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THE THEOSOPHICAL PATH

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THERE is no purifier in this world to be compared to spiritual knowledge; and he who is perfected in devotion findeth spiritual knowledge springing up spontaneously in himself in the progress of time. $-Bhagavad-Git\hat{a}$, iv.

OCCULT SCIENCE AND METAPHYSICS: by H. T. EDGE, M. A.

SCIENCE, PHYSICS, METAPHYSICS



SCIENTIFIC writer, in giving his opinion as to the proper scope of science, begins by stating that he uses the word *science* in contradistinction to the word *metaphysics*. It would seem better, however, to pair off *metaphysics* with *physics* and consider them both as

belonging to science. Science is methodized knowledge, and, as such, may be distinguished from art and literature (for instance), which, though included under knowledge, do not (at least generally) have method as their characteristic feature. Science, in this complete sense — methodized knowledge — would include a larger category than physics; it would embrace all methodized knowledge, whether of external nature or of psychology. But the word science has come by habit to be used as an abbreviation for natural science, and even in this definition the word natural is restricted. The expression physical science is preferable as avoiding this restriction of the meaning of the word nature.

The word *metaphysics*, meaning "after physics," and originally applied by the followers of Aristotle to a treatise which he wrote, or is thought to have written, after his treatise on physics, has since come to mean the science of first principles or causes. Thus it is rightly called a branch of science, and cannot rightly be considered as contrasted with science, unless we unduly limit the meaning of the latter word. In common parlance the word *metaphysics* has suffered a further change of meaning, for it is popularly supposed to deal with unprofitable abstractions, and to be, for that reason, on quite a different plane, as regards usefulness, from physical science. These two words — science and metaphysics — then, stand in need of reinstatement: science, as including a wider range than is ordinarily understood; and metaphysics, as being a branch of science which should be as real and systematic as any other branch can be.

If physical science deals with phenomena, and metaphysical science with their causes, then truly metaphysics may be said to be the one which deals with realities. For phenomena are, in accordance with the etymology of the word, appearances — effects produced upon our physical senses — while the real body of nature, and the soul which animates the perceptible forces, remain hidden behind the veil. But metaphysics claims to deal with the realities behind the veil.

Another alleged ground of distinction between physical and metaphysical science is that the former deals with "observed facts," and is therefore on sure ground; while the latter, being concerned with supersensuous matters, is chiefly speculative. But this disparaging contrast rests upon a limitation of the meaning of the phrase "observed facts," which again implies a restriction of the meaning of the word "senses." Are our physical senses the only ones we have?

WHAT IS OCCULT SCIENCE?

This brings the argument up to the point where we can introduce the subject of Occult Science, or Occultism, as defined by H. P. Blavatsky in *The Secret Doctrine* — a very important reservation, in view of the prevalent misuse of those words by psychics, pseudo-Theosophists, and others. She maintains that the hidden causes behind the outer veil of nature may be as much the subject of observation and careful study as those without the veil; but that this study implies, of course, the use of finer means of perception than those at the disposal of the ordinary physical scientist. And here it will be appropriate to quote from *The Secret Doctrine* a definition of the word *matter*:

Matter, to the Occultist, . . . is that totality of existences in the Kosmos, which falls within any of the possible planes of perception. — Vol. I, p. 514.

From this it is apparent that physical matter is merely a subdivision of that which is meant by the unqualified word, and that there must be other forms of matter. When we have passed beyond the reach of the physical senses, we have not by any means exhausted the regions of objectivity. When we ponder over a thought in our mind, we may be said to be directing some sense organ upon some form of matter, just as much as we do when we examine a physical object with the external eye. Therefore the field of view of our mind can be regarded as a form of objectivity, a kind of matter, amenable to inspection and study by a mental perceptive power.

Occult Science, according to H. P. Blavatsky, employed the methods of direct observation and careful analysis in inner nature which physical science employs in physical nature. Hence the Occultists were not speculating in abstractions, but were dealing with actual facts. Modern knowledge, however, having chosen to believe in only one form of objectivity — the physical — has consequently reduced everything else to abstractions, and most unfairly saddles ancient science with the responsibility for its (modern science's) own mistake. This point is well illustrated in connexion with the word *atom*.

Abstractions of Modern Science

The atom of modern science is an abstraction; it "belongs wholly to the domain of metaphysics. It is an entified abstraction." (Op. *cit.*, I, 513) This has been shown to be the case by such writers as Stallo and Borden P. Bowne, among others. If we take away all the properties attributable to the atom, nothing is left. The same has been shown to be the case with other conceptions of physics; they are entified abstractions — abstractions vested with a spurious reality. But now comes the important question. Are we, for this reason, to assert that the ancient philosophers, when *they* used the word *atom*, were guilty of the same logical fallacy? Or, when they spoke of *forces* and *matter*, or of *sound* and *light*, did they also connote thereby a mere mental grouping of properties with no reality behind? By no means, says the author of *The Secret Doctrine*, in her vindication of these ancient philosophers.

Occult Science is logical; and, recognizing that the physical forces, when defined by their effects alone, become reduced to abstractions, it sought for the reality behind the phenomena, the entity of which these phenomena were the properties, the cause of which they were the effects. An abstraction is an idea, a mental category, as when we speak of force, velocity, or weight; but an entity is a real existence; so modern technical explanations are often no better than saying that an engine is driven by horse-power. Horse-power is an abstraction, but this does not mean that there is no steam or no engineer. Occult Science went behind the horse-power to the steam and the fuel, and behind those again to the engine-driver. When we speak of *sound*, for instance, in the terms of modern physics, we usually denote such an abstraction; that is, we mean a group of phenomena produced by an unknown cause. And the same is the case with *light*, *heat*, and other physical concepts. But now physicists are beginning to realize the abstract nature of these things and to argue that each and all of them must have some actual reality behind them.

Modern physics has given a false reality to abstractions; and the corollary to this procedure is that it has made the realities unreal. Thus, in giving the name *matter* to what is only a group of sensory impressions, it has deprived the metaphysical world of all reality. So physical science may paradoxically be said to be the most superstitious and visionary of cults. For it, that which is not physical matter is nothing at all; it jumps at one bound from the physical to the "supernatural" — and naturally enough rejects it.

SELF, MIND, WILL

If we seek to give reality to the word *force*, we must define it as a manifestation of *will*; and similarly the *properties* or *qualities* of nature are manifestations of *mind* or *soul*; they are, in short, dispositions, moods. But will and character in turn are the attributes of *beings*, nor can they be thought of as existing apart from beings. If now we seek to define the meaning of the word *being*, we can get no farther than that which is denoted by the words, *I*, *self*, *ego*, *person*. A being is a self, endowed with will and ideation; and the forces and qualities of nature are the manifestation of the activities of innumerable beings. Any form of science which does not take this into account is a superficial science, studying externals only. Such a science may be very useful and quite legitimate, so long as it forbears to try to construct a philosophy of life and conduct on an illogical basis.

Professor Alfred Russel Wallace, as is well known, recently wrote a book embodying his ideas, similar to the above, on the sentience of nature. The philosophy demands the postulation of innumerable beings or forms of life other than the familiar denizens of the human, animal, and vegetable kingdoms. What might be termed *mineral lives* are needed, as well as beings which manifest themselves in the phenomena of electricity, light, sound, etc. Thus we seem to be formulating a system of demonology; and it must frankly be admitted that there is here ample room for absurdity and superstition. But that is the fault of the age, which has so long neglected this line of study that it is a very infant in its knowledge thereof. Moreover, demonology consists rather in the *addition* of demons to a kosmos already supposed to be full, these demons acting as interferers — quite superfluous: whereas the present idea proposes to utilize the demons ($\delta au\mu oves$) as necessary and indispensable parts of the cosmic machine, without whose presence nothing could happen. In other words, it is not that tiny demons frequent the busy mart of atoms and push the particles to and fro; but rather that the atoms themselves are the demons, being alive and endowed with purpose. If an atom is not a tiny being, one would like to be told what it is. To call it a speck of matter moved by motion, sounds pretty, but does not mean anything. It is about the same as calling a man a body moved by a mind.

Why Knowledge is Guarded

We have thus given a faint idea of the many interesting paths of knowledge outlined in *The Secret Doctrine* and forming part of the domain of Occult Science; and it would have been possible to run on indefinitely on this topic. *The Secret Doctrine* teems with such hints. But now comes a question that will inevitably arise in the minds of all eager students of that work — why are the hints not completed? Why does the writer, after a few suggestive remarks on one topic, pass to another? Why, in short, do we not find " explicit and easy directions " given to enable us to find out some definite secret and apply it?

The answer to this question, however, is to be found in the book itself. Occult Science is not of the kind that can be explained in a text-book so that all can immediately understand and follow the directions. It is indissolubly linked with conduct; and the pupil has to apply the little he may have learned before he can learn more. H. P. Blavatsky's object was to say enough to induce people to start on the way. And, in accordance with what she says about Occult Science, it is a matter of developing our faculties, so that we thus open the gates of knowledge for ourselves and become to that extent independent of books. In short, Occult Science is a science and not a sermon. A student of natural science does not rely solely on books, but passes from books to actual experiment for himself, thus resting his knowledge on experimental verification. And surely it must be so with Occult Science. The teacher or book points out the way by which we may start, and the rest is left to ourselves. Furthermore, we are given to understand that much of the language in The Secret Doctrine which we find obscure or barren is so only because we have not yet progressed far enough in our studies to understand and make use of it. Thus there are no arbitrary barriers to knowledge, but merely conditions which insure that the intending pupil shall do his share of the work.

The fact that modern science has failed to guard its secrets by conditions calculated to prevent its misuse merely serves to illustrate the folly of that policy. As it is, we have given our dynamite and drugs promiscuously into the hands of the trustworthy and the fool. Such a mistake committed in connexion with the weightier secrets of nature would be disastrous in the extreme; and nobody wants to see such powers placed indiscriminately at the disposal of all in our civilization.

It is evident, then, that H. P. Blavatsky was but fulfilling universally recognized conditions when she gave out her hints in this guarded way. The knowledge of which she speaks is placed within the reach of all who can fulfil the conditions; and is protected against possible abuse by those who desire to obtain knowledge without fulfilling the conditions.

We have seen how people who attempt to gain knowledge without fulfilling the conditions fall into folly and delusion, teaching all kinds of absurd speculations or becoming the victims of their own unconquered weaknesses. Instead of helping the world, as the Theosophical program proposes, they only mislead it.

KNOWLEDGE AND ETHICS

Knowledge cannot be separated from obligation; and the nearer a science approximates to the one Master-Science, the more does its study entail such obligations. H. P. Blavatsky had no other purpose, in giving her instructions, than to promote the welfare of humanity. She did not work for self, nor was she actuated by an impersonal desire to gratify other people's idle curiosity. It is evident that she has kept back much more than she reveals; but she points the way to further knowledge. That way is the path of duty and service.

In thus juxtaposing duty and knowledge, we are aware that we shall be met with the argument that knowledge has nothing to do with ethics, but should be studied for its own sake; or that we are imposing an arbitrary and puritanical condition and allowing the freedom of the human intellect to be fettered by notions of morality. Such objections are becoming common among the shallow and facile writers who find utterance in the literature of today. But they are founded on a lack of reflection as to the meanings of the words used.

