THE THEOSOPHICAL PATH

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If there be no reasons to suppose that we have existed before that period at which our existence apparently commences, then there are no grounds for supposing that we shall continue to exist after our existence has apparently ceased.

—*Shelley*

IS THE WILL FREE? by H. T. Edge, M. A.

"DETERMINISM or Free Will" is a title that one reads at the head of discussions, which shows that people still love to debate a very old question — whether the will is bound or free. It might be as well to begin by defining the word "will," with a view to arriving at a definition agreeable to all parties in the debate. Indeed, that would seem to be an indispensable preliminary, yet it is sadly neglected. The result of the neglect is what might be expected — endless confusion. It is like trying to solve an equation with too many unknown quantities; and too often also there are mistakes in the algebra, leading to such solutions as $2 = 3$, or $2 = 2$ — that is, to absurdities and truisms.

It is safe to say that that which is ordinarily understood by the word "will" includes factors which are bound and factors which are free; hence, according to this meaning, the will is both free and bound. But here we find it necessary to define the word "free" also. Free means unconditioned, and it would seem that only the Absolute can be free in this broad sense of the word, and that every being in the universe must be conditioned to a greater or less extent. In short, freedom is relative.

Our actions are determined by various incentives known as wishes, desires, passions, etc. If we cannot resist these desires, then our will is bound. If we resist them, we do so in obedience to some other and stronger motive. In this case we can claim that our will is relatively free, but yet it is conditioned. We must always act in accordance with some law; it is inconceivable that a being can act without incentive of any kind. Hence all action may be said to be conditioned. The

expression " freedom of the will " has therefore to be used in a relative sense. But this need not trouble the practical man, since the human will, conditioned though it be in a strictly philosophical sense, is nevertheless a great deal freer than the most ambitious man imagines.

As long as man remains subject to the desires and impulses arising from his lower nature, he is bound by a chain of cause and effect. But no man is so completely enslaved as that; his ability to propound the problem at all indicates the existence in him of another factor which alters the situation. Behind all the moving parts of our mind and emotions there is the stable center, the source of our identity or selfhood, which we often seek but fail to find. It cannot be an object of contemplation by the mind, its very definition precludes that possibility.

The practical question is how to free our faculties, our power of action, from the various attractions and repulsions set up by our desires and misunderstandings. As to the purely philosophical question, we may leave that to those interested in it, reserving for ourselves a faith in the axiom *" solvitur ambulando."* The problem of motion is solved by moving; and perhaps the philosophical solution of the problem of the freedom of the will is consequent upon its practical solution.

Yet, when our power of action shall have become independent of the said attractions, how then do we propose to act? The answer is — in fulfilment of a higher law, in accordance with a clearer vision, in obedience to a diviner urge than that of mere desire — say, divine love, the feeling of harmony with all that lives.

In the above remarks the word " will " seems to have become equivalent to " power of action." It is our power of action that is bound — bound by our likes and dislikes. Hence we have to overcome our likes and dislikes, if we would be free from their bondage.

The word " will " frequently means a strong desire, as in the phrase " self-willed," or as when we say that Napoleon had a strong will. By contrast with this, Theosophical language uses the word " Spiritual Will " to denote a deeper power that may actuate us and enable us to act independently of our desires. This power is evoked by unselfish devotion to the highest ideals of truth and right which we can form. Its spell is " Not my will but Thine be done! " No doubt pious people have by their devotion evoked the aid of this power,

though without understanding its nature or source. It is existent in all men and can be evoked by devotion to truth and right and in no other way. It is a power that cannot be used selfishly or wrongfully or harmfully. There are lesser powers latent in the mysterious complex nature of man, and these can be summoned in various ways; but they are of the lower nature and can do mischief; nor do good intentions save the ignorant evoker from the consequences of his ignorant handling of unknown forces. Much danger threatens society at the present time from the prevalent dabbling in such forces, and one of the principal objects of Theosophy is to counteract that danger by indicating the true and safe path to emancipation.

Our original question, then, is thus answered: *the personal will is not free; the Spiritual Will is free* — free in all significant senses of the word.

How to summon to our aid the Spiritual Will constitutes the great Quest, the pursuit of wise men throughout the ages. It is this that the great Saviors and Sages have sought to teach; it was this that was taught in the ancient Mysteries. This is the eternal Way or Path, always the same, though with many approaches. We can all achieve relative freedom by sacrificing desires to higher aspirations. A service of love may wean a selfish man from his wretched crankiness. There is no limit to the extent to which the principle can be applied.

At the root of all motion we must posit a self-moving power; this is a philosophic axiom. And we are obliged to suppose the existence of such a self-moving power in ourselves at the end of the chain of causes and effects (if it be permissible to speak of an end in such a connexion). But there is no sense in trying to jump at one bound to the absolute or to sound the depths of infinity. The practical point is to find that center in ourselves which is independent of our states of mind; the question as to how far this in its turn is conditioned by still higher powers may well be postponed until a further point in our evolution has given us a new point of view. It is a mistake to expect to see the whole road from any given point on which we may be standing; and a still graver mistake to be pessimistic on that account.

There are great possibilities before him who undertakes to achieve this practical liberation of the will; but he must be able to distinguish between his will and his desires. It is for this reason that all true Occultism insists on the primary necessity of devotion to an impersonal object. If self-development be made a primary object, the

motive of ambition persists and ruins the results. Self-development is achieved incidentally to the primary object, which is impersonal. If this explanation seems inadequate, that is due to the inevitable confusion arising from the use of words whose meaning is ill-defined — such as the words "selfish" and "unselfish." But such obscurities are generally due to making our philosophy too abstract, and they can be removed by bringing it down to practical life. So let us take one or two simple cases in illustration of the difference between personal and impersonal motives.

Suppose a valetudinarian, occupied with the care of his health or with attempts at self-culture, to become enthused on the subject of agriculture, so as to forget about his faults and virtues and failings and devote himself to the care of his plants. Or suppose a teacher interested in his pupils, or a mother in her children, or a father in his family, or any other such case that comes to mind. All these people are forgetful of self-conscious motives and are absorbed in the expression of a broader and more impersonal aspiration. Thus, in the study of Occultism, we seek to identify our interests with a broad and impersonal ideal; and in this way the little personal will is made to give place to the greater Will that inspires our disinterested actions.

In fine the Will is free in proportion as it is unfettered by desire.

"DE MORTUIS —": by Kenneth Morris

The evil that men do, lives after them;
The good is oft interred with their bones.

THIS is true, in one sense, as W. Q. Judge states somewhere: the effluvia, psychically speaking, of evil deeds, being grosser and heavier, hangs about longer in the inner atmosphere than does the effluvia of good deeds; and thus it is easier to put a curse upon a place than to bequeathe it any real benediction; but there is another sense also, and perhaps a more important one, in which this passage may be read. Oh that the right-minded among mankind would fight as intelligently and persistently to uphold the good that is so often interred, as the wrong-minded fight to make the evil that men do persist!

Behind all the events of life a mighty warfare is stirring; the

rise of states, the fall of dynasties, treaties and battles and arbitrations — all these things are the shouts of victory heard by us from afar off, dimly; or they are the flashing of the swords and helmets of the gods moving battleward, that we catch glimpses of through the smoke and confusion of the conflict; or they are the glare and echoes of the lurid fires and thunders of the demons. The story of man is the most wonderful and enthralling of all stories; because it is a cipher, beneath which may be read all the secrets of the universe. Great Camlan endures; every day "the noise of battle rolls among the mountains by the wintry sea"; every day, perhaps, it is given to us to interpose a shield between the helm of Arthur and the traitor's sword; or again, at any time we may be lending our strength to Medrod, and speeding the blow whereby the King is wounded again and again. Not of old only, but always and now, Odin opposes the demons: who will wait to see which army is victorious? Or who will fight for Odin whether he win or lose?

Who then are the Gods and demons that wage this warfare of the world? Small need to inquire, perhaps; so evident, will we but look for them, are their footprints and the marks of their battling through all human affairs. Are men souls, sparks of the Flame of flames; or are they mere clay impassioned and made crafty? Is their proper motion ascent, or to take the downward road towards hell? May we call for heroic deeds, compassionate lives, flaming aspirations; or must we only expect selfishness and mean ignoble mediocrity? Is it to be soaring or crawling with us? Where the bright conception is maintained, there behold the glint of the wings of the Dragon, the banner of the Gods; where they preach and insinuate the other, look for footprints of the hellions.

These thoughts invade one, in contemplating the fate of earth's heroes and teachers. It is a sore thing for the demons, that the champions of their opponents here in the world should have a shining reputation unsullied. A great hero stands before mankind as an object-lesson in the divinity of the human soul: the grand and central truth of things, so far as concerns us souls embodied. Of such and such a one history says that he did great deeds: he flamed over half a continent, and broke the bondage of five nascent nations. Transcendent genius was there, surely, some lightning power that shone down from above, and was never evolved of the passions and the selfish thought that schemes for self-advancement. Now mark the

rumors that are to rise and go the rounds of the scandal-lovers, before a century or two shall have rolled over his grave. *A hero indeed? Divine light of the Soul? H-m! — he was a very ordinary human man, let me tell you! Why, all the world knows what he spent on scent — how many affairs of a certain nature he had — just why he went to such a place on such an occasion!* And the baser levels of our minds love to hear these things, and believe them eagerly; no proof is asked for; we will not examine or trace the thing to its source; glittering generalities (a putrescent glitter) shall serve us better than facts; of course it was so with him — are not we ourselves —? The meanest side of human nature is that which will not allow any one to have been better than oneself.

There is no heroism in the ranks of the demons; their warfare is wholly inglorious, a matter of backbiting, of throwing mud at everything bright, unsmirched, and splendid; of offering base, tasty explanations for noble deeds and lives; of libeling where there is no danger of prosecution: libeling the great living, and libeling the great dead. Anything and everything, so as to cast doubt upon the divinity of the soul of man. Immortal Voices spoke to Joan the Maid, and she went forth obedient and did the impossible — impossible, unless there be that great wizard, the Soul, utterly transcending all our petty possibilities. The whole world is indebted to Joan for saving France to the world; but infinitely more because she, of all historic persons, did so triumphantly flaunt the proof of our human divinity in the face of the world. If you can believe in Joan, then also you can believe in Baldur, Alawn, or Apollo; Hercules with all his labors will be but a trifle to you, and you may even conceive of some flamy, unstainable godhood slumbering within yourself. So the great thing will be at all costs to keep you from believing in Joan.

You do not believe in witchcraft, having been born a little late for it; in her own time, however, witchcraft was a cry that would serve well enough. Now, being scientific, we say *hysteria,* or we say *epilepsy;* we care not what far-fetched fools we make of ourselves, so we may but account for the Glory of God, as if it were one of our own diseases. Witchcraft then, hysteria now; yet it is always the same voice that is speaking, the same charge that is made. It matters not what she was, so long as her story shall suggest nothing hopeful to us, nothing to set the imagination free and soaring, to cut the mind from its moorings to drab, trumpery, unlovely, and commonplace

things. Always some new Barabbas of a theory shall be let loose, so that Christ the Soul may be again and again crucified.

Then there is Shakespeare: about him we do know practically nothing, but may know this much: within that personality the divine soul, stirring, found some responsive element; seized upon the mind (with its very moderate education) and utterly transcended it; giving out through that intellect more than many intellects might contain; tapping, you may say, the ocean. Here the man counts for almost nothing, the work counts for all. Let the latter have come from Shakespeare, the modest, unostentatious, businesslike, not over-intellectual nor highly educated, and you are bound to posit that it came through him from sources universal. Do but shout long enough, and tease texts with sufficient patience and ingenuity, and you shall get many to believe that it came not through or from Shakespeare at all, but had its whole source in the mere gigantic intellect of Bacon. And as we cannot yoke together the influences of the soul and meanness, peculation, and the accepting of bribes, behold what great work has been accomplished! We have insulted and degraded the grand dramas; we have accounted for the lightning of heaven with the flame of a farthing dip; we have blasphemed Poetry by fathering on it a merely clever mind; we have said *Tush! there is no ocean! All water is from the kitchen tap.*

Genius is the shining of the soul, the fruition of many lives of effort. Who would approach the soul, must travel on the road of stern morality with the ardent love of mankind to urge him onward. There are black imitations of genius; there are the incandescences of putrefaction; of these we do not speak. But where you find the true and splendid thing, there the effort, the love, and the purity have been. If they are not there any longer, then the light of genius in that man is destined to extinction — and that too happens often enough. The soul that has labored so long comes into a new body; before it has made its link with the young brain and flesh complete, before it has impressed upon these its mastery, they — sensitive, or that soul could never have chosen them — may have gone rioting after delight and satisfaction in strange quarters, and set up habits that the soul will never succeed in quelling. Intermittently it may capture the brain, and speak out a few words of its message for awhile; but in the end it must conquer and drive out the devils, or go. Such souls are Promethean: chained upon the Caucasus of the flesh, and

preyed on by vultures of passion. They defied Zeus the tyrant of old, and brought down fire from heaven for the sake of man. But they shall not bring more fire until Herakles has unbound them; and *we* shall not qualify ourselves to be fire-bringers, by giving ourselves up to be torn by the vultures. Sometimes we talk as if it were these very vultures that brought the fire.

