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THE NATIONAL GEOGRAPHIC MAGAZINE

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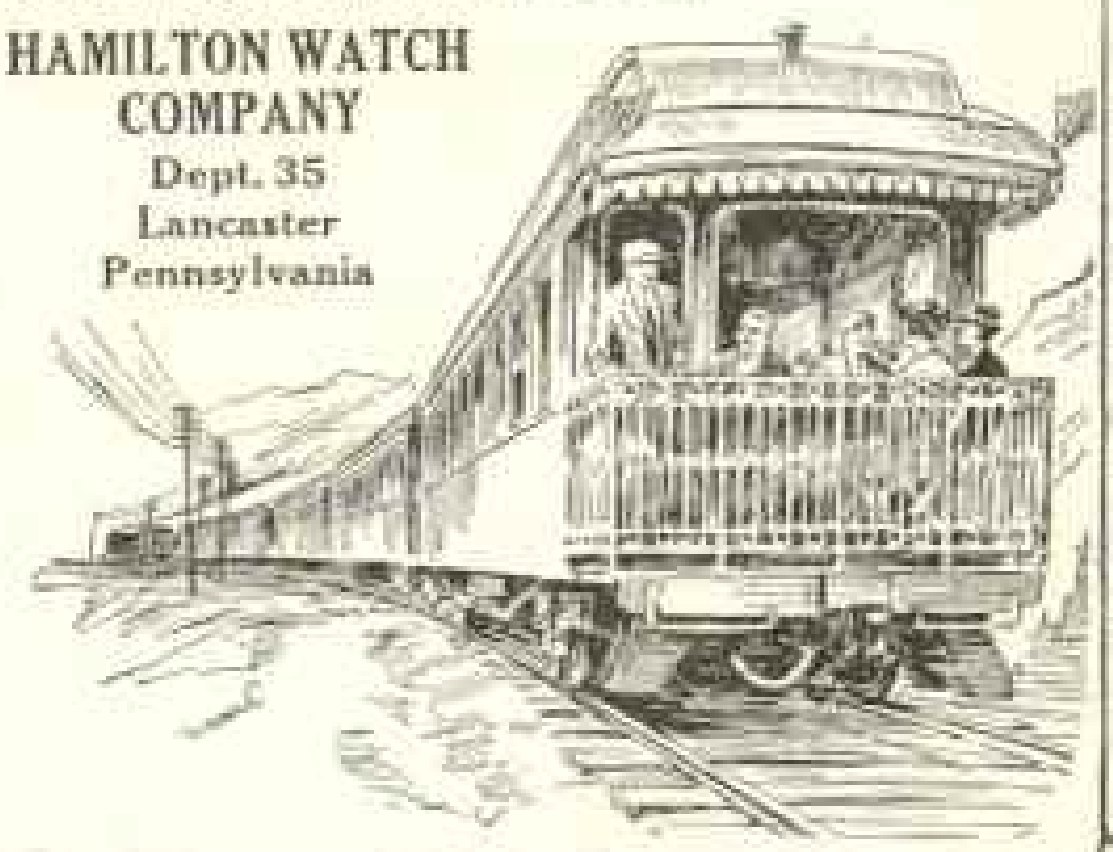

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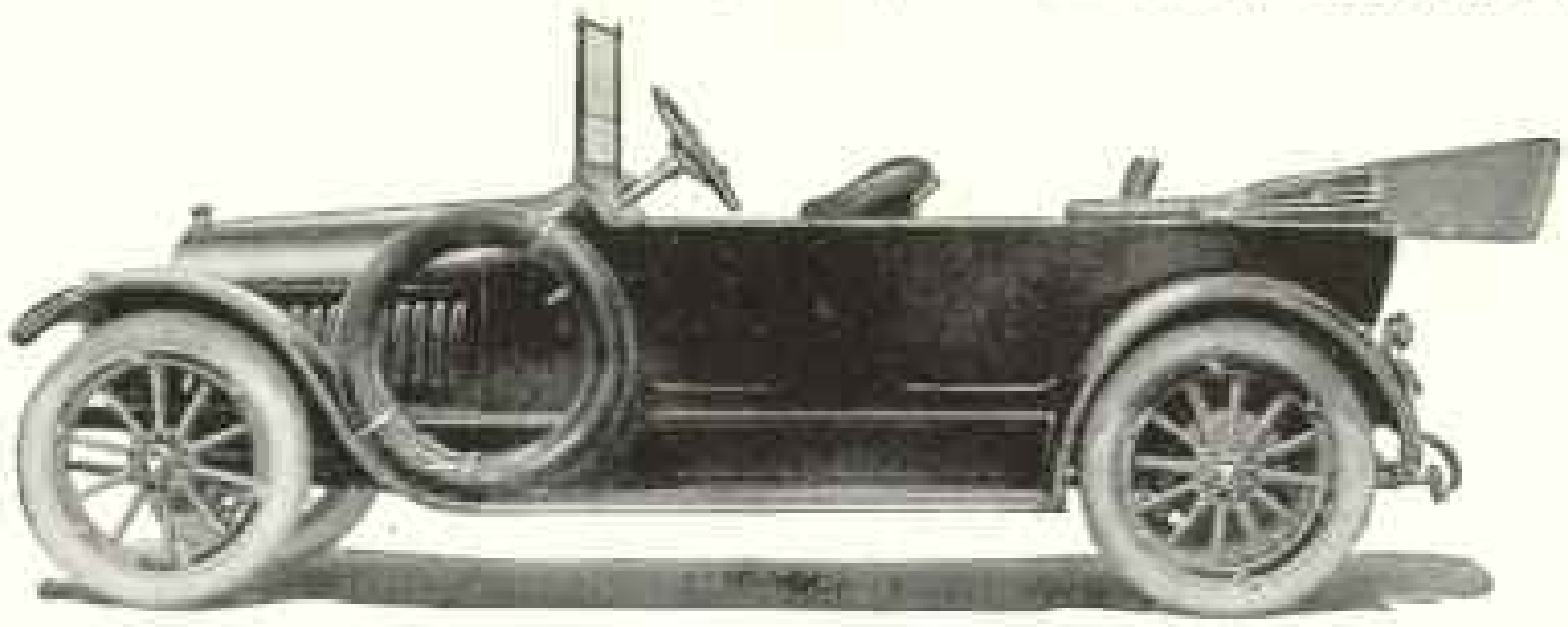

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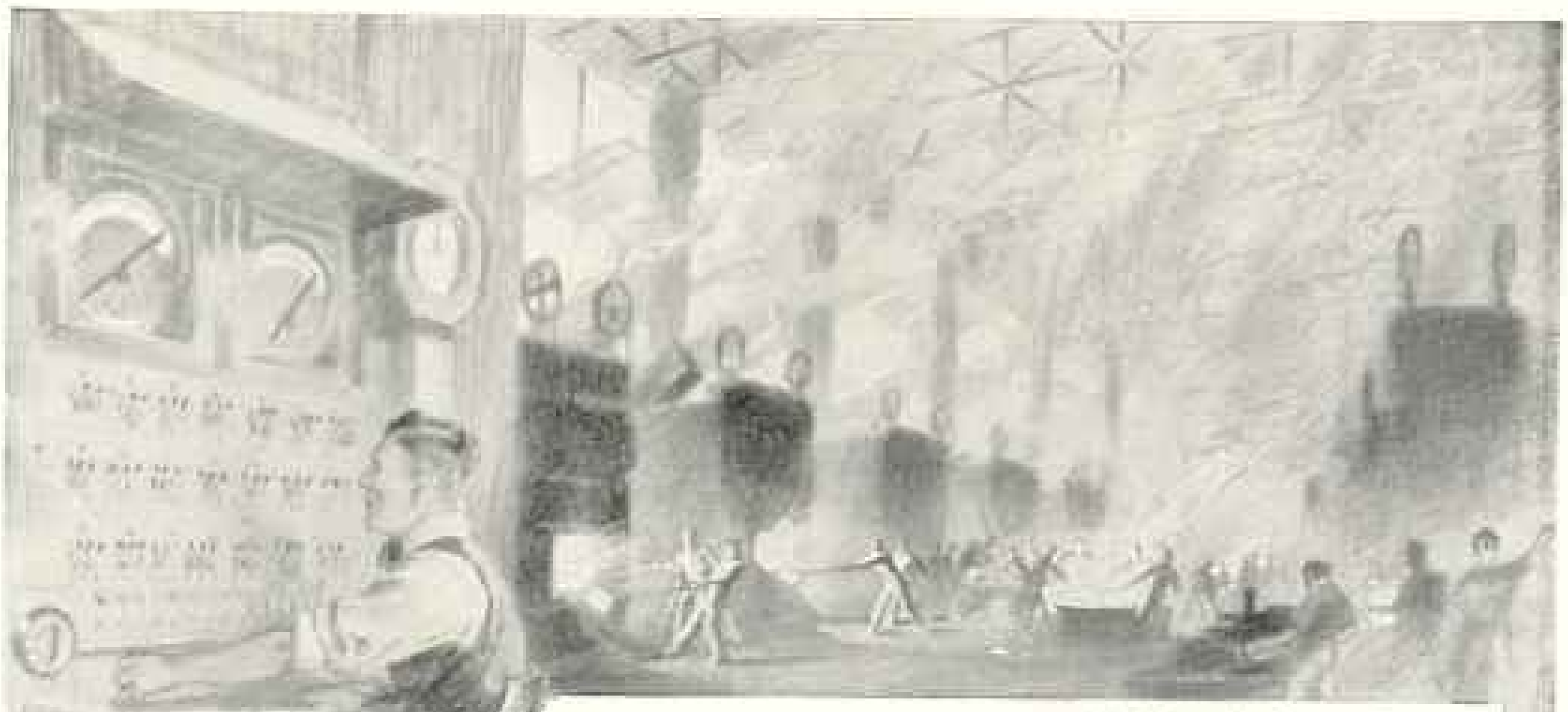

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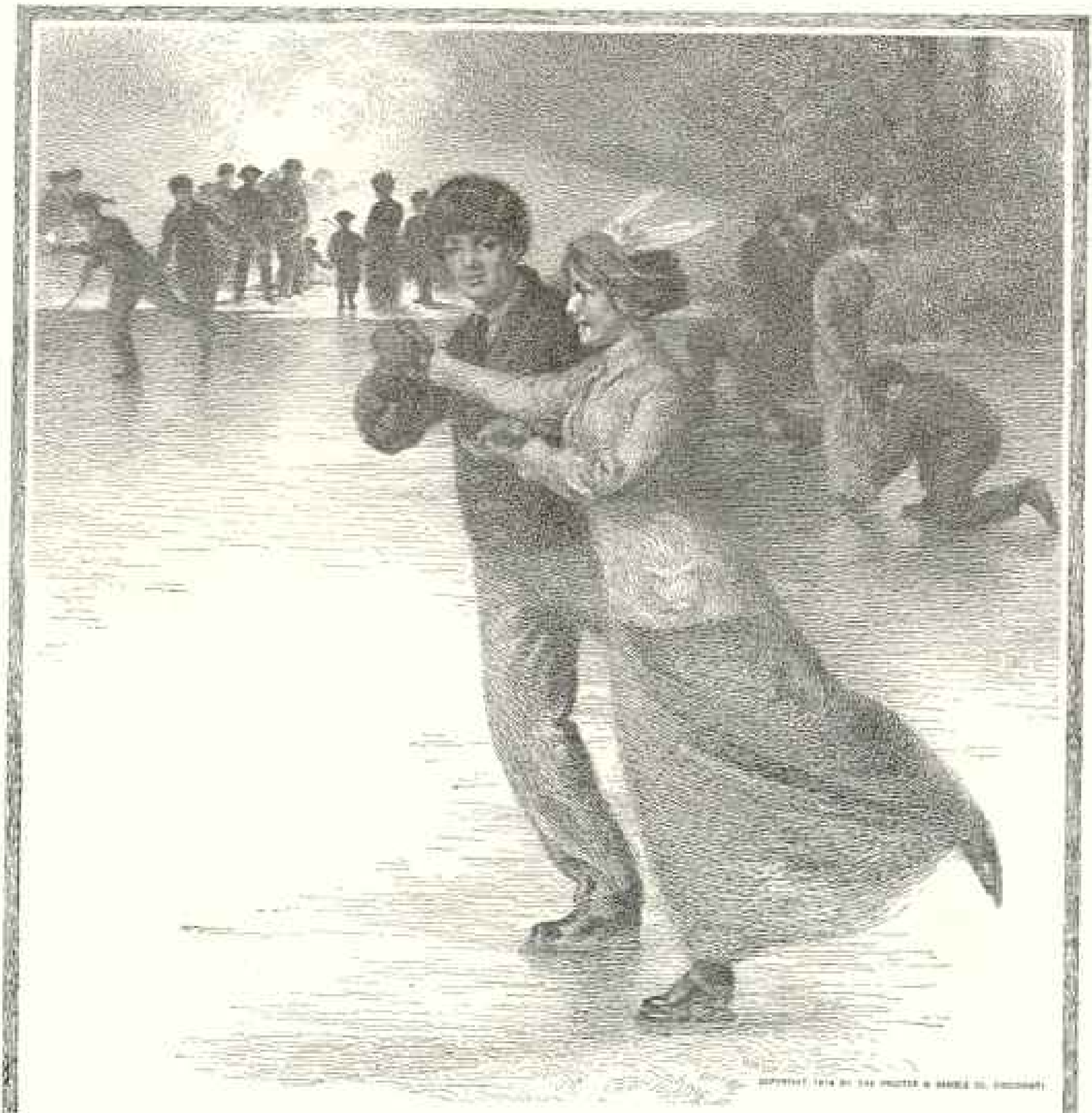

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VOL. XXVII, NO. 1 WASHINGTON JANUARY, 1915

THE NATIONAL GEOGRAPHIC MAGAZINE

GLIMPSES OF HOLLAND

BY WILLIAM WISNER CHAPIN

PEOPLE living in other countries, through intercourse or association with the natives of Holland, have often pictured in their minds the fatherland of this honest, industrious people; but only by seeing the country can one appreciate its peculiar charm.

Here is a section of the globe which was almost entirely overlooked by nature in the original distribution of iron and other metals, of coal, stone, and wood. In fact, to a great extent even the land itself was wrong side up at the start. With this discouraging beginning in mind, a visit to Holland for the sole purpose of observing the results accomplished by patient, persevering labor and sacrifice would in itself amply repay a great amount of effort. The existence of Petrograd and Venice is regarded with wonderment, although they are cities covering small areas. What, then, can be said of Holland, where the land, made and reclaimed from the sea, spreads out in great fertile meadows and plains thousands of square miles in extent!

As nature is charged with discrimination against Holland in the distribution of her gifts, so nature is entitled to credit for important assistance; for she has worked hand in hand with the builders of the main. The wind, ever an ally, has furnished the power in the battle through which the land was wrested from the sea; while even the water, against which Dutch ingenuity so long and successfully plotted, has repeatedly obeyed their summons and come to the rescue of besieged cities, overwhelming their enemies and preserving the nation.

One-quarter of the whole kingdom lies below the normal level of the sea, while 30 per cent of all the territory of the country would be submerged but for the dikes.

Holland's chief defenses against the encroachment of the sea are its sand dunes, in which there have been but two real breaches in the course of centuries of erosion. These dunes are covered with bent grass and protected as carefully from the ravages of the sea as a nation can protect them. The two breaches are filled now by the Westkapelle dike and the Houdsbossche sea defense, the former over two miles long and the latter nearly three miles long. In many places the sand dunes are gradually being eroded away, and what are known as "sleeping dikes" or Holland's reserves in her war with the waves.

For a time Holland was one of the three ruling powers of Europe, and its political history is even more marvelous than its physical. Warfare has marked the existence of this sturdy people from the first; for when not fighting with swords as weapons, shovels and picks were the implements.

Once so successful in her ascendancy as a world power, she has exchanged ancient grandeur for modern prosperity. She has beaten her swords into plowshares and settled down to the enjoyment of the fruits of her labors, inviting to her shores the nations of the world to

pluck the olive branch of peace from her plant of arbitration.

In opposition to Napoleon's pretext for annexing Holland to the Empire, which was that what land existed was the alluvium of French rivers—the Rhine, the Scheldt, and the Meuse—an old proverb runs, "God made the sea, but the Dutch made the shore."

Such were some of the thoughts which filled our minds when the train bearing us from Hamburg entered the capital of the Netherlands, The Hague. He who has formed impressions of the country from the attractive posters advertising steamship and chocolate companies must be quite disappointed in finding that the buildings of the city are ordinary in appearance, and that the people do not all wear awkward-fitting clothes of wonderful colors and clumsy wooden shoes; nor do they stand on the dike watching the yellow-funneled steamship as it passes, while sipping their cocoa. However, the disappointment will be short-lived.

Having been deprived of fresh milk and cream during the several months of our sojourn in Japan and China, the many beautiful cows seen from our car window as we approached The Hague had prompted the craving for a glass of genuine half and half, cream and milk. So we set out to obtain it and devoted a full hour hunting over the town to gratify the desire. Had our quest been for a high mountain in this low-lying land, the search would have been quite as successful. Cream and milk are a commodity altogether too valuable in the manufacture of cheese to be sold for use as beverages.

THE OLD DUTCH PRISON

Our first visit was to the old city gate, used centuries ago as a prison. It marks the scenes of the most bloody events in the history of Holland. Its dismal dungeons and array of accessories are indisputable evidence that the early Dutch, like all other Europeans of that time, were past masters in ingenious methods of torture, and the rough crudeness of the instruments exhibited prove that little time was wasted in their construction and finish.

THE WINTER PALACE

The Winter Palace, built four hundred years ago, and now occupied by Queen Wilhelmina, contains furniture and bric-a-brac of almost priceless value. The exterior is ordinary in appearance and does not in the least resemble the popular idea of the home of royalty. It was the square in front of this building on which the people gathered and anxiously awaited the announcement, from the balcony just above the main entrance, of the birth of their beloved Queen's presumptive successor, Princess Juliana, which event occurred April 30, 1909.

The forest of The Hague forms one of the most magnificent parks in the world. The dearth of trees in other parts of the kingdom has been more than made up by this grand collection, which includes elms, oaks, alders, and the largest beech trees to be found in Europe. The value of this wood is so great and the bond of affection between the people and these monarchs of the forest so strong that on occasions when the government exchequer has run low and the sale of the trees been under serious consideration, the people by repeated sacrifices and voluntary offerings have averted this catastrophe.

From The Hague a drive of a few miles through the forest proved a delightful route by which to reach Scheveningen, once a little fishing village, now Holland's most popular watering place and resort of fashion. On this wide expanse of clean sand beach crowds of spectators gathered daily at the bathing time. Many of them reclined in the comfortable willow chairs with peculiar bath-tub-shaped backs, which entirely enveloped the occupants and furnished protection from sun and wind while they enjoyed the frolic of the great rolling surf as it tossed the bathers in its final tumble on the smooth sand. The hotel buildings here are commodious and handsome, and a substantial iron pier connects the steamboat wharf with the cement promenade above the beach (see page 8).

AMSTERDAM AND ITS BRIDGES

An hour on the train brought us to Amsterdam, Holland's greatest city and

The dikes of Holland serve not only to shut out the water, but in many places form the favorite strolling places of the people. The costumes seen in this picture and the situation of the houses behind the dike are characteristic of nearly all of the fishing towns of Holland.

Photos by W. L. Gifford

LIVING BELOW SEA-LEVEL IN HOLLAND: SCENES AT VOLLENDAM

The level of much of the land in Holland is shown by the houses in this picture. Dikes which keep the water from overflowing the country were built at vast expense and cost about $3,000,000 a year for maintenance. They have to be maintained along the rivers as well as across the breaks made by erosion in the sand-dunes that fringe the sea.

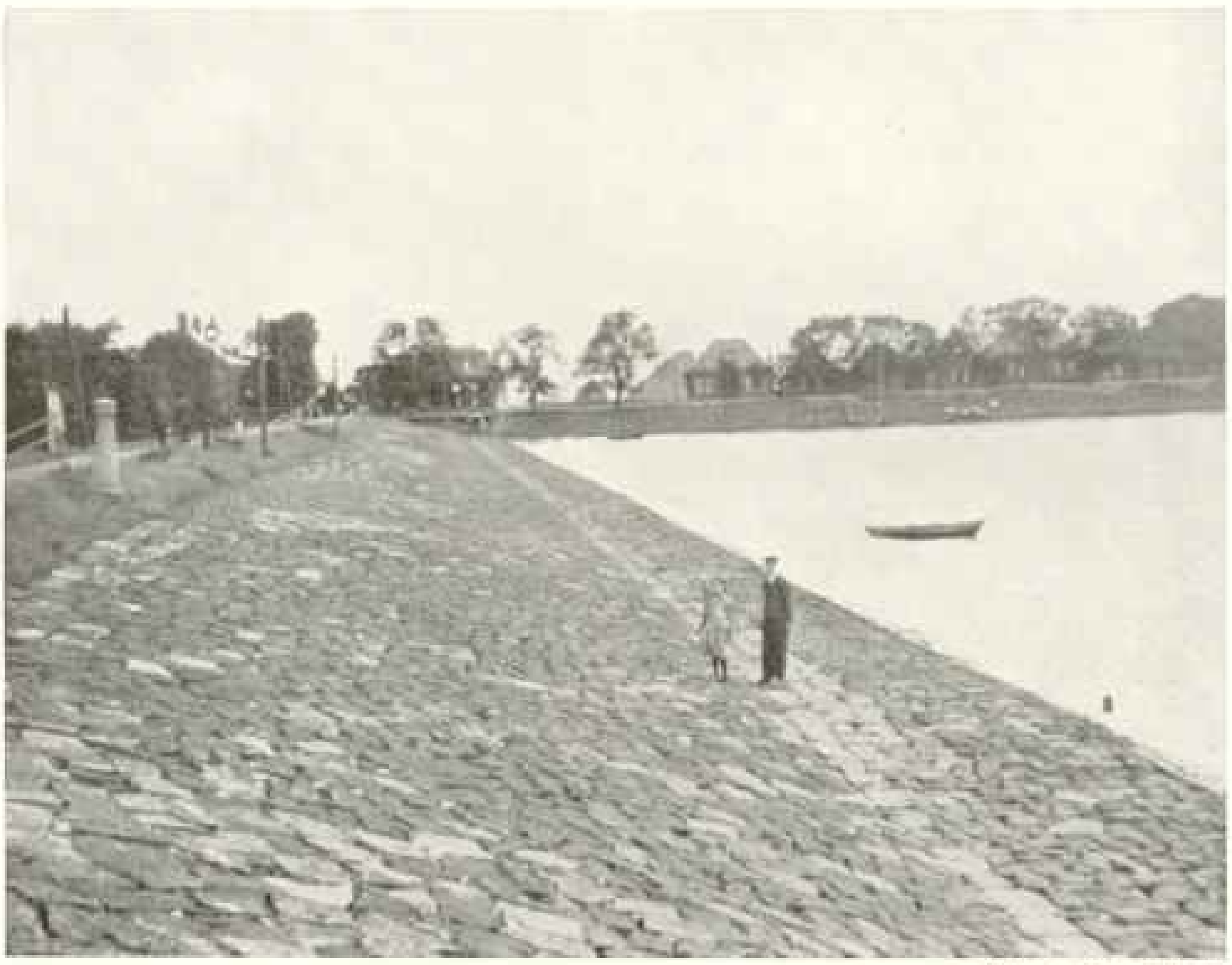


Photo by W. L. Gifford

THE SEAWARD SIDE OF A HOLLAND DIKE

The seaward side of the dikes has to be heavily armored with riprap. This riprapping consists of great granite blocks, which extend above the highest tide and below the lowest tide. In many places where the ocean threatens to break through a sand-dune dikes have been built back of the dunes to serve as Holland's reserves in its war with the waves.

reputed to be one of the wealthiest cities in the world. The appearance of this old town at once impresses one with its solidity and massive proportions. Its wide avenues and large buildings do not suggest that this city is supported on piles, connecting some 90 islands, except the frequent crossing of bridges, which number more than 350. So numerous are the waterways that the map of the city resembles a spider's web in form. And when one inquires the distance to a certain point, the reply is, "It is so many canals" in the direction indicated.

Amsterdam at the end of the eleventh century was a poor fishing village. Five centuries later it became the grain emporium of northern Europe, while its bankers have since assumed wonderful prestige and wield a tremendous power in the financial circles of the world.

Among the most conspicuous buildings of the city is the Royal Exchange, which rests on a foundation for which 34,000 piles were used. Another great building is the Royal Palace, built in 1648 on 13,659 piles. Its massive walls inclose a ball-room said to be the largest in all Europe.

The employment of 12,000 of Amsterdam's Jewish population in the polishing of diamonds is an important factor in the industry of this city.

PHILANTHROPY SYSTEMATIZED

The powerful philanthropic organizations of Holland have earned for her the reputation of being the most liberal in charities of the European States. To the tourist who has encountered the disgusting beggars of some parts of China and India, the entire absence of this class in Holland is very noticeable. Among other favorable conditions reputed to her is

Photo by Emil P. Albrecht

ON THE CREST OF ONE OF THE SAND-DUNES THAT SAFEGUARD HOLLAND

The sand-dune, despised, if not useless, in most parts of the world, is the faithful friend and protector of Holland. The government of that country in turn guards them with rare zeal. The force of the waves, which eat into their seaward sides, is broken, and they are robbed of their sands by numerous jetties built at large expense. Several jetties may be seen on the left. These sands, deposited at the base of the dune, broaden out and make Holland more secure. On the land side the winds are circumvented in their efforts to damage the dunes by the systematic planting of various grasses, which thrive in the sands and bind it fast.

that she has the best public instruction and the least corruption of any nation. Louis Napoleon's conclusions, too, were in the same strain: "In Holland is found more innate good sense, justice, and reason than in any of the other European countries."

It is estimated that about one-third of the people of Holland are of the Catholic faith, 100,000 of Hebrew, and the remainder made up of different branches of Protestantism, with the Calvinists predominating.

DUTCH LOVE OF MUSIC

The Hollander's love of music cannot be disputed. This fact is impressed upon the traveler by the continuous performances of strange belfry music, which not only floats in, but rushes through one's windows, when the chimes in the church towers ring in each hour of the day or night, with a flood of harmony. While the selections include many quaint old hymn tunes and movements from operas having rapid cadenzas of wonderful range, the degree of pleasure one experi-

Photo by Emil P. Albrecht

HOLLAND'S TIRELESS TOILERS

"The variety of work these mills perform includes almost everything but cultivating the soil. It would seem that the possession of at least one windmill is a condition precedent to the forming of the family ties, as the windmill furnishes not only shelter, but occupation and income. One must not take it for granted, however, that these wind engines are all engaged in grinding out florins for their owners. Many hundreds of them are constantly at work pumping water over the dikes; otherwise much of the fatherland would soon be reclaimed by the Father of Waters, who has ever carried on a vigorous warfare in his dispute for possession" (see text, page 12).

ences from listening to the bells depends more on the hour of the production than the composition played, since being awakened in the night by one time, however choice the harmony, does not differ materially from another in its moral effect upon the sleeper.

Fortunately, the Dutch chimes do not include large castings with deeptoned vibrations. The bells are small in size and many of the carillons contain as many as 42 in the set. The mechanism of the chime is so arranged that the cylinder, which has pegs similar to a Swiss music-box, may be exchanged for another or removed entirely, permitting a performer to play whatever tune he chooses without waiting for the minute-hand to complete its circuit.

Many of the Dutch steeple clocks wear an unnatural, open expression, which we finally discovered was owing to their habit of holding but one hand—the hour hand—over their faces.

The location of Amsterdam is most favorable to tourists as headquarters from which to make excursions to places of great historical interest, and to towns in which the life of today is said to be lived precisely as it was centuries ago, and where the dress is similar and the adornments of jewelry and laces are identically the same.

THE DUTCH WINDMILL.

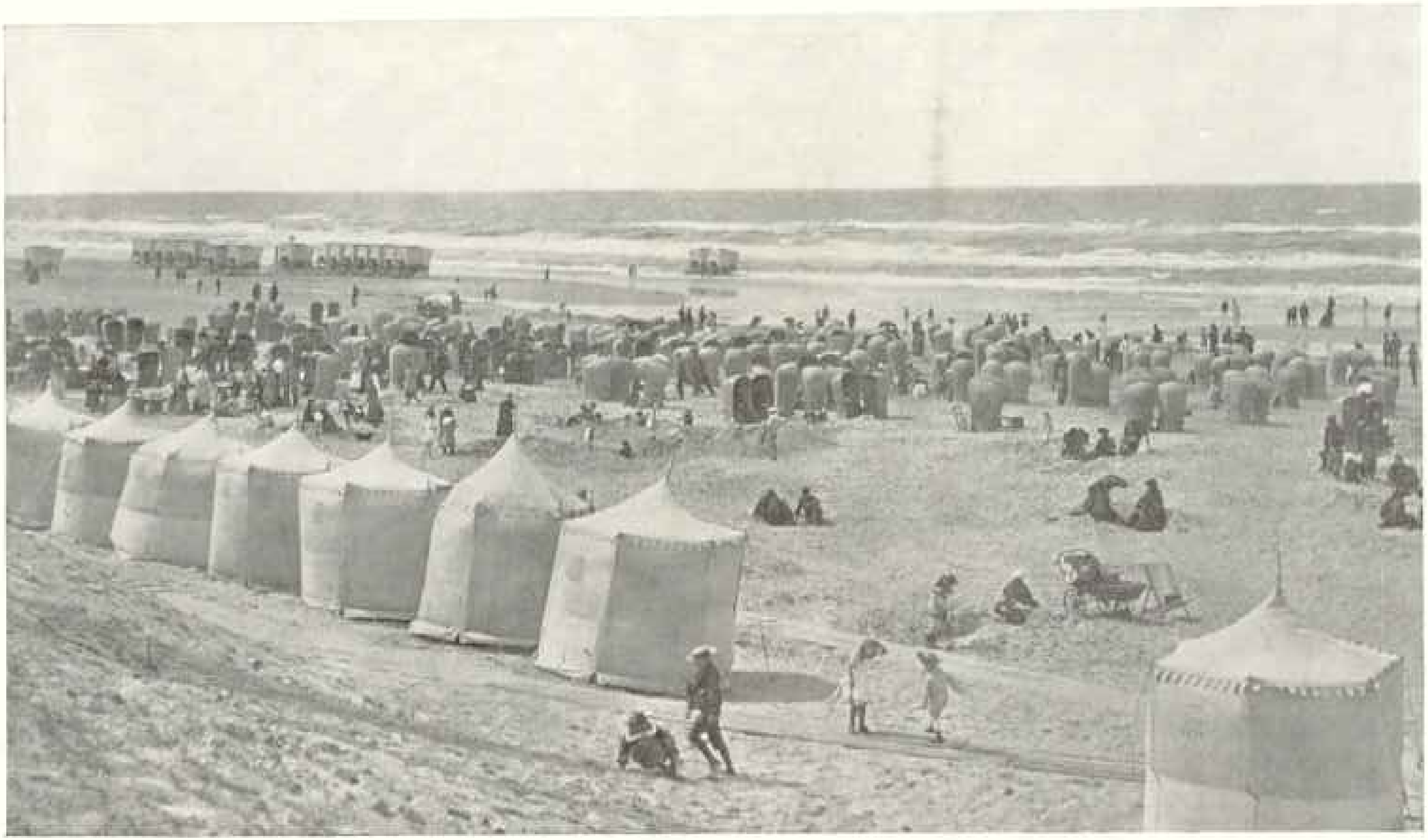
A man's wealth may be measured by the stocks and bonds he owns in New York, by the cattle he has in Argentina, by the chain of gold eagles his wife wears in Tehuantepec, and so on; but in some parts of Holland the number of windmills a man owns gives the clue to his financial rating. They fight the water, shelter the family, afford an occupation, and provide an income for their owners.

