft in a mint near the town of Nagafaki.

The coins formerly current, and at prefent fcarce, which my friends procured for me here, were as follow: Old Kobang; this is made of fine Gold, is of an orange-yellow colour, and fomewhat broader than a New Kobang, otherwife it bears the fame imprefiion. It is always worth to rixdollars or thails.

Old Itjib is fomewhat longer, broader, and thicker than the common Itjib; it is made of pale gold, and in value 22 maas and five konderins. One fimilar to this, but lefs, was faid to be very fcarce, it was much fhorter, narrower and thinner, and of a deeper colour, and was valued at eleven maas, two konderins, and two Catjes.

Kosju kin, Kosjubang or Kosju Itjib, Nifin and Sjunak, were finall gold coins, different in fize, form, and value. They were faid to have been formerly coined in the province of Kosju, and from that circumflance to have obtained their name. They are made of pale gold, and flat, with flamps on each fide, two on the one fide and four on the other. Of thefe I obtained four of the round and one of the fquare fort, differing in fize, but all agreeing in having the uppermost flamp on one fide always fimilar, and the other

other two to the right, on the other fide, also fimilar. The lower framp on one fide, and the two to the left on the other, are wariable in feveral of these coins. The round ones were marked within the edges with raifed dots, but the square ones not. The value of them is from two to twelve maas.

Gemome Gin, a flat filver coin, is almost two inches long, and half as broad, with transated angles, as thick as a halfpeany, and made of indifferent filver. On the edges are feveral ftars, and within them, on each fide, there is an elevation, as if a Nandiogin had been laid in there, on which there is a large ftamp with raifed letters. The other leffer moiety is on one fide fmooth, and on the other decorated with two rows of dots, two ftraight crofs bars, and between them a wavy ribband, all raifed. This was yalued at five maas, and faid formerly to have been current in the capitals of the empire.

Amongst fuch Japanese books as were shewn me, was one which had been printed during the time of the Portuguese being here. It was a long quarto, printed on Japan paper, and entirely with Japanese characters, except the title page. At the top of this flood *Racvyovv*, which the interpreter could not translate into Dutch. In the middle was an oblong Portuguese coat of arms, and below it—In Collegio Japonico Societatis Jefa

Jefu, cum facultate fuperiorum. A. D. MDXCVIII. The interpreters faid that it was a vocabulary, but without any Portuguefe in it. It was an inch in thicknefs.

My attentive and ingenious pupil, Mr. Sunnan, made me a prefent of a Japanese herbal, which he called *Chimenso*, confisting of twenty volumes in octavo, with descriptions and very indifferent figures. Each volume was one or at most two lines broad.

Befides this I had likewife an opportunity of purchafing fome other printed botanical books, confifting of different numbers of volumes; and containing figures of different degrees of excellence, fuch as Sooqua Jenfo, a herbal confifting of three volumes, and containing, befides defcriptions, indifferent figures of Japanese plants only. Morokufi Komoofi, another herbal, which treated at the fame time of quadrupeds, fishes, birds, manufactures, and rural œconomy. This was faid to have been first printed in China, and confifts of feveral volumes, and fmall miferable figures. The fame work, printed in Japan, but in a fomewhat handfomer manner, was called Kimofi. It confifts of thirteen volumes in quarto.

Foko no jamma Kufu was a beautiful herbal, confifting of only one octavo volume, with elegant and diffinct figures of Japanese plants; and another (title unknown) in feven volumes quarto.

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I also bought a large printed book, in large quarto, and in two parts, with coloured figures of Japanese fishes. This is one of the most elegant publications ever exhibited in this country, and the figures are engraved and coloured in fuch a manner, as would obtain fingular commendation even in Europe.

At this time, and during the 26 days that I refided at Jedo, the weather was often damp, and almost every day cloudy; with fometimes drizzling, and fometimes heavy rain, either in the fore or afternoon.

The Japanese kept here to their usual mealtimes. They eat three times a day, and very frequently; their fare was mile-foup boiled with fish and onions.

A kind of a thick paper, which was of a brownifh colour, with feveral fingle darkifh ftreaks printed on it, was fold as a rarity. Several pieces, of more than a foot fquare, were pafted very neatly together, and were faid to be ufed as nightgowns. Thefe night-gowns, as I was informed, were worne by very okl people only, and that in the cold feafon of the year, when they do not perfpire, and over one or two other night gowns. It was faid, that young people were abfolutely forbidden to wear them. As this drefs was neither durable, or indeed neceffary for want of better clothing, it rather denoted the great age of those that were permitted to wear it.

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Ano-

Another fort of ftuff was made me a prefent of, as a ftill greater rarity. It was woven, was as white as fnow, and refembled callico; but it was prepared, fpun, and woven, from the fame kind of bark and its filaments of which their paper is commonly made. This was used inflead of linen, not through neceffity, but as a rarity, and was not very firong. It was faid that it would bear washing, but that this operation was to be performed with great care.

The candles used in this country are made of an oil preffed out of the feeds of the Rbus succedanca. This oil becomes, when concrete, of the confiftence of tallow, and is not fo hard as wax. The province of Jetfigo, more particularly, produces this tree, and confequently fupplies the greateft quantity of this oil. Amongst the prefents which the prince from this province brings to the imperial court, are one hundred candles of a foot in length, and as thick as a man's arm, with a wick in proportion. Thefe gala candles are burned only twice a year at court; that is, on the first of Sjoguats, and at the festival of the first of Sjuguats. Although it is a difficult matter to procure any of these candles, I had nevertheles the good fortune to get one, which had burnt on the above-mentioned occasion. The oil in thefe feemed both whiter and harder than in the final ones that are commonly exposed to fale, which foon grow rancid and brown.

The 18th of May was appointed for the day of audience. This day was not fixed on before we arrived at Jedo, and always depends upon the fpeed or tardiness of our journey thither. The day being now arrived, we were ready in our beft apparel, after having previoufly made a good breakfaft, to be conveyed in our norimons to the imperial palace. We were dreffed in the European fashion, but in coftly filks, which were either interwoven with filver or laced with gold. And on account of the fellivity of the day, as well as of the occafion, it was requifite for us to wear our fwords, and a very large black filk cloak. The prefents had been fent before, as well to the emperor as to the hereditary prince, the privy counfellors, and other officers of state, and arranged in order at the fide of the room, where we were to have our audience.

We were carried for a confiderable time through the town before we arrived at that part which conftitutes the emperor's refidence. This is furrounded by foffes and ftone walls, and feparated by draw-bridges. It forms a confiderable town of itfelf, and is faid to be five leagues in circumference. This comprifes the emperor's private palace, as alfo that of the hereditary prince, each of which were kept feparate by wide foffes, ftone walls, gates, and other bulwarks. In the outermost citadel, which was the largeft of all, were large and handfome covered ftreets,

ftreets and great houfes, which belonged to the princes of the country, the privy counfellors, and other officers of state. Their numerous families, who were obliged likewife to remain at the court the whole year throughout, were alfo lodged here. At the first gate, it is true, there was a ftrong guard, but that at the fecond gate was faid to confift of one thousand men every day. As foon as we had paffed through this gate, having previoufly quitted our norimons, we were conducted to an apartment where we waited a full hour, before we were fuffered to advance any farther into the imperial palace. At laft we obtained leave to approach it. We paffed thro' a long lane of warriors, who were posted on both fides, quite up to the door of the palace, all armed and well clothed.

The emperor's private palace was fituated on an eminence, and, although it confifted of one flory only, ftill it was much higher than any other houfe, and covered a large tract of ground. We were immediately conducted into an antichamber, where we again waited, at leaft an hour. Our officers fat down in the Japanefe manner on one fide, and the Dutchmen, together with the interpreters, on the other. It proved extremely fatiguing to us to fit in their manner; and as we could not hold it out long thus, we put our legs out on one fide, and covered them with our long cloaks, which in this refrect were of

of great fervice to us. The time that we waited here did not appear long to us, as great numbers of people paffed in and out, both in order to look at us, and talk with us. We were vifited by feveral princes of the country, but conftantly incog.; though we could always perceive when they were coming, from the murmuring noife which was at first heard, and the filence that enfued upon that in the inner rooms. Their curiofity was carried to a great length in every thing; but the chief employment they found for us was, to let them fee our mode of writing. Thus we were induced to write fomething, either on paper or on their fans. Some of them allo fhewed us fans on which the Dutch had formerly written, and which they had carefully treafured up as great rarities.

At last the instant arrived, when the ambassador was to have audience, at which the ceremony was totally different from that which was used in KÆMPFER's time, a hundred years ago. The ambassador was introduced into the prefence of the Emperor, and we remained all in the apartment into which we had been ushered, till in a short time he returned.

After the return of the ambaffador, we were again obliged to ftay a long while in the antichamber, in order to receive the vifits, and anfwer the queftions of feveral of the courtiers, during

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during whole entrance a deep filence feveral times prevailed. Amongst these, it was fuid that his imperial majesty had likewise come incognite, in order to have a nearer view of the Dutch and their drefs. The interpreters and officers had spared no pains to find out, through the medium of their friends, every thing that could tend to our information in this respect. The emperor was of a middle fize, hale constitution, and about forty and odd years of age.

At length, after all the vifits were ended, we obtained leave to fee feveral rooms in the palace, and alfo that in which the ambaffador had had audience. The ambaffador was conducted by the outfide of the drawing room, and along a boarded paffage, to the audience-room, which opened by a fliding door. The inner room confifted in a manner of three rooms, one a flep higher than the other, and according to the measure I took of them by my eye, of about ten paces each in length; fo that the diffance between the emperor and the ambaffador might be about thirty paces. The emperor, as I was informed, flood during the audience, in the moft interior part of the room, as did the hereditary prince likewife at his right hand. To the right of this room was a large faloon; the floor of which is covered by one hundred mats, and hence is called the hundred mat faloon. It is fix hundred feet long, three hundred broad, and

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is occupied by the most dignified men of the empire, privy counfellors and princes, who all, on fimilar occafions, take their feats according to their different ranks and dignity. To the left, in the audience room, lay the prefents piled up in heaps.

The whole of the audience confifts merely in this, that as foon as the ambaffador enters the room, he falls on his knees, lays his hand on the mat, and bows his head down to the mat, in the fame manner as the Japanese themselves are ufed to teftify their fubjection and refpect. After this the ambaffador rifes, and is conducted back to the drawing-room the fame way as he went.

The reft of the rooms which we viewed, had no furniture in them. The floors were covered with large and very white ftraw mats; the cornices and doors were handfomely lacquered, and the locks, hinges, &c. well gilt.

After having thus looked about us, we were conducted to the hereditary prince's palace, which flood clofe by, and was feparated only by a bridge. Here we were received, and complimented in the name of the hereditary prince, who was not at home; after which we were conducted back to our norimons.

Although the day was already far advanced. and we had had fufficient time to digeft our early breakfast, we were, nevertheless, obliged to 0

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pay vifits to all the privy counfellors, as well to the fix ordinary, as to the fix extraordinary, at each of their refpective houses. And as these gentlemen were not yet returned from court, we were received in the most polite manner by their deputies, and exhibited to the view of their ladies and children. Each visit lasted half an hour ; and we were, for the most part, fo placedin a large room, that we could be viewed on all fides through thin curtains, without having the good fortune to get a fight of these court beauties, excepting at one place, where they made fo free, as not only to take away the curtain, but alfo defired us to advance nearer. In general we were received by two gentlemen in office, and at every place treated with green tea, the apparatus for fmoking, and paftry, which was fet before each of us feparately on fmall tables. We drank fometimes a cup of the boiled tea, but did not touch the tobacco, and the paftry was taken home through the prudent care of our interpreters.

On this occafion I shall never forget the delightful prospect we had during these visits, from an eminence that commanded a view of the whole of this large and extensive town, which the Japanese affirm to be twenty-one leagues, or as many hours walk, in circumference.

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So that the evening drew near by the time that we returned, wearied and worn out, to our inn.

On the following day, viz. the 19th of May, we paid our refpects to the temple lords, as they are called, the two governors of the town, and the two commiffaries of ftrangers.

A few days elapfed after this before we received our audience of leave from the emperor and the hereditary prince. This was given in a very fummary manner, and only before the lords in council appointed for this purpofe, on the 23d following. In the mean time, thefe and the following days were employed in receiving prefents, and preparing for our departure. At the audience of leave, the night-gowns, that are intended as prefents to the Dutch company, are then delivered; but the other prefents, deftined for the gentlemen themfelves, were carried to our inn. Every ordinary privy counfellor, the day after the audience of leave, gives ten night-gowns, every extraordinary privy counfellor fix, every temple lord five, every governor five, and every commiffary and the governor of Nagafaki two. Thefe are made of the fineft Japanefe filk, very wide, and reaching down to the feet, with large wide fleeves, in the Japanese fashion, and quilted either with filk-wadd or cotton. Of these our banjos received two, the fecretary and myfelf

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two a piece, and the ambaffador kept four to himfelf. Of the ftuffs, fome are black, and others flowered in different ways.

The reft are packed up for the company's own account, and divided into different packets, one for each of the East India company's warehouses in Europe, in order that they might be fent home in this manner from Batavia.

Amongst other curiofities that were shewn us at Jedo, was a young wolf, which had been caught farther to the northward, and, as a fcarce animal, had been brought hither to be shewn. The Japanese were not acquainted with this animal, and gave so strange an account of it, that we could not but long to see it. Being brought to the place where the wolf, which was fcarcely half grown, was kept, we observed how carefully they had tied it about the body and legs, though, in fact, it seemed more frightened than dangerous. The Japanese appeared rather aftonished when I told them, that in my native country these animals went in large troops, and fometimes did a great deal of mischief.

A finall cabinet, fuch as is ufed for the Japanefe toilets, with feveral drawers in it, a foot long, and little more than fix inches high, varnifhed with old lacquer (vieux lac), was offered to the ambaffador for fale. Such pieces of furniture now-a-days are feldom to be feen, and ftill feldomer

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feldomer exposed to fale. But, in order to purchafe it, one must have weighed it against gold. For this feventy kobangs were afked, or four hundred rixdollars. It was without doubt better lacquered than what is done at prefent, and the flowers upon it elegantly raifed. But yet the difference in the price feemed to me extravagant, and by far too great.

Maps of the country and towns are firicily prohibited from being exported, or fold to ftrangers. Nevertheless I had an opportunity to purchafe feveral, exactly like those that KÆMP-FER brought away with him (though with lefs trouble indeed) in his time. These were a general map of Japan, and of the town of Nagafaki, Miaco, and Iedo.

A woman who had been turned out of doors by her hufband, was permitted to vifit the ambaffador, in order to beg fomething towards her fupport. She had had her head fhaved all over, and walked about with it bare, making a very ftrange figure. This was faid to be cuftomary, when any female, for fome reafon or another, was parted from her hufband.

Koto was the name of a mufical inftrument, which in found much refembled a guitar or David's harp. It was fix feet long, and one foot broad, with thirteen ftrings, and moveable 03

pieces

pieces of wood for the better arranging the ftrings.

The two phyficians at court, my much beloved pupils, who vifited me almost every day, had, through my affiduous pains, and their own unwearied endeavours, made confiderable advances in the fcience which treats of the diagnofis of diforders, and had even begun, under my direction, to reftore to health feveral patients by means of the fame medicines as are used in Europe, divers of which they had procured, in order to use them as occasion might require. At this time it happened, that, as I for the most part prefcribed the medicines that were to be used, my advice was asked with regard to fome patient of great diffinction at the imperial court. But when I defired to be informed of the patient's fex, age, &c. which is very often highly neceffary for a phyfician to know, they affected great fecrecy, which prevented me from being able to prefcribe at all. The people of diftinction in this country feldom fuffer themfelves to be feen by the inhabitants themfelves, much lefs by ftrangers; and at court, the perfonages compoling the imperial family are for the most part fo little known, that there are very few people in the whole empire that know the reigning emperor's name before he dies. So that, in fact, it might have been abfolutely impossible for me to difcover

cover who my illustrious patient was. At first I ufed great importunity to be allowed to fpeak with the fick perfon, and to put fuch queftions as would ferve to give me information concerning the diforder. And this might have actually happened, on account of the dangerous fituation in which the patient was; but on this occasion fuch precautions were to be ufed, as would prevent me from either feeing the fick perfon, or laying my finger on the pulfe. In thort, my vifit was to be made in the adjacent room, with the curtain down. As by fuch means I could not obtain the neceffary information with refpect to the flate of the patient, I adopted the method of inveftigating and finding out the circumftances I ought neceffarily to be acquainted with through the medium of the interpreters, and of fuch of my medical pupils as had made the greatest advances in their studies. After which the remedy was foon prepared; and my illustrious patient, who without doubt was one of the imperial princeffes, quickly reftored to health.

I had brought with me from Holland a quantity of corrolive fublimate, and during my refidence here plainly perceived that this remedy was much wanted, on account of the great number of people that laboured under the venereal difease. Notwithstanding which, I could not fell any of it to the phyficians of this country, who were

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were totally ignorant of the use and application of this fure, but, at the fame time, dangerous medicine. They had fome idea, indeed, of falivation, but thought it too difficult and dangerous. With the other methods of using mercury they were not acquainted. I therefore thought I could not do better than prefent the practitioners, as well the phyficians of the country as the interpreters, with fmall parcels of the fublimate, and at the fame time gave them directions how to use it, by diffolving it in water with the addition of fome kind of fyrup. This folution was afterwards exhibited by them to a great many miserable creatures, after the due preparations, and with the utmost caution, but never without daily reports being made to me (and confequently under my direction; till fuch time as at length they could venture to take the management of it entirely to themfelves. The cures they performed with it feemed at first to furpafs their conception; they were rather inclined to confider them as miracles, and beftowed on me more thanks and bleffings than I could ever have expected for a piece of information, which I myfelf confidered as trifling; but which was of great importance to them, and may hereafter prove of ineftimable utility to a whole nation.

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The Japanefe have not the leaft knowledge of anatomy; neither have they the most distant idea of the circulation of the blood. When, therefore, they feel the pulfe of their patients, they do it first on one and afterwards on the other arm, not knowing that the beatings of the pulfe are every where exactly alike, and that the fame heart propels the blood to both places. This feeling of the pulfe, in their manner, is a tedious operation, and lafts full a quarter of an hour. Bleeding, indeed, has fometimes been performed in the arm by a few phylicians and interpreters; but it was but feldom that they had recourfe to this operation, and then always with a great deal of apprehension and fear. On this head I gave them not only the beft and most certain inftructions, but alfo encouraged them to practife on certain occasions, this fimple but often ufeful operation; and for that purpofe I was obliged to make a prefent to my beloved pupils at Jedo of my filver fpring-lancet, and other chirurgical inftruments which might be of ufe to them.

Amongst the plants which were brought to me in Jedo, and which I did not observe elfewhere, were the following, viz. (Juglans Nigra) Walnuts, (Fagus Castanea) Chesnuts, which, however, I asterwards faw in Miaco; (Inula belenium) Eleçampane, the aromatic root of which

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which was used as a strengthener of the stomach; and our common Pine (*Pinus abies*), several of which I faw at the time that they were carrying us up to the imperial court.

At the fame time too, I had the pleafure of feeing a man of diffinction carried in his norimon to court in the most pompous manner, a manner which is used in the towns; and on days of festivity only. On this occasion the norimon is not carried, as usual, on men's schoulders, but on their hands, and as high as the bearers possibly can, who at the fame time run with it as fast as they are able. The other hand is carried horizontally, and in running they throw their heels up into the air. This norimon passified us at fome diffance, like an arrow shot acrofs a field.

My friends made me a prefent of a large chalk-ftone, which was faid to be found in the ftomachs of horfes. The Dutch called it *Paardefteen*. It was only faid to be found in the vicinity of Jedo, in fuch horfes as are kept in the ftable, without my informer being able to throw any farther light on the fubject, or to fay whence this concretion derives its origin, and receives its growth. Some fmaller ftones which I had given me atterwards, were flatter, and had no nucleus in them. This ftone confifted of lamellæ, was very clofe-grained, and as large

as a child's head. I am apt to imagine, that the water which the horfes drink is impregnated with lime, and that their flanding ftill contributes much to the growth of this fubflance.

The minerals, as well as other natural curiofities which the Japanefe brought to me at Jedo, were of various kinds, of which I shall here enumerate only the most curious : Gold ore from Simar, was called Kan nab. Afbeftus, an immature species, called Jawatta. Cupreous Pyrites, from Simot/ke and Asjo jamma, or from Asjo mountain. A copper ore, brought hither from China, was called Simoo Seki : it contained a great quantity of fulphur, and was faid, when burned and reduced to powder, to be used in coughs. A white and fixed porcelain clay, of a farinaceous confistence, was called Fak Sekift. This, together with a great variety of other minerals from the Cape, as also Bezoar and precious ftones, I prefented to my much effeemed preceptor, the Chevalier BERGMAN, and may be feen in the collection of foffils belonging to the royal academy at Upfal; alfo a white Afbeftus with foft and fine fibres, called Sekima, which is fpun and woven, and made into cloth. Alfo a red Arfenic, called Owoo or Kyquan Seki; and yellow Shell-fand, termed Awa Sna (i.e. coarfegrained (and). A Lapis Steatites, was called Sakufekis, and Iswatta: this was of a flefh colour, and

and very beautiful. Pumice-ftone was known under the denomination of Karuifi, and a spathiform stalactite under that of T/urara Ifi. Cinnabar, in powder, was called Sju; a round quartzofe-itone was named from T/ugara, the place from whence it had been brought, Tjugaro Ifi, and also Takara Ifi ; white marble, Nikko Ifi and Nikkorofik; Galena with Cupreous Pyrites, Soi noi Megin; a fine rock oil, from Sinano, Kefofo no Abra; Saltpetre, Siro Jinfo; Sal fontanum, boiled out of the earth near fome warm-baths, Boofu; Phytolithus lithophyllum, from the Fakonie mountains, Konofa Is; Tubipora Mulica, Luukuv Sangoda; Sponge, Uniwatta; a Gorgonia ramofa, Umemats; red Corals from Kamaku, Sangodin; and the fame from Sangami, were called Sangosja; a thick red Millepora, from the ifland Sjofufima, in the province of Sannoki, Djukuts; Anomia plicatella, Seki Jen; Argonauta argo, from Jotfigo, Tako fune; Cypræa mauritanica, Kino Kui; Cicindela Japonica, from Oh, Hammoa; Julus terreftris, Jalude; Onifcus afellus, Saori Kofi, which fignifies a houfeinfect; Onifcus oceanicus, Funa Musi, which fignifies a fhip-infect; Sygnatus hippocampus, Kaij ba; Sepia octopodia (the Cuttle-fifh) which is much fished for, and is dried and eaten all over the country, Ika; Jamamo was the name given to a fifh with red fins, from the rivulets of

of the Fakonie mountains; this reduced to powder, was faid to be good for the ladies in pectoral complaints; Anas querquedula, was called *Kamo*. *Karafumo* was a name given to the roe of fome large fifh, which, falted, preffed flat, and dried, could be eaten like any other dry food with rice. *Kali*, *Makotje*, *Niga Kotje*, and *Ifaka Gotje*, were appellations borne by different kinds of flounders (*Pleuronectes*).

The interpreters also fhewed me a root, probably of fome Fern or other (*Filix*), which they called *Jaboki*, and which, when cut acrofs, exhibited the figure of a ftar, that was confidered by them as fomething extraordinary.

As the town of Jedo is very large and extenfive, it is likewife very populous, on account of the infinite number of ftrangers who flock to it from all parts of the country. Every family, it is true, has its own houfe, and the houfes are only one, or at most two, stories high ; but, yet, many individuals live crowded together in one and the fame houfe. Towards the ftreet there are always either work-fhops, or ordinary fale-fhops. Thefe are for the most part covered with a cloth, hanging down before them, at least in part, fo that no one can eafily fee from the ftreet what the people are at work upon. But in the fale-fhops are feen patterns of almost every thing. The fireets, efpecially the principal ones, through which

which we paffed, were very long and broad, frequently from eighty to a hundred feet in breadth. The town, like that of Nagafaki, is alternately governed by two governors, burgomafters, and commiffaries (*Ottoras*) over each ftreet.

I was informed that the princes of the country had not only their ufual palaces for themfelves and their families within the first citadel, but also feveral houses in different quarters of the town, to flee to in case of fire.

Before my departure my pupils requefted from me a certificate with respect to the instructions I had given them, and the progress they had made. I therefore gave them one written in Dutch, which made them so immensive happy and proud, that neither I nor any young doctor could possibly have ever plumed ourselves more on our doctor's hat and diploma. I had the good fortune to gain their love and friendship to fuch a degree, that they did not only fet a high value on my knowledge, and on my kindness in communicating that knowledge to them, but they loved me from the bottom of their hearts, fo as greatly to regret my departure.*

* Since this, during a period of feveral years, I have not enly kept up an intercourfe by letters with them, and others of my friends among the interpreters, but likewife fent them fome fmall, but acceptable, prefents, and received in return both feeds for the botanical garden at Upfal, and fome additions to the academy's collection of natural hiftory.

Our

Our departure from Jedo was fixed for the 25th of May, and was to take place inevitably, as the 13th of Siguats, or the 30th of May, was appointed by KUBO, the reigning fecular emperor, for his fetting out on a journey to the temple of Niko, which is very large, ftands thirtyfix leagues to the eaft of Jedo, and was the place where a great feftival was to be kept. This journey had been in agitation three years, and a great many preparations made for it, although it had been continually put off from year to year.

As both the monarch himfelf, and all the princes of the country are clothed, and their hair dreffed, in the fame manner as the reft of the inhabitants, and confequently, being deflitute of thrones, jewels, and the reft of their paraphernalia, cannot be diffinguished from others, they have adopted the expedient of exhibiting themfelves on journies and feftive occafions, according to their condition in life, and the dignity of their respective offices, with a great number of people, officers, and attendants hovering about them. It was therefore neceffary, that extraordinary preparations should be made for the fupreme ruler of the country. On the roads, new houfes were to be built to bait at, as well at night as in the day-time. Every convenience that could be thought of was to bein

in abundance, and previoufly in proper order at each place. All the domeftics, both before and during the journey, were to be in the higheft degree vigilant, every one in his ftation. During KUEO's abfence, the imperial citadel was to be in charge with the prince of the province of Mito, and the government with fome of the privy counfellors. Orders had already been iffued out that a careful watch fhould be kept every where, to prevent fires, popular commotions, and other untoward accidents. The money ordered to defray the expences of the journey amounted to 280,000 kobangs, or 1,680,000 rixdollars. Of this money diffributions were made to the privy counfellors, princes of the country, and others who were to be in the emperor's fuite. The journey was to be performed to the temple of Niko in three days, and the day after their arrival was to be a day of reft. On the 17th of Siguats, or the third of July, the feftival was to be celebrated, and the day following they were to fet out on their return home. At our departure on the 25th of May from Jedo, we already faw feveral large companies, which were to go before; but three days before the emperor fet out, fuch companies as these began to follow very close upon each other. On the day before the emperor's departure, towards the evening, they crowded

crowded fo clofe on each other, that there was only an interval of half an hour between the appearance of each company; and this continued till five o'clock in the morning, when the emperor himfelf fet out with the hereditary prince. In the train of this innumerable multitude followed, as the interpreters informed us, feveral. very old men, beggars, executioners, and even coffins, that nothing might be wanting to complete the proceffion.

Before I quitted Jedo, I felt myfelf excited by my pride, not only to know the name of the emperor, at whole court I had had the fingular fortune to refide, but alfo to learn the names of all the rulers, as well ecclefiaftical as fecular, who have reigned over this happy people and land fince KÆMPFER's time, which is almost a hundred years ago. I well knew the difficulty of this, and forefaw the impoffibility of arriving at any knowledge of it at any other place than here, which might be done by the affiftance of the friends whom I had obliged. It was not without a great deal of trouble, though, in fact, fortunate enough, and very flattering to me, that, a few days before my departure, I received an hiftorical fketch relative to this fubject, which otherwife could not have been procured for any fum of money. p VOL. III.

The

The name of the reigning fecular emperor, or Kubo, was MINAMOTO no JE FARÙ Koo; he had alfo received from the Dairi, whofe province it is to grant titles, the following firname: Sjo ji tfi naij daijfin Sakonje no taij fio zeij ji taij Siogun. His age likewife was given into me, and was forty-three years. MINAMOTA was faid to be the family name; JE FARÙ, his own name, and Koo anfwers to fir, although this title, like that of feigneur in France, is only given to people of diffinction.

The name of the hereditary prince was MI-NAMOTO no JE MOTO Koo, together with the Dairi's title : Su nieji daijnagon. He was faid to be about twelve years old.

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On the 25th of May, in the morning, we fet out from the capital for Nagafaki. Our journey homeward was made nearly in the fame manner, and along the fame road as the journey upward. We likewife, for the most part, put up at the fame inns, either to dine or sleep, and very feldom made any change. We dined this day in Kawafakki, and took up our first night's lodging in Tot/ka. On the 26th of May, before we

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we left this place, we made a purchafe of feveral elegant, but fmall, boxes of fhells, which were laid up very neatly and curioufly on carded cotton. Thefe are generally bought by the Dutch, either to fell again, or to fend to Europe to their friends and relations, as rarities from fo diftant a country. Although the fhells were all faftened to the cotton with glue made of boiled rice, in order that they might not fall off, I picked out as many as were not before known in Europe, or at leaft very fcarce, and which are now kept amongft other collections of the academy at Upfal.

We dined afterwards in Koijfo, and flept at Odowara. In our road we observed a Pine-tree (Pinus Sylvestris) the branches of which were fpread horizontally, and formed a vegetating cover over a fummer-house, under which one might walk to and fro. I had seen several of these pines before at different places, but none by far so extensive as this. Its branches were twenty paces in length, and supported by several poles that were placed under them.

On the 27th of May we croffed the high Fakonie mountains, where we met with the fame adventures as on our journey upwards. We dined at the village of Fakonie, received and paid for the things we had befpoke, and put up at night on the other fide of these mountains at Missima.

P 2

The

The Epidendrum monile, a parafitical plant, that does not faften its roots in the ground, was feen here, tied up in bundles, and hung out before the houfe. So that this plant could live feveral years without water or any kind of nourifhment whatever, and yet grow and flower all the while.

Several places also they had, Acrostichum baftatum, planted in pots for pleafure, although it is with great difficulty that this species of plant is raifed in Europe.

On the 29th of May, we travelled on till noon to Joftwara, where we dined, and in the evening to Kambara. In paffing by, we inveftigated ftill more accurately the lofty mountain of Fuft. The foot of it feemed, on the one fide in particular, to go off with a very long flope. Its fnow-white top appeared now very high above the clouds.

Here, as in various other places, the ordure left by travelling horfes was very carefully gathered from off the roads by old men and children. This was done very readily, and without flooping, with a fhell (*Halietis tuberculata*) which refembled a fpoon, and was fastened to a stick. The gatherings were put into a basket, and carried on the left arm.

Neither could I fee without admiration, the induftry of the farmers in manuring their lands, a work, in which they were already pretty far advanced. This collection of manure of every kind, uring

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urine and offals, which they had prepared at home, quite thin and fluid, they now carried in two pails on their fhoulders to their lands, and there with a fcoop poured it out near the roots of the green corn, the blades of which were fix inches long. This I was told was done twice each time they fowed.

Trapa natans was a very common plant in the rice grounds; and its black roots were much uled for food when boiled in foups; although I thought them rough and difagreeable.

On the 29th, 30th, and 31ft of May, we proceeded on our journey as far as Niffaka, where, on account of the great number of people, who met the travelling princes, we were obliged to ftay three whole days. On the firft of these days we did not travel more than seven miles, to Sutjo; on the second day to Smada, on the third we did not get farther than to Niffaka, scarcely more than two leagues.

The catkins of the alder (*Betula Alnus*) were feen in feveral places, hung out in the fhops for fale. On enquiry, I found they were used for dying black.

The Lycium Japonicum, a fmall handfome fhrub, was every where planted for hedges; and

The Azalea Indica flood in almost every yard and plot, near the houses, in its best attire, ineffably resplendent with flowers of different colours.

The Chamærops excelfa, a palm tree, higher than a man, was feen in different places. From the net-like bark that furrounds the ftem, were made brooms, which were every where used for fweeping, and were exposed to fale.

The fruit of the *Mefpilus Japonica* now began to ripen. Like other medlars, it tafted tolerably well, and melted in the mouth. In the heat of the day I thought it very refreshing.

In Futju, we bought feveral baskets of different fizes, and cabinets with drawers, all which were made of flips of rattan, woven on the spot, in the neatest and most elegant manner.

During our journey down, and in this rainy feafon, we were molefted by gnats (*Calex irritans*) which particularly diffurbed us in the night, and fometimes prevented us from fleeping. We were therefore under the neceffity of purchafing a kind of porous green ftuff, for curtains, fuch as is ufed every where in this part of the world, for a defence against these blood-fucking infects. These curtains are very wide, and are tied over the tester, and spread below over the whole bed, without having any other opening than just at bottom. They are very light and portable, and wove so open, as not to prevent the air from passing through them.

The Dolichos polystachyos, a plant of the peakind, which ran up winding like fcarlet beans, was

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was planted in many places, and formed into arbours. It was not only ferviceable for this purpofe, but alfo extremely ornamental on account of its flowers, which hung down in long ftalks, and made their appearance in gradual fucceffion.

The Sefamum orientale was cultivated in many places; and from the feed, although very fmall, a fine oil was expressed, which was in general use here, as well as in other places in India, for dreffing of victuals, and other purposes.

After having fufficiently refted ourfelves, we fet out again on our journey, on the 4th of June, although we did not get farther this day than to Kakigawa, which is only two leagues.

On the 5th, 6th, 7th, 8th, 9th, 10th, and 11th of June, we kept on our regular route, in the fame manner as on our journey upwards, and dined in Mitske, Array, Okassakki, Isjakusi, Minakuts and Isiba, and stept in Fammamats, Josida, Chiriu, Kwana, Seki, Kusats and Miaco.

In different parts of the road, between Jedo and Miaco, beggars were feen that were cripples, for the most part in their feet. This appeared to me fo much the more strange, as otherwise cripples are feldom to be met with in this country.

Red and inflamed eyes also were very common in these provinces, especially among the poorer P_{4} for

of people, as well among fuch as were advanced in years, as among young children. This malady has its principal fource in two things, viz. in the fmoke from the charcoal within the houfes, and the ftench proceeding from the jars of urine, which are in all the villages near every houfe.

Double flowers of the Corchorus Japonicus (Jamma Buki) grew wild here, and made a pleafing appearance. Dried and pulverized, they were used in hæmorrhages; and, in cases of bleeding at the nose, were blown up the nostrils by means of a quill.

In the beginning of June, which is the third or fourth Japanefe month, the first gathering was made of the leaves of the tea plant, which at this time are quite young, and yield the finer kinds of tea. In fome places, I observed, they had carelessly spread tea leaves on mats, to dry before their houses.

I had also an opportunity of seeing at several places in the villages, how corn, wheat, and mustard feed, were thrashed on mats before the houses in the open air. This operation was fometimes performed with flails, which had three flicks; fometimes the seaf and ears were beaten against a barrel, so that the grain fel out, which was afterwards separated from the chaff.

The wood of the Myrica Nagi, was called Nagi. This wood is very fine and white, and is used for combs and other fimilar articles.

Fina

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Fjun no ki was the name given by the Japanefe to a kind of wood, which was also used for making of combs.

On the 12th of June, we were introduced to the grand marshal, or the imperial fupreme judge, as also to the two governors of the town, by whom we were received in like manner as by the others in Iedo. The fupreme judge (Groot Rechter) gave in return for the prefents he received, five large night-gowns, but the governors of the town, inflead of thefe, gave the ambaffador a fum of money only, to the amount of 21 rixdollars. These were put up in paper in the manner ufual in this country. When fuch prefents as thefe are made in filver, they are wrapped up in a long piece of Japan paper, which is afterwards pafted together and written upon, on one or both fides. Sums fo inclosed, whether larger or fmaller, come frequently from the mafter of the mint, and pafs through many hands. And the mafter of the mint, who has written the value on the outfide, becomes answerable for the contents, when one of these parcels is opened.

In the afternoon I had a private visit from the Dairis, or the ecclesiaftical emperor's body physician. He is about the middle age, and his name is OGINO Saffioge je no Sakon. OGINO is his family name; je no Sakon, his prænornen; and Saffioge is a title

title of honor given him by the Dairi. He brought me feveral herbs, the moft of them just gathere d the use of which he was very defirous of knowing, as well as of gaining fome intelligence with regard to the cure of certain diforders. Our conversation was carried on through an interpreter; but he was not a little surprized, when once, in order to fix the name of a plant in his memory with the greater certainty, I wrote it down before his face in Japanese characters—Tamma.

Tamma Musi was the appellation given by the interpreters to the Buprestis Ignita, which they had got here and brought to me.

On our return from the court we are always more at liberty than in going to it. Confequently we were allowed, previous to our departure from Miaco, which was on the 13th of June, to fee feveral of the largeft, most elegant, and beft fituated temples in that place. Thefe ftand, as in this country is ufually the cafe, on the declivity of a mountain, and command the moft delightful prospects. Here were also artificial ponds, in which the monks had feveral live black turtles (Testudo Japonica) for their amusement. Amongst these temples, that of Daibud is not only the largeft, but the most remarkable. The temple stands on 96 pillars, and has feveral entries, which are very lofty, but at the fame time very

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very narrow. The body of the temple confifts, as it were, of two ftories, which run into each other, and confequently have a double roof, the uppermoft of which was fupported by feveral painted pillars, above two yards in diameter. The floor was laid with fquare pieces of marble, which I had not feen any where elfe. The only thing here wanting was, a fufficient light for fo large and magnificent a pile of building, which doubtless proceeded from the architect's not having been grounded in the true principles of his art. The image of the idol Daibud, which ftood almost in the middle of the temple, was enough to ftrike the beholder with terror and awe: terror, on account of its fize, which fcarcely has its equal; and awe, in confequence of the reflections it must naturally fuggest. The image was in a fitting pofture, and raifed about two yards from the ground, with its legs laid acrofs before it in the Indian manner, and gilded. The ears were long, the hair fhort and curling, the shoulders naked, the body covered with a wrapper, the right-hand raifed, and the left laid edge-ways against the belly. To any one who had not feen this image, the fize of it must appear almost incredible. The interpreters affured me, that fix men might fit on the palm of the hand in the Japanese manner, with their heels under

under them. The figure feemed to me to be well-proportioned, although it was fo very broad, that its fhoulders reached from one pillar to the other, notwithftanding that, thefe, when meafured by the eye, appeared to be about thirty or thirtytwo feet afunder. This idol, as well as the fect that worfhips it, derives its origin from India, and their acquaintance with it muft, in all probability, have came from Siam, China, or fome other place, at the time when ftrangers were at liberty to trade with greater freedom in this country, and they themfelves carried on commerce with foreign nations in their own bottoms.

My aftonishment at this enormous statue had not yet ceafed, when we were carried to another temple, which was nearly as majeftic, and as worthy of admiration. The height of it was not very extraordinary, nor its breadth, but, on the other hand, its length was confiderable. This was facred to Quanwon, and his image, together with all his Dii minores, were, to a confiderable number, fet up in this edifice. In the middle fat Qvanwon himfelf, furnished with thirty-fix hands; near him were placed fixteen heroes larger than men are in common, but much lefs than the idol, and these occupied a separate room, and partitioned off, as it were, to themfelves. On both fides next to thefe flood two rows of gilt idols, each with twenty hands. Afterwards were put up, in rows

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rows on each fide, idols of the fize of a man, quite clofe to each other, the number of which I could not reckon. Thofe that were neareft to us, or forwards, were the fmalleft, and thofe that flood behind, gradually larger; fo that all the twelve rows could be feen very diffinctly. On the hands the heads of all thefe fmaller idols were placed, and the whole number was faid to amount to thirty-three thoufand three hundred and thirty-three.

We then proceeded to *Fufimi*, where we fupped; after which, a little before fun-fet, we got into our fmall boats, and went down the river to *Ojaka*, where, after an agreeable night's trip, we arrived the following morning.

We ftaid at *Ofaka* two whole days, and had more pleafure and amufements at this place than during the whole of our journey befides; as here we had feveral times an opportunity to take a view of the town in our norimons, be prefent at plays, fee their dances, and enjoy various other uncommon fights, which are to be met with here in great abundance. Thofe that I, for my part, ntoft valued, were a collection of Japanefe plants, in a well-ordered garden, a collection of birds indigenous to this country, and the cafting of their copper into bars. Their plays are full of glee; but fo very fingular at the fame time, that, to me, they rather appeared abfurd. The interpreters

terpreters were obliged to explain them to us. The fubject of them was generally either fome love adventure, or heroic deed. In their way, the performers feemed to act well, but the theatre was very fmall and narrow. The dancing was chiefly performed by children of both fexes, two or more together. They fomewhat refembled our country-dances, and the fubject of them was nearly the fame as that of their plays. The body was bent a hundred different ways, and then fell back again into its natural pofition, according to the mufic or finging by which the dances are accompanied.

The most curious part of the spectacle was to fee the girls dreffed in the most magnificent manner, and in the highest style, like ladies of the first distinction, and with an almost infinite number of night-gowns, the one over the other, all of the fineft and thinneft filk. This great number of night-gowns, which was not perceptible, as they were extremely thin and light, fometimes amounts to thirty or more, and the girls growing warm while they are dancing, partly to cool themfelves, and partly to make a fhew of their finery, pulled them off by degrees, one after the other, fo that a whole dozen of them together hung down from the girdle, with which they were tied about their bodies, without hindering them in the leaft in their evolutions.

I faw

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I faw in the ftreet called Bird-ftreet, a number of birds that had been brought hither from all parts, fome to be fhewn for money, and others for fale. There was also a botanic garden tolerably well laid out in this town (though without an orangery) in which were reared and cultivated, and at the fame time kept for fale, all forts of plants, trees, and fhrubs, which were brought hither from other provinces. I did not neglect to lay out as much money here as I could fpare, in the purchase of the fcarceft shrubs and plants, planted in pots, amongft which were the most beautiful species of this country's elegant Maples, and two specimens of the Cycas revoluta, a Palm-tree, as fcarce, as the exportation of it is ftrictly prohibited, and upon which, on account of its very nutritious Sago-like pith, the Japanese fet so high, and, indeed, extravagant a value, not knowing that it likewife. grows in China. Thefe were afterwards all planted out into a large wooden box, at the top of which were laid boughs of trees interlaced with packthread, fo that nothing might injure them. This box was afterwards fent off by water to Nagafaki, from whence it was fent along with another box of the fame kind, packed at the factory, to Batavia, to be forwarded to the Hortus Medicus in Amsterdam.

We

We also viewed the temples here, and had an interview with the two governors of the town.

The operation of fmelting of copper was one day performed particularly for us, and merely on purpose that we might see it, in consequence of the importunate intreaties both of our chief and our conductors. This was done with much greater fimplicity than I had imagined. The finelting hut was from twenty to twenty-four feet wide, and a wall like a niche was built up, with a chimney on one fide of it. At the bottom of this, and level with the floor, was a hearth, in which the ore, by the affiftance of hand-bellows, had been fmelted before our arrival. Directly opposite, on the ground, which was not floored, was dug a hole of an oblong form, and abouttwelve inches deep. Acrofs this were laid ten fquare iron bars, barely the breadth of a finger afunder, and all of them with one of their edges upwards. Over these was expanded a piece of fail-cloth, which was preffed down between the bars. Upon this was afterwards poured cold water, which flood about two inches above the cloth. The finelted ore was then taken up out of the hearth, with iron ladles, and poured into the above defcribed mould, fo that ten or eleven bars, fix inches long, were caft each time. As foon as these were taken out, the fusion was continued, and the water now and then changed. Thar

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That the copper was thus caft in water, was not known before in Europe, nor that the Japanefe copper hence acquires its high colour and fplendor. At the fame time, I had the good fortune to receive, through the influence of my friends the interpreters, a prefent of a box, in which was packed up, not only pure copper caft in the above-mentioned manner, but alfo fpecimens taken from every procefs that it had gone through, fuch as the crude pyrites with its matrix, the produce of the roafting, and of the firft and fecond fmelting.

This box, which may be feen in the cabinet of minerals belonging to the academy at Upfal, was not lefs gatifying to my late refpectable and beloved tutor, Professor BERGMAN, than the information I gave him on my return home with respect to the casting of the copper in water.

After this we faw a quantity of caft copper, not only in the above-mentioned form of bars, as it is fold to the Dutch and Chinefe, but alfo caft in larger and fmaller, round and fquare, thicker and thinner pieces for other purpofes, according as they may be wanted for the fabrication of kettles, pans, and other utenfils.

Here was a difference made between the fervants that waited on us at the inns. Young boys were usually called *kodom*, but fervants, that had arrived at the age of manhood, bore the appellation of *todokos*.

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There

There cannot well be a ftranger fpectacle than that which prefents itfelf to the view, when a great multitude of people are affembled together, which is not unfrequently the cafe; every man's clothes, as well as the reft of his paraphernalia, being marked with the owner's mark or his arms. This is a common cuftom with the Japanefe, fo that every one knows his own property again, and thieves can make no advantage of ftolen goods.

I purchafed here a quantity of Mofca of different degrees of fineness, and of different qualities. The finest fort of all is white, and is used in common all over the country as a cauftic, both for the cure and the prevention of diforders. The coarfer kind is brown, and is ufed as tinder. Both thefe forts are prepared from the common wormwood (Artemifia vulgaris) that is to fay, from the wool that covers its leaves. The leaves are gathered in this month, and afterwards dried and fet by for farther preparation. They are then beaten and rubbed, till the fibrous part is feparated from the woolly, and the latter is obtained pure. There are particular furgeons who apply themfelves clofely to the administration of this caustic, and who carefully fludy, when, how, to what part of the body, and in what diforders it is to be ufed. It takes fire very readily, and confumes flowly.

OSAKA, 1776.

flowly. When a fmall ball of this is laid on any part of the body, and fet fire to, it burns down into the fkin, forming ulcers of different depths, which fome time after act as drains for carrying off the humours that have flowed to them from different parts. The back is the chief place for the application of this univerfal remedy, and although there are but few maladies in which it is not ufed, yet it has the beft effect in rheumatifms and colds. Neither fex, age, nor fituation in life, exempts any one from the neceffity of its ufe.

The Menyanthes nymphoides, with the leaves and flowers, was kept here iteeped in brine, and was used for fallad, in the fame manner as pickled cucumbers.

Of the Box tree, which was common in this country, combs were made, which were lacquered, and worn by the ladies in their hair by way of ornament.

The Nymphea nelumbo, in feveral places grew in the water, and was confidered, on account of its beautiful appearance, as a facred plant, and pleafing to the gods. The images of idols were often feen fitting on its large leaves.

The Skimmi (Illicium Anifatum) was every where confidered as a poifonous tree, and the Japanefe would not believe that the fame tree produced the real (Anifum Stellatum) Starry, Q 2 Anife

Anife, which they annually buy of the Chinefe. The Capfules did not ripen well in this country, nor had they fuch a ftrong and agreeable aromatic tafte as those that are kept in our druggift's fhops. Otherwife, the tree itfelf was in high effimation, was frequently to be met with planted, and particularly near the temples, and, as their idols were fuppofed to delight in it, branches of it were always put amongft other flowers in their temples in pots full of water.

For the menfuration of time, the Japanese use the powder of the bark of this tree in a singular manner. A box twelve inches long, being filled with assessment of the box to the other, and so on backwards and forwards, to a confiderable number. In these furrows is strewed some sine powder of Skimmi-bark, and divisions are made for the hours. The lid of the box is then closed, but a small hole is less open in order to supply the sire with air. After this the powder is set on fire, which confumes very flowly, and the hours are proclaimed by striking the bells of the temples.

The fruit of the *Melia azedarach* was used, like the feeds of the Rhus Succedanea, for making an expressed oil, which oil grew hard like tallow, and was used for candles.

On

F10GO, 1776.

On the 15th of June we fet out for Fiogo, where we made preparations for the long voyage we had to take, and embarked on board of the large veffel, which ufually carried the ambaffador over to Simonofeki. The paffage this time was both quick and profperous, fo that in the fpace of a few days we arrived fafe in port.

From Fiogo we went to Kokura, and on, midfummer-day, in the morning, from thence to Nagafaki. We dined and flept at the fame places where we had put up on our journey upwards to Jedo.

There cannot be a finer fpectacle in all nature than that of the Lampyris Japonica in a fummer's evening. This is a fly, which near its tail has two finall bladders, that, like the glowworms in Europe, diffufe a bluifh phofphoric light. But the glow-worm has no wings, and lies quiet in the juniper bufhes; whereas, this is winged, and flies about free and unconfined. Thoufands of these now filled the air, fome foaring high, and others flying lower and near the ground; fo that the whole horizon feemed to be a fky illuminated by thoufands of glittering ftars.

In Fiogo we gave our norimon-men five rixdollars and five maas for their trouble, and to the hoftefs in Fiamits Toge, according to the efta-Q 3 blifhed

blifhed cuftom, feven maas and five konderyns; after having baited there, and regaled ourfelves with fakki.

Before we got quite to Nagafaki town, our chefts were fealed, in order that they might pafs on to the warehoufe without being fearched: Our norimons and the reft of the baggage, as alfo we ourfelves, were ftrictly fearched. It is true, I had no contraband articles to hide; but as to the fcarce coins and maps, which I with great pains and difficulty had procured, I was unwilling either to lofe them, or, by their means, bring any man into difficulties. Therefore, after having put the maps amongst other papers, and covered the thick coins over with plafter, and hid the thinner pieces in my fhoes, I arrived, with the reft of our company, fafe in the factory on the 30th of June, where we gave each of our fervants one thail and five maas, and were received by our friends with fatisfaction and joy; which were fo much greater and livelier, as this journey had been protracted to a much greater length than ufual, and confequently they had long been in expectation of our return,

THE

Parties Parties

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THE NATURE AND PROPERTIES OF THE . COUNTRY

JAPAN is fituated beyond the farthermoft end of Afia to the eaft, entirely feparated from this part of the globe, and confifts of three large, and many fmall iflands. It extends from the 30th to the 41ft degree of north latitude, and from the 143d to the 161ft degree of eaft longitude, reckoning from the meridian of Teneriffe. Therefore it lies feveral degrees eaft of the capital of Sweden, fo that at Japan they have fun-rife and noon eight hours earlier; confequently, when it is noon at Jedo, it is only four o'clock in the morning at Stockholm, which makes a difference of eight hours.

Most of the European nations call this empire Japan, or Japon; the inhabitants themselves call it Nipon, or Nison; and the Chinese, Sippon and Jepuen.

The Japanese islands were not totally unknown in former ages. Japan is supposed to be the country which Marco Paolo, of Venice, heard the Chinese mention by the name of Zipangri. Of the European nations, the Portuguese were the first who discovered it, and landed there, viz, when ANTOINE DE MOTA, FRANÇOIS ZEIMOTO,

Q4

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and ANTOINE PEIXOTA, were thrown by a ftorm, with a large Chinefe junk, on this coaft, on their voyage from Siam to China. After their arrival at China, and in confequence of the report they made, other Portuguefe, and even miffionaries, were fent thither. In what year the first Portuguefe made this difcovery is by no means certain; fome fay in the year 1535, others in 1542, others in 1548, and others fiill later.

The whole country confifts of fcarcely any thing elfe than mountains, hills, and vallies; and a large plain is feldom feen here. The coaft is furrounded by mountains and rocks, and a very turbulent stormy fea. The greatest part of its harbours are entirely unknown to the Europeans; and those few that are known, are either full of rocks, or have large fands or fhoals, fo that all failing and entrance into them is extremely dangerous. Formerly Portuguefe and Dutch veffels arrived in the harbour of Firandos; but at prefent this, as well as all the others, are fhut up, and Nagafaki is the only port in which foreign veffels are allowed to anchor. The harbour of Jedo has fuch fhallow ground, that even finall boats cannot approach the ftrand ; the larger Japanese veffels keep far out to fea, and an European ship would be obliged to anchor at five leagues diftance.

The

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The mountains are of various heights, more or lefs fcattered or connected, and fome of them alfo are volcanoes. One of the higheft in the country is mount Fufi; its top reaching above the clouds, and being difcernable at the diftance of many leagues.

Many of the mountains are overgrown with wood; and fome of thefe again, which are not too fteep, are cultivated and made to rife in very high perpendicular declivities, like fteps, one above the other, and that not unfrequently up to the very top. In the vallies and on the plains the foil differs in different places; but most commonly it confifts of clay or fand, or of both together, intermixed with a fmall portion of mould.

In general it may be afferted, with the greateft truth, that the foil of Japan is in itfelf barren; but in confequence of the labour and manure beftowed upon it, together with heat and a fufficient quantity of rain, it is brought to a confiderable degree of fertility.

The heat in fummer is very violent, and would be infupportable, if the air was not cooled by winds from the fea.

In like manner the cold in winter is extremely fevere, when the wind blows from the north and north-eaft. It is always felt to be more intenfe than it really is, as indicated by the thermometer;

as

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as from the violence with which the wind blows, it pierces the body like arrows of ice.

The weather is very changeable the whole year throughout, and the ground receives rain in abundance. It rains almost the whole year round; but particularly in the *Satfaki* or rainy months, as they are called, which commence at midfummer. This abundance of rain is the cause of the fertility of Japan, and, of what is the confequence of this, its high degree of population.

Thunder is by no means unfrequent; but tempefts and hurricanes are very common, aş alfo earthquakes.

The thermometrical observations which I made during my ftay in Japan, and which are probably extremely uncommon in their kind, will shew in a more accurate manner the nature of this climate; and as none such, to my know-ledge, have been hitherto made known, I have thought proper to be very circumstantial in the communication. They were chiefly made in the southern parts of Japan, that is, near Nagafaki, on the island of Dezima, but part of them were likewife made during my journey to the court, and in Jedo, the capital.

The thermometer I made use of was Fahrenheit's, divided into 112 degrees, with a double glass, and filled with quickfilver, and was affected

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fected by the flightest change of weather. I always kept it hanging on the outside of my chamber window, by the fide of a wall, against a wooden post in a northern aspect, and in the open air.

The greatest degree of heat in Nagafaki was 98 degrees, in the month of August; and the feverest cold 35 degrees, in January, in the morning. The cold weather was universally allowed to set in this year later than other years; and was of shorter duration, infomuch, that we began to make fires in our rooms later than usual.

As to a barometer, I had none; and therefore could make no barometrical obfervations, in the ftrict fenfe of the word; in general, however, I took notice,

1. That the east and north, and north-east winds, which here blow from the land, are very cold. The fouth and west, and south-west, which blow from the sea, are always much warmer; and when it rains, the weather immediately grows milder.

2. In the fummer time, the wind blows at Nagafaki almost every afternoon from the fouth, which is a refreshing wind; in the nights and mornings it blows from the east.

3. When a fog rifes in the evening, and the clouds gather, it generally rains on that night; but

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but if there be a fog in the morning, it generally proves fair.

4. When the fky in the winter is clouded over in the eaft and fouth, rain, with blowing weather, and ftorms, generally fucceed; but as foon as it clears up in the weft or north, the weather turns out fair.

5. In the months of December and January, I twice obferved fine flakes of fnow in the air, which, however, at Dezima, melted before it could reach the ground. I was told, that in other years a great deal of fnow had fallen, which had lain for fome time.

6. Lightening, thunder, and thunder-fhowers, occur fometimes in June and July, but chiefly in August and September, as well in the evening, as all night long, 1775. SEPTEMBER.

D. M.	Morn,	Neon	Aftn.	Even.	State of the weather.
I	74	85	87	84	
2	76	85	88	86	A DOTATION AND A DOTATION AND A
3	86	88	90	88	Cloudy.
	86	89	89	87	oreauje
4	83	81	81	80	Mizzling rain.
4 56	76	82	84	81	Claropanto Contro
	75	83	87	85	
78	75	81	82	78	Cloudy.
9	73	80	81	80	cioudy.
10	71	81	83	81	A COMPANY OF A COMPANY
II	75	75	76	76	Rain. Sunfhine to-
12	74	79	82	79	wards evening.
13	67	79	80	80	maras creating.
14	72	79	80	79	
15	76	81	81	79	111 112 112 111
16	72	80	80	77	12 10 10 10 24
17	72	82	82	80	
18	73	79	83	79	
19	70	80	81	80	
20	72	81	81	79	
21	72	79	80	80	
22	72	81	82	80	
23	75	82	82	79	
24	70	81	82	79	
25	70	78	81	76	
26	69	77	77	77	
27	69	77	79	78	
28	71	77	78	77	
29	7.1	79	80	78	
30	68	78	82	81	1

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1775. OCTOBER.

·P			-		and a second sec
D.M.	Mörn.	Noon	Aftn.	Even.	State of the weather.
1	71	79	84	82	and the second sec
2	69	80	83	81	and the second
	74	81	82	81	131100-15
3	72	81	82	80	198 7 1 b
4	72	81	84	82	3 - 2 - 1 - 1 - 2 - 2
4 56	72	82	83	82	
7	72	81	84	84	16 1. 127 . 24
8	77	84	88	84	1.
9	74	84	86	85	and the second second
10	76	84	86	85	THE A REPORT OF ANY
II	78	84	85	84	and the shirts
12	77	79	80	77	
13	68	77	79	78	
14	67	76	-6	78	
15	70	75	80	80	
16	70	76	73	76	
17	70	72	75	74	Cloudy with rain,
18	70	73	74	72	
19	70	.72	73	73	
20	70	73	75	73	
21	71	73	75	72	
22	71	72	73	72	Rain.
23	70	71	73	72	
24	06	68	68	65	
25	63	65.	66	69	Rain towards Even.
26	66	70	71	70	
27	63	64	65	64	Cloudy.
28	60	66	67	64	
29	64	68	70	70	Cloudy, with miz-
30	63	68	69	68	zling rain.
31	60	68	70	68	

1775. NOVEMBER.

D. M.Mom.NoonAfm.Even.State of the weather.1 64 72 73 75 Wind fouth.2 77 73 71 70 3 60 68 70 68 4 59 66 66 64 5 64 68 70 71 6 70 76 78 78 7 76 74 76 72 8 67 67 62 Delightful funfhine.9 58 63 64 62 10 56 63 63 63 11 60 61 64 64 12 59 63 66 65 13 60 61 63 61 14 60 60 60 60 15 60 62 63 61 16 52 66 68 62 17 52 68 71 64 18 53 67 68 60 19 55 64 64 63 19 55 56 59 53 23 48 60 61 56 23 48 60 61 56 24 52 60 65 25 55 56 59 53 26 53 58 59 53 26 53 58 59 53 27 50 58	To a little			*		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	D. M.	Morn.	Noon	Aftn.	Even.	State of the weather.
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	I	64	72	73	75	Wind fouth.
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2	77	73			
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	3	60	68			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	4	59		66	64	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	5			70	71	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$				78	78	Rain in the forenoon.
9 58 63 64 62 10 56 63 63 63 63 11 60 61 64 64 the morning.12 59 63 66 65 13 60 61 63 61 14 60 60 60 60 15 60 62 63 61 16 52 66 68 62 17 52 68 71 64 18 53 67 68 60 19 55 64 64 63 19 55 64 64 63 19 55 64 66 63 20 57 64 65 64 21 52 64 66 63 22 56 61 52 56 23 48 60 61 56 24 52 60 60 57 25 55 56 59 53 26 53 58 59 55 28 45 60 61 58 29 53 64 67 65	7					
1056 63 63 63 63 The breath visible in the morning.1259 63 66 65 the morning.1259 63 66 65 the morning.1259 63 66 65 the morning.13 60 61 63 61 the morning.14 60 60 60 60 Wind north.15 60 62 63 61 61 16 52 66 68 62 Wind north.16 52 66 68 62 Wind north.18 53 67 68 60 The breath visible when the thermo- meter was between20 57 64 65 64 when the thermo- meter was between21 52 64 66 63 55 23 48 60 61 56 24 52 60 60 57 25 55 56 59 53 26 53 58 59 55 28 45 60 61 58 29 53 64 67 65						Delightful lunihine.
11 60 61 64 64 the morning.12 59 63 66 65 13 60 61 63 61 14 60 60 60 60 15 60 62 63 61 16 52 66 68 62 17 52 68 71 64 18 53 67 68 60 19 55 64 64 63 19 55 64 64 63 19 55 64 66 63 20 57 64 65 64 21 52 64 66 63 22 56 61 62 56 23 48 60 61 56 24 52 60 60 57 25 55 56 59 53 26 53 58 59 55 28 45 60 61 29 53 64 67 29 53 64 67						
12 59 63 66 65 13 60 61 63 61 14 60 60 60 60 15 60 62 63 61 16 52 66 68 62 17 52 68 71 64 18 53 67 68 60 19 55 64 64 63 20 57 64 65 64 20 57 64 65 64 20 57 64 65 64 22 56 61 62 56 23 48 60 61 56 24 52 60 60 57 25 55 56 59 53 26 53 58 59 55 28 45 60 61 58 29 53 64 67 65						
13 6_0 6_1 6_3 6_1 6_3 6_1 14 6_0 6_0 6_0 6_0 Wind north.15 6_0 6_2 6_3 6_1 16 5_2 6_6 6_8 6_2 17 5_2 6_8 7_1 6_4 18 5_3 6_7 6_8 6_0 19 5_5 6_4 6_4 6_3 19 5_5 6_4 6_5 6_4 20 5_7 6_4 6_5 6_4 21 5_2 6_4 6_6 6_3 22 5_6 6_1 6_2 5_6 23 4_8 6_0 6_1 5_6 24 5_2 6_0 6_0 5_7 2_5 5_5 5_6 5_9 5_3 2_6 5_3 5_8 5_9 5_3 2_7 5_0 5_8 6_0 5_5 2_8 4_5 6_0 6_1 2_9 5_3 6_4 6_7 2_9 5_3 6_4 6_7 6_5 6_7 6_5						the morning.
146060606060Wind north.1560626361116526668621752687164185367686019556464631955646463205764656421526466632256616256234860615624526060572555565953265358595528456061582953646765						10 -0 -1 -1 -
15 60 62 63 61 16 52 66 68 62 17 52 68 71 64 18 53 67 68 60 19 55 64 64 63 20 57 64 65 64 21 52 64 66 63 22 56 61 62 56 23 48 60 61 56 24 52 60 60 57 25 55 56 59 53 26 53 58 59 53 28 45 60 61 58 29 53 64 67 65			1			Wind north
16 52 66 68 62 17 52 68 71 64 18 53 67 68 60 19 55 64 64 63 20 57 64 65 64 20 57 64 65 64 20 57 64 65 64 21 52 64 66 63 22 56 61 62 56 23 48 60 61 56 24 52 60 60 57 25 55 56 59 53 26 53 58 59 53 26 53 58 59 55 28 45 60 61 58 29 53 64 67 65			1			VY IIIU HOICH.
17 52 68 71 64 18 53 67 68 60 19 55 64 64 63 20 57 64 65 64 20 57 64 65 64 20 57 64 65 64 21 52 64 66 63 22 56 61 62 56 23 48 60 61 56 24 52 60 60 57 25 55 56 59 53 26 53 58 59 55 28 45 60 61 58 29 53 64 67 65					and the second se	92 91 91 95 41
18 53 67 68 60 19 55 64 64 63 The breath vifible 20 57 64 65 64 when the thermo- 21 52 64 66 63 meter was between 22 56 61 62 56 55 23 48 60 61 56 24 52 60 60 57 25 55 56 59 53 26 53 58 59 55 28 45 60 61 58 29 53 64 67 65				1.	Contraction of the second	10 1-L 1-2 1 d
19 55 64 64 63 The breath vifible20 57 64 65 64 when the thermo-21 52 64 66 63 meter was between22 56 61 62 56 55 and 60 .23 48 60 61 56 24 52 60 60 57 25 55 56 59 53 26 53 58 59 53 27 50 58 60 55 28 45 60 61 58 29 53 64 67 65						22 1 1
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			4			The breath vifible
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$						
$\begin{array}{cccccccccccccccccccccccccccccccccccc$						
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$				62		55 and 60.
24 52 60 60 57 25 55 56 59 53 26 53 58 59 55 27 50 58 60 55 28 45 60 61 58 29 53 64 67 65			60	61	56	
25 55 56 59 53 26 53 58 59 55 Rain. 27 50 58 60 55 28 45 60 61 58 29 53 64 67 65				60		and the first state
26 53 58 59 55 Rain. 27 50 58 60 55 28 45 60 61 58 29 53 64 67 65	25	55	56	59		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			58	59		Rain,
28 45 60 61 58 29 53 64 67 65		50	58	60	55	
	28	45	60		58	
30 60 67 68 66] Rainthewhole night.						
	30	60	67	68	66	Rain the whole night.

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1775. DECEMBER.

	-				
D. M.	Morn.	Noon	Aftn.	Even.	State of the weather.
I 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	58 56 59 48 39 40 45 46 51 45 45 45 45 45 45 45 45 45 45 45 45 45	68 68 67 48 55 56 59 60 59 64 62 55 55 55 55 60 55 55 55 60 55 55 55 55 55 55 55 55 55 55 55 55 55	68 68 70 67 48 53 57 59 60 59 60 59 60 59 60 59 66 63 59 66 63 59 56 56 56 60 47 55 55 55 55 55	54 68 7 59 45 55 56 56 59 60 60 52 55 55 55 55 55 55 55 55 55 55 55 55	State of the weather. Thunder fhowers, Small rain. Rain. The breath vifible, rain. Rain. Rain. Wind N. Hail. Hoar froft, rain in the evening. Rain. Rain.
26 27 28 29 30 31	45 56 57 54 56 48	5 8 63 62 59 57 53	61 64 63 54 59 57	56 66 57 54 55 54	Rain. Hard rain.