To sum up: metaphysics, the science of the causes that operate behind the veils of nature, is a genuine science, and can be studied as carefully and accurately as any branch of science. But its study implies efficiency on the part of the student: for the ordinary man has various defects and weaknesses which, though they do not prevent efficiency in physical science, would be fatal obstacles in Occult Science. As to the need for such a science, it is easy to take instances. In hygiene, for example, we have passed beyond the region of chemical causes of disease to that of microbial causes, thus advancing a step from the inorganic to the organic world. But can we stop even here? A microbe is a living being; what inspires it? Why is it more numerous, prolific, and virulent at one time than another? Occult Science answers that the microbe of disease is but the physical expression, the organism, of an evil force set in motion by men's depraved thoughts and acts. Ordinary hygiene can do a great deal for the prevention of disease by hindering the conditions under which microbes flourish; yet as long as impure energies are generated by our evil thoughts, they must find an outlet somewhere. Occult Science would inform us as to the relation between our thoughts and the epidemics from which we suffer. medicine, too, how important is the mental and moral aspect of the question? Physical means can do but a limited amount of good so long as the mental causes of disease are left untouched. Again, very many circumstances of life which at present are included under the category of "chance" and "accident," because we cannot trace their causes, would be understood, so that we should be able to manage them: just as modern science has already enabled us to manage many things which formerly were piously believed to be inevitable visitations of the hand of Providence.

As people are everywhere searching for greater and surer knowledge than modern science gives; and, for want of the true way, are wandering in many blind alleys of superstition and speculation; therefore there is all the more need for a proper understanding of the nature of Occult Science. The teachings of Theosophy will vindicate themselves; because that which is genuine needs not to rely on claims and assertions. That which answers the questions and satisfies the needs of the inquirer must eventually win over shams and delusions.

ROME



OME is disappointing as one approaches it from the north. The wild, bare, undulating plain, cut up into hillocks and ravines, with its droves of cattle, flocks of sheep, and occasional herds of half-wild horses, oppresses the mind with a feeling of desolation and a haunting sense of regret. These bare stretches of plain, this *campagna romana*, the playground of the rude winds which sweep boisterously down out of the rocky gorges of the mountains eastward, all this great plain was in ancient days covered with flourishing towns and villages, and intensively cultivated fields. Within sight of Rome, the present desolate and unproductive campagna was then a green expanse of fruitful soil, studded with prosperous villages and dotted with handsome countryhouses, while as the eye roamed afar, to north, east, south, and west, the buildings and temples of other cities shone white against the verdant expanse.

Now, mounds; ruins; waste. As the train rushes across the country towards the city, the eye vainly searches for signs of the proximity of a great capital, until, finally, and almost suddenly, towards the south, straight ahead, we see the city come into view.

But modern Rome is a thoroughly agreeable contrast to the camþagna. It is a busy, enterprising, rapidly-growing, and handsome The small, dirty streets so characteristic of a medieval metropolis. town are being rapidly replaced wherever possible by broad, splendidlybuilt avenues; while every effort is made not only to preserve what remains of the unequaled splendor of Imperial Rome and to bring to light from the inexhaustible deposits further treasures, but also to beautify the modern city with whatever art can add to it, and to dignify it and make it worthy of being the capital of a great kingdom by whatever scientific knowledge and skill can bring to so noble an end.

The era of renascence dates from the entry of the Italian troops into Rome. This was on September 20, 1870. During the following year, Rome was proclaimed the capital of united Italy; and what was once but the dream of many a broken-hearted patriot, became a reality. The struggles of Mazzini and Garibaldi (his life is a veritable romance of derring-do and hair-breadth 'scapes) and of other great men had brought forth the longed-for result: Italia Riunita! How different today from past centuries, when the country was so rent by internal discord as to form an easy conquest to the armies of northern powers.

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Filicaja's *Sonnet to Italy* expresses in plaintively beautiful language what Italians felt two hundred years ago:

Italia, o Italia! tu cui feo la sorte Dono infelice di bellezza, onde hai Funesta dote d'infiniti guai, Che in fronte scritti per gran doglia porte:

O fossi tu men bella, o almen più forte, ecc. ecc.¹

It is from the occupation of Rome by the Italian troops that dates its era of progress and material growth. Then came railroads and the telegraph into the city; works of sanitation and reconstruction were introduced on a steadily increasing scale; and the comparatively small town of Papal rule began to take its place among the proud and flourishing capitals of Europe. The population of Rome is even today only a half-million, or a little less; it was still smaller before its occupation by the royal troops. This compares but poorly with the great city of the Emperors, which held not less than 1,500,000 souls, or even 2,500,000 as thought by some. So that Rome today is from one-third to one-fifth as populous as when the Christian era began. Nor is the extent of the modern city as great as under the Caesars. "Rome built on seven hills" is a sounding phrase, and taken in the sense it is so used poetically by Vergil and others, it is correct enough; but neither was the Septimontium of the ancients composed of the seven hills now so famous, nor did even the latter compose the city until a later period. Leaving the fascinating study of the foundation of Rome aside for the moment, merely remarking that it would be unwise to cast aside as unworthy of consideration any single one of the many legends concerning it (because in truth there seems nothing in the way of recognizing some different fragment of truth in every one), Roma Quadrata, Rome Square, the city of Romulus built four-square on the Palatine, gradually grew, and in time spread out over the neighboring hills and thus finally included within the girdle of the city what were evidently outlying suburbs, or villages. This, of course, destroyed the sacred shape of the original foundation, which, in common with all ancient cities, was laid out in accordance with certain secret rules of construction. Roma Quadrata, for example, was so called because its

 Rendered into equally beautiful English by Lord Byron in Childe Harold: Italia, oh Italia, thou who hast The fatal gift of beauty, which became A funeral dower of present woes and past . . . etc.

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form was roughly a square, a *templum*, and was laid out on the Palatine (doubtless chosen in preference to other hills on account of its rectangular shape²) in formal accordance with Etruscan rites. One detail is given by the old writers. The founder of a city, dressed in a certain style called Gabinian (*cinctu Gabino*) yoked to a plow a bull and a cow: the cow on the near, or left, side, and the bull on the off, or right side. Then plowing a furrow, the plowman-founder outlined the shape and size of the future town, proceeding *always to the left*.³ Where the gates were to be, the plow was lifted out of the furrow and *carried* across what was to be the future passage-way. As Cato expressed it:

Qui urbem novam condet, tauro et vacca aret . . . ubi portam vult esse, aratrum sustollat et portet, et portam vocet.

It is interesting to recall in connexion with the leftward movement, that this is the well-known circumambulation (either to right or left, according to the mystical ceremony in progress) called in Sanskrit literature *prasavyam*, while movement to the right, with the right hand constantly towards the center, was called *pradakshinam*. This ceremony of circumambulation, in one or the other direction, is found to be nearly world-wide: it will suffice to speak of the Greek *èmlééua*, and the Roman *dextratio*. There was also an equivalent Gaelic ceremony called the "*deasil*."

There were also other ceremonies rigidly followed in founding a city, several of which have come down to us and are in constant use, such as the habit of placing coins, and articles of different sorts, in the foundations of buildings.

Vergil makes the Trojans, fleeing from the sack of Troy, to be the principal founders of the Roman power, through Romulus, grandson of the exiled king Numitor, of Alba Longa, by his daughter Rhea Silvia and the god Mars. This was, according to the poet, three hundred years after Aeneas had settled Alba Longa, on the beautiful Alban Lake.⁴ But there can be no question that when the immigrants from the East, whether Trojans seeking new homes, or Greeks under Evander, arrived in Italy, they found there flourishing and opulent cities. The Roma Quadrata of Romulus existed before him, as Alba Longa doubtless did before Aeneas. Vergil is right, however, in finding the

^{2.} περιγράφει τετράγωνον σχήμα τῷ λοφῷ, Dionys. i, 88.

^{3.} Plutarch, Life of Romulus, 11; Joann. Lydus, De Mensibus, iv. 50.

^{4.} Aen. i, 272: Hic jam tercentum totos regnabitur annos.

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roots of Italian culture in the East. His words, taken in connexion with the recent discoveries in Crete, are very interesting: "Creti . . . insula . . . gentis cunabula nostrae" — "Crete, the cradle of our race."

The Seven Hills of Rome, are commonly enumerated as the Montes Capitolinus, Palatinus, Caelius, Aventinus, Esquilinus, and the Colles Viminalis and Quirinalis, but after the city was enclosed by the Wall of Aurelianus, then indeed Rome may be said to have been built on eight hills, the Mons Pincius to the north of the city, also called *Collis Hortorum* on account of its magnificent gardens and parks, being included within the zone. Later, the Mons Ianiculus was settled more closely. During the Middle Ages, again, the city shrank greatly, the hills, on which so much of the ancient city stood, being then almost uninhabited. Today they are re-occupied; the Mons Pincius, now called the Pincio, is handsomely built, and covered with fine streets and large and handsomely-built structures. The city is also extending rapidly to the north and east.

The illustrations in these pages will give some idea of the appearance of modern Rome.

The first is a panoramic view of Rome from the Pincio, and shows in the foreground the Piazza del Popolo, near to the old walls and the Porta del Popolo, the old Porta Flaminia, by which the via Flaminia entered Rome. This was the route by which most visitors to Rome used to pass within its walls, before the railroads came. The obelisk in the center of the Piazza was erected by Augustus in 10 B. c. in the Circus Maximus, but was removed to its present position in 1589 by the order of Pope Sixtus V.

The second illustration shows the fine view from the terrace of the Pincio over the Piazza del Popolo. The really splendid gardens, to the right in the illustration, were converted from a vineyard, about one hundred years ago; and are now a fashionable meeting-place, both for Romans and strangers. The Mons Pincius also comprised the famous gardens of Lucullus, rendered so notorious by the wanton Messalina; and the *Horti Sallustiani*, or Gardens of Sallust, on which now stands the Ludovisi Quarter, today the aristocratic and best-built portion of Rome. In this quarter was established this year, the temporary headquarters of our Theosophical work for Italy. Plans are being prepared to place permanent Theosophical headquarters in this vicinity during the course of 1914, which will initiate important work for Theosophy.

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The third illustration shows a portion of the Piazza di Spagna in the foreground; in the center the handsome Scala di Spagna, of 137 steps, built in 1721-1725. This photograph scarcely gives a correct idea of the appearance of this spot, for it is one of the most busy places in Rome. It was formerly, and to a certain extent is so still, the center of the strangers' quarter. The steps ascend the slope of the Pincian Hill, and on turning to the left at the top of the steps, and following the street a short distance, one passes the Académie de France, and the Pincio gardens referred to in the previous illustrations; and, traversing these, one reaches the magnificent park of the Villa Borghese, now officially called Villa Umberto I. The house at the foot of the Scala, at the right of the photograph or to the left as one goes down the steps, is the house where John Keats died in 1821. It contains many relics and mementos of both Keats and Shelley. The Scala di Spagna, and the via Sistina at its top, used to be the haunt of artists' models wearing their picturesque costumes of many colors and plaited sandals, but there seem to be very few today.