This fact that some geniuses — many — have quenched their light with evil-living; that men have found the soul, and then fallen — is the molehill whereof the enemies of man have made their mountain. The reputation of no Helper of Humanity is safe from them; heaven knows how history may be twisted. By their fruits ye shall know these Helpers; that is the only safe criterion. If one has risen up and spent his life fighting on the side of the angels; if humanity is freer and nobler because of his toil and suffering, there surely will be whispered rumors against him; ten to one, specious evidence will be at hand to show that he was a blackguard. There is but one decent and gentlemanly course to take: scout the whole of it with contempt and indignation. We owe that much to the heroes.

THE ISLAND-CONTINENT: by the Rev. S. J. Neill

THE voyage from Auckland to Sydney takes about three days. Passing along the coast of New Zealand northward one may note several points of interest. The first is the Kawau, a most beautiful island a few miles from the mainland. It was for years the home of Sir George Grey, K. C. B., " England's Great Proconsul," as he was called. A headland, wooded to the water's edge, reaches out like a protruding arm round the most lovely and secluded harbor imaginable. The residence is visible among the trees, just a little way from a sandy beach. The wharf at which you land is of blocks of copper, or so it seems, but they are only the slag of copper smelting from the ore once mined on the island. Here Froude came to see Sir George; and here the High Commissioner for the Pacific was sent by the British Government to consult him on State matters. Though not always in agreement in former days with the Government in London, her late Majesty Queen Victoria always felt a deep regard for the great Statesman, and frequently wrote to him and sent him books; for had he not, humanly

speaking, been a most important link in saving India? — sending the troops which had arrived at South Africa, where he was Governor, to the relief of India, before the news of the mutiny, in those days, had reached England. His great influence in South Africa, where his name is still cherished, might have prevented no end of trouble had his advice been followed, and might have consolidated South Africa long ago, and thus have prevented the Boer war with its lamentable loss of men and money. It is well known that Sir George was a great book-collector. He gave his large library to form the Cape Town Library, as many years afterwards he gave another magnificent library to Auckland, New Zealand, known as "the Grey Collection." It is not generally known that H. P. Blavatsky's writings found their way to the Grey Library at the Kawau soon after their publication, and that he took a keen interest in the study of man's higher nature. It is fitting to say a little about Sir George Grey in writing about Australia for he had been Governor of South Australia, and had during his exploration of West Australia been wounded in the leg by a native spear, a wound that never thoroughly healed.

As we steam along the coast northward the next point of interest is the Bay of Islands. Here on January 29, 1840, Captain Hobson read the Royal Commission which proclaimed New Zealand a British possession. The date is observed as the anniversary of the Colony. The famous "Treaty of Waitangi" between the natives and the British Government was signed February 5 the same year. But not long afterwards, on July 8, 1844, the famous Chief Heke cut down the royal flagstaff at Kororareka. It was near this place that the warlike Chief Hongi lived — he who had converted the presents given him in England into firearms, and had killed about one-fourth of the Maori race with these weapons.

At the extreme north as the steamer turns westward, steering now directly towards Sydney, we pass a most interesting rocky headland. It is Te Reinga, the extreme north of New Zealand, and the place according to Maori lore all spirits at death step off into the unknown. And there are some strange tales told among the natives of how in some cases, when a loved one lay long sick and then was seen to pass towards Te Reinga, this almost departed one was drawn back to live in the body again by the power of strong will and love.

On the voyage across to Sydney the Pacific is not always very deserving of its name. But the approach to Sydney makes one forget

even seasickness. It is fitting that our first view of the great Commonwealth, the Island-Continent of Australia, should be at the place where settlement was first made. The great navigator Captain Cook had been at Tahiti to observe a transit of Venus; from that place he came to New Zealand and then sailed westward in search of the great land known along its northwestern shores to the Dutch, and sometimes called New Holland. He came in sight of the Australian coast at that part known as Victoria, and sailed northward to a place called Botany Bay, near what is now Sydney. It was on April 20, 1770, that he discovered Australia. At Botany Bay Captain Cook landed and took possession of the country in the name of the British Crown. The favorable account given by Captain Cook of his Australian discovery led the British Government to send convicts to Botany Bay. No doubt it was thought that at such a distance the convicts were not likely to return or give any further trouble. But the only way of getting rid of convicts is by changing them into good citizens. In Great Britain the name of "Botany Bay," for a long time sounded as the term "Siberia" does to many in Russia. It was the very far-off land from which there was no return; and there were the "living dead." Before the close of the eighteenth century very many free settlers had gone out to Australia, and after a time convicts were no longer sent out to Botany Bay or Port Jackson. And so sensitive, and justly so, have the Australians been about keeping away the convict influence that for many years a bitter feeling existed between Australia and France over the latter country continuing to send convicts to the New Hebrides, an island which was not too distant from Australia to prevent some of the convicts escaping to New South Wales, where, it was said, they did not make exemplary citizens, any more than some of the British convicts of former years. In 1906 an agreement was come to between France and Great Britain for a joint occupation of the New Hebrides, but Australia was not taken into account, and the Anglo-French administration of the New Hebrides was bitterly criticised by the Australians.

Captain Cook fancied he saw a similarity between the coast of that part of Australia where he landed and the Welsh coast, and so gave it the rather long name of New South Wales, which has stuck to it ever since. If it is your good fortune to steam into the harbor of Sydney early in the morning, as the sun is rising behind you and lighting up the coast, your eyes rest on a panorama which it would

be difficult to match anywhere else in the world. It would truly appear as if Nature had in her own wonderful way laid out a harbor in which the useful and the beautiful are combined. There seems to be no end of little tongues of land stretching out into the harbor, no end of little bays, or coves as some of them are called; the land is often covered with trees down to the edge of the water, and the little islands that dot the harbor are a mass of foliage. On the right, as we enter a passage about a mile wide, are the North Head, the Quarantine Reserve, and Manly Beach. What is called the North Harbor stretches up to the suburb of Manly. To the left of that a long stretch of water is known as the Middle Harbor. Between this and the main harbor of Port Jackson is North Sydney and a great many small towns or suburbs. As we enter the harbor of Port Jackson the morning sun lights up headland after headland, and one little bay after another; and ever some new headland comes into view, or some little wooded islet seems to block the passage. It is charming, bewildering in its ever-changing variety and beauty. And the waters of the harbor make one think of the words in *Lalla Rookh*:

> Like any fair lake that the breeze is upon,
> When it breaks into dimples and laughs in the sun.

The main part of Sydney is to the left, or south. The River Parramatta flows into the harbor past Concord, Hunters' Hill, and Drummoyne. But no powers of description can give a true idea of the endless beauties of the harbor, which, though not so large as many other harbors in the world, is nevertheless unique in the points above described. But it may be well before saying more about Sydney, to view Australia as a whole.

Students of physiography are accustomed to regard the average bed of the ocean as a plain on which continents and islands are set. In some cases the land rises in terraces of more or less abruptness from this plain, while in other cases the ascent is more gradual. In the case of Australia, if we place ourselves in imagination to the south and look northward, before us will rise the Island-Continent out of the depths of the ocean. On the west of Australia is a ledge or terrace rising about 8000 feet above the ocean floor. This terrace is about 150 miles wide and slopes upward until it becomes dry land, as Western Australia. This terrace then extends southward and eastward towards Tasmania. Directly south of the great Australian

Bight there is a considerable hollow in the floor of the ocean. The sea reaches a depth of about 17,000 to 18,000 feet. This "Deep" is almost in the shape of a human foot, the heel of which extends into the Indian Ocean beyond Western Australia while the toe reaches nearly to Tasmania. Roughly it is over 1000 miles long by about 300 miles in width in some parts. On the eastern side of Tasmania is another great ocean depression, known as the "Thomson Deep." This Deep extended more than half way to New Zealand on the east and runs up northward past Victoria and part of New South Wales; consequently the continent of Australia has a rather narrow ocean ledge on the east side for a considerable distance. And a little north of Brisbane is the "Patterson Deep," where, not far from land, the sea attains a depth of 15,000 feet, "with an abruptness rarely paralleled." North of that, however, is the great "Coral Sea," and the "Great Barrier Reef," which extends northward for 1200 miles, and is therefore the greatest of all coral reefs. The ocean bed is comparatively shallow along this great reef and continues to be so, connecting (underneath the sea) Australia with New Guinea, Timor, Java, Borneo, and other islands. To keep before the mind this general outline of Australia as it rises from the ocean floor, is an importan element in determining certain matters regarding the fauna and flora of the Island-Continent.

Having obtained this view of the ocean buttresses of Australia, we may now glance at the continent as it rises above the sea. As to the size of Australia, authorities differ. Mr. J. A. Skene, the late Surveyor-General of Victoria, gives 2,944,628 square miles. The last edition of the *Encyclopaedia Britannica* gives 2,946,691 square miles. But in the New Zealand Year Book for 1911 it is said that "the following areas are taken from the latest official records: Queensland, 670,500 square miles; New South Wales, 310,372; Victoria, 87,884; South Australia, 903,690; Western Australia, 975,920; or a total of 2,948,366." From this it would seem that Australia is larger every time it is measured! If Tasmania, 26,215 square miles, is added, we have as the total, 2,974,581 for the Commonwealth of Australia. As figures often fail to give any very clear idea, a better notion of the size of Australia may be gained from the fact that "Austria, Hungary, Germany, France, Belgium, Holland, Denmark, Sweden and Norway, Portugal and Spain, Italy (including Sardinia and Sicily), Switzerland, Greece, Roumania, Bulgaria, Servia, Eastern Roumelia,

and Turkey in Europe, containing on the whole rather less than 1,600,000 square miles, amount to little more than half the extent of the Australian Continent." Australia is not so large as the United States of America. According to "Bulletin 171, U. S. Geographical Survey, the area of the United States, exclusive of Alaska and outlying possessions, is 3,026,789 square miles." This makes Australia, not including Tasmania, 78,423 square miles less than the United States. But if the Alaskan Territory of about 586,400 square miles be added, the United States exceeds Australia in size by about 664,823 square miles. It may be noted here that the area of Canada according to the latest figures is 3,745,574 square miles, not including certain waters.

The greatest length of Australia is 2400 miles from east to west, and its greatest breadth 1971 miles. It is very compact. It is the largest island and the smallest continent. More than any other continent Australia illustrates the general fact noticed by geographers that continents have high borders round a depressed interior. The raised rim round Australia is most marked on the east side, on the west, and in parts of the northwest. The interior is generally flat, and some portions of it are below sea-level. Much of the interior is desert. Australia has few navigable rivers, and one peculiar feature of the country is lost before it can reach the ocean. Australia has no snow-covered mountains, and though it has no active volcanoes, it has one "burning mountain," Mount Wigen in the Liverpool Range. Its fires result from the combustion of coal some distance underground, and authorities say it has been burning for about eight hundred years.

According to geologists, "some of the most profound changes that have taken place on this globe occurred in Mesozoic times, and a great portion of Australia was already dry land when vast tracts of Europe and Asia were submerged; in this sense therefore Australia has been rightly referred to as one of the oldest existing land surfaces."

The principal mountain ranges are on the coast of western Australia, and on the east coast extending from Victoria northward through Queensland. The ranges on the west coast do not attain any great height, but the ranges on the east coast, near the borders of Victoria and New South Wales reach the height of 7328 feet at Mt. Kosciusco. The eastern range presents a great contrast between

its northern and southern portions. In the north the mountains rise out of a sea of tropical vegetation; but in the southeastern portion "the peaks look just what they are, the worn and denuded stumps of mountains, standing for untold ages above the sea, bare and lonely."

The coastal region of Australia is on the whole well watered with the exception of the Great Bight. As may be inferred from its mountain ranges, the east coast has many rivers, the Darling and the Murray being the most important. The Darling is one of the longest rivers in the world and is navigable part of the year for 2345 miles. This includes the Murray into which the Darling flows at Wentworth on the border of Victoria and New South Wales.

These two rivers, which are really the same stream, present some peculiar features. Usually rivers are said to drain a certain area, but here the area absorbs a great portion of the water in the rivers. A vast network of streams in the rainy season flows into the Darling. But in so doing they spread out, making the whole country like "a vast inland sea." At the town of Bourke the river Darling has only 10% of the rainfall of the country which it drains. Evaporation does not account for the loss of 90%, therefore a large portion of the water sinks into the earth, "in part to be absorbed by some underlying bedrock." "The Valley of the Nile and the Great Australian Plain have had, geologically, a similar origin."

The geology of Australia shows it to be a very old land. It is, according to Theosophy, part of the "Third Continent"; and in this matter scientific study confirms the teaching given out by H. P. Blavatsky. A great part of Australia is composed of Archaean rocks. Nearly the whole of Western Australia is of this formation; a considerable portion of South Australia and parts of North Australia. The same formation crops up in portions of northern Queensland, in part of New South Wales, and in Victoria. It underlies the ocean and again appears in Tasmania, and over 1500 miles distant in the Southern Alps of New Zealand. A breaking up of parts of this Archaean formation is said to have taken place in Cambrian and Ordovician times, and then a Cambrian sea extended right across Australia from north to south. Ages later in the Silurian period the sea began to retreat from what is now the Great Central Plain of Australia. With the various other geologic ages came fresh earth movements. Devonian earth movements raised high mountain ridges and prepared for the Carboniferous era. Then the mountains of what

is now New South Wales and Victoria " were snow-capped, and glaciers flowed down their flanks, and laid down carboniferous glacial deposits which are still preserved in the basins that flank the mountain ranges." Passing on to the Kainozoic period we find volcanic action all round the coasts of Australia. Huge domes of lava were piled up; and then great rifts in the earth poured out the older basalts. Gold-miners tell of sinking through many hundreds of feet of solid rock, and then coming upon the bed of an ancient river in which were bits of charred wood, and gold nuggets in heaps for the lifting. This finding of gold at the " lower levels " was what gave a new impulse to Ballarat, and Victoria generally.