WINDOW SPIES

On the front façade of many of the houses, hanging between the windows, are mirrors, placed at such an angle that those inside, without being seen, may view the street in either direction, including the front door and any one seeking admission. The home life of many of the people is said to be so quiet that, wishing to see all that is going on about them, they employ these "spies," as they are sometimes called.

As we proceeded along a narrow street of one of the little "dam" towns our attention was attracted to a front door on which was fastened a piece of white paper containing a note. Several persons preceding us had paused in passing to read its contents, and on inquiry we were informed that a member of the family who had been ill was improving. This sensible custom is followed by changing the bulletin each day, so that inquiring friends may keep informed of the condition of the patient without disturbing the household to inquire.

Our informant further stated that when a death occurs in a family the relationship of the deceased is indicated by the position of the folding shutters of the windows: If a cousin, one section; a brother, two; while for a parent all but one are closed.



THE ATLANTIC CITY OF HOLLAND—SCHEVENINGEN

The roller-chair is replaced here with the bath-tub chair, which protects the occupant from the wind or the sun. Charles II embarked at Scheveningen on his return to England at the Restoration, and in 1673 the Dutch navy, under Admiral de Ruyter, defeated the allied fleets of England and France near here.

Photo by A. W. Cutler

A STORK'S NEST: HAARLEM, HOLLAND

Nowhere else in the world does the stork stand in higher regard than among the people of western Holland. Nothing is regarded as more indicative of good fortune to come than for a pair of storks to build their nest in the chimney of a humble cottage. However humble that cottage may be, the occupants feel that the stork's nest promises many blessings in the future. The farmers erect long poles with a box at the top in their fields, feeling that if the birds build their nests there both the quality and the quantity of their crops are assured.

ANNOUNCING THE NEW-BORN

The Dutch differ from the Chinese in announcing to the world the birth of children only in the article displayed. The Chinamen hang a piece of ginger over the main entrance to the house, while the Hollanders indicate the event by a piece of lace, combining with the lace a pink background for a boy and tinsel for a girl.

The orphans of some of the cities of Holland are quite conspicuous, and especially so when seen on the streets of Amsterdam, dressed in what might be termed half-and-half clothing. The east half of a boy's coat, including the sleeve, is red, while the west half is black. The dresses of the girls are divided in a similar manner, but are topped off by becoming white caps, which make the young misses look very neat and attractive. This singular style of dress is said to have been adopted to enable the railroad officials, as well as the authorities, to keep track of them. As the orphan asylums of Holland have the control of children committed to them until they are of age, the more mature of the unfortunates (wearing these odd garments in public) present a very striking appearance.

DOMESTICITY A TRAIT OF THE DUTCH WOMEN

The housewifely traits of the women of Holland are in evidence throughout the little kingdom. The girls learn to knit early in life, and they are perhaps as busy knitting for the needy throughout Europe today as are our own good women in America

KEEPING ONE'S LOCATION

While familiarity with the Dutch language is a great advantage in visiting Holland, it is not essential to one's pleasure. Burton E. Stevenson in "The Spell of Holland" tells a good story of an Englishman who did not understand the language, but who took the precaution to write down upon his cuff the legend he saw on the corner house nearest his hotel, and which he took to be the name of the street on which the hostelry was located. During his wanderings he became confused in his direction and showed the legend to a number of passers-by. They only laughed, shrugged their shoulders, and passed on. Finally, exasperated at their treatment, he met an English-speaking native and expressed his disgust at their stupidity in not directing him toward his boarding place. The native inspected the memorandum and informed him that the sign he had copied was "post no bills."

Photo by A. W. Cutler

THE ISLAND OF MARKEN: HOLLAND

The styles do not change as frequently on the Island of Marken as they do in New York and Paris. The children there still wear the same curiously patterned dresses that were adopted by their ancestors over 200 years ago.

The swan, so much admired for its grace and beauty when seen lazily floating on the water in our public parks, is the object of quite as much admiration in Holland. Only in this old prosaic country the popularity of the bird appeals not alone to the esthetic taste, but to the palate also. The thought of this beautiful bird occupying the same responsible position at feasts as falls to the lot of the festive turkey in America is not altogether a pleasing one. However, if the reported decrease in the turkey industry in America continues, it is among the possibilities that the swan will replace our noble Thanksgiving bird.

A delightful hour spent on a packet winding her way up the picturesque river Zaan is a splendid introduction to Dutch landscape. Holland is sometimes spoken of as a monotonous country, and there certainly are few ups and downs in the scenery, excepting in the southern provinces. But the windmill as an adjunct to the landscape would not be nearly as effective were the face of the country less level. These great nature engines are to Holland's scenery what snow-capped mountains are to the vistas of Switzerland, and quite as numerous, especially on this river, where 400 of them may be seen in a ride covering but 12 miles (see page 6).

The objective point of this river ride is the little town of Zaandam, spread along the banks of the Zaan. The numerous mills of this region indicate that Zaandam is one of the wealthiest in Hol-

land, since financial ratings here are commonly given as so many windmills; and when we realize that one of these tireless toilers is as valuable as a farm, their importance can be appreciated. The variety of work these mills perform includes almost everything but cultivating the soil.

WINDMILLS AND FAMILY STANDING

It would seem that the possession of at least one windmill is a condition precedent to the forming of the family ties, as the windmill furnishes not only shelter, but occupation and income.

One must not take it for granted, however, that these wind engines are all engaged in grinding out florins for their owners. Many hundreds of them are constantly at work pumping water over the dikes; otherwise much of the fatherland would soon be reclaimed by the Father of Waters, who has ever carried on a vigorous warfare in his dispute for possession.

In addition to Zaandam's wealth, the city possesses what Napoleon the First called the finest monument in Holland—the little hut occupied by Peter the Great in 1697. After his triumphant entry into Moscow, he returned and worked here at the trade of ship-building until his identity was discovered. This incident for a time gave the place the name of Czardam. The interesting little cottage, containing two rooms, is encased in a small brick building for protection from the weather.

While the cattle of North Holland have long held a world-wide reputation for productiveness and beauty, their importance to the entire Dutch nation can never be fully realized until one traverses this wonderful country where so much of the land lies below the sea-level. Here not only the boundaries of farms are described by narrow canals of fresh water, but the fields are separated by connecting waterways. These prevent any crop failure from drought and contribute to produce ideal conditions for the raising of cattle.

THE CHEESE TRADE

The manufacture of cheese has assumed such proportions that it may almost be regarded as a national industry. It is estimated that there are 150 varieties of cheese made throughout the world. Each sort is said to bear an individual trait or flavor which is as distinct and peculiar to the land or district where it is produced as is the language. That there is foundation for this claim in the output of Dutch dairies is clearly demonstrated.

No visitor should fail to visit Alkmaar on Friday, its market day. It is best to arrive Thursday night, so as to be on hand for the early morning sights. The town is surrounded by a region of great fertility, on which are pastured large numbers of Holland's black and white beauties.

In the center of Alkmaar stands the old weigh-house, erected in 1582. Connected with the town clock in the tower of this building hangs one of those tinkling chimes which plays a melody even stranger than those heard in Amsterdam. It is in this building that all of the cheeses are brought from the square in front, to be officially weighed, before they are delivered to the purchaser and stowed away in the packets or barges waiting near by in the canal.

From this, the principal cheese market of Holland, thousands of tons of golden spheres change ownership each year for millions of golden disks (dollars). On approaching, one might easily imagine that preparations for a bombardment are being gotten rapidly under way, as the 9-inch cannon balls of bright yellow, tossed from hand to hand in rapid succession, are being piled in double tiers of about 10 or 12 feet square.

THE CHEESE SALE

So numerous are the strange dog-carts and scows with which the farmers bring their loads to town that the adjoining streets and canal are completely filled, and the noon hour has nearly arrived before the cheeses are transferred to the square, where it is necessary to place them in perfect order before the sale can begin.

However, when all is in readiness the sales proceed very rapidly, and on the close of a deal, which is confirmed by solemn and sometimes oft-repeated hand-shakings, porters appear, dressed in white

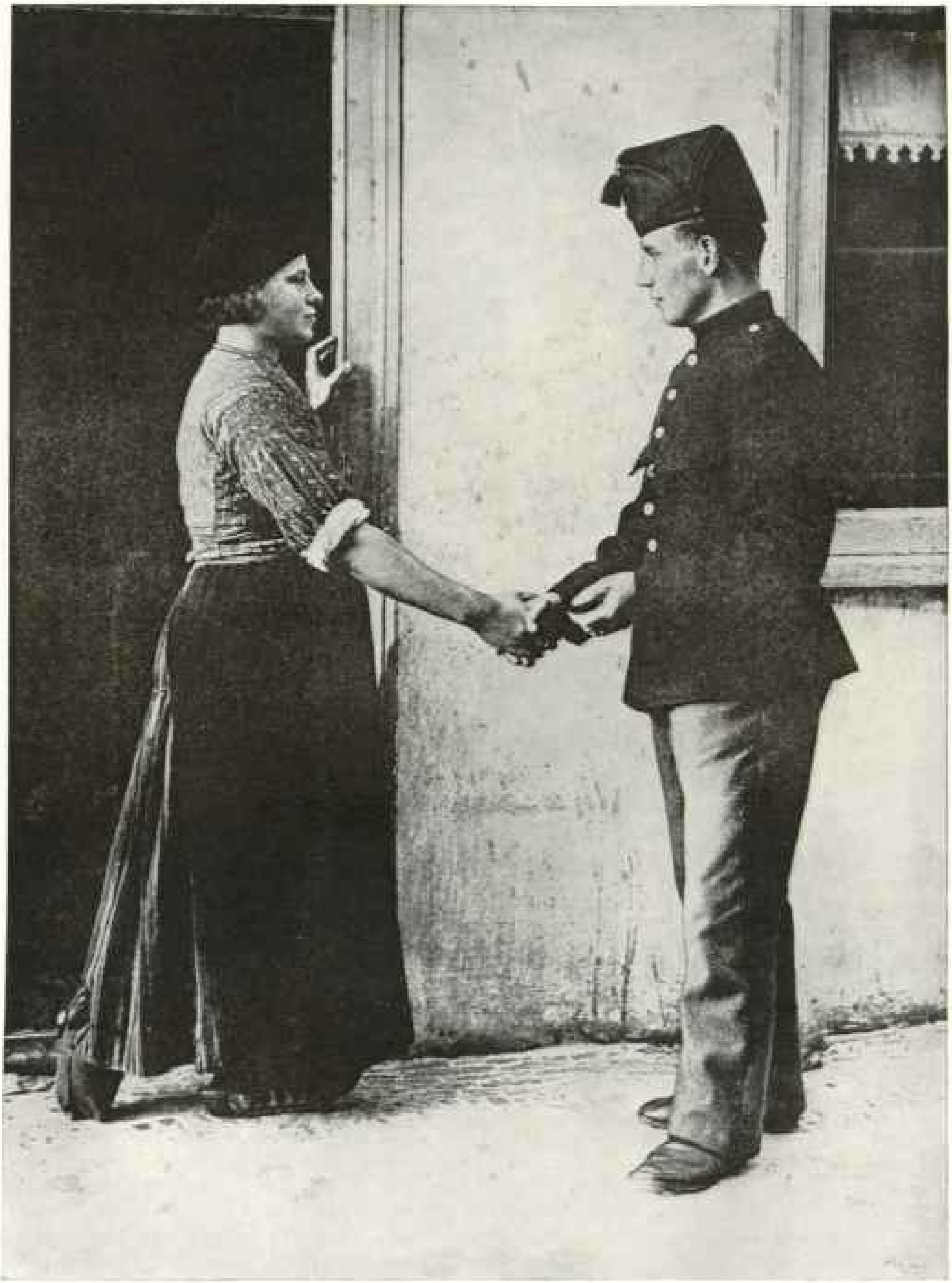


Photo and copyright by International News Service

THE SOLDIER AND HIS SWEETHEART

The army of Holland is not large, but then the Dutch have always contended that the sea is as much their ally in war as it is their enemy in peace. There is a saying that no army whose soldiers are not 10 feet tall can invade Holland. "A Netherlands under water rather than a Holland in alien control" is a sort of military maxim in the dike country.

Photo by M. L. Millard

A SCENE ON MARKEN ISLAND

Situated in the Zuyder Zee, the Island of Marken is inhabited almost exclusively by fishermen and their families. Their gaily colored costumes; their manners, which have remained unchanged through centuries; and their houses, which possess striking tiled roofs, and which are connected by narrow embankments paved with the tiles, give the place a charm that makes it popular as an excursion point from Amsterdam and other cities.

linen and wearing straw hats with colored bands, carrying a long boat-like tray, with handles on either side, supported from the shoulders by straps. On these trays, piled in pyramidal form, rest from 60 to 80 four-pound cheese balls. Two men carry each tray, raising the load just high enough to clear the ground, and swing it along to the scales in the weigh-house. Then they carry it to the packet, which will deliver the cargo to the warehouses, to be consigned to all parts of the world. These yellow cheeses have a world-wide reputation as a table delicacy, and while known as the Edam cheese, from the little town a few miles distant, comparatively few of the spheres are produced there.

The old Groote Kerk, erected in 1470, occupies a prominent corner in Alkmaar

and contains many interesting features. The ceiling, rising 81 feet from the floor, is perhaps responsible for our impression that the interior is cold and unattractive as a place of worship and is more suggestive of a place of burial. Indeed, most of the marble slabs of which the floor consists cover graves. One of these, marking the resting place of a man and wife, bears the date of 1546.

A strange feature of this old kerk was noticed upon the face of several of the slabs where, carved in relief, was an animal or object meant to illustrate the name of the one whose grave it marks.

THE YOUTHFUL SHIPBUILDER

From the day when Admiral de Ruyter vanquished the allied fleets of England and France off the coast of Holland, every young Dutchman has gloried in his country's naval history.

WHERE LIMBURGER COMES FROM

Another of the cheese-producing districts is Limburg, sometimes called the Garden of Holland. Of the celebrated relish known as Limburger cheese it has long been a query how an article of food made from delicious material and considered such a delicacy can possess so obnoxious an odor and still retain its self-respect. This peculiarity has made Limburger cheese responsible for many amusing incidents and the brunt of numerous stories. A Dutch-American rural citizen once went to town to make some purchases, among which was some of this odoriferous commodity. For convenience he placed it in a long box in the wagon, behind the seat. Happening to stop on the road, an inquisitive acquaintance approached and asked what the box contained. In answer he raised the lid and replied: "I have my grandmother." "Well," rejoined the inquirer, as he caught a whiff of the contents, "She's not in a trance."

Holland is one of the countries where dogs are required to earn their bone. About 25 years ago their labors were so arduous that they aroused the pity of the legislators of Amsterdam, who passed a

WINTER TRANSPORTATION IN VOLLENDAM

Although their wooden shoes are not very well fitted for wading snow, Holland has its share of snowfall. The picture illustrates the rustic baby carriage, with sled runners instead of wheels; for most households have children in Holland, and Dutch children must have a good time when the snow flies.

law prohibiting the use of dogs for towing boats in that part of the State. Since then the law has become general.

DOGS MUST WORK

While canines have been freed from this work, their existence in Holland falls far short of being a life of idleness, for they are commonly seen hitched up in teams. Ofttimes their running mate is a woman, and together they draw a cart (a load in itself) filled to its limit with vegetables or milk cans. After the delivery of the produce the driver feels no hesitancy in himself occupying the place of the load, while he drives his team home.

The ride from Amsterdam to Vollendam fills an hour and a half full to overflowing with interesting suburban scenes and glimpses of country life, as one speeds along in the comfortable steam tram-car. Now and then a great sail looms up on the flat horizon and we imagine we are approaching the coast, but on nearing the locality a scow appears to be moving over the grassy meadows. We wonder if the farmer, not satisfied with having all of his grinding and machine work performed by the forces of nature, can have harnessed the wind to his wagon to convey his produce to market. Soon our car passes the narrow waterway on which this craft is gliding, and we find that if we substitute a boat for the wagon our conjecture is correct.

CANALS BETTER THAN ROADS

This little canal stands for Holland's solution of the good-roads problem, and it certainly possesses some advantages over our highways, such as durability, absence of dust and noise, as well as the saving in expense of sweeping and sprinkling. Of course, automobiles are out of the question; but the staid, practical Dutchman cares little for that, since if the speed of his scow is too slow a motor-boat will be entirely satisfactory and very much safer than an automobile.

In this land where waterways are the common thoroughfare and no coping or

guards are provided to prevent the careless or inebriate from falling in, one would naturally suppose that the mortality from drowning would be very great; but it is said that few deaths occur from this cause.

History, however, records many occasions of terrible inundations that have claimed great numbers of the population. In the latter part of the thirteenth century the waters overcame the dikes at the mouth of the Ems, causing a loss of 80,000 lives. Again, in 1421, the overflow of the Meuse buried 72 villages and drowned 100,000 people; and in 1570 another 100,000 lives were swallowed up by the North Sea, when it broke through the dikes.

WHERE THE FAMOUS CHEESE COMES FROM

Edam may be a small town and its population may live as their ancestors lived a century ago, but it is known in every part of the world where people who live well dwell; for Edam gave its name to the cheese produced in the rich farming district that surrounds the town.

THE CANAL-BOAT POPULATION

The numerous canals of Holland are populated by about 50,000 people, to whom the house-boat represents home all the year round, and with the exception of the winter season, when the canals are frozen, they are constantly on the move. The stern of the vessel is fitted up for the boatman and his family, while the space in front is used for carrying freight. So large a part of Holland is intersected by this network of waterways, which also connects with the river Rhine, that the owners of these barges do a thriving business and are said to become in time quite independent.

The attractive old town of Vollendam is one of the quaint little places which every one who visits Holland should see. Here for centuries one generation after another of the people have lived on in the same rut, content to exist in the memories of the past, when wealth was abundant, but which in return for the prevailing lethargy has taken its departure.

The advantage of visiting the place on

Photo by A. Nielan

YOUNG HOLLAND ALL DRESSED UP

The little girl in Holland is her mother in miniature when it comes to dress, and the boy who cannot be appareled just like his father and wear his hat at the same angle that his father wears his is the unhappiest of creatures. Little women and little men they must be, if it is true that "the clothes proclaim the man."

Sunday is that the 300 or more boats comprising the Vollendam fishing fleet will have returned for the day. The fishermen, who comprise practically all of the male population, are very conscientious observers of the Sabbath. They always return when possible to their homes for Sunday that they may attend the church services, visit with their wives and sweethearts, and if the weather is favorable promenade with them on the clean brick road, the principal thoroughfare that crowns the great stone-faced dike protecting the town from the turbulent waters of the Zuyder Zee (pp. 3, 19).

Upon reaching the top of the dike, which rises about 14 feet above the meadows, our first view included the harbor, formed by a substantial breakwater, the inclosure filled to its capacity by the picturesque fishing craft, with sails spread and hundreds of fish-nets hung from the masts to dry in the bright sunshine.

THE PEOPLE OF VOLLENDAM

Most of the people of Vollendam are Catholics. Their costumes, while in many ways resembling those worn in other localities, have certain features distinct from those worn by Protestants. After the conclusion of mass the street presents a strangely animated scene, being nearly filled with people clothed in peculiar, ill-fitting, queer-shaped garments in bright and contrasting colors and shuffling along in clumsy wooden shoes. Here we at once recognize from whence the Holland-American Steamship Company obtained models for their attractive posters. As the younger Vollendamers promenade back and forth the length of the little town on this narrow roadway, here and there at the side of the street are seen groups of old men squatting in their wooden shoes. So motionless do they appear, one could almost imagine them to be a species of snail that had emerged out of the shoe and would soon draw back within its protection.

As the hour for church service approaches, the road is quite deserted, and so full is the building that we can only gain admittance to the vestibule.

A stroll of a few miles into the country from Vollendam affords an opportunity for a closer acquaintance with some of the interesting objects one sees at a distance through car windows. This locality is studded with quaint old wind-

Photo by W. L. Gifford

FISHER-BOATS AT HOME FOR SUNDAY: VOLLENDAM, HOLLAND

Next day they start again, but a wise man waits his turn

mills, which are large and strongly built. The ground floor of many of them is finished as a residence, which the owner occupies. While they are considered large as mills, they are rather small as homes. The interior of those we were permitted to inspect was scrupulously clean, and several windows were hung with little white curtains tied back with ribbons.

THE PRETTY MILKMAID

These mills set off many striking landscapes and make the locality very popular with artists. While most of them are attractive, some of them possess such striking features as subjects for pictures that a single one of them often commands the attention of three artists at the same time. If the traveler is ever in doubt as to the view to take with his camera, all he has to do is to follow the guidance of one of these landscape artists.

Continuing our walk into the country, we soon met a young woman supporting a wooden yoke on her shoulders, from which hung two pails. While her appearance plainly indicated her object in coming to this particular field, where several beautiful black and white cows patiently awaited her arrival, instinctively the lines came to mind, "Where are you going, my pretty maid?" From her unaffected, self-possessed manner one could easily imagine her to be the original maid whose face was her fortune, "so she said." On requesting our little friend to pose for a picture, her permission was obtained only after we had solemnly promised that it would not be used on postal cards. The evidence of mutual affection existing between the gentle animals which comprised the little herd and the milkmaid illustrated the consideration and devotion of the people of Holland to their faithful dumb servants.

In the course of our journeyings in Holland we frequently observed native women wearing curious metal helmets,

FAMILY LIFE IN HOLLAND

MILADY HAS HER DUTCH UP

Whether this youthful maid is angry at the thought of having her picture taken or whether she is nervous over the prospect of having it appear in the NATIONAL GEOGRAPHIC MAGAZINE may be a debatable question, but at least she knows how to voice her protest in her countenance.

A DUTCH BULB FARM

"From early April, when the hyacinths bloom, down to late June, when the Spanish irises are at their best, the fields hold carnival, and to that carnival all bulbous plants send their choicest flowers. Snow-drops open the ball and crocuses follow, before the elite begin to arrive; hyacinths, narcissa, and tulips succeed; ranunculi, anemones, and peonies come next; the stately Spanish iris brings up the rear. The visitor who goes carefully from one group to another is lost in amazement at the endless variety in form and hue, while if his color sense is developed he experiences a joy that few sights afford. . . . When the fields are all aglow the flowers are plucked and taken in baskets to the barges, which pass out toward the wider waters as though they were the fairy boat of some Charon of the garden world bearing the souls of hyacinths, tulips, and the rest to the enchanted land where they would bloom untouched by time. . . . Endless patience and perseverance are demanded to make bulb-raising a success. Six and seven years are required to bring some bulbs to maturity."—Rensusan. Photo by W. R. Tilton.

which not only entirely covered the hair, but part of the foreheads of the wearers. The hair is laid flat on the head and confined by a closely fitting skullcap. This in turn is entirely hidden by the helmet, which is made of very thin-beaten silver or gold, according to the circumstances of its owner. Over this—one and sometimes two—lace caps are drawn.

DUTCH HEAD-DRESS

In the province of Friesland the wearing of this style of head covering is very general and includes very elaborate ornaments, consisting of a spiral of five or six circles attached to the helmet at each side, near the temples. From the end of the spirals are suspended ear-rings, which remind one of the winkers on a horse's bridle. These are sometimes worn so long as to reach the breast. Although the metal caps often cost hundreds of florins, the possession of an elaborate helmet is not an indication of the wealth or high standing of the owner, since many peasant women deny themselves and save for years to obtain the coveted prize.

While the promenaders on the dike at Vollendam were generally sturdy and healthy in their appearance, the ladies of our party remarked on the flat chests, small waists, and large hips of the Dutch women. The custom of wearing from six to fourteen skirts, which are worn as an indication of wealth, will account for the abnormal appearance of their hips. The contour of many of these women, whose circumference rapidly increased from their closely fitting head covering down to the hem of their fourteenth heavy skirt, was directly the reverse to the recent appearance of some of their European sisters, whose lines, beginning with the washtub hats, gradually diminished down to the hem of their bobble skirt (see pages 26-32).

THE DUTCH BED

The absence of any sort of a bed was to us a surprising omission in the furniture of the first house we visited. On reflecting that possibly it was the custom of the Dutch to sleep on the floor, as it is with the Japanese, the piece of drapery hanging on a side wall was pulled aside, disclosing the secret. A kind of cupboard was built in the wall about 3 feet above the floor and contained all the bedding necessary for the parents and the younger children (see page 20). In some more pretentious houses these openings are further *protected* from fresh air by folding doors.

Such places would be considered unsafe for animals to occupy; but, as the old Dutch housewife reasoned, "The health of the cattle and hogs must be looked after; people can take care of themselves."

Many writers on the Netherlands ascribe the tendency toward tubercular disease among the women to the wearing of metal skullcaps and the excessive weight of the numerous skirts they wear. While both of these conditions may contribute to this result, it seems unnecessary to look beyond their cupboard beds for abundant cause for pulmonary disease. Indeed, the wonder is that any of those who habitually occupy these airless beds escape.

Before the winter sets in, Sunday night is a very busy time with the Vollendamers. At sunset the festivities of the day give way to hurried preparations for the departure of the fleet on another fishing cruise. Before daylight all but six of the several hundred vessels which had crowded the harbor the day before had sailed.

ON MARKEN ISLAND

The little isle of Marken, located about an hour's sail on the Zuyder Zee from Vollendam, comprises about as quaint a portion of the Netherlands as exists. The life and customs of its population, which numbers about one thousand souls, who are Protestants, dates back to an earlier period than does that of Vollendam, and their style of dress is even more peculiar.

The manner of dressing the hair of the women is peculiar to the island. The hair is cut straight across the forehead, leaving a heavy bang just above the eyebrows. On their heads they wear a white cap, trimmed with lace that covers the ears, which is tied under the chin. From under this cap, on each side of the face, emerges a long curl of hair, which swings

and dangles about their shoulders. These stray locks have been appropriately spoken of as "misplaced switches." That the side-tracked locks of these strawberry blondes bore no evidence of the ravages of time was quite noticeable. It was the one feature possessed by the old women of Marken which appeared to have quaffed from the "fountain of perpetual youth."

So satisfied are the people with their little island home that many of them die without ever having seen any other part of the world. The men of Marken, like those of Vollendam, are fishermen—an occupation which at times is extremely hazardous in the stormy waters of the North Sea.

THE DUTCH FISHER-FOLK

As we have visited the little fishing villages in this part of Holland we have been reminded of the many sad tragedies of the sea, whose victims were of those who sailed from these very shores. They departed on their final cruise with the same expectation of returning in due time to their loved ones as the jolly, rollicking sailors we had seen taking leave of their "vrouws" on the dike at Vollendam; and the words of a verse of one of Charles Kingsley's poems were frequenty recalled:

"Three wives sat up in the light-house tower,
And they trimmed the lamps as the sun went down;
They looked at the squall and they looked at the shower,
And the night-rack came rolling up ragged and brown;
But men must work and women must weep,
Though storms be sudden and waters deep,
And the harbor bar be moaning."

The Zuyder Zee was originally an inland lake and covers about 2,000 square miles, or an area of about 30 by 44 miles. In the thirteenth century the North Sea broke through the line of dunes and converted the lake into an arm of the sea. The government for a number of years has had plans under consideration for draining this great expanse of water. The expense was estimated at $75,000,000, and 33 years the time required to accomplish it. But for the present only the northwest section of the work is to be undertaken. The outlay for this part will be $16,000,000.

Investigation has shown that the soil covering this proposed new land now under water is extremely rich and, when drained, will not require fertilizing for 40 or 50 years. To one sailing over these waters, their conversion into gardens and fields appears a stupendous undertaking; but history proves it possible, for although 400 years were required to wrest Flemish Zealand from the sea, by patient, persevering toil it was successfully accomplished.

IN THE PEAT-BOG REGION

Continuing northeast from Marken, we enter the great peat district—the provinces of Drenthe and Groningen. Here thousands of men are engaged cutting, drying, and shipping this valuable turf, which, owing to the scarcity and high cost of coal, is the fuel in general use throughout the Netherlands. The vast stretches of desolate peat moors in Drenthe are inhabited by a type of people said to be quite distinct from other Hollanders.

Living in turf huts, widely separated from each other and having little intercourse with the outside world, they remind one of the old fisherman who, when asked by the tourist, "Have you lived here all your life?" replied, "Not yit." "Well, Captain," the inquirer continued, "What do you do when the long winter nights come?" Thoughtfully, as the old salt seemed to be recalling those lonely hours, he answered, "Oh, I set and think, and sometimes I just set."

THE BULB THAT BURST

In the springtime the flat country near the city of Haarlem, lying a few miles west of Amsterdam, is for the time being the beauty spot of Holland. As far as the eye can reach, the country is carpeted with great patches of tulip, hyacinth, narcissus, and daffodil blossoms in masses of most brilliant colors (see page 22).

During the seventeenth century many of the staid, conservative Dutchmen lost their heads, as well as their fortunes, in a wild speculating craze in these innocent bulbs, which was so wide-spread and se-

Photo by M. L. Millard

ALMOST EVERYTHING IN HOLLAND IS TRANSPORTED OVER ITS NETWORK OF CANALS

Even the mountainous hay-wagons of other lands here give place to the single-masted, flat-bottomed hay-scows, upon which the farmer brings all his product to market and carries supplies back home. The loaded fleet in the picture is tied up at a Dutch hay-market.

vere as to shake the entire nation. Bulbs were dealt in on the exchange in quantities impossible to furnish and in varieties which never existed.

The growth of bulbs is a very important industry to Holland, as from Haarlem the markets of the world obtain their supply.

It is told of Said Pasha, who had a great love for flowers, that he placed an order in Holland for a very choice assortment of these bulbs, for which he paid $5,000. When the bulbs arrived his "Secretary of the Interior," who received them, not knowing of the bulb order, sidetracked them to the kitchen. Soon after their arrival the Pasha was to give an important banquet, and his chief cook, wishing to serve an especial treat, grilled the new variety of onions and served them hot. Evidently as an article of food they did not prove a success, since the only comment the recorder of the incident made of the result was that the Pasha's interest in gardening received a severe body blow.

The two hours' car ride from Amsterdam discloses much characteristic Dutch scenery, which includes many large windmills standing guard like sentinels over the numerous waterway approaches to the great city of Rotterdam. This town, located 14 miles from the North Sea, has been a prominent trade center since the thirteenth century, and is today the most important shipping and commercial city of Holland. Based upon the recent increase of its population, it is predicted that it will become the metropolis of the Netherlands. The push and business ac-

Photo by Walter R. Brown

DUTCH SCHOOL CHILDREN

Photo by John Oliver La Gorce

THREE OLD FISHERMEN OF VOLLENDAM

Many of you who have visited Holland will recall these picturesque old Salts of Vollendam, who will pose for your camera, spin yarns of their terrible experiences on the treacherous North Sea nearly a century ago, or steer you around their quaint little village, as it may suit your fancy. Their fine old rugged faces, transformed by the salt winds of many winters into veritable maps traced on parchment, always attract artists and lovers of the characteristic; but if you let them spin their yarns of the sea for an hour or so, you will go on your way wondering whether all fishermen are liars or if only liars fish.

THE CHILDREN OF MARKEN

The little girls of the Island of Marken, which lies in the Zuyder Zee, are as full of health and fun as the unpampered lives they lead can make them. When they grow up they become the wives of the sturdy fishermen who make Marken famous for its fish.