The Fontana di Trevi, the next illustration, the largest of the fountains in Rome, is constructed against the Palazzo Poli. Neptune is represented in the center. The fountain, changed from an ancient one in 1762, is supplied with water by the ancient *Aqua Virgo*. The name Trevi is said to be a corruption of "Trivio," referring to the fountain's three outlets.

The next illustration shows what is one of the finest and most imposing buildings in Italy, perhaps in Europe. This is the monument called Vittorio Emmanuele II, in honor of the first king of Italia Riunita. Begun in 1885, it will not be fully completed for twenty years. An equestrian statue of the king is in the center. The cost of this splendid structure, it is said, will amount when completed to over 24,000,000 lire. It is built on the ancient Capitol, on the Arx, and it forms a noble monument of the spirit of the Risorgimento Italiano — of the renascence of that spirit of beauty and unity and self-confidence which makes pagan Rome so grand a spectacle even in our days of material achievement and conquest of Nature. Back of the monument is the Forum Romanum; to the left, Trajan's Forum.

The next view is that of a short portion of the famous Via Appia, the great road running south out of the city and ending finally at Brundusium on the Adriatic. Near the entrance to Rome, the Appian Way is bordered with tombs on either side: pagan tombs, and christian catacombs. The electric tramway has been built for long stretches over the famous old highway.

The last two illustrations give two of the groups of the Goethe monument by Eberlein, in the Villa Borghese Park. This monument was presented in 1904 by Emperor William II of Germany. The figures on the pedestal represent characters from Goethe's poems. The art-work is very striking and suggestive of its theme, and naturally distinctly German. The seated female figure in the second view is a typical "Germania," such as one may see in different German cities.

COUNT CAGLIOSTRO AND HIS ENEMIES: by P. A. M.



URELY a sensitive, well-born, and educated man, the friend of rulers, who never took a penny from any one, never had such bitter trials as those suffered by Count Cagliostro on his arrival in England in July, 1776 (the year of American Independence).

He knew no English and was obliged to take an interpreter. As he was engaged in chemical and ultra-chemical experiments, he accepted a man who had some chemical knowledge. But this man saw one or two experiments which so startled him that he promptly spread abroad the report that the Count was a man capable of miracles. As his landlady, Madame Blevary, and his wife's companion and interpreter had already decided to bleed the Count of every penny of the three thousand pounds he had in jewels, plate, and money, the ground was prepared for a goodly crop of trouble. The result of the blazing indiscretion of the chemist-interpreter was a horde of visitors of every rank. To many of these the Count was obliged to deny admittance to his lodgings in Whitcomb Street, and thus he made enemies. Balked curiosity makes enemies about as fast as any other thwarted vice.

We need hardly go into the miserable, sordid details of the plucking of this helpless foreigner in London. If for no other reason, one's national pride revolts at repeating the wretched tale of fraud and meanness, to say nothing of the law that actually allowed his bloodsucking friends to put him in prison for witchcraft!

Later on, during his second visit to London, there was an equally base plot formed against him, this time expressing itself in journalism of the society-scandal type. A French journalist for whom none has yet been found to say a single good word, was forced on account of his devious ways to leave France. He came to London, and soon became editor of a journal describing the life of London and especially the foreign and political life of the capital, in such a way as to be a perfect spy organ for the French police. It was said that the journal was worth so many regiments or ships to the enemies of England. The Government tried to impede its circulation by taxing the paper on which it was printed, but this was easily evaded by publishing it simultaneously in France.

This was the kind of paper that Morande, the most consummate blackmailer unhanged, began to use for the persecution of Cagliostro. Morande made thousands of pounds by his libels and enjoyed a rare freedom in his career of calumny. For awhile he proved a bitter enemy of Cagliostro, and then the latter stopped the war by ridicule, cleverly catching his enemy in a witty trap which made everybody laugh. But the harm already done was enormous, and Cagliostro was obliged to issue a refutation of much that had been printed. Even so, these lies are popularly extant today, in many cases. Poor Carlyle sadly lost his judgment when he foolishly repeated them and gave them added weight by his reputation. It was perhaps the great mistake of Carlyle's literary career.

Cagliostro had a rare compassion even for his enemies. Even though, publicly at least, he said nothing about his knowledge of the now familiar doctrine of Karma or natural adjustment of causes to effects, otherwise expressed in the famous maxim, "What a man sows that shall he also reap," he clearly indicates his belief in the Law which needs no man to do its work.

Four years after his persecution in England by the money-suckers, he has occasion to call attention to the curious fate of all who persecuted him.

He says he will not attack Morande, who has a wife and children, and so inevitably ruin him.

I leave my vengeance in the hands of him who does not visit the crime of their father upon the children; it will perhaps be slower, but it will be none the less sure. My trust in that Supreme Being has never been deceived; I have always seen his justice manifested sooner or later, and the wicked end miserably.

If the Sieur de Morande can for an instant doubt this truth so terrible for them, but consoling for good men, let him reflect upon the fate of those whose cause he has defended and whose horrors he has exceeded. Madame Blevary (the landlady) in payment for my benefactions delivered me into the hands of two scoundrels.

She is dead.

Miss Fry, my implacable enemy (an adventuress), has not enjoyed the fortune she owed to me. After having devoted the whole of it to suborning witnesses, and corrupting the officers of justice, she fell into the most terrible misery.

She is dead.

Mr. Broad, the friend, the spy, the witness for Miss Fry, was in the flower of his age.

He is dead.

Mr. Dunning, Miss Fry's lawyer, instead of defending me, had been chosen to make a manifestly unjust cause triumph.

He is dead.

Mr. Wallace, my lawyer, instead of defending me, has delivered me up to the mercy of the arbitrator chosen by Miss Fry.

He is dead.

Mr. Howarth (a magistrate) gave an iniquitous judgment against me, which condemned innocence and left the perjurer unpunished.

He is dead.

(Note. He was drowned crossing the Thames.)

The Justice of the Peace at Hammersmith issued a warrant against my wife and myself for an imaginary crime; he was dismissed in disgrace.

He is dead.

Mr. Crisp, Marshal of the King's Bench Prison, in connivance with Aylett, swindled me out of fifty guineas worth of plate; he lost the lucrative position he enjoyed. Reduced to beggary, he retired to a charity-house.

He died there.

Vitellini too (the chemist interpreter assistant) betrayed my confidence; his culpable indiscretion made him accomplice in a robbery of which he expected one day to enjoy the proceeds. He was thrown into a vagabonds' prison.

He died there.

Four years after my departure, there scarcely existed a single one of the persons I have just named. Of all my persecutors of that time there remain today only four individuals, whose manner of existence is such that death would be a benefit for them.

Raynold, the Attorney of Miss Fry, and the accomplice of the theft from me committed by Scott, has suffered the infamous punishment of the pillory for the crime of perjury.

The Attorney Aylett who cheated me out of 80 guineas under pretext of my pretended identity with Balsamo of London has just suffered the same punishment as Raynold, also for the crime of perjury. And this is the man who swore an affidavit against me! And this is the man whom Mr. Morande consults, and whose friend he is!

The bailiff Saunders was involved in the plot against me. He delivered me into the hands of the Attorney Priddle. His fortune was dissipated in a very short time; he was imprisoned for prevarication; he has been in prison several years.

As for Scott, if I am not mistaken, he is living at this moment alone, without relatives and without friends, in the heart of Scotland. There a prey to remorse, undergoing at the same time the anxieties of wealth and the miseries of poverty, he is tormented by the enjoyment of a fortune which continually escapes him, until at last he is perishing of inanition beside the object of his cupidity, which has become the instrument of his suffering.

Such has been the destiny of the fourteen individuals who have been united against me and who have violated against me the sacred rights of hospitality. A portion of my readers will only see in the series of these events a combination of chance; as for me, I recognize in them the Divine Providence which has sometimes permitted me to be the victim of the wiles of the wicked, but which has always broken the instruments which it has used to try me.

Now my enemies think I am crushed. They have said to one another, "Let us trample under foot this man who knows us too well"; . . . they rejoice in the wounds they have inflicted upon me; and these foolish people in their mad joy do not see hovering overhead the cloud from which the lightning will dart.

Might the truly terrible example I have just put before their eyes, provoking in their hearts a salutary repentance, save me from the grief of having to moan over their fate! Let them recognize their error, let them make one step towards justice, and my mouth will only open to bless them.

(Signed) LE COMTE DE CAGLIOSTRO

We may add that de Launay, who treated Cagliostro so badly when taking him to the Bastille where he lingered an innocent man for nine months under de Launay's care, also perished miserably in the attack on the Bastille. So also with others of Cagliostro's persecutors.

On the other hand, it has been shrewdly remarked that even if St. Germain and Cagliostro were only speaking figuratively when they talked of the possession of the elixir of life, their friends and pupils are noted for their remarkable average of longevity. There seems to be some analogy here between the old Eastern saying of honor of ancestors conducing to long life and some law or coincidence little observed in the West as a rule.

Is it possible that these are men who in another sense have found the elixir of life, in that they can crowd the feelings and experiences of ages into a few mortal years and so normally hurry their evolution? And that those who have much to do with them also increase their rate of living through experiences? To use a homely simile in the language of the science of 1912: are they people who can put the cinematographic films of which we are told all life consists into an immensely accelerated rapidity of motion? It should be noted that Cagliostro is obliged to talk down to the intelligence of his age, and so, speaking of Divine Providence, appears to make the action of the Law as depending on a Great Big Man. And as a consequence he is obliged to appear to hope for revenge upon his persecutors when he is only stating the inexorable law of Karma that man cannot escape the consequences of his actions. Only in this case they are so obvious as to be remarkable, instead of (as sometimes) waiting for ages to come about or balance themselves.

He himself gave away on one or two points which would in the ordinary man be considered scarcely worth remark, much less "sins." But his suffering as a consequence was swift and terrible. His account with nature was not one of long credits, if we are to judge from his known history.

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OF The Age of Reason Thomas Paine wrote: Nothing that is here said can apply, even with the most distant disrespect, to the real character of Jesus Christ. He was a virtuous and amiable man. The morality he preached and practised was of the most benevolent kind; and, though similar systems of morality had been preached by Confucius and by some of the Greek philosophers many years before, by the Quakers since, and by good men in all ages, it has not been exceeded by any. . . . He preached most excellent morality and the equality of man; but he preached also against the corruption and avarice of the Jewish priests and thus brought upon him the hatred and vengeance of the whole order of Priesthood.

The accusation which those priests brought against him was that of sedition and conspiracy against the Roman Government, to which the Jews were then subject and tributary; and it is not improbable that the Roman Government might have some secret apprehension of the effect of his doctrine, as well as the Jewish priests; neither is it improbable that Jesus Christ had in contemplation the delivery of the Jewish Nation from the bondage of the Romans. Between the two, however, this virtuous reformer and religionist lost his life. . . . He was the Son of God in like manner that every other person is — for the Creator is the Father of All. . . .

Jesus Christ founded no new system. He called men to the practise of moral virtues and the belief of one God. The great trait in his character is Philanthropy.

ANCIENT AND MODERN LIFE: by F. S. Darrow, A. M., PH. D.