1776. JANUARY.

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D. M.	Morn.	Noon	Aftn.	Even.	State of the weather
I	52	58	60	54	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
2	50	55	54	50	1. T. D. I. E.
3	42	51	54	48	2011 27 2 97 6
4	38	54	56	54	1 20 1 02 1 2 4 7 4 1
56	52	60	64	58	Rain even. & night. East.
6	66	68	68	70	Rain.
7 8	57	60	58	56	Rain, afterwards sunshine.
8	54	52	52	46	Rain. Wind N.
9	40	46	44	46	
10	43	52	54	48	The second second second
II	44	52	52	54	Cloudy. Rain.
12	59	60	60	55	Rain.
13	44	52	50	50	1 98 11 42 11 11 11 11 11 11 11 11 11 11 11 11 11
14	42	50	52	48	Contraction of the
15	38	50	52	50	Froft.
16	47	54	54	52	Rain.
17	44	52	52	50	
18	48	50	48	46	Cloudy. Wind N.
19	38	42	42	40	Wind N. very cold. Snow.
20	35	48	50	46	Thick ice on the water.
21	36	50	50	50	Cloudy. Rain.
22	47	52	54	50	Wind N. Rain.
23	44	52	50	48	Rain & hail. Wind N.W. Wind N. Rain.
24	40	48 48	44	44	Wind N. Rain.
25 26	44 36		48	46	Hoar froft. Ice.
27	48	55 62	56 62	55	Float Holt. ICC.
28	40	54	50	58	Contraction of the second second
29	36		56	50	A PERSONAL PROPERTY AND
30	48	55 58	58	61	Rain. Wind N.W.
31	60	56	56	52	Rain. Wind N.W.
)L. 111		1.30		R R

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1775. FEBRUARY.

D.M.	Morn.	Noon	Aftn.	Even.	State of the Weather.
I	42	48	.0		Rain. Snow. Wind
2			48	48	S. W.
	43	51	50	50	D
3	40 46	52	56	52	
4		56 60	58 60	56	Wind W. Sunshine.
56	50 60	64	66	58 62	TTING TTO DUIMINU
			10000		
78	47 48	54	54	51	
9	46	51 48	51 48	52 48	Rain.
10	48	54	58	56	0
II	48	52	52	50	
12	48	52	52	50	
13	42	44	50	48	Rain. Snow.
14	44	48	48	46	
15	42	50	50	46	
16	42	52	55	52	
17	44	52	52	50	
18	42	54	54	50	
19	44	54	56	52	
20	44	56	58	52	
21	52	58	58	56	Small rain.
22	60	62	63	60	Mizzling rain.
23	52	54	54	50	
24	44	54	58	52	
25	48	56	58	54	Mizzling rain.
26	56	50	50	48	Rain.
27	40	50	52	48	
28	44	55	52	51	
29	46	55	56	51	

1776. MARCH.

D. M.	115	the second second			
	Morn.	Noon	Aftn.	Even.	State of the weather.
I	46	54	56	52	
2	44	56	60	50	Charles new line
3	44	56	56	56	22122102
4	56	60	62	58	On the journey to the
5	55	61	62	58	court.
6	50	62	63	55	
78	58	54	54	52	Rain.
8	47	59	56	52	
9	44	58	56	52	
10	44	56	56	52	Rain.
II	51	56	56	56	-12 1 - 2 1 - 1 - 1 - 2
12	54	58	58	58	Thunder showers.
13	60	62	62	62	Rain.
14	62	60	62	60	Rain in the morning.
15	58	55	55	56	Rain.
16	60	62	60	56	and the second of the
17	54	66	70	66	
18	56	60	60	52	Rain.
19	60	66	62	62	du - se -
20	56	68	68	56	
21	58	72	72	70	Mizzling rain.
22	68	68	68	62	Rain in the morning.
23	58	60	70	68	
24	64	68	66	64	Mizzling rain.
25	64	68	70	58	
26	58	64	64	60	
27	56	58	56	55	
28	60	60	60	56	Rain in the morning.
29	52	56	58	56	A REAL PROPERTY
30	58	55	64	56	
31	54	58	54	55	

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1776. APRIL.

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D.M.	Morn.	Noon	Aftn.	Even.	State of the weather.
I	56	58	58	56	13 1 1 1 101 1
2	60	68	68	60	
3	62	60	60	58	07 h2 40 h
4	60	66	64	62	
56	60	66	66	60	1 39 61 61
6	60	77	77	70	13 10 10 101 62
7 8	60	68	72	70	1.30 42 121 5
	62	72	74	70	In Ofaka.
9	60	72	74	70	1 STA ARE ARE V
10	60	60	60	58	T AF
II	58	60	60	60	In Miaco.
12	62	60	64	62	Rain.
13	56	58	56	50	Rain.
14	48	58	60	58	Dain
15	56	56	56	56	Rain. Rain.
16	-58	58	58	62	Kalli,
17	62	70	70	70	0, 00, 20, 11,
18	62	66	66	66	Rain.
19	64 64	66	66	64	Italii.
20 21	60	60	60	60	Rain.
22	56	56	58	58	Itulle
23	50	56	60	54	
24	48	66		66	12 102 100 100
25	60	70	68	64	Rain and thunder.
26	52	70	72	58	
27	58	70	76	68	
28	62	65	66	72	Las in as in
29	62	68	68	68	Mizzling rain.
30	62	68	70	66	
0	1		11	1	

1776. MAY.

with spinster and					
D.M.	Morn.	Noon.	Aftn.	Even.	State of the weather.
I	1 54	72	74	68	In Jedo.
2	72	72	72	68	Mizzling rain.
3	64	64	64	64	194 195 194 1
4	60	70	72	68	105 15 12 1
56	66	70	72	68	
6	56	70	70	68	Rain in the evening.
. 7	58	64	64	64	Hard rain.
8	62	70	76	72	Thunder showers.
9	66	72	74	68	
10	64	66	66	62	Thunder showers.
II	56	64	68	64	
12	58	70	72	68	and the sector
13	58	70	72	70	
14	68	74	76	72	
IS	68	74	76	72	D
16	70	76	78	74	Rain.
17	70	78	76	72	
18	60	70	72	70	
19	64	74	76	74	
20	70	72	76	76	and and and and
21	66	70	74	68	
22	62 68	72	76	74	Mizzling rain.
23	68	74 80	76 82	76	TAILZEIING FAIN.
, 24		80	76	78 76	1
25 26	74 76		80	70	Left Jedo.
20	64	74	78	72	Luci Juuo.
28	66	74	74	72	20 20 00 20
29	68	70	72	74	Mizzling rain.
30	72	72	72	66	Rain.
31	66	78	78	68	
5.		1 / - 1	/-	Pa	

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1776. JUNE.

	-				
D. M.	Morn.	Noon	Aftn.	Even.	State of the weather.
I	68	72	72	70	
2	66	76	78	72	Rain in the morning.
	68	76	84	78	U.S.
4	64	76	76	74	lite barriers a
3456	72	76	-78	80	Thunder showers.
6	64	66	66	64	
7	64	66	68	64	In Miaco.
78	64	66	66	68	Kain.
9	65	70	70	70	
10	64	80	74	70	
II	68	80	82	76	In Ofaka.
12	68	76	78	76	
13	72	72	72	76	Rain.
14	76	76	76	72	Rain.
15	70	72	74	76	
16	72	78	84	80	
17	74	78	78	76	
18	76	78	78	74	Rain.
19	74	74	74	72	
20	74	76	76	72	
21	75	76	66	76	
22	76	76	76	76	
23	80	76	76	.76	In Kokora.
24	76	84	84	80	
25	76	80	84	82	TT
26	76	82	78	74	Heavy rain at noon.
27	76	82	80	76	Rain.
28	76	84	84	84	Rain.
29	78	82	84	82	On Dezima island.
30	80	82	84	82)	

1776. JULY.

D. M.	Morn.	Noon	Aftn,	Even.	State of the weather.
		0,	0.0		Deiningle
I	80	84	88	82	Rain in the morning.
2	80	. 84	84	80	Ditto.
3	80	84	86	80	THE PAST
4	78	88	88	84	AND DE LA STREET
56	82	90	90	84	
	84	90	90	84	and the second
78	82	89	89	82	and the second second
	80	84	85	80	Cloudy.
9	78	76	78	76	Heavy thunder-shrs.
10	78	80	80	76	Rain.
II	76	80	80	76	Showers.
12	72	80	80	78	
13	80	86	84	80	The second second
14	76	80	86	80	
15	84	88	90	78	
16	78	80	85	82	Heavy rain.
17	80	84	84	80	
18	80	86	86	80	
19	82	84	84	82	
20	80	88	92	84	
21	80	91	92	86	
22	82	88	88	86	
23	84	88	88	84	
24	84	88	88	85	
25	82	84	84	83	Showers.
26	82	90	91	84	
27	82	88	88	84	
28	84	86	88	84	Showers.
29	84	78	78	79	Heavy thunder-fhrs.
30	82	85	85	82	anour j chomen - Mar 3.
31	82	88	88	86	

1776. AUGUST.

				*	- ·
D.M.	Morn.	Noon	Aftn.	E ven	State of the weather
I	8.6	93	96	98	Thunder showers.
2	84	88.	88	82	Hard rain.
3	79	80	82	80	
4	80	92	95	84	
5	84	95	98	84	
56	80	96	98	88	
	82	96	98	92	
78	80	92	96	88	+
9	84	96	98	86	
IO	86	88	86	86	Rain.
II	78	86	86	82	
12	80	90	92	88	the state of the second
13	88	90	93	88	
14	86	96	96	90	
15	84	86	86	82	Heavy rain.
16	80	86	86	84	Small rain.
17	78	90	92	86	
18	78	90	92	84	
19	76	88	90	84	n : · · ·
20	86	88	90	84	Rain in the evening.
21	82	92	94	86	Rain.
22	82	86	86	82 82	Rain.
23	80	88	88		Nam.
24	80	90	90	84 86	
25 26	80	90	92	84	1960 1 Mar 17 18 18 19
27	82	92 92	94	86	
28	82	88	92 88	86	
29	82	90	90	84	8 TH
30	82	89	90	86	
31	180	90	90	84	Rain in the morning.
5-		1 20	1	1 . 1.	I server alling.

1776. SEPTEMBER.

Management and a second s									
D.M.	Morn	Noon	Aftn.	Even.	State of the weather.				
-									
I	80	88	90	84	Rain in the morning.				
2	80	84	84	78	Thunder showers.				
3	72	84	86	78					
4	70	88	90	80					
56	76	90	94	86					
	77	.90	90	88	Rain in the evening.				
7	80	94	94	80	Heavy thunder flow-				
8	80	94	94	88	ers.				
9	82	94	96	88					
IO	80	92	94	86					
II	80	90	90	82	Thunder showers.				
12	80	86	96	84					
13	78	88	90	86	and the second second				
14	82	82	82	80	Heavy thunder flow-				
15	80	78	78	7.8	ers for three days				
16	78	80	80	80	together.				
17	76	82	80	76					
18	74	82	82	76					
19	66	80	82	75	el la				
20	68	84	84	76					
21	68	82	82	76	26 1 2 4 2 10				
22	72	78	78	76	100 1 1 1 1 1 1 X				
23	68	78	78	76	A DE LA DE LA DEL				
24	65	80	82	78	1 - 1 - 1 - Te				
25	70	82	80	72	2 10 PT 10 PT				
26	64	80	82	72	121 121 11 22				
27	60	78	82	74					
28	60	80	80	76	1111111111111				
29	60	82	82	76	State A LE				
30	60	82	82	74	11 1 - 1 1 82				
-									

1776. OCTOBER.

D.M.	Morn.	Noon	Aftn.	Even.	State of the weather.
I	62	86	86	78	1
2	72	86	86	80	
3	76	82	82	76	122 10 10 10
4	66	84	84	78	10 1 1
56	70	82	84	78	
	64	82	82	78	
7	66	82	84	78	w Para Para
8	62	82	84	78	and the second second
9	64	84	86	78	1
10	68	84	86	80	
II	74	80	80	80	Thunder showers.
12	72	76	76	78	
13	66	74	82	74	D' 117' 10
14	72	80	80	80	Rain. Wind S.
15	70	74	74	68	CI. I. WILLINT
16	64	64	64	64	Cleudy. Wind N.
17	60	66	64	62	Mizzling rain.
18	62	66	66	64	Ditto.
19	62	68	68	68	D. *
20	66	66	66	62	Rain.
21	62	66	66	66	Ditto.
22	64	68	68	66	
23	58	70	70	66	
24	58	74	74	70	
25	60	76	76	74	
26	64	80	82	76	
27	72	76	76	70	TT1 1 0
28	70	80	80	76	Thunder shower's.
29	68	70	72	68	561 1 5 8 - 5
30	58	74	74	66	1.4
31	64	74	74	66	

PERSONS OF THE JAPANESE.

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THE PERSONS OF THE JAPANESE.

THE people of this nation are well made, active, free and eafy in their motions, with ftout limbs, although their ftrength is not to be compared to that of the northern inhabitants of Europe. The men are of the middling fize, and in general not very corpulent; yet I have feen fome that were fufficiently fat. They are of a yellowifh colour all over, fometimes bordering on brown, and fometimes on white. The lower class of people, who in fummer, when at work, lay bare the upper part of their bodies, are fun-burnt, and confequently brown. Ladies of distinction, who feldom go out in the open air without being covered, are perfectly white. It is by their eyes that, like the Chinefe, thefe people are diffinguishable. These organs have not that rotundity which those of other nations exhibit, but are oblong, fmall, and are funk deeper in the head, in confequence of which these people have almost the appearance of being pink-eyed. In other refpects their eyes are dark-brown, or rather black, and the eye-lids form in the great angle of the eye a deep furrow, which makes the Japanefe look as if they were fharp-fighted, and difcriminates them from other nations.

nations. The eye-brows are alfo placed fomewhat higher. Their heads are in general large, and their necks fhort, their hair black, thick, and fhining, from the ufe they make of oils. Their nofes, although not flat, are yet rather thick and fhort.

THE GENIUS AND DISPOSITION OF THIS NATION.

THE Japanefe are in general intelligent and provident, free and unconftrained, obedient and courteous, curious and inquifitive, induftrious and ingenious, frugal and fober, cleanly, goodnatured and friendly, upright and juft, trufty and honett, miftruftful, fuperfittious, proud, and haughty, unforgiving, brave, and invincible.

The Japanese nation shews Sense and steadiness in all its undertakings, so far as the light of fcience, by whose brighter rays it has not as yet had the good fortune to be illumined, can ever guide it. This nation is so far from deserving to be ranked with such as are called favage, that it rather merits a place amongst the most civilized. Their present mode of government, regulations for foreign commerce, their manufactures, the vast abundance, even to superfluity, of all the necessaries of life, &c. give convincing

vincing proofs of their fagacity, fteadinefs, and undaunted fpirit. That idle vanity, fo common amongft other Afiatic as well as many African nations, who adorn themfelves with fhells, beads, and glittering pieces of metal, is never to be observed here; nor are these unneceffary European trappings of gold and filver lace, jewels, and the like, which ferve merely to catch the eye, here prized at all; but they endeavour to furnish themfelves from their own manufactures with decent cloathing, palatable food, and excellent weapons.

Liberty is the foul of the Japanese, not that which degenerates into licentiousness and riotous excefs, but a liberty under strict fubjection to the laws. It has been fuppofed, indeed, that the common people of Japan were merely flaves under a defpotic government, as the laws are extremely fevere. But a fervant who hires himfelf to a mafter for a year is not therefore a flave : neither is a foldier who has enlifted for a certain number of years, and over whom a much ftricter hand is kept, a flave, a flave although he is obliged implicitly to obey his fuperiors commands. The Japanefe hate and deteft the inhuman traffic in flaves carried on by the Dutch, and the cruelty with which these poor creatureare treated.

The

The rights and liberties of the higher and lower class of people are equally protected by the laws; and the uncommon feverity of thefe laws, joined to the inevitable execution of them, ferves to keep every one within proper bounds. With regard to foreigners, no nation in the whole extensive tract of the Indies is more vigilantly attentive to their liberties than this; and none more free from the encroachments, fraudulent attempts, or open attacks of others.

The regulations they have adopted in this particular are not to be paralleled in the whole world. The inhabitants have been forbidden to leave the empire on pain of death, and no foreigners are fuffered to come into the country, except a few Dutchmen and fome Chinefe, who during the whole time of their ftay, are watched like ftate-prifoners. The people of diffinction and those that are rich, have a great number of attendants; and every one, in general, has fome attendant in his house, to wait upon him, and when he goes abroad, to carry his cloak, shoes, umbrella, lantern, and other things that he may want of a fimilar nature.

With refpect to Courtefy and fubmiffion to their fuperiors, few can be compared to the Japanefe. Subordination to government and obedience to their parents, are inculcated into children in their early infancy, and in every fituation

fituation of life they are in this respect instructed by the good example of their elders, which has this effect, that the children are feldom reprimanded, fcolded, or chaftifed. The inferior class of people shew their respect to those of a higher rank and to their fuperiors by bowing very low, and in the most reverential manner, and at the fame time pay implicit obedience to them cheerfully, and without the leaft hefitation. Their equals they always falute with great politenefs, both at nreeting and parting. In general they bend their backs with their heads downward, and lay their hands either on their knees, or elfe on their legs below their knees, and fometimes bring them down to their feet, accordingly as a greater or lefs degree of respect is to be shewn; and the greater the veneration, the nearer do their heads approach the ground. If any one fpeaks to them, or they are to prefent any thing to another, they bow in the fame manner. If a perfon of inferior rank meets his fuperior in the ftreet, he remains in the pofture above mentioned till the latter has paffed him. If they are equals, they both make the fame obeifance, ftanging ftill, and then go on with their backs bent for a fhort time after they have paffed each other. On entering any house, they fall on their knees, and bow their heads more or lefs low; and before they

the rife to go away, perform the fame obeifance.

This nation, as well as many others, carry their Curiofity to a great length. They examine narrowly every thing that is carried thither by the Europeans, and every thing that belongs to them. They are continually asking for information upon every fubject, and frequently tire the Dutch out with their queftions. Among the merchants who arrive here, it is chiefly the phyfician of the embaffy that is confidered by the Japanefe as learned; and confequently, on the little ifland fet apart for the factory, and particularly in the journey to court, as also during the refidence of the Dutch in the metropolis, they look up to him as an oracle, whom they fuppofe capable of giving them information upon every fubject, particularly on those of mathematics, geography, natural philosophy, pharmacy, zoology, botany, and phyfic.

During the audience we had of the emperor, the privy councellors, and others of the higheft officers of flate, we were furveyed from head to foot, as alfo our hats, fwords, clothes, buttons, lace, watches, canes, rings, &c.; nay, we were even obliged to write in their prefence, in order to fhew them our manner of writing and cur characters.

In

In *mechanical ingenuity* and invention, this nation keeps chiefly to that which is neceffary and ufeful; but in induftry it excels most others.

Their works in copper and other metals are fine, and in wood both neat and lafting; but their well-tempered fabres, and their beautiful lacquered ware, exceed every thing of the kind that has hitherto been produced elfewhere. The diligence with which the hufbandman cultivates the foil, and the pains they beftow on it, are fo great as to feem incredible.

Frugality has its principal feat in Japan. It is a virtue as highly efteemed in the imperial palace, as in the pooreft cottage. It is in confequence of this that the middling class of people are contented with their little pittance; and that accumulated flores of the rich are not diffipated in wantonnefs and luxury. It is in confequence of this, that dearth and famine are ftrangers to this country; and that in the whole extent of this populous empire, fcarcely a needy perfon or beggar is to be found. The people in general are neither parfimonious nor avaricious; and have a fixed diflike to gluttony and drunkenness. As the foil is not wasted upon the cultivation of tobacco, or of any other ufeless plant, neither is the grain employed in the VOL. III. S dif-

diffillation of fpirits, or other idle, not to fay pernicious, purpofes.

Cleanlinefs and *neatnefs* are attended to as well with regard to their bodies, as to their cloathing, houfes, food, veffels, &cc.; and they use the warm-bath daily.

Of their friendly difposition and good nature, I have frequently with aftonishment seen manifest proofs; even at a time when, as now, they have every reason in the world to hate and despise the Europeans who traffic there, for their bad conduct and fraudulent dealings. This nation is lofty, it is true, but good natured and friendly withal; with gentleness and kindness it may be foothed and brought to hear reason; but is not to be moved in the least by threats, or any thing like defiance.

Justice is held facred all over the country. The monarch never injures any of his neighbours; and no inftance is to be found in hiftory, ancient or modern, of his having fhewn an ambition to extend his territories by conqueft. The hiftory of Japan affords numberlefs inftances of the heroifm of these people in the defence of their country against foreign invasions, or internal infurrections; but not cr of their encroachments upon the lands perties of others. The Japan affords

kingdoms, or fuffering any part of their own to be taken from them. They have ever followed, and ftill continue to follow, the ulages and cultoms of their forefathers, and never adopt th manners of other nations. Juffice constantly prefides at their tribunals, where caufes are adjudged without delay, and without intrigues or partiality. The guilty finds no where an afylum ; no respect is paid to perfons, nor can any one prefume to flatter himfelf with hopes of pardon or favour. Justice is held facred even with respect to engagements with the Europeans, infomuch, that treaties once concluded are neither broken, nor even a fingle letter of them altered, unless the Europeans themselves give occasion to such procedures.

Honefty prevails throughout the whole counts and perhaps there are few parts of the wor where fo few thefts are committed as her Highway robberies are totally unknown. The are feldom heard of; and in their journey to the court the Europeans are fo fecure, that they pa very little attention to their baggage; althous in the factory the common people think it no 1³ to pilfer a few trifles, particularly fugar and te cups, from the Dutch, while thefe articles a carrying to or from the quay.

It is highly probable that these people hat fo *fuspicious* as they are at prefen;

fent; poffibly their former internal commotions and civil wars, but still more the frauds of the Europeans, have called forth and increased their mistruss, which now, at least in their commerce with the Dutch and the Chinese, is without bounds.

Superfition is more common with them, and rifes to a higher degree than in any other nation; which is owing to the little knowledge they have of most fciences, and the abfurd principles inculcated into them by their priefts, together with their idolatrous doctrines. This fuperfitious difposition is displayed at their feasts, their public worship, in themaking of folemn promises, in the use of particular remedies, the chusing of lucky or unlucky days, &cc.

Pride is one of the principal defects of this nation. They believe that they are honoured with that faceed origin from gods, from heaven, the fun and moon, which many Afiatic nations as arrogantly as abfurdly lay claim to. They confequently think themfelves to be fomewhat more than other people, and, in particular, confider the Europeans in a very indifferent light. Whatever injury a Japanese might be inclined to put up with, he can never bear to have his pride touched. It was pride that expelled the Portuguese from the country, and this alone may in time ruin the present flouristing traffic carried on by the Dutch.

Befides

Belides the circumstance of this nation having never (not even in the remoteft ages) been conquered or fubjected to any foreign power, we read in the annals of its hiftory fuch accounts of its valour and unconquerable spirit, as might rather be taken for fables, and the produce of a fertile imagination, than the fober dictates of truth, did not latter years furnish us with convincing proofs of their reality. In the year 799, the Tartars having, for the first time, over-run part of Japan with an innumerable army, and their fleet having been loft in one night in a hard gale of wind; the Japanese commander in chief, on the day following, raifed the camp, attacked the enemy, routed and put them all to the fword, fo that not a man was left alive to return with the tidings of fo unparalleled a defeat, and fo complete a victory. In like manner, when in the year 1281, they were again attacked by the Tartars, to the amount of 240,000 men, the victory was equally great and glorious. The expulsion of the Portuguele, and the extirpation, at the fame time, of the Christian religion in the feventeenth century, was fo complete, that fcarcely any traces are now to be found of their former existence in the country. The war and devastation continued for the fpace of 40 years : feveral millions were victims to its fury; and at the laft fiege 37,000 men fell. These victories are not the only proofs of the courage and intrepidity of the Japanefe. S 3

anefe. I shall here adduce another instance still more to the purpole. The affair happened in the year 1630. A fmall Japanele veffel arrived for the purpose of trading at the island of Formosa, which at that time belonged to the Dutch Eaft India company. One PETER NUYTZ, who was at that time governor, treated the Japanefe merchants ill, who arrived there in this veffel, and who, on their return home, complained to their prince of the ill-treatment they had received. As the prince took fire at this infult, and the more fo, as it came from foreigners whom he defpifed, and at the fame time he did not find himfelf in a condition to revenge himfelf, his guards addreffed him in the following manner: " We do not confider ourfelves worthy any longer to have the care of your highnefs's perfon, unlefs you permit us to retrieve your honour. Nothing can efface this ftain but the blood of the offender. You have only to command, and we will cut off his head, or bring him hither alive, to be treated as you shall think proper, and according to his deferts. Seven of us will be fufficient for the purpose. Neither the danger of the voyage, the strength of the castle, nor the number of his guards, shall screen him from our vengeance." Accordingly, having received the prince's permiffion, and confulted upon the measures proper to be taken, they arrived at Formofa. They were no fooner introduced to the governor, in order to have

GENILS AND DICPONTON

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have an audience, than they all drew their fabres, made him prifoner, and carried him on board of the veffel that had brought them. This happened in broad day-light, in the fight of his guards, and domeffics, and without any one offering to ftir in defence of their mafter, or to refcue him from his bold conductors, who, with their fwords drawn, threatened to cleave his head in two the moment the leaft opposition should be made. This anecdote may be feen in KEMP-FER's Description of Japan, Appendix, p. 56.

Any one that, from what has been faid above, has formed to himfelf a notion of the pride, juftice, and courage of the Japanefe, will not be much aftonished, when he is told, that this people; when injured; are quite implacable. As they are haughty and intrepid, fo they are refentful and unforgiving; they do not fhew their hatred, however, with violence or warmth of temper; but frequently conceal it under the mask of an inconceivable fang froid, and wait with patience for the proper time to revenge themfelves. Never did I fee a people lefs fubject to fudden emotions and affections of the mind. Abuse them, despise them, or touch their honour as much as you pleafe, they will never answer you a fingle syllable, but merely with a long Eb ! Eb ! teftify, as it were, their furprife, and conceive in filence the greatest hatred for their opponent, which no justification, nor

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nor length of time, nor change of circumftances can afterwards efface. Thus they are not used to treat their enemies uncivilly either in word or behaviour, but deceive them, as well as others, with diffembled friendship, till, fooner or later, an opportunity offers of doing them fome material injury.

THE JAPANESE LANGUAGE

Is, on account of its differing in many refpects from the European languages, very difficult to learn. It is written, indeed, like the Chinefe, in ftrait lines upwards and downwards, but the letters are quite different, and the languages, upon the whole, fo diffimilar, that thefe two neighbouring nations cannot underftand each other without an interpreter. The Chinefe language, however, is much read and written at Japan, and is confidered as their learned language, which, together with various fciences, they have adopted from China.

Notwithstanding these difficulties, I was at great pains, as well during the last autumn and winter months as fince that time, to learn, from my best friends among the interpreters, both to understand and speak it a little, as also to write it; though, as well for their fastery as my own, I was obliged to do this with the greatest privacy. And the better to obtain this end, whence I stattered myself that at a future period (and particularly

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ticularly in my journey to court) I might derive confiderable advantage, I wrote down the words by degrees, as I learned them, and, by the affiftance of the Japanese dictionary already mentioned, formed a vocabulary of a language, which of all others is the leaft known in Europe. At first I imagined I should profit much in this respect by my Dutch friends, and the more, as many of them feemed to be able to call for any thing they wanted in the Japanese tongue; but not one of them had ever thought of forming a vocabulary by way of affifting his memory, or otherwife endeavoured to elucidate the nature of the language. A Japanefe and Dutch vocabulary might, it is true, in the fpace of two centuries, have been thought of, and completed for the ule and fervice of fuch as are to remain for fome time in this country, had not incapacity in fome, . and idlenefs in others, laid infurmountable obflacles in the way. Some flay here for a fhort time only, others are merely in fearch of a fortune, and, for the major part of them, the tobacco-pipe has too great charms for them to devote to any thing better, more uleful, and more agreeable, their precious time, which, however, here they frequently complain of as tedious. Of this vocabulary I have given an extract, at the end of this volume, in hopes that fomebody, fooner or later, may reap fome benefit from it.

THE NAME

Or each family and individual is used in Japan in a very different manner from what it is in Europe. The family name of the Japanese remains unchanged, but is never ufed in daily converfation, or in the ordinary courfe of life, but only when they figh any writings, and that chiefly when they fet their feals to them. There is likewife this fingularity in the affair; that the family name is not put after, but always before the adfcititious name, in like manner as in botany, where the generic name of a plant always precedes the fpecific. So that the adfeititious or adopted name is that by which they are addreffed, and this is changed feveral times in the courfe of their lives. As foon as a child is born, it receives from the parents a certain name, which, if a fon, he keeps till he arrives at years of maturity. At that period it is changed. If afterwards he obtains an office, he again changes his name; and if, in process of time, he is advanced to other offices, the fame change always takes place, and fome, but efpecially emperors and princes, have a new name given them after their death. The names of the women are lefs fubject to change, and are frequently taken from certain beautiful flowers.

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flowers. Titles are given to place-men of a fuperior order, on entering to their employments; and to the chief of them various names of honour are added by the fpiritual emperor.

THEIR DRESS

AT Japan deferves, more than any where elfe in the world, the name of national; as it not only differs from that of every other nation, but at the fame time is uniform from the monarch down to the most inferior subject, similar in both fexes, and (which almost surpasses all belief) has been unchanged for the space of two thousand five hundred years.

It confifts every where of long and wide night-gowns, one or more of which are worn by people of every age and condition in life. The rich have them of the fineft filk, and the poor of cotton. The women wear them reaching down to their feet, and the women of quality frequently with a train. Those of the men come down to their heels; but travellers, together with foldiers and labouring people, either tuck them up, or wear them fo fhort, that they only reach to their knees. The men generally have them

DRESS.

them made of a plain filk of one colour, but the filken fluffs worn by the women are flowered, and fometimes interwoven with gold flowers. In the fummer, they are either without any lining at all, or elfe with a thin lining only; in winter, by way of defence against the cold weather, they are quilted with cotton or filk wadd. The men feldom wear many of them, but the women often from thirty to fifty, or more, and all fo thin, that together they hardly weigh more than four or five pounds. The undermost of them ferves for a shirt, and is therefore either white or bluifh, and for the most part thin and transparent. All these night-gowns are fastened about the waist by a belt, which for the men is about the breadth of a hand, and for the women of about twelve inches, and of fuch a length as to go twice round the body, with a large knot and rofe. The knot worn by the fair fex, which is larger than that worn by the men, fhews immediately whether the woman is married or not ; as the married women wear the knot before, and the fingle behind. The men fasten' to this belt their fabre, fan, tobacco-pipe and pouch, and medicine-box. The gowns are rounded off about the neck, without a cape, open before, and flew the bare bofom, which is never covered either with a handkerchief or any thing elfe. The fleeves are always ill-fhaped, and much wider than they ought to be, and fewed together half

DRESS.

half way down in front, fo as to form a bag at bottom, into which they put their hands in cold weather, or ufe it as a pocket to hold their papers and other things. Young girls, in particular, have the fleeves of their gowns fo long, as frequently to reach quite down to the ground.

On account of the great width of their garments, they are foon dreffed and undreffed, as they have nothing more to do than to untie their girdle, and draw in their arms, when the whole of their drefs inftantly falls off of itfelf. So that long and wide night-gowns univerfally form the drefs of the Japanefe nation, though in this point fome fmall variation takes place with regard to fex, age, condition, and way of life. Thus one frequently fees the common people, fuch as labourers, fishermen, and failors, either undreffed, when they are at their work, with their night-gowns taken off from the upper part of their bodies, and hanging down loofe from their girdles; or elfe quite naked, having round their body a girdle only, which wrapping round and covering the parts that decency requires to be concealed, is carried backwards between the thighs, to be fastened to the back.

Men of a higher rank in life, have, befides thefe long night-gowns, a fhort *balf-gown*, which is worn over the other, and is made of fome thin kind of ftuff, fuch as gauze. It is like the former

former at the fleeves and neck, but reaches only to the wafte, and is not faftened with a girdle, but is tied before and at the top with a ftring. This half-gown is fometimes of a green, but moft frequently of a black colour. When they come home to their houfes or to their refpective offices, where there are none fuperior to them, they take off this outer garment, and, folding it carefully up, lay it by.

The breeches are of a pecular kind of fluff, which is thin indeed, but at the fame very clofe and compact; and made neither of filk nor of cotton, but of a fpecies of hemp. They are more like a petticoat than breeches; being fewed between the legs, and left open at the fides to about two-thirds of their length. They reach down to the ancles, and are fastened about the waift with a band, which is carried round the body from before and from behind. At the back part of thefe breeches is a thin triangular piece of board, fcarcely fix inches long, which is covered with the fame ftuff as the breeches, and ftands up against the back just above the band. The breeches are either ftriped with brown or green, or elfe uniformly black. I have formetimes feen them made of Succotas, a fluff from Bengal. Drawers are feldom used but on jour-' - wear fhort and tucked-

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up night-gowns, that they may walk or run with the greater speed.

The complimentary drefs, as a fort of holiday drefs is called in Japan, is used only on folemn occasions, and when people of an inferior rank pay homage to their fuperiors, or by fuch as are going to court. Such a drefs is worn on the outfide of all, over the gowns, that form the whole of this people's ufual drefs. It confifts of two pieces, made of one and the fame kind of ftuff. The undermost piece is the above-defcribed breeches, which are generally made of a blue ftuff, printed with white flowers. The uppermost piece, which particularly diffinguishes this drefs, is a frock, not unlike the half nightgown already fpoken of, but is carried on each fide back over the fhoulders, by which means the Japanese have the appearance of being very broad shouldered.

All their clothes are made either of filk, cotton, or of a kind of linen manufactured from certain fpecies of nettles. The better fort of people wear the fineft filks, which in finenefs and tenuity far exceed every thing produced either in India or Europe; but as thefe filks are not above twelve inches broad, they are not carried to Europe for fale. The common people wear me, which is found here in great abundance.

the Japanefe make of the bark of the Moras papyrifera, a kind of cloth, which is either manufactured like paper, or elfe fpun and woven. The latter fort, which is quite white and fine, and refembles cotton, is fometimes ufed by the women. The former, printed with flowers, is ufed for the long night-gowns by elderly people only, and is worn by them at no other time than in the winter, when they perfpire but little, and then with a gown or two befides.

As the night-gowns reach down to the feet, and confequently keep the thighs and legs warm, *flockings* are neither wanted nor ufed throughout the whole country. One fees the common people, however, when travelling, and foldiers who have not fuch long night-gowns, wear fpatterdafhes made of cotton ftuff. I obferved that fome people near Nagafaki wore alfo hempen *focks*, with the foles of cotton ftuff, which they ufed in the fevereft winter months, to preferve the feet from cold. They are tied faft about the ancle, and have a feparate place made for the great toe to enter, and adapted to the form of the fhoe.

The *floces*, or, to fpeak more properly, *flippers* of the Japanefe, are the moft fhabby and indifferent part of their drefs, and yet in equal ufe with the high and the low, the rich and the poor. They are made of rice ftraw woven, but fometimes for people of diffinction of fine flips of ratan,

ratan. The fhoe confifts of a fole, without upper leather or hind-piece: forwards it is croffed by a ftrap, of the thickness of one's finger, which is lined with linen; from the tip of the fhoe to this ftrap a cylindrical ftring is carried, which paffes between the great and fecond toe, and keeps the fhoe faft on the foot. As thefe fhoes have no hind-piece, they make a noife, when people walk in them, like flippers. When the Japanefe travel, their fhoes are furnished with three ftrings made of twifted ftraw, with which they are tied to the legs and feet, to prevent them from falling off. Some people carry one or more pair of floes with them on their journeys, in order to put on new, when the old ones are worn out. When it rains, or the roads are very dirty, thefe fhoes are foon wetted through, and one continually fees a great number of worn-out fhoes lying on the roads, especially near the brooks, where travellers have changed their fhoes after washing their feet. Instead of these, in rainy or dirty weather, they wear high wooden clogs, which underneath are hollowed out in the middle, and at top have a band acrofs like a ftirrup, and a ftring for the great toe; fo that they can walk without foiling their feet. Some of them have their ftraw fnoes fastened to these wooden clogs. The Japanese never enter their houses with their floes on ; but leave them in the entry, VOL. III The second sort Victoria

or place them on a bench near the door, and thus are always bare-footed in their houfes, fo as not to dirty their neat mats. During the time that the Dutch live at Japan, when they are fometimes under an obligation of paying vifits at the houfes of the Japanefe, their own rooms at the factory being likewife covered with mats of this kind, they wear, inftead of the ufual fhoes, red, green, or black flippers, which, on entering the houfe, they pull off; however, they have flockings on, and fhoes made of cotton fluff, with buckles in them, which fhoes are made at Japan, and can be wafhed whenever they are dirty. Some have them of black fattin, in order to avoid wafhing them.

This people's mode of dreffing their bair is as peculiar to them, and at the fame time as general amongh them, as their use of the night-The men fhave the whole of their head gowns. from the forehead down to the nape of the neck, and what is left near the temples and in the neck is well greafed, turned up, and tied at the top of the head with feveral rounds of white ftring, made of paper. The end of the hair that remains above the tie is cut off to about the length of one's finger, and, after being well fliffened with oil, bent in fuch a manner, that the tip is brought to ftand against the crown of the head, in which fituation it is kept merely by the ftring above mentioned. This coeffure is frictly

ftrictly attended to, and the head fhaved every day, that the ftumps of the growing hair may not disfigure their bald pates. Priefts and phyficians, and young men that have not yet attained to the age of maturity, are the only perfons who are exempted in this refpect. The priefts and phyficians fhave their heads all over, and are thus difcriminated from all others. Boys again keep all their hair on till fuch time as the beard begins to make its appéarance.

Of the fair fex, none have their hair cut off. except women that are parted from their hufbands. I had an opportunity of feeing fuch a one, while I was at Jedo, who traverfed the country much, and made, with her bald pate, a droll and fingular appearance. Otherwife the hair, well befmeared, and made fmooth with oil and mucilaginous substances, is put up close to the head on all fides, and this either quite in a neat and fimple manner, or elfe ftanding out at the fides in the form of wings. After this the ends are fastened together round a knob at the crown of the head. Single women and fervant maids are frequently diffinguished from the married by these wings. Just before this knot a broad comb is fluck, which the poorer fort of people wear of lacquered wood, and those that are in better circumstances of tortoife-shell. Besides thefe, the rich wear feveral long ornaments made

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of tortoife-fhell fluck through this knot, as alfo a few flowers, which ferve inftead of pearls and diamonds, and conflitute the whole of their decorations. Vanity has not yet taken root among them to that degree, as to induce them to wear rings or other ornaments in their ears.

These people never cover their heads either with *bats* or *caps*, to defend them against the cold or the foorching heat of the fun, except on journeys, when they wear a conical hat, made of a species of grass, and tied with a string. I observed fuch as these also were worn by fishermen. Some few travelling women wore caps in the form of a terrene, which were interwoven with gold. Otherwise, the parasol is what they use to shelter them against the rain or the rays of the fun.

Befides the above-mentioned drawers, fpatterdafhes, and hat, which none but travellers wear, they are generally provided on journeys with a *cloke*, efpecially fuch as travel on foot or on horfeback. Thefe clokes are wide and fhort, and of the fame fhape as the night-gowns. They are made of thick oiled-paper, and are worn by the fuperior attendants in the fuite of princes, and of other travellers; and my fellow-travellers and myfelf, during our journey to court, were obliged to make a prefent to our attendants of fome of thefe clokes, when we paffed by the place where they were manufactured.

The

The Japanese always have their coat of arms put on their clokes, particularly on their long and short night-gowns, and that either on their arms or between their shoulders, with a view to prevent their being stolen, which in a country where people's clothes are fo much alike in point of materials, form, and size, might easily happen.

Inftead of a *bandkerchief*, I always faw them use thin and foft writing paper, which they conftantly carried about them for this purpose, and which they also used for wiping their mouths and fingers, as likewise for wiping off the fweat from their bodies under the arm-pits.

THE STILE OF THEIR ARCHITECTURE.

The *boufes* in general are of wood and plafter, and white-wafhed on the outfide, fo as to look exactly like ftone. The beams all lie horizontal, or ftand perpendicular (no flanting ones, as are otherwife ufed in frame-work buildings). Between thefe beams, which are fquare, and far from thick, bamboos are interwoven, and the fpaces filled up with clay, fand, and lime. In confequence of this, the walls are not very thick, but when white-wafhed make a tolerably T 3 good

good appearance. There are no partition-walls in their houfes, which are merely fupported by posts or upright beams, between which again at the cieling and floor other beams run across, with grooves in them, for partitioning off the apartments. Thus, the whole house at first forms only one room, which, however, may be partitioned off with frames that flide in the grooves made in thefe crofs-beams, and may be put up, taken away, or flid behind each other at pleafure. These frames are made of lacquered wood, and covered with thick painted paper. The cieling is tolerably neat, and formed of boards clofely joined; but the floor, which is always railed from the ground, is laid with planks at a distance from each other. The roofs are covered with tiles, which are of a fingular make, and very thick and heavy : the more ordinary houfes are covered with chips, on which are frequently laid heavy flones to fecure them. In the villages, and the meaner towns, I fometimes faw the fides of the houfes, especially behind, covered with the bark of trees, which was fecured by laths nailed on it, to prevent the rain from damaging the wall. The houfes are generally two ftories high, but the upper ftory is feldom inhabited, is for the most part lower than the other, and is used for a loft, or to lay up lumber in. The houses of people of diffinction are larger indeed, and handfomer

handfomer than others, but not more than two ftories, or, at the most, twenty feet high. In each room there are two or more windows. which reach from the cieling to within two feet of the floor. They confift of light frames, which may be taken out, put in, and flid behind each other at pleafure, in two grooves, made for this purpole, in the beams above and below them. They are divided by flender rods into panes of a parallelogramic form, fometimes to the number of forty, and pasted over on the outfide with fine white paper, which is feldom or ever oiled, and admits a great deal of light, but prevents any one from feeing through it. The roof always projects a great way beyond the house, and fometimes has an additional roof, which covers a fmall projecting gallery, that flands before the window; from this little roof go flanting inwards and downwards, feveral quadrangular frames, within which hang blinds made of rufhes, which may be drawn up and let down, and ferve not only to hinder people that pafs by from looking into the house, but chiefly when it rains, to prevent the paper-windows from being damaged. There are no glafs windows here; nor have I obferved mother-of-pearl or Mofcovy talk uled for this purpofe.

The floors are always covered with mats made of a fine species of grass (Juneus) interwoven T 4 with

with rice-ftraw, from three to four inches thick, and of the fame fize throughout the whole country, viz. two yards long, and one broad, with a narrow blue or black border. It was only at Jedo, in the imperial palace, that I faw mats larger than thefe. In the houfes of the lower order of people a great part of the room on the outfide is not covered with mats, and ferves for a hall, where the company may leave their fhoes : within is a raifed floor, which, covered with mats, conftitutes the fitting-room, and, by means of fliding fcreens, may be divided into feveral compartments.

The infides of the houfes, both cieling and walls, are covered with a handfome thick paper, ornamented with various flowers; thefe hangings are either green, yellow, or white, and fometimes embellifhed with filver and gold. A thin gruel made of boiled rice forms the pafte ufed for this purpofe; and as the paper is greatly damaged by the fmoke in winter, it is renewed every third or fifth year.

Tradefmen and mechanics frequently use the front part of the house, that looks into the fireet, as a workshop, fale-shop, or kitchen, and inhabit the part that looks into the yard.

The room which ferves as a *kitchen* has no other fire-place than a fquare hole, which is frequently in the middle of the room, and is lined

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lined with a few flones, which are laid level with the furface of the mats. The fmoke makes the houfe black and dirty, as there is no chimney, but only a hole in the roof; and the floormats, being fo near the fire-place, frequently occafion fires.

Every house has its privy; in the floor of which there is an oblong aperture, and it is over this aperture that the Japanese fit. At the fide of the wall is a kind of a box, inclining obliquely outwards, into which they discharge their urine. Near it there is always a China vessel with water in it, with which, on these occasions, they never fail to wash their hands.

Every house likewise has a small yard, which is decorated with a little mount, a few trees, shrubs, and flower-pots. The plants that were most commonly seen here were, the Pinus Sylvestris, Azalea Indica, Aukuba, Nandina, &c.

At fome places, fuch as in Jedo and other towns, adjacent to each house there is a *ftorebouse* that is fire-proof, for the purpose of faving the owner's property.

One feldom finds a houfe in which there is not a room fet apart for the purpose of *bathing*, with a bathing-tub in it. This generally looks towards the yard.

So that the Japanese buildings, in town as well as in the country, have neither that elegant appearance,

ance, nor the convenience and comfort of our houfes in Europe. The rooms are not to cheerful and pleafant, nor to warm in the winter, neither are they to fafe in cafe of fire, nor to durable. Their femi-transparent paper windows, in particular, fpoil the look of the houfes, as well in the rooms as out towards the ftreet.

The *public buildings*, fuch as temples and palaces, are larger, it is true, and more confpicuous, but in the fame flile of architecture, and the roofs which are decorated with feveral towers of a fingular appearance, are their greateft ornament.

The towns are fometimes of a confiderable fize, always fecured with gates, and frequently furrounded with walls and foffes, and adorned with towers, efpecially if a prince keeps his court there. The town of Jedo is faid to be twentyone hours walk in circumference, or about twentyone French leagues. From a height I had an opportunity to take a view of the whole of this fpacious town, which for fize may vie with Peking. The ftreets are ftrait and wide, and at certain diffances divided by gates, and at each gate there is a very high ladder, from the top of which any fire that breaks out may be difcovered, an accident, that not unfrequently happens here feveral times in the week.

The

The villages differ from the towns, by being open, and having only one ftreet. Their length frequently furpaffes all belief: most of them are three quarters of a mile in length, and fome of them fo long, that it requires feveral hours to walk through them. Some alfo ftand fo close together, that they are diferiminated from each other only by a bridge or rivulet, and their name.

Neither chimnies nor floves are known throughout the whole country; although the cold is very intenfe, and they are obliged to make fires in their apartments from October to March. The fires are made in copper kettles of various fizes, with broad projecting edges. The hollow part of thefe is filled with clay or afhes, and wellburned charcoal is put at the top, and lighted. A pot or kettle of this kind is placed in the middle of the room, or at one fide, and, on account of the apartments being too pervious to the air, the fire is made feveral times a day, or elfe a conftant fire is kept up for the Japanefe to fit round it. This mode of firing, however, is liable to the inconvenience, that the charcoal fometimes fmokes, in confequence of which the apartment becomes dirty and black, and the eyes of the company fuffer exceedingly.

The furniture in this country is as fimple as the ftile of building. Here neither cupboards, bureaus,

FURNITURE.

bureaus, fophas, beds, tables, chairs, watches, looking-glaffes, or any thing elfe of the kind are to be found in the apartments. To the greatest part of these the Japanese are utter strangers. Their foft floor-mats ferve them for chairs and beds. A fmall table, about 12 inches fquare, and four in height, is fet down before each perfon in company at every meal. Here it may be proper to obferve, that whereas most of the other nations in India fit with their legs laid across before them, the Chinese and Japanese lay their feet under their bodies, and make a chair of their heels. A foft mattrals, fluffed with cotton, is fpread out on the mats when the hour of reft approaches. Cupboards, chefts, boxes, and other fimilar articles, are kept in the ftorehouses or elfe, in feparate rooms.

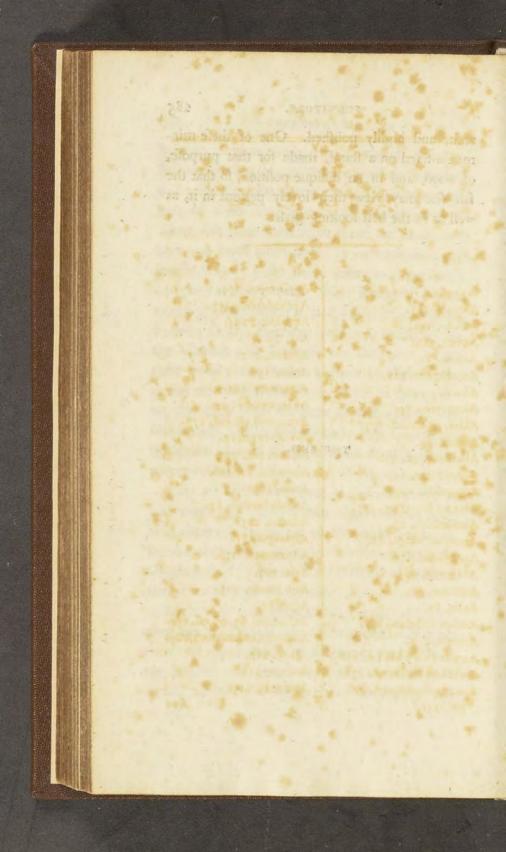
Fans are used throughout the whole country, and every body carries one always about him. It is always fluck in the girdle on the left hand, behind the fabre, with the handle downwards. On these they frequently have their route marked out, when they go on a journey.

Mirrors do not decorate the walls, although they are in general use at the toilet. Of glass there are none made in the country: but both the fmaller and larger fort are made of cast metal, which is a composition of copper and zink,

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zink, and highly polifhed. One of these mirrors is fixed on a stand, made for that purpose, of wood, and in an oblique position, so that the fair fex may view their lovely perfons in it, as well as in the best looking-glass:

THE END.



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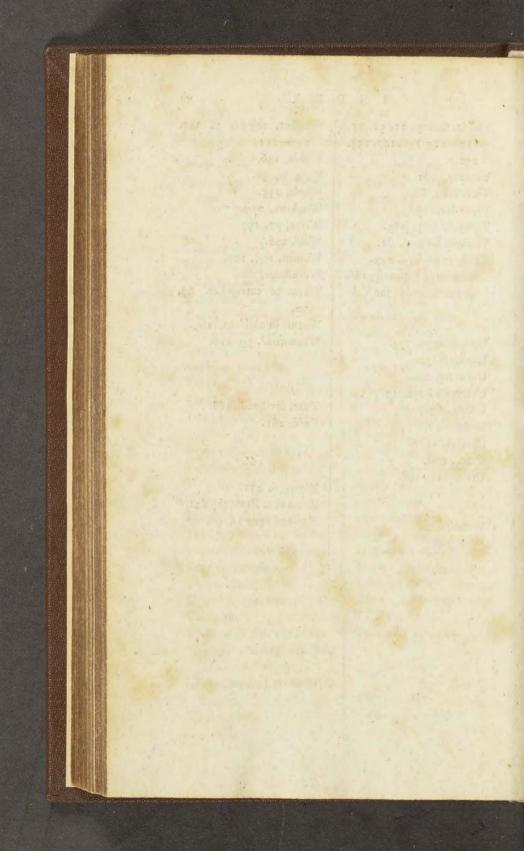
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Alum, Milban. Alone, folitary, Bakari, tofin, Sammifiku. to Allow, to permit, Jeruft. Allowed, Juris gomen. Amber, Kowaku. Ambergrife, Kuferm no fung, i. e. Whales excrements. Amendment, Joifo. Anifeed, Oikio. Anifeed water, Uikjoff. Anchor, Ikari. to Anchor, to let go the anchor, Ikakaru. Animal, Kedamono. to be Angry, Fandatfarts ikaru. to make any one Angry, Faratate, fafarit. to grow Angry, Warthan tatsuru, farikatatsuru. Anvil,

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to Blow the nofe, Fanna toru. Blubber of whales, &c. Tokuru, abra no kawa. Board, eating, Sukomots, kuimono, kusmos. Boat (Dutch) Obatera. Boat (Japanese) Temma. Body, Gotai. to Boil up, Fagiru. Bone, Fone. Book, Somots. Borough, Ukefai, ukejau, kekejawu. Borrowed, Finawa. to Border upon, Sakkai furu. Botanist, Tonfos. Boundary, Sakkai. Boundary mark, Fost. Boon, or request, Tannomi. Bow, to fhoot with a bow, Jumi, iru. a Bowl for playing at nine pins, Tamma, Box, Fako. Box, Iremono. Brain, Itadakki, fiakkuje. Branch of a tree, Jeda. Brandy, and all forts of fpirituous liquors, Sotju. Brafs, Sintju. Breadth, Jakobaba, firofa. Breaft, breaft of a woman, Tittia

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te

to Celebrate or extol, Fomeru. Chafing difh (large) Fibat-Sji. Ditto (fmall) Sjuro. Chalk, Siraffumi. Chamber, cabin, Bea fea. to Change or alter, Tjigau, kawatu. Chain, Kawufari. Chapter, Ketta. Charcoal, Sumi, Jum. to Chew, Asjiwau. to Cheat, Damaffu. Cheek, Hogeta, fo, fogeta. Cheft, Hago, nagamotji. Chief justice, Ofuffi. Chicken, Fioko. Child, Kodoma. Chintz, Sarafa. Chopping knife, Debabotjo, nommi. Church, Tera. Cinnamon, Nikke, Circle, Maru. Citadel or caftle, Sire, fe. Clay, Sira/Jumi. Claw, Tommarige. Clean, Kireina, sjomi. Clear, Seteng. to Climb, Nagoru. to Clip, to clip off, Se. to Clip with feiffars, Kiru, fasami kiru. Cloak, Hawori.

Cloak to keep out the rain. Toi. Clock, Suriganni, rei. Cloth, So king. Cloth, to wipe plates with, Fui king. a fuit of Clothes, Kimono. to have a fuit of Clothes on, Kimono kiru. Cloves, Tioofs. pit Coal, Isufumi. Cobweb, Kruumo no je, monoje. Cock, Ondari, otori. Cockscomb, Tori no kabito. Coxcomb, Kabuto. Coffin, Kwanoki. Cold, Samka kang. Cold, a diforder, Kusame Suru. to Catch cold, Kafe fuku, fukafi. Commodioufly, with eafe, Sfio, Sfiona. to Compel, Muri. Common, general, or univerfal, Onafijona. Common, or ordinary, Sfune, tju. Compais, to feer by, Fobari bobarri. a Compress, Maki mome. Commerce, to trade, Akirawu, Sobai. to Compare, Anaskarana. Courfe,

Coarfe, Arai, areka fino-waika. Coat of mail, Kapto. Colic, Senki. Colour, to colour, Iro, irotskuru, somuru. a pair of Compasses, Bumawallu. to Complain, Todokuru, utajuru, mosaguru, todokeko. to Come, Kuru. Comb, to comb, Kavufi, Kwaskes uru. Conversation, Kotoba atfume. to Confilcate, Kjsju. to Conduct any one out to the door, Okuru, utjiokuru. I shall Conduct him out, Wataks kufi utji okuri mallo. Conduit, Kakifi. to Confider, Ansuru. Confectionary, Sattojaki. to Conquer, Kat/u. Cook, Riourinen. to Cook, Tako, nia/Ju. Cool, Sulufi, to Cool, Sofu, furu. Copy, Ujuft. Copyist, Utfuju, utufu. Copper, Agaganni, akaganni. Coquet, Iro mono. Corner, Fanna.

Cordage, rope, Theno, ki no kawa. tarred Cordage, Tjansuna. Cork, Seng. Corple, Sining, figajo, figai. to Coft, expences, Nedang, Sapi, irio. Cottage, Sato, mura. Cotton, Kiwatta. Court, Miaco. Cough, Siwamoki. to Count, to reckon, Kansju, Sanjo Suru. Counting house, Sanjobea. Courageous, Kimono fitoka, amaru. Cover or lid, Fta. to Cover, Tfutfumu, on, Coverlit for a bed, Ftong. Covenant, Kubira, Cow, cow beef, Us, us no niku. Crofs, Sjumanh. Crofs road, Sjumonfi, mitji, jotskado. Creature, animal, Juka, Jjo. Crooked, Magaru. to Crush to pieces, Fifaguru. to Creep, Fau. Cray-fifh, Ganne. Creek or bay, Nada. Crazy, Bakka, babo. Cup

Cup, tea cup, Wang, tiawang. the Cup of a pair of scales, Tenbin. to Cut, i.e. to be fharp, Kuifako, kuikiru. to Cut afunder, Kiru. Cuftoms, cuftom-houfe, Kokfing, kokfing bansjo. Cushion, pin-cushion, Farifass.

D

Dainty, delicious, Umaka. Dark, Mime. to Dawn as the day, Akibonu. Dam, fifh Dam, Ike. Daughter, Musme, gogo. Danger, Abunaka. Dangerous, Abunaikoto, Damage, prejudice, Takkara, Jong. Devout, Tsutinsunde. Devotion, Kavanen. Damask; Dons. Devil, Oni. Deep, Fukai, f'kaka. Dear, coffly, Takkaj t fufuku. Dead body, Sinda fining. Dear, my dear, Suko Suita, onego. Desire, inclination, Fimma konomut fuk. to Deduct, Kansjo aju, Sanjo aju.

Debt, Sukugin. Debtor, Sakugin ota fito Deceit, fraud, Damaskoto Deformed, Tefong. to Dig, Foli. Difinclined, without defire for a thing, Konoman. Dirtinefs. uncleanlinefs, Akfta. Dirty, unclean, Kifane, jogore. Diffuade, Jamaru. to Divine, foretell, Sufe miru, uranau. to Difmount, Oriru. to Difmifs one from office, Itoma. Difmiffion, Itoma. to Discharge or Dismiss, Itimagoi. to Divide, Wakwuru. Diarrhæa, Kuudas. to Die, Sinneru finu. Difh. Kooke. to Difguife or mafk, Ifo furu. a Ditch with water, Forie, Foka. Dice, the playing with dice, Saii, bakutji utfu. Divers, various, Iro iro. Difference, diffinction, Matjgai. to Difcover, Owamu. to make a Difference, Matfigotory. Difciple, Keko. to Diflocate a bone, Fanffu. Dike or bank, Dote.

Double

Double, Kasannaru... Dove, Fato, wild Dove, Jamma fato. tame Dove, Jefato. Door, To. Door mat, Toma. to Double, Kafannu, kafanoru. Done, executed, Itas. to Do, or make, Suru, itaffu, Suhurru. to Do one's best, Uke jai nikui. Dog, Inu. to doubt, Utagu. Dragon, Firio. to Draw the portrait of any one, Nagu, torru. to Draw, Katamitru, mootfu, fiko. to Draw out, Nugu. Drawers, or under breeches, Feko, momofiki. Dream, jume jumemiru, to Drefs one felf, Kimono tjako furu, fofukfuru. Dreffed and painted Lady, Mifimai. Drum, Taiko. Drunkard, Jeikfari. Drink, Nomi : 10no. Drop, Tamma. to be Drunk, Namoji jeikfsari, to pretend to be Drunk, Jeik, faraffuri. It is break of day, Ju no aki juaki.

8

to Drink, Nomu.
Duck, tame Afiru, Wild, Kamo.
to Dwell, inhabit, Tfumu, Tatfuru tsükuru.
Dyfentery, Okabara,
to Dry, dry, in, Foffu, hoffu.
to Dry up, wither, Karruru.
Dry, Kavaka, firu.boffu fajoru.

E

to Earn, deferve, Sotomuru, Stomuru jakv. Earthquake, Djifin. Earth, the Earth, Tji dfi. Ear, Mimi. Ear ach, Memi no itami. Eaft, Figah. to Eafe one's felf, evacuate, Joh fong, fung, fulo. Ebb tide, Suwo no firu. Echo, Fibiku. Edge, border, Fas. Edge of a mat, Tuttami ne feri. Egg, Egg shell, Tamago, Tamago no karra. Eggs, to lay Tamago met-Ju. Eggs, to fit on, Fioko nokomuru. Eel, Unagi. Ell, Ikkin. Elbow, Ude, fifs. Elephant, So.

Elapic

Elapied, past, Sugita. Empty, Aki. to Empty, evacuate, Akwuru. Envy, Nettamj. Envious, Neramu. Enemy, Kata ki. Enfign ftaff, Hatofao, fato-Jawo. Enigma, conjecture, Nafe. Entrails, Farawatta. End, Oari, fime, fimai. Eternal, I/o. Every day, Neifits. Every night, Meibang. Events, adventures, Fufina, banaffi. Even, level, Firataka. to Exchange, Kajuru. to Exercife, Mannabu. to Excel, Wataru. Executioner, Sioki. to Experience, Midaffu, Mifke daffu. to Explain, Simau. to Examine accompts, Fifia Su. Eye of a Needle, Farino mimifo. to Eat, Eatables, Kwu, kui mono. F.

Fatcon, Fakka,

Face, or countenance, Kawo, omotte, minmente, tsera. to Fall, Otjiru, tawareta. to Fall short, Tarang, fufoku. Falle, to adulterate, Nift, nite ; nife monoffu. Famine, Katfujetofi, kiking. Fan, Oge. Round fan, Utjuwa. Fan-maker, Ogit/kuri. Fan-duck, Oftori. Farewell, Kingo, nigoferrus to Faft, Sofimu. Father, Tete, toto. grand Father, Jino. Father in law, Jitfofo. Fathom, one fathom, Fire, fito firo. Fat, it is fat, Kojuru, jete oru. Feather, Tori no fa. to Fear, Ofiruru. to Feel, Obojuru. Feeble, Jowaka, jowai. Festival, Matfuri. to Fetch, Toriuffuri. Fever, Nets, nitfu. Field, corn-field, Fataki. Field, Nabekw. Figure, Katals. a File, to file, Jasuri, jasurisuru, jafuri kakuru. Fin, a fin, jokofiri, fire. Fine

Fine, Koma kanna, komaina, komaka, komai. Finger, jubi. to Find, to hit upon, Midaffu, midskuru, midkedaffu. Fire, Fi, finoko. a Fire (incendium) K-waffi. to Fire off a mulquet, Ut/u. Fish, Iwo, Jakkana. to Fish, Iwo tfuru. Fisherman, Rick. Fishing box, Binto. Fishing net, Ami. Fish fried in oil, Agi iwo. Fift, Tekobus. Flag, colours of a fhip, Ha-10. Flame, Foro, moi ibi. a Flea, Nomi. to Flez, Faguru. Flint, Kado if. Flood, Sizuo. Ploor, Jula. Flour or meal, Mugiko. a Flower, Fanna. to Flower or bloom, Fanna, fatu. Flower pot, Fanna iki, fanna tsuba. a Fly, Hai. to Fly away, Toobu. to Fly away, Fukitfiraffu.

IQ.

Frame, fliding frame, Sofanoko, Sofonofone. Free, to free, Fiwa, momu. Fresh, Ataraffi. to Freeze, Kogusuru. Friend, Ftoobai. good Friend, Naka a jof. naka no joka. bad Friend, Naka no warka. to Frighten, Odoffu, ofururu. to Froth or cream, Awa tatfuru. Fruit, fruit kernels, Mi, fanne. Fog, foggy weather, Kiri, donteng. Fold, wrinkle, Fidda. to Follow, T'fufuk.v. Foot, affi. Force, ftrength, Sicaria. Force-meat balls, Kammaboku." Foreigner, Jamma midofs. to Foul, make dirty, Jogoru. Fountain fpring, Mis no karakuri. Four-footed, Jotfalli. Fox, Kitfne. Fuel, fire-wood, Takigia Full, Mits. Full, fatiated, Skai juru.

Gain,

G.

20 Gain, Kata, Katfu. Gain, profit, Di, disjung. Gall, Ox gall, Tang, gurvo. Gallery, Linft. to Gape, the jaws, Akubu, akubi. Garden, Hannabhataki. Garret, Nikai. to Gather together, Atfumaru, juru, jorijai. Gate, Mong. Gentle, Sorona, Jofkina, jawara kana. to Gild, gilded, Riukinfuru, kimfaku. Ginger, Sjoga. Girl, maiden, Komufme. Girdle, Skimmaines, Sanfakagi. to Give, Furera, jara. to Give up, Wataffu, furera to Give up to, to deliver over to, Niwatafu. to Give back in return, Modoffu, kajoffu. Glad, merry, Iwan, omofe. Glove, Te ne ki. Glue, Simegi. to Glue, Simegi fasamu. to Go away, Modoru, kairu. to Go into fome body's house, Jorjukv, fito, no to kuro juku.

to Go down, Ururu, iru, to Go up, Aguru. to Go out, Sitsfugjo. to Go to bed, Nin jiu. he Goat, Jagi. God, Sin, kami. Gold, gold coin, Kin, kinling. Gonorrhæa, Rinsjo. Good, it is good, Jukkas jukka. Good man, Jukka fito. Good natured, Naka no jukka. to be good for nothing, Jonaka. Goods, merchandize, Mouo. Grapes, Bude. Gnat, O, Sutofa. Gnat, Ka. to Grind, U/u, mawaru. to Grind, grindstone, Togus sojifi. Ground, Pon, fan. Guard, imperial guard, Bang oban furu. to-keep Guard, Ban Jurn. to Guels, Atfuru. Gull, Kagume. Gun, fowling piece, Tappo, tippo. Gut, Observatis.

11

H.

H.

12

Hail, Arare. Hair, Kami. Hammer, Kanatsutji. Hand, Te. Hand, Koaka, kowai, kowarka. Handle, Moth. Handle of a pot, Kwang. Handy, Gaskoi. Handkerchief, Teno goi. Hare, U, ufagi. Harnels, Kapto. Hafty pudding, pafte for books, flarch, Nori. Hafte, to make hafte, Motja. Haity, Allegaro. Hat, Kafa. to Have, Aru, alu. Haven, bafon or bay, Minato, irie. Hawk, Tobi. Head, Kubi. Head ach, Attamanna, itama, duilfo. to Heal, to cure, Jeta. Health, Taffia nifle. Heart, Kokurro, fing fingnofo. to Hear, Kikf. Hearth, fmith's forge, Makuts. Heavens, the fky, Ten. Heaven, the manfion of the bleffed, Gokurakv.