Photos by Edgar K. Frank

ON THE BEACH AT SCHEVENINGEN

The bath-houses at the Holland seaside resort are more accommodating than those at American resorts. They meet the bathers half way (see page 8)

Photo by Walter R. Brown

DUTCH SCHOOL CHILDREN

Few countries are more insistent than Holland upon the education of her children. Primary public instruction is given to all children and compulsory education is in force. The school age is from 6 to 13. Out of the total number of children of school age 5.3 per cent were not receiving elementary training in 1910.

tivity of the place would seem to indicate the probability of this prediction soon being realized.

If the rating of a nation were based alone upon population, what an insignificant position would be occupied by the Dutch! Still, with a people numbering only a little more than six million and with an area only about one-fourth the size of the State of New York, this little nation ranks third among the countries of the earth in the number of its colonials and fifth among them in the area of its colonies.

Only Great Britain and France have greater colonial populations, and only Great Britain, France, Germany, and Portugal have greater colonial areas. The Dutch rule six times as many people—38 million—outside of Holland as there are within its boundaries, and govern colonies fifteen times as great in area as the mother country.

Measured by the standards of trade, Holland is an important member of the family of nations. With an area no larger than that of Massachusetts and Connecticut, the country is so thickly populated that it has almost as many people living within its boundaries as dwell in all six of the States of New England. In fact, its population is so dense that only Belgium, among all the nations of the earth, outranks it in that regard, and if France could match it she would have ninety-six million people instead of thirty-nine million.

Yet with all that seeming overcrowding and lack of elbow room to gain a livelihood, Holland has imports amounting to $236.40 per capita annually, as compared with $18.41 per capita in the

United States. Its exports amount to $203.69 per capita, as compared with $24.66 for the United States. Of course, a great deal of this is to be accounted for by the amount of international business that passes through Holland, but which neither originates nor ends there.

It is a matter of history that many of the greatest men the world has known, in every branch of art or knowledge, were Dutchmen.

To the world of art Holland gave Rembrandt, Jan Vermeer, and Ruysdael; to the world of navigation and exploration she gave Tasman and Hartog; to the world of theology and philosophy Erasmus and Spinoza. She founded the greatest city in America and called it New Amsterdam, and established trading posts on the sites of what are now many leading American cities. Everywhere and in every line of human endeavor Holland has a history creditable to herself and worthy of the admiration of her friends.

THE CITY OF JACQUELINE

By Florence Craig Albrecht

Illustrations from Photographs by Emil Poole Albrecht

IT WAS Motley who sent us there. "Little need to tell the story of fair and ill-starred Jacqueline," he said. But we thought that there was much need, for we didn't know it and Jacqueline was such an invitingly romantic name. The "Joan of Arc of the Netherlands" and various other charming things he called her, while still evading her history.

That epitome of all wisdom, the Encyclopedia Britannica, was quite "mum" on the subject. Delving through stacks of old books for any crumbs of information, flavored with frequent disappointments, was not inviting on summer days, so we sought the elusive lady upon her native soil. Perhaps had we known at the start that the lovely Jacqueline had had four husbands before she was thirty, and that her fellow-countrymen called her Jacoba, we might not have been so keen on the quest.

There is little romance about Jacoba or four husbands. Jacqueline's historians are a little divided as to the responsibility for the many misfortunes that beset her short life, and were it not that her early death draws a veil of pity over her career, opinion of it would be expressed more sharply.

Countess of Holland and Zeeland by birthright some five centuries ago, there is scarcely a town of note in either province which has no souvenir, sad or glad, of this ill-fated lady. The "Quest of Jacqueline" took us up and down the land from pretty Hoorn, the town of many gables, to charming Middelburg, ringed round an abbey's walls.

THE STORY OF JACQUELINE

In Holland, Jacqueline comes in for much sharp criticism. Hoorn tells a story of her, not in the least pretty, but none the less true, of a young man done to death at her command because he had ventured regretful comment upon some of her wanderings deserving of harsher censure.

And yet such is the romance which veils a female ruler, above all if she be young, pretty, and charming, that in spite of Jacqueline's vagaries and husbands she is yet enshrined loyally in Holland hearts, while in Zeeland, her best-beloved home, she dwells half saint, half martyr in loving memory.

She stands in carven stone upon Middelburg's charming town hall. She looks out over your head with far unseeing eyes, and such is her distraction one may venture to stare rudely and remark that she is neither so lovely nor so fascinating as one had expected her to be. Jacoba is written upon her pedestal, Jacoba it is who stands there; but the bewildering, elusive Jacqueline, who turned men's heads and hearts with her white fingers,

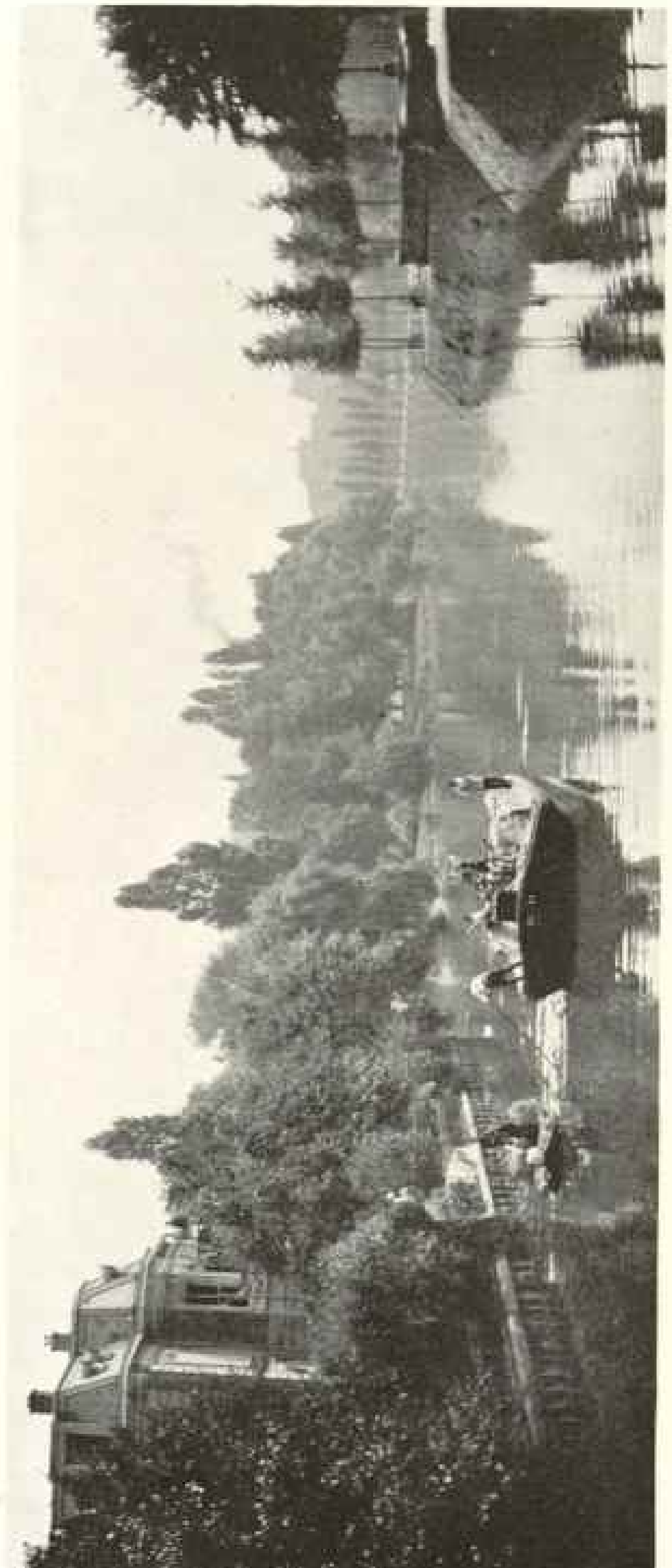


Photo by J. A. Walker

A WATER BOULEVARD IN AMSTERDAM

More beautiful in the eyes of many than the canals of Venice, their tree-covered and green-bordered banks than the piled-pile restrained canals of Venice, there are no city highways in the world as restful as the broad water boulevards through the better residential and suburban parts of Amsterdam.

who ruled with a glance from her bewitching eyes—Jacqueline, who loved and suffered and died before her youth was gone, cannot be done in paint or stone, but lives in imagination alone.

Here at Middelburg we hear: "Yes, that is our Jacoba; but Ter Goes, over there on Zuid-Beveland, was her very own city; she did not live here, you know." No, we didn't know; but we keep very quiet until a train takes us the 15 miles to Ter Goes, where, I am ashamed to confess it, but in the land of the Pilgrims the truth must out, we speedily forgot all about Jacqueline.

ON EVERY HAND ARE ROSY FACES

We left the train with good intentions. We all know what place is paved with good intentions unfulfilled. I hope its pavements are no harder to unaccustomed feet than those of Ter Goes, where our feet grew tired long before we did. It was Tuesday — market day — and the produce of Beveland's meadows and the tenants of her farms were gathered in her streets. It is very difficult to concentrate one's thoughts upon any lady — fair, lovely, unfortunate countess

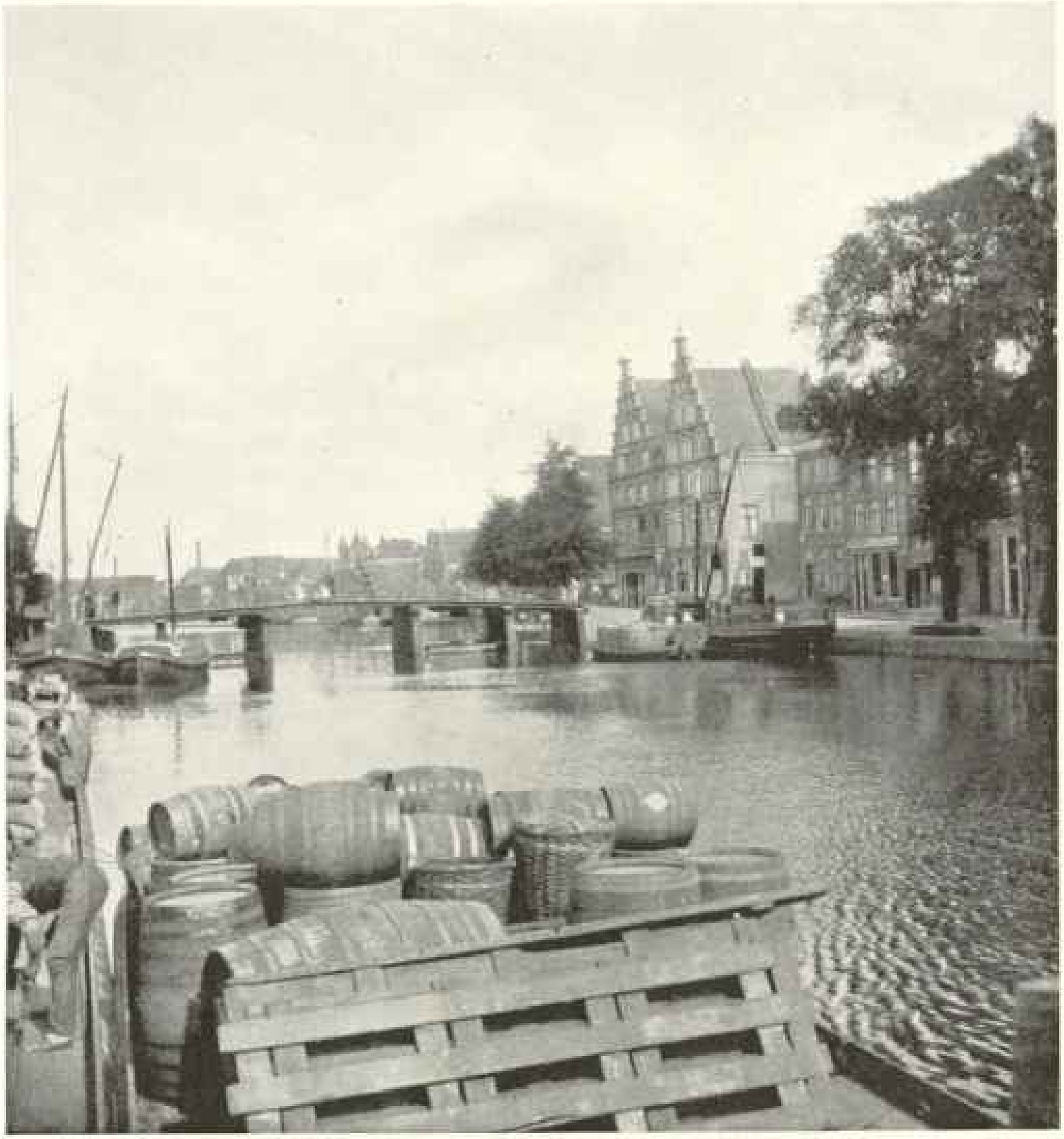


Photo by M. L. Millard

SCENE ON THE SPAARNE: HAARLEM, HOLLAND

There is a large bend in the Spaarne as it flows through Haarlem, the city which is the center of the Dutch bulb trade. The gabled warehouses along the river tell of the natural love of beauty that dwells in the Dutch heart.

though she be—who has been dead 500 years, when on every hand are rosy faces smiling at one from the most novel frame of wide-spreading lace cap and golden pins.

Of course we had industriously "read up" the town's history. I do not know how Goes or Ter Goes received its name, but when the natives say it, it sounds like a Scotchman saying "Hoose," for the Zeelander and Hollander frequently makes his "g" an "h." "Goose" we should call it; the "oe" has the sound of our double "oo." But I am glad the conductor shouted "Ter Hoose," not "Goose," in my window, although for a traveler to add sensitive feelings to his luggage is ridiculous.

In any event, there was a castle here some six or seven centuries ago, and

Photo by Emil P. Albrecht

ST. NICHOLAS' CHURCH AND OLD AMSTERDAM

St. Nicholas' Church is a Roman Catholic edifice in the heart of the business district of Amsterdam and close to the great central railway station. Its two towers and central dome occupy a conspicuous place in the city's sky-line. The Warmoes Straat and the Zeedyk, two streets leading from the church plaza, are popular resorts for the masses in the evenings.

Photo by Emil P. Albrecht

THE INNER HARBOR NEAR THE RAILROAD STATION: AMSTERDAM

So numerous are the waterways that the map of Amsterdam resembles a spider's web in form; and when one inquires the distance to a certain point the reply is, "It is so many canals," in the direction indicated. The city is built on piles connecting some ninety islands and contains more than three hundred and fifty bridges.

Photo by Emil P. Albrecht

IN THE HEART OF OLD AMSTERDAM

Amsterdam has had a striking history. Once a member of the Hanseatic League, it came to be the dominating city of western Europe following the Spanish war, at the close of the sixteenth century, but its trade was nearly annihilated by Napoleon's continental blockade. There was no revival in business until the completion of the North Holland Canal in 1876. The houses of Amsterdam are built on piles, which led Erasmus of Rotterdam to remark that he knew a city whose inhabitants dwelt on the tops of trees like rooks.

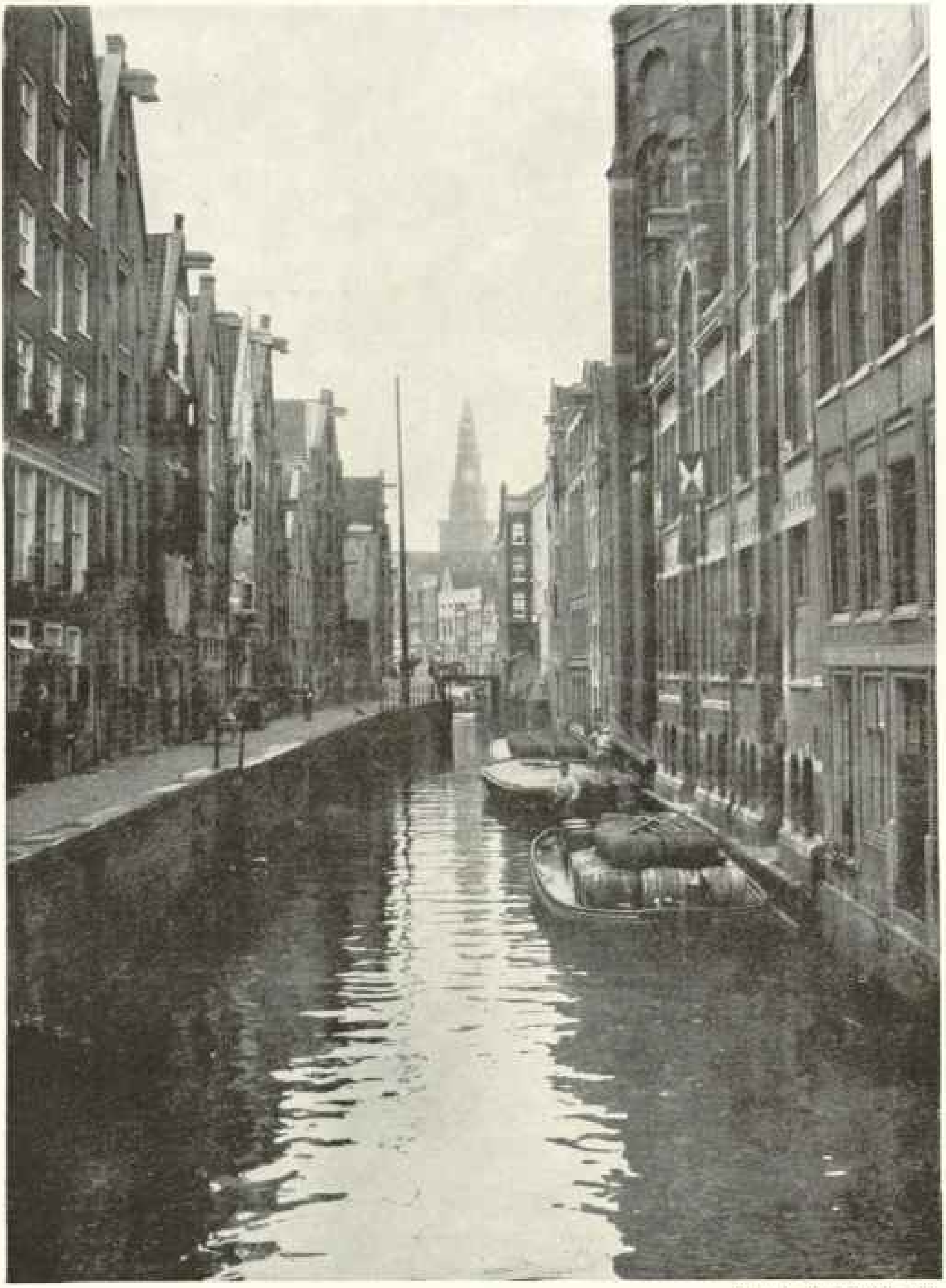


Photo by Emil P. Albrecht

WAREHOUSES IN OLD AMSTERDAM

Amsterdam is now one of the leading commercial cities of Europe and, as the seat of the Bank of Netherlands, wields a tremendous power in the financial world. Between 2,000 and 3,000 steamers annually enter and clear its harbor. Its industries include shipbuilding, sugar refining, candle-making, the fabrication of machinery, and the polishing of diamonds. In the latter industry there are now more than seventy mills, employing in the aggregate about 10,000 workmen.

PILING FRESH CHEESES IN READINESS FOR THE WEEKLY MARKET: ALKMAAR

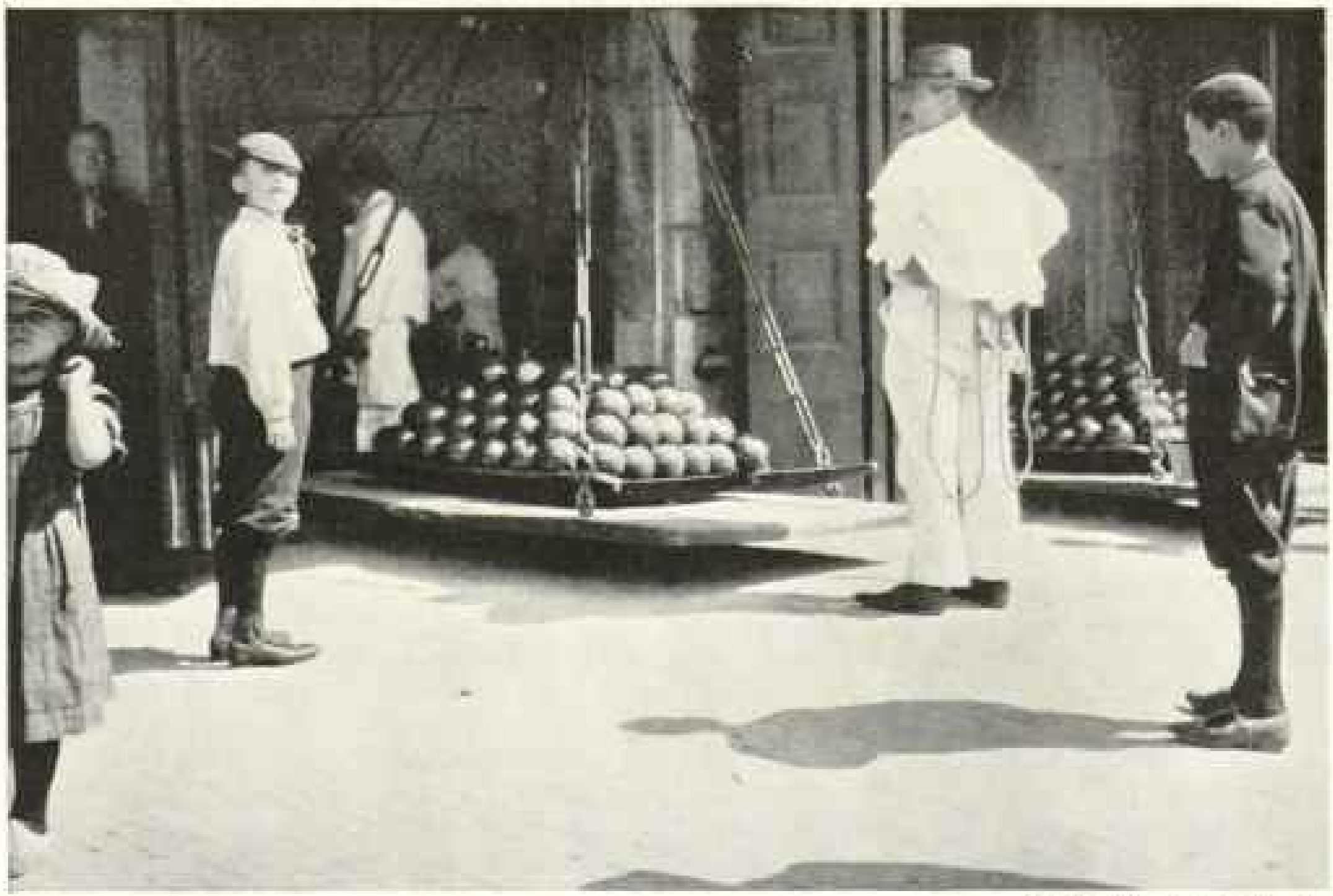
Brought by boats on the canals from neighboring farms, the golden yellow spheres are spread out in the market for inspection and test by buyers representing the large dealers. After the sale they are taken to the purchasers' warehouses, placed on racks to dry and ripen before they receive their familiar coat of red, and are packed for shipment to all parts of the world (see page 12).

Photos by Emil P. Albrecht

THE FISHERWOMEN COMING INTO MIDDELBURG FROM VLISSINGEN (FLUSHING)

CARRYING A TRAY OF CHEESES TO THE SCALES TO BE WEIGHED

As soon as a lot of cheeses have been sold, the clerk of the market is notified and he designates a weigher. Each set of scales has its own porters, who wear hatbands corresponding in color to the scales, and whose trays are painted the same color, all for identification purposes. Settlements are made through the market clerk.



Photos by Emil P. Albrecht

WEIGHING CHEESES

A tray will be piled with 100 to 120 cheeses and weighs several hundred pounds. After weighing, the porters carry the trays to the waiting wagon or boat of the purchaser.

Photo by Emil P. Albrecht

WATCHING JUGGLERS IN THE MARKET-PLACE: TER GOES

Over their bodices the maidens of Ter Goes wear gay kerchiefs folded in prescribed and curious lines, and the caps which cover their shapely heads are of lace plaited into wide-spreading wings.

about the castle walls grew up a little town. This castle was called the Slot van Ostende. Jacoba's ancestor built it, and to its shelter she returned when armies, husbands, powers, all were gone, to sit beneath her mulberry-tree and dream love-dreams of the man she would marry if she dared. And, in spite of solemn promise and loss of lands, she did dare. But that story has little to do with Ter Goes.

Jacoba loved Goes and wished to wall it and make it strong. In her time the beautiful Church of St. Mary Magdalene, the "finest in Zeeland today," was consecrated, its huge walls towering beside her palace above the roofs of the little town. Its quaint lantern peeped invitingly through the trees as we neared the town; its high roof and beautiful windows promised lovely vistas within. Its interior was divided into two churches we knew well. It had been robbed of its saintly name and rebaptized "the Reformed Church," or, more simply yet, "the Great Church," in the centuries of Protestant worship; but those were its outside names alone. Within were a mighty and famous organ and the old choir, possessing renowned tombstones.

We meant to learn precisely why the choir was called the *wandelkerk*, for in our vocabulary *wandel* meant walk, and very plainly the huge church had stood very still for centuries. Did the other congregation walk in the apse and study tombstones when the fire in the *stoofjes* burned low and the preacher was still in full blast? Do you know what a *stoofje* is? A little perforated wooden box containing briquets of peat to keep one's toes from being frost-bitten on the cold stone pavements in churches guiltless of heating apparatus in a land of ice, frost, and lengthy sermons. A good sexton is he and a far-seeing man who can accurately measure the probable length of the coming discourse in these coals of fire.

JACQUELINE'S MULBERRY-TREE

Of the castle there are but a few inconspicuous remnants, to be found with difficulty upon market days in the crowded courtyard of the rather shabby little inn which bears its name. In the maze of wagons, chaises, big, high-stepping horses and velvet-jacketed farmers you may perhaps find some one who will unlock for you a little door in the corner of the wall and disclose a tiny court almost filled by a decrepit tree.

Age and weather have split its trunk in many deep gashes; its limbs bend almost to the ground with weariness and years. Yet even this summer its foliage was youthfully fresh and dense; its twigs

Photo by Emil P. Albrecht

IN THE MARKET-PLACE: TER GOES

hung thick with fruit. Like Jacqueline's story, Jacqueline's tree seems immortal and Goes does its best to keep both green. The poor old trunk, with its clefts and crannies, is carefully covered to protect it from weather. It has a patched-up look, as of a man with limbs in splints and on crutches; but feeble as it is, Goes rejoices in its possession, for is it not the tree which Jacqueline planted, and beneath whose shade she sat watching and waiting the coming of the knight who should set her free.

Just how both tales can be credited is a little difficult. Jacqueline must have planted the tree in extreme infancy if she sat beneath its shade within 30 years; but then mulberry-trees grow rapidly, Zeeland soil is fertile, and why spoil a good story with too many questions?

The knight came and she married him; but the fairy tale closes there, for the proper ending, "and they lived happily ever after," is wanting. "A bad promise is better broken than kept," the fair lady thought, when she married without asking consent of that cousin who had extorted the pledge to do so and to whom, as a consequence, she forfeited her lands; but the broken promise and the new husband did not bring the power or peace she craved, and freedom from sad memories was not hers for the asking. Poor disappointed Jacqueline found it only far from her dear Goes, in her tomb at The Hague.

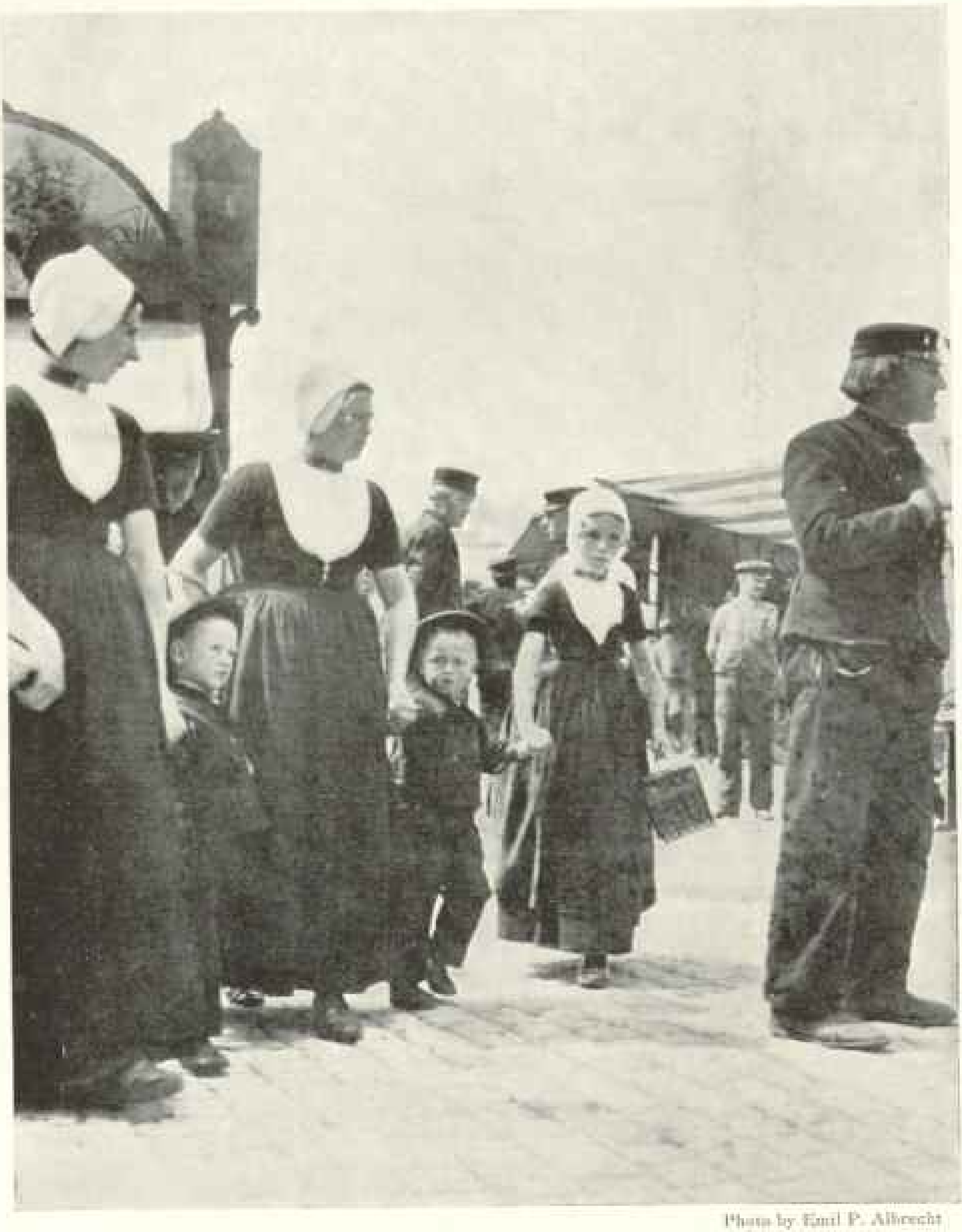


Photo by Emil P. Albrecht

COUNTRY PEOPLE SEEING THE FAIR: ALL IN A ROW, AS USUAL

The *boers* (farmers), both masculine and feminine, old and young, are fond of going hand in hand, spread out from side to side of the street, giving way to let others pass, but holding tightly to their chain as if afraid of being lost if they broke it.