(a) THE PRESENT CRISIS



WARS and rumors of war are afloat. Clash follows close upon clash, conflict close upon conflict. Apparently, the world of today is like to a pot, seething with turmoil. Truly, does it not seem as if we were face to face with one "of those Crises, God's stern winnowers

from whose feet earth's chaff must fly?" And woe unto those, who in the titanic struggle mistake the quicksands for the rocks!

Lowell's words seem to be as appropriate today as they were more than sixty years ago.

When the travail of the Ages wrings earth's systems to and fro: At the birth of each new Era, with a recognizing start, Nation wildly looks at nation, standing with mute lips apart, And glad Truth's yet mightier man-child leaps beneath the future's heart. Once to every man and nation comes the moment to decide, In the strife of Truth with falsehood, for the good or evil side.

(b) HELLENICISM AND THE ANCIENT IDEALS

The old may now be sleeping: it may now be temporarily forgotten but it is not dead. Forms come into being and die but the *spirit* is *reborn*.

> Life, like a dome of many-colored glass, Stains the white radiance of Eternity.

In view of this it behooves us to search the records of the past.

The substance is not changed, nor altered. But only forms and outward fashion: For every substance is conditioned To change her hewe and sundry forms to don. (*The Faerie Queene*, III, vi. 38)

Throughout all nature there is a constant process of dovetailing, a process which is instinct with infinitude and eternity. Every single, separate thing by either visible or invisible bonds is linked with everything else. Although we see neither the deepest depth below nor the highest summit above in the endless chain of being, yet it is evident that:

> All are parts of one stupendous Whole, Whose body Nature is and God the soul. That chang'd thro' all, and yet in all the same; Great in the earth, as in th' ethereal frame:

Warms in the sun, refreshes in the breeze: Glows in the stars and blossoms in the trees: Lives thro' all life, extends thro' all extent, Spreads undivided, operates unspent: Breathes in our soul, informs our mortal part. — Alexander Pope

The great Pan of old, who was clothed in a leopard skin to signify the beautiful variety of things and the firmament his coat of stars, was but the representative of thee, O rich and various man! thou palace of sight and sound, carrying in thy senses the morning and night: in thy brain, the geometry of the City of God: in thy heart, the bower of love and the realm of right and wrong. An individual man is a fruit which it cost all the foregoing ages to form and ripen. The history of Genesis or the Old Mythology repeats itself in the experience of every child. He too is a demon or a god thrown into a particular chaos, where he strives ever to lead things from disorder into order.

He who aims at progress should aim at an infinite, not at a special benefit. . . . I know, that these qualities of my soul did not now begin to exist, cannot be sick with my sickness, nor buried in any grave: but that they circulate through the universe: before the world was, they were. Nothing can bar them out, or shut them in, but they penetrate the ocean and land, space and time. . . . I draw from this, faith, courage, and hope. All things are known to the soul. . . . It is older than space, older than time, wide as life, rich as love. — *Emerson*

Tell what we mortals are, tell what of old we were. . . . A spark or ray of the Divinity Clouded in earthy fogs, yclad in clay, A precious drop sunk from Aeternitie. (Dr. Henry More, *Philosophical Poems*, 1647, pp. 255-256.)

The same truth is thus magnificently voiced by the great Plotinus:

Having first premised this principle "That every Divine thing is immortall," let us consider a Soul — not such a one as is immerst into the body, having contracted unreasonable passions and desires but such a one as hath cast away these. — Such a one as this will sufficiently manifest that all vice is unnatural to the Soul, and something acquired only from abroad and that the best Wisdome and all other Vertues lodge in a purged soul, as being allyed to it. If therefore such a soul shall reflect upon itself, how shall it not appear to itself to be of such a kind of nature as Divine and Eternall Essences are? For wisdome and true vertue being Divine Effluxes can never enter into any unhallowed and mortall thing: it must needs be Divine, seeing it is fill'd with a Divine nature by its kindred and consanguinity therewith. Whoever, therefore, amongst us is such a one, differs but little in soul from Angelicall Essences. - And if every man were of this raised temper, or any considerable number had but such holy souls there would be no such infidels as would in any sort disbelieve the soul's immortality.— Contemplate, therefore, the soul of man, denuding it of all which itself is not, or rather let him that does this view his own soul: Then he will believe it to be immortall, when he shall behold it, fixt in a spiritual and pure nature: he shall then behold his own intellect contemplating not any sensible thing but eternall things, with that which is eternall, that is, with itself, looking into the spiritual world, being itself made all lucid, spiritual, and shining with the Sunbeams of Eternall Truth, borrowed from the First Good, which perpetually rayeth forth its Truth upon all Spiritual Beings. One thus qualified may seem without any arrogance to take up the saying of Empedocles — "Farewell all earthly allies, I am henceforth no mortall wight, but an immortal Angel," ascending up unto Divinity, and reflecting upon that likeness of It which I find in myself. When true sanctity and purity shall ground him in the knowledge of Divine Things, then shall the Inward Sciences, that arise from the bottome of his own Soul, display themselves; which, indeed are the only true Sciences; for the soul runs not out of itself to behold temperance and justice abroad but its own light sees them in the contemplation of its own being and that Divine Essence, which was before enshrined in itself. (*Enneads*, iv. 7, 10. translated by John Smith, the Cambridge Platonist in *Select Discourses*, 1660, pp. 104, 105.)

If then all powers are inherent in the soul, the life of the past so far as that life was noble, true, and good, can be realized now under happier conditions, for the Cyclic law, the law of periodicity or recurrent repetition, the law of growth and decay with a consequent new growth, holds universal sway throughout nature and its complete action is always triple, including the three elements of birth, death, and rebirth. This law of perpetual transformation is ever active and governs all forms of life. Habit and memory are children, born of the Cyclic law. The old life sleeps preparatory to its rebirth. There is nothing new under the sun, but the old constantly reappears in the new. The serpent casts off its old skin to receive a new and handsomer vestment: the crab breaks its old shell to become the occupant of a larger mansion.

The Universe is represented in every one of its particles. Everything in nature contains all the powers of nature. Everything is made of one hidden stuff. The world globes itself in a drop of dew. -Emerson

Antiquity is still vital, and Hellenicism, the spirit of ancient Greece, has many messages for the world of today, messages to which it is essential that more heed be given. The highest elements of ancient life must be again reincorporated, for truly happy were those ancients who knew

> The Love that dwelleth in Wisdom's place. Happy of yore were the children of race divine Happy the sons of old Erectheus' line Who in their holy state With hands inviolate, Gather'd the flower of wisdom far-renowned. — Euripides, *Mede*

Naught else there is But the weird beat of Time, which doth disjoin Today from Hellas. — Lewis Morris, *Epic of Hades*

We moderns who no longer inscribe over the lintels of our temples the profound motto of Thales, "Man, know thyself," we must (or we will rue the day), give more attention to the teachings of the olden time. Children of the past, we can never know ourselves until we relive the life of our spiritual and intellectual ancestors. Said Solon: "Nothing too much." Kleoboulos: "The Middle Course is the Best." Pittakos: "Recognize opportunity." Periander: "Consideration is everything."

Let us listen to the Precepts of the Seven Sages:

Follow the Deity. Obey the Law. Reverence thy parents. Suffer for justice. Understand what thou learnest. Know what thou hearest. Govern thy anger. Exercise prudence. Honor providence. Apply thyself to discipline. Emulate wisdom. Speak well of that which is good. Praise virtue. Do what is just. Abstain from evil. Be general. Speak words of good omen. Be a lover of wisdom. Judge according to equity. What thou knowest, do. Guard thyself. Hate calumny. Reverence the good. Exercise modesty. Hearing, see. Curb thy tongue. Determine equally. Go through thy undertakings fearless. Be benign to all. Do that whereof thou shalt not repent. Hate malice. Be not weary of learning. Hazard thyself prudently. Stand in awe of thyself. Begin no injury. Crown thy ancestors. Be not troubled upon every occasion. Be in childhood modest, in youth temperate, in manhood just, in old age prudent. Die untroubled. (Collection of Sotades in Stobaeus.)

Do not these maxims show that in very sooth Hellenicism, rightly understood, is the consideration of the essential interests of man, the distinguishing between accretions and organic members, a lesson in rationality? Its ideals are represented by the fourfold canon of true art: first, clarity or definiteness; secondly, simplicity or elimination of needless details; thirdly, dignity or serenity; and fourthly, poise, or reserved power. Are we moderns neglectful of the cardinal virtues, justice, temperance, courage, and wisdom?

H. P. Blavatsky has said:

For the old Grecian sage there was a single object of attainment: REAL KNOWLEDGE. He considered those only to be genuine philosophers, or students of truth, who possess the knowledge of the really-existing, in opposition to the merely seeming; of the *always-existing* in opposition to the transitory; and of that which exists *permanently*, in opposition to that which waxes, wanes, and is developed and destroyed alternately. (*Isis Unveiled*, I, p. xi.)

The modern world in its feverish rush for externals is too oblivious

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of the realities of the Inner Life — those realities which constituted the key-note teachings of the Ancient Mysteries — realities, which disclose the universe as the country through which the Eternal Pilgrim-Self must journey, ever gaining new experience — realities which proclaim heaven to be the true fatherland of souls, and earth but an inn for the accommodation of the travelers.

The ancient world had time for the inner life, there was none of the hurry and rush which is so destructive of much that is valuable. Its ideal was an *all-round* education, a sound mind in a sound body, thus forming a most striking contrast with the one-sided development of specialties so prevalent today.

The ancient ideal sought to express something inherently worthy of expression in noble simplicity and truth. It was typical, general, not petty and personal. The Athenians, the truest exponents of these ideals, during the Periklean age, were pre-eminently men of clear intellect, of just taste and general aptitude. Unlike most men of today they arose at daybreak. Thus we learn from Plato that Hippokrates in his desire to have Sokrates accompany him and attend a lecture by the famous Protagoras, knocked at Sokrates' door so early that when in his impatience he wished to start off at once, the philosopher had to reply: "Not yet, it is too dark. Let us walk in the court until nearly daybreak; then when the light comes we will go." Such a love of learning is rare indeed in this age!

The ancient world had time for the inner life, there was little or no ostentation, while many things now regarded as conventional or trivial were formerly fraught with a much greater significance.

Thus a handshake was either a solemn pledge or a demonstrative welcome, not a mere formal greeting.

It is, however, a mistake to suppose that the ancient Hellenes were only cold and statuesque, for despite their customary dignity and serenity we know of many anecdotes which reveal a natural and inherent impulsiveness. For example, so fond were the Athenians of fish that as every new catch arrived in the market a bell was sounded to announce the fact. It is said that on one occasion when a musician was giving a recital on a harp to a company of his friends the fish-bell rang. Every one immediately left without stopping to say by your leave — every one, except one deaf old man. Whereupon the musician walked up to the one still faithful and said: "Thank you, sir, for having the courtesy to remain although the fish-bell rang." "Hey!

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What!" replied the solitary remnant of the former audience, "Did you say the fish-bell? Thanks, good-bye!" and off he went after the others.

(c) THEOSOPHY, THE KEY

Katherine Tingley has said:

If we look around the world, we find wherever we fix our eyes confusion, injustice, discord, and criticism, and a negative attitude towards higher things. But man has as his inheritance a divine nature, and the problem is to develop this sense of our divine nature by seeking to become one with all humanity.