Heavy, Omoka, omotaka. Heel, Kibis. Help, to help, Kaffei, torimotju, kafje suru. Hens, a Hen, Tori, mendori metori. Herb, K-wufa, Kufa. Herring, or Pilchard, Konoferu. Hereditary prince, Dainagon famma. Heron, ftork, Sagi, Kono Catter all toi. to Hew, to cut, Kiru. to Hide, Kak/u. Hide, fkin, Kawa. Hideous, Otoruffik. High, Dakka. to Hinder, Motomeru. Hip, Momo. a Hiftory book, concerning wars and martial deeds, Ikfauno, hannafibo. to Hit, Nerau. to Hoard up, take care of, Nawallu, u. Hoarfe, Kojekari, kui no kakaru. to Hoift up a cheft, Fikiaguru. to Hoift a fail, Hoaguru. to Hoift fail, Hoagura, homaku. Hog, wild boar, Sis, ino fis.

Hole,

Hole, or cavity, Anna. to Hold one's tongue, Da-

mateeru. Honour, Roko. Honey, Fats miets. Hook, Kakkiganne. to look fait, Kakaru. Horn, Tjunno, kaku. Horle, Aki una. 19 draught Horfe, Mire, nimban and sorthy faddle Horfe, Jome sjome. Hot, Atfka. Houle, Je. Houfe rent, Jenufs. Hunger, Fimofe. to Hunt, Kari. to Hurt, to do hurt, Wakuru. Hysterics, in women, Skai. , in men, Sakki.

Į.

Jack ferew, Manriki.
Ice, Koori.
Jealous, Dingfuru, neiamo.
Ill, Faradati, faratats, farakaki, warikakufe, kufe no warika ifinowari.
to do Ill, Warukakotofuru.
to fpeak Ill of any one, Warika, koto ju.
Important, Taifits. to Improve or meliorate, Joofuru. Impolite, Buie, ofemisno, burei. Impudent, Cafkafine. Impossible, Sofa arme. Incendiary, Fitfoki. Inconvenient, Fusiana. Income, Mitfuki mono. to Infest, Walfurn. Infectious diftemper, Utfuri jammi. Ink, Sum, Jumi. Inkstand, Sufumi bako. Inn, Jedoja, funfing. Infalt, affront, Fias. Interpreter, Tjufi. Ditto upper, Offich. Ditto under, Kafufi. Instruct, Ofiru, ofijoru. to Invite, Nilfkuru. Iron, Tets, furoganni. to Iron clothes, Finofilure. Iron for fmoothing clothes, Nori, finnofi finnoi. Ifland, Dhma. to Itch, Kaika. Itch, an eruption on the fkin, Kafa. to Join together, Jofurn. tjogu. Journey, Tabi. to take a Journey, Tabi furn. Journey homewards, Kudare. Journey,

13:

Journey upwards, Nabori. Ditto downwards, Kudari. Jadge, Tadaffu. to Jump off, Tobu. Ivory, Sege, Jogi.

K.

to Kill, Koro/Ju. Kils, Umakutji, Kwutji/u. to Kifs, Umakutji furu. Kitchen, Kammado. Kingdom, Kuni, kawuni. Kettle, Jakavang. --- copper, Tetjakwang. ---- iron, Tjifdag. --- china, Dobine. Key, key hole, Kagi, kagi ana. Knife, table knife, Haka. faka, fotjo. folding Knife, Orifaka. pen Knife, Kogatanna. Knee, Fifa, fifa no farra. to Kneel, Filatatfuru. Knot, Fimmo. to Know (fcire) Siru. to Know (cognofcere) Mifiru. Koown, Misteoika. a Known herb, Konokufa, misteurka. to let one Know, Arawaru-

1.12.

Knap upon cloth, Klunu kwadus.

L

Lace, Saffaferia to Lacquer over, Makie Jaru. Lacquered work, Makie mono, norimono. Lacquered work, gilded, Nafes. Ladder, Faffigo. Lady, Okatfa, niobo, Lamb, Fitfufineki. Lame, Tjukifto. Lamenels, Nai juru. Lamp, Filomoft, fiteboft, andon. Lamp oil, Tomofi abura. Lamp black, Fegura fum, Sumi, kemuri. Land, Kokf, kuni. Landgrave or Lord of the Diftrict, Koks f., daimio. Landlord, hoft, Tefu. Lantern, Japanese, of paper, Tjotjin. Ditto of glafs, Toro. Larboard, Torikafi. Lafting, Hanni, bonnakoto. Laughable, Qkafki. Law, Sicki.

to Lay,

14'

to Lay, Okv. to Lay hold on, Torajoru, Ramaijoru. to Lay a wager, Kake, furu. Lazy, lazy fellow, Itafuro, fionakamono; fionafi. Lead; Namari. white Lead, Sirome. black Lead pencil, Sekfits. a Leaf, Fa. Leak, leaky, Moru. Lean, to grow lean, Jaffita, jaffu. to Learn, Narau, Kieku. to Lecture, Stajumifuru. to Lend, Karu. to Lend out, Karidafu. Length, Nagafan. Lesson, Tjumi ju. to Leffen, Skono Juru. to Let fly an arrow, Iru. Letter of the alphabet, Moi-A, sfi moufie a Letter, an epifile, Sjo, tegami. to Lick, Neburu. to Lie in wait, Snobimiru. to Lie down to fitep, Nituru. to Lift, Motjiagary. make Light, Kamku fura. to Light, to kindle, Fitobu-Ju, fitomulu.

to Light a candle, Rofukamifits kuru. Lightening, Inafuma, inabikai. Lime, Sirobe, tfikui, Sirobai. to burn Lime, Skui jako. to Limp, limping, Tijmba fiku, ijimba. a Line or fripe, Mimi. Ling, Hainofo. Lint, Metja. Lion, Sis. Lip, Thiba. a Liquor prepared from rice, Sakki. Liquorice, Spanish, Tankiri. Liquorice root, Kanfoto Live, Inotji. Lively, Jois miskane. Liver, Kimmo. Living, Iktoru. to Load, Manje tfums, niave furu. to Load a horfe, Noru. to Load a thip, Niako the-77217. to take a Load in, Thank Komu. Lock, So, Sjo, joot feuri. Long, Nagai. to Long for, Nago furna. to Look out after, Miawaffuru. to Look at, Mira. Looking

Looking glafs, Kagami.
Loofe, Oros.
to Lofe at play, Makuru.
to Loofen, Tokty.
Lofs, Song.
Lote, Song furu, mahuru.
Loude, Sirami, fübifirami.
Low, Fikui.
Lucky, fortunate, Jonotfuki, foiwai.
Lukewarm, Nama.
to Lye, to tell a lye, Suragate, uffo.

M.

Mad, Kithgai, afo, baka. Mad, Kitjigai. to have Made, Skuraffuru. Majelly, Gojo. to Make larger or enlarge, Tooku Juru. Man, in the general fignification, Momo. Man (vir) Otoko. Manner, method, Ofiennomits. Manure, Koje. Map, Mu. Mari, Damo. Mark, butt, Sirus. Mark, figa, Surufu. to Mark, to write down, Surufi iura, firofuru. to Marry, Konrefuru. Marriage, Komui.

Married man, Metoru, taffuru. Marrow, Thio. Maft, Hobah. Master of a ship, Sendo. Mat, floor mat, Tattami. a Match to light fires with, Skedakki, fkegi. Matter of a fore (Pus) Umi. Meal, Sibundoki. Mean, Sfune, tju. Meafles, Haffika. to Measure, to take measure, Sino torru, fakfutfu. Measure of capacity, Mome. Meafure, to meafure length with, Siakf, monofafa. Meat, flesh, Miku, mi. a Medicine, K-wassuri, gosuri. to Melt, Aguru, kiuru iokuru. Merchant, Akibito, Jonin. Merry, glad, Omaffiroi. Meffage, Meffenger, Skai, Kotkai. Metal, Karaganne. to Mew like a cat, Neko, nakv. Microfcope, Mosimeganne. Midwife, Toriagibaka, Toriagikaka. Mild, Fatfnar mono. Mile, a mile, Ri, itjiri. Mile polt, Itjiri fura. Milks Tji, gra tji. Milk

M

Milkwoman, Onago no titi. Mill, Us, kuruma. Milt or fpleen, Heinofo. to Mimic, Nifuru. Miferable, Haffii. Misfortune, Fusaiwai. Mischance, miscarriage, Soifan, chomang. Mistake, Matjigai. Miffrefs, i. e. concubine, So tekaki. Mif-ufe, Sojugu, chigau. to Mix, Masuru. Mode, custom, Okfiabiri. Modefly, bashfulness, Haf. jaffi, futskaffiku. Moment, Metataki, Monkey, ape, Saru, Jalu. Money, Kane. Monthly courses, Sawarri, Skinomon. Moon, T/uki. new Moon, Mikatfuki. full Moon, Mangets. Moon light, Waffukv: Mols, Koki. Moth, Koft. Mother, Fafa, kafa. Mother of pearl, Sinfu. Mother in law, Jitfubo, jitnofafa. Mould, mouldinefs, Kabi, kabi suru. Mountain, Jamma.

the Mounting of any thing, Kanago. Moufe, Konifumi. Mouth, Kuts, kuutji. Mud, Noro. to Murder, Totokuroffo. Murderer, Stokoroffs, meffudo. Mufk, Siako. Muftard, Karas.

17

N.

Nail (iron pin) auger, Kuugi kiri. Nail on the finger, Tfume, ja/Turu. Naked, Hadaka. Name, Na. Nape of the neck, Gonokubo, Napkin, handkerchief, Te no goi. Narrow, straitened, Semaka. Native country, Hungokf. to Nauseate, Mone no warika: Navel, Foffo, fefo, Navel ftring, Fara obi. to draw Near, to approach, Skaijuru, Skaknuru. Neat, Chodo. Neceffary, Irio. Neck, K-wabi, nodor. Needle, Fari. Neglect, Tfitfing, okatari. to Neglect, Wafuru. Neighbour, Tonari fito.

Neft,

Neft, Koja, kago.
a Net, Tjuribai, ami.
New, Ataraffi, sjoguats.
New year's day, Guanfits.
Niggardly, avaricious, Nigiri, fwambo, fimats.
Night, Jofari, joru.
Night gown, Nimaky.
the Night watch, Jobang, jabang.
Nightingale, Ogu ifu.
Nipple, Tjibufa.
Nobody, Naka, dare monai.
to Nod with the head, Gat-

:8

ting furu, North, Kitta, Nofe, Fanna, Noftrils, Fanna nofu. Notary, Fiffa. Nutmeg, Nikufuk.

0.

Oar, Ro.
Oath, Seifi.
to Offer, Okuru, aguru jafiaguru, nedoafkuru.
Officer of police for a street, Ottona.
Office, employment, Sobe, jakunin, stomessto.
Oil, Abura.
Oil press, Abura simoru.
Old, Tassijori, furuje, struke. Old age, Rofin. Open, Akuru. to Open, Akeru. to Order or command, Iet/ki, it/kuru. Organ pipe, Kubuje. Orphan, Minaffigo. Otter, Kawanfo, to Overturn, Tawaruru. Own, one's own, Waga. Owner, Tofigoro. Ox, Kinkiri ufi. Oyfters, Otjigaki.

P.

Pace, step, Ajumi. to Pack, Tfutfumu. to Pack up, Nefuku Jura mitskuru. to Pack afresh, Sine nawaf-Ju. a Packet, a parcel, T/ut-Jumi. Packthread, Ito fioma, ito jama. Pains (i. e. labour) Kitska. Pain, Itami. Painful, Itamofe. too Painful to be born, Amaritame. Paint of the face, to paint. the face, Kefo, oferni, ke-So Suru.

to

to Paint, to imitate by painting, Jesuru, jedoru. Pan, Nabe. Paper, writing paper, Kami. window Paper, Minoganni, mifokatjiganny. imperial Paper, Otaka daisi. painted Paper for hangings, Karakami. gilt Paper, Kinkarakami. nofe Paper common, Fanaganni. nofe Paper large, Sitkusumi. Paper for prefents, Fasogami. Parafol, Fifafi. Parchment, Fiogu. Pardon, Jiuruffi. Parents, Riofin. Parrot, Omu. Partial, Figi. to Partition off with planks, Fedatsuru, Skiru. Pafs-port, Saffigari. to Paste, Fallu. Pasting brush, Fake. Pastry, confectionary, kawa Mi. a Patch, to patch or mend, Kiri, fuse, fusi furu. Patience, Takatfuru. wooden Pattens, Getta, bokuri, figesuri. to Pay, Farau, farai. Peace, Seifits.

c 2

Peacock, Kulokv. Peafant, farmer, Fjakfo. Pearl, Kainotamma. to Peel, to peel off, Mukry. Penis, Mara. Pen, pencil, Fuda. Pen knife, Kohatanna. Pepper, Kotjo. Per cent. Ire. to Perfuade, advife, Tasjimuru. Pheafant, Kif. Phyfician, Ija. Pike (an inftrument of war) Jarri. to Pile up, Tsumu. Piles, hæmorrhoids, Df., fi. a Pill, Guaijakv. couch-Pillow, Boffi. bed-Pillow, Kakuri makura. a Japanese wooden Pillow, Makura. Pin, Fisifari, tomebari, tencfari. Pin cale, Fari ire. Pin cufhion, Farifafs, to Pinch, Nesumu. Pinchers, Kugi noki. Pipe, tobacco pipe, Kiferu. P-, to p-, Sobing, Jobin furu. Place-man or Perfon in office, Sonin, Jobainin, Jokunin.

19

to Place, to put, Oku. Plank (board) Ita hei. to Plant, Honu. Plaster for a fore, Kofaku, katagojaku. Plate (filver) Tiratti, fira. Plate (or difh) Sara. Play-house, Sibaia. to Play at cards, Karta utfu, bakkutsu, bakkutjiutsu. to Play with dice, Sugoroko ut/u. one that Plays at dice, Bakuth uth. Pleafant, Omofiro ofito. Pleafing, agreeable, Jurofikku. Pleafure, amufement, Sio, asubi. Pledge, Sits: to Pledge, Sitji iruru. Plough, Seri, feribetta; tfuko, tauts. to Plough, Togajaffu. to Pluck, to pluck off, Chigiru. Pock-marked, Mago. to Point out, Miru, oibi. Poifon, Sumire doku. to Poifon, Douku. Pole; stake, Fassura. Polite, Kawatta, kuttona, mesirasi. Poor; Fing.

20

Porcelain images, Jakima. no ningio. Portrait, Je. Portrait painter, Jekako. Pot, earthen pot, Tfutfubo. to Pound, to break by triture, Uthwaro. to Pour in, Tjugu. Powder (gun) powder magazine, Jenso, jensoia. Powder, medicine, San, ko. fmall Pox, Fofo. to Pray or worship, Ogamu Suru, faisuru. Prayer, requeft, Tannomi. ----- to heaven, Kjojomi. Pregnant, Mimotji, farami. Preposterous, Matjigao. to Prefs, Siburu. Prefent (not abfent) Konoguru. Prefent, gift, Okuro, miage, fimots. to accept a Prefent, Uketoru. Pretty, fine, Migotto, kikkona. Prickle, thorn, Ige. Prieft, Boos. to Print, Fanku. Prince, Waka gimi. Princefs, Waka gimigatia. Prison, Roja. Privy councellor, Daimio.

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the Privy or necessary, Set-Sujin. Profit, gain, Tokw. Progrefs, advancement, Faijaka. Prohibition, Fato. to Prohibit, Fato furu. to Promise, Jaksaku. a Promise, Jaksoksta. Profpect, a fine profpect, Ge, ke; jui ke. to Protect, Hajaku, fajai, hajai, fajaku. Proverb, Tattoje gotoba. to Provoke, Faratate fafaru. to Pull away, to pluck off, Fiku. Pulfe (of the artery) Miako. to feel the Pulfe, Miako tollus Pump, to pump, Mitfuki, mitsuki suru. Punishment, Nikwuni, Jekka, fikka. to Punish, Nik-wumu. Purge, Kudassu. to Purge, Kudassu Suru. Purse, Kamefukuro. to Pufh, Sukikakaru.

Q.

Quail, Ujura. to Quarrel, contend, Ijou. to Quench, extinguish, Kiaffu, kiafi.
Question, enquiry, Tfura, tfukamma tfuru.
to Question, interrogate, Taffu nuru.
Quick, Faijo, faijaki.

23

R.

Rabbit, Ulagi. Rain, Ame. to Rain, Ame no fiuru. Rainy, Senkju. Rainy feafon, Niubai. Rainbow, Nifi. Ram, Otoko fitstjuft. Rat, Nifumi. Ratan, a species of cane, Tfaje. Raven, Karafu. Raw, Ataraffi, nama. Ray, fun beam, Goko, Sit-Sugets no goko. Razor, Sorri, jori, fari, kan mi. to Read, Jomu. Ready, prepared, Simal, fmai. Receipt, Okittori. to Receive, Uke toru. to Receive a prefent, Ukonu, akitorn.

to Reckon up, Kajujuru. Reeds, flags, Jos, as. Refractory, Nigir. Reins, Tafuna, tadsuna. to Remove, Jautsuri suru. Renown, Siman. to Report, Kafu juru. to Report, Tjufin, furu. Reft, remainder, Nogori. Reft, Jafune. to Reft, to take reft, Jaffude oru, jaffumu. Refidence, Todomaru, torui. Refin, Matsejari. to be Revenged, Inu. Rib, Jokabara. Rice, Kome. early Rice, Wafe. threshed Rice, Skigome. boil'd Rice, Mes. reddifh Rice, Tobofe. white Rice, Matjigome. fine Rice for Soups, Domenfe. Rich, Buginsa. to Ride on horfeback, Noru. Right fide, Migi. Ring, gold ring, Ibiganni. to Ring a bell, Furu. to Rince, Juffugu. Ripe, Juksuri, um. River, Kawa. Rivulet, river, Nagari, hawa.

Rheumatism, Kake. Rhubarb, Daiwo. to Roaft, Iru, Jaku-Rogue, Uje. Roll, Maku, kurubakas. Roof, Janne. Root, Ne. Rose water, Hanna no mis. Rope, 7 Juna no na. to Rot, Kabiru. Round, round about, Mamimawari. to Row in a boat, Roofu-Rumour, report, U-waffa. to Run, Ajiubu. to Run out, Moru, Jugurru. Ruft, rufty, Sabir, fabita. to Ruft, Sabirru.

S.

Sabre, long, Katauna. ______fhort, Wagiffaffin. Sack, Fukuro. Saddle, Knoura. Saddler, Knourafukuri, bagufi. Safe for meat, Sokomots bako. Saffron, Kakwa. Sail, to fail, Hoo, baffiru. ______to hoift, Hoaguru, komaku. ______to firike, take in, Hogoruffu. Sailor.

Sailor, Suiffi. Salt-petre, Sirojinfo. Salt, to falt, Sizvo, Sizvofuru. Salt water, Sizuo mis, ufizuo. to Salute, to compliment, Refuru, reigifuru. Salve, Neriaku, jurogojaku, Sample, specimen, Asjinvau. Sand, reef of fand, Tjunna, Julakki. Sanders wood, Biakdan. Sappan wood, Sowa, Jobok. Sattin, Sjas, Sauce, Sjur. Saw, to faw off, Noko, waku, Saw duft, Nogokufu. to Say, Ju. Scabbard, Saja. Scales, fmall, Hakari, timbe. ----- large, Tembin. School, school-master, Fera, filo. Sciffars, Faffami, faffaim. to Scower, Migakf. to Scrape off, Kulagu, ke-Suru. to Scratch, rub off, Kefuru. Screen, Beooto. Screw, Nefi. Scum, Awa. to Scum off, Arva dat/u, arva foru.

Sea, ocean, Ume. Sea-fick, Funin jou. Seal, Fang, hang, ingjo. to Search at the cuftome, Aratamu. Secretary, Joniro. See, to fee, vision, fight, Miru. Seed, Tanna. Seed (in general) Muggi. to Seek, Tatfimuru, mitskuru: to Select, Jeraburu, jenidaffu. to Sell, Uru. Senfe, understanding, Gateng ... to Separate, Saru. Serpent, Kutjinawa, bebi. Servant maid, Onago, jarite. a Servant man or woman, Kerai. to Serve, to deferve, Sotomuru, stomuro, jako. to Set or place out, Thurs gu. to Settle, to finish, Wakiru. to Sew, No, nois Shadow, Kagi. Shagreen, Same. Shallow, Affai, affaka. Shame, Haft, Foft. to Shave, Soru. a Sheaf, or bundle of any thing, Kifamu.

23

Sheep,

Sheep, Fituft, fitfuft. a Sheet of paper, Itjimai. Sheets (of a bed) Skimono. Shell, univalve fnell, Kai, horano kai. to Shew, Fufi, uta. I will Shew, Omini koki maffi, mifi maffu. Ship, an empty thip, Fune, kara f'ne. Shoe, Kwutfu. Shoe-maker, Kwutfutfukuri. Shop, Mile. to Shorten, Kogiru. Shoulder blade, Katabone. Shoulders, Kata. Shriek, cry, Tamagatta. Sick or ill, Itami mono, bioki mona, jamai mono. Sicknefs, Jamai, itami, bioki. Side, Waki. to Sift, a fieve, Fund, fino, ka/n. Sigh, Fame ikt fuko. Sign, fign at a fair, Kambang. to Signify, Wageru. Silk, Kinno. Silver, Gin. Silver coin, Ginfing. Selver-fmith, gold-fmith, Ginfaker

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to Silver over, filvered over. Ginnagassu, gimbeko. Sinew, Foro no tfugai. to Sing, Utau. to Sing a fong, Uta no fufe. to Sink, Sifumu. Sir, Samma, muss. Sifter, Musme. ----- eldeft, Ane. to Sit on mats, Idoru. - on stools, Kofkakuru. Slap in the face, box on the ear, Fogeta, uttokuri. to Slaughter, Ut/koroffu. Slave, Frobo, firombo, kurombo. Sleep, to fleep, Nur, nuru. to Sleep with one, Sabini nuru. Sleepy, Nemutaka, nemutai. Slime, Mucus tang. Slimy, Nebaru, nemaru. Slipper, Kuts. Slop bason, Domburi, otjawang. Slow, Sifukamai, jojajora. Small, Ko, komaka. Smell, Nioi, nizuoi. to Smell, Kufamu. to Smile, to laugh, Warau. Smith, Kafia. Smooth, flippery, Suberu. Smoke, Honto. to Smoke, Kemoli.

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Smith, Kafia. to Smoke, fmoke meat, Kemura Juru. to Smoke tobacco, Tabaco nomu. Smoked, Kemota. to Smuggle, Sukuru. to Sneeze, Akfingu. to Snore, Ibikikakw. Snow, to fnow, Juki, Juki no fiuru. to take Snuff, Kagu. Snuff, Fanna, tabak, kagi. Snuff box, Hanna tabako ire. to Snuff a candle, Sinkiru. Snuffers, Sinkiri. Sober, Harafos. Soldier, Bannin. the Sole of a fhoe, Ura. Some, Ikubaku. Son-in-law, Jitjufi. to become Sore, Kifutfukuru. Sorrow, Jumi. Sorrowful, Kujamo, kinnodoko. Sort, to affort, Rui, rui Suru. Soul, Omo, firia. Sound, Hibiki. Soup, Suru. Sour, Suika. South, Minami. to Sew, to embroider, No, noi

Sewing box, Farifals. to Sow, to fow corn, Tannemako. * Sowas, Sakdo. Spanish green, Rokufeo. to Speak to a perfon, Monoju, mufinafu, ju, moofuru. to Speak ill of any one, Warika koto ju. Spectacles, Meganni, fanna meganni. Spectacle cafe, Meganne no je. Speech, Kotoba. Spider, Kavumo. to Spin, Fikw. to Spin cotton, Momen fikers ----- filk, Nibaffimuru. Spinning wheel, Momenkuruma. Spittle, to Spit, Subakki, Jubakki bawk. Spitting pot, Faifuki. Spoon, Saift. to Spoil or damage, Itamu, faruru, Sofuru, Skufarumu. a Spot, Afa, moja. to Spread, Koffu. the Spring, Faru, naati. Spy, Jing. Square, Sikako. Square, a mechanical instrument, Magarikani. to

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* Sovies is a composition of gold and copper, (generally of a black colour) of which various trinkets and otenfils are made in Japan. [Note communicated to the Translator by the Author.]

· to Squirt, Miffukofura. Stable boy, Mogo. Stag, Kano fis. Stairs, Fakko fafigo, fafigo. Stallion, Kuma. to Stamp, T/ukv. to Stand, Tatfu. to Stand up, arife, Okiru. Starving, Katfujetofi, kiking. Star, Foh. Starboard, Omokafi. Starch, powder blue, Awofumi suru, gunsjo. Statue, Ningio. to Stay over night, Joda fi. to Steal, Nofumu. Steel, Hagane, fagane. Stem of a fhip, Tomotti. Stench, to ftink, Kufai, ku-Jaka. Steep, Somodatfu. to Step, trample, Ki, gi. Stern-post of a ship, Tomotti. Sticks, to eat with, Fas. to Stick, to adhere like glue, T/ugu. to Stick, or cleave to, Kakuru. Stiff, Ojoru, Skorru, kavuki. to Stifle, Simuru. to Stir, to put in motion, Igokw. Stirrup, Abumi. Stock fish, Tara.

Stocking, Merias. Stomach, Fii. Stone, I/i, iwa. Stone cutter, Ifnomi. Storehoufe, warehoufe, Kura, kwura. Storm, Okafi. Story of a house, Kikaai. to Stop up, to ftuff, Tjumaru. Strainer, Konoferu. Strand, Nagifa, ifo. Japanefe Straw flipper, Sori, agaruts. Strawberries, Itfigo. Street, Tjo, matji. Stream, Nami fino. Streak, Suli. to Strike, Wutfu, utfu, tataku. to Strike on the head, Kubi kiru. to Strike with the hand, Tataku. to Strike from behind, Kiru, fanuru. Stripe, Mimi. String, fiddle ftring, Ita, samsi no ito. Strong, Saoka, kitska, sjioi. to caufe any one to be Struck, Tatake. to Stumb'e, Ketfu masukv, tawaru, torruru, tawa. ruru. Stupid,

Stupid, Donna. Such, Konojona. to Suck, Neburu, fiwabaru. to Suck (the breaft) Kooruffu. to Suffer, Tefiko. Sugar candy, Korifatto. foft Sugar, Sirofatto. to Suit, fit, Au, ota. Suite, troop of followers, Ikedor Jukama juro. Sulphur, Iwo. Summer, Noats. Sun, Fi, nitji. the Sun fets, Fi no iri. the Sun rifes, Fino de, fino agaru. Sun dial, Fitoke. Sure, certain, Taskani. Surgeon, Gekwa, guairo. to Swallow, Nomikomu. to Swathe, to swaddle, Maku. Sweat, to fweat, Aft, aft-Juru. Sweet, Amaka, amai. to Swell, to fwell up, Faruru. to Swim, Ojugu. Sword, Ken. Sword belt, Jsjuobi. a Syringe or fquirt, Mil fuki.

T.

Table-cloth, Skimmomen. Table, Sukus, fandai. Tail, Sirio, firiwo, O. to Take off a leg, Fana/Ju. to Take a likeness, Jeju. Tame, Sju, kemono nasuku. to Tame, Nogai. to Tap, Tsugu, Tsumuru. Tar, pitch, Tjan. Tar, to tar, Nuru, tjan nuru. Tafte, to tafte, Afi afreun. Tavern, or Public - houfe, Kooja. Tea, tea-canister, tea-cup, Thaa, tjaire, tjawang. Telescope, To meganni. Temple, Tera. Tefficles, Kintama, inno, itamma fugure. Thanks, Kataskenai. to Thank, Katafike no gofarimafu. Thick, Atfufa, atfumi. Thief, Nofto, nofobito. Thigh, Momo, Sotomomo. Thing, Koto. Thirst, Nodonokawaku. Thin, Uffui. Thread, Ito. to Throw, Naguru. to Throw down, Koboffu, Koboruru, stamuru.

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Threshold,

Threshold, Sekis. Thumb, Ojajubi, ojubi. Thunder, Kaminari. to Tickle, Kusuguru. Ticklish, Kufuwaika. Tidings, Tjufing. to Tie together, Kubiru, awafuru. Tiger, Tora. Tile, Kawara. Time, paftime, Toki, kouurafu. Tin, Sulu. Tinder, Fjutji, Tinder-box, Fjutjibako. Tobacco-box, Tabako ire. Tongue, Sta, fita. Tongs, fire-tongs, Febafi. Tooth, gum, Ha, fagis. Tooth-powder, Hamigaki. Tooth-ach, Hanoitami. Top, point, Toge. Top of a mountain, Toge. to Torment, Itanda, fimuru. Tortoife, Kame, bekogame. Tortoife-fhell, Bekko. to Touch, Kamau, kakaru, ateru. to Tow. Fiku. Tower, To. a Towing veffel, Fiku fune. Town, Matji, fotomatji. to Translate, Tfuben furu.

Train oil, Kusura, no abra.

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to Travel, Tabi furu. to Tremble, Fururu. to Tremble (for fear) Furou. Treasure, Sakkara. Trumpet, Tjammera fuki. Trunk, Fio, tawara. Truth, Makoto. to Try, Aida. toTurn, v.n. Fiki kurikajaffu. to Turn, v. a. Fikikurikagass maku. to Turn out of the way, avoid, Wakaruru. to Turn in a lathe, Nefiru. to Turn about, Kajeru. Tweezers, Ken no kin. a Twining plant, Kadfura. Twins, Futago. to Twift, to wreathe, Siboru.

U.

Ugly, Kifannai. Umbrella, Fifafi. to Underftand, Konogotoku. Unfortunate, Fufaiswai no fito. Unjuft, injuftice, Mari. Unmarried, Gataifen, naka, no warrika. Unfure, Makota naranu. Unthankful, Katafke no Karaffu.

Unwhole-

Unwholefome, Biofa. Upright, fincere, Maffafiku. Sinfjo. Ufe, cuftom, Narruru. to Ufe, Motji jura.

V.

a Valley, Nerawa. Variegated, Fam. Vein, Sufr. Velvet, Birodo. Venture, Kakura. Vexation, Nagufammu. it Vexes me, Nagusama Fito. Vexed, mentally afflicted, Sitfnaki, fitfnaka, fimaru. View, a fine view, Ge, ke; jui ke. Vinegar, Su. Vinegar cruet, Suire. Virgin, Imada, kimusme. Virginity, Sara. a Vifit, Mimai. Vote, Koje. Voyage, Wataru, Vulva, Bobo.

W.

Wadd, callico wadd, Watta, ditto filk, Mawatta, nebas. Wager, Kudamono, Naimono. Wages, falary, Jaknrio. Waggon, cart, Kuruma. to Wait, wait here, Matjiukuru, matte.

to Wake, Okiteory. to Waken, Okufu. to Walk, Ita. to Walk round about, Mawaru. to Walk lengthways, Aruko. Wall, Kabe. War, Ikufa, fakaro. to make War, Motomuru. Warm, to warm, Nakka, atska, atsururu. to Warn, to caution, Todokuru. to Wash, Arau. to Wash one's-felf, Jof. to Wash one's feet, Sinfok furu. a Watch (time-keeper) Tokei. Watch-maker, Tokeijeff. Water, Mis. Water-tub (large) Furo. ----- (fmall) Joho Waterfall, Taki. Wave (of the fea) Araffu. Way, guide, Mits, annefa. to Wear out, worn out, Sakuru, Sururu, fageta. to Weave, Fattaoru, oru. Weather, good weather, Fiuri, jui fiuri. -foul, Warri huri. Weather, boifterous, ftormy, Kitfifuri. fine

fine Weather, Jukka fiuri, jui teng. Weapon, Bugu. to Weep, Jogeru, naku. Wedding, Nagaodo; nagadaki. Wedding-day, Konreifi. Weight, Fundo. a Well, Iganva. Welcome, Jokita, jo oidena naferrimasta. Weit, Nis. Wet, to wet, Naroru, Naraffu. Whale, Kufira. Whalebone, Kufira no fige. Whale's fat, blubber, Kufira - no kawa. Wheat, flour of wheat, Komuggi, mugi no ka. Wheel, Kuruma. Whetftone, Toif. Whip, Moot f. to White-wash, Muru, Skui muru. Whole, Djigokf. Whore, Juso, jorofi. Wick of a candle, Suko, fako. Widow, Jammome. Widower, Otokojammome, otokegoki. Wide, large, Habanna firoka. Wife, Niobo, jomego.

Wig, Katsura, skegami, tsukiganni. Wild, Inu. to Will, to be willing, Konomu fuska. Willing, Sio. Wind, Kafe. Wind, contrary, Mokaokafe. to Wind up, Sutfumu, Windlafs or capftan, Makido. Window, Mado, Samma. Wing, Toobu fanne. to Wink, make a fign, Manaku. Winter, Fuju. to Wipe up, Nogou, bawaku. Wife, prudent, Tjifa. to Wither, Sibomu, kakuru. Wonder, miracle, Kimeona, kurigi. Wood (to burn, &c.) Tagi, taki gi. Wood, grove, Mori. Wool, Kemono. Wound, ulcer, Kega, Juribago. to Work, Sigita. Worshipper, Ogamusura mono, faisuru mono. Word, fpeech, Kotoba. to Write, a writer, Kakv, fifa. Writing-defk, Fikidaffi: Yarn,

Y.

Yarn, Ito. Yealt, Amafaki, fakki no ore, Orifakki, Year, Fofi. Young comrade, Gofa. Young, younger, Wakai, wagaki mono. Youth, Warabi.

STA

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T.oge. 29.

1. 16

ERRATA.

Page. Line.

19, ult. after thing, read they take in hand.

SDAUOVAL SCAN-TA.

75, 1, for Kalbro, read Kabro.

77, 8, for married, read marry.

78, 13, from bottom, for Ohagur, read Ohaguro.

85, 1, after Spanish, read (or Cayenne).

141, 5, from bottom, for Tiaia, read Chaja.

143, 11, after Nafumi, read Ifami.

146, 12, for Akafiki, read Akafaki.

155, 16, for Furagawa, read Firagawa.

160, 13, for Skawero, read Skawaro.

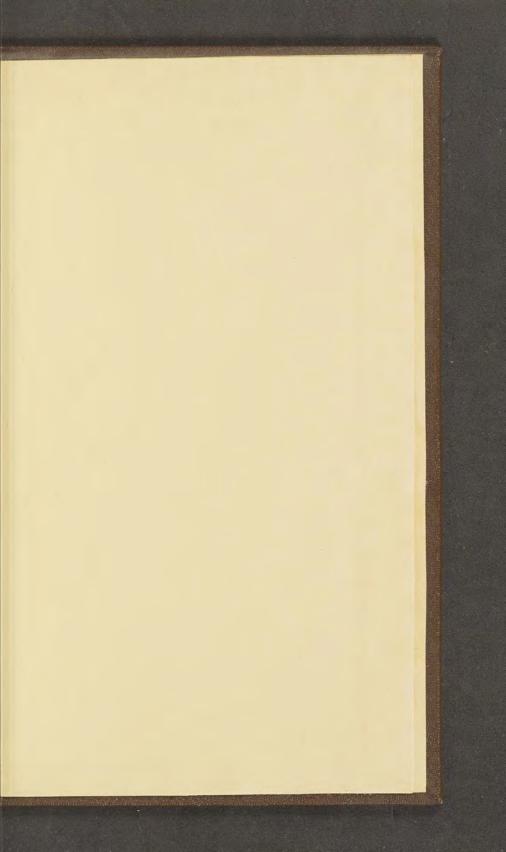
203, 9, for kan, read kin.

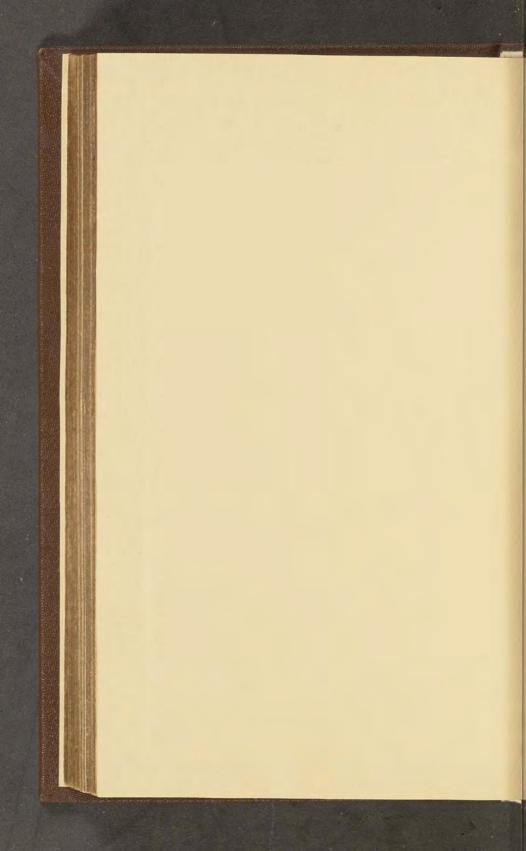
204, 14, for Sangoda, read Sangodu.

-, 5, from bottom, for Sygnatus, read Syngnathus.

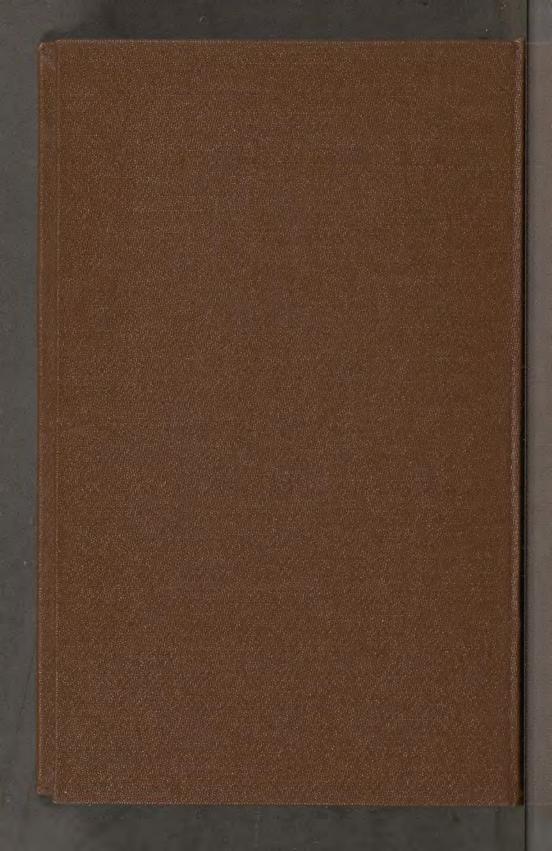
212, 13, for Josiwara, read Josiwaro.

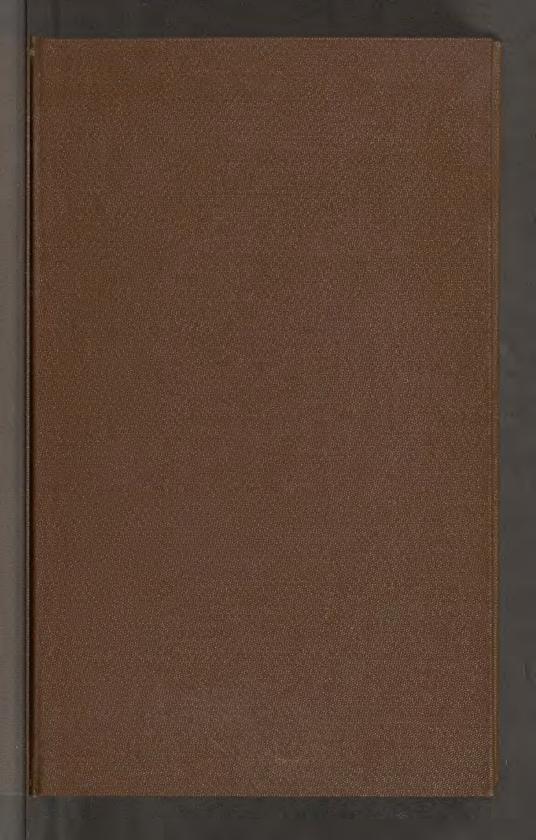
226, 11, for Moscha, read Moxa.

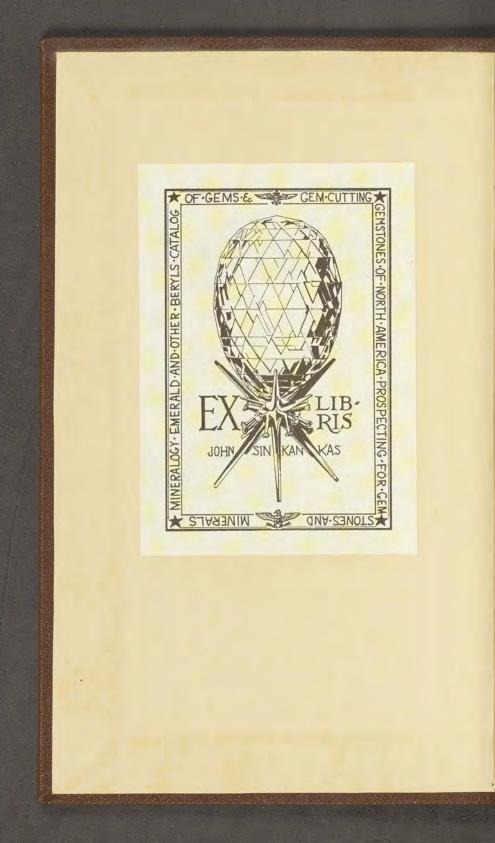


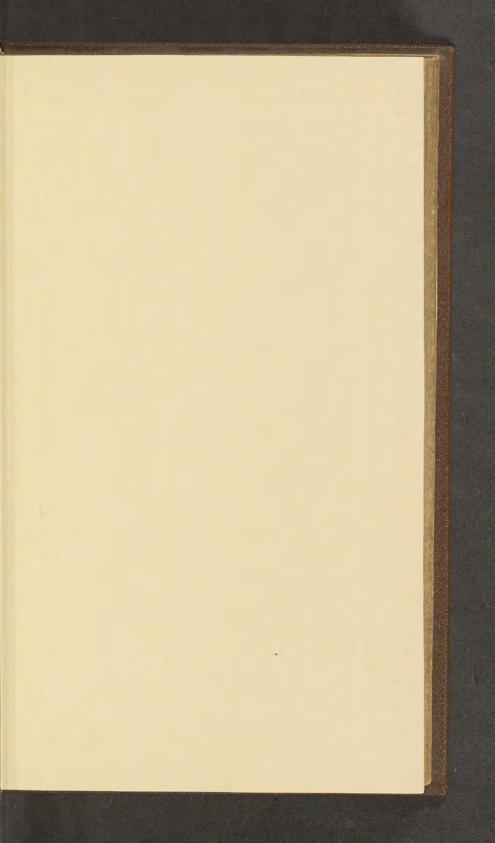


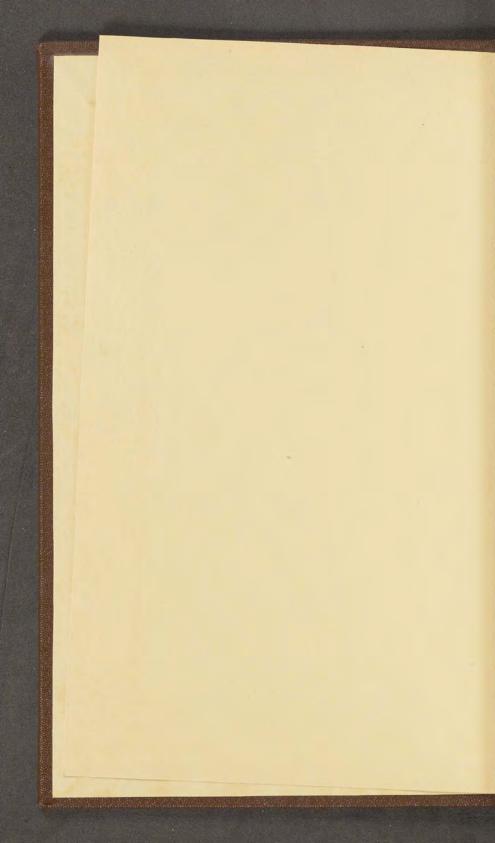












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TRAVELS

IN

EUROPE, AFRICA, AND ASIA,

MADE

BETWEEN THE YEARS 1770 AND 1779.

IN FOUR VOLUMES.

VOL. IV.

CONTAINING

TRAVELS

IN THE EMPIRE OF

JAPAN,

AND IN THE ISLANDS OF

JAVA AND CEYLON,

TOGETHER WITH

THE VOYAGE HOME.

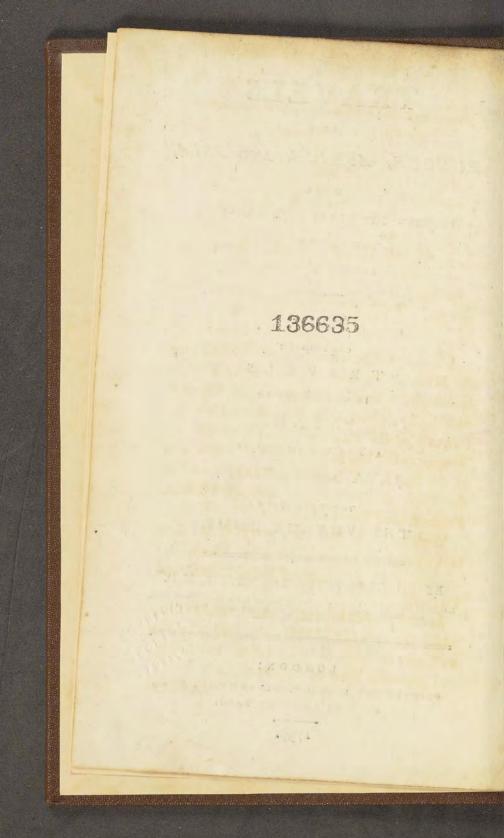
BY CHARLES PETER THUNBERG, M.D.

Knight of the Order of Vafa, Professor of Botany in the University of Upfal, and Member of various Academies and learned Societies both in Sweden and other Countries.

LONDON:

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1795.



AUTHOR'S PREFACE.

THE

A T length I have the happiness to fend from the Press the *concluding Volume* of my Travels. It contains a farther Account of the Japanese nation, my departure for Batavia, and the defcription of the Island of Java; after that my Voyage to Ceylon, and my Travels on the coafts of this island; and finally my Voyage home by the Cape of Good Hope, through Holland, England, and Germany.

With a view to illustrate a part of what I have here treated of, I have added a few Plates, defcriptive of the Japanese and Indian Utenfils and Furniture.

In this volume I have mentioned feveral articles, which are either in general use at prefent, or at least may be rendered beneficial and ferviceable, and applied to fome useful purpose, e. g.

A 2 ARTICLES

ARTICLES used as FOOD, —1. In Japan. —2. In Java. —And 3. In Coylon.

i. The flesh of Whales, the Perca 6-lineata, the Clupea thriffa, Shrimps, and Crabs, Salmon, Oyfters, and univalve Shell-fifh; Rice, Buck-Wheat, Barley, and Wheat, the Holcus Sorghum (or Millet), the Cynofurus coracanus, Panicum corvi and verticillatum, Sium fifarum, Solanum melongena, and tuberofum, Braffica rapa, Arum esculentum, Sagittaria fagittata, Polygonum multiflorum, Diofcorea japoni a, Daucus carota, Convolvulus edulis, Lactuca fativa, Pifum fativum, Vicia faba, the Phafeoli, and various fpecies of Dolichos; China and Seville Oranges, Lemons, Shaddocks, Pears, Peaches, Plumbs, Cherries, Medlars, Kaki-figs, Grapes, Pomegranates, Chefnuts, and Walnuts.

2. Birds-nefts.

3. The Mufa paradifiaca and troglodytarum, the Radermachiæ, Bolange, Paningai, and Cocoa-nuts.

For Preferves and Spices :

1. The Amonum mioga, Bamboo, Raphanus fativus, or Radifhes, Lycoperdon tuber, or Truffles, the Agarics, the Fagara piperita, and Capficum, or Cayenne Pepper, the Cucumis melo, Pepo and Conomon.

2. The

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- 2. The Cardamomum compactum, and Cubebs.
- 3. Alpinia, the different Peppers, the Cherimelle and Marmelle.
- Oils for dreffing Meat, for Lamps and Candles.
 - 1. The Sifamum, Camellia japonica, Bignonia tomentofa, Dryandra, Rhus fuccedanea and vernix, Taxus baccata and Ginko, Braffica orientalis, Laurus camphora and glauca, Melia azedarach, Cocoa-nut.
- For *Quickfet-Hedges*: The Jatropha curcas, Ophiogloffum fcandens and Cocoa-tree.
- For Paper, Fans, and Umbrellas: The Licuala, and Boraffus.
- For Bottles : The Cucurbita lagenaria.
- For Lackering : Gum Lac, from the Croton.
- For *Materials for dying* : The Polygonum chinenfe, barbatum and aviculare.
- For Combs: The wood of the Myrica nagi.
- For Furniture and various forts of Cabinet and Joiners-Work: The Pinus fylvestris, Cuprefius japonica, Taxus macrophylla, and Calaminder-wood.

For Cloaths: Cotton, Silk, and the Urtica nivea.

For *Remedies*: Camphor, Moxa; the Dolichos pruriens, Ariftolochia indica, Periploca indica, various forts of Cinnamon, Lopesroot, the Moringa, Stink-tree, Serpentftones, the Lignum Colubrinum, Ophi-A 3 orhiza

orhiza mungos, Rhinoceros's-horn, and a variety of other articles, which are noted down feparately and by themfelves, for Java, from p. 145 to p. 150.

Japan is in many refpects a fingular country, when compared with the different flates of Europe. In it we behold a Form of Government. which has exifted without change or revolution for ages; ftrict and unviolated Laws; the most excellent Institutions and Regulations in the towns, the villages, and upon the roads ; a drefs, coiffure and cuftoms, that, for feveral centuries, have undergone no alteration ; innumerable inhabitants without parties, strife, or discord, without discontent, distress, or emigrations; Agriculture in a highly flourishing state, and a foil in an unparallelled ftate of cultivation ; all the Necessaries of life abounding, even to fuperfluity, in the land, without any need of foreign commerce; befides a multiplicity of other advantages.

Among the Rulers of the Country are to be found neither *Throne*, *Sceptre*, *Crown*, nor any other fpecies of Royal Foppery, which in moft courts dazzles and blinds the wondering eyes of the fimple multitude; no Eftablifhment of a *Royal Houfehold*, no *Lords in waiting*, nor *Maids* of *Honor*; no extensive and magnificent range of *Stables*, no profusion of *Horfes* and *Elephants*, nor

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nor Masters of Horse; no Equipages, Wheel-Carriages, nor Cavalry; no Wars nor Ambassa dors; no Public Functionaries, unused to or unqualified for their respective posts; no Corporations, Imposts, nor other Monopolies; no Playnor Cosse-houses, no Taverns nor Ale-houses; and confequently no consumption of Cosse, Chocolate, Brandy, Wine, Bishop; or Punch; no privileged Soil, no waste Lands, and not a single Meadow; no National Debt, no Paper Currency, no Course of Exchange, and no Bankers.

Java and Ceylon are; in fact, two of the most fortunate islands on the whole face of the globe, with refpect to their fituation under a warm climate, their abundant fupply of rain, and the fertility of their foil; but the Government of thefe islands is of various kinds, always defpotic, and the Religion, for the most part, Mahometanifm; whereas the happinefs of the people must be in a restraint which renders them stupid and fuperfitious, cringing and rebellious, poor and flothful, conftantly objects of commiferation ; and this wretched ftate has been rendered the more oppreffive to them, inafmuch as the Europeans, who trade with them, have, by their fuperior information, their Christianity and Humanity, in the last centuries, neither meliorated their condition, nor made their fetters fit lighter A4

FREFACE

vili

lighter upon them; but rather, by their infatiable avarice, aggravated their yoke, and increafed both the degree and number of their unmerited fufferings. And, indeed, how is it poffible for the people of a country to be happy, where no I aw obtains but the caprice of individuals; where the life of man is not more regarded than that of the brute creation; where there is no fecurity, nor real property, and where there is fearcely the leaft idea of liberty, or of great and noble actions?

During the fpace of nine years, which I fpent in foreign countries, I have had many defirable and happy opportunities of difcovering and collecting new and hitherto unknown treasures from the exhauftlefs mine of Nature. Thofe, which I have already been enabled to arrange and defcribe, amount to a confiderable number; the new animals to nearly 400, the new genera of plants to 75, and the fpecies of plants to upwards of 500; not to mention all thofe, which I ftill keep by me for farther examination.

On my arrival in Stockholm, in the month of April, 1779, I had the honor, at the Levee in Drotningholm, and still farther afterwards on the fame day, in a private audience, to render an account to a great and gracious King of the general termination of my foreign Travels abroad,

the

the most remarkable things and occurrences in them, efpecially with respect to the almost unknown country of Japan, of my own private adventures, and the discoveries, which might be confidered as being in a greater or less degree useful.

During my absence I had, on the 31ft of May, 1777, been appointed by the Privy-Counfellor RUDENSCHIOELD, Chancellor of the University of Upfal, Botanical Lecturer at that University, to which office I now received my patent from the hands of my Patron, the King's first Phyfician, the Chevalier BAECKS. March 5th, 1781, on occasion of Professior LINNÆUS's making a Tour into foreign parts, I was appointed Overfeer of the Botanical Garden, and to prefide over the public Lectures. November the 7th, 1781, I received his Majefty's Patent to be Profeffor Extraordinarius, together with an increase of falary. September 7th, 1784, I was appointed Ordinarius Medicinæ Professor, and Professor of Botany. In the fame year, I had the honor to be elected Prefident of the Academy of Sciences in Stockholm. In June, 1785, I was chofen Rector of the Academy in Upfal, and on the 21ft of November of the fame year, was created a Knight of the Royal Order of Vafa.

Divers foreign Philosophical Societies have at different times done me the honor to chuse me a Member of their Learned Affociations.

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The

The IMPERIALIS Natur. Curiofor. The NORWEGIAN Society, 1772, October 17. The LUNDEN Phyfiogr. 1773, December 8. The UPSAL Society, 1777. The STOCKHOLM Society of Sciences, 1780. The HAARLEM Society, 1781, May 21. The AMSTERDAM Society, 1781. The STOCKHOLM Occonom. Patr. 1782, March 16. The MONTPELIER, 1784, July 1. The PARISIAN Society of Agriculture, 1785, July 7. The ZEELAND Society in Flushing, 1785. The BERLIN Soc. Nat. Scrut. The EDINBURGH Nat. Stud. 1786, May 4. The EDINBURGH Medical Society. The FLORENTINE, 1787, Feb. 7. The PARISIAN Academy of Sciences, 1787, September 5. The HALLE Soc. Nat. Scrut. 1787, May 12. The LONDON Royal Society, 1788. The LONDON Linnæan Soc. 1788, March 8. The LONDON Medical Soc. 1789. The BATAVIAN Ind. Orient. The PARISIAN Society of Nat. Hiftory, 1791, January 7. The PHILADELPHIAN Society, 1791, April 15. The COPENHAGEN Society of Nat. Hiftory, 1792, June 8. The

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The Works I published after my return home, were as follows :

Ift, My TRAVELS, in four Volumes, printed at Upfal, between the years 1788 and 1793. Tranflated into German, at Berlin; into English, at London, and into French, at Paris.

2ndly, My INAUGURAL ORATION, on the Species of Coin, that have been ftruck in Japan, held before the Academy of Sciences at Stockholm, the 25th of August, 1779. Translated into Dutch, and printed at Amsterdam in 1780, and afterwards into German in 1784.

3dly, My SPEECH, on laying down the office of Prefident in the Stockholm Academy of Sciences, on the Japanele nation, Nov. 3, 1784. Translated into German by Stridfberg, Francfort, 1785.

4thly, My ORATION in COMMEMORATION of the Affeffor and Provincial Phyfician, Doctor MONTIN. Stockholm, 1791, 8vo.

5thly, FLORA JAPONICA, printed at Leipfic, 1784, 8vo. with 39 Plates.

6thly, My ACADEMICAL DISPUTATIONS have been as follows :

I. De venis reforbentibus. Præf. C. v. LINNÉ. 1767. 4.

2. De lschiade. Præf. J. Sidrén. 1770. 3. De

- 3. De Gardenia. Refp. Djupedius. 1780. Tab. 2. Recenferad i Upf. Salík. Tidn. 1781. No. 49.
- 4. De Protea. Refp. GEVALIN. 1781. Tab. 5.
- 5. Oxalis. Refp. HAST. 1781. Tab. 2.
- 6. Nova Plantarum genera. P. 1. Refp. C. HORNSTEDT. 1781. Tab. 1.
- 7. Novæ Infectorum Species. p. 1. Refp. CASSTROM. 1781. Tab. 1.
- 8. Nova Plantarum genera. p. 2. Refp. SAHLBERG. 1782. Tab. 1.
- 9. Iris. Refp. EKMAN. 1782. Tab. 2.
- 10. Novæ Infectorum Species. p. 2. Refp. EKELUND. 1783. Tab. 1.
- 11. Nova Plantarum genera. p. 3. Refp. Lodin. 1783. Tab. 1.
- 12. Ixia. Refp. Rung. 1783. Tab. 2.
- 13. Novæ Infectorum Species. p. 3. 1784. Tab. 1. Refp. LUNDAHL.
- 14. Novæ Infectorum Species. p. 4. 1784. Tab. 1. Refp. ENGESTROM.
- 15. Gladiolus. Refp. AJMELÆUS. 1784. Tab. 2.
- 16. Nova genera Plantarum. p. 4. Refp. BERG.
- 17. Nova genera Plantarum. p. 5. Refp. BLU-MENBERG. 1784. T. I.
- 18. Infecta Svecica. p. 1. Refp. Borgstrom. 1784. Tab. 1.
- 19. Aloë. Refp. Hesselius. 1785.

20: Medicina Africanorum. Refp. BERG. 1785. 21. Erica.

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- 21. Erica. Refp. STRUVE. Tab. 6. 1785.
- 22. Ficus. Refp. GEDNER. 1786. t. 1.
- 23. Museum Natural. Acad. Upf. p. 1. Refp. RADLOFF. 1787.

24.	-	-	-	-	p. 2. Refp. Holmer. 1787	•
25.	-	-	-	-	р. 3. Refp. Екевекс. 1787	

26. Museum Natural. Acad. Upf. p. 4. Refp.

BJERKÉN. 1787. Tab. 1.

- 27. - p. 5. Refp. GALLEN. 1787.
- 28. Moræa. Refp. Zach. Colliander. 1787. Tab. 2.
- 29. Museum Natural. Acad. Upf. p. 6. Refp. Schalén. 1788. Tab. 1.
- 30. Reflio. Refp. Petr. LUNDMARK. 1788. Tab. 1.
- 31. Arbor toxicaria Macassariensis. 2. Resp. Ajmelæus. 1788.
- 32. Moxæ atque ignis in Medicina rationali Ufus. Refp. HALLMAN. 1788.
- 33. Myriftica. Refp. RADLOFF. 1788.
- 34. Caryophylli Aromatici. Refp. HAST. 1788.
- 35. Mufeum Natural. Acad. Upf. p. 7. Refp. BRANZELL. 1789.
- 36. Characteres generum Infectorum. Refp. TORNER. 1789.
- 37. Museum Natural. Acad. Upf. p. 8. Refp. RADEMINE. 1789.
- 38. Novæ Infectorum Species. p. 5. Refp. Noræus. 1789. Tab. 1.

39. Muræna

- 39. Muræna et Ophichtus. Refp. Ahl. 1789. Tab. 2.
- 40. Remedia nonnulla indigena. Refp. Hol-MER. 1790.
- 41. Muleum Natural. Acad. Upf. Append. 1. Refp. LUNDELIUS. 1791.
- 42. Mufeum Natural. Acad. Upf. Append. 2. YMAN. 1791.
- 43. Museum Natural. Acad. Upf. p. 9. Refp. Ekelund. 1791.
- 44. Novæ Infectorum Species. p. 6. Refp. LAGUS. 1791.
- 45. Mufeum Natural. Acad. Upf. p. 10. Refp. KUGELBERG. 1791.
- 46. Flora Stregnefenfis. Refp. CARLSON. 1791.
- 47. Infecta Svecica. p. 2. Refp. BECKLIN. 1791. Tab. 1.
- 48. - p. 3. Refp. Akerman, 1792.
- 49. - p. 4. Refp. SEBALDT. 1792. Tab. 1.

50. Genera nova Plantarum. p. 6. Refp. Strom. 1792.

- 51. - p. 7. Refp. TRAFVENFLDT. 1792.
- 52. Mufeum Natur. Acad. Upf. p. 11. Refp. Sjoberg. 1792.
- 53. - p. 12. Refp. Lindbladh. 1792. 54. - - - p. 13. Refp. Ferelius. 1792.

7thly,

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7thly, TREATISES on Miscellaneous Subjects, fent in to different learned Societies.

a. To the Academy of Sciences at STOCKHOLM.

- An accident, that happened from Whitelead being ufed in food, through miftake. 1773. 1ft. qu. p. 29.
- 2. Description of a curious and unknown Mushroom, the Hydnora Africana, 1775. 1st. qu. p. 69. Plate.
- 3. Defcription of a new Genus of Infects, the PNEUMORA. 1775. 3d. qu. p. 254. Plate.
- 4. ROTHMANNIA, a new Genus of Plants. 1776. Ift. qu. p. 65. Plate.
- 5. Defcription of a new Genus of Plants, called RADERMACHIA. 1776. 3d. qu. p. 250.
- 6. Remarks on the HYDNORA AFRICANA. 1777. 2d. qu. p. 144. Plate.
- 7. Defcription of a BEZOAR EQUINUM. 1778. 1ft. qu. p. 27.
- 8. A new and, with refpect to its Genus, hitherto unknown Grafs, called the EHR-HARTA. 1779. 3d. qu. p. 216. Plate.
- Obfervations upon CINNAMON, made at Ceylon. 1780. Translated and inferted into the Transactions of the Flushing Society. Tom. 12. Part 1. by Dr. Hou-TUYN. p. 296.

10. Description

- , 10. Defcription of the WEIGELIA JAPONICA, a fcarce Plant from Japan. 1780. 2d. qu. p. 137.
 - Africa and Afria. 1781. 1ft. qu. p. 78.
 - 12. Defcription of two new INSECTS. 1781. 2d. qu. p. 168.
- 13. NOCTUA Serici, a new Silk-Worm. 1781. 3d. qu. p. 240. Plate.
 - 14. Defcription of two Species of genuine NUTMEG, from the island of Banda. 1782. 1st. qu. p. 46. Plate.
 - 15. Some Obfervations in ORNITHOLOGY. 1782. 2d. qu. p. 118.
 - 16. Description of a new Genus of Plants, the FAGRÆA Ceilanica. 1782. 2d. qu. p. 132. Plate.
 - 17. On the Oil of CAJOPUT, and its use in Medicine. 1782. 3d. qu. p. 223.
 - NIPA, a new Genus of Palm-tree. 1782.
 3d. qu. p. 231.
 - 19. On PALM-TREES in general, and particularly on the Licuala Palm. 1782. 4th. qu. p. 284.
 - 20. Defeription of the HOUTUYNIA cordata, a Japanese Genus of Plants. 1783. 2d. qu. p. 149. Plate.
 - 21. Farther Obfervations on ASTERIAS. 1783. 3d. qu. p. 224.

22. De-

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- 22. Defcription of the MINERALS and PRE-CIOUS STONES OF Ceylon. 1784. Ift. qu. p. 70.
- 23. Observations on BIRDS of the Loxia kind, at the Cape of Good Hope. 1784. 4th. qu. p. 286.
- 24. Observations on and Description of the Genus of Plants called Albuca. 1786. 1st. qu. p. 57.
- 25. Obfervations on the Plants called OR-CHISES. 1786. 4th. qu. p. 254.
- 26. Description of some rare and unknown Species of Lizards. 1787. 2d. qu. p. 123. Plate.
- 27. Defcription of three species of TORTOISE. 1787. 3d. qu. p. 178.
- 28. Defcription of the WILDENOVIA, a rare and new Species of Grafs. 1790. Ift. qu. p. 26. Plate.
- 29. Defeription of two Fishes from Japan. 1790. 2d. qu. p. 106. Plate.
- 30. Defcription of the WAHLBOMIA INDICA. 1790. 3d. qu. p. 215. Plate.
- 31. Two foreign Fishes, the GOBIUS patella, and SILURUS lineatus. 1791. 3d. qu. p. 190. Plates 6.
- 32. Two Japanese Fishes, the CALLIONYMUS Japonicus, and the SILURUS lineatus. 1792. 1st. qu. p. 29. Plate 1.

Vol. IV. a 33. De-

XVIII PREFACE.

- 33. Defcription of the unknown Fishes, the PERCA 6-lineata and pitta. 1792. 2d. qu. p. 141. Plates 5.

B. To the Literary Society in UPSAL.

- 1. Cycas Caffra. 1775. cum figuris. Vol. 2.
- 2. KÆMPFERUS illustratus. p. 1. 1780. Vol. 3.
 - 3. Cuffoniæ Genus. 1780. c. f. Vol. 3.
 - 4. Novæ Species Infectorum Svecie. 1783.
 c. f. Vol. 4.
 - 5. KÆMPFERUS illustratus. p. 2. 1783. Vol. 4.
- 6. Curculio Cycadis. 1783. Vol. 4.
- 7. DefcriptionesInfectorum Svecicorum. 1792. Vol. 5. p. 85.
- 8. Observationes in Linguam Japonicam. 1792. Vol. 5. p. 258.

. y. To the Physiographical Society in LUNDEN.

- 1. Retzia capensis. 1776. cum figuris.
- 2. Montinia et Papiria.
- 3. The Preparation of Gum Aloë in Africa.
- 4. Aitonia capenfis.
- 5. Falkia repens.
 - 6. Syngnathi nova Species.

J. To the Norwegian Society in TRONDHEIM.

- . I. Hypoxis.
 - 2. Cliffortiæ Genus.