In connexion with the geology of Australia may be mentioned the fact that by sinking through certain clays, sands, and drifts on the west of New South Wales, on the west of Queenstown, and other places, water rises to the surface in large quantities. This finding of water where it was much needed has been of great service in assisting the developments of central Australia. The " Blackhall Bore " is 11,645 feet deep, and discharges 291,000 gallons a day. Now there are about 600 flowing wells of this kind in Queensland, and they produce 62,635,722 cubic feet of water per day. The deepest of these wells is 5046 feet. New South Wales and South Australia have made similar wells and been rewarded with a large outflow of water. These wells were at first supposed to be artesian, but according to Prof. J. W. Gregory of Glasgow and Melbourne, they cannot be accounted for on this supposition.

The difference in level between the outcrop of the assumed eastern intake and of the wells is often so small, in comparison with their distance apart, that the friction would completely sop up the whole of the available hydrostatic head.

Professor Gregory believes that

the ascent of water in these wells is due to the tension of the included gases (the town of Roma is lighted with the natural gas which escapes from its well) and the pressure of overlying sheets of rocks, and some of the water is of plutonic origin.

The climate of Australia differs very much in different parts, as one might naturally expect from its size and from other conditions. The level interior, nearly one million miles square, is so vast that the colder and moister air from the ocean cannot reach the interior with any sufficient supply. Hence the rainfall in the interior is about an

average of 10 inches and in some places not more than 5 inches. The rest of Australia has a fairly good rainfall. In the north and northwest, the monsoon, from December to March, penetrates 500 miles, and sometimes sweeps across Queensland and New South Wales. All the east coast has a good rainfall, from 50 to 70 inches in the north, to 30 or 40 in New South Wales. Melbourne has an average of over 25 inches. Adelaide has about 21 inches. On the west coast, Perth has an average of 33 inches a year.

The temperature varies very much. In the Northern Territory most of the country has a mean temperature of about 90°, and is not suited to Europeans. Queensland is also very trying in its northern parts. At Brisbane, however, the average temperature in winter is about 60° and about 76° in summer. New South Wales is about the same, Sydney having a mean average of 62.9°, which is much the same as Barcelona in Spain, or Toulon in France. As a rule Australia exhibits less change during the 24 hours than places of a similar latitude in the northern hemisphere. In Victoria, which corresponds with Washington, or Madrid, the difference between summer and winter temperature is less than at those places named. The result of a long series of observations at Melbourne shows the mean temperature to be, spring 57, summer 65.3, autumn 58.7, winter 49.2. It is rare for the temperature in summer to rise above 85, or to fall below 40 in the daytime in winter, though 110.7 in the shade was once recorded, while the lowest record is 27. South Australia is very agreeable during the winter months, June, July, and August showing a mean average of 53, 51, and 54. In the summer, when the hot winds blow from the interior, the temperature rises to 100 in the shade. The country however is healthful, "no great epidemics ever visiting this State." Western Australia has two seasons, winter, which is wet and begins in April and ends in October. The rest of the year is generally dry. In the south parts, where there is most settlement, the average temperature is about 64; in the northern districts, however, the heat is often very great, but being dry it is not so oppressive as in most tropical countries.

A general survey of the geological formation of Australia prepares the way for a consideration of the questions that arise as to its fauna and flora. But these, with some notice of the aborigines, the products, the government, etc., must be deferred for another article.

A STUDY OF "THE SECRET DOCTRINE":

by H. T. EDGE, M. A.

(Continued from July issue.)

III. Universality of Symbolism

THE second part of Volume I treats of symbolism, a most important subject, since it is the language whose interpretation gives the clue to so many mysteries. A preliminary idea as to the scope of this section will be afforded by a list of the headings, which are as follows:

I. Symbolism and Ideographs.
II. Mystery Language.
III. Primordial Substance and Divine Thought.
IV. Chaos, Theos, Kosmos.
V. The Hidden Deity and Its Glyphs.
VI. The Mundane Egg.
VII. The Days and Nights of Brahmâ.
VIII. The Lotus as a Universal Symbol.
IX. Deus Lunus.
X. Tree and Serpent and Crocodile Worship.
XI. Daemon Est Deus Inversus.
XII. Theogony of the Creative Gods.
XIII. The Seven Creations.
XIV. The Four Elements of the Ancients.
XV. On Kwan-Shi-Yin and Kwan-Yin.

Thus two kinds of symbols are considered: emblems, such as the Tree, Serpent, or Cross; and allegories, such as the Falls of the Angels, the Lunar Myth, or the Redemption. Religious symbolism is so widespread and uniform that scholars have always found a difficulty in explaining its origin. A reference to any collection of the religious allegories of the numerous tribes of Red Men in North and South America will show that they have stories of Creations and of Deluges. How can we explain how these ancient peoples came to have the story of a Flood, a Vessel, a saved remnant, a bird sent forth from the Vessel, etc? We cannot explain it at all if we consider that particular fact by itself. We must make a general study of religious symbolism, not among the Red Men only, but among all peoples. This will show us that no conventional theory is enough to explain the similarity of these allegories and symbols wherever found.

Some have supposed that the stories were meant to symbolize natural events like the return of spring and the conquest of night by day. This is the "Solar Myth" theory. Then there is the linguistic fad,

in which people with a craze for philology have tried to explain everything by that. But these theories require too great a stretch of faith and imagination.

The Mystery Language

H. P. Blavatsky gives us the real reason, long suspected by the more intelligent scholars, from some of whom she quotes with approval; but it is evident that she possesses clues which they did not. There was in ancient times a symbolic language, independent of ordinary spoken and written languages, and understood by people of every nation provided they had the key. We can compare it to musical notation, for instance, or to chemical symbols; the signs employed in these tell their own tale to the initiated. Another point is that these same signs are a mystery to the uninitiated. It is so with this ancient symbolic mystery-language. In ancient times there were Schools of the Mysteries, wherein were taught the profounder truths concerning the nature of man and the structure of the universe. As this kind of knowledge confers powers on the holder, it had to be guarded by secresy; hence it could never be written down except in allegories and symbols. In this way it was both preserved and concealed; for the uninitiated understood only the outer meaning, while the initiated understood the inner meaning.

The history of the world and its peoples has thus been recorded, giving rise to these wonderful legends which have so puzzled the scholars. As often as not the scholars take the allegories literally and dub the ancients simpletons.

These legends are what H. P. Blavatsky interprets in this part of her work. And of course the Hebrew-Christian Bible comes in for a share of attention, along with the sacred books of many other peoples. And this reminds us of a remark she makes elsewhere, as follows:

> No more than any other scriptures of the great world-religions can the Bible be excluded from that class of allegorical and symbolical writings which have been from the prehistoric ages the receptacle of the secret teachings of the Mysteries of Initiation, under a more or less veiled form. The primitive writers of the *Logia* (now the Gospels) knew certainly *the* truth, and the *whole* truth; but their successors had, as certainly, only dogma and form, which lead to hierarchical power at heart, rather than the spirit of the so-called Christ's teachings. Hence the gradual perversion. — *The Esoteric Character of the Gospels*

Christian Symbols

In Part I it was stated that the Deity in action is always considered in a twofold way — as the Divine Thought and Primordial Substance. The former is the origin and basis of all mind and thought; the latter, of all objectivity. And this is symbolized in all the sacred allegories as the Great Breath moving over the face of the Deep, or a great Bird hovering over the Sea and depositing therein the Egg from which the universe is born. Spirit is always connected with air or wind, as the etymology of the words in various languages shows; and Water is always connected with the primordial Matter. These things, too, have their geometrical symbols, the Spirit being a vertical line, and the Matter a horizontal one, whose union produces a Cross, which is an emblem of the created universe. The Cross is shared by Christianity with many other systems, mostly far older; for it is one of the symbols of the universal Mystery-language. But it is incomplete; it ought to have a Circle above it, because the Cross alone is considered as standing for material things, and the added Circle is intended to show that Spirit dominates material life. In Egyptian pictures representing initiation scenes, the candidate is seen holding such a Cross (the "ansated Cross") or sometimes a square with a circle above it, which means the same. The sign of the planet Venus is the same, and stands for the power of Divine compassion and harmony. Perhaps this may help to explain why the Cross in history has been so much associated with material progress and emulation.

This naturally leads to the subject of Crucifixion, on which again we shall find much of deep interest in the volumes. The Christian Churches themselves are at present busily engaged in pondering over the meaning of this symbol and in trying to derive from it something that will better meet the demands of the present age. But we must first recognize that this too is one of the universal symbols and not peculiar to Christianity. The Crucifixion of the *Christ* means the sacrifice and tribulation of the Spiritual Man when he puts on flesh and thereby becomes a human being in this world, as he does every time he incarnates. The Resurrection means the final triumph of the Spiritual Man over the forces of material life; and the same idea is also represented by the Redemption, for the Spiritual Man redeems the earthly man. We are all engaged in the endeavor to attune our outer life to our inner, to realize our higher possibilities, to travel

forward along the path of perfection; but it takes many incarnations — many great days with nights of rest between.

This again leads us to another fruitful topic of the volumes — the perversion of symbolism. How many mistakes in religion have come from wrong interpretations of sacred symbols! We all know that doctrines have been promulgated in the name of religion which cannot be squared with our sense of justice and mercy. Hence the importance of studying symbolism in its universal aspect, so that we may better understand our own religion. As to which the following is significant:

> That which the Jews had from Egypt, through Moses and other initiates, was confused and distorted enough in later days; and that which the Church got from both is still more misinterpreted. (p. 32)

Man's Divine Ancestry

Theosophy, and with it *The Secret Doctrine,* is of course concerned with dissipating the mists of ignorance and superstition by turning on a beam of light from the Sun; and the doctrine that there never was any other kind of man on the earth except the present type and other still more dwarfed types who are supposed to have begotten him, receives scant mercy in these volumes. Universal symbolism speaks of *the evolution of races of men from gods.* The Platonic idea was that man is a dwarfed god, an exiled or entombed god. As shown in a preceding article, the Secret Doctrine teaches that natural evolution alone could produce no more than a perfect physical, but *mindless* man — not a man at all in the real sense; and man was completed by means of a line of evolution proceeding downwards — by the descent of those Spiritual Beings variously called Mânasaputras, Sons of Mind, Elôhîm, etc.

> Identical glyphs, numbers, and esoteric symbols are found in Egypt, Mexico, Easter Island, India, Chaldaea, and Central Asia. Crucified men, and symbols of the evolution of races from gods; and yet behold Science repudiating the idea of *a human race other than* one made in *our* image; theology clinging to its 6000 years of Creation; anthropology teaching our descent from the ape; and the clergy tracing it from Adam 4004 years B. C.!!

This was written in 1888, and times have changed since then in theology, and not a little in anthropology too.

"Personal" God

The section headed "Chaos, Theos, Kosmos," gives some ideas about the meaning of God which may be useful to many earnest in-

quirers, if we can judge by the report of a recent census of opinion taken by a clergyman from the prominent business men in his town. They all believed in God, but hardly any believed in the ordinary *personal* God. They recognized with Theosophists, apparently, that the conception of Deity is unduly limited by attaching such a notion to it. We do not know what is our own personality. The ancient oracle said: "Man, know *thyself*"; how else indeed can we hope to approach a knowledge of God? Yet it is not by self-inspection alone that we can gain knowledge, but also by action; we must *do*, we must *be*. Perhaps instead of expecting the Divine compassion to descend on us, we should manifest it ourselves, thereby proving our Divine rather than our zoological origin.

What we call our mind is a faculty belonging to some part of us still deeper within; so that we have not sounded the depths of our own mysterious being and can scarcely expect to be able to form a good conception of Deity. We can but trust in the infinite power of that unsounded depth of goodness which we feel within us. It is surely not so inconceivable that there may have been on this earth at a time, perhaps many times, in its history, races of men with more knowledge than we have now. Look at the records of geology, with the countless aeons of years they disclose, and see how nations rise and fall; then we may be helped to realize that our present race is still in its swaddling clothes.

Evolution of Suns and Planets

As regards the process of world-building — the nebulae, meteor swarms, comets, incandescent gases, nuclei, etc. — astronomers deal plentifully therein, and magnificent indeed is the picture they present us of all this vast cosmic machinery, hurtling to and fro, tumbling about in the vastness of the void; causeless, purposeless, senseless, ruthless, and in short bereft of practically everything that constitutes life. A powerful imagination, accustomed to deal with realities and not satisfied with abstract formulae, staggers aghast at the awful question of how all this cosmic dirt ever got where it is, and the still more awful questions of why and whereto. And indeed, as a dry matter of fact, the worlds do not build themselves, any more than the bricks in a house pile themselves up and spread their own mortar. There are *builders*. The idea of an almighty finger is crude. When H. P. Blavatsky mentions these cosmic Builders — called *Dhyân-*

Chohans in the teachings — she says: "We are twitted with: 'You *never saw them.*'" But she asks who ever saw the atoms or the ether; and of course it is always necessary to postulate something which one cannot see, as the cause of those things which one does see. In the case of our own selves — the Microcosm or little world called "man" — we are aware of the existence of intelligence directing the movements of the parts; and we infer the same thing in our friends, both biped and four-footed. If we refuse to postulate intelligence as being behind every phenomenon, then we have to invent some other explanation — which is difficult, to say the least. The idea that the list of intelligent beings stops short at man and the animals is hardly adequate, whether we add a God to the list or not. Intelligence cannot be absent from any point or speck in the universe, and it is as actively engaged in the building of a crystal in a test-tube as in the building of a world in the ether of space.