This great truth of the divinity of man is thus stated by Seneca:

All this that you see, in which things divine and human arc included, is one: we are members of one great body. (Letter 41.)

It is, indeed, the mission of Theosophy to give to modern life the keys whereby the secrets of old will be unlocked and the modern world will realize the import of those messages from ancient life, that have been safely transmitted throughout the ages.

Consequently, H. P. Blavatsky declared:

Theosophy will gradually leaven and permeate the great mass of thinking and intelligent people with its large-minded and noble ideas of religion, duty, and philanthropy. Slowly but surely it will burst asunder the iron fetters of creeds and dogmas, of social and caste prejudices; it will break down racial and national antipathies and barriers and will open the way to the practical realization of the Brotherhood of all men. (*The Key to Theosophy*)

It will accomplish this in large part by means of the Râja Yoga system of education, which will help to revivify all that was true and noble in antiquity, and will teach the humanity of today how to avoid those fatal mistakes which led to the downfall of the ancient nations. Râja Yoga, or Kingly Union, is the True education of the *Inner* Man, the true instruction of the *outer*: the real secret of which in the words of Katherine Tingley

is rather to evolve the character than to overtax the mind; it is to bring *out* rather than to bring to — the grander part is from within. It means no less than the development of the soul, with all the capabilities which belong to it. . . It is the power to live in harmony with our environment, the power to draw out from the recesses of our own nature all the potentialities of character and divine life. It is not so much a something that is imparted. It is a liberation from the power of the lower forces which hinder and check a growth which ought to be unchecked and spontaneous.

Theosophy by "teaching Brotherhood and demonstrating that is it a fact in nature and by making it a living power in the life of humanity" will reveal the true method of "putting yourself in the other man's place," whereby the lost secrets and mysteries of antiquity will remain lost no longer. Truth is universal, and has never been possessed by any one race or any one nation, but it has been and is the guide of the wise men of every clime and of every age. We must free our minds from the prison-houses of provincial prejudice, thereby gaining that deeper insight which perceives the meaning and purpose of the life of the ages in all its manifold variety. Toleration is essential to sympathy, sympathy essential to real knowledge, which in dissipating the mists and contradictions of life reveals its inward spirit.

Rightly sing the poets and the mystics of all ages:

Love is one and liveth, is of life the star; In the Jew or Gentile naught its gleam can bar, Clear the music ringeth, prison'd not by clime: Truth the note it soundeth, undestroy'd by time. Oh! be glad ye people, Buddhist, Christian, Jew, Hasten to believe it, Christos dwells in you!

Therefore, an important message of the past, and the present as revealed by Theosophy, is that

> Life is real, life is earnest, and the grave is not its goal. Dust thou art, to dust returnest, was not spoken of the soul.

> Let us then be up and doing, with a heart for any fate. Still achieving, still pursuing, learn to labor and to wait. (Longfellow: *Psalm of Life.*)

From the richly significant life of the ages, we may hear if we will stop to listen the clarion-tones of "Nature's wordless voice" declare that:

They must upward be and onward, who would keep abreast of Truth! I.o, before us gleam her camp-fires, we ourselves must Pilgrims be, Launch our Mayflower and steer boldly through the desperate winter's sea. Nor attempt the future's portals with the past's blood-rusted key.

Lowell

Thou canst create this "day" thy chances for thy "morrow." In the "Great Journey," causes sown each hour bear each its harvest of effects, for rigid Justice rules the world. With mighty sweep of never-erring action, it brings to mortals lives of weal or woe, the karmic progeny of all our former thoughts and deeds. (*The Voice of the Silence*)

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THE COST OF HIGH LIVING: by Lydia Ross, M. D.



ONES was meditating upon the cost of high living. Not that he was much given to meditation or to counting the cost. He had been taking things as they came, and had lived pretty high until recently. His meditations were not due to reading the housekeeper's column or economic edi-

torials. He hadn't seen a newspaper for — well, it seemed like ages, though he was an able ex-editor with a practical training. In fact, he began a striking career as a printer's devil, a disorderly, frowsyheaded, willing lad, who dreamed ambitious day-dreams and wore a very dirty apron.

When Fortune met him one day and saw the mixture of dirt and good material, she just poured him out a lapful of good luck. That was the beginning, and it would sound like a romance to relate the things he had gotten since then, some by work, but more had just fallen into his lap. He remembered that day when he left his first position for the better opening. There were chaff and good wishes from the printers, for he was a bustling, likable youth. He could see the quizzical, friendly face of young Hathaway, his immediate senior in service. "Joy go with you, Jonesey," he said. "We can't promise to keep your grave green, but we'll hang that funereal apron on the deadmatter rack, in memory of the departed galley slave."

His employer's parting words came back, too: "Good-bye son. Don't forget that even little things count in the long run. Everything you put into the day's work shows in the first proof; and it all comes back for correction sometime. Remember your spacing that escapes the average eye, the little spaces of time, out of sight. The small hidden spaces are what keep the words from running together in unmeaning pie. It pays to get the habit of setting a clean proof that means something, for Life is a close marker."

He had flushed a little under the man's keen, kindly eye, for even then there were unseen spaces that he wouldn't like to have observed. Looking back, he realized today that the dirty-proof habit had run right through his unusual career. As time went on he had surprised even himself with the business ability he developed and the literary talent and diplomacy and pleasing manners, and the all-round cleverness and open-handed companionship that made him generally popular and gave him a certain standing and weight.

Money came easily and he spent it freely, on himself or on any one who suited him. He willingly paid the score for others who were

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going the pace with him; but he did not lay up treasures with the men and women who broke down under it, or who drifted down stream one way and another. Now he saw how his generosity was only a free-handed, sociable kind of self-indulgence. He wrote highsounding articles on leading topics and dwelt upon the people's rights, etc., with original, catchy phrases which the exchanges widely quoted. His cleverness in relating fine sentiments to his political party, and in posing their candidates with high lights on their best points and their faults obscured, was the delight of the campaign managers. His political patrons were older men than he, more conscious and unscrupulous, and deeper plotters. They admired his ability to do what they could not do, and were willing to pay well for it. He was valuable, and he was good fun, too. They made a favorite of him, and rather enjoyed giving him profitable tips and social sugar-plums, being sharp enough to know what he liked and politic enough to keep him satisfied.

Once, when abroad, he met a really fine girl, and they became engaged. She appealed to the best in him, and she was the dearest and truest thing that ever touched his crowded life. Then he began to think seriously about his uncorrected proofs that had been piling up. There was too much of it to handle all at once; and it was rather too bad to be seen, anyway. He would begin, quietly, changing the things that affected her. But his attempts to get out of the tangle of old errors brought the matter to her ears, and she took pains to find out the truth. Then she gave him back his ring, saying, gently, that she trusted it would go to the girl who ought to have it. Uplifted by the beauty she had brought into his life, he had not thought out how much happier she was likely to be. But he never dreamed he could hurt her so grievously as that look in her lovely eyes revealed. Those eyes that had discerned and loved the ideal he ought to have been, and were opened now to what he had been content to be. Of course, she could not read the details of his story; she didn't need to, to know that the history of a happy home never could carry those marks along its margin. Looking back, today, he could see that his bitter resentment of his past and its cost, as well as his self-pity were part of the yellow streak in him, and not Love, at all. He couldn't change his past; and he didn't change his future; and he knew now that he wouldn't have made it worthy if she had shared it.

It was right after this that he got in with the big politicians, who had been watching him and studying his likes and possibilities, until

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they knew him better than he knew himself. Unsuspicious that he was only a tool in their hands, he was engrossed with more money and power and popularity and flattery and creature comforts and a round of froth and excitement. He made up his life-story for a larger page with a wider margin and plenty of fancy lettering. But lacking purpose, the old errors mixed up the meaning more and more every year, until, suddenly, he was challenged to explain.

Things had begun to pall on him; he wanted a novelty, and had private reasons for opposing the new party that was pledged to reform some civic abuses. But he ought to have been too wide awake to stand in the public limelight. What he met with was unique enough. He was confronted with some old proofs of his own story — half-forgotten records, and not at all the worst ones. But they showed him as a willing agent for illegal dealings; and the Delilah of their day, holding the secret of his weakness, had long waited to catch him napping. She produced her evidence, now for revenge, not for reform; but the law of adjustments made it serve both ends.

The outcome was that instead of being what he had hoped, he is representative for a large outside constituency in the democracy of dirty proofs. As the State's escorted guest he went to the house where he would have all the time there was to catch up with his personal correction. At first he didn't like its charm of novelty, even with a life-long appetite for new sensations. But he is making good in finding the real man in his mixed nature; and he is beginning with his first sentence in a new chapter to aim at a clear margin. Not easily, but slowly and surely, he is learning to work with a purpose, instead of being a puppet worked by selfish impulses and social wire pullers.

SANDRO BOTTICELLI: by C. J. Ryan



ORN in 1446, the sixty-four years of Botticelli's life may be said to cover the culminating period of the Renaissance. The transition from the medieval to the modern order was so fully progressed that no retrogression was possible. This period witnessed the discovery of America, the exploration

of the Indian seas, and the consolidation of the Spanish nationality. It also included the application of printing to the diffusion of knowledge, the revolution in warfare through the use of gunpowder, and the Copernican widening of the outlook in astronomy. Constantinople

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fell into the hands of the Turks in 1453, and about the same time the culture of ancient Greece began to reincarnate in Western Europe. Fifty years before the birth of Botticelli, Manuel Chrysoloras was appointed professor of Greek at Florence, and through his influence and that of his successors a great enthusiasm for antique literature, art, and philosophy, spread rapidly throughout Italy. The "New Learning" began to break the fetters which had cramped the development of the human intellect for centuries. The reign of rigid monasticism was over, and theologians had to accept many of the despised or neglected principles which were the glory of pre-Christian times.

Botticelli was the first great master, as Ruskin, the great artcritic, says, "who understood the thoughts of the heathen and the Christian equally, and could in a measure, paint both Aphrodite and the Madonna." He first introduced classical mythology into distinctively Christian religious subjects.

In contradistinction to the sister arts of sculpture and architecture, the antique remains of which were numerous and largely used as models, painting in the fifteenth century was in a state of development, owing little or nothing to the ancient Greeks or Romans, whose paintings had all disappeared. Even the Pompeiian remains, second-rate as they are, were not discovered then. Painting was, until about the time of Botticelli, the "handmaid of religion" indeed, and was strictly regulated by restrictions. The effect of the revival of the classical studies which revealed to Italy a new light in whose joy the twilight of monastic art began to pale, is well seen by comparing Botticelli's pictures with those of Orcagna (1316-1376) in the Campo Santo at Pisa. In Orcagna's Triumph of Death (see plate) his Last Judgment, or Hell, we are impressed by the gloom and terror of the prevailing view of the Divine government. In the Triumph of Death a party of ladies and knights on a joyous hawking expedition are suddenly arrested by the horrifying sight of three open coffins. In the distance, hideous demons are thrusting souls into holes in the ground from which flames are issuing. The only refuge from the dangers of the ordinary secular life is suggested by the presence of several hermits who are pursuing their self-centered occupations in the middle distance, equally oblivious of the worldlings on horseback and of the perishing souls on pitchforks.