To

E. To the Society of Sciences at HAARLEM.

- .1 Obfervationes Thermometricæ in Japonia habitæ.
- Cryptogamarum fructificatio in Cycade et Zamia.

2. To the Royal Society at LONDON.

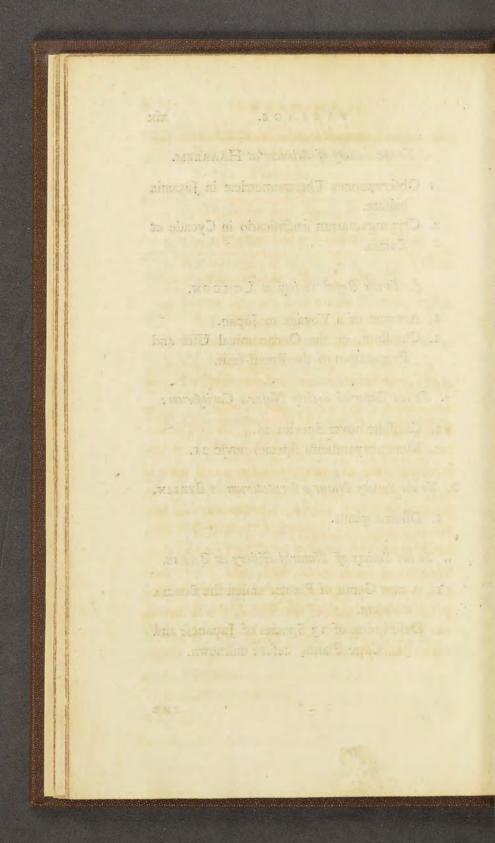
- r. Account of a Voyage to Japan.
- 2. Citodium, or the Oeconomical Uses and Preparation of the Bread-fruit.
- n. To the Imperial Society Natura Curioforum:
 - 1. Craffulæ novæ Species 28.
 - 2. Mefembryanthemi Species novæ 21.
- 9. To the Society Natur & Scrutatorum at BERLIN.

1. Dilatris genus.

- s. To the Society of Natural History at PARIS.
 - 1. A new Genus of Plants, called the Boscia undulata.
 - 2. Description of 13 Species of Japanese and 341 Cape Plants, before unknown.

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TRANSLATOR'S

THE

PREFACE.

AFTER the warm reception the preceding Volumes have met with from the public, it would be needlefs to fay any thing in recommendation either of the Work or its Author. It may fuffice to obferve, that this Volume is much more interefting than any of the former; and that, if any thing be wanting to make it complete on the fubjects of which it treats, the Reader will find the deficiency amply fupplied, in a little Tract, lately publifhed, entitled " The Life and Adventures of Chriftopher Wolf, with his Voyage to Ceylon;" particularly with refpect to the Vegetable Productions of that ifland, the Rollewai, the Elephant, and the manner in which this latter animal is captured.

ERRATA IN VOL. IV.

Page 36, line 12, read By this means all the viands are extremely well dreffed ;

1. 21, for are read have been

- 40, l. penult. read, 'To Batavia Sacki is imported as an article of commerce; but it is alfo drank there out of

- 57, l. 10 from bottom, for must read would

- 62, 1. penult. for has an opportunity of feeing r. fees

1. 8 from bottom, for blacker read black or

- 63, 1. 10, for portable ftools read Norimons

- 77, 1. 4 from bottom, for exterior read hindermoft part of the

1. 6, for Haki read Kaki

- 84, 1. 9, for Cabbages; read Coleworts;

1. 10, after of which read laft

1. 21, for like Cabbage-feed, in beds. read and thick, as Cole-feed is in boxes.

1. 24, for Cabbage-plants, read Colewort-plants,

1. 25, for bundles, read tufts,

1. 26, for bundle. read tuft.

- 86, 1. 10 from bottom, read leave an empty space between them.

---- 87, 1. 13 from bottom, for Cabbage-feed read Colefeed, for grows wild read is cultivated I. 4 from bot. for Cabbage-feed read Cole-feed

- 88, 1. 11, read as is likewife the whole bean

1. 6 from bottom, for Turnips read Turneps

- 89, 1. 13 from bottom, for amonium read Amomum 1. penult, after Lemons read Shadocks

____ 90, 1. 1, after Japonicar. Figs of a very delicious tafte.

---- 93, 1. 2, after fuccedanea read indeed, for feed r. feeds

1. 3, for yields, read yield,

1. 14 and 15, read The finer oil of Sefamum they use in the kitchen,

1. 4 from bottom, for is read be

_____II2, 1. 15, dele roundish, and read oblong plate of gold, rounded off at the four corners,

1. 17, after broken off read at intervals

----- 146, 1. 16, after Vitex add (or Agnus Caftus)

-218, 1. 4 from bottom, for Purperagan read Pufperagan

-237, 1. 7 from bottom, after Mature read back again

read their mutual defence.

-289, 1. 5 from bot. read the British, Leverian, and other Musenms.

1. 4 from bot. for The former read The first

IN THE PRECEDING VOLUME.

Page 183, for Daikoku read Daikokv.

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Explanation of the Plates

For the Fourth Volume.

PLATE I.

- Fig. 1. A Japanese Slipper. These are used every day in common, instead of Shoes.
 - 2. Another, which is used on Journies, and is tied fast round the foot.
 - 3. A Horfe-Shoe, which is tied round the foot.
 - 4. A Rafor-Cafe. a. The Cafe itfelf, for two Razors, and b. the Razor.
 - 5. A Medicine-Box, with feveral compartments in it. a. The Box, with its partitions. b. The Cord, by which it is fupported. c. The Ball, by which it is made fast to the belt.

PLATE II.

- Fig. 1. A Japanese Lady, with a. her Lute, in her usual dress.
 - 2. Touche, or Japan-Ink, with which the Japanese and Chinese usually write, and which they use instead of ink.
 - 3. A Box, which contains a. a Reckoningboard, with moveable Counters, ftrung upon a fteel-wire, denoting Units and Decimals; b. a Steel-yard, together with its Scale, and c. the Weight hanging to it; d. e. an excavated Stone, to rub the Touche upon; f. a. little Irough, for holding water for that ufe, and g. a Writing-pencil.

PLATE

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Explanation of the Plates.

PLATE III ..

- Fig. 1. A Steel-yard, with its Cafe. a. The Cafe, which fhuts up with great eafe and convenience. b. The Steel-yard itfelf, formed of ivory. c. The Scale with its Strings. d. The Strings, by which the Steel-yard is held, when ufed. e. The Weight.
 - 2. A Tooth-brush, of fost wood, to clean the teeth with.
 - 3. A common Writing-pencil, made of a reed and hare's hair.
 - 4. A Spring Steel-yard, of Weight upon a Spring, which is very elaftic, for weighing finaller articles.

PLATE IV.

- Fig. 1. A Tobacco-pouch, with a Pipe and its Sheath. a. The Pipe-fheath, made of filk. b. The Pipe in its fheath. c. The Pipe made of a reed, with a mouth-piece and bowl of metal. d. The Tobaccopouch, made of filk.
 - 2. A Cafe for Inftruments for the Ears and Teeth. a. The Cafe, made of horn. b. The String, by which it is fastened to the belt. c. Ornaments of Silk. d. Divers fmall Instruments, to clean the ears and teeth with.

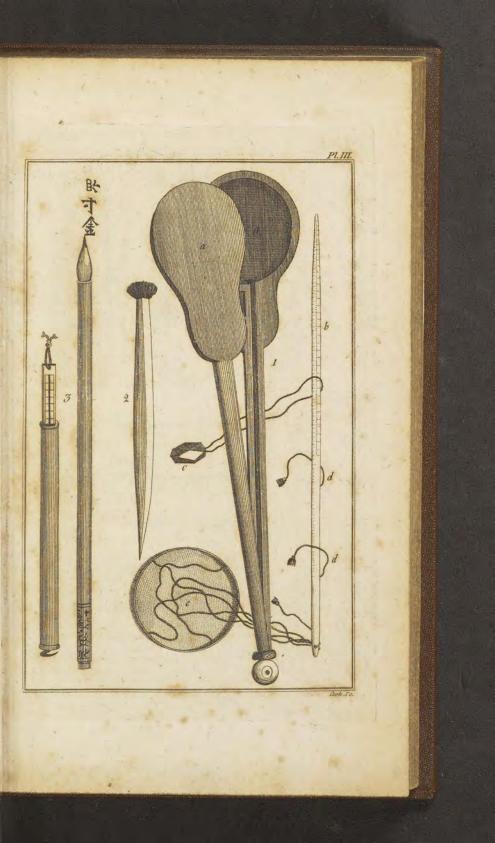
TRAVELS

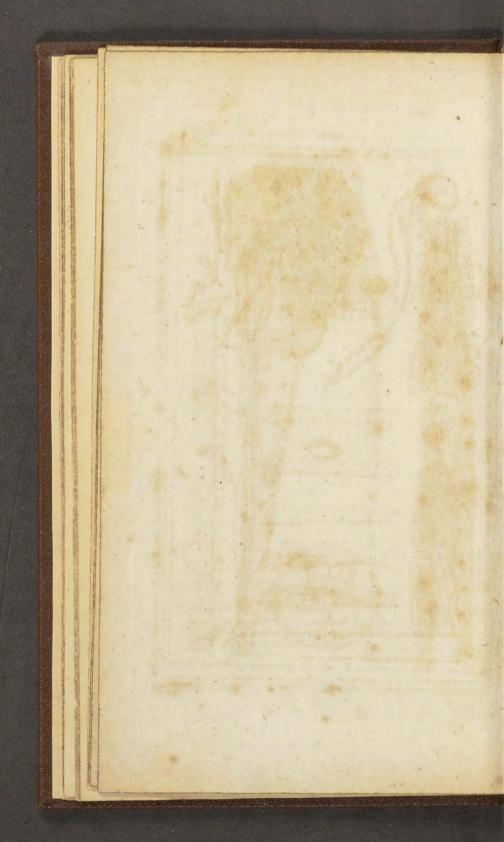
















TRAVELS

IN

EUROPE, AFRICA, AND ASIA.

THE GOVERNMENT.

THE empire of Japan is encompaffed on all fides with water, and confifts of three large islands, together with a vast multitude of smaller ones. All these are divided into feven departments, which again are subdivided into fixty-eight provinces, and these into fix hundred and four districts.

At prefent, Kubo, or the Secular Emperor, is Lord of the whole country, and under him rules a Prince or Governor in each province. The Princes that are first in dignity, are called Daimio; those of an inferior rank are denominated Siomio. If any of them is guilty of misdemeanors, he is amenable to the Emperor, who has a right to difinifs him; to banish him to fome island; or even to inflict capital punishvol. IV. B ment

THE GOVERNMENT.

ment upon him. It is farther incumbent upon all these Princes to perform a journey once every year to the Imperial Court, to reside there fix months, and to keep their whole family there constantly, as hostages for their allegiance.

But, befides this Monarch, there is a Spiritual or Ecclefiaftical Emperor, whofe power at prefent is totally confined to the concerns of religion and the church eftablifhment; although this Spiritual Regent or Pope, derives his defcent in a direct and uninterrupted line from the ancient Rulers of this country, for upwards of 2000 years back.

If we carry our refearches back to the remoteft ages of antiquity, which are enveloped in obfcurity and uncertainty, it will appear probable, that Japan, like other countries, was governed by Patriarchs, or petty Chiefs, who afterwards united together under one head. The most authentic History of the Japanese Monarchs commences about 660 years before the birth of Chrift, when the government was beflowed upon Syn Mu, of a very confpicuous race, called TENSIO DAI SIN. This SYN MU is the founder of the monarchy; he introduced an accurate Chronology, called Nin O, and improved not only the laws of the country, but likewife the very form of the government. The Emperors of this tribe were most usually denominated 3.1. 2

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THE GOVERNMENT.

minated DAIRI, and fometimes, but not fo frequently, *Mikaddo*, *Dai*, *Tai*, *Tenfin*, and *Oo*. One hundred and nineteen DAIRIS have afcended the throne in fucceffion, from that period down to the time of my refidence at Japan; although their power and authority have been very different and diffimilar at three different periods. Thefe reigned alone with unlimited authority, till the year 1142. From that time the fecular power was divided between the oldeft and lawful Potentate of the country and the fecular Rulers or Generalifimos of the army, till the year 1585, fince which time his authority has only manifefted itfelf in matters which concern the government of the church.

The veneration which is entertained for DAIRI, falls little fhort of the divine honours which are paid to the gods themfelves. He feldom goes out of his palace, his perfon being confidered as too facred to be exposed to the air and the rays of the fun, and ftill lefs to the view of any human creature. If at any time he has abfolute occafion to go abroad, he is generally carried upon men's fhoulders, that he may not come into contact with the earth. He is brought into the world, lives, and dies within the precincts of his court, the boundaries of which he never once exceeds during his whole life. His hair, nails, and beard are accounted fo facred, that they are B 2 never

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never fuffered to be cleanfed or cut by day-light, but this, whenever it happens, muft be done by ftealth, during the night, whilft he is afleep. His holinefs never eats twice off the fame plate, nor uses any veffel for his meals a fecond time; they being for the most part broken to pieces immediately after they have been used, to prevent their falling into unhallowed hands. For this reafon, the furniture of his table confifts of a cheap and inferior fort of porcellain. The cafe is pretty much the fame with refpect to his cloaths, which are diffributed among those who refide at his court. Without the precincts of the court there is none, or at leaft hardly any one, that knows his name, till long after his death. His whole court, with very few exceptions, confifts of none but fuch as are of his own race; all of whom have their appointments at court, in like manner as others of them, who are not employed at court, are promoted to the richeft benefices, and the beft convents. He has twelve wives, only one of whom, however, is Emprefs. The pomp which reigns in his court, though not fo fplendid as formerly, is yet very great. Since the retrenchment of his power, he derives his revenues from the town and adjacent country of Miaco; and has likewife an allowance from Kubo's treasury, besides immense sums which he acquires by the conferring of titles ; and

and yet his revenue is frequently inadequate to his expences. The right of beftowing titles of honour remains to this day vefted in the perfon of the ecclefiaftical Emperor, and ferves confiderably to increase his income. Even Kubo himself. and the hereditary Prince, receive titles at his hand; as do likewife, on K uso's recommendation, the higheft officers of ftate at his court. Those who have fpiritual titles, are diffinguished both at court and in the churches all over the country, by a particular drefs, conformable to their rank and dignity. I had the honour to fee one of thefe Prelates at a convent in Nagafaki; his drefs confifted of a pair of trowfers, and a large cloak with a long flowing train. I found him very affable and courteous, and we had a long conversation together, through the medium of our interpreters, respecting various matters; which, however, afforded me far lefs pleafure than the fhrubs I met with in the vicinity of his church.

DAIRI'S court was formerly removed at pleafure from one part of the country to the other; but now his refidence is fixed in the town of *Miaco*. This court is very extensive, and forms of itself no inconfiderable town, being provided with walls, foss, ramparts, and gates: in the centre stands DAIRI'S palace, adorned with losty turrets, and round about it are the mansions of

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both

both the fuperior and inferior officers of his household, and other attendants. A Governor is kept here for his fervice by Kubo, and a guard appointed for his fafety, to defend the facred perfon of DAIRI, and by way of fecurity to KUBO, that no diffurbances or infurrection can be raifed there. At this court literature is cultivated, and academic ftudies are purfued with vigour. It is the only university in the country; and here the ftudents are maintained, brought up, and instructed. The principal objects of their application are poetry, the hiftory of the country, mathematics, &c. Mufic is a very favourite fludy with them, efpecially with the ladies. Here it is that all their almanacks are compiled, which are afterwards printed in I/ie.

Although DATRI has loft his authority in temporal concerns, yet he is ftill confidered as fo august and holy, that KUBO, either in perfon or by his ambaffador, is bound to pay him a visit, and that either annually, or at the expiration of a certain ftated time; bringing with him, according to the general custom of the country, prefents of great value. YORITOMO and many more of the fecular Emperors, have visited *Miaco* in perfon, to perform this homage, which latterly however, and by degrees, has been more and more neglected, and is at last entirely given up. Neither the Princes of the country, nor the Dutch, when they

they go up to Jedo, pay their refpects to the ecclefiaftical Emperor in Miaco. Seventy-fix Emperors of this race have reigned with unlimited power, till the year 1142, when civil commotions arole among the Princes of the land, and a calamitous war was waged between them. With a view to compose these disturbances, the command of the armies was given to YORITOMO, in the quality of Generalifimo. This valiant commander fuppreffed, indeed, the growing difturbances, but at the fame time alfo arrogated to himfelf and his fucceffors great part of the Emperor's authority; which continued to be divided between DAIRI and the Imperial Generals till the year 1585. About this time a peafant's fon, named TAIKO Samma, had raifed himfelf by his fuperior abilities to the rank of General, reduced all the Princes of the Land under his authority, and in the end deprived DAIRI of all the power he had hitherto poffeffed, with respect to fecular affairs, and the government of the empire. From the reign of YORITOMO, the first of the fecular Monarchs, to that of YEVARU, who fwayed the fceptre of Japan, at the time of my refidence in that country, one and forty KuBos had fat upon the throne, and kept their court at 7edo. The fecular Emperor does not, however, hold the reins of government entirely in his own hands, but reigns conjointly with fix Privy Counfellors who

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who are moftly men in years and of found judgment. Befides the confiderable prefents which each ruling Prince fends to court of the produce of his province, Kubo derives his revenue from certain crown lands, as they are called, or five imperial provinces, and fome imperial towns, which are fubject to the fway of Governors or *Bugios*. The tax or tribute is paid in fuch commodities as each country produces. In the fame manner each of the Princes receives tribute from his province, with which he maintains his houfehold, his troops, defrays the expences of keeping the roads in repair, as likewife of his journies to court, maintains his family, &c.

The five imperial crown-lands pay a tax of 148 mans and 1200 kokfs of rice, which amounts to nearly 44,400,000,000 facks of rice. Each man contains 100,000 kokfs, each kokf 3000 balis or facks of rice, and each fack weighs upwards of twenty pounds. The aggregate revenue of the whole empire of Japan amounts at leaft to 2328 mans and 6200 kokfs.

At the time when KÆMPFER refided in Japan, in the year 1692, the Dairi KINSEOKWO TEI, was in the fifth year of his reign, having afcended the throne A. C. 1687. Since that period the following Emperors have reigned.

NAKA no Mikaddo no Yn, from 1709 to 1735. SAKKURA Matie no Yn, from 1736 to 1746. Momo

Момо Zon no Yn, from 1747 to 1761. Zentoogozio, from 1762 to 1769.

And, fince the year 1770, FIGASI jamma no Yn, who continued to fill the imperial throne at the time of my departure from Japan, in the year 1776.

Of KUBOS, or fecular Emperors, the following have fucceffively fat on the throne of Japan. In the year 1693, when KÆMPFER took his leave of this country, KUBO CHINAYOS still reigned. He was then in the 43d year of his age, and had reigned twelve or thirteen years. The whole duration of his reign comprehended a period of twenty-nine years. After him followed :

YE NOB Koo, and reigned from 1709 to 1712.

YE TSU KU Koo, from 1713 to 1716.

Yosi MUNE Koo, from 1717 to 1751.

YE SIEGE Koo, from 1752 to 1761; at which time the prefent Kubo

YE FAR Koo, afcended the throne, which he fill occupied at the time of my departure A. 1776.

The government of each province is intrusted to fome Prince, who refides in it, and is refponfible to the fecular Emperor for his administration. He has a right to all the revenues of his fief, with which he supports his court, his military force, keeps the roads in repair, &c. He is likewife bound, as we faid before, to make a journey once every year to Kubo's court, with

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a degree of pomp fuited to the fize and dignity of his fief, to take with him confiderable prefents, and to keep his family conftantly at this Emperor's court, as hoftages for his allegiance.

The towns, in which these Princes hold their court, are mostly of confiderable note, fituated hear fome harbour, or large river, and furrounded with walls and foffes. Most frequently at one of the extremities of the town ftands the Prince's ceftle, which is of a great extent, being likewife furrounded with a wall and foffe, provided with ftrong gates, and adorned with high towers. Thefe caftles are for the most part, like the imperial palace at Jedo, divided into three compartments, each of which is well fortified. The innermost is the refidence of the Prince himfelf: the fecond is allotted to the fuperior officers of ftate ; the third and laft is deftined for his troops, with the reft of his retinue and attendants. Not only are the towns themfelves provided with gates, but each individual ftreet has its own gates, which are fhut during night, and on fome other occafions, fo that not a foul can either enter in or go out. The diftance between each of thefe gates is generally from 60 to 120 yards. Each ftreet has its own watch, watch-houfe, and apparatus for guarding against fire; as likewife an Ottona, and other officers, for preferving decorum and good order. For the accommodation of

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of travellers in every town there are a great many inns, which are neat and conveniently fituated; by the fide of the roads likewife, and near each other, (none of them being more than a quarter of an hour's diftance afunder) there are others, which are post-houses, where are always to be found horfes, and norimon-bearers, who forward travellers for a certain determined price, proportioned to the length and difficulty of the road : fo that the price of travelling is not the fame throughout the whole country, but is regulated according to the nature of the roads in each place. Although the regulations here, as well in the towns as in the country, agreeable to the genius of this people, appear fometimes very fingular, and frequently even favour of compulfion and conftraint, ftill it cannot be denied, that they are really fometimes both neceffary and excellent. Upon the whole, both the fupreme government, and the civil magistrates, make the welfare of the ftate, the prefervation of order, and the protection of the perfons and property of the fubject, an object of greater moment and attention in this country than in most others.

The villages in Japan are for the moft part fituated near the public roads; they are diftinguished from the towns by having only one ftreet, and by being open; but they are otherwise of an extraordinary length, extending from a mile

a mile and a half to three miles, and fometimes farther.

The roads are both broad and kept in excellent repair, as they are not liable to be fpoiled by wheel-carriages, in a country where travellers are generally carried by men in a kind of litter. or elfe walk. With refpect to this, they confantly observe a most excellent rule, which is, that travellers shall always keep on the left-hand fide of the way, fo that different companies, whether great or fmall, may meet and pafs, without in any wife incommoding each other: a regulation, which, in other countries that lie under less reftraint, deserves so much the more to be attended to, as not only in the high roads in the country, but even in towns and cities, every year exhibits in no inconfiderable number, the most lamentable, and, to an enlightened nation, difgraceful inftances of perfons of every age and fex, but more efpecially children and old people, being rode or driven over by the giddy fons of riot and diffipation; of which broken limbs, if not lofs of life itfelf, is a pretty certain confequence. And as it often happens that bridges cannot be laid down over certain parts of a river, on account of the violent floods, the beft and fafeft regulations are adopted for transporting travellers over, either in boats or upon the hands of men. Even in the most inconfiderable villages there is a number.

a number of petty inns established, where the traveller is fure to find boiling water ready for his tea, with other refreshments.

WEAPONS.

THE arms of the Japanese confist of bows and arrows, fcymitars, halberts, and guns. Their Bows are very large, and their arrows long, like those of the Chinefe. When thefe bows are to be drawn and the arrows difcharged, the troops always place themfelves upon one knee; a polition which renders it impoffible for them to difcharge their arrows in quick fucceffion. In the fpring the troops affemble to exercise themselves with these bows in shooting at a mark. Guns are not their ufual weapons : I could only meet with thefe at the houfes of the gentry, where they were difplayed upon an elevated stand, appropriated for that purpose in the audience-chamber. The barrels of the guns were of the ufual length, but the flock behind the lock was very fhort, and in as much as I could perceive at a diftance, there was a match in the lock; the locks are fometimes made of copper. I never had an opportunity of feeing a gun fired off, although I have feveral

feveral times heard them difcharged from the Dutch factory in the neighbourhood of the town of Nagafaki; but the interpreters informed me, that their guns, which, on account of their fhortnefs, could not be placed against the shoulder, were here generally held against the cheek-bone; a position, which, however, appears not a little fingular. Cannons are not the usual arms of this country ; although at Nagafaki, in the poffeffion of the imperial guard, there are fome to be feen, which were formerly taken from the Portuguefe; but they are never used for faluting the fhips; and indeed they are very feldom difcharged at all. The Japanese have little or no notion of the proper mode of using them; and whenever they are to fire them off, which is generally done once every feven years, at Nagafaki, in order to cleanfe and prove them, the adjutant of artillery provides himfelf with a long pole, to which he fixes the match, and notwithstanding this precaution, fometimes fets fire to the cannon with averted eyes. The Scymitar, therefore, is their chief and choiceft weapon, and is conftantly worn by every one but the peafants. This fcymitar is a yard in length, fomewhat inclining to a curve, and has a broad back; the blades are of an incomparably good temper, and fuch as are old. in particular, are very highly valued. In goodnefs they far furpafs the Spanish blades, which are

are fo much renowned throughout Europe : they will cut a very large nail afunder with eafe, and without their edge being turned; and, according to the accounts of the Japanefe, will cleave a man afunder from top to bottom. A blade is never fold for lefs than fix kobangs; but thefe fcymitars often fetch from fifty to feventy, and even a hundred rix-dollars, and are confidered by the Japanefe as the most precious and valuable part of their property. The hilt is furnished with a round and fubftantial guard, without any bow, and is fometimes full fix inches long; the hilt itfelf is fomewhat roundish and flat, is frequently fplit at the ends, and covered with fhark's-fkin, which prefents a furface replete with knobs of different fizes. Thefe fkins have been imported by the Dutch and bought of them at a very dear rate ; fometimes from fifty to eighty kobangs, each kobang being valued at fix rixdollars. Round this fhagreen filken cords are twifted checkerwife, fo that the fhagreen appears through; the guard itfelf is thicker than a rixdollar, embellished with emboffed figures, or curious openwork. The fcabbard of the fcymitar is thick and rather flat, and cut off fouare at the end ; it is fometimes covered over with the fineft fhagreen, which is lackered; fometimes it is made of wood, and lackered either entirely black, or variegated with black and white fpcts, like 2 ... 7 marble : 5

marble. Sometimes one fees a filver ring or two encompaffing the fcabbard; in the fore part on one fide there is a finall rifing prominence with a hole in it, through which a ftrong filken cord is introduced, that ferves occafionally to faften the fcymitar. Near the inner fide of the hilt, there is another hole, which contains a knife about fix inches in length. This filken cord is fometimes yellow and fometimes green, but more commonly black. They never make use of an appropriated belt, but always thruft the fcymitar into the belt upon the left fide, with the edge upwards, which to Europeans appears ridiculous enough.

In the figures which Dr. KÆMPFER has given of the Japenefe, in his Hiftory of Japan, thefe fcymitars are drawn after the European manner, and therefore appear in the very reverfe of their real polition. Every magistrate, as well as the fuperior and inferior officers of the army, wear constantly two of these fcymitars, one of which is their own private property, the other is what is called their official fcymitar, and is farther diftinguished by its fuperior length. Both thefe fcymitars are worn in the belt upon the fame fide. where they lie a little across each other. On entering a room, and fitting down, they generally take off their official fcymitar, and lay it either on one fide of them, or before them. The interpreters had only one fcymitar, but the banjofes wore

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wore two; and thefe were always the first that came on board, and the last that less the fhip, on those days when any business was to be transacted there.

RELIGION.

PAGANISM is the effablished religion throughout the whole empire of Japan; but their fects are both numerous, and very oppofite to each other in their tenets; notwithftanding which they all live together in the greateft harmony and concord, without difputes or quarrels. The ecclefiaftical Emperor, DAIRI, is, like the Pope, the head of the church, and appoints the principal priefts. Every fect has its refpective church, and its own peculiar idols, which are reprefented under fome determinate, and that, for the most part, very uncouth and hideous form. The number of these fictitious deities is fuch, that almost every trade has its own tutelar divinity, after the manner of the ancient Greeks and Romans; and confequently they have both their Dii majorum et mincrum gentium. The Japanese are not, indeed, entirely ignorant of the existence of an eternal, omnipotent VOL. IV. C

omnipotent Being, fupreme in power and might above all other gods; but their knowledge in this particular is very much obfcured with fable and fuperfition. Notwithftanding this, I have never feen among any Pagans whatever fo large and majeftic a reprefentation of this god, as is to be met with in two of the temples in this country. In the one is feen a wooden image, of fuch an amazing magnitude, that fix men can fit crofslegged, in the Japanefe fafhion, upon its wrift, and it meafures ten yards in breadth acrofs the fhoulders. In the other, his infinite power is reprefented by a multitude of fubaltern deities, who ftand round him on each fide, to the number of 33,333.

Their temples, of which they have likewife a great variety, are generally built in the fuburbs of the towns, upon the higheft and moft eligible fpots. The priefts in each temple are numerous, although they have little or no employment, any farther than to keep the temple clean, to light the fires and the lamps, and to prefent fuch flowers as are confecrated to the idol, and which they believe to be most agreeable to him. No fermons are preached, nor hymns fung in the temples; but they are left open all day for the accommodation of fuch as with to offer up their prayers, or to leave their offerings. Nor are strangers denied admittance to their temples; not 6

not even the Dutch, who are allowed to vifit them, and may be accommodated with lodgings in them, whenever it happens that the inns in the petty country towns are befpoke; as was once the cafe in the courfe of the journey that I made to the imperial court.

The principal religions of Japan may properly be faid to be only two : the Sinto and the Budido. The former is the proper and most ancient religion of the country; though its adherents are not fo numerous as those of the latter, which was brought hither from the continent of Afia, and has acquired the greateft number of followers. The doctrine of the Sinto, in its original fimplicity and purity, was much nobler than it was after it became in process of time adulterated with a great many foreign and fuperfluous ceremonies. It is even probable that it originated from the Babylonian emigrants, and was in its rife more intelligible and clear, but by degrees became obfcured. Its adherents acknowledge and believe in a Supreme Being, who inhabits the higheft heavens; but they likewife allow of inferior or fubaltern deities. It is by this Supreme Divinity that they fwear; and they believe him to be far too great to stand in need of their worship. Their adoration, therefore, has for its object the inferior deities, who, according to their creed, exercise dominion over the earth, the

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the water, the air, &c. and have it in their power to make men happy or miferable. Neither are they without fome conception, however imperfect, of the immortality of the foul, and of a future state of happiness or milery after death. According to their tradition, the fouls of the virtuous have a place affigned them immediately under heaven, whilft those of the wicked are doomed to wander to and fro under the cope and canopy of heaven, in order to explate their fins; confequently they place no manner of faith in the metempfychofis or transmigration of fouls into animals or other bodies; the whole tenor of their doctrine has no other object than to render mankind virtuous in this life: their chief and univerfal care is to preferve a clear confcience, to lead a virtuous life, and to fhew due obedience to the laws of their fovereign. They abitain from animal food, are very loth to fhed blood, and will not touch any dead body. Whenever any one transgreffes in any of these points, he is confidered as unclean for a longer or a fhorter term, as was the cafe with the Jews, agreeable to the Levitical law. They believe that there are no other devils than those which refide, as fouls, in foxes; thefe animals being confidered as very noxious and dangerous in this country.

Although

Although the professors of this religion are perfuaded that their gods know all things, and that, therefore, it is unneceffary to pray to them for any thing, they have, neverthelefs, both churches and certain ftated holidays. Their gods are called Sin or Kami, and their churches are ftyled Mia. Thefe churches confift of feveral different apartments and galleries, with windows and doors in front, which can be taken away and replaced at pleafure, according to the cuftom of the country. The floors are covered with ftrawmats, and the roofs project fo wide on every fide, as to overhang an elevated path in which people walk round the temple. In thefe churches one meets with no visible idol, nor any image which is defigned to reprefent the Supreme invisible Being; though they fometimes keep a little image in a box, reprefenting fome inferior divinity, to whom the temple is confecrated. In the centre of the temple is frequently placed a large mirror, made of caft-metal well polifhed, which is defigned to remind those that come to worship, that, in like manner as their perfonal blemishes are faithfully pourtrayed in the mirror, fo do the fecret blemishes and evil qualities of their hearts lie open and exposed to the all-fearching eyes of the immortal gods.

I have frequently obferved with the greateft aftonifhment, as well on holidays as on other C 3 occasions,

RELIGION,

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occafions, the extreme devotion with which the Sintoifts approach thefe temples; they never venture to approach the house of their god, if they are in any wife impure; for which reafon they wash themselves first perfectly clean, drefs themfelves in their very beft apparel, and wafh their hands a fecond time just at the entrance of the temple; then advancing with the greateft reverence, they place themfelves before the mirror, and after bowing refpectfully down to the very ground, turn once more to the mirror, prefer their prayers, and prefent their offerings. At the conclusion, they ring thrice a little bell which is kept for that purpofe in the temple, and retire to fpend the remainder of the day in mirth and rejoicing.

The priefts in thefe temples may be divided into two claffes; the firft, who attend to the domeftic bufinefs of the temple, are fecular priefts, and illiterate, in order that they may not be able to reveal the myfteries of their religion, The other clafs, confifting of thofe who are in facred orders, inftruct their difciples in the religious myfteries of their fect, who are bound by oath not to reveal any part of them. The fecular priefts fhave their beards, but not their heads; and are habited in a large and loofe drefs, after the manner of the country; on their heads they wear a lackered hat, with a filken taffel hanging down

RELIGION,

down behind. Since the introduction of *Budfdo*'s doctrine into this country, this fect has adopted a greater variety both of tenets and ceremonies than it originally embraced, and unqueftionably merits the preference before all other fects in the ifland, notwithftanding all the fuperflition with which it is infected. Kubo profeffes himfelf of this fect, and is bound to make a vifit every year, either in perfon or by his ambaffador, to one of their temples, and there to perform his devotion, and at the fame time to leave behind him pre-fents of great value.

Budído's doctrine was originally brought hither from the western coast of the East-Indies; that is to fay, from Mallabar, Coromandel, and Ceylon. Budha, who without doubt is the fame with Budsdo, was a prophet among the Bramins, who is reported to have been born in Ceylon about one thousand years before the birth of Christ, and was the founder of that fect which has fince diffufed itfelf over every part of the East-Indies, and to the remoteft boundaries of Afia. The doctrine, however, did not gain repute in China till a long time after its first introduction; from thence it paffed over into Coræa, and from that place into Japan, where it was very generally received, and, being blended with that of the ancient Sinto, gave birth to the most monstrous and abfurd fuperititions. Its principal tenets con-

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fift in the following maxims: that the fouls of men and beafts are alike immortal: that a juft diffribution of rewards and punifhments takes place after death; that there are different degrees of happinefs as well as of punifhment; that the fouls of the wicked transmigrate after death into the bodies of animals, and at laft, in case of amendment, are translated back again into the human form, &c. &c. To the Supreme God they give the name of *Amida*; and Satan is called *Jemma*.

The churches of all the different religious fects are in general built upon the moft eligible fpots, both in the villages and in the towns; the roads leading to them likewife are frequently adorned with alleys of cyprefs trees, and handfome gates; moft of them have a feparate apartment for the idol, who is fometimes exhibited fitting upon an altar, furrounded with incenfe, flowers, and other decorations.

The churches throughout the whole country are open every day in the year; but they are, as the reader will eafily imagine, more generally frequented on the cuftomary feftival days, and likewife at other times, by a multitude of vifiters, who repair thither in order to amufe and divert themfelves.

The ufual holidays in Japan are the first day in every month, when they rife early in the morning,

morning, drefs themfelves handfomely, and go to pay their refpects to their friends and fuperiors, at the fame time wifhing them joy of the new month. This day is kept as a feftival throughout the whole empire; a cuftom which has been obferved from the earlieft ages. The full of the moon, or the fifteenth day, is another holiday, on which the people refort to the temples in greater numbers than on the firft. The third feftival is of lefs confequence, and falls upon the twenty-eighth day, or the day before the new month.

Befides thefe monthly feftivals, they celebrate five more, which happen but once in the year: the first of these is New year's day. On this day they rife very early in the morning, drefs themfelves in their beft attire, and go round among their fuperiors, friends, and relations, to wifh them a happy new year; the remainder of the day is fpent in eating and drinking, vifiting the temples, and making merry: fome of them make a practice of giving away fome trifling prefent on thefe occafions; and very often the eldeft of the tribe gives a public fupper to his kindred. The whole country, at this time, is in a state of busy fermentation, as it were, which lafts for three whole days; after this the whole of the first month is dedicated almost to no other purpose than pastime and pleasure. The second annual

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annual feftival falls upon the third day of the third month; the *third* upon the fifth day of the fifth month; the *fourtb* upon the feventh day of the feventh month; and the *fiftb* upon the ninth day of the ninth month. Thefe months and days, which make always uneven numbers, are confidered by the Japanefe as unlucky, and are therefore dedicated (fetting all bufinefs afide) to mirth and mutual congratulations, and in fome measure, though but little, to the fervice of the divinities. On fome of thefe holidays, in preference to other days, they celebrate their nuptials, give public entertainments and other diverfions; as it is a maxim with them, that the gods take delight in feeing mankind joyful and happy.

Some of the churches in the country being more worthy of note than others, it is common to perform pilgrimages thither from all parts of the empire, in like manner as the Mahometans are accuftomed to vifit Mecca. Among these the temple of *Ifie*, which is confecrated to TENsio DAI SIN, the most ancient of their gods, and fupreme above all the other celeftial divinities, is particularly remarkable. This temple is the most ancient in the whole empire, and at the fame time in the worst condition, being now fo exceedingly decayed with age, that it can fcarcely be kept together with the greatest care and attention. It has no other ornaments than a mirror, and

and flips of white paper hung round about on the walls, denoting that nothing impure may approach, or can be pleafing to God; as likewife that nothing can be hid from his all-feeing eye. The Emperor, who cannot perfonally vifit this temple, fends hither every year an ambaffador in his ftead, in the first month of the year. Every one of his fubjects, without any exception of age or fex, is bound to undertake a pilgrimage hither at leaft once in his life-time, and many perform it every year : people of fuperior rank, however, go but feldom; as here, as well as in other places, they arrogate to themfelves various privileges and prerogatives, in which they confult their private eafe and convenience, rather than their duty. Thefe journies may be undertaken at any feafon of the year, as best fuits the convenience of the party, but in general they chufe the pleafanteft months, efpecially the fpring, The performance of fuch a pilgrimage is deemed highly meritorious, and is befides rewarded with an indulgence, granting remiffion of fins for the whole year. In the courfe of my journey to the imperial court at Jedo, I faw fome thoufands of theie devout pilgrims, many of whom were fo wretched and indigent, that they were obliged to beg their way. Thefe miferable people even carried their beds with them, agreeable to the fashion of the country, confisting of a straw matt,

matt, which they carried on their backs; moft of them were farther provided with a little bucket, which ferved them to drink out of, as likewife to receive the alms given them. On this bucket I faw the name of the owner infcribed, which ferved to fhew who the traveller was, in cafe he fhould meet with any calamity, or chance to die on the road. On their arrival at *Ifie*, the pilgrims are conducted by fome prieft to the temple of the god, where they humbly prefer their prayers, and, in confideration of fome prefent made to the prieft, are favoured with an indulgence; which confifts of a few thin laminæ of pewter, kept in an oblong box, made likewife of thin pewter.

Befides the priefts employed in the fervice of the different churches, there is another clafs, or a lefs facred Order of them. The order of Blind Monks is, perhaps, one of the moft fingular that ever was known, and is not to be paralleled in the whole world, confifting of none but blind members, who are difperfed over the whole empire. The order of Jammabos, or Monks of the Mountain, is likewife worthy of notice; it was founded about 1200 years ago, and has a General, who refides in Miaco, and diftributes titles of honour to his dependants, according to their various merits. Thefe wear, by way of diftinction, a finall cord fufpended from the neck,

neck, to which are attached feveral pieces of fringe, of different lengths, according to the merit of the wearer : they farther wear a fcymitar on the left fide, and carry in their hands a ftaff with a copper head to it, and a conch, or Murex tritonis, which ferves them inftead of a trumpet. Their head is covered with a cap, on their back is hung a fack, and a pair of fhoes, to make ufe of when they travel over the mountains, and they are likewife frequently provided with a rofary, or kind of pater nofter. The monks of this order fuffer many hardfhips, and are in duty bound, once every year, to the great and imminent danger of their lives, to traverfe wild forefts, and to climb up to the fummits of the higheft mountains. It is furthermore incumbent upon them to ftudy cleanlinefs; on which account they bathe very often in cold water, and fubfift folely upon roots and herbs which they gather in the mountains; in fine, they wander barefoot over the whole country, and, like the gypfies in the north, cure diforders, reftore stolen goods, tell fortunes, &c.

Votos are frequenly made by fuperfittious perfons; thus, for inftance, one of our beft interpreters, a man advanced in years, having made a vow, a long time back, never to make use of fhoes, and being this year employed to accompany

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pany the Dutch embaffy to the imperial court in the depth of winter, marched along very patiently upon his bare feet; bore all the inclemency of the weather with the unconcern of a Stoic, and, what was furprizing, did not afterwards fuffer any inconvenience in confequence of his hard and troublefome expedition.

Numeries have been eftablished in this country upwards of a thousand years ago, although, with respect to number, they fall infinitely short of those established in Europe.

Every Order or fect has conftantly its General refident in *Miaco*; befides which every church or convent has its own fuperior: exclufively of thefe, they have likewife at the fecular Emperor's court in *Jedo*, their ecclefiaftical plenipotentiary; whofe bufinefs it is to fettle fuch difputes as concern temporal matters in the country, as likewife to take cognizance of the mifconduct of thofe who are in holy orders: but when fentence of death is to be paffed upon the latter, the warrant muft always be previoufly figned by the General of the order.

The Christian religion was brought into Japan immediately after the difcovery of this country by the Portuguese. The first Jesuit Missionaries arrived in the province of Bungo in the year 1549, and in a short time spread themselves over the

the whole country, where they continued till the year 1638, when 37,000 Chriftians were maffacred. In 1549, a Japanese youth was baptised in Goa, who gave the Portuguese great infight into the advantages which they might reap in Japan, both with refpect to commerce and the propagation of the Christian religion. The Portuguese enjoyed here the most unlimited freedom, with liberty to travel over the whole country, to trade and to preach. Their commerce proved very lucrative, and the work of conversion made fuch a rapid progrefs, that many of the Princes of the empire, as for inftance, the Princes of Bungo, Arrina, Emura, and many more, embraced the Chriftian religion, which induced the Portuguese to come over in great numbers, marry, and fettle in different parts of the country. In 1582, after forty years labour, the Catholic religion was in fuch high efteem here, that a Japanefe embaffy was fent to Rome to Pope GRE-GORY XIII. with letters and valuable prefents. But the incredible profits of this commerce, added to the rapid progrefs of the Chriftian religion, foon puffed up the Portuguefe with pride, and it was not long before their avarice and haughtinefs proved their ruin. In proportion as their riches and credit increased, they became infupportable to the Japanefe, and were at length detefted to fuch a degree, that already in the year

year 1586 a decree was iffued for the extermination of the Chriftians; in confequence of which, heavy perfecutions were commenced against them, and in the year 1590 only, upwards of twenty thousand of them were put to death. Notwithftanding all this, numbers of the Japanefe daily became profelytes to the Chriftian faith; fo that in the years 1591 and 1592 not lefs than twelve thousand were converted and baptifed. Even the Emperor KUBO FIDE JORI himfelf professed Chriftianity, together with his court and army; and had the Portuguefe but conducted themfelves with prudence and gentlenefs, there is every reafon to believe, that the perfecutions already commenced against them would have ceased. But instead of this, they gave daily greater fcope to their haughtinefs and ambition, and one of their bishops behaving with unwarrantable rudeness towards a Prince of the Empire, thereby accelerated their final ruin; giving, at the fame time, a decifive blow to their lucrative commerce, together with the propagation of the Christian religion. This circumflance took place in the year 1596, when a certain Prince was fo grofsly affronted by an ambitious Prelate, during a journey to the imperial court, that, on his arrival at Jedo, the former laid before Kubo a statement of the whole affair. Hence arofe a new perfecution against the Chriftians in the year following; the Priefts being

being forbidden to preach, a great many of the Clergy banished out of the country, and the mercantile part of the colony fent to the island of Defima. At this time too a confpiracy was discovered, which the Portuguese had set on foot against the Emperor, with an intent to dethrone him. The Dutch, who happened at that time to be at war with the Portuguese, having captured one of their veffels, found, among other papers, a letter from a certain Japanese Captain, named Moro, to the King of Portugal, containing the particulars of the plot concerted against the Emperor's throne and perfon. The actual exiftence of this confpiracy being afterwards fully authenticated by another letter written by Moro to Macao, the Japanese government came to the final determination to banish all Christians from the empire, who should refuse to abjure the Catholic faith, or elfe to put them all to death without quarter. This perfecution was accordingly commenced, and carried on without intermiffion for the fpace of forty years, when it ende in the total eradication of the Christian religion, together with the final overthrow of the trade carried on by the Portuguese; after 37,000 Chriftians, who had taken refuge in the caftle of Simabara, where they fuftained a fiege, had been forced to furrender, and were all put to the fword in one day. The Japanefe, who were perfuaded VOL. IV. That

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that this unwarrantable conduct in the Chriftians was the infeparable confequence of their doctrines, took from that time forward the moft efficacious meafures to prevent the Chriftian faith from being ever re-eftablifhed in their dominions; and the Portuguefe received ftrict injunctions, under the fevereft penalties, never to approach their coafts any more. And in order the more effectually to difcover whether any Japanefe Chriftians remained hidden and concealed in the country, recourfe was had to various inftitutions, and, among others, to that of trampling upon the images of the faints, a cuftom which ftill prevails, and is repeated at the commencement of every year in Nagafaki and the circumjacent country.

Philofophers and moralifts are regarded in this country in the fame light as priefts and facred perfons, and their tenets have been embraced with equal ardour with those of other spiritual fects. The chief, which has obtained estimation and repute in Japan is *Sjuto* or *Koofi*, known in Europe by the name of the Morality of Con-FUCIUS. This system derives its origin from China, where CONFUCIUS was born 400 years after BUDSDO. Its followers, though they cannot properly be faid to worship any God, place their *funmum bonum*, nevertheles, in a virtuous life; and admit of rewards or punishments for man in this life only. They confess that a universal foul

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or fpirit belongs to the world, without acknowledging any other gods, without having churches, and without worfhipping any one. Their doctrine, therefore, chiefly inculcates the following maxims; to lead a virtuous life, to do juffice to every man, to behave at the fame time to all perfons with civility, to govern with equity, and to maintain an inviolate integrity of heart. They do not burn their dead, but lay them, like the Europeans, in a cheft, and bury them in the earth. Suicide is not only deemed lawful among them, but it is even applauded, and confidered as an heroic act.

The difference between this fyftem of morality, which has been introduced among them in latter times, and their most ancient religion, is very great and remarkable. In their modern fystem we discover the offspring of human wit; whilft their ancient religion exhibits evident traces of the divine Law of Moses.

FOOD, AND THE VARIOUS MODES OF PREPARING IT.

IN the multiplicity of the articles of food to be met with in its iflands, and the furrounding ocean, and which both nature and art confpire D_2 to

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to furnish and prepare, Japan may, perhaps, be faid to furpafs most other countries hitherto known to us. The Japanefe not only make ufe of fuch things for food and aliment, which are in themfelves wholefome and nutritive, but take in almost the whole of the animal and vegetable kingdoms, not excepting the most poifonous; which, by their mode of dreffing and preparing them, may be rendered harmlefs and even ufeful. The meat that is ferved up in every difh, is cut into fmall pieces, thoroughly boiled and ftewed, and mixed with agreeable fauces. In this manner every thing is ferved up in the very beft order; and the mafter of the house is not harraffed at his table with the trouble of cutting up great pieces, or of diffributing the provisions round to the guefts. At meal-time every one feats himfelf upon the foft floor-mats; facing each gueft is placed a finall fquare table, that ferves for the purpole of holding the different difhes, which already in the kitchen are portioned out to each perfon, and are ferved up in the neateft veffels, either of porcelain or japanned wood. Thefe cups are tolerably large bafons, and always furnished with a lid. The first course confists generally of fifh, with fifh-foup; the foup they drink out of the cup, but eat the folid part, which is chopped into finall pieces, with two lackered pegs, which they hold fo dexteroufly between

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between the fingers of the right hand, that they can with the greateft nicety take up the fmalleft grain of rice with them; and thefe pegs ferve them for the purpole both of fork and fpoon. As foon as one courfe is finished it is taken away, and another ferved up in its room. The laft courfe is brought to table in a cup of blue porcelain, and this likewife is furnished with a lid. The victuals are carried in by a fervant, who kneels down as he places them upon the table, and takes them away after dinner. When feveral perfons eat in company together, they all falute each other with a low bow, before they begin to eat. The ladies do not eat with the men, but by themfelves. Between each difh, they drink warm facki, or rice-beer, which is poured out of a tea-kettle into fhallow tea-faucers, made of lackered wood; and during this, they fometimes eat a quarter of an egg, boiled hard, and very frequently they drink at the fame time to fome body's health. In general they eat three times a day; about eight o'clock in the morning, two o'clock at noon, and eight in the evening. There are fome that obferve no regular time for their meals; but eat whenever they are hungry; for which reafon the victuals are obliged to be kept in readinefs the whole day. Rice, which is here exceedingly white and well-tafted, fupplies, with the Japanefe, the place of bread : D 3 they

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they eat it boiled with every kind of provisions. Mijo foup, boiled with fifh and onions, is eaten by the common people, frequently three times a day, or at each of their cuftomary meals. Mijos are not unlike lentils, and are finall beans, gathered from the Dolichos Joja. Fifh is likewife a very common difh with the Japanefe, both boiled and fried in oil. Fowls, of which they have a great variety, both wild and tame, are eaten in great abundance; and the flefh of whales, though coarfe, is in feveral places, at leaft among the poorer fort, a very common food. It has a red and difagreeable look, and was often expofed for fale in the ftreets in Nagafaki, when I paffed by, in order to go on board of fhip.

In preparing their victuals, they make use of expressed oils, of several different forts. These oils are made chiefly from the seeds of Sefamum, of Tjubaki, (the Camellia japonica) Kiri, (the Bignonia tomentofa) Abrasin, (Dryandra cordata) Azedarach, and several others; sometimes from the Rhus succedanea, Taxus baccata, and Gingko. In their victuals they make a very plentiful use of mushrooms, and the fruit of the Solanum melongena, as well as the roots of the Solanum esculentum, (batatas) carrots, and several kinds of bulbous roots, and of beans. For the defert, they have kaki-figs, chesnuts, water-nuts, and pears, which are possibly often exported from hence to Batavia; besides lemons, Seville,

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Seville and China-oranges, fhaddocks, grapes, &c. Among their valuable fifthes is what they call the tay, (by the Dutch called fteen-braafem,) which is frequently fold at a very high price, and purchafed for holidays and feftival occafions. The Perca Jexlineata (Ara) ranks among their fineft fifth, and their Clupea Thriffa is fo fat, that it is equal to the beft herrings that are caught in Europe. Salmon is only found near the Fakonie mountains, and is neither fo large, nor fo well-tafted as those of Europe. Of oyfters and other fhell-fifth, feveral different forts are eaten; but always boiled or ftewed, as likewife fhrimps and crabs.

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TEA and facki-beer conflitute the fole liquors of the Japanefe, which fall infinitely fhort in number of thofe which the thirfty Europeans can exhibit. Wines and diftilled liquors they never make use of, and can hardly be perfuaded to tafte them, when offered them by the Dutch. Coffee is fearcely known, even by the tafte, to a few of the interpreters; and brandy is not with them one of the neceffaries of life. They have hitherto never fuffered themfelves to be corrupted

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by the Europeans that have vifited them: rather than adopt any practice from others, which might be actually both ufeful and convenient, they have chofen to retain their ancient and primitive mode of life, in its original purity; into which they would not even infenfibly introduce any ufage or cuftom, that in the courfe of time might become ufelefs to them, or detrimental.

Sacki is the name of a kind of beer, which the Japanefe prepare from rice; it is tolerably clear, and not a little refembles wine, but has a very fingular tafte, which cannot be reckoned extremely pleafant. This liquor, when it is frefh, is more inclined to a white colour, but after it has lain in fmall wooden cafks, it becomes very brown.

This drink is vended in every tavern, in the fame manner as wine is fold in all cellars in Europe, and it conflitutes their cheer at entertainments, and loofer hours, and is likewife ufed as wine, by the more wealthy, at their very meals. It is never drank cold by the Japanefe, but is warmed in a common tea-kettle, from which it is poured out into flat tea-cups, made of lackered wood, and in this manner it is drank quite warm, which in a very fhort time heats and inebriates them; but the whole intoxication vanifhes in a few minutes, and is generally fucceeded by a difagreeable head-ach. *Sacki* is imported to Batavia, as an article of commerce, but is drank out

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out of wine-glaffes before meals, to provoke an appetite, on which occafions the white *facki* is generally preferred, which is lefs difgufting to the tafte.

Tea is drank throughout the whole country, for the purpose of quenching thirst; for which reason they keep in every houfe, and more efpecially in every inn, a kettle upon the fire all day long, with boiling water and ground tea; from this the brown decoction is poured out for immediate ufe, and another kettle, filled with cold water, affords them the means of diluting and cooling it. In the houses of people of diffinction, visiters are always prefented with green tea, with which the Dutch are entertained, whenever they wait upon any of the privy-counfellors or other perfons in office. This tea is fresh gathered, and ground to powder; boiling water being first poured into a can, they put in the tea in its pulverized ftate, and ftir it round with a flick, in the fame manner as is usually done with chocolate, and then pour it out into tea-cups ; it must be drank immediately, otherwife the green powder fettles at the bottom. No perfon of diffinction undertakes a journey of any length, without carrying with him a lackered cheft, which is borne by a man-fervant, and in which water is kept boiling all the way; ground tea, tea-cups, and every other

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other neceffary appendage are ready prepared and at hand.

The tea-fhrub grows wild in every part of the country, but I met with it most frequently growing on the very borders and margins of cultivated lands, or upon fuch mountains and downs as did not very well anfwer the trouble of cultivation. This plant grows from the feed in the course of fix or feven years to the height of a man; but already in the third year of its growth it yields fome produce of its leaves. Those who are fomewhat accustomed to this kind of harvest, can gather, in the fpace of one day, ten or twelve pounds weight of them. The older the leaves are, and the later in the year the gathering is made, the greater abundance, it is true, they yield, but then the tea is fo much the worfe; as the finaller leaves, and those which have but just fhot forth, furnish the finest and most valuable. The tea, therefore, is gathered annually at three different feasons. The first harvest commences (at the end of Songvats) the beginning of March, or the end of February, at which feafon the leaves begin to push forth, posses a viscous quality, and are gathered folely for the use of the Emperor, or for people of rank and opulence; whence it takes the name of imperial tea. A month after this, the fecond harveft takes place, when the leaves are full grown, but are ftill thin, tender,

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tender, and well-flavoured. Again a month, and the principal harveft commences, when the greateft quantity is gathered; the leaves having all pufhed forth completely, and become very thick and ftout. Young fhrubs always yield better tea than old ones, and fome places produce it in greater perfection, and more delicious than others.

The tea-leaves are afterwards, for the fake of drying them, fpread upon thin plates of iron, which are made hot. During this operation they muft be continually flirred round with both hands, as long as ever the fingers can fupport the heat. They are next rolled to and fro upon mats, till they grow perfectly cool; and in cafe they are not then fufficiently dry, they are roafted and rolled over again, once, or as many times as may be requifite.

THE SMOKING OF TOBACCO

Was in former times not cuftomary in this country; but it is probable, that the Portuguefe were the first who introduced this practice. The Japanese have no other name for tobacco than *tabaco*, which is smoked indiscriminately by both fexes. The tobacco used for this purpose, is planted

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planted in the country, and is the common Nicotiana tabacum. They cut their tobacco into very fine fhreds, almost as fine as human hair : the pipes which they use are very fhort, feldom more than fix inches in length, and are made of lackered bamboo, with a copper mouth-piece and bowl; this latter is fo finall, that it does not contain above a third part or one half of a thimble full of tobacco, which is twifted up and crammed in with their fingers. Thefe pipes are foon fmoaked out, in a very few whiffs only, upon which the afhes are beaten out, and the pipe is filled again; which practice they repeat feveral times. The fmoke is puffed out each time both through the noftrils and the mouth. Perfons of diffinction have always the following apparatus for fmoking: an oblong box, eighteen inches long, a foot broad, and three fingers high, lackered of a brown or black colour, is placed before each perfon; in this box are laid pipes and tobacco, and three cups are placed, which are ufed in fmoking : one of thefe round cups, which is generally made of thick and ftout porcellain, or lackered wood, is lined with brafs on the infide, and is filled with ashes, in which a live coal is placed, for the purpole of lighting the pipe : the fecond ferves to receive the afhes of the tobacco after the pipe is finoked out, when this latter is ftruck with force against the edge; and fometimes

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fometimes it is fpit upon, in order to quench the fparks. The third fupplies the place of a fpittingpot, during the time of finoking. At vifits, this apparatus is the first thing that is placed before the guefts. One of these boxes is fometimes furnished with a lid, which is tied fast with a ribbon, and is carried by a fervant, whenever they go to fuch places, where they do not expect to have tobacco prefented to them. The poorer clafs generally carry both their pipe and tobacco with them, when they go out; the pipe is then put into a cafe, and worn on the right fide in the girdle at the back of their loins; the tobaccopouch is hardly of the breadth of a hand, and fomewhat fhorter, furnished with a flap at the top, which is fastened together with a little ivory hook ; this pouch is likewife flung to the girdle by means of a filken cord, and a bead of cornelian, or a piece of agate : it is made for the most part of a particular kind of filk, with interwoven flowers of filver and gold.

FESTIVAL

FESTIVAL SPORTS AND GAMES.

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ALTHOUGH gravity forms the general character of the Japanese nation, this serious difpolition, however, does not prevent them from having their pleasures, their sports, and festivities. These are of two kinds, occasional or periodical, and constitute part of their worship : the latter, in many respects, may be compared to our plays. Their chief festivals are the *Feast of Lanthorns*, and what is called the *Matfuri*.

The Lanthorn-Festival, or Feast of Lamps, is celebrated towards the end of August, and is called by the natives Bong. It lafts three days ; but the fecond afternoon, with the following night, are kept with the greatest feftivity. It was originally inftituted in memory and honour of the dead, who, they believe, return annually to their kindred and friends on the first afternoon of these games; every one vifiting his former houfe and family, where they remain till the fecond night, when they are to be fent away again. By way of welcoming them on their arrival, they plant stakes of bamboo near all the tombs, upon which they hang a great number of lanthorns, with lights, and those fo close to each other, that the whole mountain appears illuminated : thefe lanthorns are kept alight till nine or ten o'clock at night.

night. On the fecond evening, when the fpirits of the defunct are, according to their tradition, to be fent away again, they fabricate a fmall veffel of ftraw, with lights and lanthorns in it, which they carry at midnight in proceffion, with vocal and inftrumental mufic, and loud cries, to the fea-fhore, where it is launched into the water, and left to the wind and waves, till it either catches fire and is confumed, or is fwallowed up by the waves. Both of thefe illuminations, confifting of feveral thoufand fires, exhibit to the eye an uncommonly grand and beautiful fpectacle.

The feaft of Matjuri is celebrated upon fome certain feftival day, and in honour of fome particular god. Thus, for inftance, in the town of Nagafaki, where I was prefent at one of thefe feftivals, it is celebrated in memory of Suwa, the tutelar deity of the town. It is celebrated on the ninth day of the ninth month, which is the day of this idol's nativity, with games, public dances, and dramatic reprefentations : the feftival commences on the feventh day, when the temples are frequented, fermons are preached, prayers are offered up, and public fpectacles are exhibited; but the ninth day excels all in pomp and expensive magnificence, which they vary every time in fuch a manner, that the entertainments of the prefent year bear no refemblance to those of the laft; neither are the fame arrangements made. The

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The expences are defrayed by the inhabitants of the town, in fuch manner, that certain ftreets exhibit and pay the expences of certain pieces and parts of the entertainment. I, together with the reft of the Dutch, had an invitation fent me. to be a fpectator of this feftival, in 1776, which was celebrated in a large open fpot in the town of Nagafaki. A capacious houfe, refembling a large booth, raifed upon pofts, and provided with a roof and benches, was erected on one fide. for the convenience of the spectators. These confifted not only of the magistrates and ecclefiaftics, but likewife of foreigners; and a guard was placed to keep off the croud. First of all appeared the priefts, carrying the image of the idol Suwa, and took their places, habited in black and white. A company of ten or twelve perfons played upon inftruments of mufic, and fang the exploits of their gods and heroes; in the mean time that a party of virgins dancing, difplayed the most enchanting elegance in their geftures and deportment. The mulic confifted in a mere rattling noife, which might perhaps found more grateful in the idol's, than in human ears. A large parafol was next introduced, infcribed with the name of the ftreet, and emblazoned with its coat of arms, followed by a band of mulicians, in masks, with drums, flutes, bells, and vocal mufic. These were fucceeded by

by the device itfelf, which was different for every ftreet; then followed a band of actors; and laftly, the inhabitants of the ftreet, in folemn proceffion, with an innumerable and promifcuous croud at their heels. This progreffive march lafted nearly a whole hour, after which they marched back again in the fame order, and a fecond proceffion fucceeded in its place; this was followed by a third, and fo on, during the whole forenoon. The inhabitants of each ftreet vied with each other in magnificence and invention, with refpect to the celebration of this feftival, and in difplaying, for the most part, fuch things as were characteriftic of the various produce of the mines, mountains, forefts, navigation, manufactures, and the like, of the province from which the ftreet derived its name, and whence it had its inhabitants.

Plays I had an opportunity of feeing acted feveral times, both in Nagafaki and during my journey to the imperial court at Ofaka. The fpectators fit in houfes of different dimensions upon benches; facing them, upon an elevated, but small and narrow place, stands the theatre itself, upon which feldom more than one or two actors perform at a time. These are always dressed in a very singular manner, according as their own taste and fancy suggest, infomuch that a stranger would be apt to believe, that they vol. IV. E exhibited

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exhibited themfelves, not to entertain but to frighten the audience. Their gestures, as well as their drefs, are ftrangely uncouth and extravagant, and confift in artificial contortions of the body, which it must have cost them much trouble to learn and perform. In general they reprefent fome heroic exploit or love-ftory of their idols and heroes, which are frequently compofed in verfe, and are fometimes accompanied with music. A curtain may, it is true, be let fall between the actors and the fpectators, and fome neceffary pieces be brought forward upon the theatre : but in other refpects, thefe fmall theatres have no machinery nor decorations, which can entitle them to be put in comparison with those of Europe. I did not observe that public spectacles contributed any more in this country than in other places, to reform the manners of the people; as the defign of them appears to be the fame here as in other parts of the world, and as they tend rather to amufe the idle frivolity of mankind with jugglers tricks, than to amend the heart, rather to fill the pockets of the actors, than to be of any real benefit to the fpectators.

When the Japanese with at any time to entertain the Dutch, either in the town of Nagafaki, or more particularly during their journey to the imperial court, they generally provide a *band of female dancers*, for the amusement of their guests. These

Thefe are generally young damfels, very fuperbly dreffed, whom they fetch from the inns; fometimes young boys likewife are mixed among them. Such a dance requires always a number of perfons, who turn and twine and put themfelves into a variety of artificial poftures, in order to reprefent an amorous or heroic deed, without either fpeaking or finging; their fteps are however regulated by the mufic which plays to them. The girls are in particular provided with a number of very fine and light night-gowns, made of filk, which they flip off one after the other, during the dance, from the upper part of their body, fo as frequently to have them, to the number of a dozen together, fuspended from the girdle which encircles their loins. Their dances therefore correspond, in some measure, with our country-dances, although, upon the whole, they widely differ even from thefe.

Their weddings and funerals may likewife claim a place among their feftivals, although they do not celebrate them with the fame pomp as do the Europeans and other nations.

Marriages are folemnized upon a pleafant eminence without the towns, in the prefence of the relations and the priefts, when the following ceremonies are obferved. The bridegroom and the bride advance together to an altar erected for that purpofe, each holding a torch in their hand; E_2 whilf

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whilft the prieft is employed in reading a certain form of prayer, the bride, who occupies the right-hand place, first lights her torch from a burning lamp, and then holds it out to the bridegroom, who lights his torch from hers; upon which the guefts with the new-married couple joy. In this country the men are not allowed a plurality of wives, as in China, but each man is confined to one, who has liberty to go out and fhew herfelf in company, and is not fhut up in a reclufe and feparate apartment, as is the cuftom with their neighbours. Inftances of divorces fometimes occur among them, but thefe cafes are not very common. The more daughters a man has, and the handfomer they are, the richer he efteems himfelf, it being here the eftablished cuftom for fuitors to make prefents to their fatherin-law, before they obtain his daughter.

Fornication is very prevalent in this country; notwithftanding which, chaftity is frequently held in fuch high veneration, both with married and fingle, that when they have been injured in this point, they fometimes lay violent hands upon themfelves. In this country likewife the difhonourable practice of keeping miftreffes obins with fome; but the children they bring into the world cannot inherit, and the miftreffes are confidered as fervants in the houfe.

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The Japanese either burn their dead to ashes, or elfe bury them in the earth. The former method, as I was informed, was in ancient times much more cuftomary than it is at prefent, though it is still practifed with perfons of diftinction. This ceremony is not always performed on a funeral pile in the open air, but takes place at times in a finall house of stone, calculated for that purpofe, and furnished with a chimney. The afhes are carried away in a coftly veffel, and preferved for fome time in the houfe at home, after which they are buried in the earth, Both men and women follow the corpfe in norimons, together with the widow and children of the deceafed, and a numerous train of priefts, who fing all the time. After one of the priefts has fung the eulogy of the deceased, he waves thrice over the corpfe a burning torch, and then throws it away: upon this it is picked up by the children or other relations, and the pile fet on fire with it. Those who are interred without being first burned, are inclosed in a wooden cheft, after the cuftomary manner, and let down into the grave. The children are very much attached to their parents, even after their death. During the interment, and after the fame, fragrant fpices are caft into the grave, and the fineft flowers are planted upon their tombs. The furvivors continue to vifit the manfions of the dead for feveral

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years,

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years, and not unfrequently during their whole lives; repeating their vifits at first every day, then every week; after that once a month, and at last once a year, exclusively of the Lanthorn Festival, which is celebrated every year in honour of the defunct.