Space and Primordial Matter: the Vesture of Deity

In the section on "Chaos — Theos — Kosmos" we are told that:

> Space, which . . . the modern wiseacres have proclaimed "an abstract idea" and a *void,* is in reality the container and *the body of the Universe* with its seven principles.

In other words, Space is the Supreme in one of its aspects; it is the ultimate substance. Science is obliged to postulate some substance as the basis of physical manifestation; hence we have the "ether." And the attempt to define the ether in terms familiar to physicists, merely makes it necessary to postulate still another primordial matter. In short, it is necessary always to imagine some unattainable and irresolvable kind of matter at the back of any kind of matter which we can analyse or define. Protyle is one of the names that have been given to this. But, given our protyle, the question arises: If protyle is not the supreme being, what is its source; and the philosopher finds it necessary to go back even beyond protyle. The Ether of modern science is, it would seem, merely the root of *physical* manifestation, so it is not the "container of all," nor the source of all. There is, for instance, the world of our mind, which is not physical nor related to physical space, but is very real for all that. In this world there play forces, and there is doubtless a mind ether, out of which the mental forces build up ideas. The ultimate substance must be the container of ***all***, whether physical, mental, or what not. And the word Space,

as above used, must be a good deal more than what we call space in physics; for the latter is merely a quality of physical *objects*. Real space can have no relation to the extended space of geometry with its threefold system of rectangular co-ordinates (the so-called "three dimensions").

In this fundamental Space played Spirit, and thus out of Chaos was born Kosmos. Thus matter itself evolves and is a product of evolution; and this forms an important part of the subject of these volumes. Not only is physical matter, such as composes the worlds, the product of evolution from finer grades of matter, but there is no reason for assuming that matter had, at all stages of our earth's history, arrived at the same stage in its evolution. There may have been times when the earth was not physical, when man was not physical, when the animals and plants were not physical, and yet lived; when the stones and metals had not concreted to the physical state. And the Secret Doctrine states that there were such times; and this greatly modifies the view we must take of geology, astronomy, zoology, and anthropology in past times. Some of the earlier Races of mankind were not physical, say the teachings; and many of the animals whose imprints have been left in the older rocks, never lived in the physical state at all.

In Ohio is the Great Serpent Mound, representing a serpent in the act of swallowing an egg, and there are other serpent mounds in Ohio. On the banks of Loch Nell, near Oban, in the Hebrides, is a serpent mound with an egg-like circle of stones at the mouth. Strabo mentions such dragons and serpents in India. In several places, such as Avebury in England and the Morbihan in Brittany, there are rows of stones in serpentine lines; and in Algeria mysterious animal-shaped mounds are found. The serpent symbolizes the eternal deity Time, and the egg signifies rebirth.

> Like the Hindûs, the Greeks and Romans (we speak of the Initiates), the Chaldees and the Egyptians, the Druids believed in the doctrine of a succession of worlds, as also in that of seven "creations" (of new continents) and transformations of the face of the earth, and in a sevenfold night and day for each earth or globe. (Vol. II, p. 756)

This quotation, though from the second volume, treats a subject which is amply dealt with in this part of Volume I. Tree and Serpent worship has much exercised the minds of students anxious to explain its prevalence by any acceptable theory. But the mystery vanishes

in the light shed by an acquaintance with universal symbolism and its object and meaning. The Tree, as thus used, is a variant of the Cross, and we are reminded of the Caduceus of Hermes and of the brazen Serpent lifted up by Moses. The Serpent has always been a most sacred emblem, and has a dual aspect — good and evil. In the former sense it means Wisdom or a Wise Man; but both meanings are reconciled by the fact that the Serpent stands for certain powers in our nature which may be very beneficent or very harmful, according as they are used or abused.

All these various symbols are surviving records of the great knowledge enjoyed by the Race which has split into so many diverse nations. For each Root-Race of humanity (as is shown elsewhere) is divided into seven sub-races, and each sub-race is subdivided into seven "family races," the duration of a family race being about 30,000 years. The earlier sub-races of our present Fifth Root-Race had great knowledge. But the symbol of the Egg, as just shown, indicates rebirth; and the law of cycles provides that there be a regaining of knowledge by the later sub-races. We are on the upward arc now, and are beginning to uncover the past and study its records. The people who carried blocks of granite as big as a cottage to the tops of almost inaccessible peaks in the Andes were no savages and no "primitive men." Nor were those who set up the dolmens and menhirs. *The Secret Doctrine* brings into juxtaposition and into their proper mutual relation all the facts which prove the antiquity of civilization and the existence of the Wisdom-Religion in ancient times. Such facts are often conveniently forgotten, or only pass before the mind severally and one at a time, so that their evidential value is lost.

A NOTE in a contemporary about earth-movements of the tectonic or fault-slip kind, causing permanent displacement of stations as ascertained by triangulation, suggests the thought that the cause of fault-slips is still in question. The theory of earth-cooling and shrinkage was a convenient explanation of geologic phenomena of this nature and of upheavals and depressions, but as the cooling is not proved, in the light of recent discoveries, slow changes in shape may have to be invoked. — D.

THE FLORAL ART OF JAPAN: by E. S. Stephenson

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FOR over a thousand years the floral art known as *Ikebana* has held a prominent place among the refined arts of Japan. Not only ladies of the higher class, but also philosophers, literati, priests, statesmen, and nobles have been its enthusiastic votaries. Japanese writers on the subject trace its origin to Prince Shotoku Taishi (A. D. 571-621) who did so much to introduce *Mahâyâna* Buddhism in Japan, and as principal adviser to the government for about thirty years was of great practical usefulness to his countrymen in many ways. He was regarded as the *avatâra* of a great Indian teacher. Following the suggestions given by this enlightened prince, certain rules for flower arrangement were formulated by Ono no Imoko (commonly known as Ikenobo) and gradually developed by his successors in the school known as *kwa-dō* (literally the "Flower Path"). According to a certain Japanese authority on the subject, this *Ikebana* (literally "living flower") system was designed to typify the existence of the soul in the body, and was used to that end when instructing people in the art. The basic principles have been followed for upwards of fifty generations, and the following brief outline of them is translated from a Japanese book on the subject: "The main lines of the design always form or indicate a triangle, and these three branches or stems are called *Ten* (the superior nature, or heaven), *Chi* (the inferior nature, or earth), and *Jin* (man). *Ten* is regarded as positive, archetypal, and a circle or alternatively as a triangle. *Chi* is negative, has opposite sides, and is regarded as a square."

Two, four, or six subsidiary lines may be added to the basic three, making five, seven, or nine (always odd numbers). Various names are given to these lines in the old schools, such as benevolence, fidelity, wisdom, truthfulness, and courtesy. Or according to another classification, the sun, moon, stars, etc.; or earth, fire, water, metal, etc.; or sometimes colors: yellow, blue, red, etc. In the *Eushin* school the five lines of the floral emblem are called the heart, help, the guest, skill, and the finishing touch. A religious spirit, self-discipline, gentleness, and peace of mind are some of the virtues that follow the practice of this art, it is said. "The Flower Path," says another Japanese authority on the art, "simple as it is in its principles, is entirely in accord with the Path of Buddhism." It is, however, the older writers

on the subject that deal more with these ethical matters: teachers and students of the present day have regard rather for the esthetic side alone in all their arts. "Morality has nothing to do with art," say some of the Japanese writers of today, whose ideas are taken from the West; but their ancestors thought otherwise. And many of their contemporaries also think otherwise, and are urging the revival and safeguarding of inner beauties of the national life that have become obscured. But this obscuration may be merely a passing phase — a mist of the earth that the Rising Sun shall presently dispel.

The lotus is given first place among flowers on the *tokonoma* (the alcove —-the place of honor — in Japanese rooms), but is not used on ordinary occasions. In the arrangement of the design three leaves are used together with the flowers. One of the leaves is partly withered, the other is fully opened and vigorous, and the third is a curled leaf about to unfold. In this way the idea of past, present, and future time is deftly conveyed. Symbolical presentations of this kind are very numerous, and belong rather to what are called the *oku-gi* (literally, inner secrets) of the art. The reason for the precedence given to the lotus is on account of its sacred significance in Buddhism. The following translation gives the ideas of a Japanese writer on the subject. "The lotus growing out of the mud of earth puts forth its blossoms of purity and reveals to us *Busshin* [literally the Heart of Buddha, also used to express the spiritual consciousness in the heart of every man — union with which was the great object of *Zen,* the Japanese name for the Dhyâna method of meditation extensively practised in Japan]." "And not only the lotus," he adds, "but the other flowers also in their loveliness — do they not all reveal to us *Busshin?* Is it not fitting therefore that we should place flowers on the altars of our homes, and in our rooms both as offerings and to arouse the purer feelings of our hearts?"

The Japanese floral art on its technical side differs from that of the Western countries in that not merely the blossoms but the whole lineal character of the plant that produces them is set forth, showing especially the aspects of life and growth. In fact, as will be seen from the accompanying photographs (all of them of the *Ikenobo* three-line school) branches or leaves alone may be used. It should be noted, however, that the branches in all cases are separate pieces placed together by the student of *Ikebana* in conformity with the natural character and symmetry of the plant represented. This necessitates

thorough observation and accurate perception of the characteristic form of each plant dealt with, and in its way is thus an education in itself. But in addition to this, and without any breach of symmetrical conformity, the essential *Ikebana* touch must be given, and the triangular *Ten, Chi, Jin,* must fitly dominate the whole. How gracefully and effectively this is accomplished a little study of the photographs will show. It should also be observed that in this as in all the other arts of Japan, the symmetry aimed at is not the regular equal-sided kind, but the more subtle harmony of well-balanced differences in natural variety. In the other arts it is the materials alone that are different — the aesthetic principles are the same. Hence the music and the ancient *No* dramas and dancing of Japan should be interpreted according to the same standards. Instead of this, however, and in so far as they differ from kindred arts of the West, they are apt to be condemned by Western observers: thus some foreign specialists declare that the classical music of Japan is worthless. But are they really competent to judge? This hasty and prejudiced judgment may also have to be revised some day. In the meantime it is a significant fact that Japanese can learn our music much easier than we can learn theirs. In art as well as in theology the ideas of Christendom are taken to be superior as a matter of course, albeit they are apt to be more remarkable for militant self-assurance than for magnitude of breadth and depth. One finds more tolerance here in Japan and desire to understand the different points of view. Nor are critics here so ready to decry what does not conform to their own standards. Even where there is disapproval there is no shallow denunciation. A Japanese, for example, may prefer his own method of flower arrangement as an art to that of a mass of blossoms torn from their stems and crushed together into a vase. But he makes allowance for the difference in object and in taste on the part of the foreigner. And in fact he will duly appreciate the foreign way if the flowers are becomingly arranged.

The popularity of this most characteristic Japanese art shows no sign of diminishing. It forms part of the curriculum of all higher girls' schools, and is regarded as an indispensable accomplishment of princesses as well as of all other ladies. Teachers and students of the art may be found in every town and village, and the alcoves of innumerable homes throughout the Island Empire are brightened and beautified by the Nature touch of flowers in these meaningful designs.

THE ROMANCE OF THE DEAD:
by Henry Ridgely Evans, 33° (Hon.)

Who knows the fate of his bones, or how often he is to be buried? Who hath the oracle of his ashes, or whither they are to be scattered?
— Sir Thomas Browne: *Hydriotaphia* (Urn-Burial)

I

ONE of the things that distinguishes man from the animal is his treatment of his dead. We dig up the burial mounds of earth and uncover the megalithic tombs of unhewn stone of prehistoric man, and find the dead interred with some sort of rude ceremonial. We discover ornaments, weapons, implements, and food placed in the sepulchers with the departed for their use in the next world — that land beyond the dark portals of the grave. But the animal quickly abandons its dead to the disintegrating processes of nature. It knows nothing, conceives nothing of a shadowy world of Amenti or of a realm of light and life in the abode of the divine Osiris. The animal is conscious being; man self-conscious being. Man lives in the past, present, and future. Who can forget the powerfully suggestive statue by Rodin, which stands before the palace of the Luxembourg, Paris, entitled *Le Penseur* — the Thinker — who broods upon the problems of life, death, and eternity.

The dead have their vicissitudes as well as the living. The body of a king may receive sepulture in a coffin of gold, hidden away in a pyramid, and finally be deposited upon a dunghill, or behind a glass case in some museum for curious persons to gaze at. As Shakespeare has it —

> Imperious Caesar, dead and turned to clay
> Might stop a hole to keep the wind away.

The remains of Napoleon I lie hermetically sealed in a gigantic sarcophagus of granite beneath the gilded dome of the Invalides. But some day, perhaps, that body may be torn from its shelter and thrown unceremoniously into a common trench with quicklime cast upon it.

To quote again the quaint lines of Sir Thomas Browne: "Who knows the fate of his bones, or how often he is to be buried? Who hath the oracle of his ashes, or whither they are to be scattered?" Alas, look at the fate of the mummies of Mizraim. In the Middle Ages they were actually sought for medicinal purposes. Says Browne:

"The Egyptian mummy, which Cambyses or time hath spared, avarice now consumeth. Mummy is become merchandise, Mizraim cures wounds, and Pharaoh is sold for balsam."