In Botticelli's pictures all this was changed. While his faces are often touched with a pleasing gravity, his figures are inspired with

the joy of life. The happiness of the angels and spirits in his paradise is not mystical and rapt; it is expressed by an elastic and mirthful grace of motion new to art, and which compensates for a certain want of nobility in the general type of his figures. In his Venuses and Madonnas, of which he painted many, he seems to have felt the desire to express the highest beauty of womanhood as worshipped equally in the classical and Christian ages. Botticelli was a poor anatomist, but he was a great master of draughtsmanship. This perhaps seems a contradiction, but it is not. He did not trouble about exact correctness in scientific construction, but he had an innate power of seeing and representing the grace and beauty in the outline of the human form, and of making it significant of the sentiment of grave and tender poetry which he felt so strongly. The subtle sense of graceful motion is peculiarly delightful in his works. A gentle zephyr seems to rustle the leaves and flutter the garments. He is sometimes called "the painter of the breeze."

Botticelli was favored not only by being born at the moment of the classical revival, but also at a time when the progress of science had given new facilities to the arts. The introduction of oil colors, and the re-discovery of perspective had not long been made. It is amusing to notice how Botticelli, in common with most of his contemporaries, delighted in showing off his knowledge of the recently-acquired art — or science — of perspective. They constantly introduced elaborate architectural backgrounds which were quite out of place in the subject, apparently out of sheer joy in conquering the difficulties of perspective.

Botticelli was born in Florence, and as he would not take kindly to any sort of schooling, was apprenticed to a goldsmith named Botticello — hence his name. His family name was Filipepi. Later he studied painting under Filippo Lippi, then in the height of his fame. In 1468, on the death of Lippi, Botticelli started as an independent painter. Among his principal pictures are *The Birth of Venus*, *The Calumny of Apelles, The Primavera*, and several altarpieces. About 1480 he was called to Rome by Sixtus IV to paint on the walls of the new Sistine Chapel in competition with Perugino, Ghirlandajo, and other masters. He was greatly befriended by the Medici, for whon he painted many of his noblest works.

Soon after 1491 a new influence came into his life which greatly changed it. This was the preaching of Savonarola, whose disciple

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Botticelli became, in common with many other famous artists. According to Vasari, a devoted servant of the Medici and therefore an enemy to Savonarola who had driven them from Florence, Botticelli went wrong after his conversion and did little or no more good work. Vasari is probably a prejudiced witness, but it is true that Botticelli painted no more classical allegories after that. It is generally believed that Botticelli towards the end of his life devoted himself to engraving. He is supposed to have drawn and engraved a magnificent series of illustrations for Dante's *Divina Commedia*. If so, he was one of the pioneers of engraving.

THE SONG IN THE MOUNTAINS AND THE SEA

Welsh Air: Hoffedd Abram ab Ifan

by Kenneth Morris

Lin, lan, lone! Who's it singing when the rain falls? Who's it through the wildwood green gloom calls When the noon sun dapples Through acorns and oak-apples The bird-song halls? Lin. lone! Who's it through the woodland croons now? Who goes harping on the lone hill brow? Who's it strews the dream-rich music Round the mountain throne? Lin, lan, lone! Is it laughter of the wild broom? Is it whispering of the dim ling bloom, When the sky's all over Primrose bloom and clover, And blue, bright gloom? Lin, lone! Shadowy fingers rippling pearl-pale, Flame-strings wakening down the dusk-strewn vale -'Tis n't they 'd be driven away By all the chapels known! Lin. lan. lone! What's the music on the sea-shore? What's the murmur 'neath the long wave roar When the Atlantic 's hurling Breakers foam-mane whirling, On Glan Wen y Mor?

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Lin. lone! By the foxgloves in the fields there You can hear, upon the salt, keen air, Trembling song that 's borne along On the sea-wind's undertone.

Lin, lan, lone! It's a fairy-shaken bell rings From the sea-hid house of old time kings, 'Neath the lift and dipping Flash of silver-dripping White, wave-wet wings. Lin. lone! And the moon above the bay beams, Ripple-glimmering through their long, long dreams: - There they 'll bide beneath the tide Till the creeds are overthrown.

> International Theosophical Headquarters, Point Loma, California.

NOAH'S ARK: by R. Machell



HEN the fog-bank rolls in from the sea and spreads itself over the low lying land like a lake that has suddenly risen and submerged all but the island-peaks of the mountains, it seems as if Nature were parodying her own processes, by means of which she fashions the face of the earth anew from age to age. Standing above the fog and looking at the transformed face of the land, one seems to have before one a practical lesson in the mutability of that which seems so permanent.

Every student of geology is of course familiar with the periodic submergence of continents and the regular appearance of new lands from the bed of the ocean. Such things are part of the alphabet of science; but it is evident that these simple facts of natural history are not generally appreciated, and indeed are by many otherwise welleducated people entirely unknown. Even in literary circles there is an amazing ignorance of some of these almost obvious facts, and this surprising ignorance peeps out when the subject of Atlantis comes into the field of discussion, a subject that is becoming quite popular at present. One continually reads articles on the lost continent which show that the writer looked upon the subsidence of a part of the earth as a phenomenon that was so remarkable as to be quite a matter of

speculation instead of being one of the details of the regular rotation of geological processes by means of which the earth renews her skin.

In a small way we see these processes illustrated arounds us, the subsoil continually being thrown up to the surface by the work of countless hosts of small insects as well as by burrowing animals, while on a larger scale we see the mountains being continually washed down into the valleys, and the lowlands being washed down and deposited beneath the ocean; we see lakes dry up, and we see desert lands transformed into lakes by the changing course of rivers, and we may note a hundred other evidences of the ceaseless activity of nature in the work of change that is the law of life on earth. Yet man who claims to have knowledge talks of the submergence of a continent as if it were a matter of speculation.

It does not fall to the lot of all to watch the sea-fog roll in like an ocean or like a great snow-field over valley and city; but to one who has the opportunity to watch this strangely beautiful transformation scene, the majestic sweep of nature's forces stamps itself into his mind and gives him almost unconsciously a larger standard by which to measure history. He sees how softly and smoothly the spectral sea sweeps in and blots out the mighty cities with their teeming millions of "lords of the earth"; and, if his imagination is not atrophied, he can see how from time to time, as the earth surface rises and falls, the ocean must roll in and obliterate the works of man and make the land he was lord of a home for the monsters of the deep. Then, if he can believe in the reality of the correspondence between the visible material world and the invisible world of which it is but the appearance and the evidence to our senses, then he can perhaps understand how great tidal waves of thought periodically sweep over the thought-world and change and renovate the minds of men, submerging old systems of religion and philosophy and revealing new lands.

To those who shut their eyes to the facts of nature, and who make their minds prison-houses for their imagination, these events come as cataclysms, disasters, punishments sent by an angry god, or, more marvelous than all, as mere accidents. Those who see what is taking place around them, and who forsee that which is coming, and who know that which is past, are the natural pioneers of the new age. To them comes a Leader to guide them to the site of the new civilization, that must replace that which is sinking to its final resting place beneath the rising tide of evolution. For the pioneers and their Leaders are all a part of the world process, part of the great hierarchy of souls that are the active forces in that evolution; for Man is Lord of the Earth. But Man, the Lord of Earth, is as a god to man the blind creature of lusts and passions, who submits to be ruled by the terrestrial forces of generation and destruction, instead of asserting his divinity and ruling his body and mind himself.

So Theosophy comes to man with this message of his divinity, and calls once more to him to build a new ark that shall float on the waters of the coming deluge, and that shall be great enough to carry over safely into the new age the seed of civilization now ripening on earth.

The ark of Noah is a world-myth that finds its actual embodiment in the history of nations, races and continents, as well as in the story of the evolution of civilization on the thought-plane. For every myth has its spiritual principle within, as well as its material expression in the periodic recurrence of historic events.

Archaeology has shown how universal is the story of Noah and his deluge, but men have not yet realized that history is continuous, and that what has been will be. So that they are now as unwilling as ever to look beyond yesterday. "Sufficient unto the day, etc.," is a good saying; but I have yet to learn that there is much wisdom in being content with yesterday; and that is where the mass of the world stops short. Could they but wake up to the reality of the present moment they would perhaps see the future as clearly as the past; but that which they think of as today is but a memory carried over from yesterday; they fancy they are living in the present moment, but the present moment escapes them. It is a mystery to the mass of humanity, who live in the memory of the past while looking with longing eyes towards the mirage they call the future.

To live in the present moment, which is eternal, man must awake from his dreams and become Self-conscious. He must know himself, must realize his own divinity. This is the great awakening, in which man learns the meaning of the word NOW.

Now is the present moment that is the Arch of the gods bridging the gulf between the past and the future; and it is the Ark that floats upon the surface of the flood bearing the seed of the new era to the risen land that shall be in the future the home of the new race.

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PSYCHIC EPIDEMICS: by William Dunn



HE physical epidemics that have afflicted humanity throughout the past, such as the Black Death, the Plague of London, smallpox, cholera, etc., have not been more terrible in their aspect and effects than have been the *psychic epidemics* that have swept over whole portions of the race — oblit-

erating for the time being nearly every trace of individual sanity among the people so affected. The worst of these psychic scourges have occurred under the cloak of religion, and perhaps no form of human degradation can equal the depths to which whole communities have been carried while such epidemics lasted. An important analogy between physical and psychic epidemics is this: that contagion originates from one individual. These psychic plagues have not been confined to religion, however, but have taken many other forms in political and financial manias. Dr. Cutter of Yale, author of the "Psychological Phenomena of Christianity," remarks that

All powers are capable of *reverse action:* water, fire, steam, electricity, are wonderful aids to mankind *if regulated*, but if they get beyond control, how great is the destruction! A child can start a fire; it is not so easily stopped. A revival is such a power that when once started it may sweep a community. It may arouse the passions and degrade religion to the frenzies of savages or beasts, or it may permeate the minds of men and cause a growth to the full stature of the true man.

The same writer says in speaking of phenomena of contagion:

The leader of a crowd is usually a despot. . . . He never sways the crowd by reason . . . but trusts to the emotional contagion, which is part of the crowd mind. . . . Once the mob-self is brought to the surface it possesses a strong attractive power and a great power of assimilation. It attracts fresh individuals, *breaks down their personal life* and quickly assimilates them; it affects in them a disintegration of consciousness and . . . the assimilated individual enters fully into the spirit of the mob.

So great is the collective power of suggestion that a crowd will see things which do not exist, and hear sounds which are purely imaginary. Not only does this apply to the depraved, but it may be experienced by every unit in the crowd. Those who read and observe can hardly avoid noticing this phenomena in all avenues of life.

HISTORICAL DATA

During the Crusades, forty thousand German children and thirty thousand French children were infected with a psychic epidemic so terrible in its fanatical zeal that nothing could restrain them. Whenever restrained from following their aim, they sickened and died. During the last of the Crusades, the women Crusaders were overpowered by a strange mania; entirely devoid of clothing, they rushed about the streets speechless, and in frequent cases fell into ecstatic convulsions.

When the Crusade-epidemic was abating, a new one arose. In 1260, bands of people in Italy were seized with a veritable craze for public scourging. . . . Both men and women went in groups from town to town, and stripped to the waist, or with but a loin cloth about their bodies, they stood in public places and scourged one another.