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THE Sciences in general fall infinitely fhort in Japan of that exalted pre-eminence, to which they have attained in Europe. The Hiftory of their own country, may, however, perhaps be deemed more authentic here than that of most other nations, and this, together with the fcience of houfe-keeping, is fludied, without exception, by them all. Agriculture, which the Japanese confider as the moft neceffary and ufeful fcience, for the profperity and ftability of the empire, is in no place in the world fo much efteemed as here; where neither foreign nor civil wars, nor emigrations, leffen their population; and where they never think of encroaching upon the territories of other nations; nor yet of introducing the unneceffary and often detrimental productions of other climates : but where, on the contrary, their

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their whole care is directed in the higheft degree, that not a fingle fod of earth shall lie fallow, nor the revenue of the earth be unthriftily employed.

Aftronomy is in great favour and repute ; notwithftanding which they are unable, without the affiftance of the Chinefe and Dutch Almanacs, to compose a perfect Calendar, or to compute to minutes and feconds an eclipfe of the fun or moon. Medicine neither has attained, nor is it likely that it ever will attain, to any degree of eminence. With Anatomy they are totally unacquainted, and their knowledge of difeafes is very imperfect, involved in error, and frequently in fable : Botany and the knowledge of remedies, conftitute the whole of their medical knowledge. Of Natural Philosophy and Chemistry, the Japanefe have little more idea than what they have lately learned from the Phyficians of Europe. Law is not here a tedious and complicated ftudy : no nation upon earth has a finaller code, and fewer Judges. Commentators upon the Statutes and Advocates are here totally unknown; but in no country perhaps are the laws more ftrictly carried into execution, without any regard to perfons, and without partiality, or violence. The laws are fevere, and law-fuits fhort. The original Language of the country, in opposition to that of all other nations, is at once copious and expressive. Of foreign languages, Chinefe 16

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is learned by those who devote themselves to ftudy, and read Chinefe books and writings. The Interpreters and fome of their Phyficians even learn the Dutch language, and fome of thefe underftand a little Latin ; a language which for nearly two thousand years has given more trouble to youth in the fchools of Europe, than in general they have derived benefit from it, Their Morality does not confift in any curious labours of the brain, but in fimple and rational doctrines, which they endeavour to reduce to practice in their conduct by leading a virtuous life. And this morality is preached and enforced by all their religious fects, and is never detached from their divinity, with which it ftands in the closeft connexion. The Science of War, is with thefe Orientals very fimple : courage, fortitude, and love of their country, make ample amends for their ignorance of military tactics; and with these qualifications they have hitherto always proved victorious, and never once been obliged to bow their necks to their enemies. Four hundred and feventy-one years before the commencement of our æra, we find the first mention made of war in the Japanese History. After that period they have been feveral times difturbed by foreign forces. Anno 1284, after the Tartars had fubdued China, Mooku, their General, fent 4000 veffels, and 240,000 men to conquer

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conquer Japan, but without being able to accomplifh his aim.

The Art of Printing is unqueftionably very ancient in this country; but they always ufed, and ftill continue to use plates for this purpose, without having any knowledge of moveable types. They print upon one fide of the paper only, on account of its thinnefs, as otherwife the ink would fink through. They have even a knowledge of Engraving, although in the Art of Drawing they remain vaftly inferior to the Europeans, over whom they however boaft this decided preference, that they always draw forne animal, plant, or other object, that exifts in nature, and do not heap together upon tapeftry or other kinds of paintings, fantaftical figures of things, which have no actual existence; a circumftance, which has hitherto fo little engaged the attention of our artifts, and which must do no little credit to an enlightened and fenfible European. Surveying they understand tolerably well, and poffefs accurate maps, both of their country in general and of its towns. Befides the general map of the empire, I have feen special maps of Jedo, Miako, Ofaka, and the town of Nagafaki, which I likewife contrived to carry out of the country with me, notwithstanding the great danger with which this was attended, and the ftricteft prohibitions

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to the contrary. Like the Chinefe, the Japanele write in upright rows, or columns, from the top to the bottom, and then down again, beginning at the right hand and fo proceeding to the left, forming their letters with a pencil made of hare's hair, and touche, or Indian ink, which they rub every time with water upon a ftone. Poetry is a favourite study with this na+ tion, who employ it to perpetuate the memory of their gods, heroes, and celebrated men. Mulic is likewife held in high effimation, but hitherto they have neither been able to bring their mufical inftruments to any degree of perfection, nor yet have they made any progrefs in the fcience of harmony. At feftivals, and on other grand occafions, they make ufe of drums, fifes, ftringed instruments, bells, horfe-bells, and other mufical inftruments. The ladies efpecially are very fond of mufic, and even learn to perform upon different instruments themselves; but their favourite instrument is a kind of lute with four strings, which they ftrike with the fingers, and will pafs whole evenings at this diversion, although it is not very pleafant. The koto bears a ftrong refemblance to our dulcimers, having a number of ftrings, which are ftruck with fticks; and is inconteffibly the most agreeable instrument they have.

In feveral places, for the inftruction of children in reading and wrinting, public Schools are eftablished, in which all the children read aloud, and make a terrible noife. The children are in general educated without chastifement and blows; in their infant years fongs are fung to them in praife of their deceased heroes, which tend to encourage them in the practice of virtue and constancy. In youth they are admonished with feriouss, and good examples are held up for their imitation.

Arts and Manufactures are carried on in every part of the country, and some of them are brought to fuch a degree of perfection, as even to furpafs those of Europe ; whilst fome, on the other hand, fall fhort of European excellence. They work extremely well in Iron and Copper, and their Silk and Cotton manufactures equal, and formetimes even excel, the productions of other eaftern countries. Their Lacquering in wood, efpecially their ancient workmanship, furpasses every attempt which has been made in this department by other nations. They work likewife with great skill in Sowas, which is a mixture of gold and copper, which they underftand how to colour blue or black with their toufche, or ink, by a method hitherto unknown to us. They are likewife acquainted with the art of making Glass, and can manufacture it for any purpofe, both coloured

coloured and uncoloured. But window-glafs, which is flat, they could not fabricate formerly. This art they have lately learned from the Europeans, as likewife to make watches, which they fometimes use in their houses. In like manner they understand the art of Glass-grinding, and to form Telescopes with it, for which purpofe they purchafe mirror-glafs of the Dutch. In the working of Steel they are perfect mafters, of which their incomparable fwords afford the most evident proof. Paper is likewife manufactured in great abundance in this country, as well for writing and printing, as for tapeftry, handkerchiefs, clothes, for packing of goods, &c. and is of various fizes and qualities. They prepare it from the bark of a species of Mulberrytree, Morus papyrifera. The method is as follows. After the tree has fhed its leaves in the month of December, they cut off the branches about three feet in length, which they tie up in bundles, and boil in a ley of afhes, ftanding inverted in a covered kettle, till fuch time as the bark is fo fhrunk, that half an inch of the woody part is feen bare at the ends. They are then taken out and left in the open air to cool, cut up lengthwife, and the bark is ftripped off. Upon this the bark is again foaked three or four hours in water, and when it is become foft, they fcrape off the fine black fkin with a knife. The next thing

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thing to be done is, to feparate the coarfe bark from the fine, which produces the whiteft paper. The older the branches are, the coarfer is the paper. The bark is now boiled again in fresh ley, and the whole continually ftirred with a flick, and fresh water added to it, till the fibres feparate. The washing of it, which is a nice and delicate operation, is then performed in a brook, by means of a fieve, by ftirring the bark inceffantly about till the whole is reduced to the confiftence of a fine pap, and, thrown into water, feparates in the form of meal. It is then further mixed in a finall veffel with a decoction of Rice and the Hibifcus manibot, and ftirred well about, till it has attained a tolerable confiftence. After this it is poured into a wider veffel, from whence the fheets are taken and put into proper forms, made of grafs-ftraw, and laid one upon another in heaps, with fraw between, that they may be eafily lifted up. They are farther covered with a board, and preffed, at first lightly, but afterwards and gradually harder, till the water is feparated. When this is done, they lay the fheets upon a board, dry them in the fun, and then gather them into bundles for fale and ufe. An inferior kind of paper is likewife manufactured from the Morus Indica.

The *lackered* wood-work, which is executed in Japan, excels the Chinefe, the Siamefe, and indeed

indeed that of all other nations in the world. For this purpofe they make choice of the fineft fort of firs and cedars, and cover them with the very best varnish, which they prepare from the Rbus vernix, a tree that grows in great abundance in many parts of the country. This varnish, which oozes out of the tree on its being wounded, is procured from ftems that are three years old, and is received in fome proper veffel. When first caught, it is of a lightish colour and of the confiftence of cream; but grows thicker and black on being exposed to the air. It is of fo transparent a nature, that when it is laid, pure and unmixed, upon boxes and other pieces of furniture, every vein of the wood may be clearly feen. For the moft part a dark ground is fpread underneath it, which caufes it to reflect, like a looking-glafs; and for this purpofe recourfe is frequently had to the fine fludge, which is caught in the trough under a grind-stone. At other times ground charcoal is ufed, and occafionally fome blacker red fubftance is mixed with the varnish, and fometimes leaf-gold, ground very fine, when it is called Salplicat. This lackered work is afterwards for the most part embellished with gold and filver flowers and figures laid on upon the varnish, which, however, are liable to wear off in time : fometimes one has an opportunity of feeing thefe figures emboffed upon the varnish, and

and more efpecially in old work, which is greatly effeemed, and being rare, fetches a high price. This varnifh, which hardens to a transparent and difficultly foluble gum, will not endure any blows, but flies and cracks, almost like glass; though it can ftand boiling water without receiving any damage. With this they varnish over the posts of their doors and windows, their drawers, chefts, boxes, fcymitars, fans, tea-cups, and foup-difnes, their portable stools, and most articles of household furniture, which are made of wood.

No Japanefe is allowed to leave his native. land and vifit foreign countries; this being prohibited, under penalty of death. So that the long voyages which the people of this nation formerly undertook in their own veffels to Coræa. China, Java, Formofa, and other places, can be no longer performed, and the art of navigation muft of courfe be upon the decline. This, however, does not prevent them from making fhort Voyages between the rocks, with an inconceivable number of trading veffels, of different fizes, as likewife with fishing-finacks. They feldom venture out far enough at fea to lofe fight of land, and always take care to have it in their power to run every evening into fome port, or elfe to come into fome other place of fafety, in cafe of fudden forms. Yet they are provided with a compass, which

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which is not divided into fo many points as those which the Europeans make use of, but their vessels are open at the stern, fo that they cannot weather the open sea; and their rudders are large and inconvenient.

The Japanese have little furniture in their houses belides their apparatus for the kitchen; and what they use at their meals. Of these, however, as likewife of clothes and other neceffaries, one fees fuch an incredible quantity exposed for fale in the shops of their tradefmen; both in town and country, that one is led to wonder where they can find purchafers, and would be apt to fuppofe, that they kept magazines here to fupply the whole world. Here the native may felect, according to his varying tafte and fancy, all his clothes ready made, and may be furnished with shoes, umbrellas, lackered ware; porcellain, and a thousand other articles, without having occafion to befpeak any thing before-hand.

THE LAWS AND POLICE.

IF the laws in this country are rigid, the *Police* is equally vigilant, and difcipline and good order are as forupuloufly obferved. The happy confe-1 quences

quences of this are extremely vifible and important; for hardly any country exhibits fewer inftances of vice. And as no refpect whatever is paid to perfons; and at the fame time the laws preferve their priftine and original purity, without any alterations, explanations, and mifconftructions, the fubjects not only imbibe, as they grow up, an infallible knowledge of what ought, or ought not to be done, but are likewife enlightened by the example and irreproachable conduct of their fuperiors in age.

Most crimes are punished with death, a fentence, which is inflicted with lefs regard to the magnitude of the crime, than to the audacity of the attempt to tranfgrefs the hallowed laws of the empire, and to violate juffice, which, together with religion, they confider as the moft facred things in the whole land. Fines and pecuniary mulcts and amercements they regard as equally repugnant to juffice and reafon; as the rich are thereby freed from all punifhment; a procedure, which to them appears the height of abfurdity. Murder is punished with death; and, if this crime is perpetrated in a town, or in the open ftreet, not only the murderer himfelf, but fometimes his relations and dependants, and even the neighbours, partake in the punifhment, accordingly as they have been more or lefs accomplices in the crime, or have neglected to prevent its VOL. IV. F perpe-

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perpetration. To draw one's fword upon any one, is likewife a capital offence. Smuggling of all kinds is punished with death without mercy, and the punifhment extends to every individual concerned in the traffic, both buyers and fellers. Every death-warrant must be first figned by the National Council in Jedo, before it is carried into execution; previous to which alfo the culprit has a fair trial before the proper tribunal, and witneffes are heard. The general mode of punishment is private decapitation with a fcymitar, in prifon, although crucifixion and other painful modes of death are fometimes practifed. in public. Those, whose crimes do not merit death, are either fentenced to perpetual imprifonment, or elfe banished to some distant island, when all their property is confifcated. In the towns it often happens that the inhabitants of a whole ftreet are made to fuffer for the mal-practice of a fingle criminal; the mafter of a houfe for the faults of his domeftics, and parents for those of their children, in proportion to the share they may have had in the transaction. In Europe, which boafts a purer religion, and a more enlightened philosophy, we very rarely fee those punished, who have debauched and feduced others, never fee parents and relatives made to fuffer for neglecting the education of their children and kindred, at the fame time that thefe heathens 2

heathens fee the juffice and propricty of fuch punifhment. The *Prifons* are in this country, it is true, as in most others, gloomy and horrid; the rooms are, however, kept clean and wholefome, and confist of an apartment for the trial by torture, and another for private executions; a kitchen, a dining-room, and a bath.

The Imposts in the empire are different in the towns and villages, and in different places. Befides the confiderable prefents which Kubo receives annually from all the feudal Princes, and from the Dutch Company, this temporal Monarch has his revenues from certain towns and diftricts. The Princes derive their revenues, each from his province, and the towns which the fame contains; and their revenues differ in value, according to the fituation of the province itfelf, its opulence, extent, population, and cultivation. Each proprietor of a houfe is affeffed in proportion to the breadth of his houfe towards the ftreet, befides the prefents he makes to the civil officers, and the taxes he pays for the fupport of the temples and idols. The town of Nagafaki contains ninety ftreets, and fixty-two temples, or thereabouts, and the produce of its taxes amounts to about three mangokfs. The country is rated according to its produce, and this confifts, for the most part, in rice. Forests and other little cultivated tracts of land are rated lower.

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A Receiver General, or Voigt, collects this important impost. Arable land is divided into three claffes, according to its different degree of fertility. The man that cultivates a fresh portion of land, holds it free of all taxes after the first two or three years. In order to make an effimate of the value of a piece of ground, which, in foring, frequently lies under water, and at the fame time of the lord of the manor's income from it, lands of this defcription are fometimes meafured twice a year, viz. in fpring and in harvest-time. The taxes levied upon landed eftates are extremely heavy, and frequently amount to more than half, or even two-thirds of the produce. In order to calculate them, they measure off a portion of land, of which they cut down the corn, and thrash it for a fpecimen, and from thence afterwards calculate what may be the amount of the produce of the whole. The land belongs always to the Crown or to the Prince, and the Farmer holds it in fee no longer than while he cultivates it with proper care and attention.

In every town the most excellent order is kept up, for the prefervation of the welfare, peace, conveniency, and fecurity of the community. For this purpose four Burgomasters are appointed, of which number one presides every year, who is their prolocutor, speaking in his own name and

and those of his companions, and is called Ninban. Befides thefe an Ottona is appointed for every freet, who acts in the capacity of Commiffary, and is obliged to give in his report to the Burgomafter concerning every thing that happens : this officer has feveral of the town-officers under him, to execute his commissions. His duty is to fet down the names of all that are born or die in his ftreet, or marry, or travel, or remove thence, or arrive there; he likewife promotes union and concord among the inhabitants, and has the power of cafting offenders into prifon, and even of putting them in irons. This officer is cholen by the inhabitants of the ftreet, and is paid from the private revenue of the ftreet over which he prefides. Lodgers have not the privilege of voting. Lodgings are paid for by the month, the rent being in proportion to the fize of the room, which is afcertained by the number of mats upon the floor. Each Ottona has three Affeffors as his coadjutors, a Secretary, who fets down every thing that comes under the cognizance of the office, and a Calbier. The Townofficers act at the fame time in the capacity of fpies, who give the Ottona accurate intelligence of every thing that occurs. Each ftreet is, as it were, detached from the reft by gates at each end, which being thut on the approach of any tumult, cut off all communication with the other

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ftreets,

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ftreets, fo that no perturbator of the peace can efcape by flight.

Most admirable measures are adopted in the towns for the prevention of fires. The Burghers, including both houfe-keepers and lodgers, keep watch themfelves. Two keep watch every night, and their perfons are confidered fo facred, that it is a capital offence to attack them whilft on duty. Of these, one is constantly with the main guard, and whenever any apprehenfion is entertained of danger, the watch is doubled. The other goes the rounds, and is, properly fpeaking, the fire-watch; in which capacity he perambulates the ftreets, and gives notice of the hour by ftriking two pieces of wood against each other. Ladders are kept in readinefs at the gates, and every other apparatus for extinguishing fire is constantly at hand, and in the best order. In the day-time certain officers are ftationed at the churches, who strike the clock with a wooden clapper, in order to fhew, what hour of the day it is. Befides this, in every tavern and inn fuch peace and order are obferved, that one feldom fees any inftance of frays and drunkennefs, irregularities which fo greatly and fo commonly difgrace the Northern part of the Weftern World.

That they will be trufty and upright, the Officers of Justice take a very strict Oath, on entering

entering on their office, and this is fometimes repeated every year. Sometimes likewife they are changed, in order that they may not be too long in one place, and in the course of time feduced from the paths of probity. And forafmuch as the punifhments in this country are exceedingly fevere, and the laws at the fame time immutable, it may be affirmed with great truth, that fewer crimes are committed, and fewer punifhments inflicted, than in other populous countries, where, notwithstanding the number of punifhments yearly inflicted, a multitude of criminals remain concealed, or fall upon fome expedient to fly from the fpot, or in fome other manner efcape the punifhment they fo juftly merit. I heard the following extraordinary circumftance mentioned by one of the Interpreters, viz. that there were laws, which did not make known the punifhment, and that for many crimes the punifhment was not univerfally known. They were of opinion, that a perfon ought not to be the lefs on his guard against crimes and transgreffions, although the Sovereign did not think proper to determine and make known the fpecies of punifhment; and probably they have good reason for thinking thus. However, that no man may plead ignorance of the laws, they are promulgated not only once or twice from the pulpit, according to the cuftom in the Chriftian churches, F.4 but

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but likewife in every town and village they are pofted up for public infpection and daily perufal, in large letters, being placed confpicuous in an open fpot furrounded and guarded with rails. This place, in the towns, is immediately within the city gates; in the villages, it occupies the middle. Directions what ought, or ought not to be done, are drawn up very concife, without fpecifying the punifhment annexed to difobedience, or the addition of any menaces, of which the governments in fome parts of Europe, fo renowned for its jurifprudence, have fuch a plentiful ftore. One fometimes perceives on the weft fide of croffes and pofts, that are crected without the towns and villages, the places, where formerly a greater number of criminals than at this time prefent made their exit, and migrated to another world.

PHYSICIANS

Are of feveral defcriptions. Some profess only Medicine, and occupy themselves with the cure of internal diforders. Others practife Surgery; others only burn with Moxa; others perform no other operation than that of puncturing with

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with needles, (the acu-punctura,) and others again go about making frictions. Those who perform the latter of thefe operations, may be heard in the evening patrolling the ftreets, and making a tender of their fervices with great noife and vociferation. In a country, where colds are fo frequent, this chafing of the body is very beneficial. Those who cure internal diforders, are confidered as fuperior to the reft, from whom they are diffinguished by their heads being shaved all over. They never make use of any other than fimple remedies, and those generally in the form of decoctions, which are either diuretic or fudorific. Sometimes they make use of powders likewife. Of compound medicines they have no knowledge. A great part of thefe remedies may be procured, it is true, within the precincts of their own kingdom, but a very confiderable quantity is fold to them by the Chinefe. Their Phyficians fometimes feel the patient's pulfe; but they take a long time for examination, fometimes not lefs than a full quarter of an hour, feeling it first in one arm and then in the other; as though the blood did not flow into both arteries from one and the fame fource. Their knowledge of Fevers and other internal diforders can be no other than very fuperficial, and their mode of cure very precarious, as their Phyficians have no infight into Anatomy and Phyfiology, and

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and are very little acquainted with the remedies which they preferibe. The only perfons among them, who have a little more knowledge of thefe matters, are either the Phyficians of the Court, or the Dutch Interpreters, who have an opportunity of acquiring fome degree of knowledge from the European Phyficians.

Burning with Moxa and puncturing with needles are two very effential and cuftomary operations throughout the whole empire, and are performed, in fact, as often as ever Phlebotomy is in Europe. Moxa is made use of, not only for curing, but likewife for preventing difeafes: no exception is here made either for fex or age; every one makes use of it, old and young, children, rich and poor, and even the prifoners themfelves. There are few parts of the body which do not allow of this operation, as for inftance, the finews, (tendines) veins, &c. but the flefhy parts, and more efpecially the back, are confidered as the propereft places, which are therefore carefully felected by the operators, and of which they have printed tables. It is of ufe in moft diforders, but efpecially in the Pleurify, Toothach, and it proves of the greateft fervice in Gout and Rheumatifins. Moxa is nothing elfe than the woolly part (tomentum) of the leaves of Mugwort, (Artemifia valgaris) particularly of the old leaves. It is prepared in the following manner :

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ner: the leaves are beaten and rubbed with the hands, till all the green feparates from them, and nothing but the woolly part remains. Of this there are two forts, the coarfe and the fine. The fine is confidered as the beft, and the coarfe is commonly ufed for tinder. When it is to be applied, a little ball is made of it, which is laid upon the appointed place, and then fet fire to, when the fire gradually confumes it, and at the fame time burns the fkin, leaving behind it a fcar, which fome time after breaks, and a humour diftills from it,

Acu-puncture, or puncturing with a needle, is generally performed with a view of curing the cholic, efpecially that kind which here has the name of Senki, and is commonly occasioned by the drinking of Sacki. Thus it has the ftomach for its object, over which feveral fmall holes, often to the number of nine, are made, under the idea of promoting the discharge of wind; but other flefhy parts of the body likewife may be felected for this operation. The needles used on these occasions are very fine, nearly as fine as the hair of one's head, being made of gold or filver, by perfons who have the privilege of making them, and who alone underftand how to give them the temper, pliability, and finenefs, which it is requifite for them to have. While they are passing through the skin, they

they are twirled round between the fingers, and the bony parts are carefully avoided.

The difeases, to which the Japanese are most liable, and which are peculiar to this country, are the abovementioned Colic, which is here called Senki, watery eyes, and indurated glands. The Senki Colic, which proceeds from the ule of Sacki, or Rice-beer, attacks great numbers of people, and likewife ftrangers, who refide any length of time in the country. The pain is violent and intolerable, and often leaves fwellings behind it, in different parts of the body; and is efpecially productive of the Hydracele. Red and watery eyes are very common among the peafants, and the poorer kind of people in the villages, and originate partly in the fanoke of the coals, with which they warm their rooms in winter, and partly from the ftench which exhales from their privies. Indurated glands were very common in every part of the country, and frequently, I obferved, turned to cancers. They happen particularly in the neck, and increase daily from the fize of a pea to that of a man's fift. As the heat in the day-time is frequently. very intenfe, and a fudden guft of wind arifing is very apt in those circumstances to stop the pores, and prevent perfpiration; it follows of courfe, that the Rheumatifm must be very prevalent among them; in like manner, as for the fame

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fame reafon, during the fummer months, Diarrhæas and Dyfenteries attack both the Europeans and Japanefe. The fame is likewife apt to be the cafe, when they imprudently eat too much of the fruit, the produce of the country, and more efpecially of the Haki-figs, which are very palatable and in high effimation.

The Small-pox and the Meafles have been long prevalent in this country, and are not more dreaded here than in other places. I did not fee a great many people that were much defaced by them : they are unacquainted with Inoculation. The Hydrocephalus, or Dropfy in the head, I had an opportunity of feeing in a man thirty-three years old, who came to afk my advice during my journey to the court. He related to me, that he had been attacked with this diforder nineteen months ago, in confequence of having received feveral blows upon his head from a bamboo cane, in a fray with another man, although the cane was covered with linen. From the crown to the back part of the head a tumor was perceived, about the thickness of a finger, and the bones of the fcull were elevated to that degree, that the exterior fontanel was felt foft.

A fpecies of *Miliary Eruption*, termed by the Europeans the *Red Dog*, is very rife here in the hotteft fummer months, viz. in August and September,

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tember, particularly among the Europeans. It continues for feveral weeks and fometimes for months together. The eruption is elevated above the furface of the fkin, rough and of a red colour, without fever. Sometimes it partly difappears, and at other times it becomes visible in greater quantity, efpecially about noon and evening. The diforder is not always attended with an itching; but whenever this concomitant fymptom appears, it is most troublefome in the evening and at night, being attended with great reftlefsnefs and want of fleep. Sometimes a very fingular kind of itching fupervenes, which is chiefly felt when the patient is in motion, when he fets himfelf down in a chair, or leans with his back against a wall, or is lying in bed, or folds his arms. On these occasions a fensation of pricking is felt in the fkin, as if it were pierced with a thousand fine needles; and this fenfation ceafes immediately, as foon as the limb which was in motion is kept ftill, even if the fame polition be preferved. The face is free from this eruption, which diffuses itself over every other part of the body, even to the very extremities of the fingers. A perfon may be afflicted with this diforder feveral times, during his refidence in India.

The Venereal Difease was without doubt imported by the Europeans, who have the superlative

lative merit of having diffufed this diftemper to many parts of the globe. Venereal complaints are at prefent very prevalent here, and they are hitherto acquainted with no other mode of alleviating them than the use of decoctions, that purify the blood. The cure by falivation, of which they have indeed heard mention made by the Dutch Surgeons, appears to them very difficult to undertake properly, as well as to undergo. They adopted therefore, both with joy and gratitude, the method, which I had the good fortune to be the first to teach them, viz. of curing this diforder with the Aqua Mercurialis. Several of the Interpreters made use of this method as early as the years 1775 and 1776, and performed with it, under my direction, feveral complete cures, both in and out of the town of Nagafaki. And I pleafe myfelf with the agreeable hopes, that by means of this eafier method, in future many thousand unhappy fufferers will be preferved both from fiftulas in the neck, and other dreadful fymptoms, attendant on this truly foul difeafe ; which I very frequently had opportunities of feeing, with an equal mixture of grief and horror, during my journey into the country.

AGRICUL-

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Is in the higheft efteem with the Japanefe, infomuch that (the moft barren and untractable mountains excepted) one fees here the furface of the earth cultivated all over the country, and most of the mountains and hills up to their very tops. Neither rewards nor encouragements are neceffary in a country, where the tillers of the ground are confidered as the most useful class of citizens, and where they do not groan under various oppreffions, which in other countries have hindered, and ever must hinder the progress of Agriculture. The duties paid by the Farmer of his corn in kind are indeed very heavy, but in other refpects he cultivates his land with greater freedom, than the Lord of a Manor in Sweden. He is not hindered two days together at a time, in confequence of furnishing relays of horfes, by which he perhaps earns a groat, and often returns with the lofs of his horfes : he is not dragged from his field and plough to transport a deferter or a prifoner to the next caftle : nor are his property and his time wafted in making roads, building bridges, alms-houfes, parfonage-houfes, and magazines. His days are not confumed in journies after poles and ftakes in winter, nor with the almost endless occupation of fencing in his

his grounds, funk up to the ancles in mire and clay, in fpring. He knows nothing of the impediments and inconveniencies, which attend the maintenance and equipment of horfe-and-footfoldiers. And what contributes still more to his happinefs, and leaves fufficient fcope for his induftry in cultivating his land, is this, that he has only one master, viz. his feudal Lord, without being under the command of a hoft of mafters, as with us. No parcelling out of the land forbids him to improve to the beft advantage the portion he poffeffes, and no right of commonage, belonging to many, prevents each from deriving profit from his fhare. All are bound to cultivate their land, and if a hufbandman cannot annually cultivate a certain portion of his fields, he forfeits them, and another, who can, is at liberty to cultivate them. Thus he is enabled to direct all his thoughts and all his time to the cultivation of his land, an employment, in which he is affifted by his wife and children. Meadows are not to be met with in the whole country; on the contrary, every fpot of ground is made ufe of either for corn-fields, or elfe for plantations of efculent-rooted vegetables. So that the land is neither wafted upon extensive meadows, for the fupport of cattle and faddle-horfes, nor upon large and unprofitable plantations of tobacco, VOL. IV. G nor

nor is it fown with feed for any other ftill lefs neceffary purpofe; which is the reafon that the whole country is very thickly inhabited and populous, and can without difficulty give maintenance to all its innumerable inhabitants.

There is no part of the world, where manure is gathered with greater care than it is here, infomuch that nothing that can be converted to this ufe is thrown away or loft. The cattle are fed at home the whole year round, fo that all their excrements are confined to the farm yards, and it is a very common fpectacle to fee old men and children following the horfes that are ufed in travelling, with a shell (Haliotis tuberculata) fastened to the end of a stick, in order to collect the ordure from off the highways, which is carried home in a basket. Nay, even urine itfelf, which the Europeans fo feldom turn to the advantage of their fields, is here carefully collected in large earthen pots, which are to be found funk in the earth here and there in different parts, not only in the villages, but even befide the highways. Nor is the Japanefe more fcrupulous and exact in collecting every material fit for manure, than his mode of applying it is different from that of other countries. He does not carry out his manure either in winter or in fummer into his fallow fields, to be dried up there by the fcorching heat of the fun, and to have

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have its nutritive qualities weakened by the evaporation of the volatile falts and of its oily particles; but, on the other hand, gives himfelf the difguiting trouble of mixing up manure of various forts, the excrements both of man and beaft, with water and urine, together with every kind of refuse from the kitchen, till it becomes a perfect hodge-podge; this he carries in two large pails into his field, and with a ladle pours it upon the plant, which has now attained to the height of about fix inches, and receives the whole benefit of it, at the fame time that the liquor penetrates immediately to the root. By this mode of manuring, and at the fame time by the farmer's indefatigable weeding, the fields are fo completely cleared of weeds, that the most fharpfighted Botanist would be fcarcely able to difcover a fingle plant of another fpecies among the corn.

The pains which a farmer takes to cultivate the fides of even the fteepeft hills, is almoft incredible. If the place be even no more than two feet fquare, he neverthelefs raifes a wall of ftones at the bottom of the declivity, fills the part above this with earth and manure, and fows this little plot of ground with rice or efculentrooted vegetables. Thoufands of thefe beds adorn moft of their mountains, and give them G_2 an

an appearance which excites the greatest astonishment in the breasts of the spectators.

Rice is their principal corn. Buck-wheat, Rye, Barley, and Wheat are very little ufed. Among their efculent-rooted vegetables Batatas (*Convolvulus edulis*) are the moft abundant, and the moft palatable. Several forts of Beans and Peas are planted in abundance, as likewife Alliaceous Plants, Turnips, and Cabbages; from the feeds of which they express an oil for their lamps, and whose yellow flowers give to whole fields together a most beautiful appearance in fpring.

In the beginning of April, the farmer begins to dig up the land, which he defigns for the cultivation of Rice. It lies at this time almost entirely under water, with banks raifed round the fides. The furrows are made with a rather crooked hand-bill, about a foot long and a hand broad, fastened to a handle. The Rice-grain is always fown first, in a plot of ground very clofe, like Cabbage-feed, in beds. Afterwards, when it is grown up to the height of fix inches, it is taken up, and planted out in a manner fimilar to Cabbage-plants, in the Rice-grounds, feveral plants together in bundles, leaving the fpace of fix inches between each bundle. This is always the women's work, who wade about in water, that is at leaft fix inches deep.

In

. In the month of November it is ripe, and is then mown, and, after being bound up in bundles, carried home. The mere ftriking of the ears against a barrel, or any other hard body, caufes the corn to fall from the stalk, fo that in this refpect no long and tedious threfhing is neceffary : but before the hufk can be feparated from the pure grain, a fecond threfhing, or ftamping, is neceffary, which is feldom fet about before the grain is wanted to be used. Thus it is carried to different places, and fold there entirely unftamped. The ftamping of it in fmall is performed in the following manner. A block of wood is hollowed out, and this cavity is filled with Rice, which they pound with a wooden peftle, till it feparates from the hufk. In the great, this ftamping is performed not only by means of a machine, confifting of a number of peftles, which are fet in motion by a waterwheel; but likewife by a fimilar machine, which a man treads with his foot, and during the ftamping, ftirs with a ftick in the hopper, fo that the grain can run down. The Rice in this country is accounted the beft in all the Eaft-Indies, and is extremely white, glutinous, and more nutritive than any other.

Buck-wheat, (*Polygonum fagopyrum*) is moft commonly used when ground to meal, and made into finall cakes, which, after being boiled, and G 3 frequently

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frequently at the fame time coloured, are baked, and are fold in the villages and at the baitingplaces for a mere trifle, to travellers and their bearers.

Wheat (Triticum æstivum et hybernum) is fown in the month of November, and cut down ripe in June. It is used in general in the form of fine meal; of this they make finall cakes, which are eaten in a fost state.

Barley (Hordeum) is fown at different feafons of the year, fometimes in November, fometimes in December, and at times in the month of October. It is cut down, dried, and threshed, either towards the latter end of May, or in the beginning of June. The fields in this country often refemble cabbage-gardens with their beds, which are frequently no more than a foot in breadth, and feparated from each other by a deep furrow or trench, which is likewife a foot broad. In these narrow beds the corn is fown ftrait across in rows, which leaves a small empty fpace in the middle. I have fometimes, however, feen the corn fown lengthways in the beds, in which cafe there were only two rows. I have likewife had an opportunity of obferving, that when the corn has grown to the height of about a foot, that before it has put forth the ear, the farmer has dug up, as it were, thefe fmall trenches, and very carefully put earth about the roots, whence the corn has both received manure and been

been watered. I was informed, that after a certain ftated time the trenches are filled up with earth, and what before conftituted the beds, is converted into trenches. In fome places likewife the corn was found to be blighted, a calamity, to which, however, the feed is more liable in Europe. As foon as the corn is cut down, they frequently fow another kind of corn or even French-Beans, (Phafeoli) between the ftubble, either acrofs it or in furrows, fo that the land is actually fown twice in the year, although upon different places, without fresh carting or other attendance. They use this corn chiefly for fodder for their horfes and other animals. It is likewife at times ground down to fine flour, of which they make fmall foft cakes.

Cabbage-feed (Braffica orientalis) grows wild in great abundance in every province. In the month of April, the fields all over the country appear gilt with the flowers of this plant. They make no use of the root; but the feed, which ripens in May, yields, on being preffed, an oil, which is used every where for lamp-oil. The plant the Japanefe call Na Tanne, and the oil Natanne Abra, or Natanne no Abra.

Barley, Wheat, and Cabbage-feed are all of them threshed out at times quite in a plain and artlefs manner, upon ftraw mats, in the open air, in the villages, and not unfrequently before the

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the doors of their houfes, with flails, which have three fwingles. And indeed fome only beat the fheaves with the ears of corn against a barrel, vat, or the like, which causes the corn to drop out: this must afterwards be purged from the chaff and other impurities.

Of Beans, Peas, and Lentils, many forts are cultivated, both the larger (Phafeoli) and the fmaller (Dolichos). Of Daidfu Beans (Dolichos Soja) the meal is used for dreffing victuals, and the expressed juice for making Soy; as likewife the whole Beans for the foup called Milo, which is a daily difh with the common people. Atfuki Beans likewife (Phaseolus radiatus) are ground to meal, of which finall cakes are made with fugar. The common Pea (Pifum Sativum) and the broad Bean (Vicia faba) I faw fown and made use of in fome places. In like manner divers forts of grafs are cultivated, for the fake of using their feeds for food both for man and beaft, as the Awa (Panicum verticillatum), Kibi (Holcus forgbum), or Millet; Ko Kibi (Panicum Corvi), Nan ban Kiwi (Cynofurus Coracanus) with feveral others. Turnips (Braffica rapa) are fown in abundance, and are much used for food. as are likewife other efculent-rooted and bulbous plants, fuch as Skirrets (Sium fifarum), Carrots (Daucus Carota), which here are of a colour very little inclined to yellow; Radifhes (Raphanus

nus sativus); Batatas (Convolvulus edulis); and, in a trifling quantity, Potatoes (Solanum tuberosum). In addition to thefe, Lettuces (Lastuca fativa); Melons (Cucumis melo), both with white and red pulp, to ferve by way of defert at meals, and to refresh and cool the human body, and quench thirft in fummer; Pumpkins (Cucurbita pepo), which are used in foups; Cucumbers (Cucumis (ativus) both to be eaten raw, and for pickling; the Conomon (Cucumis conomon), for pickling, and by way of defert, as likewife to excite an appetite ; Fokke Fokkes, or the fruit of the Solanum melongena, to put into foups; Calabaffes, or Bottle-gourds (Cucurbita lagenaria), are cultivated for flafks and veffels of a fimilar kind. For feafoning are ufed, and fometimes cultivated, the Amonium mioga, a new fpecies of Ginger; the Pepper shrub (Fagara piperita), of which both the leaves and fruit are taken, to give to foups and fauces a ftrong fpicy favour; Cayenne Pepper (Capficum), Bamboo roots, and various forts of mushrooms (Agarici), which with thefe people are in great requeft, occur common in the fhops, dried for fale, and are befides in almost daily use, both for soups and fauces. The defert at table confifts of various well-tafted fruits, which are cultivated in the gardens, fuch as Lemons, Seville and China oranges; Pears, Peaches, Plumbs, Cherries, Medlars (Mefpilus Japonica)

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Japonica) of a very delicious tafte; Figs (Diofpyros Kaki), Grapes (Vitis vinifera), Pomgranates (Punica granatum), Spanish Figs, (Castus ficus), Chefnuts, Walnuts, with a multiplicity of others. Hops (Humulus), I faw in different parts, growing wild, but not cultivated nor made use of.

As every one's land lies open, without being fenced in with hurdles and pales, which are unknown in this country, it is very common to meet with a great number of culinary vegetables and kitchen-garden plants, growing wild in the open fields, and confequently there are no other gardens, than those which are found near every houfe, are of a very infignificant fize, and are chiefly intended for the fake of ornament. In thefe are to be feen both trees, which make a fplendid figure with their beautiful, large, and frequently double bloffoms, and other vegetable productions, as well herbs as bulbous plants, adorned with the most elegant flowers, fuch as, for instance, the Azalea Indica, Nandina domestica, Prunus cerasus, Gardenia florida, Aucuba Japonica, the Spireæ, Magnoliæ, the Tagetes patula, Celofia cristata, Hovenia dulcis, Aster Chinensis, Pæonia officinalis, Chryfanthemum Indicum, Calendula officinalis, Impatiens balfamina, Mirabilis dichotoma, and an infinite number of others.

For materials for Dying, I faw them cultivate the Polygonum Chinense, barbatum and aviculare:

culare: all of thefe produced a beautiful blue colour, much like that from Indigo. The leaves were firft dried, then pounded, and made into fmall cakes, which were fold in the fhops. With thefe, I was told, they can dye linen, filk, and cotton. When they boil them up for ufe, they add afhes to them; and the ftronger the decoction is made, of fo much the darker blue is the colour obtained; and *vice verfa*.

The cultivation of Cotton and Silk, is an object of the greateft importance in this country, and furnishes the cloathing of many millions. For this purpose they cultivate and plant every year the cotton shrub (Goffypium berbaceum), which yields a very fine and white cotton, fit for cloths, wadding, and other uses. The cultivation of Silk depends upon the planting and propagation of the Mulberry-tree, by means of which an incredible number of Silk-worms are bred, and the raw filk is produced, of which are made filken stuffs, thread, wadding, and a great many more articles, both of ornament and use.

The Varnish-tree, (Rbus vernix), the Camphor-tree (Laurus camphora), the Pine (Pinus fylvestris), the Tea-tree (Thea bohea), the Cedar (Cupreffus japonica), and the Bamboo-cane, or Reed (Arundo bambos), do not only grow wild in every part of the country, but are likewife cultivated in feveral places, on account of the great

great advantages which the inhabitants derive from all thefe articles. The Bamboo-reeds ferve them for water-pipes, for levers, for making baskets and cabinets, for writing pens, fans, &c. Firs ferve to adorn the courts and places in the vicinity of their houfes, and the wood is ufed for building, as likewife in handicraft trades of every kind, even in the finest lackered work. Cedars are used for naval craft, household furniture, and cabinet work, in the fame manner as fir. The Varni/b-tree contains a milky juice, which is the beft of all gums for lackering. The Camphor-tree grows wild in great abundance in the neighbourhood of Satfuma, and on the Gotbo islands. From this tree is prepared the chief part of the Camphor that is used in Europe. The Japanefe fplit the wood and roots into very fine pieces, boil it up with water in an iron pot, covered with a wooden lid, which has a deep concavity on the infide. In this concavity they fasten a piece of straw or hay, fo that the camphor, when it rifes, may adhere to it. The gum camphor, on being feparated from the ftraw, is in grains, and is packed up in wooden cafks, and fold to the Dutch Company by weight.

As in the whole of this extensive empire, there is neither any tallow to be found, nor any butter churned, the inhabitants have turned their attention to fupply the place of these articles, by using fweet

fweet oils, both for dreffing victuals, and for burning in the house. The feed of the Rhus fuccedanea yields, on being preffed, an oil which foon congeals to the confiftence of tallow, and from which they prepare candles; but thefe are by no means fo much in use as lamps. So they fometimes likewife manufacture candles from the coagulated oil of the Laurus campbora, and glauca, of the Rbus vernix, and the Melia azedarach. For burning in lamps again, to light up their rooms in winter, they make use of feveral forts of oil. as for inftance, that of the Dryandra cordata, &cc. but efpecially and most commonly the Braffica orientalis. On the other hand, they use in the kitchen the finer oil of Sefamum, for frying fifh, and dreffing other difhes.

The Sugar-maple does not, to my knowledge, grow in Japan, neither have Sugar-canes been hitherto imported for cultivation; the Japanese Interpreters nevertheless shewed me that they had a juice, from which fugar may be prepared. This, they informed me, was made from the juice of a certain tree, which grows upon the islands that furround Japan. It had a fweet tafte, but was of a brownish colour, and a disagreeable aspect. So that if fugar is a necessary commodity for a country, it feems to be the only one, which the Japanese need to receive from the hands of foreigners. That besides, they have, and

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and that in the greateft abundance, every thing elfe which is needful both for food, cloathing, and the conveniences of life, refults from that which was faid above. And whereas in most other countries complaints are made more or lefs frequently about bad harvefts and fevere famine, fuch complaints are feldom heard in the populous empire of Japan, where the inhabitants live frugally, and without prodigality or diffipation, and where they providently blend in the foil with their different fpecies of corn, a confiderable number of leguminous and efculent-rooted vegetables. Notwithstanding these precautions, however, it fometimes happens, that even here famine is felt.

As the Japanefe have fuch a variety of fpecies of corn, fuch a plentiful diverfity both of roots and pulfe, befides the large fupply of provisions, which they fetch from the rich ftore-houfe of the circumambient fea, they neither need nor have any confiderable flock-farms. They have few Quadrupeds; for which reafon there is no occafion to lay out the land in extensive meadows. The finall number of horses to be met with in this country, is chiefly for the use of their Princes; fome are employed as beafts of burden, and others ferve travellers to ride on. Indeed I do not fuppofe that the fum total of all their horfes amounts to the number of those made use of in one

one fingle town in Sweden. Here one neither hears mention made of ftately chargers, nor of mettlesome coach-horses, nor of fwift fledgetrotters, nor of the Mafters of the Horfe fo famous in Europe. Of Oxen and Cows they feem to have a ftill finaller number; and they neither make use of their flesh, nor yet of their milk, nor of the cheefe, butter, and tallow prepared from them : the fole ufe they make of them is fometimes for drawing carts, and for ploughing fuch fields as lie almost constantly under water. A very few Swine are to be feen in the vicinity of Nagafaki; and this mifchievous animal, the most hostile to agriculture, if not confined, of any, was probably introduced by the Chinefe. Sheep and Goats are not to be found in the whole country; the latter do much milchief to a cultivated land, and wool may eafily be difpenfed with here, where cotton and filk abound. During my flay at the Dutch Factory, it happened that fome Japanefe arrived at the island with feveral fheep, of which they had had the cuftody for many years, having received them from fome Chief for the Dutch trade, who failed to Batavia, and did not return again. Dogs, the only idlers in this country, are kept from fuperstitious motives; and Cats are in general the favourites of the ladies. Hens and common Ducks are alfo kept tame in their houses, chiefly, it is to be prefumed, on

on account of the eggs, of which they are very fond, and make use of them on various occasions, boiled hard, and chopped into small pieces.

THE NATURAL HISTORY OF THE COUNTRY.

WERE we to enter into a minute inveftigation of the fubject in its full extent, it would be too voluminous for the narrow limits of a work, which is intended to form merely the Journal of my Travels. The prefent sketch, therefore, is only defigned to give fome faint idea of the different productions of this country in the three grand departments of Nature. As to the vegetables, I have already amply defcribed them in my Flora Japonica, published in the year 1784; and have at the fame time indicated the profit and use which the Japanese in every respect know to make of the various forts of trees, fhrubs, and herbs, and their different parts. The animals, which are either rare, or altogether unknown to the Naturalists in Europe, I have in part already arranged and defcribed in various Academical Treatifes and Difputations, frequently with the addition of Plates. I am in hopes, in cafe my time

time of life, health, and leifure will permit, to communicate in the fame manner the refidue, which I may ftill chance to have in my poffeffion, and which have hitherto efcaped divers wayward perfecutions of fate.

The following is a lift of the Mammalia, which have come within the reach of my observation.

Canis *lupus*: the Wolf, called *okame*, in the northern provinces.

Vulpes, the Fox; an animal detefted throughout the whole country.

Familiaris, the Dog; both in its domefticated ftate, and, as I was informed, likewife wild, called Yamma ing, which, however, was probably confounded with the Jackall, or fome other fpecies.

Felis *catus*: Cats are to be found in every houfe, very variable in colour.

Mus *rattus*: the rat domeflicates here, as in other countries.

Lepus *timidus*: the Hare (the grey fort) was brought not unfrequently to our Factory and to our table.

Bos *taurus*: Buffaloes with a bunch on their backs, I faw in the neighbourhood of Miaco, drawing large carts; but the cows, which the country people fometimes made use of in agriculture, were very fmall.

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Equus

Equus caballus : the Horfe is of a middling fize.

Sus fcrofa : the Hog is of the Chinefe fort.

Whales I faw in the market and the fhops in Nagafaki, cut in pieces, and fold for food. They are caught upon the coaft with harpoons; and, befides their flefh, their bones are made ufe of, as is likewife the ambergrife which is faid to be frequently found in their bowels, and which once even was fhewn to me quite frefh and in a foft flate.

Many fpecies of the Mammalia were indeed mentioned to me, as being found in the northerly and leaft inhabited tracts of the ifland, fuch as Harts, Bears, Monkeys, and feveral others; which, however, I had not an opportunity of feeing alive, nor even their fkins, when dead.

Of the Bird tribe both the common Cock and Hen and Geefe occur tame; but a great number live wild in the water, between the iflands, frequently in incredible quantities, fecured both from the attacks of thofe that wantonly fire at them, in order to feare them, and of thofe that purfue them before the due feafon. Others too live high up in the country and in the fields; neverthelefs I had no opportunity to make any collection of them, as I had not the ufe of any firearms, and could not procure them by any other means. Thofe that I knew with fomewhat greater 6 certainty,

certainty, were only the following: the Cock (*Phafianus gallus*): the Crow, *Corvus corax*, the *Anas anfer*, *galericulata & querquedula* (the common Goofe, the Chinefe Teal, and the Garganey), which were brought to our kitchen; the *Ardea alba & major* (the white and common Heron), which followed the ploughman in the field; the *Tetrao coturnix*, or Quail; the *Loxia pyrrhula*, or Bulfinch, and *Oryzivora*; the *Colmmba oenas*, or common Pigeon. Of the Amphibia, very few are to be met with in this country; thofe that I faw were merely a *Teftudo japonica*, and a *Lacerta japonica*. The Interpreters, indeed, affirmed that Serpents were to be found here; but I had never an opportunity of feeing any figns of them.

Fifh, notwithftanding the extensive fpace they occupy in the depth of the fea, are fought after with greater diligence by the Japanefe than any other kind of animal. A great number of thefe I collected, and having preferved them in fpirits of wine, I fent them to Batavia, Holland, and my native country. Misfortunes that happened to them in their way home, have deprived me of a great many of thefe rare animals, and fome of them are ftill undetermined. Those among them that are at prefent known are the following : the Murana nebulofa; picta, annulata, and fasciata, together with the Ophicthus cinereus, all very beautiful and fingular fpecies of Eel; the Gobius patella ; H 2

patella; Silurus maculatus, lineatus; Callicnymus japonicus; the Sciena cataphracta; Perca 6lineata, and pista; Salmo Jalar; Clupea thriza; Fistularia tabacaria; Cyprinus aureus; Tetraodon hispidus, and ocellatus; Ostracion cornutus; Syngnathus hippocampus; Raja torpedo.

Of the Infects, which were more easy to be procured, as well during the journey to court, as on the ifland of the factory, fome were known, others entirely unknown before, viz. the Anobium ruficolle, Coccinella japonica, 4-pustulata; Chryfomela aftuans, pallida; Dermestes violaceus; Cicindela japonica, catena; the Scarabæus eruginofus, called Fama Musi: the Hifter unicolor; Mordella nasuta, aculeata; Ptinus fur; Meloë proscarabæus; Caffida nobilis, vesicularis; Silpha aftiva; Bupreftis rustica, ignita, vittata, elegans; Cerambyx rubus; Lampyris japonica, compressa; Staphylinus erythropterus, riparius; Forficula auricula; Cimex grandis, guttigerus, bispidus, clavatus, trigonus, unipunstatus, fullo, fordidus, chinensis, brunneus, anchora, cornutus, niger, andrea, colon, augur; oceltatus; Blatta orientalis, germanica, gigantea; Mantis religiofa, maculata, nasuta; Gryllus nasutus; Acheta gryllotalpa; Papilio argiolus, rapæ, Calbum, thrax, becabe, proteus, ascanius, phlæas, cardui, niphe; Sphinx atropos ; Bombyx lubricipeda ; Noctua ferici, chi, paranympha; Phalæna nymphæata, prunata, immutata:

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mutata, amatoria; Pyralis ocellaris; Tortrix viridana; Hemerobius perla, grandis; Agrion puella, virgo; Panorpa japonica; Apis mellifica; Vefpa parietum; Musca carnaria, japonica, albifrons, cæsar, mellina, vibrans, domestica, simetaria, cynipsea, pluvialis; Stomoxys calcitrans; Tipula pbalænoides, russicollis, femorata; Culex pipiens; Oniscus oceanicus, asellus; Monoculus polyphemus; Pulex irritans; Pediculus humanus; Julus terrestris; Lepisma saccharina; Cancer diogenes, astacus and dorsipes.

Shells were collected by the Japanefe, efpecially in the more northerly diffricts, were laid upon carded cotton, fastened to it with rice-glue, and fold to the Dutch that went on the journey to court. Thefe shell-fish were all very elegant, but the finaller specimens were always selected for this purpofe. Those which were used more commonly in the country for food, and were fometimes even brought to our table, were the Offrea pleuronectes and gigas, a very long and thick fpecies of Oyfter, together with the Venus chione and meretrix, which were either boiled or flewed. Of Worms, Shells, and Corals, I collected the following: the Sepia octopodia, Sepiola; Afterias rubens; Lepas mitella, balanoides; Mya truncata (fossil;) Solen vagina, legumen, bullatus, strigilatus; Tellina solidula, delicatula, lastea, albida; Donax scripta, irus; Cardium rusticum; Venus virginea, H_3

virginea, decussata, læta, deflorata, tigerina, rotundata, cancellata, verrucofa, pestinata, exoleta, together with chione, which is called hamagai and meretrix, which bears the name of Sigakf. The Mactra violacea, glabrata, folida, lutaria, stultorum; Arca antiquata, undata, pella, barbata, noæ; Spondylus gæderopus; Chama antiquata, lazarus; Mytilus birundo, barbatus, bilocularis, margaritiferus; Oftrea lima, pellucens, plica, maxima, folium, fornicata, pleuroneEtes, and gigas; Anomia bysterophorus, terebratula, plicatella, lacunosa, cepa; Pinna nobilis; Argonauta argo; Conus (pectrum; Cypræa mauritanica, serpentis; Voluta mercatoria; Buccinum galea, spiratum, nitidulum, lapillus; Bulla naucum, amplustre, ampulla, physis, spelta; Murex tritonis, aluco, faxatilis, antiquus; Strombus lubuanus; Trochus conulus, vestiarius, pharaonis; Turbo bidens, ungulinus; Nerita canrena; Haliotis tuberculata; Patella ungarica, faccharina, unguis, nubecula, barbara, carulea; Serpula arenaria, triquetra, spirorbis; Madrepora porpita petrefied; Ifis entrocha; Tubipora musicalis, which is called iwa kik and teredo; Umbilici veneris were found caft up on the fhore, in like manner as Belemnites were found on the mountains.

That the precious metals, Gold and Silver, are to be found in abundance in the empire of Japan, has

has been well known, both to the Portuguefe, who formerly exported whole fhip-loads of them, and to the Dutch, in former times. Gold is found in feveral parts; and perhaps Japan may in this refpect conteft the palm with the richeft country in the world : but, in order that this metal may not lofe its value by becoming too plentiful, it is prohibited to dig more than a certain flated quantity; not to mention that no metallic mine, of any kind whatever, can be opened and wrought without the Emperor's exprefs permiffion. When this permiffion is obtained, two-thirds of the produce are the portion of the Emperor, and the proprietor of the land receives one-third for his expences. Gold is found in fmall quantities in the fand ; but the chief part is extracted from cupreous pyrites, diffolved by brimftone. The fineft gold, together with the richeft gold-mine, I was told, are found on the largeft of the Nipon Islands, near Sado. The next in quality to this is that which is found in Surunga. Belides these places, it is known for a certainty, that feveral rich gold-mines are to be found in Satfuma, as likewife in Tikungo. and in the ifland of Amakufa. It is used for the Mint, gilding, and embroidery ; but is not carried out of the country.

Silver must formerly have been found in much greater plenty than at prefent, as a large quan-H 4 tity

tity of it was then exported from this country, The Japanefe confider it as being much more rare than gold, although the latter metal is dearer. They now likewife received in barter a confiderable fum of Dutch Ducatoons, from the Dutch Company. It is faid to be found in the province of *Bingo*; and in the more northerly parts towards *Kattami*, as I was informed, very rich filver-mines are to be met with. Independently of thefe places, the two iflands, which are called the Gold and Silver Ifles (*Ginfima*, *Kinfima*) are faid to contain a great quantity of both of thefe precious metals. Silver is ufed for coining and for plating.

Copper is quite common in every part of the empire, and is richly impregnated with gold, conftituting the main fource of the wealth of many provinces. It was not only formerly exported in amazing quantities, but ftill continues to be exported both by the Dutch and Chinefe Merchants. The fineft and moft malleable is dug in Suruga, Atfingo, Kyno Kuni. The laft fort is efteemed to be the moft malleable of any, whilft that from Suruga contains the greateft quantity of gold. A great number of copper-mines are to be found in Satfuma and at other places. Of this metal are made fmall pieces of money for change; it is ufed likewife for plating, for making utenfils of Sowas, for pots, kettles, &cc.

Iron.

Iron feems to be fearcer than any other metal in this country. It is found, however, in the provinces of *Mimafaka*, *Bitfju*, and *Bifen*. This they are neither fond of importing, nor yet of exporting it for fale. Of it they manufacture feymitars, arms, feiffors, knives, and various other implements, of which they ftand in need,

Of Amber I had a prefent made me by my friends: they called it Nambu. It was of a dark as well as of a light yellow colour, and likewife ftreakey. I was told alfo that it is found in this country.

Brimftone is found in great abundance in Japan, efpecially upon a certain ifland, near Satfuma, *Pit-Coal*, I was informed, is likewife to be met with in the northern provinces. *Red Agate*, with white veins, I faw feveral times made ufe of for the buttons, &c. of tobacco pouches, and medicine chefts, which Agate was moft frequently cut in the fhape of a butter-fly, or fome other animal.

COMMERCE

Is carried on either within the empire itfelf, between its different towns and harbours, or elfe with foreigners. Their inland trade is in a very flourishing

flourishing state, and in every respect free and uncontrouled, being exempted from imposts, and having no want of communication between the various and innumerable places of the empire. The harbours are feen covered with large and finall craft, the high roads are crouded with travellers, and wares that are transporting from one place to another, and the fhops are every where filled with goods from every part of the empire, especially in the principal trading towns. In thefe towns, and particularly in Miaco, which is fituated in the centre of the empire, are kept likewife feveral large fairs, to which a vaft concourse of people refort from each extremity of the land, to buy and fell. If we except Kubo, the merchant is, it is true, the only one in the whole country, who can become rich, and fometimes accumulate very confiderable fums, But, notwithstanding his wealth, he cannot here, as in other countries. either purchase great titles, or raise himself to a higher rank in life; on the contrary, a merchant is always defpifed, and the public at large entertain the most contemptible opinion of him, inafmuch as they look upon it, that he has amaffed his treafures in a difhonourable way, and not without doing an injury to his fellow-citizens. In caffing their accounts, they always make use of Decimals. For weighing they use a fteelyard, to which they fasten a scale, wherein they place their wares. Upon

Upon this fteelyard is hung, by means of a ftring, a weight, which can be pushed backwards or forwards to afcertain the weight of the commodity. Such finall fteelyards the merchants always carry about them, either fingle or elfe in a box, together with a computing board. The Tea Trade is confined entirely to the inland confumption, the quantity exported amounting to little or nothing. The traffic in Soy, on the other hand, is more confiderable; and as the tea produced in this country is reckoned inferior to that of China, fo the foy is much better than that which is brewed in China. For this reafon foy is not only exported to Batavia, in the wooden barrels in which it is made, but is likewife fold from thence to Europe and to every part of the East-Indies. In fome places of Japan too the foy is reckoned still better than in others; but. in order to preferve the very beft fort, and prevent its undergoing a fermentation, in confequence of the heat of the climate, and thus being totally spoiled, the Dutch at the Factory boil it up in iron kettles, and afterwards draw it off into bottles, which are then well corked and fealed. This mode of treatment renders it ftronger and preferves it better, and makes it ferviceable for all kinds of fauce. The Silk trade is indeed in a very flourishing flate in the empire ; but their manufactured filk cloths, on account of their

their flightnefs, cannot be exported and used by the Europeans. The home trade in *Porcellain* is very brifk; but the exports are very few; as the Japanese Porcellain, though very good with respect to the materials, is thick and clumfy, and very feldom well coloured, and in general is far inferior in beauty to the Chinese.

The trade with China has probably been carried on longer than with any other nation; it is likewife the only Indian nation, with which they continue to have any dealings. From the remotest times the Chinese traded in raw filk, which they imported: they first landed at Ofacca, and afterwards at the harbour of Nagafaki, where they ftill continue to anchor, and have a Factory, together with a Temple, and their own Priefts. Till the year 1684, there arrived annually two hundred veffels, each equipped with fifty men: but on its being difcovered that the Jefuits, who at that time flood in high favour with the Chinefe Emperor, had, through the medium of fome merchants, fmuggled into Japan feveral Catholic books, originally printed in China; the Chinefe were in confequence of this more reftricted than formerly, and their capital in trade, which before was diferentional, was fixed at 600,000 thayls, and the number of their fhips reduced to feventy, equipped with only thirty men each. At prefent they are confined to a fmall island opposite the town

town of Nagafaki: they fend no Ambaffador to the Emperor; they have no Purveyor, but barter their own provisions themfelves at the gate; they have likewife no Director over their Commerce ; but Interpreters, a Guard, and Supervifors are appointed to attend them, the fame as the Dutch. They vend their wares at three different feafons of the year, viz. Spring, Summer, and Autumh. They fell here raw Silk, and manufactured filken Stuffs, Sugar, Turpentine, Myrrh, Agate, Catumbak, Baros Camphor, Ninfi, Medical Books, and other articles appertaining to medicine : in exchange for which they take Copper in bars, lackered ware, &c. Many, who are fond of pork, bring with them fwine from China. When a fhip of theirs has taken in its lading, and fet. fail, it is followed to a confiderable diftance at fea by a Japanefe veffel, in order to prevent fmuggling on the coaft.

The Portuguefe, who first difcovered the islands of Japan, were likewife the first European nation that carried on any trade in thefe parts. The profits were in the beginning incredible, infomuch that annually upwards of 300 tuns of gold were exported from hence. Afterwards, when they had rendered themfelves detefted by their haughty conduct, and their trade in confequence of this had fallen off amazingly, yet ftill they continued to export Anno 1636, 2350 chefts of

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of filver, or 2,350,000 thayls. Anno 1637, they exported 2,142,365 thayls, and in the year 1638; 1,259,023 thayls. After the Portuguese had been expelled from the land; they; as well as the Spaniards, made feveral attempts to re-eftablish their trade; but every attempt not only mifcarried, but was attended with the most difagreeable confequences among a people, fo inflexible in their refolves as the Japanefe: Anno 1640, a ship was fent from Macao, having on board two Ambaffadors; with a retinue of feventythree perfons. These were all of them immediately made prifoners in Nagafaki, and their arrival fignified to the court; upon which they were all, excepting twelve, who had previoufly fet out on their return, fentenced to be put to death, and were all of them beheaded upon one and the fame day, and even in one and the fame moment, each by a feparate executioner. At the fame time the prohibition was renewed for this nation ever to come to Japan; and this prohibition contains the following no lefs arrogant than ftrange menace, that fhould even the King of Portugal himfelf, or the God of the Chriftians arrive there, they fhould undergo the fame fate.

A large Spanish three-decker, well-manned, and mounting a confiderable number of guns, was audacious enough to anchor in the harbour of Nagafaki, and experienced a ftill more lamentable

mentable fate; which proves how inflexible the Japanefe are in their determinations, how pertinacioufly they execute the flatutes of their laws and fupreme magistrate, and do not even fuffer themfelves to be deterred by the formidable cannon and artillery of Europe. The fhip alluded to came from the Manillies, unloaded their cargo in Nagalaki, and took in a heavy lading of filver and other commodities. Meanwhile intelligence of their arrival had been fent to court, upon which the Prince of Arima received orders to burn the fhip, together with its crew and merchandife. Accordingly the Prince attacked the ship, in spite of the most valiant refiftance. As foon as he had boarded the ship with his forces, the Spaniards retreated under their uppermost deck. The Prince retired in sime to fave himfelf, and the deck was blown up into the air. The Spaniards were attacked with equal bravery a fecond and after that a third time, till all their decks were blown up. when the fhip went to the bottom, and not a fingle man was faved. Upwards of 3000 of the Japanele perished in this attack, and the conteft lafted nearly fix hours. More than 300 chefts of filver have been fince got up at different times.

The Dutch trade has experienced many yiciffitudes, and has ever, one time after another, both been

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been diminished, and rendered less profitable. As the Portuguese could not by the influence which they had at first acquired, prevent the Dutch from trading here likewife, the latter eftablished a Factory upon an ifland near the town of Firando, which they were in the fequel compelled to abandon. In the reign of the Emperor IVEYAS, Anno 1601, the Dutch first obtained the Royal permission to carry on a trade in any part of Japan, a trade, which flourished till the year 1619, when they had the imprudence to request the renewal of this charter from the fucceeding Emperor FIDE-TADA. Since this period their profits were greatly reduced, and their privileges in many refpects retrenched. Anno 1638, they received orders to demolifh their warehoufe at Firando, which was built of ftone, with great ftrength as well as magnificence, and had the letters A : o C. infcribed over the door ; a circumftance, which could not fail of alarming a people fo extremely miftruftful, and fo ill-treated by the Portuguefe. Shortly after this transaction, they received orders to abandon Firando entirely, and to remove to Nagafaki, and in future to caft anchor only in this harbour, which is fituated at the very extremity of the empire. Here they were fubjected to the fricteft infpection; the rudders being at firft taken off from the fhips, the powder, balls, cannon, and arms carried into the country, and the

the fhip unladen by the Japanefe themfelves; but fome of these precautions have been fince gradually omitted.