It is my purpose in this article to study the subject. It is full of interest, a veritable romance of the dead. I must confess that the theme possesses a strange fascination for me. The sight of a mummy inspires me with awe, be it Egyptian or Christian.

I remember some years ago, going into a Gothic church in Europe, a very old church, the brazen bells of which had been blessed by a bishop centuries ago. Under the high altar reposed the bones of a medieval saint. Torch in hand you went down into a mouldy, shadow-haunted crpyt, and there saw, in a great glass sarcophagus, all that was mortal of the man of God — a crumbling mummy black with age, clothed in gorgeous apparel. Cloth of gold, studded with precious stones, enshrouded the body; diamonds were inserted into the eyeless sockets of the skull, while rubies, amethysts, and pearls sparkled on the shriveled fingers — a ghastly travesty of Death. What a gruesome sight it was, to behold that skeleton figure in such splendid vestments, bedecked with flashing jewels. The dust lay thick upon everything, upon the mosaic floor, upon the crystal sarcophagus, even upon the hideous mummy that mocked at time and the grave.

II

In the ancient days there reigned in Egypt a mighty king whose name was Rameses II. He was great both as a conqueror and as a builder of temples to the gods. It was he who erected the vast Ramesseum, with its avenue of winged sphinxes, and the colossal images of himself that form the façade of the great rock-cut temple of Abu-Simbel. These four statues, each seventy feet in height, are the admiration of the world, and preserve for us eternally the features of a remarkable king — who is supposed by some to have oppressed the Children of Israel, "and made their lives bitter in mortar, and in brick, and in all manner of service in the field." After a long and brilliant reign of sixty-seven years Rameses was gathered to his fathers, and the embalmers taking in care his royal body prepared it right royally for burial.

They swathed and bandaged, and then laid away the kingly clay in a hermetically sealed mummy case. This case was placed within another wooden receptacle, and the two into a third shell of some-

what similar construction, just like the nest of boxes which every juggler has among his paraphernalia. Indeed, these strange old embalmers, themselves jugglers with Death, had secret arts which are now forever lost in oblivion.

The mummy-cases of Rameses were gorgeously painted by the scribes with the most curious hieroglyphics. At last all was completed. The huge sarcophagus was placed on board of a funeral barge, and amid the lamentations of the people, the weird chantings of the priests, and clouds of incense, was floated up the Nile from Thebes to the place of royal sepulture — the far-famed Valley of the Tombs of the Kings. The door of the mortuary chamber was closed up, the Chief Priest affixed his seal thereto, and the body of Rameses was left in silence and in darkness. The Government inspectors of tombs made their periodical visits to the royal sepulcher to ascertain if all were well with the mummy, for even at that time there were organized bands of tomb-breakers. Several times sacrilegious hands were laid upon the royal remains. Finally for greater security the mummy of Rameses was removed, from time to time, to other places, until finally it was deposited in a subterranean vault near the great temple of Queen Hatshepsu, on the left bank of the Nile opposite Karnak. Centuries slipped away. The land of Mizraim saw many changes. Dynasty followed dynasty. Cambyses, the Persian, conquered the country; after him came the subtle-tongued Greeks, and a long line of Ptolemies sat upon the throne of the Pharaohs, culminating with Cleopatra the Great —

> The laughing Queen that caught the world's great hands.

Then came the Caesars with their mail-clad legions, and Egypt was reduced to a mere outlying province of the Roman Empire. When the old Roman world embraced Christianity, Egypt became the coign of vantage for all the ragged anchorites of the primitive church. The Thebaid was haunted by them. Following the Christians came the Moslem armies, fierce fanatics, who tried to disembowel the Great Pyramid of Gizeh in their efforts to get at the treasures of the olden Pharaohs. One day the thunder of cannon announced the arrival of a young demi-god of the West — Napoleon Bonaparte, who communed with the Sphinx, and crushed the followers of Mahomet under his heel. But still the mummy of Rameses slept on in undisturbed repose. At last in the latter half of the nine-

teenth century a family of so-called " Theban Arabs," who made their living by plundering the sepulchers of the old Egyptians, chanced upon the last resting-place of Rameses the Great. How they discovered it remains a mystery to this day.

Says Miss Edwards[1]:

It is now about twelve years since certain objects of great rarity and antiquity, mostly belonging to the period of the Amenide Dynasty (priest-king) XXI, began to find their way to Europe from Upper Egypt. Foremost in importance among the said relics were four funereal papyri (consisting of extracts from the Ritual or " Book of the Dead ") written for royal personages of the Amenide family. Concurrent testimony pointed to a family of Arab brothers, named Abd-er-Rasoul, as the original holders of these papyri; it was therefore concluded that the tombs of Pinotem I and of the Queens Notem-Maut and Hathor Hont-taui (for whom the papyri were written) had by them been discovered and pillaged. The eldest brother was ultimately induced to reveal the secret, and pointed out a lonely spot at the foot of the cliffs not far from the ruins of the great temple of Hatshepsu, on the western bank of the Nile, where the bottom of a hidden shaft opened into a short corridor, leading to a gallery seventy-four meters in length, at the end of which was a sepulchral vault measuring seven meters by four. The whole of this gallery and vault were crowded with mummies and mortuary furniture, as sacred vessels, funereal statuettes, canopic and libation vases, and precious objects in alabaster, bronze, glass, acacia wood, and the like. The mummies were thirty-six in number, including upwards of twenty kings and queens, from Dynasty XXVII to Dynasty XXI, besides princes, princesses, and high priests, all of which, together with four royal papyri and a miscellaneous treasure consisting of upwards of six thousand objects, are now in the Bulak Museum.

Among these mummies was that of Rameses II. The discovery of the remains of the great Sesostris of the Greeks was made on July 5, 1881, and forms a most romantic page in the history of modern archaeology. The unfolding of the mummy took place at Bulak June 1, 1886, in the presence of the Khedive and other distinguished men. There was no doubt as to the remains, for " in black ink, written upon the mummy case by the high-priest and King Pinotem, is the record testifying to the identity of the royal contents." Then " upon the outer winding-sheet of the mummy, over the region of the breast," the testimony is repeated. Professor Maspero conducted the ceremony of unwrapping the mummy, and reported as follows:

The head is long, and small in proportion to the body. The top of the skull is quite bare. On the temples there are a few sparse hairs, but at the poll the

1. *Encyclopaedia Britannica,* 9th ed. 1884, Vol. 17, p. 22.

hair is quite thick, forming smooth, straight locks about five centimeters in length. White at the time of death, they have been dyed a light yellow by the spices used in embalmment. The forehead is low and narrow; the brow-bridge prominent; the eyebrows are thick and white; the eyes are small and close together; the nose is long, thin, arched like the noses of the Bourbons, and slightly crushed at the tip by the pressure of the bandages. The temples are sunken; the cheek-bones very prominent; the ears round, standing far out from the head, and pierced like those of a woman for the wearing of earrings. The jawbone is massive and strong; the chin very prominent; the mouth small, but thick-lipped. . . . The skin is of earthy brown, spotted with black. Finally, it may be said the face of the mummy gives a fair idea of the face of the living King. The expression is unintellectual, perhaps slightly animal; but even under the somewhat grotesque disguise of mummification, there is plainly to be seen an air of sovereign majesty, of resolve, and of pride. The rest of the body is as well preserved as the head. . . . The corpse is that of an old man, but of a vigorous and robust old man. We know, indeed, that Rameses II reigned for sixty-seven years, and that he must have been nearly one hundred years old when he died.

The mummy of Rameses now reposes behind a glass case in the Bulak Museum, where it is stared upon by impertinent tourists. Alas, how the mighty have fallen! Think of the strange vicissitudes of this royal mummy. We can shut our eyes and see in imagination the famous King seated upon his throne, clothed in his royal robes, with his courtiers and slaves bowing before him. Or again we see him in the vestments of a priest offering incense to the gods, in one of the old dim temples of Thebes; perhaps offering incense to his own divine image, for in the wall-painting at Abu-Simbel he is portrayed under the twofold aspect of royalty and divinity — Rameses the king burning incense before Rameses the god. At Pithom his statue, in red syenite, is seated in an armchair between the statues of the two solar gods Ra and Tum. Rameses was the great builder. From the Delta to Gebel Barkal he filled the land with splendid monuments and temples, dedicated to his own glory and the worship of the Egyptian deities.

In this same Bulak Museum are exhibited the mummies of Rameses III, King Pinotem, the high priest Nebseni, Queen Nofretari, and Seti I, the father of Rameses II.

The ancient Egyptians were past masters in emblaming the dead. Thanks to this wonderful art they have preserved for us the forms and faces of the mighty dead of Mizraim. Embalming with such care and secreting the mummy so mysteriously in rock-cut cavern and pyramid had a profound signification. As the reader knows, it had

its origin in the Egyptian idea of immortality, the unique conception that the soul would return after cycles of probation, and make its home once more in the mummified body; or as E. Wallis Budge puts it in describing the funeral of the high priest Ani[2]:

His relatives ordered that his body should be mummified in the best possible way, so that his soul, *ba,* and his intelligence, *xu,* when they returned some thousands of years hence to seek his body in the tomb, might find his *ka,* or "genius" there waiting, and that all three might enter into the body once more, and revivify it, and live with it forever in the Kingdom of Osiris. No opportunity must be given for these four component parts of the whole man to drift away one from the other, and to prevent this the perishable body *xa* must be preserved in such a way that each limb of it may meetly be identified with a god, and the whole of it with Osiris, the judge of the dead and king of the nether world. The tomb must be made a fit and proper dwelling-place for the *ka,* which will never leave it as long as the body to which it belongs lies in its tomb.

The Egyptians may be said to have brought the cult of death to its highest pitch. And yet even in that age there were doubters who looked askance upon the religion of the temples. This is proven by the existence of such persons as "Tomb-robbers," for whom the horrors of Tartarus had no terrors. To rob a tomb and despoil a mummy was the height of sacrilege.

Says Miss Edwards[3]:

Most of the tombs at Bab-el-Molûk were open in Ptolemaic times. Being then, as now, among the stock sights and wonders of Thebes, they were visited by crowds of early travelers, who have as usual left their neatly-scribbled *graffiti* on the walls. When and by whom the sepulchers were originally violated is of course unknown. Some, doubtless, were sacked by the Persians; others were plundered by the Egyptians themselves, long before Cambyses. Not even in the days of the Ramessides, though a special service of guards was told off for duty in "the Great Valley," were the kings safe in their tombs. During the reign of Rameses IX — whose tomb is here, and known as No. 6 — there seems to have been an organized band, not only of robbers, but of receivers, who lived by depredations of the kind. A contemporary papyrus[4] tells how in one instance the royal mummies were found lying in the dust, their gold and silver ornaments, and the treasures of their tombs, all stolen. In another instance, a king and his queen were carried away bodily, to be unrolled and rifled at leisure. This curious information is all recorded in the form of a report, drawn up by the Commandant of Western Thebes, who with certain other officers and magistrates, officially inspected the tombs of the "Royal Ancestors" during the reign of Rameses IX.

2. *The Mummy,* Cambridge, 1894. 3. *A Thousand Miles up the Nile.*
4. *Abbott Papyrus,* British Museum.

No royal tomb has been found absolutely intact in the valley of Bab-el Molûk. Even that of Seti I had been secretly entered ages before ever Belzoni discovered it. He found in it statues of wood and porcelain, and the mummy of a bull; but nothing of value save the sarcophagus, which was empty. There can be no doubt that the priesthood were largely implicated in these contemporary sacrileges. Of thirty-nine persons accused by name in the papyrus just quoted, seven are priests, and eight are sacred scribes.

At Denderah is the temple of the goddess Hathor, the Lady of the Underworld. In the museum at Cairo is the mummy of "the lady Amanit, priestess of Hathor," who once walked this world of ours and ministered to the goddess in the great temple. Round her neck is a string of amulets, beads, and ornaments. Robert Hichens says of the mummy [5]:

The expression of "the lady Amanit" is very strange, and very subtle; for it combines horror — which implies activity — with a profound, an impenetrable repose, far beyond the reach of all disturbance. In the temple of Denderah I fancied the lady Amanit ministering sadly, even terribly, to a lonely goddess, moving in fear through an eternal gloom, dying at last there, overwhelmed by tasks too heavy for that tiny body, the ultra-sensitive spirit that inhabited it. And now she sleeps — one feels that, as one gazes at the mummy — very profoundly, though not yet very calmly, the lady Amanit.

The dried and withered mummy, however, affords one but little idea how the individual really looked in life, when the rich blood coursed through the veins and passion swept the mortal frame. But under the Greek Ptolemies arose the custom of affixing portraits to mummies. The practice began in the second century B. C., and lasted until the fourth century A. D., when the Emperor Theodosius issued an edict forbidding it. These portraits have been discovered in the necropolis of the ancient city of Kerke (now called Rubaigat), about fourteen miles from the ruins of Arsinöe, in the Egyptian province of Fayûm. They were usually painted on panels of wood, some in encaustic, others in distemper. In encaustic the colors were laid on in patches, and then blended with the cestrum, which was an instrument resembling a lancet-shaped spatula, long-handled, with a curved point at one end, and a finely dentated edge at the other. The colors were mixed with liquid wax instead of oil. With the tooth-edge of the cestrum "the wax could be equalized and smoothed, while the point was used for placing high lights, marking lips, eyebrows, etc." Final-

5. *Egypt and its Monuments,* 1908.

ly the colors were burned in by applying a heated surface to the panel. Distemper-painting was accomplished with a mixture of water-colors, egg, fig-milk, or some other resinous compound beaten thoroughly together. The brush was used, as well as the cestrum. The paints were made from mineral substances, and produced the most brilliant results. Herr Graf, of Vienna, owns ninety of these remarkable portraits.