Photo by Emil P. Albrecht

CHINA SALE IN THE MARKET ; TER GOES

The serving-maids wear a work-a-day apron of plaid gingham, but the mistress wears one of fine black sateen

Photos by Emil P. Albrecht

THE OLD AND THE NEW IN TER GOES

There cannot be a moment's doubt as to which costume is the most pleasing to the visitor's eye, although the wearers of each style seem entirely satisfied with themselves

Photo by Emil P. Albrecht

MOTHER AND DAUGHTERS SHOPPING

The mulberry-tree was a bit saddening, so we hurried back to the market. Besides its church and town-hall, Goes has few buildings of great note save a quaint *hofje*, where live numerous old men and women in tiny houses ranged about a flower-filled court; but it has curious, winding streets filled on market days with picturesque shoppers and a very pretty promenade upon the site of its old walls.

Its market is a general one. The farmers and their wives bring in the products of their meadows; the peddlers set up booths or spread their wares upon the stones of the market-place to catch the *boer's* (farmer's) or *boerin's* eye. It is not the cups and saucers, the bits of lace and gay chintzes, the ropes and twine, the cutlery or picture postal cards, the pigs, poultry, butter, eggs, and chickens, which rivet our attention, but the buyers and sellers, whose quaint costumes seem better fitted to a comic opera than a very material scene.

A PARADISE OF QUAINT COSTUMES

Zeeland is a paradise of quaint costumes. Every island, almost every town, once had its own distinctive dress, and many still retain it.

The butter market at Middelburg has a pretty setting. The wagons and chaises roll up to the two gateways in endless procession, and the fair Walcheren dames descend with much shaking of voluminous skirts and aprons, much patting of caps and adjusting of coral necklaces, to set their baskets of golden butter and pearly eggs in even rows upon the long benches within before trotting off to the inevitable shopping.

The product of dairy and chicken-coop belongs exclusively to the farmers' wives in Zeeland. It is they who do the selling, they who spend the earnings. You may find the men at the grain market; on the corners where pigs, calves, or sheep are for sale; in the cafés about the market square smoking and drinking with their fellows, and upon the days of great cattle markets very busy indeed driving shrewd bargains.

But the butter market is left to their dames. When the farmer (*boer*) has lifted down the last basket to his buxom wife or daughters, his duties there are

MOTHER AND DAUGHTER: TER GOES

Photos by Emil P. Albrecht

WEEDING THE STREET: MIDDELBURG

In the damp, cool shadow of tree-bordered canals grass springs readily between the stones wherever much traffic or constant watchfulness gives it an opportunity. A frequent penalty for minor offenders against law and order is the weeding of a certain tract of quay or street. Each is provided with a wooden stool and a stout knife and is expected to "hitch" himself or herself along the straight lines of stones, digging up faithfully every green leaf in sight until the quay is clean or the time worked out. In this case all the offenders are women. The man seated by the tree is a guard watching them and their work.

dome. He drives away to stable his prized horse and to attend to his own affairs.

The butter market is ready for business about 1 o'clock. If you saunter in then through the iron gateway, now standing hospitably wide to invite buyers, you will find the front row of benches occupied around all three sides of the arcade with close-set rows of heavy baskets and the back row by the wall with a hundred or more rosy farmers' wives and daughters, dainty as the proverbial new pin, in glistening white caps, gold spirals, coral necklaces, many finger-rings, and best black aprons over the second-best gown. The *very* best belongs to festivals and kermis.

The work-a-day apron is of plaid gingham; you will see it upon the serving-maids who come from various houses to purchase the week's supply of fresh butter. When the farmer's wife comes to town she replaces it by one of black sateen or "farmer's satin," almost as long and full as her skirts and close shirred at the waist in many fine, even rows. Her bodice is black likewise: but a shield-shaped tucker is frequently of gay colors, and the sleeve is but an apology, ending far above the elbow in a broad and very tight black velvet band.

A PRETTY PICTURE

The gay frontispiece and the bare arms give an air of gaiety to the somber costume, and the upturned gold spirals at each temple are fine hangers for many broad pearl-tipped pendants, which quite belie the demure primness of the close white cap.

They are not so demure after all, these dainty little dames who trip so swiftly and lightly from house to house, from shop to shop, from booth to booth, in the market-place. They are mischievous and roguish, despite the somewhat puritanical air lent by their garb, and quick at repartee and banter as our friend from Cork, whom in vivacity they somewhat resemble.

M. Havard in his inimitable book on Zeeland records the answers of the saucy girl whose mother "knew her name before she did," and 70 years ago Hildebrand, whose pictures of Dutch life are so truthfully charming, must have known her ancestress, for he tells the same story. Her daughters today might echo, "Ask mother, she knew it first," if you insist upon inquiring her name. She has no objection to your knowing it, but much pleasure in teasing you.

You will find her perhaps in the market-place with her own small daughter or son beside her. There is always room for a chubby boy or girl among the baskets when mother comes to town in Walcheren. You miss them in Zuid-Beveland, where she frequently rides into market upon a bicycle. They are so funny—so cunning, we would say—these little replicas in miniature of their parents.

A tiny maid of four, a wee laddie unable to speak plainly, wear precisely the same costume as mother or father—full, long, black skirts, white cap, tiny gold spiral, coral beads, and aprons for one; black cloth or velvet trousers and jacket, much adorned with silver buttons, silver-buckled shoes, and queer black hat for the other.

You may have seen them buying sweeties or fruit in the market-place, eyeing the coveted baubles which kermis brings, or waiting patiently while mother bargains for a new tea-pot; and if you look closely you will meet them again here in the butter market, wedged in between the chubby mothers and half-hidden by the voluminous skirts. Dear little round baby faces looking out from a frame of quaint old-worldly dress!

THE BUTTER MARKET

When market begins the wrappings are folded back from the well-filled baskets; first a print cover to keep the white one fresh and clean, then snowy white damask, and beneath it rolls of golden butter wrapped in fresh green leaves, or dozens of big pinky-white eggs translucent in their freshness.

The buyers come in numbers, crowding along the rows; the bargaining is brisk and keen; the big-headed bag, with its rich silver clasps, which so many of the country women wear swinging from the waistband, grows heavy with coin, and a roll of bills is perhaps tucked away in the huge pocket hidden beneath the flowing skirt.

Photos by Emil P. Albrecht

LINGERING FOR A MORNING GOSSIP

The Island of Walcheren, at whose center Middelburg lies, is very fertile, its soil and climate being especially suitable to the growth of small fruits and vegetables. Queen Elizabeth, three centuries ago,

BOERS (FARMERS) OF WALCHEREN IN THE MARKET-PLACE AT MIDDELBURG

spoke of it as her "fair kitchen garden," and fair and fruitful it is today, although no longer hers.

Photos by Emil P. Albrecht

WITHIN THE ABBEY WALLS: MIDDELBURG

Our milkmaid coming in the early morning. All Middelburg is served with milk in this way

SHOPPING AFTER THE BUTTER AND EGGS ARE SOLD: MIDDELBURG

Observe the tightness of sleeve (see page 49)

Photos by Emil P. Albrecht

CLEAR THE TRACK: TER GOES

"How those Protestant ladies with the wide-spreading wind-scoops of caps can ride so merrily and so swiftly is beyond me to tell. Very rarely one "ducks" her head or trims her sails to the wind."

BROTHERS: MIDDELBURG

Note that the left-hand one holds the butt of a cigar quite nonchalantly, although he is certainly not more than eight years old. I have seen a child of four with a cigar, but only once, and I doubt if it is common. Undoubtedly, however, the boys learn to smoke very young and continue it incessantly.

The Walcheren farmer is comfortably well-to-do, even rich; he can easily afford to let his wife have the butter money and is quite sure she will use it wisely. There is always ample for the children to have a sweetie or toy, for fritters and waffles, and all the shows at kermis.

If you have not seen them arrive, the descent from the high wagon, the unpinning of skirts, the shaking and settling of ruffled plumage, it is fun to see them depart, when the scene repeats itself in reverse order. The tiny baby pats and smooths and settles its many wide skirts, adjusts its beads, and feels its gold spirals, to be quite sure all are as they ought to be, with as much care as its mother.

It must be confessed that this anxiety of dress is much more developed in baby girls than boys. Once or twice I have met a small man manifestly proud of his many buttons or his new cap, but he has no concern or care for them except that his cap shall be tilted at just father's angle over one eye. Perhaps it is only another example of masculine conceit, this seeming indifference. The little *boer* (country boy) may think that he cannot fail to look well under any circumstances, while his sister *simply must know* that her cap is straight, her skirt even and unwrinkled, to be happy.

Somehow in Zeeland one is always coming back to Middelburg. It sits serene in the center of its green island and draws you back like a loadstone whenever you stray beyond the sound of its merry bells.

At Ter Goes the butter market is also ruled by the ladies. It also is held in an enclosure and its gate opens upon the market-place. Without it the men are grouped in numbers, but within the dames reign supreme. There is no great linden to cast picturesque shadows nor to filter the sunshine which touches a gold pendant or coral bead now and then as with living fire. There is not the same cool, green shadow to make yellower the golden butter or whiter the pearly eggs; but the matrons and maids who buy and sell there are far more startling to stranger eyes than the Walcheren beauties.

Over their bodices gay kerchiefs are folded in prescribed and curious lines, and the caps which cover their shapely heads are of lace plaited into widespreading wings. There is always a small close cap which fits the heads snugly, disclosing the hair only at the forehead, where it rolls back in a tiny smooth puff.

THE STYLE OF CAP DENOTES THE RELIGION

From beneath this cap jut shiny gold plates like window mirrors, secured firmly in place by huge gold pins. Above this is worn the lace cap, coming down smooth and straight to end squarely across the shoulders for a Catholic woman, gathered or plaited to flare widely and coquettishly for the woman whose faith is Calvinistic.

Their fathers or husbands also mark belief by head-dress. The Protestant wears his beaver hat with brim rolled up the entire round; the Catholic turns his down in front to form a visor.

The women's kerchiefs also once denoted their church by their color, but that, I believe, is no longer true. The men do not now wear knickerbockers, but the long, baggy trousers are still held at the waistband with four huge silver plates, as of old, and the high vest, the short-cut jacket, boast their rows of silver filagree buttons; a pair of gold ones clasp the shirt at the throat.

As in Walcheren, the women's sleeves end almost before they begin in the tightest of black velvet bands, which make the plump, sunburned arms appear yet redder and fatter; but I seem to have noticed that the elderly ladies go in for a bit more of comfort, less of fashion. One could slip a finger easily beneath their velvet bands, although it would not be wise to try it.

A JOLLY CROWD

If there is nothing much gayer, more unreal, theatrical in effect than these oddly-capped girls scurrying about the market-place, with their small bags and baskets, laughing, giggling (they *do* giggle in Dutch as well as English; their verb is *giggelen*, but they pronounce it "hihhelen," with all h's aspirated as I cannot), shopping for picture postal cards, tripping over the twine which the rope-seller has led quite across the square in his endeavors to prove how much is in a ball, scolding, jesting, bargaining with

Photo by Emil P. Albrecht

PROTESTANT GIRLS IN TER GOES

The religious faith of the peasants is indicated by their head-dress. The lace cap comes down smooth and straight, ending squarely across the shoulders for a Catholic, but gathered or plaited to flare widely and coquettishly for the woman whose faith is Carvinistic. Beneath this cap jut shining gold plates like window-mirrors, securely held in place by huge gold pins. The carefully folded kerchiefs, the long black aprons, the short-sleeved bodice with the tight velvet bands around the arms, and the coral necklace complete the costume.

Photo by Emil P. Albrecht

GOING HOME FROM MARKET; TER GOES

Judging from their smiling faces, something pleasant or amusing must have happened to these two young women while at market

Photo by Emil P. Albrecht

ONE OF ENKHUISEN'S MANY GABLED HOUSES OF THE SEVENTEENTH CENTURY

The brick-work is as fine as can be found anywhere. The courses of stone are well and elaborately carved. Enkhuisen is one of the so-called "Dead Cities of the Zuyder Zee," but of recent years has shown considerable awakening.

Photo by Emil P. Albrecht

THE ORPHANAGE: ENKHUISEN

A fine gabled building of 1615. Over the sculptured doorway are carved figures of a boy and girl in the uniform provided for them at that time. In most of the cities of Holland the costumes provided for cities' wards have never been changed; often each half is of a different color.

Photo by Emil P. Albrecht

THE TOWN HALL, MIDDELBURG, ONE OF THE MOST CHARMING SECULAR BUILDINGS IN THE NETHERLANDS

It was begun in the sixteenth century, but was not completed until the eighteenth. The tower, which is 180 feet high, dates from 1507-13, and the façade upon the market-place is of the same epoch, both the work of Ant. Keldermans the Younger. This façade is adorned with twenty-four statues of counts and countesses of Holland and Zeeland. Under the western end, obscured in this picture by scaffolding, is the ancient Gothic meat market.

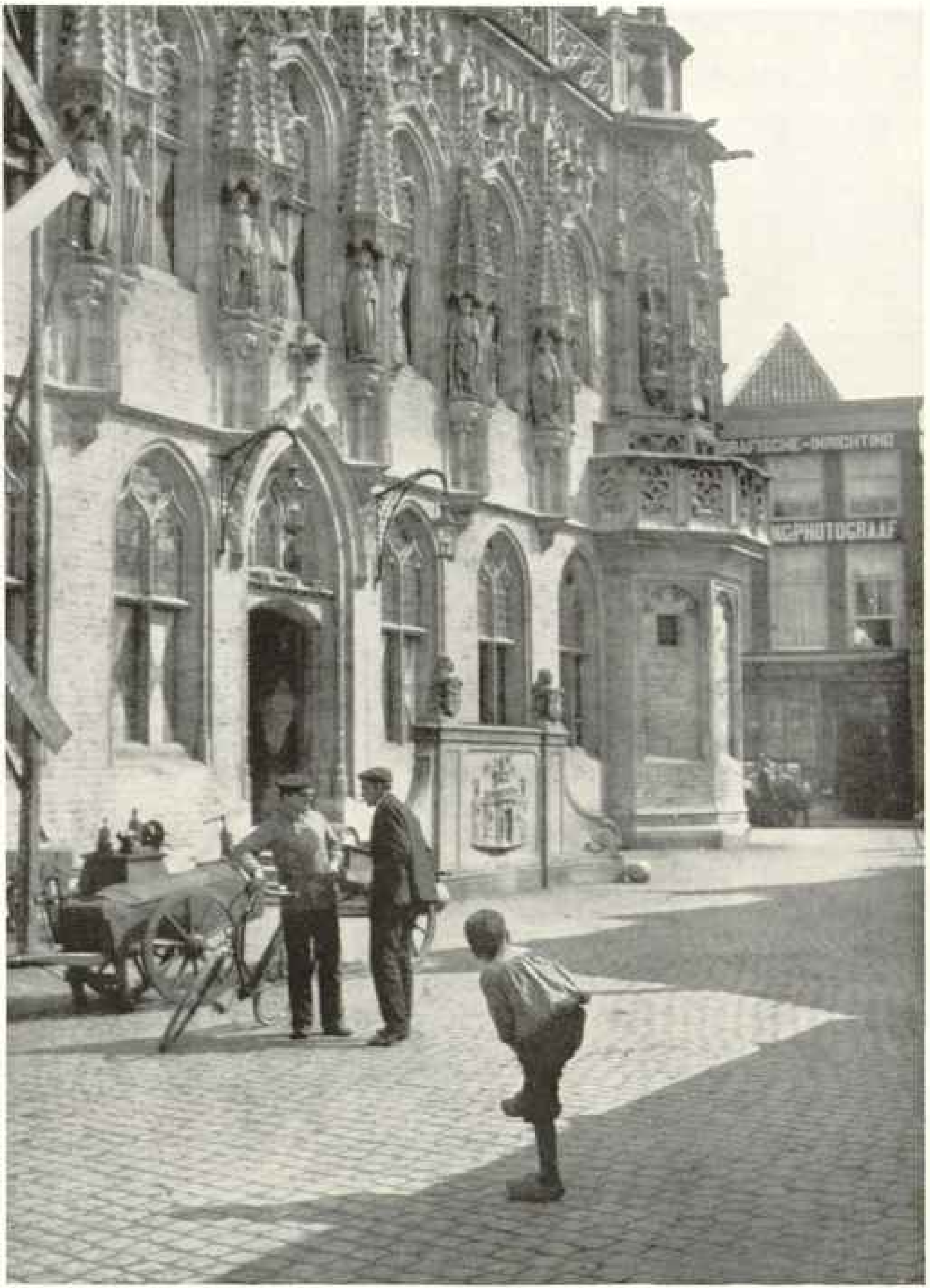


Photo by Emil P. Albrecht

SCENE IN FRONT OF THE TOWN HALL, MIDDELBURG

Two dozen figures of former counts and countesses of Holland and Zeeland adorn its façade, among them that of Jacqueline

zest and energy, there is certainly nothing much funnier than to stand upon the bridge over the old moat and watch them mount their bicycles and ride away home.

In the courtyard of the old inn there are many chaises and wagons, but they would not contain half nor quarter the marketers of a Tuesday morning. In they come by twos and threes and fours upon their wheels; a hundred bicycles at least were stacked in rows beside one little café. Carts and wagons bring in the market supplies.

Under the tall old trees about the church you will find them reloading at noonday, and a miscellaneous load it is that they take. The butter, eggs, and poultry which they brought are all sold to the townsfolk. Back to the various farms along their road they are taking the farmers' purchases—crockery, hardware, farm tools, a lamp, a crate of tiny pigs, a pair of fancy chickens, a new table, a bolt of muslin, shoes, an alarm-clock (a waker-up clock, our Dutch friends would say), groceries—anything which towns supply and farms lack.

The freight wagon commissioned to deliver his packages, the farmer may mount his high chaise or his bicycle and ride off, care and burden free. The roads are good, tree-shaded, dust-free, and level; the only enemy of the wheelman in Zeeland is the wind, which bloweth where and when it listeth, which is pretty much all the time and directly in his face.

How those Protestant ladies, with the wide-spreading wind-scoops of caps, can ride so merrily and so swiftly is beyond me to tell. Very rarely one "ducks" her head or trims her sails to the wind. Over the bridge they come in a long procession, heads up, eyes bright, gold plates gleaming, coral beads glowing, gay kerchiefs unruffled, full skirts falling smoothly, black-shod feet pedaling steadily, trim, orderly, and merry, as if rehearsing for some performance, not riding home from a busy morning to a busier afternoon.

The men ride a little more solemnly than the girls; or is it their black clothing which gives them that grave aspect? There is no "scorching," no ducking low over down-turned handle-bars; no high gears; the bicycle in the Netherlands is not a plaything or a race-horse; it is a useful servant. There are numerous motor-cycles, but the automobile has not yet come to dwell in Zeeland.

A PROGRESSIVE PEOPLE

The Zeeland farmer takes kindly to progress, however, in spite of his conservatism in the matter of costume. American farm machinery stands in many a farmyard; the quick adoption of bicycle and alarm-clock, the constant use of tram-car and telephone give proof of this.

Jacqueline may have seen lace caps and coral beads, who knows? But certainly she never saw a bicycle. Look once more at her as she stands above Middelburg market. She would not seem out of place in that costume in Goes today, amid all these oddly-clad maids and matrons; one might even fancy her mounting that tall black chaise, although she would probably prefer a well-cushioned saddle or pillion. High enthroned in a great motor-car, our lady fair might even look comfortable and imposing, but mounted upon a bicycle—strangle the thought ere it chokes us with laughter.

Let us return, then, to Middelburg filled with gay memories of sunshine and laughter. Some gray day when there is no market to distract, when Goes is quiet and sleepy and heavy with dreams of her past, we shall return to sit beside Jacqueline's mulberry-tree, read once more the old poet's halting but pathetic lines which in such small compass embrace her whole short life:

"Four times in marriage sweet love me did give,
Yet not through me shall my race grow or live.
Gorinchem from Arkel I took at fearful cost,
And in one day three thousand English lost.
From prison cell my husband dear to save,
I all my lands to Burgundy's Duke gave.
Ten years I ruled distressed; now, in one tomb
With my ancestors, content I have found room."

SOME PERSONAL EXPERIENCES WITH EARTHQUAKES

By Rear Admiral L. G. Billings, U. S. Navy, Retired

THERE is no natural phenomenon more deeply interesting and yet so little understood as the seismic disturbances which have from earliest history devasted the earth and carried terror and dismay into the hearts of all survivors.

Up to 1903, it is computed by an eminent scientist, Compte de Balloré, there had been 159,782 recorded earthquakes. Of later years, when more accurate records have been kept, they have averaged about 60 per annum. There is comfort to the dwellers in most of the world to know that 94 per cent of recorded shocks have occurred in two narrow, well-defined belts—one called the Mediterranean, with 5.5 per cent to its credit, and, the other, the Circum-Pacific, with 41 per cent—while the remainder of the world has only 6 per cent, widely distributed.

The United States has been singularly free from recorded seismic disturbance, perhaps the most disastrous being in 1811, when a very severe shock occurred in the Mississippi Valley south of the Ohio, which was felt in New York in one direction and in the West Indies in another. This earthquake changed the face of the earth. A vast extent of land was sunk, lakes were formed, and even the course of the Mississippi River was obstructed for a time (see page 67).

Most of the earthquakes occurring of late years can hardly be classed with the great ones of history, nearly all of the destruction being caused by uncontrolable fires. In the more stable zones long periods may elapse between shocks, as, for instance, in Kingston, Jamaica, 215 years intervened.

While the Panama Canal is not situated in the earthquake zone proper, it has experienced numerous shocks, though none in historic times have been fatal.

THE CAUSE OF EARTHQUAKES

The cause of earthquakes and volcanoes is an elusive problem, not yet settled to the satisfaction of the scientist. Tremors of the earth may be caused by many things. The explosion of mines, falling in of caves, slipping of rock strata, and many other movements of the earth may cause them; but for the great shocks which have recurred almost since the history of the world began we must look further.

For ages theories have been evolved, and, though most of them have received the earnest consideration of our modern scientists, they seem to be advanced only to be combated and denied; so that, after all, we must confess to the humiliating fact that we know very little about the cause of earthquakes.

Though many times there seem to be an intimate connection between earthquakes and volcanoes, the law regarding them has not been established. Some remarkable coincidences have been observed in late years. The terrible cataclysm of Mount Pelee, which, on May 8, 1902, almost instantly killed 30,000 inhabitants, was preceded by the earthquake which in January and April of the same year wrecked a number of cities in Mexico and Guatemala. The distance between these points is at least 2,000 miles, showing how deep-seated must have been the disturbance, if, as has been suggested, there was communication between them. The great San Francisco earthquake was preceded only two days by one of the most violent eruptions of Vesuvius recorded in many years.

THE BEHAVIOR OF BOGOSLOF

It is also a significant fact that the fuming island off the coast of Alaska, called Bogoslof No. 3, appeared at almost the same time. A revenue cutter, visiting this island, was astonished to see that the mountain, or hill, some 400 feet high, on the island, had disappeared, and in its place a bay had been formed. Soundings showed a depth of from 8 to 25 fathoms of water.

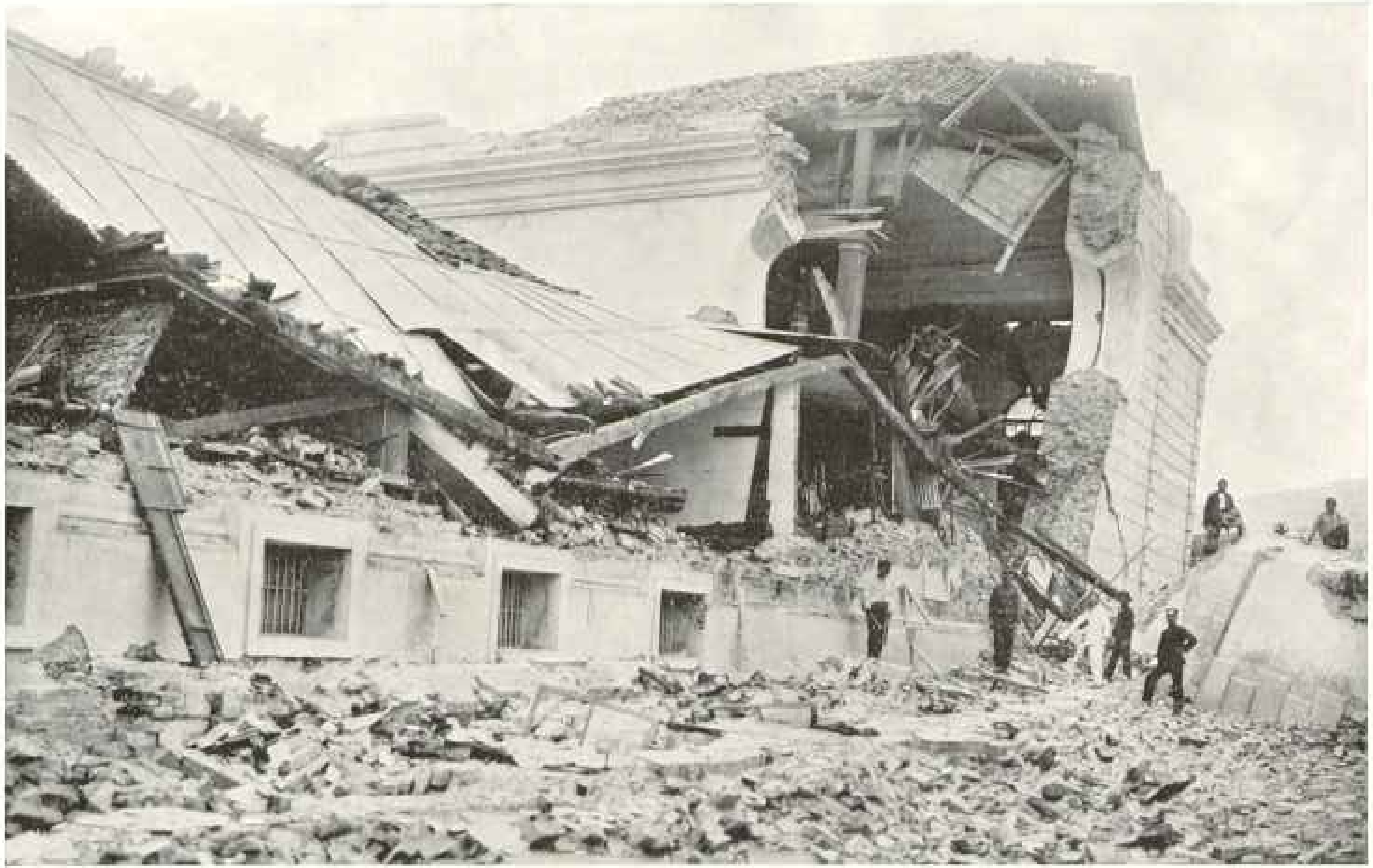


Photo from Admiral F. Singer, U. S. Navy

THE CHURCH OF LA DOLOROSA WRECKED BY THE EARTHQUAKE: CARTAGO, COSTA RICA

The same earthquake that destroyed this church razed to the ground the beautiful peace palace built for Central America by Andrew Carnegie, and opened many graves in Cartago's cemeteries. Cartago is only about a hundred miles from the point where it was proposed to construct some of the most important regulating works of the Nicaragua Canal (see "Costa Rica—Vulcan's Smithy," by Henry Pittier, NATIONAL GEOGRAPHIC MAGAZINE, June, 1910).

Nor is that the only time Bogoslof has changed. When the revenue cutter "*Tahoma*" called there on September 10, 1910, it was found that what was once a group of islands had now become a single mass of land, with several peaks. The cutter's officers found on the new-born land the skeletons of myriads of sea-birds that had been roasted alive before they could fly away from the terrible upheaval caused by the submarine explosion. They had been burned in such a fervent heat that the skeletons crumbled to dust upon being touched. Nine days later the "*Tahoma*" visited Bogoslof again, and when 25 miles off, witnessed another eruption, which resulted in another upheaval and another change in the appearance of the island.

But volcanoes, terrible and impressive as they are, are hardly worthy of comparison with the great earthquakes. The volcanic effects are of limited area, while the "earth movers" frequently extend thousands of miles, marking their paths with destruction.

It has been observed that in certain portions of the South Pacific Ocean there are almost continuous eruptions of fire, water, and foreign bodies, forming considerable islands in inconceivably short periods, which quite as frequently vanish again beneath the waves.

The eruption of the volcano of Krakatoa was a most wonderful illustration of this hidden power. Ashes were projected 14 miles into the air and carried 600 miles, while the accompanying tidal wave swept the shores for immense distances, submerging all life.

THE HUMAN TOLL OF EARTHQUAKES

One appalling feature of earthquakes is the almost instant death of thousands of people. What wonder, then, that no other phenomenon of nature produces such unreasoning terror in all forms of life?

Tracing back, it is recorded that in 373 B. C. Burao Helico, called the Superb, was engulfed in the Sea of Corinth and over 100,000 inhabitants drowned.

In 13 A. D., 13 great and noble cities of Asia Minor were destroyed in one night. The destruction of Burao Helico was paralleled November 4, 1799, at Cumana, a magnificent New World city, situate on the Venezuelan coast, where, almost in the twinkling of an eye, the city, with all its unhappy inhabitants, sank beneath the waves.

THE DESTRUCTION OF PORT ROYAL

The last earthquake at Kingston, Jamaica, almost sinks into insignificance when compared with that which destroyed the old city of Port Royal, practically on the same location, on June 7, 1692. Immense waves swept over the town, and in less than three minutes submerged 2,500 houses, drowning nearly all the inhabitants. The sea remained 33 feet above even the steeples of the town, and the large English frigate "*Swan*" was carried safely over the city and escaped to sea.

Lisbon was destroyed in 1755, when, it is computed, 60,000 people perished in less than two minutes.

The destruction of Sodom and Gomorrah, the wicked cities of the plain, by fire sent from heaven, is paralleled by the utter destruction of a small town in Equador by fires bursting through the ground.

I quote from a quaint account given by "a member of the Royal Academy" at Berlin concerning the birth of an island:

"At a place in the sea where fishermen used to fish every summer, called La Fermera, 6 miles from Pico Della Caramine, upon the fifth Sunday in July, a subterranean fire — notwithstanding the weight and depths of the sea in that place, which was 120 feet by soundings, and the multitude of waters, which one would have thought sufficient to have quenched the fire—fire, I say, broke out with inexpressible violence, carrying with it up to the clouds water, sand, earth, stone, and other bulk of bodies, after which was formed an island in the main ocean, which was not, at first, over 5 furlongs; but in 13 days it had extended to 14 miles."

RIDING A TIDAL WAVE

It is the purpose of this article to record a thrilling experience in one of the modern earthquakes, in which a United States man-of-war was carried on the

crest of a tidal wave 5 miles down the coast, 2 miles inland, and set down, entirely unharmed, upon the beach, within 100 feet of the Andes (see page 70).

In 1868 I was attached to the U. S. S. "*Wateree*," then on duty in the South Pacific—one of a class of boats built at the close of our Civil War to ascend the narrow, tortuous rivers of the South; she was termed a "double ender," having a rudder at each end, and was quite flat-bottomed—a conformation which, while it did not add to her seaworthiness, enabled her to carry a large battery and crew, and eventually saved our lives, in the catastrophe which was soon to come upon us.

We had about finished our cruise and, now that it was nearly over, were congratulating ourselves that we had passed safely through all the exciting phases of our station, such as northers, revolutions, yellow fever, and even earthquakes, for we had experienced several shocks which sent the natives screaming to the squares, while we, with an ignorance soon to be enlightened, smiled calmly at their fears and made the usual remarks about "the cowardly Dagos."

AT ANCHOR AT ARICA

August, 1868, found us quietly at anchor off the pretty Peruvian town of Arica, whither we had towed the old United States store-ship "*Fredonia*" to escape the ravages of yellow fever, then desolating Callao and Lima. We had received preparatory orders to go up the coast to San Francisco, and had been at anchor for six weeks overhauling boilers and engines preparatory to the long trip. This unusually prolonged stay in one port had given us opportunities to form pleasant acquaintances and friends among the hospitable citizens, and we congratulated ourselves on the fact that our lines had been cast in such a charming place.