At first the Dutch imported raw Silk, manufactured Silk-stuffs, and Half-filks, Chintzes, Cottons, Clothes, Sappan-wood, Brazil-wood, Buffaloes-hides, Wax, Buffaloes-horns, Ivory, Shagreen, Spanish Leather, Pepper, Sugar, Cloves, Nutmegs, Baros Camphor, Quickfilver, Saffron, Lead, Saltpetre, Borax, Alum, Mufk, Gum Lac, Benzoe, Storax, Catechu, Ambergris, Coftus Arabicus, Coral, Antimony, Lookingglasses, Lignum Colubrinum, Files, Needles, Glafs, Spectacles, Birds, and other curiofities. The profits of this trade were very confiderable at Firando; when, on the loweft calculation, fix millions of gilders were exported, and in filver alone upwards of four millions. At the requeft of the Dutch themfelves, the filver trade was afterwards exchanged for that of copper, the profits upon the latter being at that time the moft confiderable : but from that period likewife the exportation of filver has been ftrictly forbidden. The worft blow perhaps, which the Dutch trade. has received, was in the year 1672, in confequence of the enmity, which the Privy-Counfellor INABA MINO, a favourite of the pious Emperor Daijojin, had conceived against the Dutch. This hatred he gratified by means of VOL. IV. one

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one of his relations, who was appointed Governor in Nagafaki. This man ordered famples to be fent him of every kind of wares, which were that year brought in the Company's fhips to Nagafaki. These famples he shewed to the merchants, and informed himfelf of the price fet upon them, as well as of the quantity, which they wished to have. Upon this he proffered the Dutch much lefs for thefe commodities, and left it at their option, to export them in cafe they did not find it answer to them. According to this valuation, the price of commodities was reduced every year, and the kobangs, or Japanefe currency rofe in value. This conduct, it is true, gave birth to complaints, and the Dutch trade was fo far free and uncontrolled, that their wares were permitted to be fold by public auction; but the whole amount of their fale was limited in the year 1685, to 300,000 thayls. At prefent the company employs only two fhips, and its profits are very inconfiderable. The commodities, which are now in general imported and exported by it, have been already fpecified by me in the Third Volume of this work.

The Coins current in this country, I have likewife already defcribed in part in the Third Volume; as for inftance, new Kobangs, Itjibs, Nandiogin, Itaganne and Kodama, Seni, old Kobangs, old Itjibs, Kosju Kin, and Gomome Gin. The

The Japanese coins in general are very simple, ftruck plain and unadorned, and the greater part of them without any rim round the margin, and without that decoration which the Swedifh coins poffefs, and most of them without any determined value. For this reafon they are almost always weighed by the Merchants, who, at the fame time, likewife fet a mark upon them, to fignify that the coin is ftandard weight and unadulterated. The Obang is the largeft gold coin that is to be found in the whole country, and ought rather to be confidered as a medal, than as a piece of money. It is not current in trade, and is feldom to be met with among merchants or perfons in private life. It is a flat, roundifh, oblong plate of gold, nearly of the thickness of a farthing, and is ftampt on one fide with fine lines, going tranfverfely acrofs the die, but broken off, and four imprefiions within the margins of the four fides, each impression exhibiting Dairi's arms. On the other fide, which is plain and finooth, are infcribed, in the name of the Prince who iffues the coin, feveral large black letters, reaching from fomewhat above the middle down to the lower margin. This infeription affures the proprietor of the genuineness of the coin, and therefore, as foon as it is worn off, the fame Prince's fecretary is bound to renew it, for which an Itjib must at that time be paid. Such a gold I a coin

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coin is of the value of ten old Kobangs. So that the *Obang* is chiefly in the poffeffion of, and iffued out by the Princes of the country and the Privy Counfellors, who prefent one of thefe pieces to those who are in their good graces, when they have no other fit prefent at hand. It is then given by way of doing honour to the perfon to whom it is prefented, fince they confider it lefs honourable to beftow in a prefent, though to the fame amount, the common kind of Kobangs.

Among their Silver coins the Kodama is the most variable, as well with respect to its shape and fize, as to the impreffion which is ftamped upon it. Of this coin there are fome that are oblong, while others are circular, or fpherical, or convex, or flat. Sometimes they are ftamped with more and fometimes fewer letters, and at other times with the image of Daikokf. By Daikekf is meant the God of Riches, or the Merchant's God, in this country. He is reprefented fitting upon two barrels of rice, with a hammer in his right hand, and a fack at his left. The Japanefe believe him to be invefted with the power of producing, on any fpot which he ftrikes with his hammer, whatever he pleafes; as for inftance, rice, food, clothes, money, &c.

Seni, of copper or iron, are ftrung, a hundred at a time, or, as is most commonly the cafe, ninety-

ninety-fix, upon a rufh. The former are then called Metastjakf, and the latter Kwurok-kufjakf. A ftring of the latter conftitutes the value of one Maas, five Konderins. The coins in one of thefe parcels are feldom all of one fort; but generally confift of two, three, or more different kinds. In this cafe the larger Seni are ftrung on first at one end of the rufh, and then follow the fmaller; the number of Seni diminishing in proportion to the number of large pieces in the parcel, which are of greater value than the fmall ones. Such parcels of Seni often lie ready ftrung in their fhops, both in town and country, for the accommodation of travellers, who are thus enabled to exchange their finall coin expeditioufly, without having occafion to lofe any time in reckoning it up. In the town of Nagafaki, Chinefe farthings are likewife current in trade: thefe are diftinguished by their yellow colour. They .refemble the Japanefe Seni in every refpect, except in the colour of the metal, and the infcription,

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RESIDENCE

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RESIDENCE AT DEZIMA, PREVIOUS TO MY RETURN HOME.

AFTER my arrival at the Factory, from the Court, I fpent a very hot fummer, and was very bufily employed in reviewing and arranging the different collections which I had made in the courfe of my journey, as well of dried and preferved, as of curious live trees and fhrubs, which I intended to fend to Amfterdam, by the homeward-bound fhips from Batavia. Thefe were in particular feveral very beautiful fpecies of the Maple genus (Aceres), befides others appertaining to thofe of Lycium, Celastrus, Viburnum, Prunus, Cycas, Cypreffus, Citrus, &c.

I made likewife at this time feveral excursions in the vicinity of Nagafaki, and as this was the feafon of the year most productive of flowers, I had the pleasure to fee my heavy expences, in this respect, fomewhat better repaid, than in the preceding autumn and winter.

Inftead of hemp, I faw white nettles (Urtica nivea, which likewife grew very commonly wild), cultivated in fome places for the manufacturing of ropes and cloths.

The Ricinus I found planted in feveral places, the feeds of which being pounded with Moxa and

and Touche together, are put into a box, over which a piece of filk is ftretched, which is befineared with oil, in order that the powder contained underneath may be moiftened by it. Whenever a Japanefe has occafion to put his feal to any thing, which is often very curioufly wrought in horn, he first dips the feal into this box, and then impreffes it upon the writing that is to be defignated by it. Thus this powder fupplies the place of Printer's Ink, and it is therefore neceffary, that the filk which covers the box, fhould always be moiftened afresh with oil, as fast as it dries.

The mats, with which the floors in general throughout the whole empire are covered, are moftly plaited in the country, and are of different quality in different provinces. The better fort is manufactured from the *Juncus effujus*, which is plaited very clofe and neatly together, and the interflices are afterwards filled up with riceftraw to the thicknefs of two or three fingers. In order therefore that this fpecies of grafs may grow to a greater height and be more ferviceable, it is cultivated in fome places which lie low; and for the purpofe of giving the mats a whitifh, rather than a yellow colour, it is very common to lay the rufhes out to bleach.

The Lilium fuperbum, which is one of the most beautiful flowers in the world, I frequently I 4 faw

faw hung up in their fmall veffels in the harbours, as an offering to their Sea God.

The Uvaria Japonica is a finall fhrub, which creeps along the ground, and grows very plentifully in feveral places round the harbour of Nagafaki. It is remarkable on account of the great quantity of clear mucus which it contains. When the twigs are deprived of their outfide bark, and placed in a glafs of water, the mucus exfuding, expands itfelf round them for about the thicknefs of a line and upwards, and appears as clear as chryftal. This mucus is fometimes ufed for the manufacturing of paper, inftead of that which they extract from the *Hibifcus manibat*, and the ladies likewife ufe it to render their hair fmooth and gloffy.

The Camellia fafanqua grows very plentifully near Nagafaki. It is a little fhrub, fo exactly refembling the Tea-tree, both in its leaves and flowers, that it is difficult to diffinguifh them from each other, except by their fize. The leaves have rather a pleafing fcent, and are therefore ufed by the fair fex, after being boiled, to wafh their hair. They are likewife fometimes mixed with Tea-leaves, to render the fcent of thefe ftill more agreeable.

A very finall fpecies of China Orange (Citrus Japonica), is frequently cultivated in the houfes in pots. This fhrub hardly exceeds fix inches in height,

height, and its fruit, which is fweet and palateable, like China Oranges, is not larger than an ordinary Cherry.

Truffles (Lycoperdon tuber), are dug out of the ground in many places, of the fize of a plumb: when fresh dug, they are soft and rather of a brown colour: but when falted they turn black. I frequently faw the Japanese eat them, after they had been falted, in soups, in the fame manner as Morils.

Soy-fauce, which is every where and every day used throughout the whole empire, I might almost fay in every difh, and which begins even to be made use of in Europe, is prepared from Soy Beans (Dolichos Soja) and falt, mixed with barley or wheat. For this purpose they cultivate. this fpecies of bean in feveral places, although it grows in great plenty wild. Scarcely any kind of legumen is more copioufly used than this. The feeds are ferved up in foups, once or twice a day all the year round, to people of diffinction or otherwife, to the poor and to the rich. Soy is prepared in the following manner: the beans are boiled till they become rather foft; afterwards an equal quantity of pounded barley or wheat is added. Thefe ingredients being mixed together, are fet in a warm place, and covered up for four and twenty hours, that they may ferment. An equal quantity of falt is then added to the mixture.

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ture, and twice and a half as much water is poured upon it. After it has been mixed in this manner in an earthen veffel, it must ftand well covered two or three whole months together, during which period it is neceffary however at first for it to be ftirred about feveral times in the day for feveral days together. The liquor is then prefied and strained off, and kept in wooden veffels. Some provinces furnish better foy than others; but exclusively of this, it grows better and clearer through age. Its colour is invariably brown, and its chief excellence consists in the agreeable falt tafte which it posses.

Myrica nagi is but rarely found at Nagafaki; the wood is quite white, and is used for making combs for the ladies to wear in their hair.

The Fir-tree (*Pinus fylvestris*), is that of which the wood is most commonly used by the cabinetmakers in their work-shops: but the wood of the Japanese Cypress (*Cypressi japonica*), which is both fost and beautiful, is likewise very much used, as is also that of the *Taxus Macrophylla*, and feveral other forts.

The Arum efculentum is cultivated in fmall beds in the fields, not only on account of its efculent roots, though thefe, unlefs prepared, are very acrid, but alfo on account of its ftalks, which they cut in pieces and put into their foups. In like manner they use for food the roots of the following

following plants, which grow wild, viz. the Sagittaria fagittata, Polygonum multiflorum, and Diofcorea Japonica, the two latter of which ferve as fodder for the cattle, and were very frequently brought, together with other grafs, to the cattle at the Dutch Factory.

One of the Interpreters, a friend of mine, of the name of KOSAK, often did me the favour to collect for me feveral different kinds of coin, which were faid to be very ancient, and to have been formerly current in the land. Thefe were prefented to me as great curiofities. They were all of them *Seni* of red copper, and refembled the others in fize, thicknefs, and the fquare hole in the middle; but they were marked with different letters.

One of them was reputed to be 1135 years old, and to have furnished the standard for the measure of the country; as the diameter of this coin was required to be just one Japanese inch. It had no letters on the other fide.

Another was reported to be 758 years cld, without any characters upon the other fide.

The third, 748 years old, was likewife without any characters on one fide.

The fourth, 718 years old, without any letters on one fide, like the foregoing.

The fifth, 651 years old, without any letters on the other fide.

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The fixth, 596 years old, without any infeription on one fide.

The feventh, I was informed, was 566 years old; it had two letters on the under fide. The ages of all thefe coins are reckoned only down to the year 1776, when I received them, each with its age fet down feparate, and folded up in paper. All thefe, together with the Japanefe coins above defcribed, are to be found in his Swedifh Majefty's very valuable Collection of Coins, at Drotningholm.

A blackifh coloured *Cicada* was called *Semi* by the Japanefe, and a *Bombylius* with a white tail, had the name of *Abu*.

July 31, 1776, the Zeeduyn, a fhip belonging to the Dutch Company, arrived from Batavia; and on the 2d of August following, the Admiral's fhip Stavenisse, having on board M. DUURKOOP, who was to refide here this year in quality of Chief of the Factory.

August 26th, in the evening, the Japanese began to celebrate in Nagasaki and throughout the whole empire, the Feast of Lamps, or Lanthorn-festival, which is kept with great folemnity in Nagasaki.

September 13th, towards evening, intelligence was brought, that the Prince of Owari, Coufingerman to Kubo, had died five days before. On account of this event, orders were now given out,

out, that no perfon whatever fhould play upon any kind of inftrument for the fpace of five days, which in this country is the ordinary time of the deepeft mourning. This Prince was about forty years of age, or rather more. For fome time previous to this, he had been made choice of for the Emperor's fon-in-law; but his ill ftars had decreed, that the day before his arrival in Jedo, his intended bride had paid the laft debt of nature.

When Copper is weighed for exportation, it is always done with a large Dutch weighing-machine. In each cheft a pickel is put, and on each pickel the additional weight of a catje is allowed, of which the Administrators at Onrust, in Batavia, to whom the copper is configned, receive a fifth part. Of the remaining fourfifths, the ship's Captain receives two-thirds, and the first Mate one-third, in order that those who are refponfible for the weight, may not be lofers. However, notwithstanding this precaution, it happens every year, that in carrying the chefts of copper to the bridge, the Japanefe contrive to fteal fome of it, fo that those who are concerned in them, always lose fomething. They do not regard it as a crime to rob the Dutch Merchants in this manner : and the ftolen copper is afterwards fold to the Chinefe, who pay a greater price for it than the Dutch

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Dutch would. The preceding year the Captain was fifty-two pickels too fhort.

Several of the crew in the Dutch fhips, who had been attacked very feverely with the fever in Batavia, fpeedily recovered their health here; and others, who had large indurated tumors in different parts of their bodies, and a fwelled abdomen, which is a very common confequence of the malignant Batavian fevers, were here perfectly freed from them.

Unicorns teeth (*unicornu*) were fold this year at a much lower price than the preceding. A maas of it fetched this year only four maas, eight konderyns, and five kafjes, which amounts to about feventy-eight thayls for each catje.

October 10th, the newly-arrived Governor reviewed first of all the Imperial guard in the harbour, after which he paid a visit to the Dutch Admiral-ship, and lastly proceeded to the island of Dezima, accompanied by the Governor, who was now going out of office.

The following Gentlemen were Governors in Nagafaki during my abode there. Anno 1775, Noto no Kami went out of office, and was fucceeded by NAGATO no Kami: who in his turn refigned the reins of government in the year 1776 to his fucceffor TANGO no Kami.

Of the Fishermen who, from the harbour of Nagafaki alone, go forth to feek their livelihood

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upon the deep, and who may be feen by their lighted torches, at the diftance of four miles or more from the town, the number is almost incredible. The multiplicity of fires which were now feen at this diftance, prefented to the fpectator, in the dark autumnal evenings, the most glorious fight imaginable.

Among other commodities, which private perfons exported on their own account, there was likewife this year a parcel of iron carried out by one of the Captains, probably with a view of felling it to fome profit to the Chinefe in Batavia.

As I forefaw, that were I to prolong my ftay in this country to another year, I should still be able to contribute little or nothing more to the advancement of the fciences than I had already done this year, I formed a firm refolution to return to Batavia. On the other hand, our new Chief endeavoured at first to perfuade, and at laft to compel me, to continue here another year, with a view to his own advantage, as he placed greater confidence in my medical talents, than he expected he fhould have reafon to do in those of my fucceffor. I was, however, fortunate enough to escape from him, and to revifit those places, where I could have greater liberty and a wider extent of country, to collect and examine without control the wonderous treafures of nature.

November

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November 23d, I bade farewell to the island of Dezima, and failed to the Admiral's ship Stavenisse, which rode at anchor off Papenberg.

On the 29th following, Commiffaries from the Factory came on board, to deliver letters and other documents to the Government in Batavia.

On the 30th in the morning we weighed our first anchor, although we still staid there a couple of days.

December the 3d, about ten o'clock, we weighed our other anchor and got under fail. The Zeeduyn failed a-head of us, and fired her guns, as we did ours, at eleven o'clock, directly before Papenberg, and again at twelve, at the laft ridge of mountains called Cavallos, at the fame time reciprocally wifning each other a profperous voyage.

The lading in each fhip confifted now chiefly of 6750 pickels of bar-copper, and 364 barrels of camphor, each barrel containing from 120 to 130 pounds weight.

ARRIVAL

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ARRIVAL IN BATAVIAL

1777. January 4th, I landed, after a profperous voyage, in Batavia, and waited again upon my refpectable friend Dr. HOFFMAN, who now likewife made me an offer of his houfe and table during my ftay at this place.

At the mouth of the great river, which flows through Batavia, a confiderable way down into the harbour, the current was at this feafon of the year fo violent, that it required no little caution, and was at the fame time attended with fome degree of danger, to work one's way up to the town in floops and other veffels.

Among other kind friends, whom I now miffed on the ifland, was Dr. HOFFMAN's lady, who had departed from this world during my abfence. This recalled to my remembrance, how I had, fhortly before my departure to Japan, fat down to dinner in this very houfe with thirteen perfons; eleven of whom, my friend now informed me, had been carried off by the fevers which ufually prevail here, in the fpace of three weeks, infomuch, that of the whole thirteen, he and myfelf were at this time the fole furvivors. This furnifhes an irrefragable proof of the mortality and unhealthy climate of this fpot, where a great number of humid vapours fill the heated at-VOL. IV. K mosphere,

mosphere, render the body sluggish, and apt readily to receive the feeds of putrefaction.

The Governor General, van der PARRA, had likewife left this fublunary fphere in the courfe of the preceding year; in whom I loft a real patron. He was incontrovertibly a man of good fenfe, and had rendered effential fervices to the Dutch Company, although he had not neglected, during the great length of time that he continued in office, to confult his own interefts. To his fon, who was his fole heir, he had bequeathed upwards of four millions of guilders. The fupreme authority in all the Eaft-Indies now devolved into the hands of van RIEMSDYK, an old and fuperannuated man, who, if we except an unwearied attention to his own intereft, did not feem ever to have been poffeffed. of any remarkable qualities. The first time, after my landing, that I waited upon his Excellency, which is the ufual title of this Chief Magistrate, I was immediately confulted with refpect to his Lady's illnefs, which confifted in a cancer in one of her breafts, and was beyond all hope incurable.

After I had farther paid my court to my benefactor, M. RADERMACHER, a gentleman, to whom the Sciences at large are greatly indebted, and the active friend of the whole human race, I made it my first care to inspect the various things.

things, which I had left in charge with my hoft in a large cheft, and in a very capacious warehoufe. But how great was my confusion and furprize, when on opening the cheft I discovered, that notwithstanding it had been placed upon bottles, and in this manner raifed above the ground, the major part of the Herbs, that I had formerly collected in Java, together with a great number of the books that I had left behind me, were, almost to a third of the height of the cheft from the bottom, entirely rotten and mouldered away with the damp air, which had been pent up in it.

At this feafon of the year it ftill rained violently, commonly every day, particularly in the morning and evening, befides flitting flowers. The fky was for the moft part overcaft, and the air thick and damp, infomuch that it was impoffible for me to dry any of the herbs I had collected, as every thing mouldered away and rotted in rooms that were clofe flut. The rainy months are reckoned from December to March, during which time the air here is cool, and fewer diforders prevail, and this feafon is what they generally call their winter. After this follows the warmer feafon, when the heat is fcorching and intolerable, and the fky clear, with a continual fucceffion of dry weather.

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The New Year of the Chinefe now commenced with the first New Moon in February, and was celebrated by them with great folemnity.

M. RADERMACHER, the State-Counfellor, from whom I experienced extraordinary friendthip and protection, infifted on my being his gueft once or twice a week at leaft, and giving him an account of what I had collected and difcovered, as well in Japan, as in the vicinity of Batavia; the environs of which, even during the most fultry heat of the afternoon, when others were enjoying a comfortable afternoon's nap, I every day visited and explored. On one. of these occasions a circumstance happened, which greatly aftonished both him and myfelf. It chanced that one day M. FEITH, who was lately the Chief at the Dutch Factory at Japan. and whom I had accompanied the foregoing year to the Imperial Court, was queftioned by M. RADERMACHER concerning the reigning Emperor in Japan, and whether he was acquainted with his Imperial Majefty's name. This queftion he was then obliged to answer in the negative, although he had lived at leaft fourteen years in that country, during which period he had four times had an audience of the Emperor, in the character of ambaffador. The following day, when I had the honour to dine at this fame. Counfellor's houfe, he imagined that he could propofe

propofe a queftion to me, which I fhould be at a lofs to anfwer; though he had hitherto feldom found me non-pluffed. I was accordingly interrogated with refpect to the name and age of the prefent Emperor of Japan. And as I on this occafion was not only able to answer to these queftions, but likewife informed them, that I had procured authentic intelligence concerning the names of the Ecclefiaftical Emperor, the Hereditary Prince, and of the Emperors both -Spiritual and Temporal, who had died in the courfe of the prefent century, both the Counfellor himfelf and the whole company were greatly amazed, that I fhould have been able to penetrate into a fecret, which was effeemed infcrutable, and which an ambaffador in the fpace of many years had not been able to difcover. This lift of the Japanese Emperors, which I left with M. RADERMACHER, was fince introduced into the Transactions which a Literary Society in Batavia published fome years afterwards. The confidence and friendship, which both the Interpreters and Phyficians in Japan had conceived for me, were highly inftrumental in procuring me the information which I received, in what relates to the Political Hiftory of Japan.

KEMPFER has given in his Hiftory a copious lift both of the Ecclefiaftical and Temporal Emperors in Japan, who had fucceeded each K 3 other

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other till the year of his departure from that The continuation of this lift to the country. prefent period was a principal object of my wifhes, however difficult the attainment of it was with any tolerable degree of certainty. During my abode in the Metropolis, Jedo, however, I was fortunate enough to procure, by means of the Principal Interpreter, and the Imperial Phyfician, the above-mentioned Catalogue both of the Ecclefiaftical and Temporal Emperors, and the name of the prefent Emperor. And with thefe my Japanefe friends I have in the fequel, for many years after my return to my native country, maintained a very inftructive correfpondence; and I have even afterwards had a moft defirable opportunity, with the kind affiftance of my honoured patron Profeffor Bur-MANN, of Amfterdam, to recommend and promote one of my friends and beloved pupils, Dr. STUTZER, to India and the remote ifland of Japan.

Although the climate is extremely unhealthy, efpecially in the town, the Europeans, with very little exception, lead here a very irregular life. At dinner they inflame their blood with ale and wine, and after dinner, with fmoking tobacco, drinking ale and wine. At half paft two in the afternoon they go to bed, and take their reft till five o'clock. The evening is fpent in company,

pany, and with ale, wine, cards, and that altogether indifpenfable article of life, the tobaccopipe. At half paft nine in the evening, they again fit down to table to eat, at the fame time that they drink profully of ale and wine. After fupper is finished, recourse is again had to the delicious pipe, which had only been laid as fide during the repast, and which is now a fecond time lighted up, to burn till eleven o'clock, its fires being all the while mitigated with continual libations of ale and wine, till rendered giddy with heat and these liquors, and at the fame time half drunk with the finoke of tobacco, weary and drowfy, they at length retire to bed, to enjoy a reftlefs fleep and comfortlefs repofe.

After I had collected in the vicinity of Batavia whatever at this feafon of the year was to be found there, of the various productions of nature, I wifhed to infpect the interior of this incomparable ifland. For this purpofe I went on board the *Vreedeluft*, and failed in this veffel along the northern coaft of Java to Samarang,

VOYAGE

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VOYAGE TO SAMARANG.

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WE failed from the road near the town on the 23d of *March*, and on the 31ft day following paffed by *Cheribon*, one of the principal Factories, where the Eaft-India Company keeps a Governor, whofe yearly income was estimated at 70,000 rix-dollars.

The mountain, near the town of Cheribon, has feveral times been in a flate of conflagration. Two years ago a commotion took place, and the afhes, which in confequence of this it vomited up, deftroyed feveral thousand plantations of coffee in the neighbourhood.

April 2d, we failed by Mount Tagal, which is frequently feen burning at the top. At this time we faw only a fmoke iffuing from the fummit about the thicknefs of a man's body.

In the courfe of this voyage, which lafted long enough, on account of the fhiftings of the wind, that now took place, I feveral times faw ferpents of different kinds come from the land, and fwim upon the water; one of thefe was above two feet long, and fprang to a confiderable height out of the water. When the wind fhifts, one is frequently becalmed, and the heat is very troublefome. It was also now the feafon of the year when the wefterly winds began to ceafe,

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ceafe, and the eafterly trade winds were expected to fet in again. On this occafion our Captain informed me, that he, as well as feveral other experienced feamen, thought they had obferved with certainty, that the eafterly winds fet in later, and that the trade-winds were in general much weaker, ever fince the dreadful earthquake which deftroyed Lifbon, and which was felt fo univerfally all over the globe.

Notwithstanding that the island of Java produces fugar-canes in abundance, and fugar of courfe is not extremely dear, we were in our prefent voyage furnished with a very wretched commodity indeed, and put off with coarfe brown fugar instead of white. When I, in behalf of the fick, remonstrated with the Captain on the fubject, his reply was, that it was not unufual for the source fugar, instead of the white powder-fugar which the Government allowed; and that the difference between the prices of these two forts went into a common purse, for the benefit of the Superintendants of the warehouses, where they were packed up.

April 9th, I landed at Samarang, a middlefized handfome, and well fortified town, and at the fame time the principal eftablifhment for the whole coaft of Java, on which all the other Factories,

Factories, Cheribon excepted, are dependant. It was conquered by the Dutch in 1708.

Immediately upon my arrival, I took up my refidence with the worthy Phyfician of the Hofpital, a man, who had had great experience in Surgery and the practice of Phyfic, and who fhewed me much friendship and kindness. But I had hardly landed, before I was taken ill, and was obliged to take to my bed, attacked with a tertian ague, an illnefs which I had brought upon myfelf, when on board, by leaving the window of my cabin open at night, whilft I lay afleep, in confequence of which the perfpirable matter was checked and repelled by the coolness of the nightair. Although the fever was very violent, I was fortunate enough to get rid of it, by taking the Extract of Bark, after I had previously purged myfelf, and fuftained feveral febrile paroxyfms. Meanwhile the fhip profecuted its voyage to Juana, a Factory a little farther on upon the coaft, in order to take in there its lading of timber and lumber.

Samarang is fituated upon a large river, at no great diftance from the fea-fhore. It is garrifoned with about 150 foldiers, though the Factory was faid, in fact, to have 1000 men belonging to it. The yearly income of the Governor was fuppofed to amount to 80, nay, 100,000 rix-dollars; for which reafon, this lucrative poft was generally given

given to the relatives or favourites of the Governor-General, who were however feldom allowed to continue in this office above three years, when they were for the most part promoted to the rank of Counfellors of State, and were obliged to leave their place to another.

I had fcarcely recovered from my fever, which, however, was not very flight, when I undertook, with the Governor's permiffion, and in company with Dr. BOENNEKEN, Phyfician to the Hofpital, a journey, above 180 miles into the country, quite up to the mountains. The Governor, on this occafion, did me the favour to furnish me with his pafiport, directed to all the Commandants at the Company's fortified pofts, and requefted me to direct my attention likewife in this expedition to all fuch plants, as either already had been employed as remedies, or elfe might ferve in the ftead of these, for the use and behoof of the Hofpitals. For this purpofe, he likewife commanded Dr. BOENNEKEN to accompany me, in order that he might acquire a perfect knowledge of them.

April 23d, we fet out on horfeback to one of the Company's pofts, called Unarang, in which place a Serjeant is maintained with about twenty privates.

On the 24th, we profecuted our journey to Salatiga, where there is another fortification, with a Com-

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a Commandant in it, who is an Enfign, and has fomewhat above twenty men under him.

On the 26th, we rode on to Kopping, a Javanefe village, fituated high up on a mountain. The climate is both cold and healthy of this place, which is not the lefs fertile on that account. Among other remarkable circumftances, which I noticed in my journey, was the following, that the Indian Fig-tree (*Ficus Indica*), which grows to a confiderable height in the forefts, hangs its boughs down fo low, that they touch the ground, and taking root there, fhoot forth new feyons, which in procefs of time become large trees. In this manner a fingle Fig-tree forms with its boughs that have taken root, a great number of apartments or chambers, as it were, and fpreads to a confiderable diftance.

Kamadu is the name given to a kind of leaves, which fting like ftinging nettles, but much more violently, and even to fuch a degree, as to caufe an inflammation in the fkin. On every vein they have fharp-pointed prickles, which are transparent, and contain a fluid that caufes this irritation. The kind which it is found to be a fpecies of the nettle before unknown, to which I at this time gave the name of Urtica ftimulans. Any one that, unacquainted with its properties, fhould attempt to break off the twigs of this little tree or fhrub with his naked hands, would

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RETURN FROM KOPPING.

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pay dear for his imprudence and ignorance. The Javanefe are very well acquainted with it in general, and the Dutch Colonifts call it Buffel's-blad, or Buffaloe's leaf. It has ever been cuftomary with the Javanese Princes on holidays, by way of amulement, to let a Tyger and Buffalo fight together in an area, fenced in with planks, near which a great number of fpectators can fit in perfect fafety. If on fuch occasions the Buffalo fhews himfelf tardy in attacking his adverfary, he is flogged with this plant, which caufes fuch a heat and inflammation in his fkin. that he at length becomes quite wild and outrageous. Whenever any one happens to be ftung with this nettle-tree, the best remedy is, inftead of washing the part with water, which would only render the pain more intolerable, to anoint it either with oil, or elfe with rice boiled down to a foft confiftence.

On the 27th, we turned back again, and went to Salatiga.

On the 28th, we departed from this place, accompanied by the Enfign, to a Javanefe village, called *Tundang*, where we refolved to pafs the night. The village was tolerably large, but the houfes were fmall, formed of bamboo canes, in the ftile of those huts that are made of branches of trees, the bamboos not being placed closer together than what would allow of a paffage for the

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the air; a circumftance of fome importance in this hot climate. We did not take up our quarters with any of the Javanefe, but had a hut built for ourfelves. This was immediately performed by fome of the Javanefe, and the bufinefs was completed with fuch incredible difpatch, that before we could alight from, and unfaddle our horfes, and unpack our things, not only our houfe was entirely finished, but it was likewife furnished with a couch to lie upon, three stools and a table, all which were manufactured on the fpot. I ftood quite aftonished at this new edifice, and entered with the greatest amazement under its friendly shade. Some of the Javanese were employed in cutting trunks of bamboos of different degrees of thickness, others made, with two ftrokes, a hole in each fide of them, and others inferted into these holes bamboo flicks of a fmaller fize. After this twigs with the leaves on them were interwoven between, and the house, in confequence of a great number of hands being employed on it, was completed in a few minutes, as were alfo the tables and ftools in a fimilar manner, although these were neither fmooth nor even, and confequently not calculated for indolent ramblers of quality, but only for weary travellers.

As we arrived in this place early before evening, I took a ramble to the woods and neighbouring

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bouring fpots, in fearch of herbs. *Diofcore.e* I found both wild and cultivated, twining with their curling tendrils, frequently to the very fummits of the trees.

And as we had no accefs to the light, before the aperture that ferved for the door, a fire was made, round which we placed ourfelves, I, with the herbs I had gathered, and the other gentlemen with their tobacco-pipes. This lafted not long, before a whole troop of Tavanefe, confifting of the inhabitants of the village, came and pitched their numerous camp facing us. Among thefe were feveral mulicians, with a large band of dancers, male and female, who had been fent for hither by my companions, for the fake of diverting me, and that I might have an opportunity of feeing the fports and amufements of the Javanefe. Stringed inftruments, drums, and pipes began to ftrike up, and the dancing commenced and continued with various motions and geftures, being moftly kept up by two dancers at a time. Every one that danced, was obliged to pay a trifle for each dance, either to the perfon with whom he danced or to the mulicians. This rendered it necessary for us to fupply the flaves we had brought with us with a few fmall pieces of money, in order that they might take fhare in the diversion.

I cannot

I cannot deny, but that this jovial fcene and fpectacle of mirthful amufement was, in fact, extremely agreeable and entertaining; but the perfecution which we fuffered from the gnats in this low fituation, embittered every pleafure, and proved an infurmountable obftacle to our night's repose. Neither yarn-flockings nor boots were capable of keeping the gnats from our legs; and although the fmoke of the fire, as well as of the tobacco, in fome measure defended our faces from their attacks, yet thefe prefervatives proved to me, who never was fond of fmoke of any kind, quite intolerable. At length, after midnight, I laid me down to fleep upon my grafs-bed, and buried myfelf in fuch a manner under a veil, and fome pocket-handkerchiefs, which I fpread over me, that the perfecuting gnats were prevented from giving me much difturbance, any farther than by the inceffant piping noife which they made.

After paffing a fleeplefs night in this place, we continued our journey the next morning to Samarang, where we arrived on the 1ft of May.

I waited on the Governor, a friendly, wellbred, and amiable man, and made my report to him of what I had been able to collect and difcover in my journey. The plants which might be applied with advantage to the use of the fick, as well in as out of the Hospitals, were the following, viz.

The

The Fumaria officinalis, called by the Javanese Rumpung, was found in a small quantity in the mountainous tracts near Kopping.

The *Rubus moluccanus*, and two other fpecies of this genus, were found between Salatiga and Kopping, on the fides of hills, and particularly near rivers, in profusion.

The Artemifia, Mugwort, called by the Javanefe Domolo, and by the Malays Seroni, grew between Salatiga and Kopping, in the rivers and plains, in the greateft profusion.

The Sonchus oleraceus, called by the Javanefe Dimboring, was feen near Kopping; as was likewife

The Lactuca, or Lettuce, (by the Javanefe Belot) but in a finall quantity, between Salatiga and Kopping.

The Scolopendrium had taken up its quarters among the trees between Unarang and Salatiga.

The *Capficum*, or Cayenne Pepper, to which the Javanefe give the name of *Lombo*, was found wild between Salatiga and Kopping.

The Oxalis acetofella, the Samangi Kunong of the Javanefe, occurred everywhere very common.

The Chenopodium, in the Malay language Paijam china, grew near Kopping.

The Sanicula, in the Javanese language Spran, grew near the rivulets between Salatiga and Kopping.

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A Ranunculus and a fpecies of Perficaria, which the Malays called Dukut Parang, grew along with the preceding plant.

The Schananthus, in the Malay language, Sire, was feen between Unarang and Kopping.

The Fragaria vefca, or Strawberry, the Manikan of the Javanefe, occurred in this warm country near Kopping and the rivulets in that neighbourhood.

The *Clematis* twined round the fhrubs between Salatiga and Kopping.

Agrimony, in the Malay tongue Upan Upan Karpo, grew along with the preceding plant.

The Salicornia fruticofa, the Chimbine of the Javanefe, grew on the fhores of Samarang.

The Vitex was called by the Javanese Simina, as likewise Lagundo, and was very common in many places.

The Coftus Arabicus, which I had before found very common and plentiful in the dikes that environed Batavia, was likewife found in great plenty here, from Samarang all the way to Salatiga, growing among the bufhes and the high grafs.

The Leonunus cardiaca, called in the Malay tongue Klengenlang, grew near Kopping.

Urtica, or Nettles, grew here and there, in different parts, tolerably common.

The *Hibifcus abelmofchus* made an elegant figure with its leaves and beautiful flowers between Samarang and Salatiga.

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The Adiantum was found in the fkirts of woods; and even in the woods themfelves, as also near the rivulets.

The Datura Stramonium, called Rotecubung, grew between Samarang and Undrang.

The Similax in the woods near Unarang, and

The Solanum nigrum, or deadly Nightshade, near Kopping.

The Verbefina acmella, the Sironi of the Malays, was common every where.

The Amonum Zingiber, Ginger; which the Javanefe call Chai, and the Malays Bangle, occurred for the most part cultivated by the Chinese; but the Amonum zerumbet, which both the Javanese and Malays sometimes call likewise Bangle, although most commonly it bears the name of Lampryang, grew in profusion, chiefly on fandy and meagre spots of land, between Salatiga and Samarang.

The Curcuma, Turmeric, by fome called Kunir, by others again Kunjet, I found only near Samarang.

The Kampferia, or Sempu, grows near Salatiga, in watery and low vallies.

The Amomum compastum, Cardamom, by the Javanefe called Mojei, and its fruit Kappologo, is cultivated near Salatiga.

The Piper longum, long Pepper, the Chabe and Dandang Muffu of the Javanese, grew co-L 2 piously

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pioufly in the woods near Salatiga, as likewife elfewhere, frequently on the very ftone-fences.

The Piper nigrum, black Pepper, called Maritio, grows in profusion near Salatiga, in the woods.

The Piper cubeba, or Cubebs, which has obtained the name of Komukus, abounds in the woods near Tuntang, and is the fort which is fent over to Europe.

The *Melilothus*, both by the Javanefe and Malays called *Treba*, I had before obferved at Batavia; now it was found near Salatiga.

The Cannabis fativa, or Hemp, likewife grew on a fpot near Salatiga; it was high, but ftill remained a fhrub, and was called by the Javanefe Ginge.

The Cyperus rotundus grew every where com-

The Saccharum officinarum, or Sugar Cane, is called *Tebu*, and was cultivated all over the country, and at the fame time grew wild near Salatiga.

The Mirabilis Jalappa occurred for the moft part cultivated, but was likewife found wild near Salatiga, and is called in the Malay language Rambal Pokul Ampat, an expression which answers to the Vier ubrs bloom (Four hours Blossom) of the Dutch.

The Cynogloffum (Hound's-tongue), the Upan Upan Sapi of the Malays, was found between Salatiga and Kopping.

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SAMARANG, 1777.

The Cicuta? (or Hemlock,) was found just above Salatiga, in the clefts of mountains, and by the fides of rivulets.

The *Plantago major*, or greater Plantain, vegetated near the rivulets, and in other places, in abundance.

The Ricinus communis, and the Jatropha cureas, which in the Malay tongue was called Jarrak; were both of them extremely common both here and in other places on the ifland of Java.

Of the Arum there were various forts, very common, near ponds and in every ditch.

The Caryota urens, called the Saguer tree, grew between Salatiga and Kopping, and was faid to be the real tree of which Sago is made.

The Ocymum bafilicum was common hereabouts, in like manner as the Ocymum fanctum was near Batavia and at other places.

The *Tamarindus indica*, a very tall, ftrong, and handfome tree, was very common every where.

The Cassia fistula and javanica, called Dranguli, the long cylindrical fruit of which is exactly like canes or walking-flicks, grew common in the woods near Tundang.

The Acorus calamus, or Calamus Aromaticus, grew wild near Samarang and in many other places, winding round the trees, and with its prickles impeding the progress of the traveller.

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The Crinum latifolium, which may be used instead of the Scilla, or Squills, grew here, near Batavia, and in other parts.

The Sida afiatica is called by the Europeans Malva arborea, and grows near Batavia, Samarang, and other places, common.

Of Gnaphalium, or Cudweed, two forts are found near Kopping, which the Javanefe call Sombong Madur.

The Sambucus canadenfis, the Soobo of the Javanefe, grows in the clefts of mountains near the rivulets in the neighbourhood of Kopping.

The Poterium fanguiforba? grows between Unarang and Samarang.

The Ophiorbiza mungos, or Lignum columbrinum, called by the Javanese as well as the Malays Kajo ular and Bidara laut, is in different parts of the country tolerably common.

Jasminum, or Jessamine, was gathered near Salatiga.

The Coriandrum fativum, or Coriander, called by the Javanese Katumjar, I found in some few places, where some other plant was cultivated; so that it appeared to have been brought from Europe with the feeds.

Piper betle and Areca catechu, two plants of which the Indians cannot difpenfe with the ufe, are found every where.

A German

SAMARANG, 1777.

A German Surgeon, who had formerly been in the fervice of the Company, and was greatly beloved by the Governor in Samarang, had been fo unfortunate as to have contracted Cataracts in both his eyes, infomuch that he was now totally blind. The Governor, on being informed by the Phylician of the Hofpital, who was my hoft, that I thought myfelf capable of reftoring this Surgeon to his fight, made me an offer of a hundred Ducatoons, in cafe I fucceeded in the attempt; and as all my chirurgical inftruments had gone in the ship to Juana, he fent off a courier immediately to fetch them. But this man, who was fomewhat above the middle age, must himfelf have had very little confidence in his own profession of furgery, because he was full as obftinate as he was blind, and would in no wife fuffer himfelf to be induced or perfuaded to undergo any operation. I enquired therefore, whether no other blind perfons could be found, to whom I might administer some relief, and at the fame time instruct my worthy host in an operation, which is one of the fineft in the whole-Art of Surgery. He immediately procured an elderly European man, and a Chinefe woman of 70 years of age, both of whom were blind in both eyes; the former being abfolutely ftoneblind, and the latter only able to walk a little without leading. On both of them I performed.

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the operation with fuccefs, they being both reflored to their full and perfect fight. And indeed I was perfuaded, previous to my departure from this place, to leave to my hoft not only thefe ophthalmic inftruments, but likewife feveral other inftruments, which are but feldom required to be ufed on board of fhip.

The flowers, both fingle and double of the *Nyctantes Sambac*, are often ftrung upon a thread, and are ufed here likewife for garlands for the head by the European ladies. Sometimes at balls the gentlemen receive a fimilar garland, with a *Champaca* flower in the middle to hang round their necks. The fcent of it is extremely agreeable, and the colour likewife, which is as white as fnow, has a very pleafing effect.

Coffee is cultivated in a great many places, and these plantations are beautiful beyond defeription. The coffee-tree produces its first pods in the third year. A hundred trees yield upon an average three or four chefts of beans, each cheft weighing 120 pounds averdupoife, one year more, another year somewhat less. In the beginning the Dutch Company is faid to have paid the Javanese twenty-five rix-dollars for every cheft of coffee; at present they pay no more than fix, of which the *Tommegom*, or Land-Voigt, receives two rix-dollars; fo that the labouring Javanese, who plants the coffee, does not reecive

JAPARA, 1777.

ceive more than four. The Erythrina corallodendrum, which is called Dadap, was here always planted between the coffee-fhrubs, that ftood thin, and at a diftance from each other, in order to give the whole plantation a moderately thick fhade and fhelter against the fcorching rays of the fun.

It was inconceivably pleafant to behold fuch a plantation, viz. a grove of trees in ftrait rows, confifting partly of tall and thinly-planted trees, and partly of fhrubs, the fpreading, and fomewhat dependent branches of which were covered with a great number of coffee-pods, and at the fame time with a clufter of white flowers.

May 3d, the Javanese celebrated their New-Year; when the Patti, or High Sheriff of the Province, who refides here, gave a grand entertainment, to which all the Company's fervants in Samarang were invited.

May 14th, I failed in a Dutch fhip from Samarang to Japara, where I was inexprefibly well received and much befriended by M. van der BEEK, who was Refidentiary at this delightful place; a gentleman, who not only poffeffed great knowledge himfelf, but likewife protected and encouraged the Sciences and their votaries in this part of the Eaftern World, His fingular kindnefs towards me I fhall never bury in oblivion; but my deftiny would not permit me to make any

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any long flay here; as the fhip at Juana had already taken in its lading, and I was confequently obliged to leave this place in hafte, in order to accompany it to Batavia.

May 20, I profecuted my journey on horfeback over-land to Juana, accompanied by a Javanefe, whom M. van der BEEK had given me for my conductor. And as the journey was too long to be performed in one day, during the heat. I received at the fame time letters of recommendation to a certain Prince, whom I was to wait upon in my way thither, and who had married the Emperor's fifter. With this Prince I took up my night-quarters; after having had the happiness to sup at his table with him alone, and converfe with him in broken Malay, upon various topics. The filence of the night, however, was very much interrupted both by feriech-owls and other animals, whofe cries and fhriekings lasted all night long. The following day, towards evening, I arrived in Juana, and went immediately with a floop on board the fhip, which had already got to the diftance of feveral miles from the road.

The coaft on the northern fide of Java is very low, and the harbours fhallow, for the most part muddy: on this account the strength are obliged to lie at a confiderable distance in the roads, and if they are heavy laden, they are in several places

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places ftranded, and ftick faft in the mud. This happened now to be the cafe with us at Juana, although the fhip had already lain at a confiderable diftance from the fhore, in order to take in the remainder of her lading : and notwithstanding that we feized the opportunity and hoifted our fails at high water, yet we were obliged to unload a heap of planks into large boats, in order to lighten the ship. And when at last there blew a favourable wind, yet still we failed for two whole leagues together fo deep in mud. that the water in the wake of the fhip was turbid, and of a blueifh caft, from the blue clay. And indeed all feamen teftify, that the water in thefe parts is continually decreasing, whilft the ftrand increases, and the harbours are filled up with fhoals and fand-banks. This is faid to have happened in fo great a degree, fince the Dutch Company first fent their ships hither, that the place where they at that time used to lie is now a morafs, and they cannot now approach within a confiderable diftance of it. In fact, this northern fide of Java is the most fertile, while, on the other hand, the fouthern coaft is very mountainous, has deeper water, and is more barren.

Between Juana and Japara a promontory extends into the fea, which we now failed by. There is a rock here, which has received the name

name of the *Devil's Rock*, becaufe Corfairs are faid frequently to harbour here, as well as near the iflands of *Intermaja* and *Boompjes*, who attack and capture every veffel, great or fmall, that is not well-armed, or that does not fail under convoy. These Corfairs are not Javanese, but come from the coasts of the island of Borneo, and the circumjacent isles, and therefore cannot be extirpated.

Our journey proved very profperous, and we arrived again at Batavia on the 1ft of June.

As foon as I had returned to Batavia, I was called upon to act as Phyfician on board the Hospital-ship, that is stationed in the road just before the town. Although, on a ship's arrival in the road, all the fick that are on board, are always removed immediately to the Town-Hofpital, as well as those who afterwards may be taken ill; neverthelefs an Hofpital-fhip (as it is called) which is for the most part an old veffel unfit for any other use, is kept here for the reception of those, who are taken ill in the night, as the town is thut up and no one can obtain entrance. This duty, or rather night-watch, is undertaken in rotation by all the Ship-Surgeons, who are in Batavia; but they feldom perform it themfelves, but hire fome old Surgeon for this purpofe in their ftead. Thus I was this time excufed from it for one Ducatoon.

I had

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I had now the good fortune to form an acquaintance with a worthy countryman of mine, M. WIMMERCRANTZ, a Captain of Engineers in the Dutch Company's fervice, in which he was as ufeful, as he was univerfally beloved and efteemed. He lived in the fuburbs, and not only received me with great friendfhip, but alfo afterwards, during my ftay in this place, rendered me actual fervices; and, in fhort, fhewed me much of that favour, which he had before lavifhly beftowed upon feveral of his beloved countrymen.

On the 19th of June, as I had ftill to wait the arrival of fome fhip, that fhould fail to Ceylon, which ifland I wifhed to vifit, I made, with permiffion of the Governor, and in company with Baron von WURME, likewife attended by an officer, whom the Commiffary over the natives (for the interior) had fent with us, a journey up the country to the warm Baths, and the (fo called) Blue-mountains. For this journey Captain WIMMERCRANTZ had the goodnefs to accommodate me with the loan of his own horfe, of which I had the ufe both on my journey thither and on my return.

We travelled the first day to *Tanjong*, a place, which at this time belonged to the Privy-Counfellor CRAAN, and is fituated about eighteen poles from the capital. The country is here measured

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off

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off with pofts, as in Europe, but however of different lengths.

On the 20th, we travelled in the morning about twenty-five poles, to Chipinong, where we dined, and afterwards went farther by Chimangis and Chiluar to Baytenzorg, fifty poles from Batavia. This place is intended for the pleafure of the ruling Governor-General, and has been made choice of and built for this purpofe by Governor-General IMHOFF. The building, which is of ftone, is very handfome, confilting of two wings and a little citadel, with beautiful gardens between. By reafon of its diftance from the capital, however, the Governor-General can feldom refide here.

On the 22d, we travelled to Chiferoa, and from thence farther over high mountains to Chipannas. Both these places, as likewise Pondogedé and Arkidemas belong to the Governor-General, or rather to the Dutch Company. Here we rested over night, and viewed the warm Bath, which is called in Malay Chipannas, and gives its name to the circumjacent country.

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conveyed the water into the Bath .-. The hole itfelf was not deep, and the force of the fpring not very great: the earth around it was of the colour of iron-ruft, and on the fides of the water a thin crust of a deep green hue had settled, that perfectly refembled verdegrife. The houfe, which was built for those that used the Bath, confifted of two parts : one chamber was very large, through which the water was conducted to the other : here were two drains in the floor, to purify the water from its filth : the other chamber had a large, fquare hole in it, lined with boards, and furnished with stairs. To this room ran two pipes of metal, out of which either cold or warm water could be let in at pleafure to any height one chofe, during bathing. At the top of the water a cruft was formed, nearly of the thickness of a farthing, and of a faltish tafte. I was informed, that if the water were ufed for drinking, it opened the body, and therefore was feldom applied internally, but for the most part externally. Some time ago a great number of fick perfons, fome of them even from the Hofpital, were fent hither from Batavia, to use the Bath, and for this purpose an Hofpital was inftituted here, which at this time flood unoccupied and ufelefs. A European Farmer now lived here, and had the care and infpection of the Bath and feveral gardens.

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The climate is very healthy and refreshing : indeed the air, especially in the morning and evening, was not only cool, but absolutely cold, infomuch that I, who had not brought a great coat with me, was chilled and perfectly shivered with the cold evening air, in a country, that lies almost directly under the Æquator.

Cabbages, efculent-rooted plants, greens, and fruit-trees, from Europe, are cultivated here, and thrive greatly; as alfo at *Arkidomas*, *Chiferoa*, and *Pondogedé*, from all which places refrefhments are fent three times a week to the Governor-General's table, in Batavia. Oranges ripen, and are much more delicious than thofe, which grow nearer to Batavia.

The Javanefe reported, and endeavoured to perfuade the Europeans to believe, fo ridiculous a ftory, as that on the mountains of *Chipannas* a fpecies of Monkey was found (*the Orang Outang*) which had curling hair, and retroverted feet. No European had ever feen any fuch here.

The Javanefe, and those Chinese that lived among them, had their roofs covered with cleft bamboos, which were laid one upon the other, almost like tiles.

I faw a species of Ardea in this place, which refembles the Antigone: the rostrum is alboflavescens; gula nuda, flava; caput calvum, albidum;

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dum; pedes cærulescentes; remiges cinereo-nigri; dorsum et cauda nigra; abdomen allidum.

The Turtle-doves (*Columba riforia*), which at the Cape of Good-Hope are always blue, are here of a paler colour, and for the most part white.

Kadondon is a wood that is used for quickfethedges.

Andewala is the name given to a climbing plant with tripartite leaves, which was reported to be a good antidote against poison.

Korang garing and Tampal utan are two plants, with which the Javanefe dye blue.

Boa kirai is the name of a fruit, which is very aftringent and auftere.

Tingling mintik is faid to be a good and cordial remedy.

On the 24th, we went back again over the mountains to Pondogedé. At the fummits of the mountains, which were covered every where with woods and bufhes, we left our horfes and the road, in order to climb ftill higher towards the top, and to fee the extremely well-known and much celebrated pool of water near Mekemedon. I here met with the climate of the north of Europe, and among other plants, various kinds of Mofs likewife, (Mufci) and Lichens, which otherwife are fo uncommon, and indeed fcarcely ever to be feen in the warmeft climes of India.

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We staid over night in Pondogedé, and the following day travelled to Arkidomas, to take a view of a place, which was very remarkable on account of various fmall images hewn in ftone, which were placed in different parts of the wood, three or four together. The Javanese have a great veneration for them, and both Javanefe. and Chinefe facrifice to them. In our way we faw the wild Peacocks, which are kept tame, as being rarities in Europe, flying up and down in the woods, and perching at times upon the boughs of the trees, to fhew themfelves in all their glory, and make an oftentatious difplay of their long, depending, and magnificent tails. I fhot one of them, which we roafted in the evening; but found it very dry and infipid. A commandant from a fmall fort had borne us company the whole day, and had brought with him two foldiers, who blew inceffantly two fmall French-horns, in order to frighten away the Tigers. Thefe animals were faid to be very dangerous here, infomuch that they frequently carried off travelling Javanefe, and not to be able to bear in any wife the found of powerful wind-inftruments. We came towards evening to Buytenzorg, which place the Javanefe call Bogor ; but previoufly to our arrival there, we went to a place near Paditulis, to view a ftone of great antiquity, in which certain characters were

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were hewn, that no one hitherto had been able to read or interpret. The flone is nearly of the height of a man, and about two feet in breadth. The characters appeared to me to be written from the left to the right, and confifted of eight lines and a half.

On the 26th, we made another fhort excursion from the ftrait road to Mount Cherroton, which is worthy of notice in many refpects. It ftands quite detached almost in the middle of the country. Our chief view in going thither was to fee its fingular cavities, in which the Swallows (Hirundo esculenta) build their nefts, that are of a gelatinous nature, and are used as food. We afcended on foot within a fhort fpace of time, to the fummit of the mountain, and found that thefe cavities were, ftrictly fpeaking, on the fouthern fide of the mountain, and quite covered at the top. They did not appear to have proceeded from a fplitting or feparation of the parts, as no fiffure was difcoverable at the top; but it rather feemed to me that they originated from the air by a gradual mouldering, becaufe they conftantly reached to a confiderable depth, and had water at the bottom. I entered into feveral of thefe. and defcended likewife a good way into them, by means of a bamboo-ladder, without however finding any thing elfe than danger, darknefs, and fubdivisions, as it were, into feveral diffinct apart-

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ments.

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ments. The Javanefe would not allow us to take any nefts away with us; but had neverthelefs the politenefs, not only to give us fome which were undamaged, but likewife to prefent us, at our requeft, with two Swallows, of the fpecies that built here, and which were fmall and quite black.

My fellow-traveller and myfelf were entertained in a very fuperb and coftly manner by the Javanefe Governor of the province, at dinner. The Governor himfelf, together with his coufin, and we two travellers, formed the whole company. Our hoft could both talk and underftand in fome meafure the Malay language, which we fpoke. The victuals were placed feparately before each of us upon fimall plates of porcellain. Of each difh confequently there was no great quantity, but the number of difhes for each of us amounted to ninety, fo that we were hardly able to have a tafte of each.

On the 28th, we travelled to a country-feat belonging to M. DUURKOOP. It was exceedingly elegant, and contained a remarkable tower, which echoed back nine fyllables with diffinctnefs. From this delightful place we returned at length to Batavia.

In the courfe of this journey I had obferved, that the Chinefe had fettled in great numbers, and that even in the heart of the country; but that

that they neverthelefs did not live together with the Javanefe. This, I was told, was forbidden. in order to avoid difcord and contention, to which the Chinefe were faid to be very prone, if they did not change their religion, and fuffer themfelves to be circumcifed. This, however, did not prevent numbers of the Chinefe from efpouling the daughters of the Javanefe; although the daughters of the Chinefe were not allowed to marry with Javanefe. And indeed the Chinefe here are not fuffered to fhut up their wives, or disfigure their feet, as they do in China.

I was afterwards very affiduous in my vifits to the Hofpital, where the fick were properly treated, but died neverthelefs in great numbers. The number of deaths was computed to have increafed almost yearly, especially of late, in confequence of the canals, which fupply the town with water, not being kept fufficiently clean. To the truth of this I was frequently a witnefs, when both culinary vegetables and dead animals were thrown into the river by the Chinefe, and afterwards floated down into the harbour and road. Since the gentlemen of rank have begun to erect country-feats and pleafuregrounds without the town, this pernicious cuftom has obtained the afcendency. From the Public Registers I informed myself accurately of the number of Europeans, that died in the Hofpital. This

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This lift, from the year 1714, quite down to the year 1776, I shall now lay before the Reader.

Year.	Dead.	Year.	Dead.	Year.	Dead.
1714	459	1735	1568	1756	1487
1715	469	1736	1574	1757	1441
1716	453	1737	1993	1758	1638
1717	494	1738	1776	1759	1373
1718	591	1739	998	1760	1317
1719	660	1740	1124	1761	1000
1720	750	1741	1075	1762	1390
1721	614	1742	1082	1763	1750
1722	730	1743	1283	1764	1757
1723	657	1744	1595	1765	1754
1724	769	1745	1604	1766	2039
1725	925	1746	1565	1767	2404
1726	904	1747	1881	1768	1831
1727	676	1748	1261	1769	1740
1728	656	1749	1478	1770	2706
1729	626	1750	2035	1771	2316
1730	671	1751	1969	1772	2305
1731	780	1752	1601	1773	1187
1732	781	1753	1618	1774	1957
1733	1116	1754	1517	1775	2788
1734	1375	1755	2109	1776	2877

Hence may be feen that the number of the dead increafed almost from year to year; but this augmentation was particularly confiderable, after three remarkable changes. From the year 1714 to 1733, the number of the dead was least. In the year 1733, they began out of the town to make a dyke or canal leading to Batavia, on which occasion

occafion great numbers both of the Javanefe and people of other nations died; from this time alfo the number of the dead has conftantly increafed. In the year 1761, they began to flow in the Hofpital without the city more fick people than the two hundred convalefcents, which were formerly attended there; and from this time forward the number of the dead increafed ftill more. In 1775, an Hofpital-fhip was laid up in the road; in confequence of which, as well that year as the following, the number of the dead was the greateft of all.

At my own defire, I was taken on board a ship, that was at this time bound for Ceylon, in the capacity of first Surgeon; notwithstanding that M. RADERMACHER, as well as my landlord Dr. HOFFMAN, had made many attempts to detain me in this country, by means of fome advantageous employment. Although I was able to bear heat extremely well, and found myfelf very well in other refpects in this hot climate, yet it was both difagreeable and difficult, to transact one's bufinefs here; and attachment to my native country rendered me deaf to every reprefentation of advantage from other quarters, even at a time when I could not in the leaft forefee any good fortune accruing to me in the country which gave me birth.

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Before the fhip had taken her cargo in for the impending voyage to the weftern coaft of India, I made feveral other excursions in the environs of the town of Batavia.

Jaccatra is a tolerably handfome fpot, a little way out of Batavia; it was formerly the metropolis of this part of the island, and was conquered by the Dutch in the year 1619. Here is now kept a fmall number of foldiers, to defend the citadel, and to be, as it were, a bulwark to Batavia.

The Portuguese came, it is true, to Java long before any other Europeans, and indeed already in 1510; but never could make a firm and lasting fettlement here. After them came the English, and soon after that the Dutch, in 1596.

The island of Java is long and very narrow, in length at least 140 German miles, from east to west, and in breadth 30, from north to south.

Three religions are common in Java, viz. the Pagan, with part of the Javanese and Chinese; the Mahometan, with a great part of the Javanese; and the Christian, with the Europeans, and at the fame time with some of the Javanese, Malays, and other Indians.

The articles of traffic which Java produces, confift chiefly of Rice, which is excellent, and is exported to many parts of India for fale; *Cardamoms*, of that fpecies which has rounded feed-

feed-veffels (*Cardamomum compastum*); Sugar, which has been introduced into the country, with a view to its cultivation, grows in abundance, and is exported in the ftate of brown fugar, not only to all the Indian markets, but likewife to Europe. Salt, which is exported to feveral parts of India, and is exceedingly dear in the Molucca iflands in particular; Pepper, which is moftly fent to Europe; Indigo, Callicoe, and no very inconfiderable quantity of Cotton-thread; Bird's-nefts, which are for the moft part, and that with confiderable profit, fold in Canton, in China.

The Loxia oryzivora is found in abundance in Java, and does frequently confiderable damage to the rice-fields.

For change, two finall forts of copper coin were current. One fort was an ordinary farthing, which the Dutch Company had ftruck, of the common Swedish copper, in Europe, and afterwards imported hither. Of this there are two forts, perfectly alike, excepting as to fize, in which point they differ, the one being twice as large as the other. The largeft of thefe approaches neareft in fize to the Swedish farthings. On the one fide appear the usual arms of the Company, together with the date of the year, on the other the arms of the Province in which the piece was coined. The worth of each is estimated at double what it would pass for in Europe,

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Europe, fo that the Company gains by this mode about one hundred per cent. The other fort is a Javanefe coin, ftamped on one fide with Javanefe characters, and upon the other with a wreath of flowers, within which ftands *Duyt Javas*, and the year of the Christian æra, in which it was ftruck.

In like manner I faw feveral Dutch ducats in the hands of the Chinefe and Javanefe; but thefe had been ftamped on the upper fide with a little round die exhibiting certain Javanefe characters, which gave them value and currency among that people.

The Chinefe wear flippers with hind-quarters and ftout foles, within which are feveral layers of felt, to prevent them from drawing water and occafioning wet feet to the wearer; but thefe, as well as their boots, which are made on the fame plan, are heavy and clumfy.

VOYAGE TO CEYLON.

JULT 5th, 1777, I embarked, with the bleffing of Almighty God, on board the fhip Mars, in order to fail in the fame to Ceylon, being furnished with feveral letters of recommendation

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to the Governor and other public Functionaries there.

On the 7th we weighed anchor, and got under fail, with a calm and profperous wind, leaving behind us one of the fineft countries in the world.

On the 11th following, we caft anchor again off Anjer, where we proposed to continue a few days, and take in fome cafks of water, for our impending voyage. The Swedish East-India ship the Stockholm's Slott, bound to China, lay in the road already, where fhe had arrived before us, in order to take in a fupply of water, and I had in confequence the pleafure to meet with here and embrace feveral of my dear friends and countrymen; as, for inftance, Captain PETTER-SEN, the Supercargoes ALNOOR and BLADH, &c. The water, which was taken in at this place, from the rivulets that ran down hither, was, it is true, fweet, and in fome meafure good, but exceedingly turbid : and from the circumftance, that the landing here was very difficult, and that the cafks were rolled in the water on fhore, this turbidity was increafed ftill more. The water likewife conduced greatly to increase and keep up the Diarrhœa, which was rife among the crew; nay, it was almost impossible to drink a fingle glass of it, unless Tea or Coffee had been previoully mixed with it, without occasioning the inconveniencies abovementioned.

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The larger species of *Pifang* (*Musa Trogloditarum*), I observed here to have tolerably distinct feeds, flat, and almost as large as lin-feed.

Canes were fold in great quantities by the Javanefe that lived in the villages; and the Swedes bartered for feveral of the better fort, in which traffic, with what little I underftood of the Malay language, I had the pleafure to ferve my countrymen, in the capacity of Interpreter.

After this we profecuted our voyage with fuccefs and with favourable winds, fo that we croffed the Line on the 9th of August, and on the 28th of the fame month, came within view of the Malabar coaft, along which we failed, paffing by Porca, Coilan, and Cape Comorin. Notwithstanding this, the ship was very deeply laden, and without any regard to propriety or moderation, fo that it would certainly have been in a very difagreeable fituation, had any violent ftorm fprung up. The caufe of this, as well as of a great many other diforders, inconveniencies, and calamities, originated in the infatiable avarice. which prevails among the people in the Company's fervice. The Captain and all the C fficers have the privilege of trafficking with certain commodities, for which purpose a certain space is left them in the flowage of the fhip; under cover of this privilege, they introduce and burden the fhip with many times as much as the weight allowed

allowed them, in order to fwell the amount of their profits. It is more particularly the Captain and Chief Mate, who fet themfelves no bounds in their abufe of this privilege. The commodities, which were taken out by individuals in the prefent voyage, confifted of a confiderable quantity of Rice, foft Sugar, and Arrack.

On the 29th, we came within fight of the island of Ceylon, and the day following came to our moorings; but we were within a hair's breadth of fuffering shipwreck, through the ignorance and cowardice of the Mafter. Whilft we continued conftantly to heave the lead, it was perceived that we drove too much against the shoals which lie in the mouth of the channel, which feparates the island from the continent, and our fhip threatened to run a-ground, when the Second Mate, a bold and enterprizing mariner, obferving the too visible terrors and faint-heartedness of the Captain, laid hold of the trumpet, and gave orders to tack about, which in a few minutes brought the fhip, that dragged very heavily, into deeper water, and all of us fafely out of all danger; fo that we could very foon afterwards caft anchor, and return thanks to God, who had fo miraculoufly delivered us from imminent danger.

The following day arrived from Europe the Zeeland fhip *William V*, and at the expiration of a few days more the fhip *Loo*, from Amfterdam.

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I forwarded my letters to Columbo, and had foon after the honour to wait upon Governor FALCK, a very learned and fenfible man, and at the fame time the most difinterested of all the Company's Officers I ever met with. He was born in Ceylon, and had studied in Utrecht. The Governor-General, van der PARRA, had been the chief instrument of his promotion, of which he rendered himself in every respect truly worthy and deferving.

Befides many others, who honoured me in this place with their friendship, I enjoyed also a confiderable share of the favour of M. van SLUYSKEN, who went in general by the name of Captain Cinnamon, and was infpector over those that barked and delivered in the Cinnamon. I was a regular guest at his table once or twice a week, where I always met with cheerful and instructive company. I contracted likewife an acquaintance here with two worthy countrymen of mine, Baron ALBEDYL, who was an officer, and Monf. von KEULEN, or KIELLIN, who had fettled here as a Burgher, and carried on a lucrative and extensive trade to the coast of Coromandel. I further augmented the circle of my acquaintance with an honourable veteran, Captain HOPNER, who had failed originally from Sweden, in the capacity of a young tar, in a trading veffel, which being attacked by a Turkish corfair,

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he loft one of his thumbs by a mufket-ball, and afterwards advanced himfelf in the fervice of the Dutch Company, efpecially by his knowledge in Engineering and Fire-works. This worthy veteran treated me not only as a friend and beloved countryman in his houfe and family, but made me likewife an offer of his table, with the ufe of an apartment during my abode in this place; an offer which I however did not accept, but preferred refiding at the ordinary inn, that I might, more uncontrolled, make my little excurfions, and collections of the natural productions of this ifland.

Columbo, which is the capital town for the Dutch trade on this ifland, is large and handfome, furrounded on all fides with walls, and very ftrongly fortified.

The Governor's *palace* is very elegant, although it is only one ftory high. The balcony is of equal length with the houfe itfelf, and forms a pleafant and cool apartment, from which there is an entrance to feveral chambers on the other fide.