In the same sepulchers where the portraits were found were also discovered many labels containing funerary inscriptions. These labels evidently belonged to the mummies, but became detached. All of them are addressed to the soul or *Ba*. Here is one from the collection of Herr Graf: *"Alinee — also called Tenos — Herod's Daughter. Thou good one, a tender farewell. The year 10. Mesoreh 7th. Age 35."* Centuries have passed since the gentle Greek lady laid down her life. Evidently she was well-beloved. Let us hope that Osiris and his forty-two judges in the Underworld dealt kindly with her. Says Budge[6]:

A remarkable example of a very late Graeco-Roman mummy, probably of the fourth century A. D., is British Museum No. 21,810. The body is enveloped in a number of wrappings, and the whole is covered with a thin layer of plaster painted a pinkish-red color. Over the face is inserted a portrait of the deceased, with a golden laurel crown on his head; on the breast, in gold, is a collar, each side of which terminates in the head of a hawk. The scenes painted in gold on the body are: 1. Anubis, Isis, and Nephthys at the bier of the deceased. 2. Thoth, Horus, uraei, etc., referring probably to the scene of the weighing of the heart. 3. The soul revisiting the body, which is attempting to rise up from a bier, beneath which are two jars; beneath this scene is a winged disk. Above these scenes in a band is inscribed, in Greek, "O Artemidorus, farewell"; and above the band is a vase, on each side of which is a figure of Maāt.

Who was this Artemidorus whose mummy is so gaudily decorated in gold? His face stares at you from the painted panel, with eyes veiled in mystery. There is a world of affection and poignant grief in the two simple words inscribed upon the sarcophagus: "O Artemidorus, farewell!" There were gentle souls in sunny far-off Fayûm who deeply loved this sad-faced young Greek. Alas! poor Artemidorus, you are now but a number — 21,810.

The Greeks introduced many changes into the life of Egypt, but they succumbed to the awful fascination of the religion of the land.

6. *The Mummy*, Cambridge, 1894.

The shadows cast by the ponderous temples of the olden Pharaohs lay athwart their lives. The "black radiance" that issues from the tomb enveloped them, warning them of the day when they, too, should lie in their sepulchers and their souls journey into the Underworld of Amenti. As Heine puts it:

> Everywhere death, stone, mystery. . . . You know Egypt, that mysterious Mizraim, that narrow Nile valley, which looks like a coffin.

Aye! even the very contour of the country resembled a coffin. The Greek conquerors mummied their dead, and so did the Romans who came after them. Says Budge:

> The Egyptian Christians appear to have adopted the system of mummification, and to have mixed up parts of the old Egyptian mythology with their newly adopted Christianity. Already in the third century of our era the art of mummifying had greatly decayed, and although it was adopted by wealthy people, both Christian and Pagan, for two or three centuries longer, it cannot be said to have been generally in use at a later period than the fourth century. I believe that this fact was due to the growth of Christianity in Egypt. The Egyptian embalmed his dead because he believed that the perfect soul would return to its body after death, and that it would reanimate it once more; he therefore took pains to preserve the body from all destroying influences in the grave. The Christian believed that Christ would give him back his body changed and incorruptible, and that it was therefore unnecesssary for him to preserve it with spices and drugs.

III

Sir Thomas Browne speaks of the discovery of Theseus' remains and their translation to Athens, as described by Plutarch; also of Alexander opening the sepulcher of Cyrus, and Augustus opening that of Alexander. Plutarch says that the bones of Cyrus were unusually large and that beside them lay a sword and lance. Alexander was buried in a coffin of gold, but that receptacle of the mighty dead soon disappeared and was replaced by one of glass. Some centuries later Augustus saw it. Not content with gazing at the body through the glass, he passed his hand over the dead Captain's face whereupon the nose crumbled into dust. So reports Dion Cassius.

The bodies of those who died at Pompeii and Herculaneum have been wonderfully preserved for us. In the museum at Naples many of them may be seen. The catacombs of Rome kept intact the bones of the saints of the early Church.

And what about Charlemagne? The great sovereign died in 814

at Aachen, and was buried in the church of the Virgin. Tradition says that he was interred seated in a chair of state. His gold-hilted sword was girded to his side, and the Gospels in gold letters placed in his hands, like the Book of the Dead in the grasp of an Egyptian mummy. On his head was placed the imperial crown with a bit of the "true cross" inserted, and on his face a sudarium. Upon his lap was laid a pilgrim's wallet, and under his gorgeous royal robes a haircloth shirt. On the wall of the sepulcher opposite the sightless corpse were hung the gold scepter and shield which Pope Leo III had blessed. Charlemagne, the world's ruler when he lived, was decked out when he departed this life to rule the kingdom of the dead.

In the year 1000 A. D. Otto III opened the tomb. The corpse of Charlemagne showed no sign of decay except that the tip of the nose had disappeared. Otto "caused the disfigurement to be repaired with gold, and the body to be clad in white raiment." Doubt has been cast upon the story. All traces of Charlemagne's tomb have long ago disappeared.

William the Conqueror's coffin was opened some four hundred years after it was first deposited in the tomb, at the instance of a Bishop of Bayeux. The body was found entire. Before closing the coffin, the Bishop had a picture painted of the corpse. This picture was eventually destroyed. In the year 1562, a party of Calvinist soldiers opened the grave, and threw the bones of the Conqueror out into the Church. The monks, however, collected the remains and placed them under a new monument, which was destroyed during the French Revolution.

The body of Richard Plantagenet was buried at Fontevrault, his bowels were interred at Châlons, and his heart at Rouen. The latter, described in the epitaph as the "*cor inæstimabile,*" was buried in the Cathedral, to the right of the high altar, under an imposing monument, at one time surrounded with a silver balustrade. In the year 1250, the dean, canons, and chapter of Rouen, desiring to contribute their quota to the ransom of St. Louis, who was a captive among the Saracens, seized upon the balustrade and melted it down. In 1842 the heart was exhumed. It was found entire, but withered and shapeless. At the present writing it is resolved into a pinch of dust, and may be seen in a glass box, in a museum of Rouen. So much for the lion-heart of the redoubtable Crusader.

The body of Edward IV who died in 1483, was exhumed in 1879.

It was found in a fair state of preservation. A lock of his long hair was cut off, and is now in the Ashmolean Museum.

IV

Charles V was the greatest sovereign of the memorable sixteenth century. Says William Sterling[7]:

The vast extent of his dominions in Europe, the wealth of his Transatlantic empire, the sagacity of his mind, and the energy of his character, combined to render him the most famous of the successors of Charlemagne. . . . He stood between the days of chivalry, which were going out, and the days of printing, which were coming in; respecting the traditions of the one, and fulfilling the requirements of the other.

In the year 1556 he abdicated his throne in favor of his son Philip II, and retired into the Jeromite monastery of Yuste, in Spain. He died on September 21, 1558, and was buried in the church of Yuste On the 4th of February, 1574, Philip II had his father's remains carried to the Escorial, and interred in a vault in front of the high altar. Says Sterling:

Eighty years after, the repose of Charles was again disturbed by his great-grandson, Philip IV. For thirty-three years that prince was engaged in building the celebrated Pantheon begun by his father, Philip III, at the Escorial. On the 16th of March, 1654, the dust of the Austrian kings of Spain, and of their consorts who had continued the royal line, was translated from the plain vault of Philip II to this splendid sepulchral chamber. Each of the seven coffins was carried by three nobles and three Jeromite friars; the procession was headed by the remains of the fair Isabel of Bourbon, the first queen of Philip IV, and it was closed by the dust of Charles V. After infinite splendid ceremonies, they were borne round the church in procession and at last down the long marble staircase to their superb place of rest, which gleamed in the light of countless tapers and golden lamps, reflected from marble, and jasper, and gold, like a creation of Oriental romance. The grandees who bore the coffin of Charles were the prime-minister, Don Luis de Haro, the Duke of Abrantes, and the Marquis of Aytona. As the body was deposited in the marble sarcophagus, the coverings were removed to enable Philip IV to come face to face with his great ancestor. The corpse was found to be quite entire, and even some sprigs of sweet thyme, folded in the winding-sheet, retained, as the friars averred, all their vernal fragrance, after the lapse of four-score winters. After looking for some minutes in silence at the pale dead face of the hero of his line, the king turned to Haro and said: "*Cuerpo honrado,* honored body, Don Luis." "Very honored," replied the minister; words brief indeed, but very pregnant. . . .

7. *The Cloister Life of the Emperor Charles V.*

Once again, at the distance of four generations, the Emperor's grave is said to have been opened by the descendant of that despised Anthony of Bourbon at whose claims on Navarre Charles had scoffed, and whose posterity had wrested from the house of Austria the sceptre of Spain and the Indies. Mr. Beckford [the eccentric author of *Vathek*] used to relate that when he was leaving Madrid, Charles III, as a parting civility, desired to know what favor he would accept at his hands. The boon asked and granted was leave to see the face of Charles V, in order to test the fidelity of the portraits of Titian. The finest portraits of Charles, as well as his remains, were then still at the Escorial. The marble sarcophagus being moved from its niche, and the lid raised, the lights of the Pantheon once more gleamed in the features of the dead Emperor. The pale brow and cheek, the slightly aquiline nose, the protruding lower jaw, the heavy Burgundian lip, and the sad and thoughtful expression, remained nearly as the Venetian had painted them, and unchanged since the eyelids had been closed by Quixada. There, too, were the sprigs of thyme, seen by Philip IV, and gathered seven ages before in the woods of Yuste. . . . For this curious anecdote I am indebted to the kindness of Mr. Beckford's daughter, the Duchess of Hamilton. He had left, unfortunately, no note or memorandum of the fact, and therefore the date, and the names of the other witnesses of this singular spectacle, cannot now be recovered. His letters prove that he was at Madrid at the close of 1787 and in the spring of 1795. I have been unable to obtain any corroborative evidence from Spain, and therefore the story must be taken simply as told by Mr. Beckford.

Once more the sarcophagus of Charles V was opened, by the ministers of the Revolution, in 1869. Signor Palmaroli made a drawing of the remains, which showed the broad forehead, the crooked aquiline nose, and the under jaw "protruding so far beyond the other that the teeth could not meet."

The members of the Austrian House of Spain seemed to have a morbid penchant for things funereal. Juana la Loca would not surrender the embalmed body of her beloved husband; Philip II not long before his death had a skull brought to him, upon which he placed a crown.

V

Henry VIII of England (he of the many wives) was interred by the side of Jane Seymour in the vaults of St. George's Chapel, Windsor. Says Miss Strickland[8]:

She was undeniably the first woman espoused by Henry VIII, whose title, both as wife and queen, was neither disputed by himself nor his subjects. . . .

8. *Lives of the Queens of England.*

When George IV searched the vaults for the body of Charles I in 1813, Queen Jane's coffin was discovered close to the gigantic skeleton of Henry VIII, which some previous accident had exposed to view. As no historical fact could be ascertained by the disturbance of the Queen's remains, George IV would not suffer her coffin to be opened, and the vault where she lies, near the sovereign's side of the stalls of the Garter, was finally closed up. . . . Evelyn says that a parliamentary soldier had concealed himself for plunder in St. George's Chapel, during the burial of Charles I; and, in an incredibly short time, stole a piece of Henry VIII's rich velvet pall, and was supposed to have done some further mischief. . . . Sir Henry Halford, who examined the remains of Henry VIII, in his coffin, was astonished at the extraordinary size and power of his frame, which was well suited to his enormous armchair, said to be at Windsor. He resembled the colossal figure of his grandfather, Edward IV, who was six feet two inches in height, and possessed of tremendous strength.

Charles I was beheaded in the year 1648-9, on a scaffold in front of the palace of Whitehall, London. His executioner was masked. No one knows his identity. After some dispute the king's body was buried in St. George's Chapel, Windsor Castle. No monument marked his last resting-place. Finally, in 1813, his coffin was discovered. After removing the cerecloth and resinous matter, the head was seen. The muscles and skin were intact, the nose and one eye had sunken in, but the other eye was full. The hair was of a dark reddish-brown, streaked here and there with silvery gray. Among those present at the disinterment was Sir Henry Holford, who attempted to raise the body from its resting-place, when the head fell back, disproving the statement that it had been sewn on before burial. There was no doubt of the identity of the king. The features were easily recognizable from the splendid portrait of Van Dyck.

Edward the Confessor died in the odor of sanctity. His tomb was opened in the year 1163, when the body was found to be " lying in rich vestments of cloth of gold, having on his feet buskins of purple and shoes of great price." Allan Fea says [9]:

Evelyn mentions the curious fact that when the scaffolding of the seats for the Coronation in the Abbey was being removed, one of the choir men noticed a hole in Edward the Confessor's tomb, and seeing something glitter, put in his hand and drew forth from the shoulder-bones of the deceased monarch a gold chain, two feet long, formed of curious oblong links, and joined by a massive knob of gold, set with rubies. Atttached to it was a gold cross, richly enameled and hollow. . . . By James' order the broken coffin was enclosed within a new one. . . . The gold chain and cross that had been discovered in June, 1685, were

9. *James II and his Wives*, London, 1908, p. 129.

afterwards presented by the Dean of Westminster and the Archbishop of Canterbury to the King, and they descended to James' son, the Chevalier de St. George, and in 1715 were in charge of his wife, Princess Maria Clementina Sobieska, when the royal jewels were sent to Rome, as appears by the entry in the inventory: "A box with a cross and chain found in St. Edward's tomb in the year 1685."