Arica was, for a Peruvian town, beautiful, having about 10,000 inhabitants, it was supposed—I say supposed, for the inquisitive census-taker had never made his rounds, and one arrived at population as the Jerseyman weighs his pig—by guessing.

Being the only port of entry for rich and prosperous Bolivia, behind her; connected with Tacna, 40 miles distant, by what then was the only railroad in Peru, her inhabitants had grown rich and cultured on the imports and exports that crowded the large and imposing custom-house and the shipping that thronged the open roadstead.

THE SITUATION OF ARICA

The town was picturesquely situated in a cleft or valley running up into the seacoast range of the Andes. Through the valley ran a little stream, which furnished the water for irrigation, and caused the desert to blossom with a fertility that never ceased to surprise. It was blocked in, on the one hand, by the perpendicular cliffs of the Morro, 500 feet high, which, without a single break to mar its imposing front, was ever lashed by the waves of the mighty Pacific; on the other, by gradually sloping heights, rising one above the other until lost in the clouds.

The town was of unknown antiquity, there having been a large city of the Incas located there when the Spaniards overran the country, and tradition asserts that even the Incas found a people dwelling there when they, in their turn, had been conquerors.

Favored with a most charming climate, with a temperature varying from 70 to 80 degrees; the cloudless blue of the sky never darkened by storm or rain; fevers and epidemics unknown; it seemed an Eden until we found our "crumpled rose leaves" in the form of a myriad of the most active and voracious fleas that ever drove a human being distracted, and further discovered that a regular deluge would be necessary to remove the cause of a lively series of unsavory odors which would have thrown the famed city of Cologne into the background.

Behind these minor discomforts lurked the ever-present fear in the native mind of another earthquake, for Arica seemed a sort of "head center" for such seismic disturbances, having been twice before destroyed, with great loss of life.

OUT OF SYMPATHY WITH NATIVE FEARS

In blissful ignorance of what a *terremote* (earth mover) really was, we did not sympathize with their fears, and we

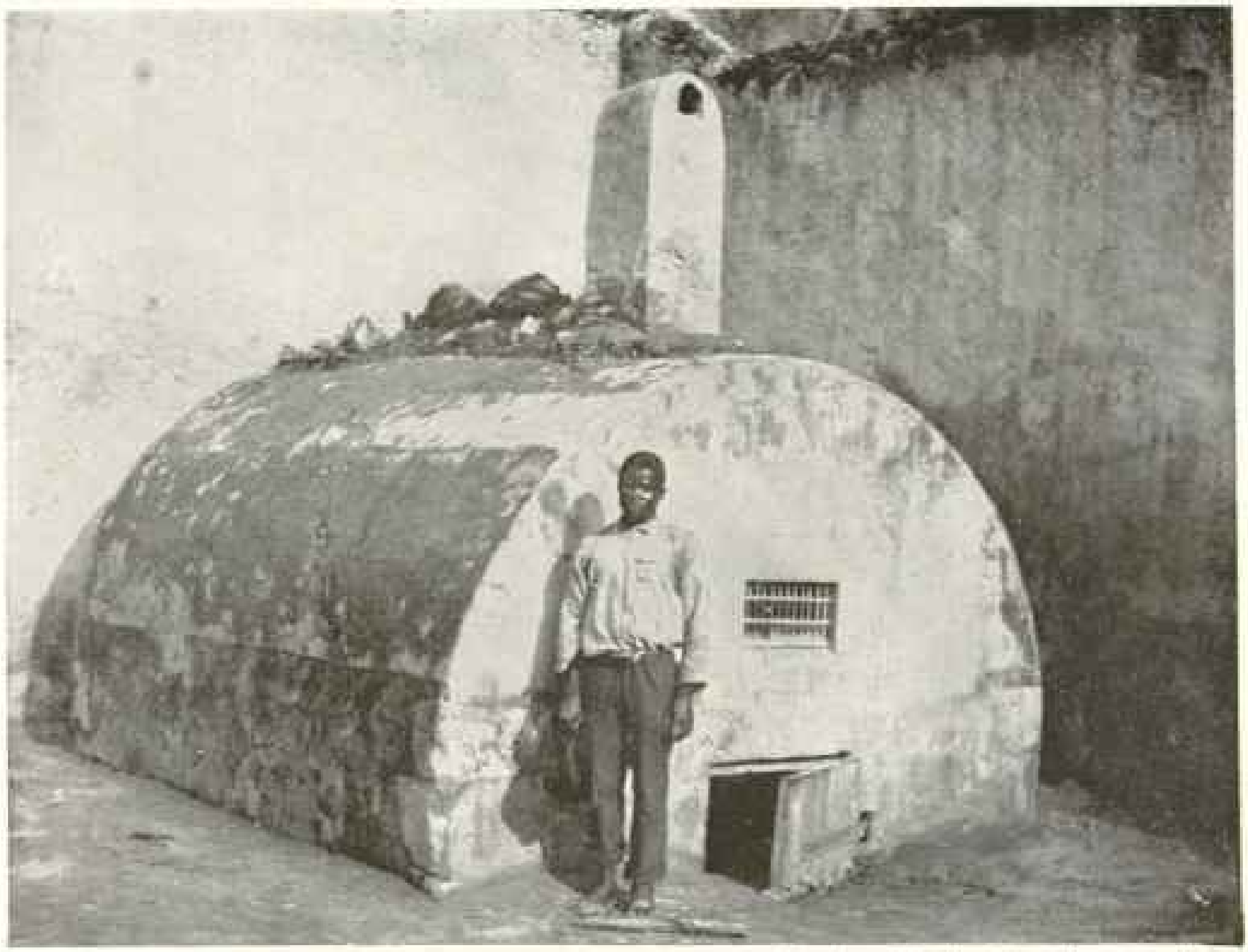


Photo from E. Tudor Grim, Providence, R. I.

ONLY SURVIVOR OF ST. PIERRE

It is estimated that 30,000 people lost their lives when Mt. Pelee, on the island of Martinique, broke forth with a whirlwind of gas or steam that overwhelmed the city of St. Pierre, May 8, 1902. Only one ship, the "*Roddam*," escaped from the harbor, and the only person in the city to come through the ordeal alive was the Martinique negro in this picture, who was imprisoned in a dungeon.

had celebrated our National holiday, the 4th, and theirs, the 10th, of July with zeal and an abundant burning of gunpowder. We were not alone in the roadstead—our store-ship, the "*Fredonia*"; a large Peruvian man-of-war, the "*America*"; and several square riggers, together with quite a fleet of smaller merchantmen, being in our company.

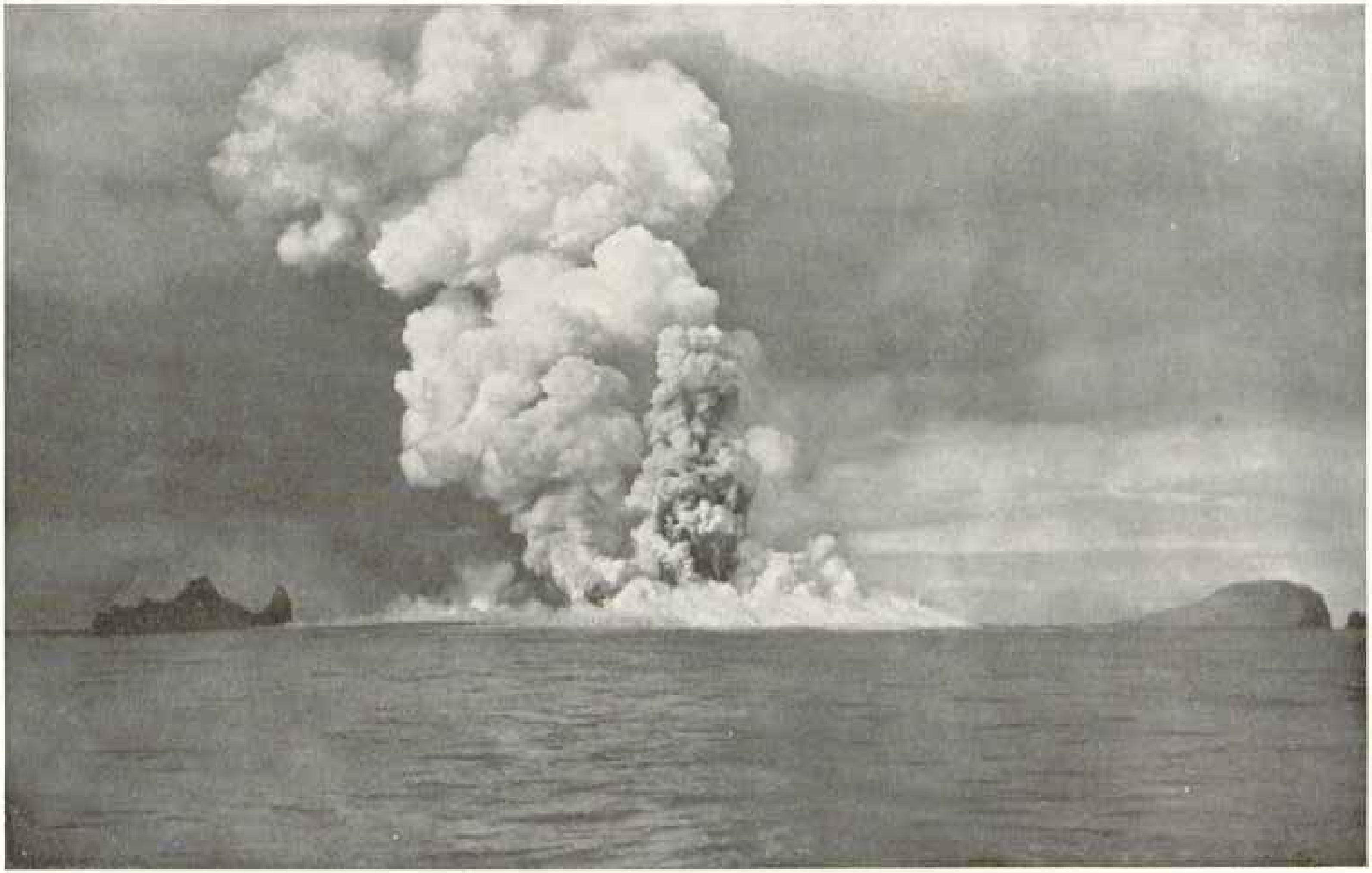
While the anchorage at Arica was an open roadstead of almost unlimited extent, it was partly protected from the prevailing winds by Alacran Island, small and apparently a lump of rock broken off from the Morro by some prior convulsion. All the merchantmen were clustered rather closely under the lee of this island, near the Morro, maybe a quarter of a mile from the usual man-of-war anchorage, and about the same distance from the shore. The men-of-war anchored more abreast of the town and possibly half a mile distant.

The vessels were about 200 or 300 yards apart and anchored in from 8 to 10 fathoms of water. The bottom was a somewhat sandy plateau, shelving gradually from 2 fathoms to 40 or 50 for a few miles, and then dropping off rather abruptly to great depths.

WHEN THE EARTH SHUDDERED

It was August 8, 1868, that the awful calamity came upon us, like a storm from a cloudless sky, overwhelming us all in one common ruin.

I was sitting in the cabin with our commanding officer, about 4 p. m., when we were startled by a violent trembling of the ship, similar to the effect produced



A CLOSE VIEW OF BOGOSLOF ISLAND IN ERUPTION

Situated in the Aleutian Islands, Bogoslof is a sort of Jack-in-the-Box of the sea. Now there is no island there; now there is a group of them; now there is one island with several volcanic peaks on it. For years the Revenue Cutter Service has watched and reported upon the antics of Bogoslof (see page 57).

by letting go the anchor. Knowing it could not be that, we ran on deck. Looking shoreward, our attention was instantly arrested by a great cloud of dust rapidly approaching from the southeast, while a terrible rumbling grew in intensity, and before our astonished eyes the hills seemed to nod, and the ground swayed like the short, choppy waves of a troubled sea.

The cloud enveloped Arica. Instantly through its impenetrable veil arose cries for help, the crash of falling houses, and the thousand commingled noises of a great calamity, while the ship was shaken as if grasped by a giant hand; then the cloud passed on.

As the dust slowly settled we rubbed our eyes and looked again and again, believing they must be playing us a trick; for where but a few short moments before was a happy, prosperous city, busy with life and activity, we beheld but a mass of shattered ruins, hardly a house left standing; not one perfect; the streets blocked with debris, through which struggled frantically the least wounded of the unhappy wretches imprisoned in the ruins of their once happy homes; while groans, cries, and shrieks for help rent the air. Over all this horror the sun shone pitilessly from an unclouded sky; the sea rolled shoreward as steadily as before. How long did it last? No one took any note of time. It seemed a nightmare, from which we would presently awake; but the agony and suffering before us were too real and apparent to be the effects of imagination. The shock may have been four or five minutes in reaching us and passing.

With the fresh recollection in our minds of the tidal wave that followed the earthquake at Santa Cruz and stranded one of our proudest sloops-of-war, the "*Monongahela*," in the streets, we anxiously scanned the sea for any unusual appearance betokening the coming of that dreaded accompaniment; but all was as calm and serene as before.

PREPARING FOR THE WORST

Our prudent commander, however, gave the necessary orders to prepare for the worst. Additional anchors were let go, hatches battened down, guns secured, life lines rove fore and aft, and for a few moments all was the orderly confusion of a well-disciplined man-of-war preparing for action. Many hands make short work, and in a few moments we were prepared for any emergency.

Looking shoreward again, we saw the uninjured thronging the beach and crowding the little pier, crying to the vessels to aid them in digging their loved ones from the ruins and to transport them to the apparent safety of the vessels riding so quietly at anchor. This was more than we could witness unmoved, and orders were given to prepare a landing party of 40 men, duly equipped with shovels, etc. The gig, a large, double-banked whaleboat, with a crew of 13 men, shoved off at once. She reached the shore and landed her crew, leaving only the customary boat-keeper in charge.

WAVING A BRAVE FAREWELL

Our attention was now distracted from the formation of our working party by a hoarse murmur. Looking shoreward, to our horror we saw vacancy where but a moment before the pier had been black with a mass of humanity—all swallowed up in a moment. Amid the wreckage we saw the gig, bearing a single boat-keeper, borne by an irresistible tide toward the battlemented front of the Morro, with the gallant seaman struggling to stem the current. Finding his efforts vain and certain death awaiting him, he laid in his useless oar, and, running aft to the cockswain's seat, grasped the boat flag and waved a last farewell to his shipmates as the boat disappeared forever in the froth of the cruel rock at the foot of the Andes. Thus the "*Watteree*" lost the only one of her crew of 235 souls on that fateful day.

OTHER TROUBLES CAME UPON US

But our troubles then commenced. We were startled by a terrible noise on shore, as of a tremendous roar of musketry, lasting several minutes. Again the trembling earth waved to and fro, and this time the sea receded until the shipping was left stranded, while as far to seaward as our vision could reach, we saw the rocky bottom of the sea, never before exposed

Photo by W. Von Gloeden

ITALY HAS SUFFERED MORE FROM EARTHQUAKES THAN ANY OTHER COUNTRY: THE RUINS AT MESSINA

The present earthquake disaster in Italy is only one of hundreds that have marred the history of that country within historic times. Comprising only one-fiftieth of the landed area of the globe, Italy has sustained one-fifth of all the recorded earthquake shocks of the world during the entire period of modern seismological observations. Italy and Japan together sustain 40 per cent of the world's seismic disturbances. The Messina quake, only six years now past, resulted in a death list of 77,000, being even more disastrous than the latest catastrophe, which has cost 40,000 lives.

to human gaze, with struggling fish and monsters of the deep left high and dry. The round-bottomed ships keeled over on their beam ends, while the "*Watercr*" rested easily on her floor-like bottom; and when the returning sea, not like a wave, but rather like an enormous tide, came sweeping back, rolling our unfortunate companion ships over and over, leaving some bottom up and others masses of wreckage, the "*Watercr*" rose easily over the tossing waters, unharmed.

THE SEAS DEFY ALL NATURE

From this moment the sea seemed to defy the laws of nature. Currents ran in contrary directions, and we were borne here and there with a speed we could not have equaled had we been steaming for our lives. At irregular intervals the earthquake shocks recurred, but none of them so violent or long-continued as the first.

The Peruvian man-of-war "*America*," said to be the fastest ship in the world at that time, had hastily gotten up steam and attempted to get to sea. She was well out when the receding water left her partly afloat and broke her back, of course destroying her engines. With her funnels still vomiting black smoke and apparently under full command of her people, she backed down toward the helpless "*Fredonia*," which was then rapidly setting in toward the Morro, as if intending to help her.

Lieutenant Commander Dyer, commanding the "*Fredonia*," saw the maneuver, and, thinking the "*America*" was coming to their aid, and that a nearer approach would only involve them both in destruction, ran on the poop and hailed the approaching ship, then but a few yards distant: "'*America*,' ahoy! You can do nothing for us: our bottom is crushed. Save yourselves. Good-bye." Then down to his station among his silent, unshrinking crew he ran again. The next moment the "*Fredonia*" was crushed, and of that ill-fated company not one was saved, while a counter-current catching the Peruvian ship drove her rapidly in another direction.

Facing the Morro, and a short distance away, a rocky islet rose some feet above the sea. On it the Peruvians had hewn a fort from the solid rock and had mounted therein two 15-inch guns, the garrison numbering some 100 souls. We were but a short distance from this fort and were fearing to be cast against its rocky sides, when suddenly we saw it disappear beneath the waves. Whether it sank or the water rose we could not tell; we only knew it vanished; and when it reappeared, after a few moments, like a huge whale, not only were the unfortunate garrison gone, but the guns and carriages as well. Imagine, if you can, how the water lifted those immense masses of iron, weighing many tons and offering no holding surface from their resting places and tumbled them out of the 8-foot parapet. It is a problem never to be solved.

Before the earthquake Arica had one of the best and most modern machine-shops between Callao and Valparaiso. Many of the machines were ponderous and properly secured on cement foundations. There were also several locomotives, cars, and many heavy castings. These all disappeared; not a vestige was left. It seems impossible they could have been swept out to sea, but assuredly they could not be found on shore.

During the first of the disturbance we had lowered one of our large cutters and sent it, in charge of a midshipman, to rescue a number of persons drifting about on some wreckage. There was no sea on at this time, but to our astonishment we saw that, with all the efforts of the crew, the boat could make no headway, but went sailing about in the most erratic fashion.

The midshipman, finding it impossible to rescue the people he had been sent to save, attempted to return to the ship. That, too, was impossible, and presently his efforts were ended by having his boat dashed violently against the side of the "*America*" and crushed like an egg-shell. He and his crew managed to scramble to her deck.

There they found a scene which beggars description. A condition of panic prevailed. Officers and men in abject terror were running about, imploring all the saints in the calendar to help them.

Meantime the heavy guns, that had been cast adrift in a vain attempt to throw them overboard to lighten the ship when she grounded, were running riot. With every "send" of the sea the guns rushed madly from side to side, crushing everything, animate or inanimate, in their path, and strewing the deck with bloody victims. There is nothing more to be dreaded than a gun on an old-time mount adrift in a seaway; it seems possessed of a demon, and baffles ordinary means of control. Some of the "*America's*" spars had been carried away and still further lumbered her deck, and, worse than all, fire had broken out near the engine-room and threatened the after powder magazine.

A HEROIC MIDSHIPMAN

Finding the Peruvians so panic-stricken as to be of no use, our gallant young midshipman, only a lad of 18, quickly took command, with his crew of 13 men. Making a line fast around his waist, he was lowered into the burning hold and flooded the powder magazine; then by choking the rampant guns with masses of hammocks piled on them he soon had them secured, extinguished the fire, and, after quieting the natives, calmly awaited events.

No one born under our glorious flag could help feeling proud of the courage, discipline, and self-reliance displayed by our officers and men at this awful test of bravery and fidelity to duty. While the crew of the Peruvian ship was simply an ungovernable mob, whose cries pierced the air, our men stood in battle array, grouped around the guns, every man at his station, ready to obey any order given by the keen-eyed first lieutenant; not a word spoken or a movement made, except when a sharp command called for instant obedience!

When men are taught self-discipline and control, as were our sailors during the four years of battle and storm which we had just passed through in our Civil War, not even nature's greatest convulsions can shake their nerve, and in this awful test of courage they determined if they could not live they would at least emulate the example of the heroes of the "*Fredonia*" and show how American sailors could die.

THE GRAVES GIVE UP THEIR DEAD

As the last rays of the setting sun fell on the heights of the Andes, we saw to our horror that the graves, where the ancients had entombed their dead, on the sloping side of the mountain, had opened, and in concentric rows, like chairs in an amphitheater, the mummies of the long-buried and forgotten aborigines rose to the surface. They had been buried in a sitting posture, facing the sea. The soil, impregnated with niter, had thoroughly preserved them, and the violent shocks disintegrating the dry earth was now exposing this long-buried, frightful city of the dead. Words cannot paint the ghastliness of the scene. In addition to what we had already experienced, to our excited imagination it seemed as if the day of judgment had come, the earth was passing away, and the bitterness of a death so full of terrors as no imagination can conceive was now to befall us.

It had now been dark for some time and we knew not where we were, the absence of the usual beacon and shore lights adding to our confusion. About 8.30 p. m. the lookout hailed the deck and reported a breaker approaching. Looking seaward, we saw, first, a thin line of phosphorescent light, which loomed higher and higher until it seemed to touch the sky; its crest, crowned with the death light of phosphorescent glow, showing the sullen masses of water below. Heralded by the thundering roar of a thousand breakers combined, the dreaded tidal wave was upon us at last. Of all the horrors of this dreadful time, this seemed the worst. Chained to the spot, helpless to escape, with all the preparations made which human skill could suggest, we could but watch the monster wave approach without the sustaining help of action. That the ship could ride through the masses of water about to overwhelm us seemed impossible. We could only grip the life-line and wait the coming catastrophe.

AT LAST THE TIDAL WAVE

With a crash our gallant ship was overwhelmed and buried deep beneath a semi-

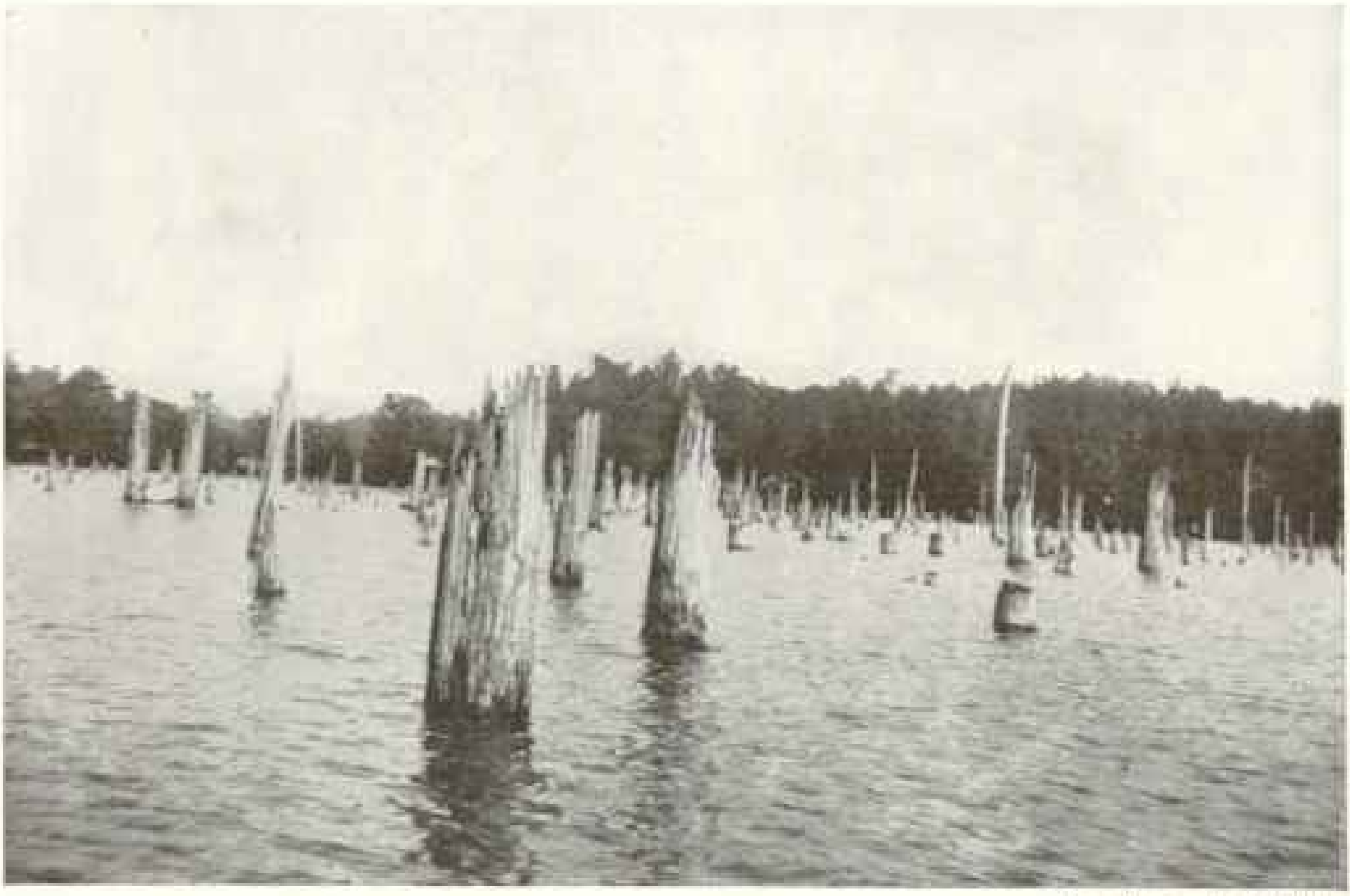


Photo by Guy E. Mitchell

REMAINS OF A DRY-LAND HARDWOOD FOREST, REELFOOT LAKE, TENNESSEE, CAUSED BY SINKING OF THE LAND

One of the greatest earthquakes of which the modern world has knowledge took place within our own country. It occurred in the year 1811 in the West Tennessee-East Arkansas region, and the remains of the sunken forests, upheaved swamps, and uprooted trees tell an eloquent story of the devastating character of the quakes. The few inhabitants of that region were kept in terror for days. Such a quake in the same region today might destroy tens of thousands of people and do millions of dollars' damage (see page 67).

solid mass of sand and water. For a breathless eternity we were submerged; then, groaning in every timber, the staunch old "*Wateree*" struggled again to the surface, with her gasping crew still clinging to the life-lines—some few seriously wounded, bruised, and battered; none killed; not one even missing. A miracle it seemed to us then, and as I look back through the years it seems doubly miraculous now.

Undoubtedly our safety was due to the design of the ship. Part of our battery was two 200-pound rifles; one forward the other aft; both mounted so they could be pivoted on either side. When not in battery, they were secured amidships.

The bulwarks, or pivot ports, in the side of the ship were arranged as a series of heavy ringed panels, which, when the guns were in use, could be lowered outward, leaving an opening of about one-third of the side of the ship practically level with the deck. Expecting the tidal wave, they had been lowered early in the afternoon. This permitted the water to run off the deck—about as it would from a raft or floating plank.

The ship was swept on rapidly for a time, but after a while the motion ceased, and, lowering a lantern over the side, we found ourselves on shore, but where, we knew not. Smaller waves washed about us for a time, but presently they ceased. For some time we remained at quarters; but as the ship remained stationary, and nothing new occurring, the order was given to "Pipe down," followed by the welcome order, "All hands stand by your hammocks," and such of the crew as were not on watch quietly made their way through the reopened hatches to the sodden berth deck—to sleep. I know not

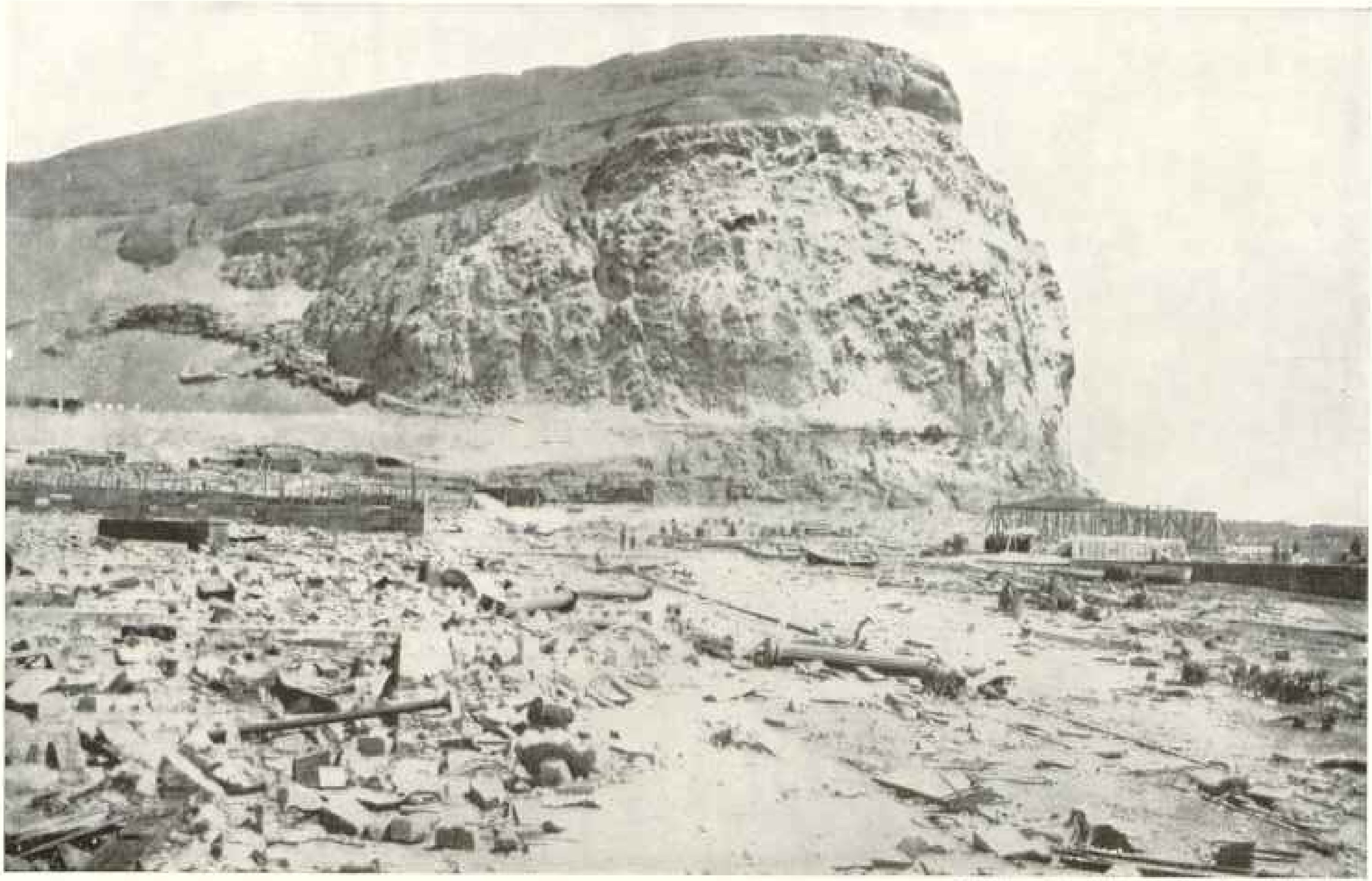


Photo from Rear Admiral L. G. Billings, U. S. Navy

MORRO HILL AND THE RUINS OF THE CITY OF ARICA, PERU

"The cloud enveloped Arica. Instantly through its impenetrable veil arose cries for help, the crash of falling houses, and the thousand commingled noises of a great calamity, while the ship was shaken as if grasped by a giant hand; then the cloud passed on. As the dust slowly settled we rubbed our eyes and looked again and again, believing they must be playing us a trick, for where but a few short moments before was a happy, prosperous city, busy with life and activity, we beheld but a mass of shattered ruins, hardly a house left standing; not one perfect; the streets blocked with debris, through which struggled frantically the least wounded of the unhappy wretches imprisoned in the ruins of their once happy homes, while groans, cries, and shrieks for help rent the air. Over all this horror the sun shone pitilessly from an unclouded sky; the sea rolled shoreward as steadily as before" (see page 63).

what dreams must have visited the pillows of these brave fellows on that eventful night, but to me one of the wonders of this wonderful experience was the matter-of-fact obedience to orders manifested by these sorely tried men.