The *air* is indeed as fultry here as in Batavia, but as the coaft itfelf does not lie fo low, but the country is more elevated, and winds more frequent, the heat proves more tolerable, and the climate is more healthy.

Bathing in cold water, and particularly in the open fea, near those coasts which are not infested with

with crocodiles, is a very common practice, both with the Europeans, and ftill more fo with the Indians. When one takes an afternoon's walk out of the town, one may fee hundreds, both black and white, young and old, free and flaves, and indifcriminately of both fexes, fporting in the water, and by thefe means cooling their bodies, and bracing their fibres, which have been relaxed and debilitated by the fcorching rays of the fun.

In company with a Ceylonefe, whom the Governor had graciously appointed to attend me, I made daily excursions in the vicinity of Columbo, and collected diligently, with the fweat of my brow, in the circumjacent diffricts, the various productions of the land, during the time that fome of my fhip's comrades at the Inn exposed their commodities to fale, and carried on their traffic in a manner much more beneficial to themfelves. The fellow-traveller appointed me was one of the most skillul Physicians of the country, who communicated to me always both the Ceylonefe and Malabar names of each plant, as well as the manner in which it was used in different difeases. His medical knowledge was very fmall, prepofterous,' and for the most part abfurd, fo that I could not derive much benefit from him in this refpect.

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The *Barringtonia*, with its large and beautiful bloffom, grew always by the fide of rivulets and near water; and in a very fhort time let its numerous ftamina fall out of its bloffom.

In like manner the *Dolichos pruriens* grew here tolerably common, with its hairy pods, the hairs of which attaching themfelves to the hands, occafion much itching, which is allayed by oil, or decoction of rice, and are celebrated as a Vermifuge.

The Company has a Printing-prefs in the town, which has given birth to various publications. Of the Books that have been printed here, I procured the following, for the Library at Upfal:

Kort Begryp der Chiftelyke Religie, in de Tamulfche Spraak, door SIGISBERTUS ABRAHAM BRONSVELD. Columbo, 1754, 8vo. i. e. A Compendious View of the Chriftian Religion, in the Tamul Language.

Tamulsch Kinder-Catechismus, door SIGISB. ABRAH. BRONSVELD. Columbo, 1776. 8vo. i. e. The Tamul Catechism, for Children.

Evangelium Jefu Christi von Matthæus, in de Mallabarse Taal. Columbo, 1741. 4to. Or 3 The Gospel according to St. Mark, in the Malabar tongue.

Evangelium Jesu Christi von Matthæus, Marcus; Lucds, ende Johannes; ende de Handelingen der VOL. IV. N Apostelen,

Apostelen, in de Tamulsche Taal. Or; The Four Evangelists and the Acts of the Apostle, in the Tamul language, printed at Columbo, 1748. 449.

The Four Evangelists, in the Cingalese language, in 4to. I procured, without any title-page.

Seftien Predikatien in de Tamulfche Taal. Or; Sixteen Sermons in the Tamul language, by PHILIPPUS DE VRIEST, Columbo, 1747. 4to.

Grammatica of Singaleefche Taal-kunft. Or; A Grammar of the Cingalefe language, by JOHANNES RUELL, printed at Amfterdam, 1708. 400.

Manis (the Ant-eater) is found much in Ceylon, efpecially near Negumbo. The Dutch call it the Negumbo Devil, and the Cingalefe Caballe. Its flefh is given to the fick to eat, by way of a remedy. The inhabitants have a method of making a hole in its fkin with a knife, and thus of guiding and governing the animal at pleafure, the point of the knife, which is kept in the hole, goading and irritating him.

The fruit of the Solanum melongena is in general use both among the Europeans and the Indians. It is supposed to expel urine, and diffolve the ftone in the bladder.

The fruit of the *Cherimelle* is ripe in October and November, and was made use of pickled in a ftrong brine.

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The Marmelle is likewife ripe in October; the internal pulpous part of the fruit is eaten both with and without the addition of fugar. The fruit is of a very flimy or mucilaginous nature, and hence is called (Slym apel, or) Slime-apple.

The *Bolange* is eaten in its ripe flate with a little fugar, and unripe, with falt. It is of the fize of a China orange.

Panningai is the fruit of a palm-tree, which grows in great abundance, and particularly near Jafna. It is of an oblong, femilunar shape, nearly as yellow as a Pifang, but feveral times larger. It has two, three, or more very hard nuts within it. When dreffed, it has a fweet tafte to those who are accustomed to it, but ftrangers do not find it very pleafant. On being opened, it yields an offenfive fmell. When the nuts of it are fown, and the fpring-leaf comes up, this is cut off clofe, and eaten either boiled with falt and rice, or by itfelf, or is pounded to meal, which can be used like any other meal. This fpring-leaf is called by the Cingalefe Kellingo. From the month of May to the end of the year this fruit is eatable, and conflitutes the chief nourishment of the Malabars. The Kellingo may likewife be dried for future ufe. The meal made from it is used particularly in foup with fifh.

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On the 28th of October, and the following days, I was requested, together with several Physicians, to examine a large quantity of Cinnamon, which had been furnished by the King of Candi. Half of it was found to be adulterated and spoiled, tasteless and bad. The best of it, which could be selected from the mass, was forwarded to Batavia.

In like manner five parcels were examined of a new kind of Cinnamon, but lately planted, which had been fent in 1775, as a fample, to Europe, but on their arrival were found not to poffefs the proper flavour, although before, at the time of its being fhipped at Cevlon, it had proved fine and good. The fcent of them was now found to be both fine and pleafant, but the flavour was very weak, or next to none at all. So that it is hardly to be doubted, that they , had loft their flavour during the voyage; the caufe of which was probably this, that the oil contained in them was too volatile, and not fufficiently concentrated in thefe young branches, the root of which was not more than three years old. Branches of three year's growth, are fit . for decortication, it is true, but yet the root and trunk ought to be more aged. And in the very fhipping and transporting of it, a fault had likewife been committed, which may have contributed much, if not totally, to the lofs of its flavour, : 3

flavour, for these parcels had been packed up in one fack, and laid in the cabin. Thus the Cinnamon was neither put into two facks, nor yet laid among Pepper, as is the usual practice. And indeed, in 1776, forty-seven parcels of this fame fort of Cinnamon were sent to Europe.

Cinnamon is the chief commodity which the East-India Company fetch from this island, and the bark of this Spice is here finer and more. valuable than in any other place in the world, All prime Cinnamon is taken from the Laurus Cinnamomum, a tree of a middling height and fize. It is diffinguished by broader and more obtufe leaves from the Laurus Caffia, which yields a coarfer kind of Cinnamon, and feems to be merely a variety of the former. It is fo much the more probable, that the coarfer and finer Cinnamon, or the Laurus Cinnamomum and Caffia. are merely different varieties, arifing from the climate, and efpecially from the foil; as Ceylon itself does not commonly yield Cinnamon of an equally good quality, throughout the whole island, and in all its various tracts. The fouthweft angle of the ifland is the only part which produces the finer fort of this pleafant and excellent cordial fpice, and the places, whence it is chiefly procured, are near Negumbo, Columbo, Caltere, Barbary, Gale, and Mature, all which lie along and near the fea-coaft. The Cinna-N 3 mon,

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mon, which the more inland parts produce, is always coarfer, thicker, more pungent, and biting to the tongue.

I vifited, out of the town, the Governor's villa, which is called Pafs, and confifts of an elegant houfe, and a large pleafure-garden, in which Cinnamon has been planted for feveral years back. The Cinnamon-tree grows. in abundance in the woods, and has been propagated without the adventitious aid of art. The Europeans have believed, and the Cingalefe even maintained, that Cinnamon, to be good, muft always grow wild, and be left to itfelf, and, that when planted, it neither thrives nor continues to be genuine. The tree is propagated in its wild ftate by birds, which eat the foft berries, (the kernels of which do not diffolve in their gizzards,) and afterwards difperfe and plant them up and down in the woods. This prejudice prevailed till the end of the fixteenth century, when the Governor, Yman Wilhelm Falck, first made the attempt, in fmall, to rear Cinnamon-trees by art, in this garden at Pafs. The berries were then fown, which grew up well and quickly, but had the untoward fate, that the plants fome time after withered and died. On accurately inveftigating the caufe of this, it appeared, that a Ceylonefe, who earned his livelihood by barking Cinnamon in the woods, and faw

faw with vexation the planting of it, which, in time, would render the gathering of it more eafy and convenient, had fecretly befprinkled them in the night with warm water. After the difcovery of this ftratagem, the Governor caufed again, in the beginning of the Seventeenth Century, feveral berries to be planted, and in feveral places, both upon a finall and large fcale, which grew up, throve well, and had already yielded feveral crops of Cinnamon. Thus feveral thoufand Cinnamon-trees were now feen in this garden, and in this garden alone, to thrive and turn out to be of a good fort.

In it alfo I faw an Areek-tree, which was very tall, but uncommonly flender, and at the fame time, which is very fingular, divided into two branches, each furnished with its respective crown.

Here is feen likewife a Boraffus, or Sea-Cocoa, brought from the Maldive islands, which had been fet in earth, had grown up, and was now in the third year of its growth, having only three leaves. The nut had lain eight months in the ground, before it put forth the first leaf. The leaf was multipartito-pinnatifidum; pinnis bipartitis.

Marendan is the name given by the Cingalefe to the fandy downs along the fea-coaft. The Cinnamon which grows in thefe fandy plains, is accounted the beft and most delicate. When the tree is cut down here, and fire afterwards

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made on the fpot, the roots fhoot up again in long, ftrait fhoots, which yield an incomparably fine Cinnamon-bark. And from thefe fhoots come the fo called Cinnamon walking-fticks, which in appearance refemble those from the Hazel-treee, but of which the bark has a cinnamon-finell, whenever it is rubbed. I feveral times received fuch flicks, by way of prefents, although it is faid that they are fcarcely allowed to be exported,

The Cinnamon-leaf has a ftrong fcent of Cloves; the root, on the other hand, which, by means of fublimation, yields Camphor, fmells altogether like Saffafras. Cinnamon is generally called by the Cingalefe *Kurundu*, and is faid now to be greatly diminifhed in the woods, compared to what it was in former times, fo much indeed, that the Cinnamon-barkers, for feveral years, have not been able to procure the quantity required.

The coafts around the whole island of Ceylon, to the diftance of fix or more leagues inland, belong entirely to the Dutch East-India Company, and are under the jurifdiction of its Governor; although the country is inhabited by Cingalese, who at the conclusion of the war became subjects to the Company. The interior, middle, and mountainous parts of the island, belong to the King or Emperor in Candi, who is

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is now fo completely hemmed in on every fide, that he can neither fmuggle, nor fell any Cinnamon to foreign nations.

Facheri is the name given to two forts of Crotalaria, which grow here pretty plentifully, viz. the laburnifolia, and retufa, both with yellow flowers. Neither of thefe, nor yet the Menifpermum cocculus, can be what is called the Radix Colombo, or Columbo-root, which for fome years paft has been introduced into Europe, and recommended as a good medicine. It derives its name from the town of Columbo, from whence it is fent with the fhips to Europe; but it is well known that this root is neither found near Columbo, nor upon the whole ifland of Ceylon, but is brought hither from the coaft of Malabar. The Crotalaria retufa is an annual plant, whofe root therefore cannot poffefs any medicinal virtues. The Menifpermum cocculus is a common climbing plant in the woods, the root of which I had feveral times caufed to be dug up, and found it bore no refemblance to the Columbo-root, either in its virtues, tafte, fize, or external appearance, being exceedingly thin, with elevated ridges, and very long.

Sacfander and Iremus were two very celebrated plants with the phylicians of this place. The former differs in feveral refpects from the latter. The former is an Ariftolochia indica, the root of which,

which, fteeped in brandy, is bitter, a ftrengthener of the ftomach, and carminative. The latter is found in great profusion, as well in the fandy downs near Columbo, as near Mature, and in other places. Its appearance fufficiently indicates, that it belongs to the *Contortæ*, and is, according to every conjecture, a fpecies of *Periploca*, whofe root is poifonous and a purifier of the blood.

Binnuge is the name given by the Ceylonefe to a fpecies of Ipecacuanha, becaufe the root of it is a very good emetic, although it differs from the American. I was informed, that it is ufed with fuccefs in the Hofpitals at Columbo, Gale, Mature, and Jafna. It must be given in rather larger dofes than the common fort. I was shown two forts of it: the one was white, and is called *Elle Binnuge*, the other, which is red, is called *Rat Binnuge*. The red is reported to be the best. The white has fine ftringy roots, and the red is fomewhat thicker. Both are species of *Periploca*, both creep on the fandy downs, or twine round the bushes which grow in the loofe fand.

The Portuguefe have here, as well as elfewhere, during their refidence, introduced both the Chriftian Religion and their own language, of which many remains are ftill to be met with in every part. Portuguefe, though corrupted, is ftill fpoken very univerfally, both among the Malabars

Malabars and others, on the whole of this weftern fide of India; and it is almost equally incumbent upon a traveller in these parts to learn this Portuguese dialect, as it is to learn Malay in the eastern part of India. The Dutch, fince their arrival, have endeavoured to preferve the light of the Christian Religion, and for that purpose the Company maintains both Churches and Schools for the natives and states, and Priests to instruct them, and perform divine fervice.

Otherwife the heathens upon the island, like other East-Indian nations, pay great adoration to their Idol Budba, or Budfo, whofe image may not only be feen in the churches, but likewife often in their houfes. They intitle him Deani Budu bamdrue, i. e. Lord God Budu. In the churches offerings of all kinds are laid before him, which ferve the Priefts for an income, and with these offerings they frequently defignate their wants and neceffities. When one or more lie fick in a house, they forge thin plates of filver, and form of them on a fmall fcale one or more human figures, which they prefent on Budba's altar. When any one has a diforder in their eyes, they make a pair of eyes of filver, and fo in other cafes; but when they in general invoke his affiftance in any thing, they make a reprefentation either of the leaf of the Ficus religiosa, or of the fruit of the Anacardium, which they believe

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to be acceptable to this their deity. When the Priefts have collected a number of these offerings, they melt them down again, or fell them by weight to the Goldfmiths. I had an opportunity of procuring by traffic feveral of thefe offerings, as also a fmall one of pure filver, reprefenting the household god Budba, whose unlucky fate it was to be pawned by the proprietor of him to a European. It fometimes happens that urgent diffrefs compels them to this meafure, but afterwards, as foon as ever they are able, they punctually redeem fuch pledges. The Idol is always reprefented fitting with his feet acrofs, after the Indian fashion, with one hand passed over his head and both hands clafped together forwards, and with long ears, which reach down to his fhoulders. In the Churches I faw this Image made partly of ftone, partly of wood, and of various fizes.

The *Moors*, who come hither from the coafts of the Continent, are tolerably numerous in Columbo, and carry on an extensive trade. They are for the most part tall of stature, darker than the islanders, and well clad. Their drefs refembles nearly a lady's gown, is most frequently made of white callicoe, very wide, and gathered up at the waist, and is bound round the body with a girdle of white cotton, tied on the right fide. On the head they wear a turban. Their ears

cars are commonly decorated with long ear-rings of gold, of various patterns, fome being plain, others twifted, others fet with precious ftones of a red, blue, or green colour. Some are very large, being a full finger in length; others again are imaller. Sometimes one of thefe only is worn in the ear, fometimes more, even five or fix together, fo that with their weight the foramen and tip of the ear are lengthened amazingly, infomuch that the ear reaches down to the shoulders. Many have a small round knobby fruit, which is faid to grow upon a holy mountain in the land of Kaschi, fet in these ear-rings. The fruit is called Uteratie, and is most commonly of the fize of a finall pea, and fometimes as large as a mufket-ball. Some fancy that they difcover in the holes and creafes of this fruit the refemblance of feven faces, in which cafe it is faid to be very much valued, and is purchased by the Moors of quality and opulence, at the great expence of two hundred rix-dollars. As foon as the children are three years old, one of these ear-rings is given them by way of ornament. It is properly the rich, who wear a number of rings in their ears, fo that from the condition, fize, and number of the ear-rings, one may form an effimate of the wealth and opulence of the wearers.

Perfons

Perfons of rank among the Cingalefe, fuch as Ambaffadors and Officers belonging to the Court in Candi, wear long gold chains round their necks, which hang down upon the breaft and ftomach. Such had the Ambaffadors who now came to Columbo, and fimilar ones are likewife given to the Dutch Ambaffador and his Secretary, by the King, on their arrival at Candi. These chains do not confist of links, but of globules, which are hollow within, and pierced through in every part of their furfaces, and woven round with gold-wire, like fillagree-work. Thefe balls are afterwards ftrung either upon a filken cord or gold-wire to any length that is defired. One of thefe chains, which is very light, well executed and ornamental, cofts, on account of the finallness of its weight, little more than from twenty or thirty to forty pagods, each pagod being valued at a ducat.

November 4th, I fet out from Columbo on my road to Mature, in company with M. FROBUS, who was to perform the journey thither on the Company's account, in order to fee after the packing up of Cinnamon at Barbari, Gale, and Mature; in the mean time that M. SLUYSKEN made a journey to Negumbo, in order to fuperintend the packing and exportation of Cinnamon to Europe by the returning fhips.

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The journey was performed in a palanquin, which is more open, and differs in fome refpects from the Japanese norimon, though in most particulars it agrees with it. It has a bamboo-pole over the roof, and is carried by several Moors, who relieve each other on the road. One may both fit and lie in one of these portable chairs. It has at the ends and fides curtains to keep off the heat of the sun. It is for the most part usual to travel with fix or twelve bearers.

Our rout went from Columbo to *Panture*, five miles; from thence to *Kaltere*, three miles; to *Barbary*, two miles and a half; to *Wellotte*, one mile; to *Amlagotte*, five miles; to *Hekkede*, three, and the fame to *Gale*; from thence to *Belligama*, five miles, and to *Mature*, three miles and a half. The road extended along the coaft, and was often incommodious and fandy.

One fees every where along the coaft on this fide, forefts of Cocoa, which extend as far as from *Negumbo* to *Mature*, and beyond, with trees in the greateft abundance, and of incredible fervice to the natives, who make ufe of their fruits. Thefe Cocoa-woods do not however reach far into the interior of the country, but confine themfelves to the coaft, and love a fandy-foil and the fea-air; infomuch, that I have often feen Cocoa-trees grow fo near the ftrand, that they over-hung the falt billows of the fea, which watered

watered their feet, and in fuch bare and naked fand, that not a fingle blade of grafs could grow there.

I obferved in feveral places Cocoa-leaves tied round the trees, and in this manner fupplying the place of ladders, by means of which the natives could climb up, and gather the fruit. Upon fome trees, one, upon others two of thefe ladders were tied. The fide-branches of each leaf, which were tied together, made from ten to twelve fteps. I alfo faw in fome places a rope tied between two Cocoa-trees, upon which the Cingalefe were able to pafs from one tree to another.

Oxen were ufed in carts, and were very finall and lean. Some of them were very little larger than a European calf of two months.

There were no bridges over the rivers, fo that we were fain to crofs them in boats, which were fmall, and for that reafon were tied three together, and covered with planks, fo as to form a floating-bridge. The rivers were of confiderable breadth, very deep, and frequently had a ftrong current.

Jarrak-trees (Jatropha Curcas) were planted in feveral places, for quickfet hedges.

On the road we met with feveral houfes built at the Company's expence, for the purpole of baiting and lodging at, and fometimes these houfes

houses were both large and handfome. These were covered on the infide under the roof with linen, with which likewife the chairs as well as the table were covered on our arrival. Exclusively of this; the room was ornamented with various elegant flowers," fuch as the Gloriofa, Areca, Lycopodium cernuum, Ixora, &c. Before the house itlelf likewife divers pillars were erected in two rows, entwined with young Cocoa-leaves, decorated with flowers, and covered with linen. On our arrival before the houfe, a piece of linen was fpread on the ground, and the palanquin fet down upon it. After this linen was fpread out for us to walk upon all the way to the house. This honour is commonly paid to the Europeans, when they travel in the Company's fervice and on its concerns.

On the 5th we arrived at Caltere, where a fort is built, in which a Lieutenant commands.

In the afternoon we travelled farther to Barbary, whither the Cinnamon is delivered in from all the circumjacent tracts, and where there are feveral warehouses built of stone, as well for the purpose of storing it, as for the preparation of *Cair*, or a fort of Cloth, made of the fibres of the Cocoa. Just before them, in the harbour, the stime, for the purpose of taking in Cinnamon.

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On

On the 6th, 319 bales of Cinnamon were fhipped, among which were fome of cultivated Cinnamon.

On the 7th, we profecuted our journey, and arrived on the 8th in the evening, at Gale, a handfome town, which frands upon a projecting angle of a rock, and is ftrongly fortified.

The water for drinking here is not very falutary; it greatly inflates the ftomach, and occafions in all probability the difeafe in the tefficles and feet, called the Malabar difeafe, which is very prevalent in the town, but rarely met with out of it.

On the 9th, we took in our lading of Cinnamon at this place, and in the afternoon profecuted our journey to *Mature*, where we arrived on the following morning. Here we fhipped the fameday 326 bales of Cinnamon in woollen facks, over which was afterwards fewed a cow's hide.

Before the Cinnamon is packed up, it must always first be examined by Surgeons appointed for that purpose, as well by the Surgeon who refides at the place where the package is made, as by him that accompanies the ship. I had very frequently an opportunity, in the course of this year, to affist at this employment, and was obliged afterward, in conjunction with the others, to be responsible for the goodness of the Cinnamon. From each bundle a few sticks are

are taken out, which are examined by chewing, and by the tafte. This office is very difagreeable and troublefome, becaufe the Cinnamon deprives the tongue and lips of all the mucus with which they are covered, and caufes afterwards an intolerable pain, which prevents one from going on any farther with the examination. So that one must perform this business with great caution, and at the fame time eat a piece of bread and butter between whiles, which in fome measure mitigates the pain. It is but feldom that one is able to hold out two or three days fucceffively.

The fuperfine Cinnamon is known by the following properties, viz. in the first place, it is thin, and rather pliable; it ought commonly to be about the fubftance of Royal Paper, or fomewhat thicker. Secondly, it is of a light colour, and rather inclinable to yellow, bordering but little upon the brown. Thirdly, it poffess a fweetish tafte, and at the fame time is not ftronger than can be borne without pain, and is not fucceeded by any after-tafte.

The more the Cinnamon departs from these characteriftics, the coarfer; and lefs ferviceable it is effected; as for inftance: in the first place, if it be hard and as thick as a half-crown piece : fecondly, if it be very dark or brown : thirdly, if it be very pungent and hot upon the tongue, 0 2 with

with a tafte bordering upon that of cloves, fo that one cannot fuffer it without pain, and fo that the mucus upon the tongue is confumed by it, when one makes feveral trials of it: fourthly, if it has any after-tafte, fuch as to be harfh, bitter, or mucilaginous.

Such are the forts of Cinnamon, when they are felected from the ftore-houfes, and forted for exportation; but the barkers, who examine the Cinnamon-trees in the woods, and ftrip off the bark, fpeak of more and different forts of Cinnamon, the leaves of which, in their external appearance, bear fome refemblance to each other, and are not all ufed indifcriminately for barking, but are picked and pointed out by thofe that are judges of the matter. Thefe Cinnamonbarkers are called in the Cingalefe language *Schjalias*.

The forts of Cinnamon which the Schjalias reckon, are the following ten:

1. Raffe Curundu, or Penni Curundu, i. e. Honey-Cinnamon, which is the beft and moft agreeable, and has large, broad, and thick leaves.

2. Nai Curundu, or Snake-Cinnamon (Slange-Canel), which approaches neareft to the former, in deliciousness of flavor, (although it does not absolutely arrive at the fame degree) and has also large leaves.

3. Capuru.

3. Capuru Curundu, or Camphor-Cinnamon; this fort is only to be found in the King's lands, and from its root Camphor is diffilled.

4. Cabatte Curundu, that is, aftringent or auftere Cinnamon; it has rather fmaller leaves than the former forts. Thefe four forts, which are all together from one and the fame fpecies of Laurus cinnamomum, are nothing more than varieties, nearly refembling each other, which are diftinguished by the Schjalias merely by the tafte, and are the only ones, which ought to be barked, and indeed can be barked, for good Cinnamon.

The following forts, on the other hand, are never barked at all:

5. Sævel Curundu, that is, mucilaginous Cinnamon, the bark of which, when chewed, has a mucous flimy after-tafte, like a Mucilage. The bark of this is foft, and of a fibrous, or ftringy texture, and not fo compact nor firm as that of the others: it is likewife tough, and bends eafily, without immediately breaking. This is likewife a variety of the Laurus Cinnamomum.

6. Dawul Curundu, that is flat, or board Cinnamon; which name it bears, becaufe the bark, in drying, does not roll itfelf up together, but remains flat. This fort is from the Laurus Caffia. 7. Nica Curundu, i. e. Cinnamon with leaves which refembles the Nicacol, or Vitex negundo, viz. in being lanceolate, or long and narrow.

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This

This feems to be a variety of the Laurus Camphora.

Befides thefe feven forts, they reckon yet three more, which obvioufly differ from the genuine Cinnamon. And indeed one may immediately fee, that they can in no wife with juffice be reckoned among the Cinnamon-trees. Of thefe I have feen one fort only, viz. the *Thorn-Cinnamon*: the other forts are very rare, and are found only in the Emperor's domains.

8. Caturu Curundu, i. e. Thorn-Cinnamon (Dorn Canel): this is of a quite different genus from the Laurus, and the bark has not the leaft tafte of Cinnamon. The leaves bear no refemblance to the Laurus, and the branches have thorns (fpinæ) upon them.

9. Mal Curundu, or Bloom-Cinnamon, and

10. *Tompat Curundu*, i. e. Trefoil-Cinnamon: becaufe the leaves are faid to divide towards the top into three laciniæ.

Cinnamon is barked in the woods at two different feafons of the year. The first is termed the *Grand Harvest*, and lasts from April to August: the fecond is the *Small Harvest*, and lasts from November to the month of January.

It is in the woods on the Company's own domains, that the Schjalias feek and peel the Cinnamon bark; although it fometimes happens that they freal into the Emperor's woods, and

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at times go as far as within half a league of Candi, in order to fetch it; but if they chance in the latter cafe to be difcovered and taken, they must expect to have their nofe and ears cut off.

Each diffrict or hamlet in the Company's dominions, is bound to bark and furnish yearly a certain stated quantity of Cinnamon; whereas the Cingalefe there have a certain portion of land rent-free, to cultivate and inhabit, with other privileges. Over a certain number of Schjalias are placed other fuperior officers, who have the infpection over them and the Cinnamon, and are likewife authorized to punish fmall offences. Over all together is placed a European, who is called their Captain (Hoofd der Mahabadde, or frequently in common difcourfe Captain Cinnamon), who receives and is anfwerable to the Company for all the Cinnamon, He is likewife vefted with authority to try and punifh offences of a deeper die,

The barking of Cinnamon is performed in the following manner: First, a good Cinnamontree is looked out for, and chosen by the leaves and other characteristics: those branches which are three years old, are lopped off with a common crooked pruning knife. Secondly, From the twigs that have been lopped off, the outside pellicle (*epidermis*) of the bark is foraped off O_4 with

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with another knife, which is convex on one edge, and concave on the other, with a fharp point at the end, and fharp at both edges. Thirdly, After the bark has been fcraped, the twigs are ripped up longways with the point of the knife, and the bark gradually loofened from them with the convex edge of the knife, till it can be entirely taken off. Fourthly, The bark being peeled off, is gathered up together, feveral smaller tubes or quills of it are inferted into the larger, and thus fpread out to dry, when the bark of its own accord rolls itfelf up ftill clofer together, and is then tied up in bundles, and finally carried off. All these offices are not performed by one fingle man, but the labour is divided among The Schjalias afterwards deliver the feveral. Cinnamon into ftore-houfes, erected in feveral places by the Company, for that purpofe, whither it is either carried by porters, or, where there are any rivers, transported in boats. Each bundle is at this time bound round with three flender rattans, and weighs about thirty pounds. In the ftore-houfes these bundles are laid up in heaps, a feparate heap for each village, and covered with baften mats.

When the fhips are afterwards ready to take in their lading of Cinnamon, it is packed up, after having previoufly undergone an examination. Each bundle is then made nearly of the length

length of four feet, and is weighed off to eighty, five pounds neat: although it is afterwards marked and reckoned for only eighty pounds; fo that five pounds are allowed for lofs by drying during the voyage. Subfequently to its being well fecured and tied hard round with cords, the bundle is afterwards fewed up in two facks, the one within the other, on which latter are marked its weight and the place where it was packed up. Thefe facks ought not to be made of fail-cloth, or linen, but of wool, or fuch as in India bear the name of *Gunjefakken*, from which the Cinnamon receives no injury in the transportation.

From the ftore-houfes the facks of Cinnamon are carried to the fhips, and after they have been ftowed in there with other goods, loofe black pepper is fprinkled over them, to fill up every hole and interftice. The pepper, which is of a dry and hot quality, attracts to itfelf, during the voyage, the moifture of the Cinnamon, and has been found, by thefe means, not only to preferve the Cinnamon in its original goodnefs, but even to increafe its ftrength.

Cinnamon-plantations, towards the end of the fixth, and beginning of the feventh decennium, of the prefent century, have, by the wife, provident, and unwearied exertions of Governor FALCK, been established in feveral places, where many thousands of trees have been reared in fandy

fandy ground, which is the foil the best adapted of any to Cinnamon. At Situwaka, which lies on the boundaries between the Emperor's domains in Candi and the territories of the Company, there are very large Cinnamon-grounds, from whence Cinnamon has been already three times barked, and from which likewife this year a quantity was fent to Europe. At Pafs, which is a country-feat belonging to the Governor, not far from Columbo, and even out before the town and fortress of Columbo itself, one may see fimilar plantations. At Kalture and Mature I had now an opportunity of feeing with my own eyes exceedingly large plantations of Cinnamon, which had been eftablished two or three years before. When all these and several more of the same kind shall have attained their full growth, it will be inconceivably more convenient for the Dutch East-India Company to fetch their Cinnamon from a garden, where the trees fland at proper diffances and in rows, than for the Schialias to creep about far and wide in the pathlefs woods to feek and procure it. Add to this, that the Cinnamon in the woods is greatly reduced in quantity, compared to former times; which is partly owing to this, that the portions of land which yielded the beft Cinnamon have been taken for other uses, and partly, that the Cinnamon-

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Cinnamon-trees in the wild forefts were left without any guard.

November 13th, We fet out from Mature on our return home, and arrived on the 14th, in the morning, at Gale.

On the 16th, fetting out from Gale, we travelled farther on our road homewards, and arrived at Columbo on the 19th following.

After the Cinnamon in Columbo has been packed up, the diftilling of the oils commence. Oil of Cinnamon, the dearest and most excellent of oils, is diffilled no where but in the Company's Laboratory in Columbo, from the fragments and fmall pieces of Cinnamon, which, break off and fall from it, during the packing of it. This dust and refuse is laid in large tubs, and a quantity of water is poured upon it, fufficient to cover it completely. In this manner it is left in feveral different tubs, which are got ready in daily fucceffion, for fix or eight days together, to macerate. One of thefe tubs commonly holds one hundred pounds weight of Cinnamon-duft. All this is poured, a little at a time, into a copper alembic, and drawn off with a flow fire. The water, called Aqua Cinnamomi, then comes over quite white, nearly of the colour of milk, together with the oil, which floats at top in the open glafs-recipient placed underneath. A tub is diffilled off every four-and-twenty hours. During

During the whole time of diffilling, two Commissaries, or Members of the Council of Justice, are appointed to be alternately prefent, although this is not precifely the cafe: but they come moftly every time that the oil is to be feparated from the water. Upon this the oil is poured into a bottle, which the Commiffaries feal, and keep in a cheft, which is likewife fealed by them. In this manner the Apothecary cannot have accefs to embezzle any, unlefs he takes care to provide himfelf with fome out of the recipient, before the Commiffaries attend. I was at great pains to afcertain, how much oil is procured from a hundred weight of Cinnamon-duft, but conftantly without effect; as it is against the Apothecary's intereft to let this be known. Thus much however is certain, that Cinnamon does not yield much oil, in proportion to other fpices, and that therefore fuch Cinnamon as is useful, cannot be employed for this purpofe; but only the refufe, that cannot be fent to Europe. The oil was fold here on the fpot for nine and three-fourths of a Dutch ducat per ounce. It is in the prefent cafe of a pale yellow colour, and not of a dark brown, which it generally is, when extracted from the coarfer kind of Cinnamon. The other parts of the Cinnamon-tree, befides the bark, are neither used for Cinnamon, nor yet for Oil. The wood of the tree is of a loofe and porous texture,

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texture, and handfome enough: when fawed into planks, it is fometimes manufactured into Caddies, and the like; but its fcent does not fecure it from the attacks of worms.

'fan Lopes was the name given to the Boerbavia diffufa, that must not be confounded with the radix Lopes, which is brought hither from the Coast of Malabar, and of which this year was fent to Europe by the homeward-bound ships, for the first time, on the Company's account, about three hundred pounds weight.

Moringa-root, with Long Pepper (Piper longum) pounded and laid on the part affected, was made use of here as a vesicatory, to raise blisters.

Calaminder was the name given to a fort of wood, which has a very handfome appearance, and of which I faw among the Dutch feveral elegant pieces of household furniture; as, for inftance, Bureaus, Chairs, Tables, Sofas, Boxes, Cafkets, &c. Thefe took a polifh as fmooth as a looking-glafs. The wood is fo hard, that edge-tools cannot work it, but it must be rafped, and almost ground into shape; and indeed it very rarely holds together with any kind of glue. It is exceedingly fine, and at the fame time brittle. In the Cingalefe language, Calaminder is faid to fignify a black flaming tree. The heart, or woody part of it, is extremely handfome, with whitish or pale yellow and black or brown

brown veins, ftreaks, and waves. In the root thefe waves are faid to be clofer and darker : for which reafon the nearer a piece is taken from the root, the more valuable it is deemed; fince higher up in the ftem of the tree, the waves are thinner and paler. The extremities of the tree. to within one-third or half of it, are faid to be fit for nothing, but to be thrown away. Ants are faid not to damage it at all. I could not get to fee the tree myfelf; but from the defcription I received of it, it is very tall, and fometimes fo thick that three or four men cannot encompass it. From a specimen of the twigs which I fent fome Cingalefe to gather for me in the forefts, I faw that it was a Diofpyrus ebenum, or the fame tree from which black ebony is procured.

Tame ferpents are carried about by the Malabars, or Snake-Enchanters, as they are called, who, for a moderate gratuity, make them dance and play all manner of tricks. The owner careffes them, and often takes them up in his hands, and fometimes provokes them to bite. When the mafter plays upon a little pipe, the ferpent rears its head, and twifts it about in various directions to a regular tune and measure. These conjurors stroll about the country and in the towns, in the fame manner as the Germans and Savoyards do in Europe,

Europe, in order to pick up a livelihood with bears and monkies.

Serpent-ftones, which were in great repute, as infallible antidotes against the bite of Serpents, I made diligent enquiries after, in order to learn the mode of preparing them. Such were frequently brought me, and were kept up for a fufficient length of time at a high price; fo that those which I bought up at first were well paid : at laft, after I had refolved not to purchase any more, and other cuftomers were become fcarce. I procured them a very cheap bargain; infomuch that I was afterwards enabled, on my arrival at the Cape of Good Hope, to let my friends have them at a rix-dollar a piece. The ftone is prepared by art, large, and nearly of the fame fhape as a bean, although in fize and shape these stones are feldom found alike. It is most commonly roundish or fomewhat inclining to the oblong form, with obtufe edges, on one fide as nearly as poffible flat, and on the other, fomewhat convex. It is prepared from the afhes of a certain root, which is burned, and from a particular fort of earth, faid to be found near Diu. Thefe two ingredients being mixed together, are burned a fecond time, and reduced to a dough, which is then moulded into the form of a ferpentftone, and dried. All have not the fame colour ; those which have been most burned, being of a lighter,

lighter, and those which are lefs burned, of a darker grey: most frequently they are variegated with black and grey fpots. The ftone is pierced through with fine holes, which however may often be feen with the naked eye, and it is at the fame time fo brittle, that it will fly in pieces; if it be let fall on a ftone-floor. When a man happens to be bit by a ferpent, one of these ftones is laid upon the wound, over which it is bound tight, and left there, till all its pores are filled with the extracted poifon. In this cafe it is faid to drop off of its own accord, like a glutted leech; and if it be then fleeped in fweet milk, the poison is supposed to be extracted from it; upon which the ftone may be applied afresh to the wound, in cafe the patient is of opinion that any poifon remains behind. They attribute likewife here great virtue to this ftone in malignant fevers, even in putrid fevers, if a finall quantity of it, being foraped fine, is taken in wine. I was informed that counterfeit ferpentine ftones are made in imitation of the real ones, but which poffefs no virtue, and therefore great attention ought to be employed in the examination of those which are genuine, and which may be known by the circumstance of their fastening on the palate and forehead, when one is warm, and likewife that on being put into water, they fend up in a fhorttime feveral fmall bubbles.

Cocoa-

Cocoa-nuts, from the Maldives, or as they are called, the Zee-Calappers, are faid to be annually brought hither by certain meffengers from thence, and prefented, among other things, to the Governor. The kernel of this fruit, which greatly refembles the kernel of the ordinary Cocoa-nut, is looked upon here as a very efficacious antidote. They take of it half or even a whole drachm. It is deemed a fovereign remedy against the Flux, the Epilepfy, and Apoplexy. The inhabitants of the Maldives call it Tavarcare, and it feems to belong to the genus of Boraffus.

From the ordinary Cocoa-nuts, which formed the daily food of the Indians, was preffed, in many places, a great quantity of oil. The Cocoa-nut was broken in pieces intire and in the ftate in which it came from the tree, between two cylinders. The oil, as long as it is frefh, is very mild, and is ufed for the table, in lamps, and for various other purpofes, both by Europeans and Indians. From the fibrous hufk, which invelopes the nut, was generally prepared cordage for floops, and other ufes, and even what to me feemed very fingular, ftrong cables, for the ufe and fervice of the Dutch fhips, when they lie in the harbour off this ifland.

The Indians, who have fuch a number of poifonous animals, juices, and fruits in their vol. iv. P country,

country, are likewife richly provided with antidotes; among which they reckon the Lignum Colubrinum, Ophiorbiza, Mungos, to which the Moors add the Rhinoceros's-horn.

The Moors conduct themfelves in the Churches (or *Mojques*) very devoutly and with great decorum. With the most exemplary devotion they offer up their prayers, during which I never once faw them turn their heads as a fide, and still lefs offer to converse with each other. In this respect they might well ferve as a pattern to Christians, who but too often behave with very little decorum in the house of God, and frequently offer up their prayers with so little devotion, that a Moor would be apt to imagine, the whole of their divine fervice to be a mere pastime.

On account of the extensive trade which Columbo carries on with the whole coast of the Continent, as likewise in consequence of the vast numbers of Moors, who reside here on account of this commerce, I had abundant opportunities of procuring a variety of scarce and current Indian Coins.

Among the Cingalese Coins was one very remarkable, on account of its form, and it was even faid to be current on the Coasts of Malabar and Coromandel. It was struck, as I was informed, by the Emperor in *Candi*, of various fizes and value, and was commonly called *Laryn*.

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It confifts of a filver-cylinder, hammered out, which in the middle is bent together, the ends being afterwards turned up like a hook, and the upper end diffinguished either with certain letters, or ftars, or elfe with engravings. One of them which I procured by barter, coft twelve Dutch flivers, and another of a smaller fize nine; both of them were of fine filver.

In fome parts of Ceylon was dug up out of the earth itfelf a copper coin lefs than a farthing, but rather thicker, with an impreffion upon it, and Malabar characters. It was fuppofed to be a Malabar Coin, which was formerly current here.

Among the poorer fort of people were very current Copper Coins of the Dutch Company, of different fizes, and of that kind which bears upon one fide the Company's arms.

Otherwife the most current Coin in traffic between the Europeans and Indians, were Rupees of gold and filver and Pagodas. The Rupees were here of different forts, being ftruck by feveral Princes, and confifted of whole, half, and still finaller pieces. Pagodas, which are feldom feen in the Easten part of India, were here extremely common. They are, with very little exception, the only Coin which bears any impreffion, and the gold in them is mixed with a fmall proportion of copper, They contain, P 2 on

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on the neareft average, a Ducat, and pafs for two Rix-dollars, one Stiver, Dutch money. On the one fide they are convex, and on the other fomewhat flatter, refembling in appearance a peppermint-drop. One fide has a figure upon it, and the other fide, in those which are most current in the Dutch Factories, has only fome emboffed dots, whilft those which pass in trade in the English Factories, have a ftar. Great caution is necessary not to be imposed upon with these Pagodas, as a great many counterfeit ones are in circulation, and are fo strongly gilt, that it is difficult to diffinguish them from the true ones, except by the found.

A Pagoda, with the image of an Elephant upon one fide, was very fcarce to be met with. It was faid to be of great antiquity, and was larger than the common fort, and at the fame time confifted of fine gold.

The Pagodas of *Maffulipatnam*, which are brought hither. from Coromandel, where they are current, have three figures upon them, confift of fine gold, and are both in whole pieces, and divided into eighteen parts.

The Mangalor-Pagodas are of two forts, the one old, having characters on the reverfe, and the other current, with a moon on the reverfe, and ftamped with two images on the oppofite fide;

fide ; it is of fine gold, and is met with in whole and half pieces.

The finall Coin, for change, which otherwife was made use of here, and was likewise current on the Coasts of Malabar and Coromandel, confisted either in very small gold and filver Coin, called *Fanum*, or in copper Coins of various fizes, which have been struck by the Factories established by the Europeans.

The *Fanums* were all finall and thin, of gold mixed with copper, and of filver, ftruck at feveral places, and by different Princes on the Continent. They were marked with feveral lines and dots on both fides. The value of them varied, according to their different contents and fize.

Among the copper Coins were feveral different forts, ftruck by Dutch, Englifh, French, and Danes, of various fizes, thicknefs, impreffions, and value. Some of thefe were likewife ftruck in filver at Madras, Pondicherry, and Tranquebar. To give a minute defcription of all thefe, would be too tedious and prolix; for which reafon I fhall rather referve them for a feparate Treatife on Indian Coins.

Two leaden Coins, fomewhat larger than the Javanefe, were likewife brought hither from Malabar; one of them with a round, the other with a fquare hole in the middle.

P 3

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As were likewife two copper Coins, called *Dudu*, or *Baifa*, with the figure of an elephant on one fide, the one of a larger, the other of a formewhat finaller fize.

The Cingalefe Ape (Simia Silenus?) is called Rollewai, and is kept by many perfons tame in their houfes. He is eafily tamed. When he fees any of his acquaintance, he directly comes jumping to him, fawns upon him, grins, and with a peculiar kind of cry teftifies his joy. He is of a very friendly and gentle nature, and is very loth to bite any one, unlefs he is immoderately irritated. If any one kiffes and careffes a child, he feeks to do the fame; if you beat a child in his prefence, he rears himfelf up on his hind legs, grins and howls in a wretched manner, and, if let loofe, will attack the party that beats the child. He leaps fafter than he runs, becaufe his hind legs are longer. He eats fruit of every kind, as for inftance, cocoa-nuts, apples, pears, greens, potatoes, bread, &c. He is very delicate and tender, with refpect to his tail, which is longer than his body. In fize he is nearly upon a par with the Lemur Catta, or fomewhat larger. His body is entirely grey; although the colour fometimes borders more upon black, and fometimes more upon white, the latter particularly when he is old. His face is blackifh, bald, and very little shaded with hair. The beard upon

upon his chin and cheeks is white, and turned backwards; on the chin and upper lip it is fhort, but upon the cheeks it is upwards of an inch in length, and ftands erect towards his ears, which are in fome measure covered with it in front, His hands and feet are blackifh, and naked ; his nails long and blunt; the thumb detached and fhort. The breech has hard tuberofities, which are bare. The tail is round, tapering towards the extremity, hairy, and longer than the whole body, fo that the animal can twift it round and hold himfelf by it among the branches of the trees. The tips of the ears are rounded off, almost bare of hair, and black. When he fits down, he always keeps his hands croffed over each other. I had one on board in my voyage homeward, but could not keep him alive, as he died on our coming into a colder climate, just before the Cape of Good Hope; he is exceedingly tender, not being able to fupport the leaft degree of cold.

SECOND JOURNEY TO MATURE,

DECEMBER 7th, I made a fecond journey from Columbo to Mature, at the inftigation of the Governor, to vifit Count Rantzow's Lady, who P 4 laboured

laboured under a fevere and tedious illnefs. Count Rantzow was Comptroller of this Factory of the Company, and fhewed me great favours during the few weeks of my abode here. I travelled both day and night in a palanquin, borne by twelve ftout Moors, who fupported the whole journey, without refting, fo that I made the journey in the fpace of three days.

I daily made excursions in the vicinity of this place, and as the precious ftones of the ifland are found and dug up more efpecially in thefe parts, I procured the proper intelligence, as well concerning the different kinds of them, as the manner in which they are fought for and made ufe of. Several of them are exported to Europe, quite in their rough flate, but the major part are polifhed and fometimes fet here, and afterwards fold in India itfelf. It was generally the occupation of the poorer fort of Moors to cut and polifh them, which was done upon a plate of lead, and for a very moderate charge. I purchafed of the Moors fuch forts as were to be met with, not only in their polifhed, but likewife in their rough ftate ; the latter, in order to be preferved among other collections of Foffils. ' At first I was obliged to pay very dear for them, efpecially as I then had my choice of them, and felected them, as I pleafed; but in the fequel I found,

found, that I could procure them much cheaper, by taking them one with another in the lump.

The Minerals and precious Stones which I had an opportunity of meeting with and collecting, were the following, viz.

Iron-ore is found interlarded in earth and clay, and that fometimes to a confiderable depth under ground. It is melted in crucibles over a fire, which is blown with two bellows. The fcoria is feparated from it with tongs made expressly for the purpofe, and the melted mass is poured into a mould made of clay, after which it is purified farther, and forged for fmaller uses.

Mica (or Glimmer) in large laminated maffes, is called *Mirinan* by the Cingalefe. The fhivers of this are ufed for ornamenting Talpats or Umbrellas, made of large Talpat (*Licuala*) leaves.

Plumbago, called by the Cingalefe Kalu Miniran, is found along with Mica, at the foot of mountains, in clay and red earth, most frequently at a confiderable depth. Plumbago is fometimes likewife met with by itfelf in a dry foil.

Stablstein, or crystallized Pyrites, which contains a little copper, is used for making buttons of.

In Ceylon all fuch Stones as are transparent and fufficiently hard to take a polish by grinding, are called precious Stones. These are known to the Moors from Malabar and Mogol, as likewife to the Cingalese and the Dutch that live in their

their country, by the following Dutch, Malabar, and Cingalefe names:

The Ruby, Robyn, Malab. Elinges Chogeppu, and Cingal. Lankaratte; is a genuine Ruby.

The Amethyst, Malab. and Cingal. Scuandi; is a purple-coloured Mountain Crystal.

Robals, Malab. Rauwa, Cingal. Rawa; are fmall transparent Garnets of a dark-red colour.

Hyacinths, which are made to pass for Rubies.

The Red Tourmalin, Malab. Pani turemali, Cingal. Penni turemali; is a Quartz inclining to a red colour.

The Blue Saphire, Malab. Nilem, and Cingal. Nile; is a genuine blueifh coloured Saphire, frequently with blue fpots.

The Blue Tourmalin, Malab. and Cingal. Nile turemali; is a Quartz, in colour inclining a little to blue.

The Green Saphire, in the Malabar and Cingalefe languages called Patje Padian, is a genuine Saphire.

The Green Tourmalin, or Maturefe Diamond, Malab. and Cingal. Patje Turemali, is a name given both to Chryfolites with tetraedal prifms, and even fometimes to the Chryfopras.

The Topaz, Malab. Purefjeragen, and Cingal. Purperagan, is a genuine Topaz.

The Cinnamon-Stone, Cingal. and Malab. Komedegam, is a fine flame-coloured or yellowishbrown Garnet.

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The Yellow Tourmalin, or Maturefe Diamond, Malab. and Cingal. Kaneke Turemali, is a Topez of a greenish-yellow colour.

The White Tourmalin, or Maturefe Diamond, Malab. and Cingal. Sudu Turemali, is a Topaz of a pale yellow colour.

The White Crystal, Malab. Wille Palingu, Cingal. Sudu Palingu, is a transparent and colourlefs mountain Crystal.

White Saphires, or Water-Saphires, Malab. Wille Padjan, Cingal. Sudu Padjan, are fmall fragments and fhivers of the most transparent white mountain Crystals.

The Taripo, is a milk-coloured Quartz.

The Yellow Crystal, Malab. Manjel Palingu, Cingal. Kaha Palingu, is a lighter coloured finoky Topaz.

The Brown Crystal, Malab. and Cingal. Tillia Palingu, is a fmoky mountain Crystal, or a dark coloured fmoky Topaz.

The Black Crystal, Malab. Karte Palingu, Cingal. Kallu Palingu, partly in crystals, partly in fragments, is the Electrical Tourmalin of Ceylon.

The Cat's-eye, Malab. and Cingal. Wairodi, is a Pfeudo-Opal.

The Ruby is more or lefs ripe, which, according to the Indian mode of expression, means, more or lefs high-coloured. The Amethyst is violet,

violet, but the Ruby is red, and for the most part blood-red. The deeper red the colour, the larger the ftone, and the clearer it is without any flaw, fo much the greater is its value. However they are feldom found here of any confiderable fize, for the most part they are fmall, frequently of the fize of particles of gravel, grains of barley, &c. The higher the colour, the clearer and more transparent they are. The unripe are not fo clear, and fometimes those that are more faturated, are found with fpots or ftreaks in them; fome of thefe latter approach very near to a violet colour. Most of them are round and flat, from having been agitated and rolled about in the water; fome I have found crystallized with eight fides, of which four were broad, and four very fmall, and terminated by two points, confifting of four fides each. The Moors fay that thefe approach nearest to the Diamond in hardnefs, and polifh them, in order to render them fit for being fet in rings.

The Amethyft is, in fact, no other than a violet-coloured mountain-cryftal, which differs very much in the degrees in which it is coloured. Among thefe one finds fome that are almost white, with fo faint a tinge of violet, that, if they were found by themfelves, one would rather take them for mountain-cryftals, efpecially one that was no great connoiffeur in thefe matters. Others are found

found to be tinged towards one end; others only in the middle, and others again in fpots and patches, and that in a greater or lefs degree. Some are fo faturated, that, when they lie on a table, they appear almost black, and exhibit, when held up to the light, a very beautiful violet colour. Frequently as well the fpots as the ftreaks are feen to be in fome parts paler and in others' of a more faturated colour, in fpecks and patches. They are of various fizes, feldom fo large as a walnut, and for the most part very fmall. The larger they are, the paler and the lefs coloured they are, and therefore the lefs valued and effectmed. The fmall ones have in general the deepeft colour, but yet are of no great value, as they furnish only small stones for cutting. The dearest and most valuable are those which are high-coloured, without flaws, and of fome tolerable fize. The more faturated the colour is in them, the more ripe they are called, and on the other hand unripe, the paler they are. It is beyond a doubt, that thefe were originally in a fluid flate, and previous to their crystallization, were tinged with a violet colour, which incorporated itfelf either with a part, or elfe with the whole of the fluid. Some are found rounded off at the angles, and by the rolling about in the water have contracted a high polifh; others are of an irregular figure, broken on

on every fide, frequently with deep and large impreffions; fome have fix fides, and one hexagonal point. Not one was I able to find quite perfect and undamaged. It is very feldom that one meets with any which have both their ends; though even in that cafe they have always received fome damage from external violence. Some have very long violet ftreaks variegated with ftreaks of white. The largeft are generally cut into buttons for waiftcoats, which, in the Eaft-Indies, it is much the fashion to wear of white linen; and those that are of an inferior fize, are manufactured into jacket and sevebuttons.

The *Robal* is a dark-red ftone, darker than the Ruby, and not fo hard. It appears most opaque in a lying position, when it is highly faturated. These are mostly found in finall pieces, which are rounded off at the angles, and worn smooth by friction. They are cut for setting in rings, and are frequently exposed to fale for Rubies.

Hyacinths are finall yellowifh-brown or reddifh prifins, which, as well as Robals, are frequently offered for fale under the denomination of Rubies.

The *Red Tourmalin*, when laid down upon a table or other fupport, appears dark and opaque, but, being held against the light, is of a pale red hue. The largest I could procure are of the faze of a pea, but most of them are smaller, about

about the fize of a grain of rice. Here and there I met with one cryftallized, but in general they are always damaged and imperfect. They feem to have had four fimilar fides on their oblong column, and a quadrangular pyramid. Most of them are worn fmooth and polished from their agitation in the water. The colour is in general equally distributed in every part, and feldom paler or more faturated in one place than in another.

The Blue Saphire is, as well as other Cingalefe coloured ftones, ripe or unripe in different degrees, that is, more or lefs of a deep blue caft. Sometimes they are fo pale, that they almost exhibit the appearance of water, and it is more feldom that they are dark blue. They are however more uniformly coloured than Amethyfts, without fpots and ftreaks; although I faw one which was quite of a light blue colour at one end, and dark blue at the other. All those which I faw had been worn fmooth by their agitation in the water, into round and various other fhapes. I have met with one as large as a hazle-nut; but most of them are many times finaller. They are all made use of, when cut, for buttons and rings.

The *Blue Tourmalin* is nothing but a Quartz, with a tinge of blue.

The Green Saphire occurs of a bright green, a greenish, and a pale whitish colour, and is a genuine

genuine Saphire, which, as well as the former, is fit for cutting, and applied to that purpofe.

The Green Tourmalin is of a dark hue, fometimes bordering a little upon yellow, fometimes upon blue, fometimes upon green, and most frequently upon black. It is in not a few inftances transparent, in others covered with an opaque furface; fometimes it is totally opaque, like Shirl, of a fhining and frequently tortuous fracture, with many flaws longways and acrofs. Sometimes it is found in a cryftallized ftate, with an oblong fhaft of four fimilar fides, and a quadrangular point, but mostly occurs worn down and broken in thick or thin pieces of an irregular form, fometimes as large' as a walnut, fometimes as finall as groats. The Green, or Chryfoprafe is beautiful, of a grafsgreen colour, clear and transparent, and is used for cutting. This is the mineral properly called Green Tourmalin, although this name is likewife given to feveral other fpecies."

The Topaz, properly fo called, occurs mostly in yellowith fplinters, and is a more or lefs dark genuiñe Topaz.

The Cinnamon-stone derives its name from its colour, which in fome measure refembles the oil drawn from the best and finest Cinnamon. It is not however always alike, but more or less pale, or of a deep orange-colour. One feldom finds any of these stones of a confiderable fize, which

which are undamaged; but they are in general, even the finall ones, cracked longways and across, which deftroys their clearnefs, and renders them unfit for cutting. Thefe flaws occasion it to fall into fquares and oblique laminæ. Sometimes it refembles, in fome meafure, Gum Benzoe. When cut, it produces very beautiful ftones, efpecially for rings, flock and other buckles.

The Yellow Tourmalin is called likewife Tourmalin Topaz, by the Moors, becaufe it fometimes bears a great refemblance in colour to the Topaz. In appearance it is very much like Amber. Some are more faturated or ripe, almost of an orange colour; fome are of a paler and fome of a whitish yellow. I never faw it in a cryftallized ftate, but always worn fmooth, by being agitated in the water, and from the fize of a grain of rice to that of a pea. They are cut for the purpofe of fetting in rings, and are exceedingly handfome.

The White Tourmalin is that which is properly called the Maturefe Diamond. It is more or lefs white, almost always of the colour of milk, fo that its transparency is not perfectly clear. For this reason it is frequently calcined in the fire, in confequence of which the colour vanishes, and the ftone becomes much clearer, although not perfectly white. It is then enveloped in fine lime, and burned with rice-chaff (oryza). One VOL. IV.

One often finds pieces which have fpots or ftreaks in them. They are moftly found worn fmooth by the water, and fometimes cryftallized, with an oblong fhaft, which has four fimilar fides and a tetraedral point. It is cut for fetting in rings, efpecially for a border round other larger ftones, and for fleeve and fmall jacket-buttons. It is among the moft common ftones in Ceylon, and not extremely dear.

White crystal is found here both crystallized and worn fmooth by the water, in uneven, flat, and long pieces, full of pits and hollows. The colour is clear, more or lefs of a watery hue, or fhining white. The fmaller pieces I have often feen with their column and pyramids. The larger ones have been generally worn fmooth by agitation in the water. It fometimes is of the fize of two doubled fifts. Of it are cut waiftcoat and jacket-buttons, ftones for buttons, for drawers, and for fetting in fhoe-buckles, &c.

Water-Saphire is the name of a ftone, which very much refembles white cryftal, but, when viewed against the light, is both clearer and whiter; it is effectially diftinguishable by its hardness, in which it furpasses the Crystals. I could never procure any of those which had their fides and points, but they had always been worn down by the water into shapeless pieces, or elfe flat and rounded off, with a rugged furface, full of 3 fmall

finall imprefiions like dots. The largeft I faw had been of the fize of a walnut. They are much dearer than Crystals, and are cut for waistcoat and jacket-buttons, and for shoe-buckles.

Taripo is the name given in Ceylon to a white ftone, which in all probability is nothing more than a Quartz or white Cryftal. Its colour is pure white, or fomewhat of a watery caft, but not fo clear and transparent as the Cryftal, but rather like a Quartz. I have never feen it cryftallized, but always in fhapelefs lumps. Of thefe likewife ftones are cut for fetting.

The Yellow Cryftal is probably the fame as the white, only with this diffinction, that it appears of a difagreeable yellowifh colour. I never faw it cryftallized, but always worn down finooth by the agitation of the water into round pieces, with a rough knobby furface.

The Brown Cryftal diftinguishes itself from the former merely by its being of a blackish cast, or of the colour of pale ink. When laid down upon any substance, it does not seem to be transparent, but may be seen through, if viewed against the light. The specimens I saw were always rounded off in pieces as large as a large hazle-nut or small walnut, in consequence of the agitation they had undergone in the water. The furface is rough, in consequence of the fine dots impressed on it, and a grey cruft, which some-Q 2 unress

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times renders it impervious to the light, when in its intire ftate, although the infide is tranfparent, as appears when the ftone is broken in pieces. It is cut into buttons for drawers, and other ufes.

The Black Cryftal is a quite black, fhining, but not transparent Shirl. It is often found broken into fhapelefs pieces, round or oblong, being worn fmooth by agitation in the water. It is of a fhining fracture, and falls into flatelike fhivers, which are transparent at the edges. Of this I have feen pieces as large as a walnut, and others quite finall, like a pea. Some I was able to meet with, which were cryftalline, although not altogether undamaged, with fix diffimilar fides and an obtufe triangular point. They are cut and polifhed for buttons, which are worn upon jackets and upon the clothes of those who are in mourning. They bear a great refemblance to canel-coal buttons. This Cryftal is verycommon, and not of any great price or value. I could not obferve, that the Indians were acquainted with its electrical properties, which they never denote by the name of Tourmalin, but beftow that denomination upon feveral other fpecies.

Cat's-eye is the name given to a very hard ftone, which approaches more or lefs to white or green, and is femi-diaphanous, with a ftreak of the

the breadth of a line in the middle, which ftreak is much whiter than the ftone itfelf, and throws its light to what fide foever this is turned. In this refpect therefore it refembles a cat's eye, whence it derives its name. The largeft I faw was of the fize of a hazle-nut, others are found -much finaller. In its rough ftate it feems to have no angles nor figns of cryftallization. Its value is in proportion to its fize and purity. One of the fize of a nut, without flaws and other imperfections, is fometimes valued at fifty or fixty rix-dollars and upwards. They are cut convex and oblong, without faces, fo that the ftreak, which interfects them, comes in the middle, and they are afterwards fet in rings, which are worn by the Malabars and Moors.

From these descriptions it may be seen, that the stone known in Europe, under the name of Tourmalin, and celebrated for its electrical wirtues, is not known by the same name to the Indians; but that they denote by the word Tourmalin, several stones, which posses no electrical properties, and which are even of different species, of different colours, and of different degrees of transparency.

Moft of thefe ftones I fhewed to Profeffor BERGMAN, who very kindly furnished me with their mineralogical names.

Q3

It is chiefly the Moors who fell thefe ftones in Columbo, Gale, and Mature, both in their rough ftate, and after they have been polifhed and fet : but a ftranger ought to be very cautious how he deals with them; as well becaufe they are apt to afk extravagantly more than the ordinary price, as alfo becaufe they often impofe upon the purchafer with glafs-fluors and ftones cut by them, which they manage with fuch art and dexterity, that one that is not ufed to them is eafily duped.

All thefe precious ftones, which are found in Ceylon, more efpecially occur in the region round Mature, in the vallies and at the foot of the mountains, in a compound of earth and fat clay. Several different forts are found in the fame foil and the fame place. Sometimes they are found likewife upon the furface of the earth, when they are wafhed off from the mountains by a violent rain or a ftrong current of water.

In fome places one finds ftones without much trouble, at the depth of one, two, or three feet beneath the furface, whilft, on the other hand, in other places, one muft dig to the depth of twenty feet and more. When one is within the reach of water, the work goes on much eafier, becaufe the wafning can then take place upon the fpot; the earth dug up being put into a large rattan-bafket, which is kept in water, that the earth may be feparated. For this reafon, thofe pits

pits, which lie near rivulets, though they are not the richeft, are confidered as the leaft troublefome.

The digging of precious ftones in the circumjacent diffrict of Mature is farmed out annually in the month of August, to the highest bidder, on account of the Dutch East-India Company. In 1777 and 1778 a Moor is faid to have farmed it for 180 rix-dollars. The land farmed out for digging does not always lie in one contiguous ftretch or tract, but different fpots, fcattered up and down in different parts, are fought out, which are found to contain ftones. Before they are farmed out, thefe fpots are infpected by Commissioners on the Company's account. To fuch portions of land appertain frequently the gardens of the Cingalefe, which in this cafe are not free to be dug. One and the fame tract of land can be hired out, and confequently dug feveral times. In general and chiefly fuch plots of ground are chosen for this purpose, as lie contiguous to mountains, and more efpecially to rivulets, on account of the washing. Afterwards the Farmer-General frequently fells licences to feveral others to dig with a certain number of men; for inftance, for fifteen rix-dollars, to those who employ ten men, and fo in proportion for five or twenty men. Thefe have the privilege of digging the whole year, and Q4

where-

whereever they pleafe, but not with more men than they pay for to the Farmer-General. Thofe who purchafe the privilege of digging, have, exclusive of this, to pay their diggers themfelves. What is got every month after digging and washing, is put into a bag, which is fealed up and fent home to the Proprietor, who then has to felect and arrange the stones, which, with more or less profit to himfelf, he has been able to acquire.

The Ficus Religiofa is called by the Dutch Duyvel's-boom, or Devil's-tree, and by the Cingalefe Boga. The latter regard it as a facred tree, becaufe they believe that the God Budu repofes under it; for which reafon they never fell one of thefe trees, but, on the contrary, make their most folemn vows under it. When, ever they have taken an oath, or entered into any covenant under fuch a tree, one may reft affured of their observance of it.

Leeches (*birudines*) are found in abundance in the woods, efpecially near the fummit of a mountain. Thefe are of a reddifh-brown colour, of the thickness of a knitting-needle, and an inch in length. When one is walking in these places, they fasten on the feet, and can fuck out the blood through two pair of cotton stockings. Count RANTZOW informed me, that a European, on whom one of these leeches had fastened, pulled

pulled it forcibly off, and afterwards loft his life in confequence of that, and a neglect in the cure.

The Hystrix (or Porcupine) is found in plenty in the woods, and the Dutch frequently hunt this animal with dogs. His fharp quills fasten in the bodies of the dogs, when they rufh too eagerly upon him, fo that it is not uncommon for them to lofe their lives in the purfuit. The animal makes its abode and burrow in the ground, the entrance to which is no larger than to admit a moderate-fized hunting-dog to creep into it, and drive the animal out at another aperture of the fame burrow. The Hyftrin has frequently Bezoar-ftones in its ftomach, which here, fcraped to a fine powder, are administered in all kinds Thefe ftones confift of very fine of diforders. hair, which has concreted with the juices of the ftomach, and have one layer over the other, fo that they confift of feveral rings of different colours. I have feen them of the fize of a hen's egg, moft commonly blunt at the end; but one I had an opportunity of feeing, which was as large as a goofe's egg, perfectly globular, and all over brown.

I was informed, that the Hyftrix has a very curious method of fetching water for its young, viz. the quills in the tail are faid to be hollow, and to have a hole at the extremity; and that the animal can bend them in fuch a manner, as that

that they can be filled with water, which afterwards is difcharged in the neft among its young.

Scorpions abound here in great numbers, although it is feldom that any detriment is experienced from them. When it rains, one may often fee thefe animals, as well as the Scolependra morfitans, fally forth from their hiding-places, and creep in fhoals into those houses, the doors of which are left open on account of the heat.

The Stink-tree was called by the Dutch Strunt-bout, and by the Cingalefe Urenne, on account of its difgufting odour, which refides efpecially in the thick ftem and the larger branches. The finell of it fo perfectly refembles that of human ordure, that one cannot perceive the fmallest difference between them. When the tree is rafped, and the rafpings are fprinkled with water, the ftench is quite intolerable. It is nevertheleis taken internally by the Cingalefe, as an efficacious remedy. When fcraped fine, and mixed with lemon-juice, it is taken internally, as a purifier of the blood in the itch, and other cutaneous eruptions, the body being at the fame time anointed with it externally. I was at great pains to procure fome bloffoms of this tree, in order to ascertain its genus, but was conftantly difappointed. Of the Cingalefe, whom I fent out for that purpofe far up the country into the woods, I could only obtain fome branches without

without any bloffom, from which, however, I could perceive, that the tree was neither the *Anagyris fatida*, nor the *Sterculia fatida*. I had likewife fet fome live but fmall plants of this tree in boxes, and carried them with me alive quite to the Englifh Channel, where they were totally deftroyed, together with feveral other fearce trees and plants, by cold and ftorms. Of the wood I carried with me fome pieces to my native country, which, however, afterwards loft their feent to that degree, that now not the fmalleft traces of it can be perceived.