The flogging-epidemic was succeeded by the dancing mania, when large assemblies of men and women took to dancing with wild delirium in both churches and streets.

The witchcraft epidemic lasted from 1484 to the middle of the eighteenth century.

Table of dates during which the above psychic epidemics occurred:

Crusades	1096 to 1299
Flagellants (flogging)	1260 to 1348
Dancing	1374 to 1470
Witchcraft	1484 to 1749

An instance of contagious phenomena is the following:

At Old Orchard Beach a crowd of several thousands was made to give up all its valuables and money . . . and some of those who contributed most had simply gone to see "how it was done."

At revival meetings scenes have occurred which pass description. It is only necessary to mention the "barkers" as a type. Groups of men and women, on all-fours, snarling and growling and snapping their teeth at the foot of a tree. This was called "Treeing the devil."

The frenzy which swept over the French nation and known as the French Revolution, ending in a carnage of blood, is an illustration of a psychic epidemic manifesting in social life. The phenomenon presented was in many respects similar to that which accompanies frenzied fanaticism in religion.

Financial and speculative frenzies are psychic disorders that act in the same manner as other forms of these national distempers. Three historical examples will be interesting.

In 1634 the Dutch became suddenly possessed with a mania for tulips. The whole population embarked in the tulip trade, neglecting all ordinary industry. The mania to speculate in tulips obsessed the whole nation. So contagious was the epidemic that foreigners became smitten with the same frenzy and poured their money into Holland. The result was that thousands were ruined and a cry of lamentation went over the land.

In 1717 John Law infected the French nation with his scheme for trade on the western bank of the Mississippi. Three hundred thousand applications were made for shares in the company; the eagerness to be a shareholder rose to a pitch of frenzy. People of every age and both sexes invested. Then the bubble burst, and multitudes were ruined.

In 1711 the "South Sea Bubble" — a similar mania — infected the English nation with kindred frenzy. Shares were inflated from $\pounds 100$ to $\pounds 1000$ and more, and suffering was great when the "Bubble" burst at last.

In modern times the historical instances given above are being re-enacted in countless ways, although in a more divided manner. Psychic epidemics may be observed in the emotional outbreaks that occur from time to time when unreasoning crowds become infected with some mania. We have but to recall the disturbances reported in the daily newspapers.

Psychic diseases are as easily transmitted to weaklings as are the well-known physical sicknesses. The pity of it is that those infected usually imagine that they are acting from a good motive and from reason; whereas, as a matter of fact, the so-called "motive" has been *put into them* by one who is himself mentally awry.

Advanced physicians declare that all known physical ailments, fevers, and chronic diseases, have their *exact counterpart* in psychic or mental disorders, and that the psychic manifestations are but diseases on their way to the physical plane.

All good movements for the uplifting of Humanity have had their *reverse manifestations* in misdirected zeal or psychic disease. Just as good food, when improperly taken, leads to physical disease, so may sacred teachings be misused by those whose psychic bent outruns their spiritual aspirations. The psychic epidemics that afflict mankind evidence the presence among men of the ancient evil of humanity — namely, the animal and emotional nature, *uncontrolled* by the overshadowing divine nature, seeking to establish a kingdom for itself. The safeguard lies in the cultivation of the higher will — self-control.

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${f Q}$ E was a pious man and faithful in the performance of his duties to the gods, particularly reverencing Jupiter, and offering sacrifice at his altars whenever he could do so without inconvenience or cost to himself. He was the owner of horses and cattle. and frequently drove his own wagon to the city. On such occasions he generally carried goods for his neighbors as well as his own, and he made no charge for his services, but he levied a small toll on his own authority, wherewith to make a propitiatory sacrifice to Jupiter, who apparently connived at the pious fraud and gave him special protection on the journey, and moreover insured him a successful bargain in the market place in return. He was a hard man at a bargain, so it was said, and few there were that could be considered his equal in getting the best of a transaction. But he was modest withal, and recognized the hand of the deity in all such matters, attributing his success to the direct interposition of the god, who in this way showed his appreciation of his devotee's piety.

He was a merciful man too, and it is well said by Suleiman that "a merciful man is merciful to his beast"; a proof of this was to be seen in the care he took of his cattle; for whenever he had a hard bit of plowing to do he always borrowed a yoke of oxen from his neighbor, who was a careless fellow with small consideration for his beasts.

So the good man prospered and grew rich, thus earning the respect of his neighbors as well as the favor of the gods. But though wealthy he was not ostentatious; on the contrary he even affected poverty, particularly when any demand for contributions was made upon him. He avoided the vulgarity of making a display of his charity, always hinting discreetly that the gods would see to it that the sufferers or victims of misfortune should receive the necessary help through channels that would not make them feel the weight of their obligation. This was taken by some to mean that he would make a generous donation secretly, and he was never known to have contradicted the report.

One day when he was driving to the city with a pair of old horses, he took a path that was not fit for travel at that time of year, because he had a little business to transact with a neighbor before going to the market, and he feared that if he made the long circuit by the high-road he would have to hurry his horses in order to get there in time. The high-road was full of traffic on a market day, and he was not a man to set a bad example to others by overdriving his horses on the public highway.

The by-road was bad and the wagon got stuck in a soft place. Such a thing had never happened before to him, and he sat there, bitterly reproaching himself for having omitted the usual sacrifice before starting on his journey. The fact was he set out with an almost empty wagon, intending to load up at the house of his neighbor and fully determined to make his offering to the god as soon as he should have something to offer that was not taken from his own sacks. He saw how short-sighted his policy had been and reflected that it would have been easy to replace the amount of the offering when he had taken on his full load at his neighbor's farm. After much shouting at his horses and some judicious use of the whip (there was no one in sight to be hurt by this example), he saw that there was nothing left but to pray to the gods.

He knew that prayers must be emphasized with offerings, and fortunately there was a small altar to Jupiter on the side of the road erected by a former occupant of the land, who thought it would cost less to put up an altar than to repair the road.

Placing his gift upon the altar the pious man prostrated himself and invoked the aid of the god with a fervor that was stimulated by his fear of missing the market.

His prayer was answered. The god himself stood before him, and

a voice from the skies above seemed to fill the air with music. The suppliant bowed himself to the earth and waited to hear the wagon being pulled out of the mud hole: but no sound came from that direction save the panting of the tired horses. Trembling between awe and anxiety, he peeped from under his sleeve and saw the team where it had stuck fast, and no god busy pulling it out. Slowly he got on his feet and looked reproachfully at the altar and indignantly at the wagon alternately. Then he heard a voice behind him and it said in vulgar tones such as he could not for a moment attribute to the god:

"You lazy clown, why don't you put your shoulder to the wheel yourself?"

There stood old Margery, who never showed any respect for him and laughed at his piety. He considered her crazy; but some said she was a prophetess in a small way.

Stung by the taunt he pulled off his cloak and went to work; he plunged into the mud, got a good hold of the wheel, shouted to his horses, and before long he had the wagon on hard ground again. He was covered with mud and sore with indignation at the neglect of the god, when he caught sight of another man who had been pushing at the other wheel. The other man was a stranger and somehow had escaped the mud which covered the owner of the wagon. He smiled pleasantly, and said, "*The gods help those who help themselves.*"

As he spoke, the air was again full of music; the farmer's eyes were dazzled by the sunlight for a moment, and then he was alone.

THE TURN OF THE WHEEL; A Little Tale of Karma: by Bryan Kinnavan (William O. Judge)

(Reprint from The Path, Vol. V, No. 7, October, 1890)



E was the son of a small ruler in Râjputâna. His father, of the warrior caste, governed a district including several villages as well as his own small town with justness and wisdom, so that all were prosperous and happy. The ruler was called a râjâ; he lived in a building made of stone, built on

a hill that commanded the town. The son, of whom this tale tells, was born after the râjâ had been many years childless, and was the only child to whom the father's honors and power could descend. He was named Râma after the great Avatâr. From the time he was born

and until he could speak, a strange look was always to be seen in his baby eyes; a look that gazed at you without flinching, bold, calculating, as if he had some design on you; and yet at times it seemed to show that he was laughing at himself, sorry too, melancholy at times. Râma grew up and delighted his father with his goodness and strength of mind. The strange glance of his eye as a baby remained with him, so that while every one loved him, they all felt also a singular respect that was sometimes awe. His studies were completed, a first short pilgrimage to a celebrated shrine had been made very early by his own request, and he began to take part in the administration of the affairs of the old and now feeble râjâ. Each day he retired to his room alone; no one was permitted to come within three rooms of his; and on the fourteenth of the month he spent the entire day in retirement. Let us go with him in fancy to one of these monthly retreats and listen with his consent.

II

The room is an ordinary Hindû room. Hard chunam floor, the bed rolled up in the corner, on the walls one or two flat metal placques inlaid with enamel and representing different gods and heroes. He enters and goes up to the wall in front of one of these placques — Krishna. The strange look in his eyes grows deeper, stronger, and a stream of light seems to rush from them to the object on the wall. His lips move.

"Âtmanam âtmanâ," he seems to say; the rest is murmured so low we cannot hear it. The words are in his own dialect, but in the mind of the hearer they translate themselves. He says:

"This weight upon my heart is not from this life. I have known no sorrow, have lost no object that I loved. My ambitions are fulfilled; the present is bright, the future shows no shadow. When, O Krishna, shall I know that which I now know not, nor what it is that I long to learn? Yet even now a ray of hope steals into my soul."

Just as he uttered the last words a ringing sound came from the metal placque and Râma gazed steadily at it. The placque vibrated, and a subtle scent spread from it over the whole room. The air seemed to vibrate slowly, undulatingly, and then a dazzling shape of a young man seemed to form itself upon the floor, while the vibration centered in the form and the scent turned into light. Râma looked steadily at this being who stood there erect and terrifying, yet calm

and strong with peace all about it. It was the calmness and power of it that terrified. As Râma looked it spoke:

"Do you forget the Upanishad, 'Two birds sit in one tree; the one eats the fruit and the other looks on '?"

"No," said Râma, "I forget not. They are the personal and universal. The one who looks on is my higher self — Âtman."

"I am thy higher self. I come to tell thee of three words. Forget them not, forget not me. They are: Action, Law, The fruit of action."

"These," said Râma, "I have heard. Action and Law I know, but the fruit of action, is it that which eats within?"

The form of beauty replied: "It is the ignorance of it that hurts thee. Thou art bound in thy future. This present birth of thine is to allow thee to make the Karma for thy next birth better in the end, but which will be ever dark and painful if not now ameliorated. In this present is thy future. Potential now lies the effect in what cause you make."

Then with one straight arrow-like glance into the face of Râma, the form faded, and the placque rang a note of farewell. Across the wall there seemed to pass a picture of poverty and riches, of huts and buildings of stone. Râma left the room the next day, and never after seemed to sorrow or to be annoyed. His old father died, and he carried on the government for many years, scattering blessings in every direction, until a rival râjâ came and demanded all his possessions, showing a claim to them through a forgotten branch of the family. Instead of rejecting the claim, which was just, instead of slaying the rival as he could have done, Râma resigned all, retired to the forest, and died after a few years of austerity.