FINDING OURSELVES HIGH AND DRY

The morning sun broke on a scene of desolation seldom witnessed. We found ourselves high and dry in a little cove, or rather indentation in the coast-line. We had been carried some 3 miles up the coast and nearly 2 miles inland. The wave had carried us over the sand dunes bordering the ocean, across a valley, and over the railroad track, leaving us at the foot of the seacoast range of the Andes. On the nearly perpendicular front of the mountain our navigator discovered the marks of the tidal wave, and, by measurements, found it to have been 47 feet high, not including the comb. Had the wave carried us 200 feet further, we would inevitably have been dashed to pieces against the mountain-side.

There we lay on as even a keel as if still afloat, with our flag flying and our port anchor and 100 fathoms of chain led out as carefully as we could have placed them there. Was it possible that this, our heaviest anchor and chain, could have drifted with us throughout all the mazes of our voyaging of the afternoon? And why was not the chain parted by the last shock, as were the others?

We found near us the wreck of a large English bark, the "*Chanacelia*," which had one of her anchor chains wound around her as many times as it would go, thus showing she had been rolled over and over; a little nearer the sea lay the Peruvian ship, the "*America*," on her bilges; and the sand was strewn with the most heterogeneous mass of plunder that ever gladdened the heart of a wrecker: Grand pianos, bales of silk, casks of brandy, furniture, clothing, hardware; everything imaginable was there. A rough estimate placed this emptying of the custom-house at $1,100,000.

"WE SAVED THE FLAG, SIR!"

Our first work was to establish a cordon of sentries around the ship, while a strong working party stove in the brandy casks and shattered the wine cases, for we did not propose having drunkenness added to the other horrors surrounding us. One of the incidents of the morning was the return of the midshipman and crew from the wrecked Peruvian ship and the laconic report of the youngster in command: "Returned on board, sir. I have to report the loss of the second cutter, 12 oars, and two boat-hooks; but we saved the *flag*, sir."

Most of the surviving Peruvians, when they discovered the "*American*" was on shore, deserted the ship, and were drowned by the next incoming wave, which, though not a breaker, was high enough to sweep them away, while our officer held his men until daybreak.

In a few days the savage Araucanian Indians from the mountains descended upon us with long trains of llamas, the camels of the Andes. They broke open boxes, cut the fastenings of bales, and started back to their retreats loaded down with plunder. We were not able to argue with them, but there was an invitation to stop in the shriek of our shells that all understood. By firing in front of them with one of our smaller guns we "hove them to" and made them approach and unload their cargoes near us. Soon we had accumulated an assorted pile of merchandise much larger than our ship.

MUMMIES CARRIED TO WASHINGTON

The earthquake shocks continued at varying intervals, but none of them so violent or long-continued as at first; some of them, however, were severe enough to shake the "*Wateree*" until she rattled like an old kettle, and caused us to abandon the ship and camp on a considerable plateau, some 100 feet high, and overlooking the ship and wreckage. Here we had an opportunity of seeing the disastrous results of the earthquake on land. We found in some places immense fissures, many of them over 100 feet wide and of unknown depths; others were mere cracks. Some of them proved the graves of the fleeing inhabitants. In one instance, I remember, we found the body of a lady sitting on her horse, both swallowed up while fleeing for their lives.

Photo from Rear Admiral L. G. Billings, U. S. Navy

THE "AMERICA," PERUVIAN MAN-OF-WAR, AND THE U. S. S. "WATEREE" ON SHORE AFTER THE EARTHQUAKE; ALSO WRECK OF THE ENGLISH MERCHANT VESSEL "CHANACELIA"; ARICA, PERU

"Heralded by the thundering roar of a thousand breakers combined, the dreaded tidal wave was upon us at last. Of all the horrors of this dreadful time, this seemed the worst. Chained to the spot, helpless to escape, with all the preparations made which human skill could suggest, we could but watch the monster wave approach without the sustaining help of action. That the ship could ride through the masses of water about to overwhelm us seemed impossible. We could only grip the life-line and wait the coming catastrophe. . . . . The morning sun broke on a scene of desolation seldom witnessed. We found ourselves high and dry in a little cove, or rather indentation in the coast-line. We had been carried some three miles up the coast and nearly two miles inland" (see page 66).

Quite a number of the mummies were brought down to the ship and were ultimately sent to the Smithsonian Institution in Washington, where, I presume, the curious can inspect them at any time.

It is now known that while Arica was probably the center of disturbance, the shocks were felt nearly 1,000 miles, and great destruction was occasioned in Bolivia. The beach line of the ocean was raised from 2 to 20 feet for over 600 miles.

The tidal wave was felt at the Sandwich Islands, 5,580 nautical miles distant, only 12 hours and 37 minutes later than it had broke on the desolated shores of Peru.

DESOLATION AND DEATH

At Arica we found but desolation and death. Where once had stood that pretty little city, a flat, sandy plain stretched before us. Except on the outskirts, higher up on the mountain, not a house marked the spot. Built to withstand earthquake shocks, the houses were low—few boasting a second story—with light roofs and thick walls of "adobe brick" (sun-dried mud). The shocks first leveled them, then the waves dissolved and washed them away. On the higher slopes a few houses, part of a church, and a hideous mass of debris, composed of everything, including dead bodies, was piled 20 or 30 feet high. This was all that remained of Arica. The loss of life was proportionate to the destruction of property. We could not ascertain how great it was, but as all provisions, clothing, and even fresh water were destroyed, the pitiful remnant of the few hundred persons who gathered about the "*Wateree*," living on our stores, in tents made of our sails, told the story as could no figures. Afloat, with the exception of the crew of the "*Wateree*," nearly all perished.

It was three weeks before relief came. Then can well be imagined the swelling of the hearts and the mist that dimmed the eyes of our sailor men as we looked across the water and hailed the stars and stripes floating from the mast-head of the old United States frigate "*Powhatan*" as she steamed majestically into that desolated harbor. Her decks were filled with all possible stores and supplies, which were soon distributed among the stricken and helpless who had sought our aid and succor.

Careful survey of the "*Wateree*" proved that while she was practically uninjured, it would be impossible to launch her; so, after removing the most valuable of her equipment, she was sold at auction to a hotel company. An epidemic of yellow fever broke up that enterprise, and the old ship was afterward used successively as a hospital, a store-house, and, lastly, a target for great guns during the Peruvian-Chilian war. But her gaunt iron ribs still rise above the shifting sands, a fitting monument to one of the greatest of modern earthquakes.*

* See "The World's Most Cruel Earthquake," by Charles W. Wright, NATIONAL GEOGRAPHIC MAGAZINE, April, 1909.

"The Recent Eruption of Mount Katmai," by George C. Martin, NATIONAL GEOGRAPHIC MAGAZINE, February, 1913.

"Taal Volcano and Its Recent Destructive Eruption," by Dean C. Worcester, NATIONAL GEOGRAPHIC MAGAZINE, April, 1912.

Photo from Office of Indian Affairs

FROM THE WAR-PATH TO THE FURROW

Approximately 450 white farmers are employed to demonstrate to the Indian agriculturists the art of profitable farming. They are required to show the Indians how to prepare the soil, how to select their seed, how to plant, cultivate, and harvest their crops, and how most advantageously to dispose of them.

FROM THE WAR-PATH TO THE PLOW*

By Franklin K. Lane, Secretary of the Interior

ON THE first of last July the Cherokee Indian Nation ceased to exist. This act was the culmination of a treaty promise made over 80 years ago, extended by statute, and at last placed within administrative discretion.

The word of the white man has now been made good. These native and aspiring people have been lifted as American citizens into full fellowship with their civilized conquerors. The Cherokee Nation, with its senate and house, governor and officers, laws, property, and authority, exists no longer.

Surely there is something fine in this slight bit of history. It takes hold upon the imagination and the memory, arouses dreams of the day when the Indian shall be wholly blended into our life, and at the same time draws the mind backward over the stumbling story of our relationship with him.

The United States Still Guardian

The people of the great Sequoyah have lost their identity, yet—and this is a fact that all do not know—there are still several thousand of these American citizens for whom the United States stands to a greater or less degree *in loco parentis*. We hold our hands upon the property and the private concerns of approximately one-fifth of these "free people."

This seems to be an anomalous situation and prompts at once the inquiry, Has this government a policy with relation to these people and the others of their race? We have had three centuries of contact with the Indian. Do we now know where we are leading him and what our own purpose is with regard to him? Have we aught that may be openly declared as a definite and somewhat immediate aim toward which we can work with clear and unwavering purpose?

If we have such a policy, it should be stated; and this is for love of the Indian himself, who daily asks the question, "What is my future to be at the hands of the white man?"

A Bewildered People

That the Indian is confused in mind as to his status and very much at sea as to our ultimate purpose toward him is not surprising. For a hundred years he has been spun round like a blindfolded child in a game of blindman's bluff. Treated as an enemy at first, overcome, driven from his lands, negotiated with most formally as an independent nation, given by treaty a distinct boundary which was never to be changed "while water runs and grass grows," he later found himself pushed beyond that boundary line, negotiated with again, and then set down upon a reservation, half captive, half protégé.

What could an Indian, simply thinking and direct of mind, make of all this? To us it might give rise to a deprecatory smile. To him it must have seemed the systematized malevolence of a cynical civilization. And if this perplexed individual sought solace in a bottle of whisky or followed after some daring and visionary Medicine Man who promised a way out of a hopeless maze, can we wonder?

Manifestly the Indian has been confused in his thought because we have been confused in ours. It has been difficult for Uncle Sam to regard the Indian as enemy, national menace, prisoner of war, and babe in arms all at the same time. The United States may be open to the charge of having treated the Indian with injustice, of having broken promises, and sometimes neglected an unfortunate people, but we may plead by way of confession and avoidance that we did not mark for ourselves a clear course, and so, "like bats that fly at noon," we have "spelled out our paths in syllables of pain."

The Indian's Status

There are some 300,000 Indians in the United States. This grand total includes

*An abstract from the annual report to the President of the United States by the Secretary of the Interior.

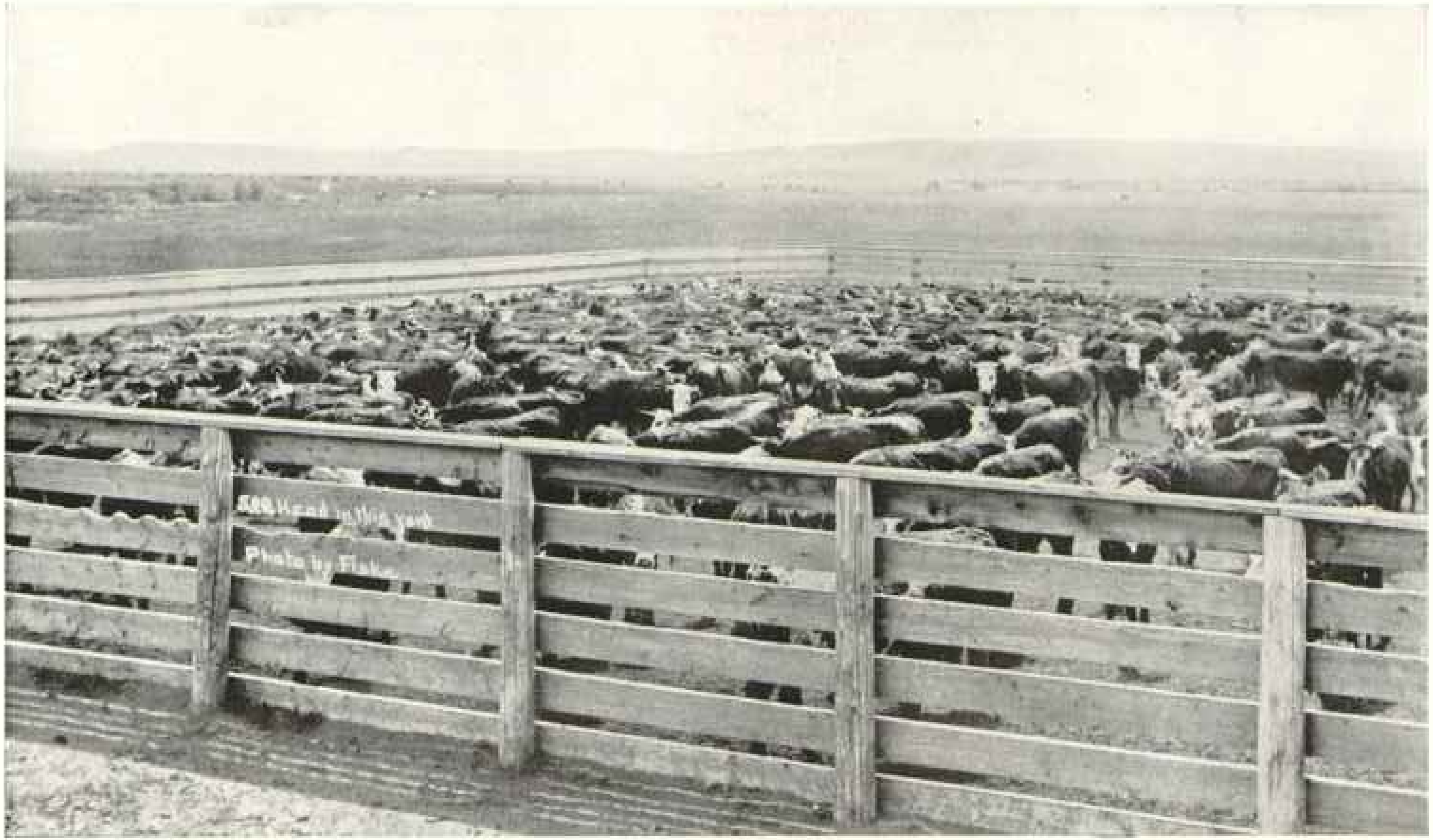


Photo from Office of Indian Affairs

FIVE HUNDRED CATTLE READY FOR ISSUE TO INDIANS: STANDING ROCK

The valuable grazing lands of the Indians offer unusual opportunities for increasing the meat supply of the country. They have what are regarded as the most desirable grazing lands in unbroken bodies in the United States. Last year about $1,500,000 was expended in buying horses, cattle, and sheep to stock these lands and to establish large tribal stock ranches. Heretofore Indian grazing lands have been rented to white ranchmen.

Photo from C. J. Blanchard

WOLF EAGLE AND RELATIVES: BLACKFEET TRIBE

The Indians of the United States own lands almost equalling in area those of all New England and New York. A rough estimate places the value of these lands at $600,000,000. If to this be added their holdings of timber, etc., they would probably be found to be worth not far from a billion dollars.

all who are of Indian blood or who have been adopted into the tribes. The census figure of 1910 shows an Indian population of 304,950, as contrasted, it may be noted, with a population in 1860 of 254,300.

These are for the most part wards in chancery, the government being the chancellor. They live in large part on reservations, which are little more than expanded and perhaps somewhat idealized orphan asylums. They have lands aggregating in extent 109,150 square miles, or a territory equal to that of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Kentucky, and Virginia, and worth, by rough estimate, six hundred million dollars.

THE WEALTHIEST PEOPLE IN THE WORLD

Over two-thirds of this land is now held as individual farms, the unallotted or tribal lands being estimated as worth less than $200,000,000. If an appraisement were made of the full value of the timberlands and of the oil and coal lands, and added to this was the value of the herds and personal property of the Indians, it is probable that they would be found to have a wealth approximating $900,000,000. In moneys, the Treasury of the United States has trust or tribal funds approximating $50,000,000, while in the banks throughout the country we have deposited to the credit of individual Indians under our control something over $18,000,000.*

* The general allotment act of 1887 was the first step toward the setting aside for each Indian of a tract of land which he could develop by his own efforts and on which he could construct a home for himself and for his family.

Each of the 41,698 members of the Cherokee Tribe receive an allotment of 110 acres of the

Photo from C. J. Blanchard

TYPICAL HOME OF FLATHEAD INDIANS ON THE FLATHEAD RESERVATION; MONTANA

"The Osages are probably the wealthiest people in the world. The average wealth of the Osage Indian is $9,570.85, and 2,230 Osages each received approximately 657 acres of land as allotments. The average income of the Osages from oil and gas royalties is $690.89. For an average family of four this would make an annual income of approximately $2,700, to say nothing of the large income from the lands allotted to them. Some few families have an income of $12,000 per year" (see text, page 77).

Photo from C. J. Blanchard

BLACKFEET INDIAN AND FAMILY: MONTANA

"The political conditions of the world will make the next few years a period of great prosperity for the American farmer. Let us see that the Indian, with his broad acres, is in truth an American farmer, and that he properly participates in this unusual opportunity."

MUST THE INDIAN REMAIN A WARD OF THE GOVERNMENT FOREVER?

The function which this government is performing for these Indians is to care for their personal welfare, supervise their business affairs, improve their property, hold their moneys, give education to their children, care for their sick, protect them from their enemies, and insure them against starvation.

This surely is doing much for a people who are richer on the average than the majority of our own people. And, we ask, must this governmental activity persist? Must this burden always rest upon the people of this country? Is it for the benefit of the Indian himself that it should continue?

There are those who say that it should not last a single day. The American conscience, however, our sense of justice,

average allottable lands, valued originally at $325.60. The average Cherokee family may be said to number four persons, which would give to it 440 acres of land. The Choctaws and Chickasaws, the Creeks and the Seminoles, have also received allotments and their tribal funds are being divided.

The Osages are probably the wealthiest people in the world. The average wealth of the Osage Indian is $9,579.85, and 2,230 Osages each received approximately 657 acres of land as allotments. The average income of the Osages from oil and gas royalties is $698.83.

For an average family of four this would make an annual income of approximately $2,700, to say nothing of the large income from the lands allotted to them. Some few families have an income of $12,000 per year.

The individual wealth of the Indian necessarily depends upon the value of his individual allotment; as, for instance, in the Creek Nation, one of the Five Civilized Tribes, the great oil fields have brought wealth to those Indians so fortunate as to hold allotments within the oil territory. The following cases are examples of the royalties for 1914 received

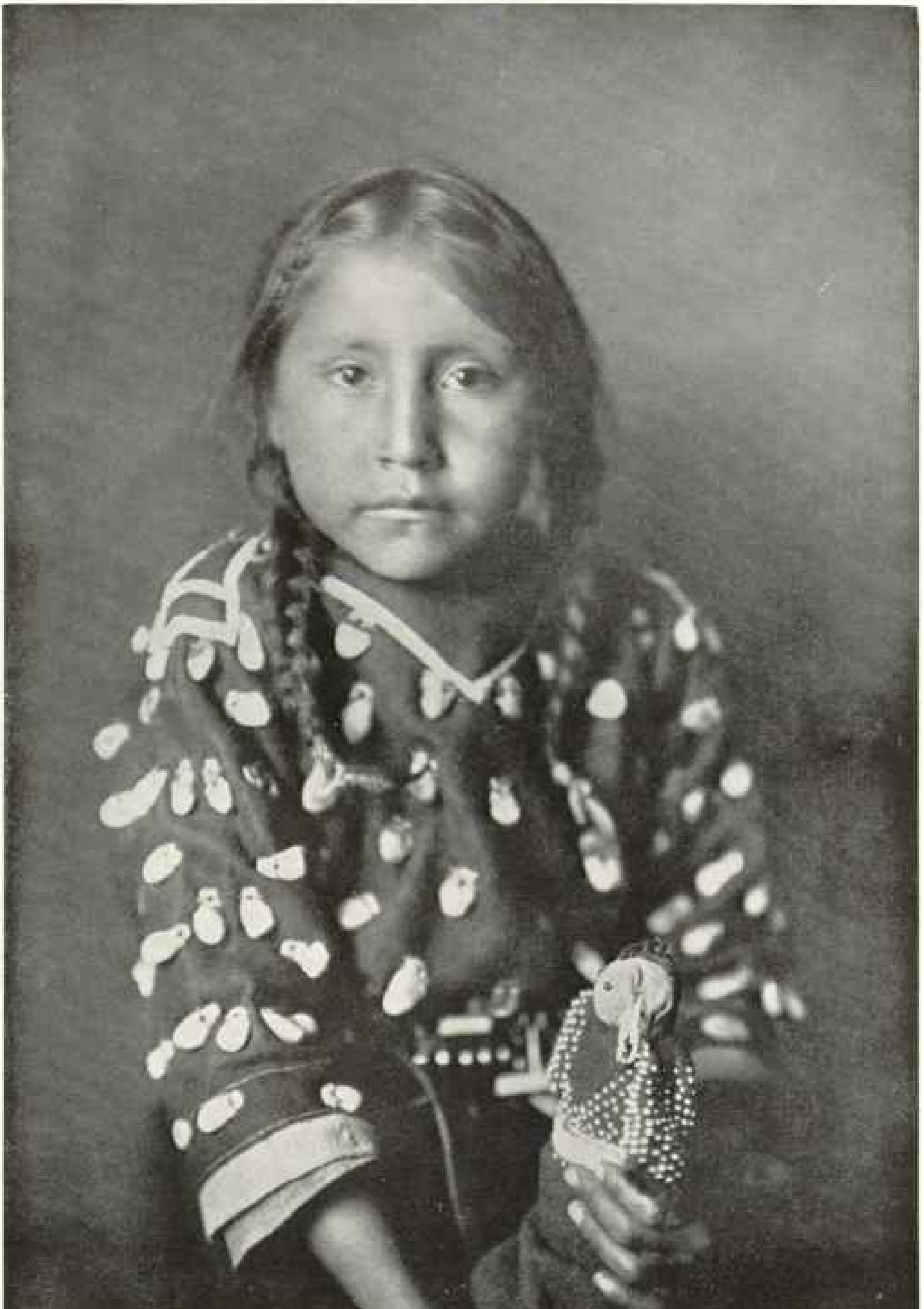


Photo from Office of Indian Affairs

"RIDES A SORREL HORSE," OR GLYDIS LITTLENEST, A CROW INDIAN

"There are no better schools than many of our reservation schools, where each child is taught the rudiments of learning and to be useful in practical things—reading, writing, and arithmetic; how to plow and sow, hoe and harvest; how to build a house and shoe a horse, or cook a meal, make a dress, and nurse a sick man or animal" (see text, pages 86 and 87). There are 65,000 Indian children of school age in the United States today.

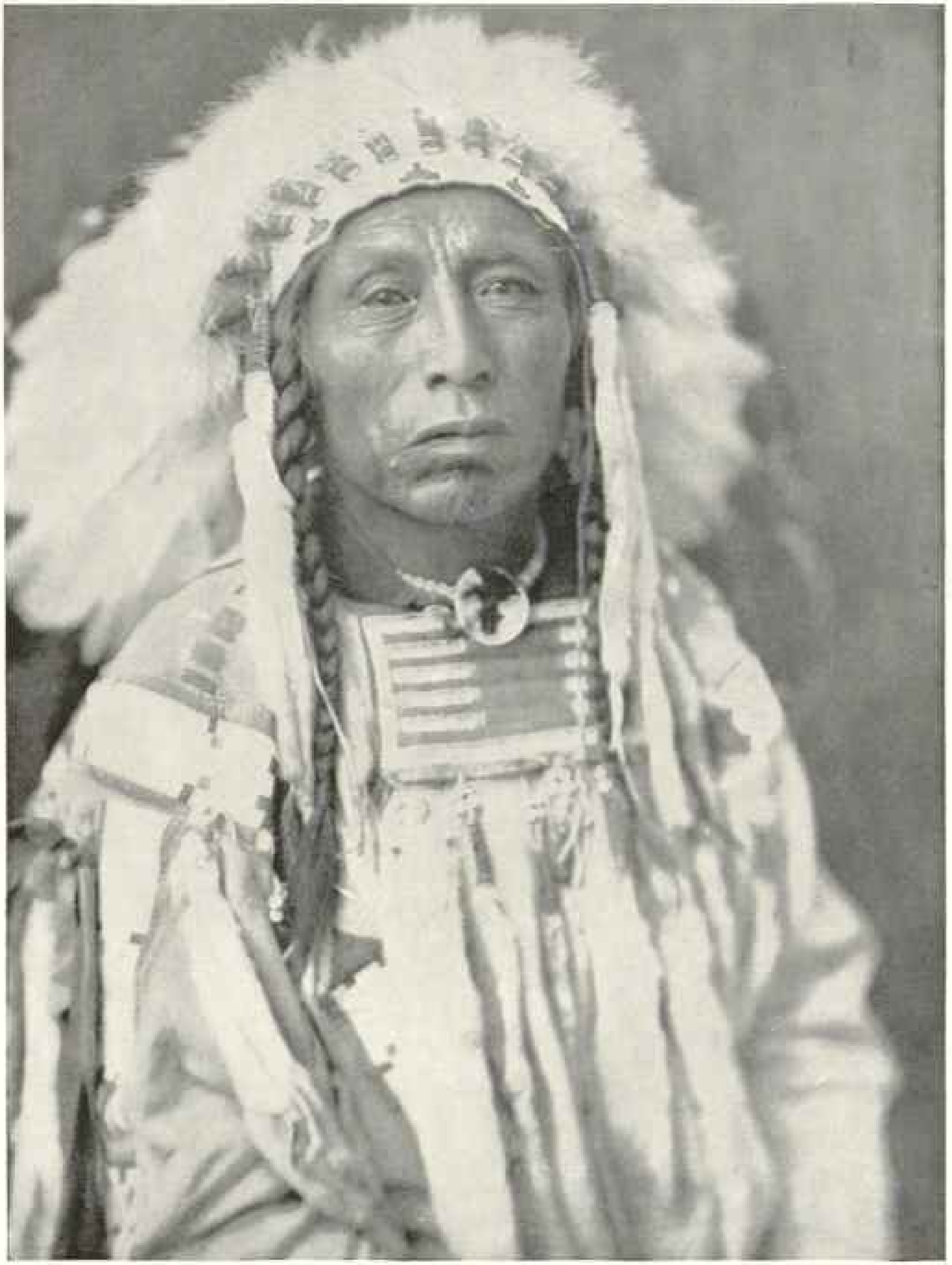


Photo from Office of Indian Affairs

ONE OF THE CROWS WHO WON THE TITLE OF "CHIEF" ACCORDING TO THE OLD CUSTOMS OF DARING AND DIPLOMACY

To fill the Indian's soul with an ambition that will not let him rest content with a war bonnet, a life of ease, and a mind for the past—that will lead him to learn surely, if slowly and by hard knocks, to lean upon himself and to make him able to take care of himself, his family, and his property—such is the aim of our government. "There are many thousand Indians in our charge who are entirely self-supporting, capable, thrifty, far-sighted, sensible men; and, singularly enough, these are most often found among those tribes which were most savage and ruthless in making war upon the whites. Some of these are indeed so far-sighted that they do not wish to enjoy full independence, because their property would then become subject to taxation" (see text, page 85).

our traditions, in fact, will not permit the adoption of a drastic course that would cast the Indian upon a world for which he is ill-prepared.

Yet I am of the opinion that it would be better, far better, to sever all ties between the Indian and the government, give every man his own and let him go his own way to success or destruction, rather than keep alive in the Indian the belief that he is to remain a ward of the government. The advocates of the sink or swim policy may be reckless. The advocates of the almshouse policy are surely doing harm.

Is there, then, no way out? Must we go blunderingly on without goal and without policy?

KILLING "THE ORPHAN ASYLUM" IDEA

The way out is gradually and wisely to put the Indian out. Our goal is the free Indian. The orphan-asylum idea must be killed in the mind of Indian and white man. The Indian should know that he is upon the road to enjoy or suffer full capacity. He is to have his opportunity as a "forward-looking man."

This is not my dictum, for the government has been feeling its way toward this policy for nearly 40 years. This is the rationale of the whole of our later congressional policy, of the liberality of Congress toward the education of the Indian, of the allotment system, of limitations fixed upon disposition of property. If the course of Congress means aught it means that the Indian shall not become a fixture as a ward.

It is the judgment of those who know the Indian best, and it is my conclusion, after as intimate a study as practicable of his nature and needs, that we should henceforth make a positive and systematic effort to cast the full burden of independence and responsibility upon an increasing number of the Indians of all tribes.

I find that there is a statute which significantly empowers the Secretary of the Interior to do this in individual cases. That authority is adequate. And as soon as the machinery of administration can be set in motion I intend to use such authority. If year by year a few from each of the tribes can be made to stand altogether upon their own feet, we will be adding to the dignity of the Indian race and to their value as citizens. To be master of himself, to be given his chance—this is the Indian's right when he has proven himself. And all that we should do is to help him to make ready for that day of self-ownership.

PREPARING THE INDIAN TO STAND ALONE

Viewed in this light, the Indian problem is incomparably larger today than it was when the Cherokees were gathered up from the Southern States and sent into the unknown across the Mississippi. In 1830 the problem was how to get the Indians out of the way. Today the problem is how to make him really a part of the nation.

This blend of wisdom, dignity, and childishness, this creature of a non-commercial age, has been brought into a new day when all must live by conforming to a system that is as foreign to him as the life of the Buddhistic ascetic would be to us. Slowly through a century and more of torturous experience he has come to see that it is not our purpose to do him harm; but he must learn to find his place in an economy that antagonizes every tradition of his ten thousand years of history.

How, then, are we to get into the mind of this soldier-sportsman the fact that the old order has passed away, and that the gentleman of today earns his right to live by his usefulness; that the American cannot be a man and a ward at the same time?

by Indians of the Creek Nation from oil: Samuel Richard, $94,000; Jeannetta Richard, $90,000; Seeley Alexander, $57,000; Lesley Yarhola, $73,000; Eastman Richard, $93,000; Thomas Long, $35,000; Ella Jones, $31,000; Nancy Yarhola, $29,000; Johnston Wacoche, $27,000; Miller Tiger, $23,000.

Some of the Bad River Indians have received as high as from $14,000 to $16,000 for the timber cut from their allotments.

On the other hand, we must not forget that many of the Indians have lands which are little better than sand hills, that even though these tribes have vast herds of sheep and the wealth of the tribe seems large, when divided pro rata shares it would be but a small sum which could quickly be expended for subsistence.