Speaking of James II of England, let me tell of the strange vicissitudes that befell his remains. James took refuge in France, after the disastrous battle of the Boyne Water, and lived at St. Germain, on a pension paid him by Louis XIV. He and his family kept up the ghostly semblance of a court, which was distinguished for nothing in particular except its intrigues with the Jacobites of England. James died on September 16, 1701. His remains were embalmed, and sent to the English Benedictine monastery in the Rue du Faubourg St. Jacques, Paris. Dangeau, in his *Memoirs,* v. ii, p. 27, asserts that the body was not interred, because it was ultimately designed to have it conveyed to England and laid to rest in Henry VII's chapel, Westminster Abbey. James became very pious in his latter years, and was looked upon as a saint, as the following contemporary account will show:

> The opinion of the king's sanctity was so great that now, at the opening of his body [during the process of embalming], a number of people came to gett pieces of linnen dipped in his blood. The guards took their cravats from about their necks and did the same. The next day, after the deposition of the body in the aforesaid (Benedictine) Church, a vast concourse of people flocked thither, as they did for many days ensuing, for to pray for that faithful soul departed.[10]

King James was not buried, with the idea previously mentioned of finding interment in Westminster Abbey. But that day never arrived. For ninety-two years the coffin of James remained above ground. In the eighteenth century, before the "Red Terror," the royal coffin was a show sight of Paris. A tourist writes in 1776:

> To a church of Benedictine friars on purpose to see the corpse of James II — who lies buried on a stand about six feet from the ground. . . . He is there ready to be shipped off to be buried in Westminster Abbey when any one of his family shall mount the English throne.[11]

The Earl of Mount Edgecombe makes an entry in his diary, eight years later, to the effect that the chapel was getting in a very dilapi-

10. *Hist. MSS Com. Rep. 10, App. 5.* See also "Posthumous Vicissitudes of James II," *Nineteenth Century,* Vol. 25, p. 105. 11. *Notes and Queries,* 9th Series, Vol. VIII, p. 45.

dated condition, and the "ornaments falling to rags." The casket bore the following inscription: "*Ici est le corps du très-haut, très-puissant et très-excellent Prince, Jacques II, par la grâce de Dieu, Roy de la Grande Bretagne, né le 24 Octobre, 1633, décédé en France, au Château de St. Germain-en-Laye, le 16 Septembre, 1701.*" In the same church was preserved a waxen face of James, taken from his dead countenance and on the eyebrows were fixed the very hairs of the dead king.

A correspondent to *Notes and Queries,* in 1850, gives the following curious description by an old Irish monk, who was living at Toulouse ten years previously when he visited that town:

I was a prisoner in Paris, in the Convent of the English Benedictines, in the Rue St. Jacques, during part of the Revolution. In the year 1793 or 1794, the body of King James II of England was in one of the chapels there, where it had been deposited some time, under the expectation that it would one day be sent to England for interment in Westminster Abbey. It had never been buried. The body was in a wooden coffin, enclosed in a leaden one, and that again enclosed in a second wooden one covered with black velvet. That while I was a prisoner the *sans-culottes* broke open the coffins to get at the lead to cast into bullets. The body lay like a mummy bound tight with garters. The *sans-culottes* took out the body, which had been embalmed. There was a strong smell of vinegar and camphor. The corpse was beautiful and perfect. The hands and nails were fine. I moved and bent every finger. I never saw so fine a set of teeth in my life. A young lady, a fellow-prisoner, wished much to have a tooth; I tried to get one out for her, but could not, they were so firmly fixed. The feet also were very beautiful. The face and checks were just as if he were alive. I rolled his eyes; the eyeballs were perfectly firm under my finger. The French and English prisoners gave money to the *sans-culottes* for showing the body. They said he was a good *sans-culotte,* and they were going to put him in a hole in the public churchyard like other *sans-culottes,* and he was carried away, but where the body was thrown I never heard. King George IV tried all in his power to get tidings of the body but could not. Around the chapel were several wax molds of the face hung up, made probably at the time of the King's death, and the corpse was very like them. The body had been originally kept at the Palace of St. Germain, from whence it was brought to the Convent of the Benedictines.[12]

There are various accounts that the remains of James were subsequently recovered, but none of them have been authenticated.

John Goldworth Alger, the author of *Paris in 1789-94,* London, 1902, says:

12. Written at the narrator's dictation to Mr. Pitman-Jones, and published in *Notes and Queries,* 1st Series, Vol. II, p. 244.

James' body was in all probability thrown into a sewer or pit. . . . The late Monsignor Rogerson possessed a glove-box made from a piece of the coffin carried off by a spectator of the desecration.

In his interesting appendix on "Profanation of Tombs," Mr. Alger records the fate of other potentates, princes, and great men, as follows:

The Jacobins, who had so little respect for the living, were not likely to show more for the dead, especially when lead was urgently required for bullets. Military exigencies and fanatical iconoclasm went hand in hand. On the 1st of August 1793 the Convention decreed that on the 10th, the anniversary of the fall of the monarchy, the royal tombs at St. Denis and elsewhere should be destroyed. The organist of St. Denis has left an account of what happened there on the 11th of October.[13] The bodies of fifty-two kings and notabilities, whether in stone or lead coffins, were taken up and interred in one grave at the cemetery. The remains of Princess Louise, Louis XV's daughter, at the adjoining Carmelite Convent, shared the same fate. A temporary foundry was established in the cemetery to melt down the lead. Henry IV and Turenne were in such preservation as to be recognizable. Three of Du Guesclin's teeth were pulled out and presented to the organist, who continued in office when Christian services had been superseded by Décadi gatherings.[14]

At Sens the bodies of Louis XVI's parents were taken up, "recalling them after their death," as a deputation on the 3d June 1794 told the Convention, "to an equality unknown to them in their lifetime." The deputation preserved the hearts, together with several crowns and sceptres found in the tombs. The lead was used to kill the country's enemies.

The Paris municipality in October 1793 ordered a search of tombs for jewels, gold, silver, bronze, or lead. Alexandre Lenoir saw Cardinal Richelieu's remains exposed to view at the Sorbonne chapel, and he had reason to remember it, for on his objecting to the profanation, a national guard pricked his hand with a bayonet, producing a permanent scar. The body was like a mummy. The skin was livid, the cheeks puffy, the lips thin, the hair white. A man cut off the head and carried it away. It passed through several hands, and one owner sawed it in two lengthwise. The rest of the body was removed with the tomb to Lenoir's Museum. Under the restoration it was replaced in the Pantheon, and in 1867 the head was restored but simply placed in a cavity. On the 25th June 1895, in the presence of the Princess of Monaco, a representative of Richelieu's collateral descendants and owner of his castle and relics, the skull was sealed up. M. Hanoteaux, the Cardinal's biographer, was one of the spectators.

13. *Cabinet Historique*, v. 21. 14. In 1815 search was made for the remains, but as quicklime had been thrown over them very few bones were found. These were reinterred in a vault in the Cathedral, with an inscription stating that they are the remains of eighteen kings (from Dagobert downwards) and ten queens. The body of Louise, queen of Henry III, which in the Capuchin chapel of Paris had escaped profanation, was placed with them.

In December 1793 the district of Montelinear [Montélimar?] (Drôme) ordered a search for plate, copper, or lead in the church of Grignan. Among the tombs consequently opened was that of Madame de Sévigné, interred there in 1696. Her hair was entirely detached. The mason Fournier cut off a lock, as also a piece of the dress. Pialla, the magistrate, sawed the skull in two, and sent the upper portion to Paris. He also appropriated a tooth. Veyreuc, a notary, received a rib. In February 1897 a piece of the dress was included in the sale of Baron Pinchon's curiosities. In 1870 during repairs to Grignan church, the lower portion of a skull was found, and this is believed to be the portion left in 1792, albeit the Dominicans of Nancy possess an entire skull which they hold to be Madame de Sévigné's. [15]

Buffon's tomb at Montbard was destroyed for the sake of the lead. His son induced the Education Committee of the Convention to request the municipality to place a small stone on the grave. This implies that the body had been re-interred.

Madame de Maintenon, as has been aptly said, was treated as a queen by the Jacobins. In January 1794 her embalmed body was brought out from its tomb at St. Cyr Chapel, stripped, dragged to a cemetery, and thrown into a hole. In 1802, St. Cyr having become a military college, the director, Crouzet, rescued it and buried it in the court, but his successor, General Duteil, resenting such honors, exhumed it in 1805, and it was consigned to an old chest in a garret. There many of the bones disappeared. In 1836, however, another director, Baraguey d'Hilliers, placed the remaining bones in a marble tomb in a side chapel, where they are not likely to be again disturbed.

Louis XIV had very bad treatment indeed. His body was but "a black, shapeless lump" when exhumed. What a base condition for the splendid "Sun King" of Versailles! His engraved coffin-plate was utilized by some ingenious *sans-culotte* as the bottom of a dripping pan. It was discovered not many years ago by the Director of the Cluny Museum. Louis XV, who died of small-pox, was a mass of putrid corruption. The Jacobins who disinterred the remains only just missed being infected. When the "Well Beloved" died his corpse was rolled up hastily in the sheets of the bed, and thrown into a triple coffin of oak and lead. On May 12, the coffin was placed on a large coach. Says the Baron de Besenval:

A score of pages and fifty mounted grooms, carrying torches, but like the carriages, not dressed in black, composed the entire procession, which set off at full trot at eight o'clock in the evening, and arrived at Saint-Denis at eleven, amidst the gibes of the curious spectators on either side of the road, and who, under cover of the darkness, gave full scope to jesting, the dominant characteristic of the nation. They did not confine themselves to that; epitaphs, placards, verses, were scattered broadcast, aspersing the memory of the late king.

15. *Figaro*, 19th April, 1897.

The body was promptly buried, and forgotten until the Great Revolution.

The body of Henri IV, the superb Gascon, was found to be in an excellent state of preservation. Says Lamartine: "Placed in the choir, at the foot of the altar, he received, dead, the respectful homage of the mutilators of royalty." Lenoir tells us that a soldier cut off a long strand from the king's beard, and exclaimed: "I too am a French soldier. Henceforth I will wear no moustache but this." He placed the strand on his upper lip, and boastfully shouted: "Now I am sure of conquering the enemies of France! I shall march to Victory!"

Marie Antoinette and Louis XVI were buried like paupers in the old cemetery of the Madeleine. A royalist who lived next to the graveyard observed where the bodies were interred and marked the places. His name was Pierre Louis Olivier Desclozeaux, a lawyer by profession. After the Terror, he bought the burial-ground. In the reign of Louis XVIII the remains were exhumed and buried at St. Denis. A beautiful expiatory chapel was raised over the original site of the graves. Says G. Lenôtre [16]:

> If the historians of Marie Antoinette are to be believed it was not until a fortnight after the Queen's death that her remains were buried. (The 11th Brumaire, year II, or Nov. 1st, 1793. See *Historie de Marie Antoinette,* by Maxime de la Rocheterie.) What became of her body during these fifteen days? No doubt it was thrown down upon the grass in some corner of the Cemetery of the Madeleine, to await further orders that never came; and so it was forgotten. At last the grave-digger Joly took it upon himself to dig a hole, to place in it the remains of the victim, and to submit this bill for funeral expenses to the authorities for their approval:
>
> The Widow Capet, for the coffin . . . . 6 livres.
> For the grave and grave-diggers . . . . 15 - 35.
>
> And this is the only document we have relating to the Queen's burial.

Quicklime had been thrown over the remains of the King and Queen, but it only partially did its destructive work. The heads of the royal pair were discovered and some of their bones when the graves were opened in the year 1815. The Sieur Sylvain Renard, formerly senior curate of the Madeleine, who conducted the funeral services of Louis XVI, has left us an interesting account of the affair, which M. Lenôtre quotes in full. Among other things the Senior Curate says:

16. *The Last Days of Marie Antoinette,* London, 1907.

When we reached the cemetery the body was handed over to us. . . . His Majesty was dressed in a waistcoat of white piqué, with breeches of grey silk, and stockings to match. His face was not discolored, his features were unaltered, and his open eyes seemed to be still reproaching his judges for the unspeakable crime of which they had just been guilty.

An eye-witness of the exhumation of the Queen's remains says:

When the grave-diggers produced one of the Queen's stockings, her elastic garters, and some of her hair, the Prince de Poix burst into tears, uttered a cry, and fell fainting to the ground.

The remains of the royal pair were placed in leaden coffins. On the king's, upon a plate of silver-gilt, was the inscription:

Here lies the body of the very high, very puissant and very excellent prince, Louis XVI, of the name, by the grace of God King of France and Navarre.

Upon the queen's:

Here lies the body of the very high, very puissant and very excellent Princess Marie-Antoinette-Joséphine-Jeanne de Lorraine, archduchess of Austria, wife of the very high, very puissant and very excellent prince Louis XVI, by the grace of God King of France and Navarre.