Another kind of tree was called the Serventtree, by the Dutch Slangen-bout, and by the Cingalefe Godagandu, which had a very bitter tafte. It was not only ufed as an efficacious antidote against the bite of Serpents, but likewife in ardent and malignant fevers. The Europeans have cups turned of the wood, into which wine is poured, which, in a fhort time, extracts the virtue from the wood, has a bitter tafte. and is drank as a ftomachic, or ftrengthener of the ftomach. Water likewife extracts a green tincture from it. Most probably this tree is the Ophioxylon Serpentinum, which grows here, although I had no opportunity of feeing any of the flowers. The wood itfelf refembles that of the Oak, by its grey colour, and numerous fmall pores,

pores, which, in the cups that are turned from it, frequently let the water filter through them.

The Shingles (*Herpes*) are cured here with the Capfules of the *Hibifcus Tiliaceus*, by rubbing the juice of them over the eruption. This beautiful tree is planted at Columbo and other places, in alleys, continues in bloom for feveral months together, and with the varying hues of its lovely bloffoms is a great ornament and embellifhment to the fpot.

From the root of the Capuru Curundu, Camphor is faid to be diffilled in Candia, which is the -capital of the ifland, and the refidence of the Emperor of Ceylon. It is fituated upon an eminence, almoft in the centre of the country. Not far off ftands a very high mountain, which rears up in the air a ftill higher fummit. The mountain bears the name of Adam's Mountain, and the fummit is commonly called Adam's Peak, where Adam, the father of the human race, is fuppofed to lie buried. The Cingalefe make pilgrimages to this place, and pretend that the imprefion of Adam's foot is ftill to be perceived in the mountain.

The Ophiorhiza Mungos, called Mendi, is used by the Indians against the bite of Serpents. The leaves and bark are faid to be boiled and taken in the form of a decoclion.

The

COLUMBO, 1777. -

The Ophiogloffum fcandens, a creeping plant, that twines round the trees, is here made use of in feveral places as a substitute for kyy, to cover pales and garden-fences with, and defend them against the sea-wind. The pales are covered with it on the outward fide, and confist themfelves of nothing more than a number of small stakes driven into the earth, close to each other.

I faw *Cocoa-trees* alfo fluck in the water, like poles, and was told, that they would laft a whole century, without going to decay, although this appeared to me incredible.

The Sciurus Ceilanicus was not fearce, but kept by feveral people in their houses tame in a cage. It is called by the islanders Rockia, or Ruckia, and is black on the back and fides, and yellowish under the belly. The tail is likewise black, and longer than the body. This Squirrel, which at this time was altogether unknown in Europe, and has fince been deferibed by Mr. PENNANT, is very eafily tamed, and is as large as a cat, but more flender in the body.

On the 28th I travelled from Mature to Columbo, in company with the young Count RANTZOW, who was now going on a vifit to his brother, and failed as Gunner on board a Dutch fhip. This youth, who was of a very hafty difposition, had, at the same time, the missfortune to be lame in his feet. Notwithstanding this defect,

defect, he had learned to fence with great skill, and, in spite of his crooked legs and thighs, to dance incomparably well. We arrived in fasty at Columbo, on the evening of the new year.

Soon after the new year, according to annual cuftom, three Ambaffadors from the Emperor in Candi, arrived in Columbo. Thefe were received on the part of the Company by Deputies at *Situvaka*, and, the ufual ceremonies of congratulation having paffed, were conducted to the old Town, without the fortifications, where they were quartered, and remained, till the day appointed for public audience.

February 5th was fixed for fending an Embaffy to the Emperor, on part of the Company, which Embaffy confifted of a Merchant and two Clerks.

About this time was celebrated, with much pomp and rejoicing, the inftallation of the Governor-General, in Batavia, in his high office, intelligence of his nomination having arrived from Europe. The joy of the day was teftified by the difcharge of cannon from the ramparts and the fhips, and the evening was fpent in dancing and diverfions, with a public fupper in the Governor's palace, to which all the public Functionaries and naval Officers were formally invited, together with the Ladies of diffinction in the town.

Among

Among the various kinds of Cottons and Chintzes, which are brought hither from Coromandel, those appear to me to merit the preference, which come from Suratte and Bengal, of which the latter feem to be the most beautiful, From Tutucorin I faw likewife fome which were not printed, but had flowers painted upon them with a hair-pencil, after the manner of Tapeftry. It is incredible to what a degree of fineness Cotton is fometimes fpun upon the Indian coaft. I had an opportunity of feeing Cotton-ftuffs fo exceedingly fine, that half a dozen thirts could be fqueezed together in one hand. Thefe are however not readily made use of, but are kept as rarities by people of diffinction, to fhew to what a degree of perfection the art of fpinning can be brought.

Some differences had arifen on the coaft of Malabar, which obliged the Governor to fend fome troops from this place to Cochim. And as preparations were now making for this purpole, the Governor was pleafed to propofe to me to make a journey to the Continent of Africa with this expedition, although the fhip in which I had come hither lay ready to fail on her return to Europe. But as I had already in Batavia formed the determination to revifit Europe, I requefted, inftead of the proffered favour, his Excellency's kind permifion to exchange my place

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place with another fhip's Surgeon, and to remain ftill a month longer upon this beautiful ifland; and by this means to have an engagement on board one of the fhips, which were to fail from hence in February; which requeft was gracioufly accorded me.

January 17th, 1778, I undertook a journey, in company with Meffis. SLUYSKEN and CON-RADI, to Negumbo, at which place we arrived the following day. This is a finall fortified place, with a gate of brick-work, and ramparts of earth, where an Enfign is flationed in quality of Commandant.

On the 19th, a quantity of Cinnamon was packed up, during which time, in company with a Cingalefe, I undertook a journey on horfeback fomewhat further up the country, to fee an Elephant-toil, or fnare, which ferved for capturing and inclofing a great number of Elephants. The toil was conftructed of ftout Cocoa-trees. almost in the form of a triangle, the fide nearest to the wood being very broad, and augmented with flighter trees and bufhes, which gradually expanded themfelves into two long and at length imperceptible wings. The narrower end was ftrongly fortified with ftakes, planted clofe to each other, and held firmly together by ropes, and became at length fo narrow, that only one fingle elephant could fqueeze itfelf into the opening.

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opening. When the Governor gives orders for an Elephant-chace on the Company's account, which happens at the expiration of a certain stated number of years, it is performed in the following manner: a great multitude of men, as well Europeans as Cingalefe, are fent out into the woods, in the fame manner in which people go out on a general hunt for wolves and bears in the North of Europe. These diffuse themfelves, and encompass a certain extent of land, which has been difcovered to be frequented by Elephants. After this they gradually draw nearer, and with great noife, vociferation, and beat of drum, contract the arch of the circle; in the mean time that the Elephants approach nearer and nearer to the fide on which the toil is placed. Finally, torches are lighted up, in order to terrify ftill more thefe huge animals, and force them to enter into the toil prepared for them. As foon as they are all come into it, the toil is clofed up behind them. The last time that Elephants were caught in this manner, their number amounted to upwards of a hundred, and on former occasions has fometimes rifen to one hundred and thirty.

The major part of the Elephants, which are caught in the manner related above, are afterwards fold at Jafnapatnam, to the Princes of Coromandel. So that the first care of the vol. IV. R captors

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captors is, to bring them out of the toil, and to tame them. For this purpole one or two tame Elephants are placed at the fide where the opening is, through which each Elephant is let out fingly, when he is immediately bound fast with ftrong ropes to the tame ones, who difcipline him with their probofces, till he likewife becomes tame, and fuffers himfelf to be handled and managed at pleafure. This difciplinary correction frequently proceeds very brifkly, and is fometimes accomplished in a few days, especially as the wild Elephant is at the fame time brought under controll by hunger. After thefe large and powerful animals have been in this manner brought forth and tamed, it remains to view and measure them ; which latter operation is performed in a place paved fmooth and even with corals; on this they are arranged in due order, and meafured with a long rod, by a man who rides between their ranks, fitting upon a tame Elephant. The review and examination of them extends over the whole body, in order to difcover whether they have any natural or acquired blemish. After this a defcription is drawn up, expressive as well of the height as of the blemishes of each, and according to the fize and perfections of the animal is its value effimated. The measure is computed by Covidos, three of which conftitute four feet. The admeafurement is made from the ground to the

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the shoulder-blade; and in general an Elephant ftands ten Covidos, or about fourteen feet high. A tame Elephant is commonly fold for 200 rixdollars; but if it has any blemish, for instance, if its tail has been plucked off, one of its ears flit, if fome of the nails be wanting on its feet, or if it has fuffered any other kind of damage, they deduct from the purchase-money for every defect, from 50 to 60 or 80 rix-dollars, according to the different nature and importance of the blemish. And as it is very rare to find an Elephant free from every kind of blemish, those that are fo, are most commonly fold for from 500 to 1,000 rix-dollars. When the time arrives for holding the auction, it is cuftomary for two, three, or more perfons, to purchafe conjointly 50, 60, 80, or 100 Elephants, which they afterwards difpofe of in feparate lots, with great profit. Previous to the fale, the Elephants are marked on the rump with the Company's arms. For this purpofe the animal is bound faft to a ftrong tree, and burned with red-hot iron.

The Elephant is inconteftably one of the moft fagacious and gentle animals in nature, an animal which, notwithftanding its unparallelled fize and ftrength, very readily fuffers itfelf to be tamed, and trained to various ufeful fervices. When he is brought into trouble and diftrefs, he whines almost like a child, and learns, when R 2 tamed.

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tamed, in a very fhort time, to understand what is faid to him. When he is first caught, he pines away with grief and anxiety, efpecially if he was tame before, and has had a good mafter. It fometimes happens, at fuch a hunt as I have just defcribed, that tame Elephants, belonging to the Emperor in Candia, and which have been turned loofe to graze in the woods, are caught with the reft. In this cafe it is often impoffible to prevail with them, whilft they are in the toil, to eat or take any kind of nourifhment, before the arrival of the fervants who are accuftomed to tend them, whom they not only recognize, but, when let loofe, follow. The Elephant is very fond of the fruit of the Pifang-tree, as likewife of Cocoanuts, whether thefe are given him broken or whole, and in the latter cafe he cracks them. himfelf. The young fucks the dam with the mouth, and not with its trunk, and many experiments made by M. SLUYSKEN have afcertained its daily proportion of drink to be commonly forty-five gallons of water. The females, when tame, are fometimes employed to catch wild Elephants, for which purpose they are turned loofe in the woods, and from hence allure the wild males to fome toil, where they can be inclosed. Males, caught in this manner, I have more than once feen bound to a large and flout tree, and at the expiration of a few days become tame,

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tame. The male Elephants, which the Dutch make use of to discipline and tame the wild ones they have captured, are commonly called Kidnappers (Zeelverkooper). When an Elephant has once been properly tamed, he may be governed even by a child, and does not willingly injure any one, provided he is not ill-treated, and thereby fpurred on to revenge. I have frequently feen him bend one of his legs, in order to let his rider climb up by it, as it were by a ftep, on his back, and likewife take up little boys very carefully with his trunk, and place them upon his back, and take them down again. The Dutch Eaft-India Company make use of Elephants every where to transport beams and other heavy articles, as likewife for carriages and large carts. When he is harneffed to any fuch vehicle, a ftrong rope is always bound round his neck, to which another ftrong rope is fastened on either fide, which runs along the fides near the back, and is made fast to the tackling of the carriage. In cafe two Elephants are harneffed to the fame carriage, a pole runs between them, When the Elephant moves, one may clearly perceive, that he bends the knee-joint, notwithftanding that the whole leg otherwife appears to be of an equal thickness, and inflexible. The probofcis is not only a great ornament to this stately animal, but at the fame time one of its

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most necessary inftruments, for gathering in its food, drinking, and laying hold of all forts of things; for which reafon he is very careful of it, and will upon no account fuffer any ant to come upon it.

The Elephant is never, or at leaft very feldom, fhot in this country, as they prefer catching it alive; neither does one find here any great Elephant-hunters. I was informed that upon a female, which was bound fast to a tree, thirteen thot were fired from a common mulket, before the fell. The reafon for killing her was, for the fake of cutting out the foctus, with which fhe was pregnant, in order to fend it, preferved in arrack, to his Royal Highness the Hereditary Stadtholder's Collection of Natural Curiofities at the Hague. That the wild ones in the woods, however, are fometimes fired upon, feems evident from a circumftance, of which I was informed by M. FROBUS, viz. that he had ordered one of the teeth of an Elephant, that had been caught, to be fawed through, in which he found a common leaden bullet, which had lodged in the tooth, and in procefs of time was fo totally inclofed and covered over, that externally no marks of it could be perceived. This tooth he fent likewife in the year 1765, to the above-mentioned Collection at the Hague. As the Ceylonefe Elephants are to eafily caught and tamed, it feems extraordinary,

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extraordinary, that many obftacles fhould lie in the way of those that make fimilar attempts at the Cape in Africa. And yet, in 1775, fhortly before my departure from thence, a young one had been taken alive, after the dam was fhot, and the attempt was made, though without fuccess, to rear it. It had need of the milk of three cows daily for its support, but could not be preferved alive.

After I had minutely examined the large and extensive toil, which was constructed for the capture of fuch a confiderable number of thefe large animals, I returned back to the companions of my journey, and arrived at Negumbo towards evening. In the way I had the pleafure, which I now leaft expected, to find that beautiful plant, the Burmannia disticha, which I had for the fpace of five months both fought for diligently myfelf, and likewife exhorted many of the Cingalefe to look out and procure for me. It grew in the low lands, and places in the woods, that were ftill covered with water, and had lately began to expand its blue flowers. I gathered as much of it, as was to be found in this place, and laid it up to dry, as well for my worthy patron and benefactor, Professor BURMANNUS, as for others of my much loved and truly refpectable friends in Europe. It is called by the Cingalefe Wilende Wenne.

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We travelled in the delightful cool of the fame evening to Columbo, where we arrived on the 20th of *January*, about noon.

Here I met with (and purchafed for twelve Pagodas) a Bezoar-ftone, which was reprefented as very fcarce, and the largeft of the kind ever found in the gall-bladder of the *Simia Silenus* above-defcribed. It was commonly called *Apeftone*, was fmooth on the outfide, and is now preferved in the Collection of Minerals belonging to the Univerfity of Upfal.

I had obferved feveral times, as I went in and out of the gates of the fortifications, that a foldier, who prefented his arms to me, as I paffed him, as is ufually done to Naval Officers, looked at me with particular attention. This induced me to afk him what country he was of. He then informed me, that he was a Swede, that his name was BOLIN, and that he had been a Notary in fome College in Stockholm, but being obliged by misfortunes to quit his native country, he had failed out in the capacity of a foldier, and had fpent feveral years in thefe parts, without having met with any encouragement or farther advancement. As foon as I had informed myfelf more circumftantially concerning this man, and had learned, that he wrote a good hand, and underftood fomething of book-keeping, and that he was content to fail to Batavia, I folicited this

this favour for him of the Governor, who very readily gave his confent. Furnished with my recommendation to Counfellor RADERMACHER and Captain WIMMERCRANTZ, he foon after fet fail, and arrived in fafety at the place of his deftination. The former of these gentlemen promoted him immediately to the post of Clerk, and foon after to that of Principal Accomptant; the latter, with his wonted partiality to his countrymen, received him into his house, and as long as he lived, rendered him the most effential fervices, which gives this gentleman, who is now returned to his native country, a just claim to our thanks and efteem.

The Coffee-plantations in Ceylon refembled thofe which I had feen in Java, with this difference, however, that here a large tree of the *Bigonia* genus was planted between the Coffeefhrubs, in order to afford them a thin fhade, and fereen them with its crowns, from the exceffive heat of the fun. The Coffee-beans which are cultivated in this place, are faid not be equal in quality to thofe that are produced in Java.

Rice is cultivated in this ifland, as well as on the coafts of Coromandel and Malabar, but not in fuch quantity as to afford thefe places a fufficient fupply. On the coafts of India abovementioned, the crops fometimes, as I was informed, turn out fo exceedingly bad, and in confequence of this fuch a dreadful famine enfues,

fues, that, on the coaft of Malabar efpecially, parents are forced to fell their children for flaves, for one fingle folitary bufhel of rice, or elfe to give them up to flavery without any compenfation, that they may not fee them flarved to death before their eyes.

Cardamomoms were brought me, which were faid to be cultivated in the internal part of the country. They were triangular oblong capfules, nearly an inch in length, and confequently quite unlike thofe which grow in the ifland of Java. A flower of them I could not procure, to enable me to afcertain their genus; but I imagine, that they were the feed-veffels of fome fpecies of the *Alpinia*.

Gum Lac was very plentiful on the fhrubs of the *Croton lacciferum*, which grew in abundance in the fand-pits without Columbo, and other places. It was fometimes ufed here for lacquering, after being diffolved in fpirits of wine.

Both on the coast of the Continent of Asia, and the island of Ceylon, the leaves of the Borass Palm-tree (*Borassi flabelliformis*) and sometimes of the Talpat-tree (*Licuala spinosa*) are used instead of paper, which the Indians do not prepare from the bark of a tree, as their neighbours more to the eastward do. The leaves of both these Palm-trees lie in folds like a fan, and the stips stand in need of no farther preparation than merely

merely to be feparated and cut fmooth and even with a knife. Their mode of writing upon them confifts in carving the letters with a fine pointed fteel (Aylus). And in order that the characters may be the better feen and read, they rub them over with charcoal, or fome other black fubftance, fo that the letters have altogether the appearance of being engraved. The iron point made use of on these occasions is either fet in a brafs handle, which the Moors and others carry about them in a wooden cafe, and which is fometimes fix inches in length; or elfe it is formed entirely of iron, and, together with the blade of a knife, defigned for the purpofe of cutting the leaves, and making them even, fet in a knife-handle, common to them both, into which handle it fhuts up, fo that it may be carried by the owner about with him, and be always ready at hand. On fuch flips are all letters, all Edicts of Governors, &c. written, and fent round open and unfcaled. When a fingle flip is not fufficient, feveral are bound together by means of a hole made at one end, and a thread, on which they are ftrung. If a book is to be made, either for the ufe of the Churches or any other purpofe, they look out principally for broad and handfome flips of Talpat-leaves, upon which they engrave the characters very elegantly and accurately, with the addition of various figures,

figures delineated upon them, by way of ornament. All the flips have then two holes made in them, and are ftrung upon an elegantly twifted filken cord, and covered with two thin lacquered wooden boards. By means of the cords the leaves are held even together, and by being drawn out, when they are wanted to be ufed, they may be feparated from each other at pleafure. One of thefe books, faid to contain various prayers, I had an opportunity of purchafing from a Prieft in Ceylon, by the intervention of Count RANTZOW.

The leaves of the Boraffus, which is a very common Palm-tree in this island, are besides ufed for Fans, both here and in other parts. The Palm Licuala, which is fcarcer, produces very large leaves, and rivals in this refpect the Cocoa-tree itfelf. Thefe, which lie in folds, are divided towards the point, and are here commonly used as Parafols, for a defence against the fun, and as Farapluyes to defend them from the rain. One of these leaves, cut off about five feet in length, and of almost the fame breadth, decorated with various elegant embellishments, bears, like the tree itfelf, the name of Talpat, and is carried over the heads of people of diftinction, both Indians and Europeans, by a flave, inftead of the common Parafols and Parapluyes. One fingle leaf is generally large enough to fhelter

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fhelter fix perfons from the rain. This beautiful Palm-tree grows in the heart of the forefts, but is fcarce. It may be claffed among the loftieft trees, and becomes still higher, when on the point of burfting forth into bloffom from its leafy fummit. The fheath, which then invelops the flower, is very large, and, when it burfts, makes an explosion like the report of a cannon; after which it fhoots forth branches on every fide, to the furprizing height of thirty-fix or forty feet. The fruit attains to maturity the following year. I had the good fortune to fee this tree in the different stages of its fructification; but as it had already bloffomed the preceding year, I miffed the pleafure of examining and noting down on the fpot the beauties of its efflorescence.

My abode in this place was much too fhort to allow me to devote any of my precious time to the learning of the Cingalese and Malabar languages: I perceived, however, that they differed much from each other, as did again the language of the Moors from both of them. I nevertheless noted down the expressions, which the Malabars used in reckoning, viz.

I.	unnu, undu.	6.	aru.
2.	rendu, rindu.	7.	elu.
3.	mundu.	8.	ettu, ittu.
4.	nalu.	9.	ombedu.
5.	anji, anju.	10.	pattu.

11. patti-

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11.	pattinendu.	60.	aruedu.
12.	pattirendu.	70.	eluedu.
13.	pattimundu.	80.	enbedu, aymbedu.
14.	pattinalu.	90.	tonnuru, imbedu.
15.	pattinanju.	100.	nuru, nur.
20.	iruedu.	101.	nutcondu
21.	iruedondu.	200.	irnur.
30.	muppedu.	300.	munur.
40.	natpedu.	1000.	ayrem, ayrim.
50.	anbedu.	10,000.	patairim.

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From Tranquebar, and the Danish Mission eftablished there, a Lutheran Priest had arrived in Ceylon, for the purpofe of preaching in Columbo, and more efpecially of administering the Holy Sacrament to the Lutherans in this place, who had no feparate Church here, nor Prieft of their own perfuafion. A Clergyman of this profession generally travels hither once a year, prompted by zeal and affection to his brethren in the faith, who, according to their circumftances, though for the most part moderately enough, reward his labours. The Danish Mission in Tranquebar was very highly extolled by feveral people here, who at the fame time affured me, that, had the Catholics, in their endeavours to propagate Chriftianity in India, conducted themfelves with equal gentlenefs, moderation, and Chriftian charity, devoid of avarice, haughtinefs,

nefs, and violence, the major part of the numerous inhabitants of Afia would at this prefent time have been converts to this doctrine.

The Bread-fruit, which in the warmer climates feeds many thousands of hungry mouths, grows in great abundance on this ifland likewife, where this fruit fupplies the place of daily bread for feveral months in the year. There are two forts of trees which produce the Bread-fruit, and both are found here, as well in a wild as cultivated ftate. The one, which yields fmaller fruit, without feed, I found at Columbo, Gale, and feveral other places. The name by which it is properly known here is the Maldivian Sour fack, and its use is here lefs universal than that of the other fort, which grows more plentifully in Ceylon, bears larger fruit, and is in greater requeft. The first fort bears fruit about the fize of a child's head, and can only be propagated by the roots. The latter fort weighs from thirty to forty pounds, and contains from two to three hundred kernels, each of them four times the fize of an almond, and this fort can be propagated by feed. The trees of both forts are replenished with a refinous milky juice, of fuch a vifcous nature, that birds may be caught with it, in the fame manner as with bird-lime. The fruits are all over prickles, with a thick and foft rind: the internal part of the fruit only is used for food by the

the human race, and the rind is left for the hogs. Both fruits have an unpleafant cadaverous fmell, and the tafte of the internal efculent part is not unlike that of cabbage. The trees will flourifh for whole centuries, and bear their fruit (which ripens by degrees) not only upon its thickeft branches, but alfo upon the ftem itfelf, for the fpace of eight months together, to the ineftimable benefit and advantage of the iflanders.

The manner of preparing and using the larger fort of Bread-fruit, which is most univerfally confumed in Ceylon, is as follows. According to the different ages of its growth, at which it is used for food, it receives from the Cingalefe three diffinct names. It is called Pollos, when it has attained to the fize of an Oftrich's-egg, and is a month or fix weeks old : Herreli, when it is half ripe, and of the fize of a Cocoa-nut; the pulpy efculent part is then still of a white and milky caft. At both thefe ages the fruit cannot be eaten without previous preparation. When it is perfectly ripe it is called Warreka: the pulpy part is then fit for ufe, and that which environs the feed has a fweetifh tafte, is yellow, and, without any preparation, both eatable and relifhing. It has the name of Breadfruit, because the poorer class of Cingalese eat this fruit instead of bread or rice. I frequently have feen them eat Bread-fruit cut into very fmall

finall pieces, and mixed either with the rafpings of cocoa-kernels alone, or with the addition of a little rice, and fometimes fome falt, Cayennepepper, or onions. The feeds may be eaten either alone, like chefnuts, or, together with the pulpy part of the fruit itfelf, prepared in different ways. They are ufed for food, both boiled and roafted; the poorer fort generally boil and eat them with the fcrapings of cocoa-nut and falt : the rich fatten pigs, as well as geefe, and other fowls with them, which are afterwards roafted.

Fifteen different difhes may be prepared from this fruit, and are more or lefs in ufe; viz.

1. Caldu Curry is prepared from Pollos, cut into thin flices, which are firft boiled a little in water with turmeric, till the liquor turns yellow; after which two pinches of dried and pounded fifh and about a pint and a half of cocoa-milk are added, and the mixture is then boiled again for the fpace of half an hour, during which time it must be continually stirred. This foup is the most common in use, and is not feldom made with the flesh of various animals.

2. Seco Curry differs from the former, in the addition of feveral ingredients and fpices, fuch as roafted and pounded cocoa-nut, corianderfeeds, pepper, cinnamon, mace, falt, boiled bacon cut into finall fquare pieces, and cocoamilk, which are all thoroughly incorporated tovol. IV. S gether,

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gether, and boiled in water for the fpace of half an hour. To this are added onions fried in butter, lemon-juice, fometimes Cayenne-pepper, and falted water, which being well mixed with each other, are boiled, till they attain the confiftence of a hafty-pudding.

3. Chundido Pollos is, like the former difh, prepared from flices of Pollos or Herreli, with turmeric, foraped cocoa-nut, Cayenne-pepper, chopped onions, and falt, which are boiled over a gentle fire to the confiftence of thick porridge.

4. Chefnut Curry is prepared from the feeds cut into long narrow flips, and boiled with turmeric in water: to this are added dried fifh, chopped chives, and cocoa-nut-milk, with which the other ingredients are boiled up afrefh, being ftirred about all the time.

5. Niembela corresponds with the former difh, with this fingle diffinction, that the Pollos or Herreli here made use of, is cut very coarse.

6. The Fruit is flewed with Bacon; on which occafion they take thick flices of the unripe fruit, chopped chives, boiled bacon cut into fquare pieces, mace, cinnamon, and falted water, which are boiled up together, and flirred continually.

7. The boiled Frait, ripe, with the kernels and pulpy membranes cut into three or four parts, and boiled up with turmeric, and the addition of a little

little falt, is a very common difh with the poor. It is eaten nearly after the manner of flewed cabbage, with fcraped cocoa-nut; and the more opulent add to this difh pepper and dried fifh.

8. Fried Pollos is prepared in the following manner. To the unripe fruit cut into thin flices, cocoa-milk and a little flour are added, which being kneaded up together into a dough, are rolled up in the flices of Pollos, and the whole fried in a pan in frefh cocoa-nut oil.

9. Empade is the name of a difh, that, in addition to the fried flices above-mentioned, confifts of chopped onions, dried fifh, roafted and chopped onions, and pounded cinnamon, which are boiled in a broad and fhallow veffel over a gentle fire, the mixture being continually diluted with cocoa-nut-milk.

10. Forced-meat Balls of Pollos are prepared in this manner. The unripe fruit is boiled and beat up to a kind of hafty-pudding; to which are added chopped onions, cinnamon, pepper, nutmeg, falt, pounded bifcuits, and the yolk of an egg. Of these ingredients, well mixed, they make balls, which are rolled in the white of an egg, that they may hang together. These are afterwards fried in butter, or in butter and cocoanut-oil, till they turn red; after which a fauce is poured upon them, confisting of butter, powder of cinnamon, pepper, falt, and lemon-juice.

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II. A Confection likewife is fometimes prepared of the feeds and their pulpy membranes. For this purpofe the membranes, which furround the feeds, are cut into two or three parts, and fried in fresh cocoa-nut oil. The oil is then wiped off well with a towel, and the fried membranes laid in a fieve, that the oil may drain the better from them. They are next boiled in fyrup of fugar, dried, and put up in glafs-bottles, which must be well corked, in which cafe this Confection may be preferved feveral months, and used with tea. The kernels of the feeds feparated and well purged from the pulpy membranes by which they are furrounded, are frequently fried in oil, and boiled up in the fame manner in fyrup, and in the fame manner likewife preferved, and ufed with tea; and, in proportion as the fyrup evaporates, a fresh supply may be poured into the bottles, in which cafe they may be preferved for half a year.

12. Fios is made by dipping the ripe kernels of the feeds in a batter composed of cocoa-nut milk with the yolk of eggs, and frying them in fresh cocoa-nut oil.

13. Pancakes are fried in the ufual manner, and composed of the juice of Siri, cocoa-nut milk, the dried meal of the kernels, and yolks of eggs, which have stood over night to ferment. 6 14. Pei

14. Pei or Jambal, is rather a fauce than a feparate difh. And indeed it is only used by way of a relifh to other difhes, fuch as fifh, rice, &c. To make it, boiled unripe fruit are required, mustard-feed and turmeric, each of which ingredients must be first beaten up feparately into a paste, and afterwards all together thoroughly incorporated with vinegar. Some add to this Cayenne pepper, ginger, and falt, previoufly reduced to powder, and well mixed together.

15. The fruit is dried fometimes for future use, during those months, when it is not to be had fresh. For this purpose they gather the fruit when it is half ripe, and extract the pulpy part, which they either leave intire, or cut it into flices. It is then boiled a little, and dried in the fun, after which it is hung up in order to preferve it, either in the chimney or fome other dry place. When thus prepared, it may be kept a whole year, and the poorer fort eat it with fcraped cocoa-nut, either thus in its dried flate, or boiled up afresh.

Of this tree, bearing fuch beneficial fruit, I was at no little pains to carry with me fome live plants to Europe. For this purpofe I collected of the fmaller fort, that produces no feed, about fifty live roots, which I planted in a large wooden box, and had the fatisfaction to fee them, at the expiration

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expiration of a few weeks, fpring up and thrive greatly. Of the larger fort I collected feveral hundred feeds, of which I fet upwards of a hundred in another large box; thefe quickly fprang up, and throye extremely well. In order that the remainder of my feeds might not grow dry during my voyage, nor become rancid, nor be damaged in any other way, I devifed feveral methods of preferving them. Some I only wrapped up in paper, laid in a drawer, and, during the voyage, exposed now and then to the open air; another part I put into glafs-bottles, which I carefully fealed up; a great part I environed with wax to exclude the air from them ; another part I laid in dry fand, and another part again I fowed every month in earth, during my voyage, in order that it might grow up gradually.

The Pearl-Fifhery was formerly carried on here with advantage in the channel between the ifland and Coromandel, which is fhallow, and is faid to have a fandy bottom. At prefent this Fifhery has been difcontinued for feveral years, on account of certain difputes between the Nabobs on the Coromandel-coaft and the Company, which the Englifh are faid to encourage, concerning the legal right to this Fifhery. I faw feveral beautiful and large Pearls, which had been fifhed up here; and pearl Bandeaus, composed of large as well as fmall Pearls, are frequently worn by the DEPARTURE FROM CEYLON, 1778. 263

the rich Merchants' ladies over their hair. This Pearl-fifhery was formerly always farmed out to one or more individuals annually for a certain fum. These Farmer-Generals after farmed out again to others the privilege of fifting for Muscles with a certain stated number of boats and men. After the Mufcles are brought up by the Divers, they are thrown carelefsly in heaps upon the fhore, and fold at random to the Merchants, who at this time affemble there. The Muscles are faid to open, as foon as the animal they contain is dead and begins to putrify, when they may eafily be examined, and the Pearls' extracted. Sometimes not the least profit is made by this traffic; whilft at other times one fingle Pearl pays for the purchase of several heaps.

On the 28th, after taking an affectionate leave of my friends in Columbo, I travelled by land to Gale, in the company of M. BELLING, Secretary of Police, who carried with him the letters which were to go by the fhip, that lay ready to fail, in the harbour of Gale.

Previous to my departure, I purchafed a quantity of the dried fruits of betel-pepper, which is fold here at a cheap rate, and at the Cape of Good Hope brought a confiderable profit, of at leaft one hundred per cent. As the flaves and Indians have every where free access to fresh

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betel-

betel-leaves, which they chew daily, it neceffarily follows, that the flaves in those places, where the coolness of the climate does not allow of the cultivation of this pepper, must content themfelves with using the fruit instead of the leaves.

February 6th, I embarked on board the fhip Loo, very early in the morning, together with the Captain and Paffengers, who were bound for Europe.

The harbour of Gale is well guarded with fortifications; by its winding it forms an elbow, and is not eafy to clear. From this harbour fail all the fhips bound to Europe or India, and here they take in their laft lading.

We fet fail with a favourable wind, croffed the Line on the 11th of *February*, and the Tropic of Capricorn, on the 16th of *March* following. The fhip was commanded by Captain Kock, a native of Norway, and was loaded with about 1500 bales of cinnamon, of the Company's own gathering, and fome cinnamon from Candia, befides a great many bales of manufactured cotton, from *Suratte* and *Tutucorin*, together with pepper from the coaft of Malabar.

Above thirty flaves were likewife carried out by the officers, and fold to great advantage at the Cape. They were all males, the major part from the coaft of Malabar, and fome few Pampufes with curly hair. This rendered it neceffary for

for me to be very circumfpect and careful, that all the flaves fhould have had already the finallpox and measles, and that no fymptoms of these diforders fhould be difcovered on board during our voyage. For when unfortunately this is the cafe, the fhip is obliged to perform quarantine at the Cape, and to anchor off Robben-Ifland, without one fingle man being fuffered to come on fhore : inafmuch as the inhabitants of this colony ftand equally in dread of the finall-pox and measles, as of the plague, and yet will not, after the example of the Europeans, adopt judicious and wholefome regulations and inftitutions for inoculation, as well as other means of oppofing thefe epidemic diftempers, which are capable of depopulating almost a whole country.

Moft of the difeafes that occurred during this voyage, were venereal, with their whole train of formidable fymptoms, which both the failors and the flaves had contracted by their diffolute courfes of life in Ceylon.

As we approached the fouth between 30 and 35 degrees, we had very frequently forms of thunder, with hail, rain, and fnow, which latter however diffolved immediately; and on the 28th of *Marcb*, during a thunder form, the electrical fluid was perceived to gliften from the tops of the fore and main-maft.

April

April 7th and the following nights, feveral long and lucid worms (Scolopendræ electricæ), were perceived to fall down upon the deck. Thefe came always from the fame fide as the wind, which beyond a doubt blew them down, and indeed they always fell upon the windward fide. So that they never came from the fails, but from the mafts and top-gallant mafts. When trodden under foot upon deck, or otherwife crushed to pieces, a phofphoric fire conftantly islued out from the whole length of the body. No appearance of wings could be difcovered in them : but they probably crawled up the mafts with their feet, of which they have a great number, and afterwards fell down from them, on the wind blowing up a brifk gale.

April 22d, between the 45th and 46th degrees of latitude, not far to the eaftward of the Cape of Good Hope, we faw at noon, or a few minutes after, a rain-bow, which lay upon the furface of the water itfelf. It blew a frefh gale at the time, and the fun ftood at the higheft point of the heavens at N. N. W. and the rain-bow was in S. S. E. It began with a lucid fegment of a circle at the horizon itfelf, which gradually got up higher and higher, and fpread at the fame time at the fides, having at tep a narrow darkred border. From the two extremities of it proceeded two branches, like two horns, which bending

bending inwards extended to two-thirds of the diftance between the brink of the fhore and the thip, being variegated with most beautiful colours of red, yellow, green, and blue-purple. In this fituation it continued half a quarter of an hour, after which it gradually vanished in an inverted order. On the left fide, towards the eaft, appeared another rain-bow, the colours of which were in an inverted order, when compared with the former, which fhews that it was only occafioned by the reflection of the rays of the former. It was not very high at the top, though it flood higher than the fegment of the former at the brink of the fhore. After a quarter of an hour indeed there arofe again a fimilar fegment, but it did not extend itfelf out fo as to form a rain-bow. The fky was during the whole time covered all over with fmall light clouds, and it was with difficulty we could diftinguish that rain fell, even the horizon. Such rain-bows as thefe, which can only occur on the ocean and large feas, are probably not often obferved.

Several times likewife in the courfe of this voyage we faw water-fpouts hovering in the air in various forms. Thefe began always to difappear at the bottom. And indeed at the time of their appearance we had most commonly thunder-ftorms, which came at flated intervals, together with violent gufts of wind.

Boobies

: Boobies (Pelecanus Sula) began at length to fhew themfelves, and confirmed our joyful hopes, that we should speedily defery land. These birds are always a fure fign to mariners, that they are not far from the African coaft, and it frequently happens, that, when they make their appearance, land is at the fame time deferied from the malt-tops. They feldom venture farther out on the ocean, than will allow of their return to the creeks and bays against evening, where they frequently fpend the nights. We likewife difcovered land immediately afterwards; but as there blew a hard gale from the fouth-eaft, we could not loof up into the road; but were obliged to caft anchor towards evening off Robben Ifland, to which place we with difficulty worked the fhip up.

By the violent gale of wind, and at the fame time the cold which it occafioned, I had the painful mortification to fee feveral of my Breadfruit trees and other plants, either blighted with the cold, or elfe unearthed and loft by the violent agitation of the fhip.

The following day, *April* the 27th, we came fafe and well to the cuftomary anchorage in the road, where we found eleven veffels flationed before us, and after the fhip had been duly examined by the Commissioners fent for that purpose, we received permission to land.

I took

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I took up my abode with my former hoft, M. FEHRSEN, and in the fame apartments, which I had occupied three years before. As thefe rooms were putting into order for my reception, a circumftance occurred, which greatly furprized and perplexed me. In the anti-chamber flood a large cheft belonging to my hoft, which I had very frequently made use of, during my former three years abode here, inftead of a table, to lay the herbs, feeds, and bulbous plants upon, that I had collected. The laft year of my refidence here, A. 1775, I had arranged the pulpy plants, which the deferts of Africa produce, in fuch a manner, as to fit them to be fent to the gardens of Europe by the homeward-bound fhips. Whilft I was thus occupied, it happened that a plant, which externally had the appearance of being entirely dried up, and was enveloped in a multiplicity of dry scales or shingles, fell behind this cheft. But, on the cheft's being removed from the wall, in order to clean out the anti-chamber, the plant was difcovered behind it, from which a branch had fhot forth nearly fix inches in length, although it had not for the fpace of fix or feven weeks fince my finding it in the defart, shewn the smallest fymptoms of life, neither had it afterwards, during the three laft years, been fupplied with any earth, nor the least moisture, except that proceeding

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proceeding from the coolnefs which might be imparted by a ftone-floor. This circumftance proves how hardy and tenacious of life the African plants are, which thrive in the moft parched defarts, and how long they can fubfift without water and nourifhment. This identical plant I afterwards took with me to Europe, and found, that thofe which I had before fent thither of the fame fpecies, had put forth both branches and leaves in the Botanical Garden at Amfterdam, without as yet difplaying their bloffoms, and making known their names.

A Swedish veffel, which lay at anchor in the road, procured me the pleasure to embrace at this place feveral of my dear friends, who had come from my beloved native country, and among other novelties, had brought me letters, together with the agreeable news, that I had been appointed Demonstrator of Botany in the University of Upfal, under Professor LINNE', who had succeeded his invaluable father.

The town at the *Cape* had been, during the three years of my refidence in India, fo greatly changed in most places, by additional buildings, and newly built and improved houses, many of them two or three stories high, that I could fcarcely recognize it again.

The foregoing Summer the fouth-east wind had laid waste the whole country. It raged with uncommon

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uncommon violence, and was accompanied with fuch exceffive drought, that complaints were made almost universally throughout the wholeland of a fcarcity of corn. In moft places nothing had been able to grow for the drought, and in fome places, where the corn ftood well, as for instance, on the other fide of the Hottentor Hollands mountains, the rain had fallen again in fuch abundance, that the grain, which was already reaped, rotted in the corn-ricks, whilft that which ftill continued on the ftalk, began to fhoot and grow in the ear. Thefe circumftances raifed the price of corn in the town in a moft unprecedented manner, infomuch that a load of corn, which had formerly fold for ten rix-dollars, now role to the enormous price of three and thirty rix-dollars.

I met here with a Mr. PATTERSON, an Englishman, who was come to this place, in order to collect from the interior of Africa, and transmit home to his own country, both the feeds and live roots of fuch plants, as were fearce and peculiar to these parts. He professed to travel at the expence of certain individuals, and poffessed forme small knowledge of Botany, but was, in fact, a mere Gardener.

The Dutch Company allows each Officer in the fhip a large cheft, four feet and a half in length, and two and a half in breadth, which they

they have permiffion to ftore with certain commodities, that are afterwards fold by public auction, for the private advantage of the individuals. Thofe, who had not already furnifhed themfelves with commodities in the Eaft-Indies, and had ftored their chefts with *Tamarinds* or other articles, bartered now at the Cape coarfe Chintzes and other articles which were not prohibited. Fine Chintzes, and Cottons, Spices, and certain other commodities, which the Company alone deals in, are prohibited to individuals, and confidered as contraband.

May 15th, 1778, I once more left the Cape, in order to fail to Europe. We fet fail in company with four Dutch veffels, which were appointed to conflitute a fleet for the defence of the country. A Danish ship, which cleared out at the fame time with ourselves, shot past us with great celerity, and, being a much better failer, foon vanished out of our sight.

The failors had purchafed feveral Baboons, which they defigned to carry to Holland. Thefe animals are always of a mifchievous difpofition, eafily provoked, and bite terribly; for which reafon they are generally obliged to be kept tied up. If any of them at any time got loofe, it was not an eafy tafk to catch them again, as they climbed with incredible fwiftnefs up the ropes and

and rigging, and were in no dread at all of the higheft top-mafts.

May 25. Hitherto we had constantly had contrary winds, fo that we could not profecute our voyage, nor get out of fight of the African coaft. We now had at the fame time thick fogs, infomuch that we could not fee at any great diftance from us. In the mean time we had approached fo near the fhore on the 26th in the morning, when the weather began to clear up, that we might eafily have made land, efpecially the Commodore's ship, which drove quite near to the rocks. Had a heavy gale of wind in thefe circumftances blown from the north-weft, we must infallibly have been loft; but, fortunately for us, the wind blew from the north, which extricated us out of our danger. Our Commodore KOELBIER, on board the Canaan, was beyond a doubt in fault in the prefent inftance : inafmuch as the preceding evening he kept clofe to the land, inftead of endeavouring to bear away to make the weft ; the other fhips were bound to follow him, and fail in his track. The following night we entirely loft fight of the Commodore's ship, in confequence of which the command devolved upon Captain Kock, of the Loo. On the 28th in the morning, we again deferied the Commodore's ship, but lost fight of her again on the 30th.

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Fune

June 3d, we failed quite close to the Commodore's fhip, which, on account of the wind being contrary, having kept too much towards the land, was now not able to come up with the fleet. This however did not in the least prevent our lofing fight of her the following day, notwithftanding it became more calm towards night, inftead of blowing with any degree of force. Hence it was eafy to conclude, that the Commodore did not wifh to keep up with his fleet, but rather, on the contrary, did all he could to feparate from it, in order to be able, with lefs control, to continue and make the greater fpeed in his voyage home. In fact, we had been greatly detained by his numerous turnings and windings; not to mention that during the whole time likewife, we had either contrary winds, or elfe were becalmed.

On the 6th, we had a fouth-east trade wind, and on the 12th, passed the Tropic of Cancer.

On the 17th we faw fomething floating upon the water, which refembled large white flowers; I fifhed for, and caught fome of them, and found them to be nothing elfe than that fpecies of Lepas (anferifera and anatifera) which, by means of its lax and pliable tube had clung to bamboo canes, and pieces of wood, in clufters of a dozen and more, and which now floated upon the water. When the animal opened its five fhells, they bore

VOYAGE FROM THE CAPE, 1778. 275 bore a perfect refemblance to a full-blown flower.

On the 24th in the morning, we discovered the island of Helena, which belongs to England, and the harbour of which is fortified with very ftrong batteries. The land appears very high and mountainous, and may be deferied at a very great diftance. The English ships which were homeward-bound from the East-Indies, always affembled at this place during the prefent American war, in order to profecute their voyage together afterwards in fleets, accordingly as it may happen, more or lefs numerous. In the afternoon we had failed on just before the middle of its road, where at that time no fhips lay at anchor; and as we had not met with any traces of our loft Commodore, a fhip's council was held, in which it was concluded not to wait for him any longer, but to continue our courfe with the brifk wind, which we now had. The road was faid to have a very bold fhore, fo that fhips might ride at anchor quite close to the land.

June 30th in the afternoon we paffed Afcenfion. Island, which frequently ferves as a place of refreshment for Swedish and other veffels, which take in Tortoifes there on their return home. The fhips, which provide themfelves with refreshments from the Cape of Good Hope, fail by this ifland. It is mountainous, sterile, and destitute of fresh T 2 water.

water. The furface is likewife covered with a kind of afhes, which plainly evinces, that it muft formerly have been a Volcano.

July 7th, having the night before croffed the line, we were confequently faluted towards noon by the other two ships with eleven vollies, which we answered in the fame manner.

On the 24th we paffed the Sun, when we perceived no kind of fhadow whatever on either fide of any thing, that was fet upright upon the deck. Before we had the Sun at noon in the north, now it flood right vertical over us, and after this was feen in the fouth, and fank continually lower and lower towards the horizon.

On the 29th the Captains of the other two fhips came on board of us, in order to open the fealed letters, which were to direct us, whether the fhip fhould fail through the Channel, or take a circuitous route behind Great-Britain, as is ufually done in war-time. We failed now in the fea called the Cross Sea, which is pretty thickly covered with Sargazo (Fucus natans). This fea-weed floats upon the furface of the ocean in incredible quantities. Sometimes it quite hides the face of the water in calm weather, fo that one feems to be failing through a meadow : at other times it forms large floating islands, and fometimes, during ftormy weather, it is driven about more toofely. This Fucus feemed to hold out a plain proof,

proof, that it grows as it floats in the water, and fhoots forth new fhoots at the extremities, which grow larger by degrees. Among this fea-weed I difcovered various animals, that harboured and fought their food in it. The most numerous of these were the Scyllea pelagica, the Cancer minutus, of various fizes, and the Lophius bistrio, a fifh, which the Dutch call Crown-filb, which was very much variegated, and at the fame time beautiful, and, when of a certain fize, in high effimation. Some of thefe I preferved in fpirits of wine; they were mostly very finall, and it is but feldom that they are found of the length of a finger or upwards, The loofe rays, which this fifh has upon its head and back, and which refemble a crown, have given occasion to its name. It is feldom that it can be brought to Holland alive ; but when this fortunately happens to be the cafe, provided the fifh is of any moderate fize, it is faid frequently to fetch ten ducats.

August 25th, a hog was killed on board, in whose bladder was found a kind of chalk-stone, It was nearly round, somewhat flattened, and rough all over, with small knobs. The colour was at first a chesnut-brown, but grew paler and paler as it dried. It was somewhat larger than a musket-ball; and of a close-grained texture within. This hog had been purchased in Ceylon.

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September

September the 12th, having heaved the lead, we found ground, and faluted the other fhips with eleven vollies, who returned the compliment.

We had on board a man, whole fate was equally fingular and unfortunate. He had been engaged as Chief Surgeon on board a fhip from Enkhuysen, called de Jonge Hugo, which was commanded by Captain KLEIN, this unhappy man's implacable enemy. His name was BERG-AKKER, and he appeared to me during the whole voyage to be a fleady, ferious, and worthy old man. Whilft the fhip lay ready to fail, the Captain had taken umbrage at him, and loaded him with all manner of infults, even fo far as tolet the boys have him in derifion. At last he wrote word to the Director who had the infpection over the fhip, that this man was infane, and requefted that another Surgeon might be appointed in his place, who was accordingly fent on board. Upon this the Captain immediately fet fail, without putting the accused on shore,. whom he kept under an arreft during the whole voyage to the Cape, and would not fo much as permit him to come once on deck, to breathe a little fresh air. During the voyage he caused a writing to be drawn up and figned by fome of the Officers, who were his creatures, purporting that the above-named perfon was politively infane.

fane. On our arrival at the Cape, the unhappy man was conducted on fhore, and immediately clapped into prifon, without having the privilege of walking out, or having any opportunity to prefer a complaint, and without being examined either by the Governor, the Fifcal, or any of the Senators. When our fhip was muftered, he was fent thither like a prifoner, to be conveyed in it to Europe, without falary or any kind of emolument whatever. Notwithstanding that this man had been pronounced infane, I was not able, during a voyage of feveral months, to perceive any fymptoms of derangement in him, or to difcover the least probability, by his appearance, that he had ever been fo. In the courfe of feven years, which I fpent in India, in the fervice of the Dutch Company, I had an opportunity of feeing feveral inftances of violence and oppreffion in Captains, as defpotic as they were wicked and brutal : but what ftruck me with the greatest furprize in this inftance was, that neither the Governor nor any Members of the Administration at the Cape fufficiently inveftigated this bufinefs, by means of which the innocent fufferer might have been freed from farther oppression, and the malicious misanthrope brought to condign punifhment. All, whom I interrogated about the character of Captain KLEIN, fpoke of him with the most fovereign contempt,

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as of an ill-conditioned, fierce, and favage man, who was not even qualified for the poft he held.

On the 16th we came within fight of the Englifh coaft at the Lizards, and cruized about there for a whole night and day, till we difcovered the Dutch man of war, which was fent out to meet and convoy home the richly-laden Eaft-Indiamen. One of these afterwards accompanied us, and convoyed us to the Texel. The first fignal was given on our fide by the difcharge of four guns, and by alternately hoifting and lowering our colours. Upon this the man of war answered us in the fame manner, by hoifting and lowering her pendants, together with the difcharge of five guns. As foon as the ships were come fomewhat nearer to each other, a Lieutenant and Clerk were fent from the man of war, in order to fearch our ship, whether it carried any contraband wares, and this fearch was made in the Captain's cabbin only among his wine bottles.

On the 18th the Captains of the three homeward-bound fhips repaired to the man of war, in order to open a fealed letter from the Overduyn, one of the fhips that came from China, by which letter we now first received intelligence, that the lading was configned to Amsterdam.

At the fame time we likewife obtained the intelligence, that our Commodore KOELBIER, with the fhip *Canaan*, had arrived two days before, and

and had failed on, which fhip we had miffed from our company four months ago, off the African coaft.

On the 28th we failed in the Channel between Dover and Calais, with a good and favourable wind : but in the evening about ten o'clock, a fudden and violent ftorm arofe, which drove us more and more against the land, rent our fails, and tore down our top-mafts. The fhip toffed about fo violently, that it was impoffible to ftand always upon one's feet. We were fo near the Breakers, that all gave the fhip up for loft, without any poffibility of deliverance; for which reafon indeed at laft none of the failors could any longer be perfuaded or encouraged to attempt any thing for the prefervation of the fhip. Befides the darkness, we had this additional misfortune, that the crew was feeble and quite worn out, owing to the exceffive covetoufnefs of the Captain and First Mate, fo that many of the crew, exhausted with their toils, fell down from the rigging, and feveral fainted away on the deck itself. Their fare had been wretched during the whole voyage, and confifted of nothing but meagre food, as for instance, rice and fruits, with very little of those more ftrengthening viands, which are indifpenfably neceffary for a Mariner. The Captain and First Mate, who had expected that the voyage would not prove

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fo tedious, had very unwarrantably confulted their own private interest and advantage, by disposing at the Cape of a great part of the meat, pork, and other articles of provision, which are allowed for the crew, and were by that means reduced to great ftreights, in confequence of the procraftination of the voyage. This had not only reduced the men's ftrength, but had likewife occafioned much difcontent and murmuring among them. For this conduct both the Captain and First Mate were in the fequel arraigned, and both declared incapacitated for farther fervice. As foon as the morning began to dawn, we perceived that we had driven in between the fand-banks, almost directly opposite Oftend, and that we were entirely feparated from our company. And as we were now, through the particular providence of God, delivered from destruction, and from the calamities which had threatened us the preceding night, the crew imbibed fresh courage to extricate the ship from its dangerous fituation; which attempts likewife fucceeded, with the favourable wind that now prevailed. Exclusively of all other damage, which I fuffered on this occafion, I had the misfortune peculiar to myfelf, of feeing my plantation of upwards of a hundred fhrubs of both species of the Bread-fruit tree, and other extremely

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tremely fcarce plants, entirely thrown topfy-turvy and abfolutely deftroyed.

After furmounting these misfortunes, we arrived at length just before the opening of the Texel, on the 29th following.

October the 1st, we failed between the Texel and Helder, faluted the road, and let fall our anchor. All now with joyful hearts invoked the Almighty; and I had, more than any of them, reafons of the most binding and compulsory nature to bring him my thank-offering, having, during a feven years feries of toilfome and not unfrequently irkfome peregrinations, enjoyed in the highest degree the benefit of his powerful protection and special guardian care.

On the 6th, M. BEAUMONT, the Director, came on board, in whofe prefence all our cloathschefts, and other things were fearched, and the crew difcharged, excepting about fixty men, who ftaid behind to unlade the fhip.

I failed in company with fome of the other officers in a hired boat, and arrived in fafety at Amfterdam, where my much-refpected Patron, Profeffor BURMANNUS, with the utmoft kindnefs and benevolence made me an offer of his houfe and table.

I fpent my time in viewing with him the most remarkable Collections, which are to be found in Amsterdam, among which that in the possession

possession of the Merchant van der MEULEN, was the most valuable, especially with regard to Birds and Infects.

After this I made an excursion into the vicinity of Haarlem, in order to pay my refpects to my three worthy Patrons, van der Poll, van der DEUTZ, and ten HOVEN, as likewife to fee their country feats, and the beautiful plantations of all kinds of Exotics, which, at an incredible expence, they have raifed in the most fandy and barren plains near this fpot. It was not without the most fensible pleasure, that I observed here feveral of the vegetable productions both of Africa and the Japanefe iflands, which teftified that the pains (not unattended with danger) which I had been at in collecting them, had not been wholly loft. I had likewife the extreme happinefs to receive from my Patrons teftimonies of their fatisfaction on the fcore of my diligence, together with the most handfome recompence, on account of which the laft-mentioned Gentleman, M. ten HOVEN, paid me, on my return to Amfterdam, an unexpected visit. This Gentleman, who is faid to have a yearly income of more than 300,000 guilders, did not deem it beneath his dignity to pay me a vifit in the Dutch fashion, on foot, and without any attendants, and at the fame to make me a prefent

prefent with his own hand of 128 Dutch Ducats in gold.

I afterwards, in company with Dr. Klochner, made an excursion purposely to Haarlem, to see M. VRIEND's fine Collection of Insects, together with the curious animals of every class, which are kept in the house belonging to the Society of Sciences at Haarlem.

The *Phalæna brumata* was at this time very common in the orchards and fruit-gardens. It was prevented from laying its noxious eggs in the buds of the bloffoms, by the method invented by Profeffor BERGMAN, and which was here very much celebrated, viz. by means of the tarred bark of a birch-tree bound round the ftem of the tree.

It is very common in Amfterdam, as well as in other parts of Holland, to difpofe of Collections of Natural Curiofities, by public auction. Such auctions were now held feveral times, agreeable to printed Catalogues, after the Cabinet had been previoufly exposed for a certain time to the infpection of the public.

Among other rarities which I faw in Amfterdam, was likewife a very pretty Collection of Coins in the poffeffion of the Minister of the church called the Oude Kerk. I had here the unexpected pleafure to see, for the first time, the Zodiac Rupees, as they are called, in gold, the whole twelve

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twelve together complete, which I could in India neither procure a fight of, nor obtain in change, and of which one feldom finds a complete collection in Europe. He had redeemed thefe twelve Coins with 300 Dutch Guilders, and had the goodness to part with them to me at my earnest follicitation for 700 Guilders. This Collection, together with the Portrait of SELIM Ift. had been made a prefent of by the Governor-General IMHOFF, from Batavia, to fome of his relations in Holland, who were afterwards under the neceffity of difpofing of them. This Coin had been ftruck both in Gold and Silver by the Emprefs Nour-MAHAL, the above-mentioned SELIM's Confort, in the fpace of twenty-four hours, during which fhe, with the Emperor's permiffion, reigned with abfolute fway. And as thefe, after the Monarch's demife, were prohibited, called in and melted down, it is now very uncommon to meet with all the twelve, which bear upon one fide the impreffion of one of the twelve figns of the Zodiac, and on the other are marked with Arabic or Perfian characters.

I could not well accept of Professor Burmann's very kind invitation to refide in his house, as he and his family were themselves straitened for room, for which reason I hired an apartment of a worthy friend and countryman of mine, ERIC

ERIE FLOBERC, who was Proprietor of a Silk-Stocking Manufactury, and was fettled in this city, where all foreigners are at perfect liberty to earn their bread, let them be of what country and of what religion they will. This did not however prevent me from vifiting daily in his houfe, and being quite overwhelmed with his kindneffes, the remembrance of which fhall remain deeper impreffed in my breaft, and be preferved as a more facred deposit there, than if they had been engraved on the most coffly Parian marble.

In like manner I had the happinefs, (and the remembrance of it even at this diftant period of fourteen years, in which I prepare the prefent narrative for the prefs, awakens the moft lively fenfe of joy and gratitude in my foul) I had the happinefs to experience from feveral of my refpectable countrymen every poffible civility, mark of friendship, favour, and real fervice; as for inftance, from the Conful-General, M. HASSEL-GREN, Meffrs. FAOHRÆUS, SWART, and LUNCE, &c.

Having finished my engagements with the Dutch East-India Company, and received my falary, together with the customary gratuity, I refolved to travel to England, and spend part of the winter in London.

1 A.17

With

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With this view I went in the month of November to the Hague, where I infpected his Royal Highnefs the Hereditary Stadtholder's valuable Cabinet of the productions of Nature and Art, and paid a vifit to M. LYONET, in order to fee his choice Collection of Shells; after which I travelled to Rotterdam, and from thence farther on to *Helvoet Sluys*.

Here contrary winds prevented my paffage over for feveral days, and when afterwards I was able at laft to fet fail, in company with feveral other paffengers, in the Englifh Packet-boat Royal, fuch a heavy florm arofe, and at laft contrary winds, that we were driven a great way out of our courfe, and landed at a place a great diftance from London, from whence we were obliged to go by land to the Metropolis, where I arrived on the 14th of *December*.

Mr. DRYANDER, my friend and quondam fellow-fludent, had very kindly taken upon himfelf the charge of providing lodgings for me: my firft care therefore was to wait upon this Gentleman, at the houfe of Sir JOSEPH BANKS, agreeably to the addrefs he had given me. As foon as I had fent in my name, I was received in the moft polite manner by Dr. SOLANDER, who did me the honour to introduce and prefent me immediately to Sir JOSEPH BANKS, in his Cabinet of Natural Hiftory.

This

This Gentleman was not only pleafed to receive me with the greateft kindnefs in the prefent inftance, but continued, during the whole time of my abode in London, to fhow me all poffible favour, and, what was the chief object of my wifnes, granted me free and uncontrolled accefs to his incomparable Collections, made (that appertaining to the vegetable kingdom in particular) from every part of the globe. I accordingly fpent the forenoon of every day in his houfe, and went with the utmost attention through his extensive Herbarium, which was a most commodious as well as efficacious method. of enlarging my flock of knowledge in this department of my favourite Science. And as at the fame time feveral learned men daily affembled here, as though it were to an Academy of Natural Hiftory, I had frequent opportunities likewife of forming connexions, that proved as ufeful as they were truly creditable and honourable.

I farther faw, during my fhort abode in this country, every thing worthy of notice, especially with respect to Natural History, as for instance, the *British* and *Leverian Museums*, &c. The former is on a very large and extensive scale, and contains Collections in many different articles, fuch as Books, Manuscripts, Antiquities, Coins, and the Apparel of remote nations, Utensils, &c. vol. IV. U KÆMPFER'S.

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KÆMPFER's Manufcripts and Collection of Herbs, together with the Drawings and Defigns, were the articles, which it gave me the greateft pleafure to fee here. Thefe were now almost a hundred years old, and had been bought up by Sir HANS SLOANE, after the Author's death. The latter was the property of an individual, was shewn for a certain fum, and confisted chiefly of minerals and animals.

In like manner I made feveral excurtions in the vicinity of London, to fee the beautiful gardens of Kew, abounding with living plants, and under the direction and care of Mr. AITON: Mr. LEE's garden, which is uncommonly rich in trees and fhrubs: Dr. FOTHERGILL'S garden, CHELSEA, &c. At Mr. LEE'S I likewife faw his daughter's fine Collection of Infects, which had been increated with the uncommonly beautiful Infects from the Coaft of Bengal, which Lady MONSON had collected there, and, previous to her death, bequeathed to Mifs LEE.

Profeffor FORSTER, fenior, whom I waited upon one day, received me with much friendfhip, and not only procured me the pleafure to fee the plants and fhells, which he had collected during his voyages in the Pacific Ocean, but was farther pleafed to prefent me with a whole Collection of them, which has entitled him to my fincereft gratitude and eternal acknowledgements.

The

The English spend the day in a much better manner than any other nation I have hitherto feen. Nine o'clock in the morning is the common hour of breakfast, which generally confists of tea and fome light diet. After breakfast they follow their occupations, till three in the afternoon. At four o'clock, when the merchants return from Change, dinner is generally ferved up, though people of fashion dine an hour or two later; after which the evening is either fpent in company or fome other pastime. This mode of living appears to me much more rational than what is cuftomary in other places, viz. during one's occupations to fast till one o'clock, and afterwards to confume the beft, lighteft, and finest part of the day at dinner, after which one is little qualified for attending to any bufinefs in the afternoon.

For this reafon Affemblies are always held at fix in the evening. The members of the Royal Society of Arts and Sciences affemble likewife at that hour on a ftated day in the week, and I had the pleafure to be prefent at their meetings feveral times. The Meeting-room is furnifhed on one fide with benches for the accommodation of the members, like a church, and the Prefident with his Secretary fit before a table. Each member has the privilege to take with him one U_2 of

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of his friends, but he must in this case deliver in his name to the President.

With the new-year a fevere froft fet in, accompanied with a very violent ftorm, which blew down feveral ftacks of chimnies upon the houfes, and fome even broke through the roof, and at times even penetrated to the fecond ftory, fo as to occafion much damage and calamity.

Among other favours, with which Sir JOSEPH BANKS overwhelmed me, I confider this a fingular proof of his friendship that I was permitted, previous to my departure, to view the Collection of Plants made from the islands in the Pacific Ocean, which were not as yet placed among the other plants, and are not systeplaced among the other plants, and are not systeplaced among the other plants, and are not flewn indifcriminately to every stranger. Dr. SOLANDER, who, as well as Mr. DRYANDER, strove to render my abode in London both agreeable and advantageous to me, had the goodness, on this occafion, to order the whole of this Collection to be brought down from the upper story, and to go through with me every fingle and distinct species of it.

The Library, which Sir JOSEPH BANKS has collected, is in fact the completeft in the world, with refpect to Natural Hiftory, both in old and new works. It is erected in a large feparate room, before you enter into the Cabinet, by means

ARRIVAL, 1778,

means of which one has a most incomparably fine opportunity, when one is examining any particular plant, of referring to, and confulting whatever author one chufes, without loss of time, and without being under the neceffity of fetching books from a general Library, which frequently stands at a great distance off, and is most commonly incomplete, and not always accessible.

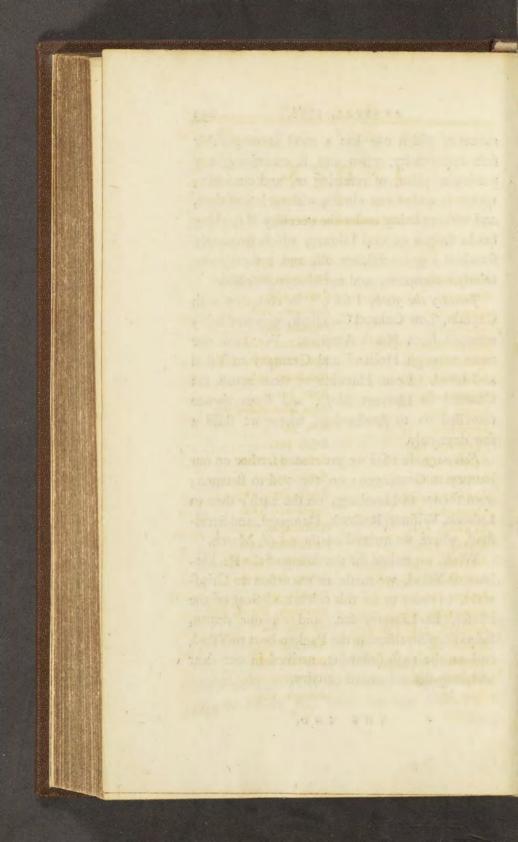
January the 30th, I fet off, in company with Captain, now Colonel Cronftedt, who was lately returned from North America. We took our route through Holland and Germany to Yftad and Lund. From Harwich we went acrofs the Channel to Helvoet Sluys, and from thence travelled on to Amfterdam, where we ftaid a few days only.

February the 16th we proceeded farther on our journey to Groningen: on the 22d to Bremen; from thence to Hamburg, on the 24th; then to Lubeck, Wifmar, Roftock, Damgard, and Stralfund, where we arrived on the 2d of March.

Whilft we waited for the failing of the Packetboat to Yftad, we made an excursion to Gripfwald, in order to fee this celebrated Seat of the Muses, its Library, &c. and on our return, failed from Stralfund in the Packet-boat to Yftad, and on the 14th following, arrived in our dear and long-defired native country.

THE END.

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