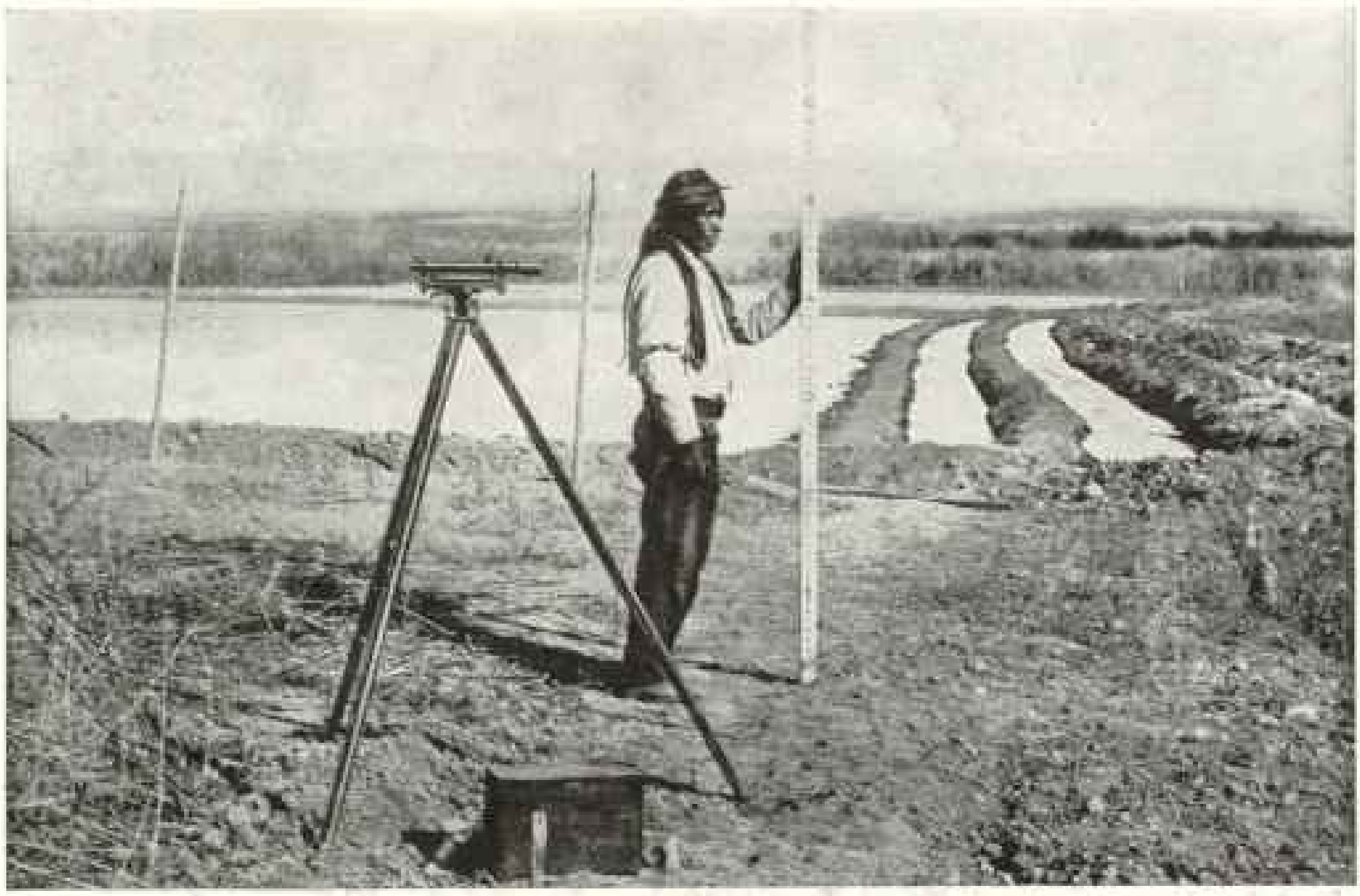
Photo from N. H. Darton

APACHE PAPOOSE AND BASKETS: ARIZONA

"There are some 300,000 Indians in the United States. This grand total includes all who are of Indian blood or who have been adopted into the tribes. The census figure of 1910 shows an Indian population of 304,950, as contrasted, it may be noted, with a population in 1860 of 254,300" (see text, pages 73-75).

BLACKFEET INDIANS AT WORK ON THEIR IRRIGATION PROJECT

"The great oil fields have brought wealth to those Indians so fortunate as to hold allotments within the oil territory. The following cases are examples of the royalties for 1914 received by Indians of the Creek Nation from oil: Samuel Richard, $94,000; Jeannetta Richard, $90,000; Seeley Alexander, $57,000; Lessey Yarhola, $73,000; Eastman Richard, $93,000; Thomas Long, $35,000; Ella Jones, $31,000; Nancy Yarhola, $29,000; Johnston Wacoche, $27,000; Miller Tiger, $23,000. Some of the Bad River Indians have received as high as from $14,000 to $16,000 for the timber cut from their allotments" (see text, pp. 77-80).



Photos from Office of Indian Affairs

The irrigable lands belonging to the Indians form one of the principal sources of wealth of these people, and also form probably the best opportunity for these people to become individually self-supporting. In some sections of the country the Indians are better acquainted with irrigation farming than the whites in the same communities, and they are making great success in this line.

It is a strange thing indeed that we should be concerning ourselves so largely and spending so many millions each year for the remaking of the people who are the truest of Americans. It shows how anxious to be just and willing to be generous are our people. They feel with a quick conscience how cruel it would be to introduce this primitive man into a harsh, competitive world of business with a code of its own more foreign to him than that of the Bushido; too much, they fear, like pitting Little Boy Blue against Shylock in a trade.

Let us frankly state the fact—there is such a thing as being too unselfish, and this the Indian too often is, for he has not gained a forecasting imagination. His training has not given him the cardinal principle of a competitive civilization, the self-protecting sense. It is not instinctive in him to be afraid of starving tomorrow if he is generous or wasteful today.

"WHY SHOULD WE WORK?"

And work? Why work if not necessary? Is it not, as an Osage chief once reprovingly said to me, is it not the hope of every American that he may some day be a gentleman who does not work?

We are bent, then, upon saving the Indian from those who would despoil him until the time comes when he can stand alone. And that time comes when he has absorbed into his nature the spirit of this new civilization of which he has become a part. This is certainly a revolution we are expecting—an impossible revolution in some natures—the substitution of a new standpoint for one long taught by fathers and grandfathers.

Truly such a transformation is not to be worked like some feat of legerdemain, by a turn of the wrist. Bayonets cannot do it; money cannot do it. We can force men to work. We can keep them without work. These two methods we have tried with the Indian, and they have failed in leading him toward the goal of responsible self-support. Adaptation to new environment comes from education through experience.

We therefore have the task of introducing a new conception into the Indian mind. This is not a thing that can be done wholesale. It becomes an individual problem, and our hope lies in schools for the young and in casting more and more responsibility upon the mature and letting them accept the result.

What should the test be in passing upon the fitness of one who is to be sent out into the world? Plainly his ability to handle himself, to care for himself so that he will not become a charge on the community. To be a rich Indian is not a qualification, for his wealth may indicate, and generally does, nothing more than good fortune. In the land lottery some drew prizes and some blanks. Nor should the degree of blood be the test nor education; for many of those who are wisest in counsel and most steady in habits and sturdy in character are uneducated full-bloods. The man who can "do" for himself is the man to be released. And he is the man who thinks not in terms of the Indians' yesterday, but in terms of the Indians' tomorrow. One whose imagination can take that leap and whose activities will not lag behind. It is to be remembered that we are not looking for an ideal Indian nor a model citizen, but for one who should not longer lean upon the government to manage his affairs.

MANY THOUSANDS ARE CAPABLE AND THRIFTY

There are many thousand Indians in our charge who are entirely self-supporting, capable, thrifty, far-sighted, sensible men; and, singularly enough, these are most often found among those tribes which were most savage and ruthless in making war upon the whites. Some of these are indeed so far-sighted that they do not wish to enjoy full independence because their property would then become subject to taxation.

Others are attached by a tribal sentiment and by the natural conservatism of the Indian to existing conditions. Still others are held to governmental control in part because of the entanglement of their tribal affairs. The government will not do its duty toward itself or toward these Indians until men of this class are fully released. There is a second class, made up of those willing to work but not

knowing how, and a third class, of those who know but have no tools. For these there is help—the teacher farmer for the one and a small loan in the form of tools for the other.*

There are those, too, for whom it is too great a jump to pass from hunting to farming, but who can herd cattle, and for these the government is providing herds for their ranges. Congress has been liberal in its appropriations for these things, and with a stable policy and administrative efficiency these Indians can be gradually lifted into usefulness, full self-support, and into entire independence.

THE ORATOR AND THE LOAFER

Then there is the "proud" red man who idly clings to the traditions of his race and talks of its past with such dignified eloquence, declaring in one glowing moment against the injustice of requiring service from those who once owned the continent and in the next sentence pleading for rations. This man is half brother to him who has degenerated under the orphan-asylum system into a loafer. My confidence is that for all these there is some hope, for most of them much.

But from what has been already said it will be perceived that in the direction of Indian affairs I believe it wisest to give our chief concern to those who are willing to work, who show evidence of a rudimentary ambition, and to convert the Bureau of Indian Affairs into a great cooperative educational institution for young and old, reducing to the minimum the eleemosynary side of its work and its trust functions. It sounds trite, but it has its significance here, that it is not so important to conserve the wealth of a people as to develop their capacity for independence.

For the young the schools* are doing much, especially the day schools on the reservations. By way of answer to those who are troubled at the neglect of the Indian, it may be noted that since 1863 we have expended $85,000,000 in the education of the Indian. Beginning with $20,000 a year, the annual appropriation for this purpose now reaches nearly $4,500,000. Those schools are most useful in which emphasis is laid upon the industrial side of life. There are no better schools, I am well advised, than many of our reservation schools, where each child is taught the rudiments of learning and to be useful in practical things—reading, writing, and arithmetic; how to plow and sow, hoe and harvest; how to build a house and shoe a horse, or cook a meal.

*EXTRACTS FROM TYPICAL LETTERS FROM INDIANS

"You can't make the Indian independent by doing his business for him."—*A Kickapoo Indian.*

"Indians ought to live like men—not like boys."—*A Colorado Ute.*

"We will never better our condition while we are wards of the nation."—*A Yakima Indian.*

"As long as we have money in the U. S. Treasury we will not do much work, and work is our salvation."—*An Oklahoma Kiowa.*

"Government should not listen to the plea of a few backward Indians who are opposed to progress and are contented to live at the expense of government and of industrious Indians."—*An Iowa Sac and Fox.*

"My children attend public schools; I pay taxes; why should I be under government supervision?"—*An Oregon Indian.*

"The government cannot all the time take care of the Indians."—*A Wisconsin Indian.*

"Indians now hampered by delays, regulations, and red tape . . . and these things have made them discouraged."—*A Yalalip Indian.*

"No greater blessing could come to the Indian than to be compelled to think for himself."—*An Oklahoma Seminole.*

*It is reported that there are 84,229 Indian children of school age. Of these 6,428 are ineligible for school, leaving 77,801 eligible for school. Of this number 22,775 children are in government schools, as follows: In the 37 nonreservation boarding schools conducted outside of the Indian country there are enrolled 10,857 children. In the reservation boarding schools situated on the various reservations there are 9,700, and in the government day schools on the reservations, which resemble closely the ordinary district schools of the States, except that they offer industrial training, there are 7,218 children. Of the children enrolled in mission schools there are 1,379 in mission boarding schools under contract with the government and 3,450 in mission schools without contract. There are enrolled in the public and private schools 25,924 Indian pupils of which the Indian Office has record. This would leave 15,906 Indian children eligible for school privileges, but not reported as being in school. Of this number probably 6,000 in the Navajo and Papago country are without school facilities, but the greater part of the remainder are enrolled undoubtedly in public schools, but not reported.

Photo from N. H. Darton

THE APACHE AND THE CACTUS: ARIZONA'S PIONEERS

For centuries the Indians of the Papago country, in southern Arizona, lived in a semi-arid region, eking out a scant existence from lands covered with cacti and sage-brush. It has been discovered that under those lands lies a rich supply of water in an underground stratum, which, brought to the surface and used for irrigation, will make their country flow with milk and honey. It is the intention of the government to sink wells and use this water for the benefit of the ten thousand or more Indians who live in that region.

Photo from George R. King

A SHEEP CORRAL: HOPI LAND, ORAIBI, ARIZONA

"To teach the Indian that he must work his way, that the government will no longer play the part of Elijah's raven; to convert the young to our civilization through the creation of ambitions and desires which the blanket life cannot satisfy; to organize each group of Indians into a community of sanely guided coöperators, who shall be told and taught that this government is not to continue as an indulgent father, but as a helpful, experienced, and solicitous elder brother—this program we are adventuring upon" (see text, page 87).

make a dress, and nurse a sick man or animal.

SOWING SEEDS OF AMBITION

In one thing we are short—the art of inducing ambition. This largely depends upon the genius of the teacher to fire the imagination of the pupil, for, after all, the true teacher is an inspirer, and the only thing he teaches his people is to want something. That is the first step in all civilization.

We need teachers in the Indian Service, men and women with enthusiasm and with sympathy, not learned, but wise. We are to control less and to help more. Paternalism is to give way to fraternalism. The teachers we need are helpers, farmers, and nurses, who may not know how to write ideal reports, but do know how to trust and secure trust. There is no way by which an Indian can be made to do anything, but experience justifies the belief that there are many ways by which he can be led.

To turn the Indian loose from the bonds of governmental control, not in great masses, but individually, basing this action upon his ability to watch his steps and make his way, not in any fool's dream that he will advance without tripping, but in the reasonable hope that he will develop self-confidence as he goes along; to destroy utterly the orphan-asylum idea, giving charity only to the helpless and in gravest emergencies; to teach the Indian that he must work his way, that the government will no longer play the part of Elijah's raven; to convert the young to our civilization through the creation of ambitions and desires which the blanket life cannot satisfy; to organize each group of Indians into a community of sanely guided coöperators, who shall be told and taught that this government is not to continue as an indulgent father, but as a helpful, experienced, and solicitous elder brother—this program we are adventuring upon. It may be inadequate, but it is surely a long step on the road which the Cherokees took.

PROTECTING THE INDIAN FROM HIS ENEMIES

To carry out this policy there should be continuity of purpose within Congress and within the Department of the Interior. The strength of the Administration should be turned against the two enemies of the Indian—those who, out of sentiment or for financial reasons, keep the Indian's mind turned backward upon the alleged glories of other days and the injustices that have been done him, and those who would unjustly take from him the heritage that is his.

The demands now being urged that reservations shall be broken up to make way for white men who can use the lands to better advantage should be resisted, unless it can be shown that the Indians under proper stimulus will not use these lands, or that by the sale of a portion the Indians would be enabled to make greater use of the remainder. The Indian is no more entitled to idle land than a white man.

But speculation is not use; and the Indian must be regarded as having the first call upon the lands now his, at least until white men are willing to surrender their lands when not used. Idle Indians upon idle lands, however, must lead to the sale of the lands, for the pressing populations of the West will not long look upon resources unused without strenuous and effective protest, and the friend of the Indian who would give him his chance and would save for him his property is he who keeps in mind the thought of his future instead of his past, and that future depends upon his willingness to work.

PARTITIONED POLAND

By William Joseph Showalter

IT WAS four years before the United States was born into the family of nations that Poland saw the beginning of her end as a member of that family; and it was two years before Washington had completed his great task of blazing the way for the young nation his sword had founded that Poland's name as an independent country was erased, perhaps forever, from the list of sovereign States of the earth.

And yet the hundred and seventeen years that have sufficed to transform the United States from a little country on the middle eastern seaboard of North America into one of the wealthiest and most influential nations of the world have not served to quench the national spirt of the Polish people, nor to end their dream of a rehabilitated and reunited Poland.

Generations of the sternest repression ever practiced upon any people have still left the Pole with his heart set on the one desire of his life—Poland restored. In spite of the efforts of three of the world's most powerful governments to assimilate them and to incorporate them into their own bodies politic, 20 million Poles have hoped and longed for and dreamed of the day when their country shall resurrect itself and make itself a vital force in the civilization of the future.

Efforts at assimilation have been met by struggles against it, and after nearly a century and a quarter of trying to quench the fire of fervor for their beloved Poland from the hearts of the Poles they still stood at the beginning of the present war, with hearts aflame and souls afire, hoping in the face of despair, that somehow, somewhere, some time, the ashes of captivity might be replaced with the garlands of liberty.

THEIR FERVENT LOVE

The fervent love of the Pole for all things Polish is borne witness to by all who travel that way. He will tell you that their cooking is better than that of Paris; that their scenery is more beautiful than that of any other country; that their language is the most melodious that falls from human lips; that there is no dance in the world to be compared with the mazurka; that the most beautiful women on the face of the earth and the bravest men who ever lived are to be found among them; that the Poles are a cheerful, hospitable, easily pleased, and an imaginative race; and that yet, in spite of and notwithstanding all this, they are the most unhappy people and theirs the most hapless nation in history. Krasveski once exclaimed during his exile:

"Oh, thou beautiful land, our mother! When we say farewell to friends we have the hope of meeting them in heaven; but never again shall we see thy loved landscapes, thy linden avenues, thy villages, thy brooks, and thy rivers. Can heaven really be so beautiful that it makes us forget all this, or does a river of Lethe flow before the gate of Paradise?"

Some one has said that there is perhaps after all no condition more elevating for a race than one in which no distinguished man has any external distinction, title, or decoration, and where the official tinsel of honor is regarded as a disgrace. In Poland such a condition has prevailed since her partition, for the honor of overlord governments is despised. A poor but distinguished teacher in Warsaw received from the government the decoration of the Order of Stanislaus. He never wore it, but when his children were naughty pinned it on their breasts as punishment for their misdeeds. And it is said that never a dunce-cap was more effective.

THE POLAND OF YESTERDAY

Poland, before Maria Theresa of Austria found cause to remark that she had been a party to an outrage upon geography and to an act of violence against the laws of ethnology, had been one of the leading nations of Europe. It was the Poles who successfully stayed the march of the triumphant Turk across the continent and mayhap saved the West from the fate that came upon the Near East.

Photo and copyright by R. W. Kilburn

THE HORSE MARKET: WARSAW

The horse market of Warsaw is one of the most important in Europe. Situated in one of the richest grazing regions of the Old World, with the added advantage of being close to the horse-using centers of western Europe, Warsaw's market has long been sought by the buyers of the continent. Some famous stock farms are to be found among the holdings of the noblemen of Russian Poland, as well as among the possessions of nobles of German and Austrian Poland.

In size she outranked nearly every nation of the continent. Even now Russia alone of the European nations is larger than Poland was at her greatest. In population she stood at the forefront of Europe; only Russia and Germany today have greater populations than are to be found in the lands that once were Poland; for unpartitioned Poland had an area of 282,000 square miles, and the lands that once lay within her boundaries now support a population of approximately 50 million. In area she was as large as the German Empire, Switzerland, Belgium, Holland, and Denmark together; larger than Great Britain, Italy, and Greece combined; larger than Austria-Hungary and Servia in one. Within what were her boundaries there dwells a present population larger than the combined populations of Great Britain and Belgium; larger than those of France, Belgium, and Holland together; and matching that of Austria-Hungary.

Poland was three times partitioned, and these partitionings were readjusted between the partitioners by the Congress of Vienna in 1815. Where the original partitions had given Russia 181,000 square miles, Prussia 54,000 square miles, and Austria 45,000 square miles, the reapportionment of the Vienna Congress gave Russia 220,500, Prussia, 26,000, and Austria 35,000 square miles.

THE HUCKSTERS OF ORTELSBURG

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In spite of war conditions, trade frequently goes on in frontier territory. After Ortelsburg, a frontier city of southern East Prussia, had been bombarded by the Germans, and the Russians had retired, the Russian tradesmen came in with food supplies just as though peace still reigned in Europe.

Much of the land which Russia secured, and particularly Kiev, had been identified with Russia generations before.

Poland, in the days of her greatest area, extended from a point within 50 miles of Berlin, on the west, to the meridian of the Sea of Azov on the east; on the north it reached nearly to the Gulf of Finland and on the south down to the Khanate of Crimea.

The plan of the Congress of Vienna was to let Prussia have Posen and the districts of East and West Prussia that were Polish, and to give Austria Galicia and Bukovina, while the Kingdom of Poland was to be continued and Russia's Tsar was to be its king—the two governments to be entirely separate except for the union of tsar and king in one person; but revolts in Poland led to the complete absorption of the Kingdom into the Russian Empire.

RUSSIAN POLAND PROPER

What we now know as Russian Poland is that neck of territory stretching westward between the Prussias and Galicia. This territory has an area almost exactly equal to that of New York, yet, in spite of the fact that its extreme southern boundary lies north of the latitude of Winnipeg, its population is as great as those of New York and New Jersey combined.

Russian Poland, in this limited sense, consists of a great plain, somewhat undulating, with an average elevation of about 400 feet, sloping upward toward the highlands of Galicia on the south and toward the swelling ground paralleling the Baltic on the north. It joins the lowlands of western Germany with the great plain of western Russia. Its rivers are slow and sluggish, with their mouths often but a few dozen feet below their sources and seldom more than a few hundred feet below. Their basins intricately interpenetrate one another, and the frequent inundations of these basins have covered them with a very rich alluvial soil.

Russian Poland usually has a winter somewhat similar to that of New England. There is an even cold, with not a great deal of snow, but often with razor-edged winds from the northward. The rivers of this region usually freeze over about the middle of December, and the Vistula is under ice for approximately 80 days during the average winter.

In the eighteenth century, when the city of Warsaw, next to Paris, was the most brilliant city in Europe, this flat plain was unusually rich in herds and in geese flocks, though almost bare of manufactures.

THE CITY OF WARSAW

Warsaw has never been able to forget that it was the capital of the Kingdom of Poland, and it still conscientiously maintains the vivacious gayety for which it was famed during the days of its highest fortunes. It is still Russian Poland, but instead of a native king and court it has a Russian governor general and a Russian army corps. The gayety of the city, long ago modeled upon that of Paris, is one of the few distinctive characteristics which it has been able to retain from the past.

The city is well situated. It is built in the midst of a fertile, rolling plain, mostly upon the left bank of the Vistula, which is navigable here for large river boats. The main part of the city lies close to the river and is compact and massive. Its streets are very narrow and very crooked, wriggling in and out regardless of all logic of direction. The more modern parts of the city, on the other hand, are laid out in broad, straight streets. In these parts one occasionally finds bathtubs, steam-heating, and various devices of sanitary plumbing in the private homes.

There are many magnificent palaces of the old Polish nobility in the city. A number of these sumptuous buildings are being put to public use, such as the renowned Casimir Palace, which now houses the university. Other palaces are being made to serve the needs of municipal and garrison administration.

Warsaw has become under Russian rule a great industrial and commercial center. It manufactures machinery, carriages, and woven goods, and it trades in these things and in the animal and food products of Russian Poland. A large export of leather and coal to Russia passes through Warsaw. A great deal of the

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THE CLOTH MARKET IN WARSAW

"Warsaw has become under Russian rule a great industrial and commercial center. It manufactures machinery, carriages, and woven goods, and it trades in these things and in the animal and food products of Russian Poland. A large export of leather and coal to Russia passes through Warsaw" (see text, page 91).

city's production is the output of handwork, and here are to be found some of the poorest, most patient, and persistent artificers of the western world. There are 50 book-printing establishments in the city, most of them engaged in the labor of promoting the supremacy of the Russian language.

Russian is the language of instruction in nearly all of the Warsaw schools. It is also the language of the government and of polite and learned society. This currency of the conquerors' tongue has deeply tinged the life of old Warsaw, and the Polish spirit of proud, ostentatious frolic has taken on a color of melancholy and meditative reflection. The Warsaw medical school is famous, as is also its school of art. Its musical conservatory is modeled upon those of Petrograd and Moscow, and the un-Polish music of Rimsky-Korsakov, Balakirev, Cæsar Cui, and Chaikovsky has replaced the lighter of native fancy.

RUSSIA'S TROUBLES

If Russia got the bulk of Poland's territory and the major portion of the Polish population, she also got by far the larger part of the Polish problem. Russian Poland was the cradle of the Polish race—a land in which both ruling aristocrat and serving peasant were Poles. The result was that Poland became a thorn in the side of Russia, causing the Empire no end of trouble and bringing upon the heads of the Poles in turn no end of repressive measures. Indeed, at

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THE SWINE MARKET: WARSAW

"Russian Poland usually has a winter somewhat similar to that of New England. There is an even cold, with not a great deal of snow, but often with razor-edged winds from the northward. The rivers of this region usually freeze over about the middle of December, and the Vistula is under ice for approximately 80 days during the average winter" (see text, page 91). In the eighteenth century Warsaw, next to Paris, was the most brilliant city in Europe.

times this became so great that more than one Russian statesman came to advocate turning Russian Poland over to Germany.

METHODS OF REPRESSION

For a long time the Poles were forbidden even to use their native tongue. Even the railway employees could not answer questions asked in Polish. The word "Polish" itself could not be used in the newspapers. For a while no letter could be addressed in Polish. Outside of what is now known as Russian Poland, in the provinces acquired before the final partition, one still encounters notices in and on all public buildings reading: "The speaking of Polish is forbidden." In one of these provinces street-car conductors were fined because they answered questions asked in Polish.

The national dress was forbidden, even as a carnival costume or in historical dramas in the theater. The coat of arms of Poland had to be erased from every old house and from the frame of every old picture. The singing of the national songs was strictly taboo.

Yet with all the efforts at repression, and with all the resistance made against that repression, when the present war broke out the Russian Pole seems to have been as loyal to his government as the German Pole was to Germany or the Austrian Pole to Austria. The whole war in the eastern theater has been fought in territory which once belonged to Poland, territory largely peopled by Poles, and yet there is no evidence that any of them have betrayed their respective flags.

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WAR TIME IN WARSAW

"The whole war in the eastern theater has been fought in territory which once belonged to Poland, territory largely peopled by Poles, and yet there is no evidence that any of them have betrayed their respective flags" (see text, page 93)

AUSTRIAN POLAND

Austrian Poland is practically embraced by the crownland of Galicia. This crownland is almost exactly the size of the State of South Carolina, but it has a population six times as great. If continental United States, exclusive of Alaska, were as densely populated as Galicia, we would boast of a population four times as great as that of Russia.

And yet Galicia is the poorest of all the provinces of Austria. It lies outside the ramparts of the Carpathians, which turn a cold and unfriendly back to it, the while they cast a protecting shelter around the northern side of that great oval basin known to geography as Hungary.

Where Hungary is protected by these mountains from the cold winds that sweep down from the Baltic, they rob Galicia of the warm winds that sweep up from the Mediterranean. And where they help to form that great ring of natural defense around Hungary which is pierced only by the Iron Gate of the Danube on the east and by the gateway of Porto Hungarica on the west, they turn away from Galicia, occupying nearly a third of her territory, but running away from the protection they might have afforded her flanks.

This inhospitality of the Carpathians toward Galicia leaves her with her back turned against steep and forbidding mountain sides that bend away from her, exposes her sides to hostile attack, and allows her to sit with her feet buried in the Russian plain.

Robbing Galicia of the warm winds that otherwise would come to her from the south, they also turn back upon her the cold winds of the north, which otherwise would sweep over Hungary. Thus they give her long, cold winters; short, wet springs; hot, blistering summers, and dreary, chilly autumns.

CRACOW AND LEMBERG

The glory of her past and the hope of her future are Cracow and Lemberg to Poland, for it was the former that was her capital in the yesterday of history and the latter that is her capital today and which would be her capital tomorrow were Polish dreams to come true.

In Cracow, the great city of Poland's past, the royal palace still stands; but it is used as a barracks and not as the home of a king. The cathedral, from which Poland's heart arose to its God, is now the Valhalla of its departed greatness; for there sleep the kings and the heroes from the Jagellons to Kosciuszko. Not far away is Kosciuszkoberg, one of the most remarkable memorials ever reared by the hand of man—a huge mound of earth brought by loyal Poles from every battle-field in the world consecrated with Polish blood. After the annexation of Cracow by Austria this great mound was transformed into a fort; but with all that, it still stands as a tribute to the great hero whose sword was drawn in behalf of freedom both in Poland and in America.

The country around Cracow is flat and is devoted almost wholly to small farming and trucking. The peasants dress in white jackets and blue breeches, and wear jack-boots; their women folk, with large bright shawls and picturesque head-dress, brighten and give spirit to the countryside.

From Cracow to Lemberg the traveler encounters good land; it is fairly level and entirely innocent of fences, boundary stones marking party lines and tethers or herdsmen keeping livestock where it belongs. The same methods of agriculture that we used in the United States before the days of the self-binder and the grain drill are still in force in that region.

It is in Lemberg that the only Polish-dominated legislative assembly in existence holds its sessions; for Lemberg is the capital of Galicia, and the Poles, both because of their shrewd political ability and their numerical weight, control the Galician legislature in the face of their rivals, the Ruthenians of East Galicia. The city of Lemberg is largely modern—a compact nucleus surrounded by scattering suburbs.

GALICIAN INDUSTRIES

While Galicia is almost wholly an agricultural region, and while a large per-

Photo and copyright by B. W. Kilburn

A SCENE IN WARSAW: RUSSIAN POLAND

"If Russia got the bulk of Poland's territory and the major portion of the Polish population, she also got by far the larger part of the Polish problem. Russian Poland was the cradle of the Polish race, a land in which both ruling aristocrat and serving peasant were Poles. The result was that Poland became a thorn in the side of Russia" (see text, page 92).

centage of that agriculture is carried on in the old-time way, there are some few manufacturing neighborhoods and industrial districts. Distilleries occupy first place among the industries, and there are many beet-sugar and tobacco factories. Petroleum springs abound along the Carpathians, and some of the towns in this region grow from small villages to modern Beaumonts between New Year and Christmas.

Galicia has many of the world's most famous salt mines. Those at Wieliczka have been worked for nearly seven centuries, at one time being a principal source of revenue for the Polish kings. Railroads are not permitted to run near them lest their vibrations result in cave-ins. Within these mines are a labyrinth of salt-hewn streets and alleys, lined with pillared churches, staircases, restaurants, shrines, and monuments.

Nearly 2,000 workmen are employed in the salt mines, working in eight-hour shifts. The damp, salty atmosphere seems to shorten their days; but even at that they do not appear unhappy, in spite of the small wage of 20 cents a day they are paid. There are little lakes in the mines, sometimes 30 feet deep, which are navigated by ferry-boats. Many of the little ponies which draw the cars over the tiny salt railway have not seen the light of day for generations and are born blind.

Access to these salt mines has always been difficult, for the government is watchful lest alien hands destroy some

CATACOMBS IN WARSAW

In Poland and other countries large structures are built to take the place of subterranean catacombs. At Panama the Chinese have one of these structures, and at Cartago, Costa Rica, the earthquake of a few years ago demolished one of them. There is nearly always an attractive colonnade where relatives and friends of the departed may gather.