Says Lenôtre:

On January 21st, 1815, the twenty-second anniversary of the king's execution, the remains of Louis XVI and Marie Antoinette were solemnly conveyed from the house of M. Desclozeaux to the Church of Saint-Denis. . . . By a coincidence that was perhaps designed, the road from the Madeleine to the Porte Saint-Denis, which Louis XVI's body followed that day, was the same road by which the condemned king had traveled in the opposite direction, on the same day and at precisely the same hour, two and twenty years before.

The coffins of the unfortunate Louis XVI and his wife repose in the vault under the choir of the basilica of the church of Saint-Denis. In this gloomy sepulchral chamber are also buried Louis XVIII, the last Bourbon king of France, and several members of his family. The coffins of King Louis VII, of Louise de Lorraine, Henri III's wife, and of two princes of the house of Condé, which escaped violation in 1793, were also placed here.

The body of the great Turenne, which was interred in Saint-Denis, was exhumed by the *sans-culottes* in 1793. Desfontaines, the famous botanist, saved it from destruction, by passing it off as a French mummy worthy of preserving in the interests of science. Napoleon I, when consul, had the remains of Turenne interred in the Invalides.

(To be concluded)

SCIENCE NOTES: by the Busy Bee

Light: the Constructive Agent

NE of the most pervasive and prolific symbols is that of the circle, a figure representing the path of a point which at first recedes from its origin and then returns thereto. This represents the course of evolution, and the formula is applicable to any kind of evolution, whether on a large scale or a small. If we take *time,* for instance, we see the principle manifested in the small cycle of a solar day, which begins in darkness, proceeds to maximum light, and then shades off to darkness again. The larger cycle of the year carries us through phases that grow out of each other and yield the perpetual alternation of the seasons. Man passes from childhood to second childhood, and it would be easy to give many more instances of this universal law.

In the progress of science a similar course is being run; for there is a notable tendency to recede from the mechanistic view of the universe and to approach the spiritual view; and this has come about not through a reaction or retrogression, but by *pushing onward.*

In chemistry attention is now being directed towards synthetic processes, as distinguished from analytic; or towards building-up processes, as contrasted with destructive. This is well illustrated in a recent address by Professor Giacomo Ciamician to the International Congress of Applied Chemistry, which appeared in *Scientia* for November, 1912. It was on "The Photo-Chemistry of the Future." He points out that plants, under the influence of light, reverse the process of combustion, freeing oxygen from carbon, instead of combining it; and wonders whether science will be able to do this on a large and efficient scale. The important point here is that in place of a destructive process attended by fire, we have a constructive process brought about by light.

Photography is the most familiar example of photo-chemistry, but its purpose is not that of furnishing supplies of useful material. There are, however, numerous other instances of the use of light in chemical reactions, and the professor cites some of these. Under the influence of light, the reactions that take place between substances in organic chemistry are different from those which take place under ordinary circumstances. The ultra-violet rays are especially capable in this respect, and sometimes the actions that take place under their influence differ from those which take place under less refrangible rays. The practical question reduces itself to a suitable choice of

rays and of "catalyzers" — substances which receive and transmit the power of the rays.

The action of these rays of light would seem to be constructive rather than destructive, building up more complex compounds from the more simple, and yielding substances more or less resembling those produced by plants under the action of sunlight. By pursuing this line of research, we are starting on the upward arc of the cycle of evolution in chemistry; and there is promise that our science may in future become less destructive and wasteful, and that it may actually increase the stores of nature instead of consuming them. Of course the source drawn upon is sunlight; and the professor shows that the energy of the sunlight that falls upon the earth exceeds enormously that which could be derived from the coal stored in the crust. Perhaps some of this energy can be utilized directly as heat, by means of solar power plants; but the science of photo-chemistry offers a way of using it to better advantage than by the direct production of heat.

Light is evidently something very much more than a mere medium for seeing with; it is one of nature's greatest forces. And it is constructive force. Consuming fires may well be taken as the symbol of man's destructive passions, and light as the emblem of his wisdom.

Intuition in Science

"Why the Intuition is Superior to the Reason in Making Great Discoveries," is the title of an article in the May *Current Opinion* which quotes from an article in *The Popular Science Monthly* by Professor James Byrnie Shaw of the University of Illinois. The articles, though containing no unfamiliar ideas, are noteworthy as illustrating the general trend of thought away from mechanicalism and formalism towards more living and creative methods. The writers point out that while the patient accumulating of facts enlarges the boundaries of scientific knowledge, this process does not insure a good use of the facts so accumulated. The mere collecting of stones will not build a cathedral. To make the fabric,

> it is necessary to have the end in view prophetically from the beginning. This implies a power of the mind which the late Poincaré called intuition. It is that power which enables us to perceive the plan of the whole, to seize the unity in the matter at hand. . . .
>
> The great educational problem of today is the problem of the development of

the intuition. . . . Too prolonged adherence to the methods of rigid reasoning leads to sterility. In mathematics, at least, both logic and intuition are indispensable. One furnishes the architect's plan of the structure, the other bolts it and cements it together.

Poincaré and J. J. Thomson are cited as examples of the use of intuition in mathematics and science. The modern extension of physics is described as largely due to the intuitions of Thomson.

It has often been pointed out that the way in which we actually discover truth is neither by the deductive nor the inductive method of reasoning, but by employing both methods and all methods in arriving at a result which satisfies our sense of *consistency*. (See, for instance, Poe in his *Mellonta Tauta*). Yet such a definite recognition of this higher faculty of the mind, intuition, would have been thought very unorthodox a few years ago. Not the least important of the points brought up in what we have just quoted is that which refers to the whole and the parts. The mere aggregation of the parts does not constitute the whole, any more than the stones constitute the cathedral. Obvious as this is, the principle has nevertheless been largely ignored in many of our scientific speculations, and also in other kinds of speculation — sociological, for example. We had grown familiar with the idea of a universe built out of atoms, of organisms built out of cells, of a society built out of individuals, and so forth; and these things were often spoken of as though the mere aggregation of the parts were equivalent to the whole.

To what extent can the intuition be developed? Having gotten so far in admitting its existence and power, scientific men can hardly stop short at any definite limit. Let us compare the various human faculties to various animals. Here, we will say, are a bird, a squirrel, and a beetle, all engaged in testing the qualities of some scattered bread-crumbs. The beetle does not see far; his knowledge is confined to one small crumb; later on he may, or he may not, discover other crumbs. The squirrel can take in the whole prospect at a glance. The beetle is the plodding reasoner, the squirrel is the man of intuition; but what of the bird? He is superior to either.

Vegetable Meat and Milk

All interested in the question of doing without animal food will be glad to hear of any discovery that makes a meat-free diet easier. The *American Review of Reviews* for April has an article on "Vege-

table Milk and Vegetable Meat," which says that the heaviest expenditures for food in a family are for milk, milk-products, and meat. Moreover these foods are difficult to procure, difficult to transport, and difficult to keep. *La Revue* (Paris) is quoted from in reference to artificial milk from the seed of the soy bean, otherwise Chinese pea and *soya hispada,* a native of the warm regions of Asia.

From these beans, by a process still secret, a synthetic milk is prepared; or, more exactly, a chemical product having the same nutritive value as natural milk. The invention has been introduced almost simultaneously in France and Germany. The parts of the plant are crushed mechanically, then triturated chemically and reduced to a lactescent substance which costs much less than cow's milk and takes its place perfectly.

A cow takes forty *ares* of pasture besides a certain amount of fodder. She converts 53% of her food into effective nourishment, and 5% of it into milk. The soya grown on eight *ares* gives an equal quantity of artificial milk. The labor employed in preparing it is incomparably less than that necessitated by the cow.

A Belgian chemist named Effront has invented a substitute for meat, made from surplus brewer's malt, and called *viandine.*

A workman, usually ill-fed, who found 200 grams of butcher's meat an insufficient daily ration, put on weight, with more appetite and better health on the same amount of viandine.

WAR

[The following paper was read at the International Theosophical Peace Congress, held June 22-29, at Visingsö, Sweden, by Colonel Charles E. Bleyer, American represenative.]

IT is my privilege today to meet you as a representative and Delegate of the American members of the Universal Brotherhood and Theosophical Society, of which Katherine Tingley is the Leader and Official Head. It affords me great pleasure indeed to visit this grand country, Sweden, and to meet a people apparently so contented in their national peace. They seem to be too busy to consider the possibilities of war and too brotherly to encourage it. Well chosen indeed is this beautiful spot, Visingsö, for a Peace Congress, where there shall go forth from the hearts of the people gathered here a message, a message of Brotherhood and Sweet Compassion to the whole world, such as Christ so exemplified in his life.

The twentieth century bears record of great progress in the human family on intellectual and material lines; but in my opinion, as long as there remains one country not prepared to proclaim peace to all people, there is yet much to be learned by its people.

It may interest some of you who are not familiar with the results of warfare

from the early days, to hear the following statistics, showing that since the beginning of authentic history, fully fifteen billions of human lives have been sacrificed upon the altar of "the God of War." The nineteenth century alone shows the loss of lives to have been fully fourteen millions; and the cost in money alone of Napoleon's nineteen years of military conquests involved an outlay of fifteen billions of dollars. Added to this we have the Crimean War, our Civil War, the Franco-Prussian War, the Spanish-American War, and the later Russo-Japanese War, and the records show that the total amount of money wasted upon this warfare reached the stupendous sum of *forty thousand millions of dollars*—enough to build schools for higher education in almost every city in the world.

The annual appropriation for the United States Army is over eighty-three millions of dollars, and for the United States Navy the sum of one hundred and two millions of dollars—an increase during the past fifteen years of over four hundred and seventy-two millions of dollars for the army and over six hundred millions of dollars for the Navy, a total increase of over one billion of dollars, and all for the purpose of "only preparing for war."

The Franco-Prussian War cost approximately five millions francs a day for each contestant, and this did not include the indemnity exacted by Prussia. The Transvaal conflict cost the British Government one million dollars a day; the Russo-Japanese War cost from three million to five million dollars per day.

Now we must reckon with the next deadly destroyers whose field of action will be the upper air; I refer to the aeroplane, the new aerial fighter which will soon demonstrate the futility of naval fleets, fortifications, and armies; and the slaughter of human lives, the horrible destruction of property that must follow can better be imagined than described. England has already one hundred and six military aeroplanes; France and Germany several hundred each.

Though we may read of the horrors of war, yet we sometimes forget the awful sacrifice of human life, in expressing our joy over our national conquests. Yet only those who have taken part in these battles can tell the true history. Here is one of the many pathetic descriptions of cruel warfare which should appeal to our inmost souls and create in our hearts and minds a determination to do our part in the future in nobly espousing the cause of peace and discouraging at all times and under all circumstances, war.

> The sound of Russian bullets was like the sweeping of ten thousand nighthawks, a terrific flash, a blast of dust, burnt powder, filings, sickening gases, and that which a moment ago was a dashing young captain, with upraised sword, was now wet rags and dripping fragments of pulp; the result of the terrible "shrapnel" spreading death among hundreds upon hundreds before my very eyes.

Surely this is no exception in the history of warfare; for every war has had its terrible horrors. I now recall that the records show us that in the siege of Moscow out of eighty thousand men engaged, only twenty thousand lived to return to tell the horrible story!

So with these memory-pictures before us, is it not easy for us to contemplate with gladness, with joy unspeakable, the possibilities of ultimate peace among

all the nations of the world? For this great end we should work with all the energies of our nature, that ere we close our eyes in this life, we may leave to posterity a glorious heritage, the heritage of peace among the nations of the world.

There are many organizations in America and Europe that are nobly working for peace; and among them stands out as one of the most forceful bodies of that kind, the Hague Tribunal. We all know that several serious international complications have been satisfactorily settled by the Hague Convention. One of them was our old difficulty concerning the Newfoundland Fisheries. The Hague Tribunal also settled the troubles between Russia and England, when the former fired upon some English fishing boats, sinking them, mistaking them for Japanese. Yet, in spite of the fact that it afforded England a magnificent opportunity for revenge, it was settled without bloodshed.

You will also remember the great work accomplished by former President Roosevelt in bringing Japan and Russia together, thereby ending one of the bloodiest of wars and clearly showing international conciliation at its best.

Is it not a fact that at the close of the War of 1812 between Great Britain and the United States, they bound themselves to maintain no navy on the Great Lakes, and is it not a fact that this agreement has ever since been religiously adhered to by both countries?

We have Supreme Courts to settle civil cases. Why not submit all international questions to a Higher Court — an International Court? Possibly some day there will be a tribunal made up of men who have a larger view of the true spirit of Brotherhood, and consequently more ability to serve the nations of the world.

Over ten years ago a number of foreign and native students in the State of Wisconsin, representing all nationalities, founded an international club, in which representatives of every nation were to meet on a basis of equality and brotherhood. This organization grew and prospered and today it numbers nearly one hundred such clubs spread out in twenty different countries. These societies united with many similar organizations in the United States have formed themselves into a league or brotherhood, and will soon encompass the entire civilized world. They appreciate the fact that they are all *members of one great family, which we know has always been the teaching of Theosophy.*

As Katherine Tingley says: "Let the peoples of all nations once find themselves accentuating in their daily personal and public lives the spirit of Brotherhood; then will come the knowledge that will sustain them in meeting all troublesome questions of national and international life."

In closing, I would pay tribute to His Majesty, the late King Oscar, whose memory is revered in every land because of that broad international spirit, which he manifested under some of the most trying circumstances of human life.

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