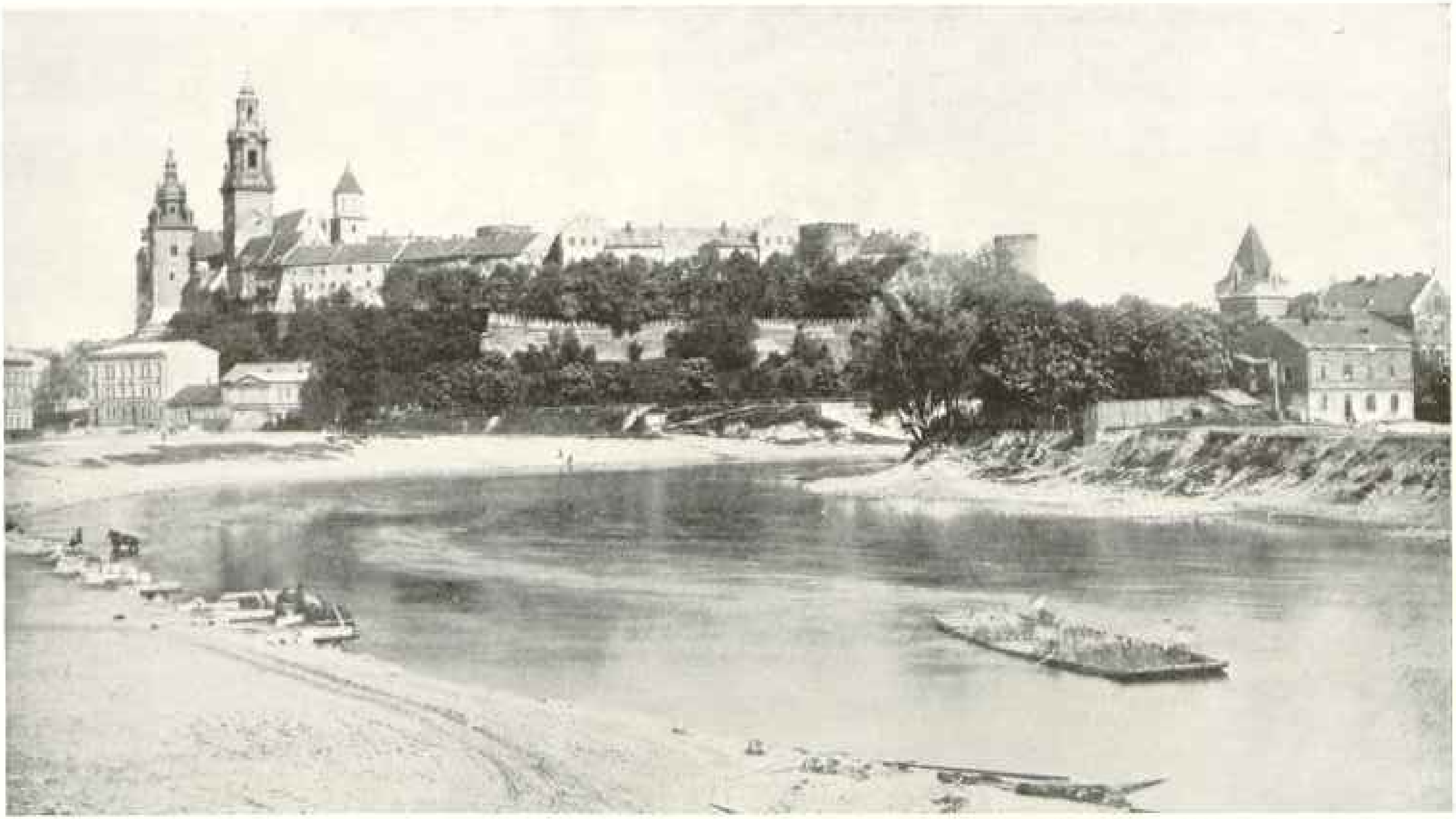
of their works. The workmen are searched almost as carefully as the men who work in the diamond mines in South Africa.

AUSTRIA AND HER POLES

Austria has never treated her Poles as the Russians and the Prussians have treated theirs. Where those countries have sought to destroy the spirit of Polish nationalism, holding it to be a perpetual menace to Russian and Prussian institutions, Austria has proceeded upon the theory that this spirit, carefully directed, becomes more a source of strength to the government than a source of weakness. So the Poles of Austria are as free to sing their national songs as the people of our own South are free to sing Dixie. They are as much at liberty to glorify their past and to speak their native tongue as though they were free and independent. Except that they must pay their taxes to Austria and serve in Austria's army, they are practically self-governing.

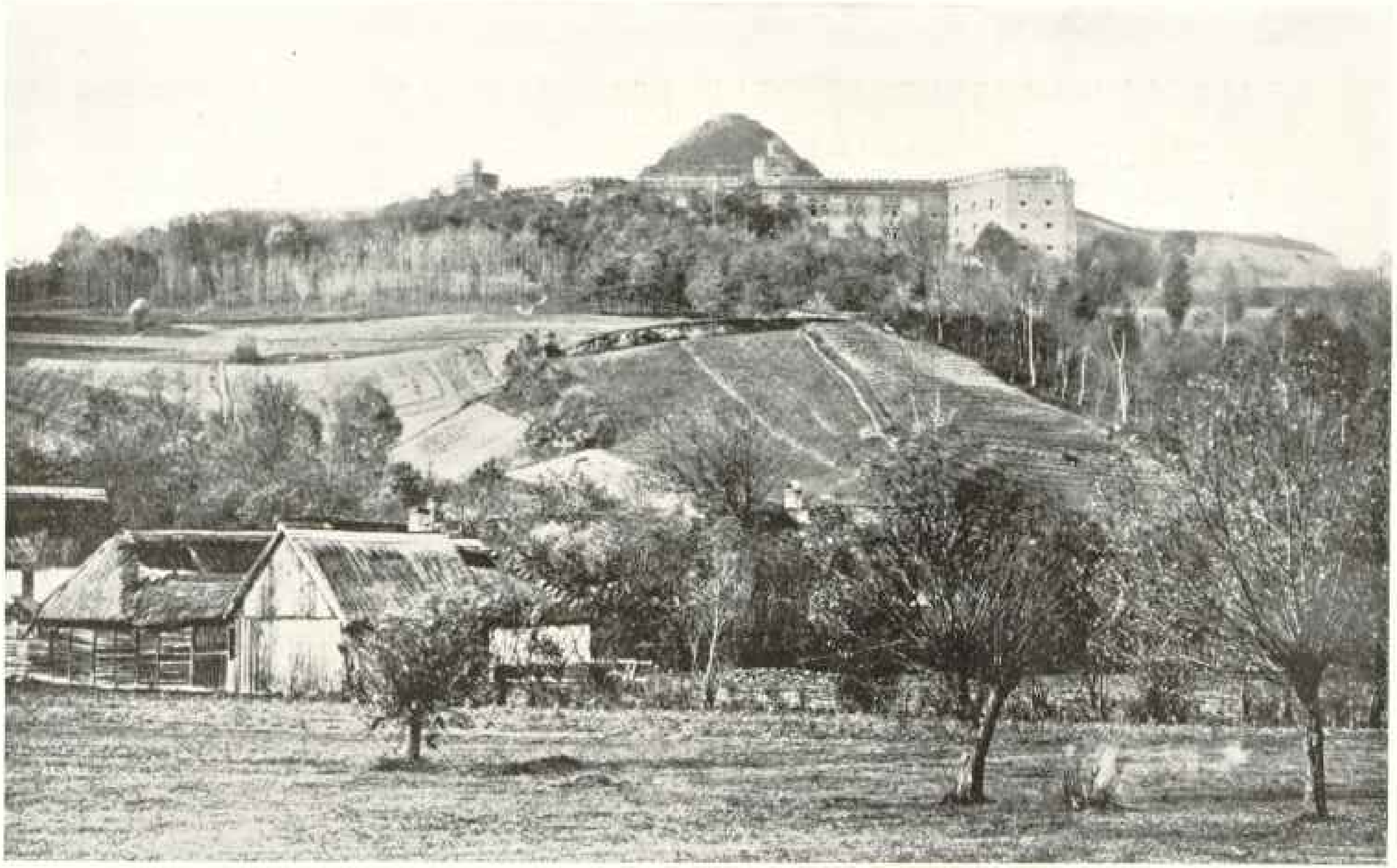
And well may this be, for all the world knows that it was Sobieski and his fellow-Poles who saved Vienna and rescued Europe from the Turks.

Not only does Austria allow her Poles local self-government, but she also gives them representation in the Austrian Reichsrath. The result has been a comparative degree of satisfactory relations between the Poles and the Austrians; so much so, in fact, that the Russian and German Poles have for years felt rather



THE GRAY SENTINEL OF CRACOW

The glories of the citadel of Cracow are a common heritage of all Poles, whether they be Russian, German, or Austrian. Here linger memories of Casimir the Great, the Sigismunds, father and son, and Sobieski. "Poland was a republic of landowners, in which the serf did not count. The man who owned land or whose ancestors owned land was a noble. He might match poverty for poorness, he might not have a single sole between his feet and the ground, he might have only a rusty old sword to tie to his girdle, and only a piebald blind horse to drive, and that a hired one, but he still was a noble, if ownership of land had ever set its approving stamp upon him or his family" (see text, page 103).



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ANOTHER VIEW OF THE CITADEL AT CRACOW: THE MECCA OF POLISH HEARTS

After Cracow lost its independence and became an Austrian city, the citadel was used as a barracks. This profanation of the holy of holies of Polish history grieved the Poles as few acts have ever hurt them. They begged to have the shrine of their aspirations restored. The Austrian government agreed that if Cracow would provide other barracks the wishes of the Poles would be met. Today the restoration is a fact accomplished, and the citadel is a museum and memorial of the Polish people. The huge mound towering over the citadel, in the background of the picture, is a tribute of the Polish people to Kosciuszko, hero alike of Poland and of America, whose sword was drawn for freedom in the Old World and the New. Loyal Poles brought to this mound of earth soil from every battle-field on the face of the globe consecrated by Polish blood.

bitter toward their Austrian compatriots, claiming that they are neglectful of their brethren who are less fortunately circumstanced than they are. Some one has observed that the Poles of Austria are like the French in Canada; that their nationalism is religious and literary and not anti-governmental.

RELATIONS WITH THE RUTHENIANS

As western Galicia is the stronghold of the Austrian Pole, so eastern Galicia is the main dwelling-place of the Austrian Ruthenian. The two races never get along very well together. About 45 per cent of the population of Galicia is Polish and about 42 per cent is Ruthenian. Outside races hold the balance of power, and it is only by playing good politics that the Poles dominate Galicia. Since the Ruthenians got universal suffrage they have been sending large numbers of their representatives to the Galician Diet. The conflict is a racial one, and the Poles are probably not as considerate of Ruthenian rights as they would like Austria, Russia, and Prussia to be of theirs.

PEASANT LIFE IN GALICIA

The peasant population of Austrian Poland eke out a hard existence. In many parts of the country the peasant lives in a log hut coveted with straw; he breakfasts, dines, and makes his supper of porridge, washing it down with bad brandy; and in general leads a life full of want and empty of pleasure. The peasants who farm for the nobles receive no money in payment, but only a share of the crop.

The usual division, all over Europe, ranges between a half and a fourth, and even in Russian Poland it never goes below the latter proportion. In Galicia the peasant now receives no such proportion. The nobles' estates are either owned outright by absentees or are controlled by them through full-value mortgages, and they have combined to force down the peasant-farmer's share, with the result that it now frequently goes down to one-twelfth, a wage of slow starvation and a wage largely responsible for a disease known as "Plica Polonica" among the peasants, which arises from a lack of nourishment.

THE GERMAN POLES

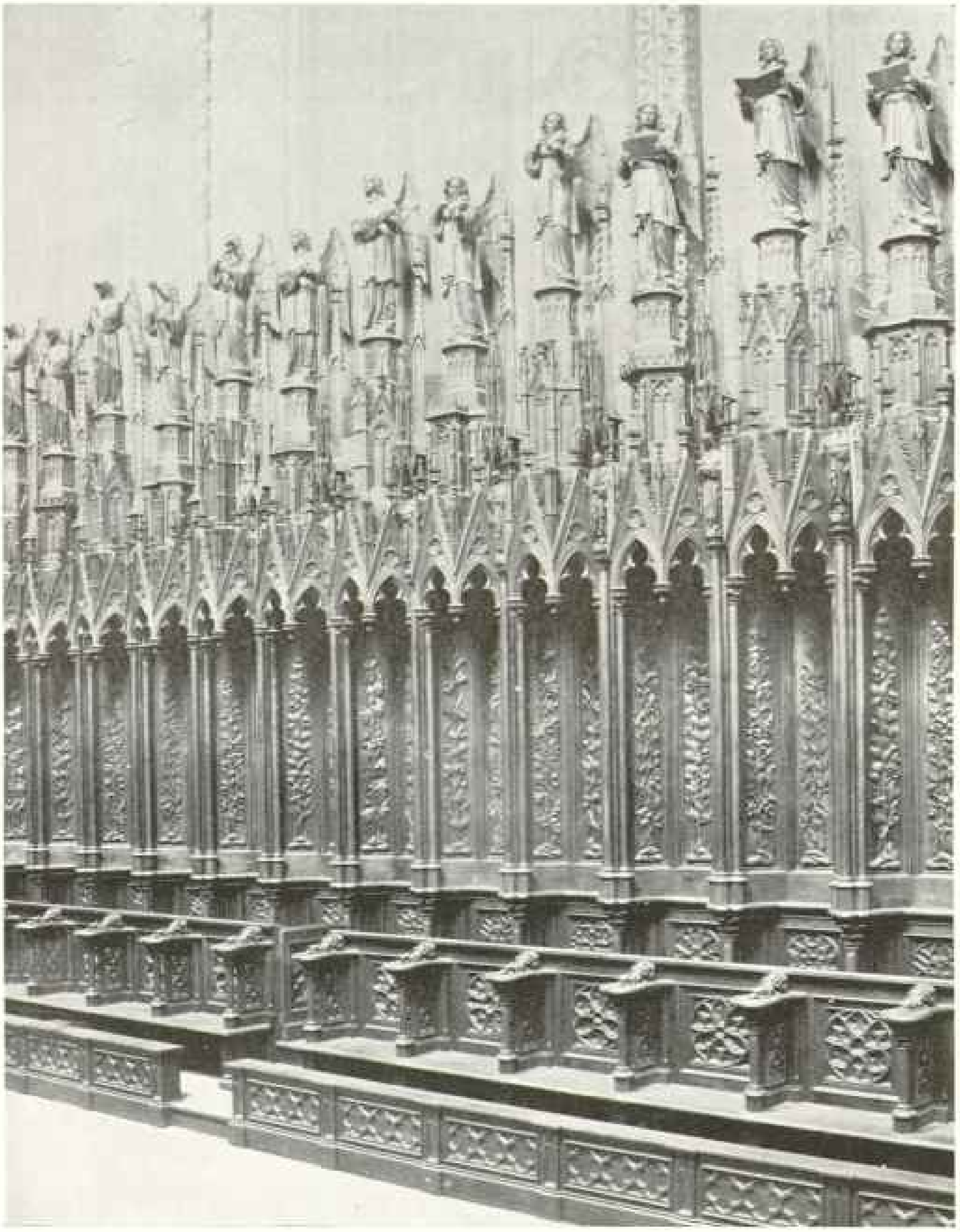
In the partition of Poland, Prussia got the smallest share when the redivision was made by the Congress of Vienna, although she had participated in the three partitions and had drawn 50,000 square miles of territory in those partitions. The Congress of Vienna reduced this to 26,000 square miles, taking the other 30,000 square miles and adding it, along with a part of Austria's holdings, to the Kingdom of Poland, which was to be ruled by the Russian Tsar, but was to be independent of and on a parity with Russia.

The 26,000 square miles of Prussian territory which once belonged to Poland is made up of Posen, most of West Prussia, and several districts in East Prussia. Posen is slightly smaller than Maryland, but has a population of approximately two million. West Prussia is a little larger than New Hampshire, but has a population nearly four times as great. East Prussia is about one-third as large as Virginia, but it possesses a population approximately equal to that of the Old Dominion.

Posen is largely Polish, the Poles constituting more than half of the population of the province, in spite of the large German immigration, aided and encouraged by the government. It is largely devoted to agriculture, though there are many important manufacturing industries. For a long time it was one of the worst educated provinces of Germany, but that time is now past. In 1901 the percentage of illiterate recruits in Posen was nearly one out of every ten; today it is only one out of four hundred. Posen is a part of the north German plain, and 61 per cent of its acreage is under tillage.

GERMANIZING THE POLE

West Prussia and East Prussia are the coldest provinces of Germany. They are cold and bleak in winter and hot in summer. East Prussia is the Kentucky of Germany in many ways. It contains the great government stud of Trakehnen, where some of the best horses in Europe are to be found. Both of the Prussias are famous for their great estates, many of them held by men prominent in the affairs of the Empire.



MAGNIFICENT CHOIR STALLS IN CRACOW

The wondrous luxuriance of these choir stalls is reminiscent of the time when sacred art was more a matter of love than of material profit. The superb canopy above the back stalls, filled with a multiplicity of symbolic detail and suggesting the guidance of an angelic choir, frames the composition with an exquisite embroidery much more rich and much more odious in accomplishment than any which could be worked in fabric. This canopy consists of cathedral towers, each tower surmounted by a heavenly chorister or an accompanist. Between the cathedral detail and surmounting the pillars of the stalls are figures of the church's historic nobility.

SIBERIAN INFANTRY IN WARSAW

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"Poland disappeared from the family of nations a victim of her own individualism. Although they constituted only one-twentieth of the population, the nobles arrogated to themselves the right of ruling everything. Granting no form of freedom to the peasantry, they yet loved their own freedom so excessively that nothing could be done without the unanimous consent of the nobles. There was no such a thing as the rule of the majority. A single one of a thousand nobles might set at nought the will of the other 999" (see text, page 106).

Germany has tried in every possible way to transform her Poles into Germans. It has used the Russian tactics in quenching the fire of their nationalism, but with no better success than Russia had. Heretofore Poles were not appointed to office; letters addressed in Polish went undelivered. Marriages between German men and Polish women were discouraged, for Bismarck had not let it escape his notice that "a Polish wife makes a Polish patriot out of her husband in the twinkling of an eye."

There were laws forbidding the use of Polish in public meetings, and Polish children who refused to answer the catechism in German were punished.

In the hope of making Germans out of the Poles, the Prussian government decided to colonize German settlers among them. First this was undertaken by private enterprise, but the Poles boycotted the settlers, and their lands finally were bought back. Then a law was enacted that no Pole could build upon lands acquired after a certain date. The result is that one who travels through Polish Germany today occasionally will see farmhouses, barns, dairies, stables, and even chicken-coops on wheels. The people live, move, and have their being in glorified wagons.

When private enterprise failed to Germanize Prussian Poland the government made appropriations, which up to the present time have amounted to a hundred million dollars, to acquire Polish lands and turn them over to German settlers; but with all that was done, the Poles are still Poles, and in spite of the law forcing some to sell their lands and preventing others from buying, the German settler has not succeeded in getting much of a foothold on Polish lands; and Germany has about four million Poles in her population.

POLISH PEASANTS

The lot of the Polish peasant is always a hard one, whether he live in Russia, Germany, or Austria. His food is simple, if not poor. His whole family must toil from the hour that the sun peeps over the eastern horizon to the hour when twilight falls into dusk. If he can say that his wife works like a horse, he has bestowed the acme of praise upon her. Hard work, many cares, and much child-bearing makes a combination that takes all pride out of the wife's heart and gives to the women of peasant Poland a haggard look, even before the third decade of their lives is closed.

You may even see them working as section hands on many of the railroads, and they are reputed to make good ones. It is not exceptional to see them carrying mortar for bricklayers and plasterers or to find them painting or paper-hanging in the cities.

Every peasant wants his daughters married off as soon as they reach womanhood, and little hands are drawn upon the lintel of the door to indicate to the world that there is a marriageable daughter inside the house. And the wedding day among the peasants is about the one bright spot in a girl's life. Where the children of the United States roll eggs on Easter Monday, those of peasant Poland pour water over one another in a spirit of fun.

THE POLISH NOBLEMAN

Poland was a republic of landowners, in which the serf did not count. The man who owned land, or whose ancestors owned land, was a noble. He might match poverty for poorness, he might not have a single sole between his feet and the ground, he might have only a rusty old sword to tie to his girdle, and only a piebald blind horse to drive, and that a hired one, but he still was a noble if ownership of land had ever set its approving stamp upon him or his family.

With him the peasants were as but worms of the dust. The Russian noble is proud of his peasants, the German noble was proud of his, and the Austrian noble had nought but words of praise for his; but the Polish noble was not proud of his.

Nothing illustrates better how the Polish peasant felt toward the Polish noble than the insurrection of the Poles of Austria in 1846. That was a movement of the nobles. The government did nothing to check the outburst, and it is said that the loyalty of the peasants to the

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THE MILKMAIDS OF KIEV

While Kiev is a part of what once was Poland, the bulk of its population is not Polish, but Russian Slavs

government and their hatred of their aristocratic brethren caused the insurrection to die aborning.

SINCERE HOSPITALITY

Whatever may be said about the relations between the Polish aristocrat and the Polish peasant, however, the hospitality of the former has always been whole-hearted and sincere. Tactfulness is as natural with them as taking to the water is natural with a duck. They like company and love entertainment, and are as fond of dancing as any other people in the world. It takes vigorous men to stand all the liquor that is provided by the Polish host.

The journal of the Countess Francoise Krasinska, who afterward married a son of Augustus III, written between the years of 1759 and 1761, is an interesting picture of Polish life just before the partition. "There are two classes of courtiers," she writes in describing her own home, "the honorary and the salaried ones, all alike nobles, with the sword at their side. The first are about twenty in number; their duties are to wait in the morning for the Count's (her father) entrance, to be ready for any service he may require, to accompany him when visiting or riding, to defend him in case of need, to give him their voice at the Diet,

and to play cards and amuse him and his guests. This last duty is best performed by our Matenko, the fool or court jester, as the other courtiers call him. Of all the courtiers he is the most privileged, being allowed to speak whenever he chooses and to tell the truth frankly.

"The honorary courtiers receive no pay, almost all of them being the sons and daughters of rather wealthy parents, who send them to our castle for training in courtly etiquette. The men receive, nevertheless, provisions for two horses, and two florins (about 40 cents) weekly for their valets. These servants are dressed, some as Cossacks, some as Hungarians, and stand behind their masters' chairs at meals. There is no special table for them; but they must be satisfied with what their masters leave upon their plates, and you should see how they follow with a covetous eye each morsel on the way from the plate to the master's mouth.

"I do not care to look at them, partly from fear of laughing and partly out of pity. To tell the truth, those who sit at our table have more honor than profit; for they do not always have the same kind of food that we have, although it comes from the same dish. For instance, when the meats are brought in, there will be on the dish game or domestic fowl on the top and plain roast beef or roast pork underneath.

"The salaried courtiers are much more numerous. They do not come to our table, except the chaplain, the physician, and the secretary. As for other people belonging to our retinue, it would be difficult to enumerate them; I am sure I do not know how many there are of musicians, cooks, link-boys, Cossacks, hostlers, valets, chamberlains, and boy and girl servants. I know only there are five different dinner tables, and two stewards are busy from morning till night giving out provisions for the meals."

POLISH WOMEN

Polish women are among the most beautiful in the world. The perfect shape of their hands and feet is commented upon by every visitor to the home of the Polish aristocracy. When they visit the shoe stores in Vienna, it is averred that the shopkeeper exclaims: "We know those are Polish feet," and proceeds to go to cases that are not drawn upon except when Polish women come into his store.

With their beauty they combine unusual linguistic abilities and almost unprecedented devotion to the lost cause of their fair Poland. It has frequently been asserted by those who know the Poles from intimate social relations with them, that but for the women the national spirit of the Pole would long since have succumbed to the wound-healing processes of time. As it is, there is a proverb that while there is a single Polish woman left the cause of Poland is not lost. "Four ladies do not meet on a charity committee without promoting the national cause under its cover," is the way one writer shows their devotion to the cause of Poland.

SOME NOTED POLES

Poland has contributed a long list of great and near great to civilization. It was Copernicus, a Pole, who first taught that the sun is the center of the solar system and laid the foundations of modern astronomy. It was John Sobieski who saved Europe from the Turks as Charles Martel hammered it out of the grasp of the Saracens. Kosciuszko and Pulaski served the cause of freedom both in Europe and America. The "Quo Vadis" of Sienkiewicz will never be forgotten as long as literature and history are appreciated by man. The music of Paderewski entitles him to a place among the immortals, and the histrionic art of Modjeska gave her a foremost place in the history of the stage. The compositions of Chopin, a Pole by birth, though a Frenchman by education, will float down through the corridors of time along with those of Wagner, Beethoven, Handel, Verdi, and the other masters.

POLES IN AMERICA

From the days of Kosciuszko down to the present, Poles have been no mean contributors to American civilization. Leopold Julian Boeck is credited with having led the movement for the establishment of the first polytechnic institution in the United States. Four million Poles

have come to the shores of America, and our Polish immigrant population living today ranges around three million. It is said that if the people of Polish ancestry in the United States were massed together they could practically duplicate the population of New England. In Pennsylvania one inhabitant out of every twelve has Polish blood in his veins; in New York one out of fourteen, and in Massachusetts one out of ten. In Wisconsin and Michigan every eighth person is of Polish descent.

POLISH IMMIGRANTS

Chicago is said to have more Poles in it than any other city in the world except Warsaw and possibly Lodz. Cleveland has more than 40,000 Polish residents, yet New York, Pittsburgh, Philadelphia, Buffalo, Milwaukee, and Detroit all have Polish colonies larger than Cleveland's.

Home-ownership seems to be an aspiration of the American Pole; many of them start to buy houses on the installment plan before they begin to speak English. With large families and small incomes, they are yet more frequently home-buyers than native-born Americans with smaller families and larger incomes.

Reared in regions where the battle of life is less one for comfort than one for existence, what seems a bare necessity to the American laboring man may appear a great luxury to the immigrant Polish peasant; consequently they can save on small wages.

Although in Europe by far the majority of the Poles are engaged in agriculture, in America they generally settle in the cities. However, many small Polish colonies have been started in New England and elsewhere. Most of the colonists buy abandoned farming lands, and not only manage to coax a living out of the soil where Americans before them could not get it, but they actually, in many instances, succeed in converting the waste place of yesterday into fields of plenty.

A VICTIM OF INDIVIDUALISM

Poland disappeared from the family of nations a victim of her own individualism. Although they constituted only one-twentieth of the population, the nobles arrogated to themselves the right of ruling everything. Granting no form of freedom to the peasantry, they yet loved their own freedom so excessively that nothing could be done without the unanimous consent of the nobles. There was no such a thing as the rule of the majority.

A single one of a thousand nobles might set at nought the will of the other 999. Unanimous consent could seldom be obtained for any vital proposition, and so Poland grew weak while Russia and Prussia and Austria were growing strong. In an age when international law was writ in the one phrase, "Let him take who has the power, and let him keep who can," the growing weakness of Poland and the growing strength of the other countries very naturally resulted in Poland's fall.

Having lost her all, Poland hailed the rise of Napoleon as an opportunity to regain it. Tens of thousands of her people enlisted under the banner of the great Corsican, and Poland poured out unstintedly of her resources of men, money, and munitions to aid the cause of the France that they hoped would deliver her. But when Napoleon retreated from Moscow the hopes of Poland declined, and Waterloo finally replaced tangible hope with an intangible dream.

The Indexes for Volumes XXV and XXVI of the NATIONAL GEOGRAPHIC MAGAZINE may be secured by any member of the Society desiring them.

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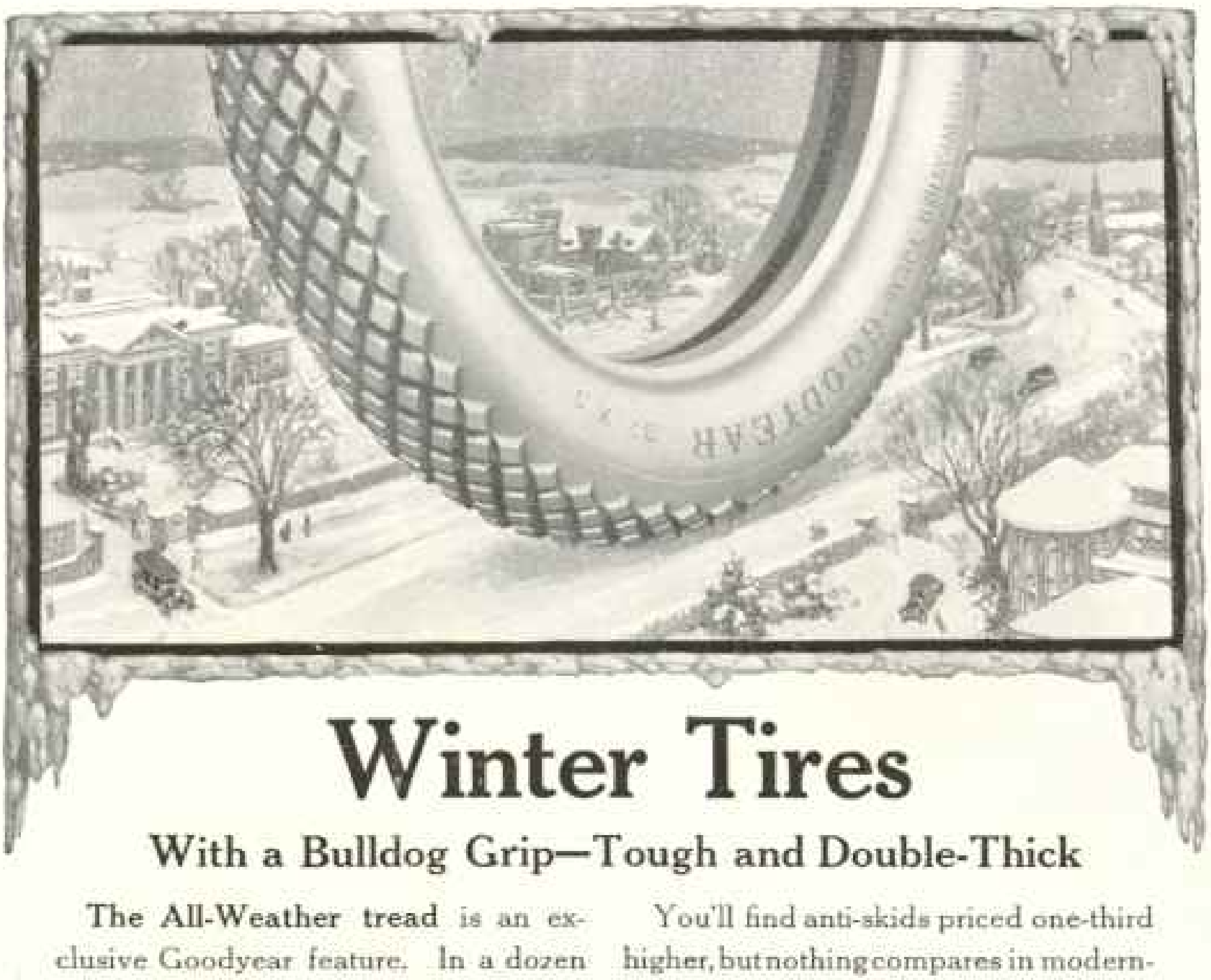

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The latest White Motor Cars are now exhibited by all White dealers.

THE WHITE COMPANY
CLEVELAND

Manufacturers of Gasoline Motor Cars, Motor Trucks and Taxicabs

Most punctures are unnecessary

Every experienced motorist knows that most punctures, so-called, are caused by faulty tubes rather than actual, accidental incision through the tire. Leakage around valves, porous rubber and worn spots are only a few of the unnecessary troubles common to cheap machine-made tubes.

The way to avoid needless punctures is to equip your car with tubes properly *made by hand out of real rubber.* *Kelly-Springfield Tubes* are made that way—and we make them slowly enough and in small enough quantity to *make them right.* If you are tired of needless tube trouble, try them.

Kelly-Springfield Tires are made the same way. You get the result in increased mileage.

Send for "Documents in Evidence" which tells the experience of others

Kelly-Springfield Tire Company

Cor. Broadway and Fifty-seventh Street, New York

Williams'

Holder Top Shaving Stick

Convenient when you first use the stick . . .

More convenient when the stick is nearly used up.

The more you try other kinds, the better you will understand why Williams' Shaving Soaps are so popular.

Send 4 Cents in Stamps

for a miniature trial package of either Williams' Shaving Stick, Powder or Cream, or **10 cents** for Assortment No. 1, containing all three articles.

THE J. B. WILLIAMS COMPANY, Dept. A, Glastonbury, Conn.

Stick

The same dependable soap in a box with the convenient hinged cover which can never be misplaid—it's fastened on.

Powder

For the double quick shave with the same comfortable and refreshed after effect. Leaves all your time for the razor.

Cream

Here is sheer luxury in shaving. Squeeze it into a hollow in your wet brush. Particularly recommended for easily irritated skins.

PRESS OF JUDD & DETWEILER, INC.