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The wheel of time rolled on and Râma was reborn in a town governed by the râjâ who had once in a former life demanded Râma's possessions. But now Râma was poor, unknown, an outcaste, a chândâla who swept up garbage and hoped that Karma might help him. He knew not that he was Râma; he only swept the garbage near the râjâ's palace.

A solemn audience was held by the râjâ with all the priests and the soothsayers present. Troubled by a dream of the night before, the superstitious ruler called them in to interpret, to state causes learnedly, to prescribe scriptural palliative measures. He had dreamed that while walking in his garden, hearing from his treasurer an account of his increasing wealth, a huge stone building seemed suddenly to grow up before him. As he stopped amazed, it toppled over and seemed to bury him and his wealth. Three times repeated, this filled him with fear.

The astrologers retired and consulted their books. The remedy was plain, one suggested. "Let the King give a vast sum of money tomorrow to the first person he sees after waking up." This decision was accepted, and the proposer of it intended to be on hand early so as to claim the money. The râjâ agreed to the direction of the stars, and retired for the night, full of his resolution to give immense gifts next day. No horrid dreams disturbed his sleep. The winking stars moved over the vault of heaven, and of all the hosts the moon seemed to smile upon the city as if being near she heard and knew all. The cold early morning, dark with promise of the dawn, saw the chândâla - once Râma - sweeping up the garbage near the palace where inside the râjâ was just awaking. The last star in heaven seemed to halt as if anxious that Râma should come in his sweeping to the side of the palace from which the râjâ's window opened. Slowly the chândâla crept around in his task, slowly, surely. Slowly the râjâ's waking senses returned, and as they came a hideous memory of his dream flashed on him. Starting up from the mat on which he lay, he rose and seemed to think.

"What was I to do? Yes, give gifts. But it is not yet day. Still, the oracle said 'immediately on awaking."

As he hesitated the poor garbage sweeper outside came more nearly in front of his window. The setting star almost seemed to throw a beam through the wall that struck and pushed him to the window. Flinging open the shutter to get breath, he looked down, and there before him was a poor chândâla with waistcloth and no turban, sweating with exertion, hastening on with the task that when finished would leave the great râjâ's grounds clean and ready for their lord.

"Thank the gods," said the râjâ, "it is fate; a just decision; to the poor and the pious should gifts be given."

At an early hour he gathered his ministers and priests together and said:

"I give gifts to the devas through the poor; I redeem my vow. Call the chândâla who early this morning swept the ground." Râma was called and thought it was for prison or death. But the Râjâ amazed him with a gift of many thousands of rupees, and as the chândâla, now rich, passed out, he thought he smelled a strange familiar odor and saw a dazzling form flash by. "This," thought he, "is a deva."

The money made Râma rich. He established himself and invited learned Brâhmans to teach others; he distributed alms, and one day he caused a huge building of stone to be built with broken stone chains on its sides to represent how fate ruptured his chains. And later on a wise seer, a Brâhman of many austerities, looking into his life, told him briefly:

" Next life thou art free. Thy name is Râma."

THE LIGHT OF ANCIENT EGYPT: by C. J. Ryan



T is always welcome to students of Theosophy to find new confirmations of the teachings of that remarkable thinker H. P. Blavatsky, and it is specially so, in view of the misconceptions about her which have so industriously been circulated in the public mind, when they are such as were

not suspected at the time she wrote her great works. The recent publication of Mr. T. W. Rolleston's *Myths and Legends of the Celtic Race* brings some new evidence of the accuracy of one of H. P. Blavatsky's statements about the connexion between prehistoric Europe and Egypt.

Egypt as a land of mystery has always exercised an irresistible fascination upon students of the past history of mankind, and we are now in possession of an immense mass of Egyptian material, which, when studied in the right way, will certainly reveal some of the hidden wisdom of antiquity that we greatly need.

The late Gerald Massey, in his books on the Beginnings of Things, works out with great industry a large number of striking resemblances between Egyptian and English words, and tries to prove by those and other correspondences that the Egyptian civilization spread northwards and westwards and impressed itself imperishably upon European culture. Scientific observers, such as Lockyer and Petrie, have attempted to make out an identity of motive in the design of some of the Egyptian temples and such prehistoric monuments as Stonehenge in England. They seem to have proved that both structures were oriented with special relation to certain stars at their rising.

Mr. Rolleston, in his recent work on Celtic civilization, draws particular attention to the important and richly-sculptured chambered tumulus called New Grange, on the northern bank of the Boyne, not far from Dublin. He mentions something that has often been pointed out in Theosophical literature but seldom elsewhere, i. e., that most of the sculpture was evidently not intended for decorative purposes, as it is found in places where it can only be seen with difficulty. Neither can it have been carved *in situ*. The inner chamber was built of stones that were already engraved with symbols, and they were put together almost as if the builder was careless whether any of the carvings were seen or not. Possibly they are the remains of some far older structure! The same thing is found in the great sepulchral monument at Gavr'inis in Brittany.

Mr. Rolleston draws particular attention to one of the markings at New Grange on account of its interest and significance in connexion with Egyptian symbology. This ideograph is roughly engraved, and if it stood alone there would be difficulty in deciding upon the intention of the engraver. In fact, those who had not known of other similar but more legible carvings elsewhere, have suggested various meanings more or less wide of the mark. When, however, it is compared with kindred markings from tumuli in Brittany and engraved rocks in Sweden, its significance becomes clearer and its historical importance positive. It is represented in Figure 1. Figure 2 is a clearer example of the same symbol from Locmariaquer in Brittany. Figures 3, 4, 5, and 10 are from prehistoric rock-carvings in Sweden, at Bohuslän. Figures 6, 7, and 8 are the well-known Egyptian symbol of the Solar Boat, the Bark of the Sun-god Ra, from the Brittish Museum collection.

Now if we compare the Irish, Breton, and Swedish prehistoric carvings with the Egyptian sacred symbol of Ra in his boat, we cannot help agreeing with Mr. Rolleston and other archaeologists that they all represent the same conception. Ra carries the souls of the good departed to the fields of heaven in his divine bark. That the Solar bark should be found in Sweden as well as in Ireland and Brittany is significant when we recollect that according to one of the early Irish traditions the "Nemedians," a semi-mythological race of immigrants into Ireland, came down from Scandinavia. Swedish folklore



THE SOLAR BOAT IN EGYPT AND EUROPE

 From Tumulus at New Grange, Ireland. 2. From Tumulus at Locmariaquer, Brittany. 3, 4, 5. From Rock-carvings, Sweden.
6, 7, 8. From Egyptian monuments (British Museum). 9. Crux Ansata or Tau from a French Dolmen (Redrawn from Myths of the Celtic Race, by Rolleston). 10. From Bohuslän, Sweden (Redrawn from Baltzer's Stone Monuments in Bohuslän).

tells of the journey of the last of the Swedish giants to Ireland at some remote period. There was undoubtedly some close connexion in remote times between Scandinavia and Ireland, long before the historical Danes harried the eastern coasts of Ireland. A curious Irish tradition has been preserved to the effect that some at least of the great monoliths of Stonehenge were brought by a magician from Africa. Now what does H. P. Blavatsky tell us about this fascinating subject? In *The Secret Doctrine* we find this:

And yet there are records which show Egyptian priests — Initiates — journeying in a North-Westerly direction, by land, via what became later the Straits of Gibraltar; turning North and traveling through the future Phoenician settlements of Southern Gaul; then still further North, until reaching Carnac (Morbihan) they turned to the West again and arrived, still traveling by land, on the North-Western promontory of the New Continent. Or on what are now the British Islands, which were not yet detached from the main continent in those days.

What was the object of their long journey? And how far back must we place the date of such visits? The archaic records show the Initiates of the Second Sub-race of the Aryan family moving from one land to the other for the purpose of supervising the building of *menhirs* and dolmens, of colossal Zodiacs in stone, and places of sepulcher to serve as receptacles for the ashes of generations to come. . . .

Nor were all such cyclopean structures intended for sepulchers. It is with the so-called Druidical remains, such as Carnac in Brittany and Stonehenge in Great Britain, that the traveling Initiates above alluded to had to do. And these gigantic monuments are all symbolic records of the World's history. They are not Druidical, but universal. (Vol. II, p. 750, et seq.)

Mr. Rolleston draws attention to the theory that the typical design of an Irish dolmen was intended to represent a ship. Actual vessels have been disinterred from sepulchral tumuli in Scandinavia and there are many sepulchral stone enclosures of the ship form in Sweden. This, he says, strongly corroborates the symbolic intention attributed to the Solar Boat carvings in Sweden, Ireland, and Brittany. The Vikings had a custom of sending their illustrious dead to sea to be swallowed up by the waves.

Another Egyptian symbol found in the environment of the prehistoric Solar bark carvings is that of the Two Feet, an attribute of Osiris, meaning spiritual dominion. In Irish mythology the chief of the Fomorians, the wicked race, was called the Footless. Furthermore, the characteristic Egyptian ansated or handled Tau-Cross is also found on at least one prehistoric dolmen in Brittany (Figure 9). A few lines from Mr. Rolleston's book will be of interest to all who

can appreciate the importance of these confirmations of certain parts of The Secret Doctrine, which should be consulted for further details:

But when we consider all the lines of evidence that converge in this direction it seems clear that there was such a relation (between the dolmen-builders of Western Europe and the people who created the wonderful religion and civilization of ancient Egypt). Egypt was the classic land of religious symbolism. It gave to Europe the most beautiful and popular of all its religious symbols, that of the divine mother and child. I believe that it also gave to the primitive inhabitants of Western Europe the profound symbol of the voyaging spirits guided to the world of the dead by the God of Light.

Speaking of the Celtic belief in Reincarnation, he says:

This is an absolutely Egyptian conception. And this very analogy occurred to Diodorus in writing of the Celtic idea of immortality — it was like nothing he knew of out of Egypt.

LITERARY TALENT IN THE ITALIAN ROYAL FAMILY: by K. M.



MONG the reigning families of Europe, the House of Savoy, the royal family of Italy, may claim pre-eminence for the literary talent of its members. King Victor Emmanuel is well-known as perhaps the leading numismatist of the world; his collection of coins is priceless; in particular the Italian section of it is said to be unique, and to illustrate the whole history of money and coinage in Italy — a history which goes back from twenty-five to thirty centuries. The king's work on the subject of numismatology is a standard book, and won him honorary membership in many learned societies in his own and foreign lands.

Queen Elena, as befits the daughter of the King of Montenegro, is a poetess, although her works have generally been in her own Slavonic rather than in the language of her adopted land. Many of them have appeared in Russian publications. Queen Margherita, the Queen-Mother, is also a poetess; and not only so, but a highly gifted woman in literary and artistic respects, a critic of no mean order, an authority on Alpine matters, and a philanthropist adored by the poor.

The fame of the Duke of the Abruzzi is firmly established, both as an explorer and as a contributor through the press to the world's knowledge of remote geographical regions. He scarcely left the naval academy when his name began to appear in nautical reviews of Italy, France, and even England; later, he lectured a good deal on scientific and geographical subjects. His first book recorded his travels in the celebrated expedition which he led into the Arctic regions; the work is now in its third edition, and has brought in large sums of money to the orphan asylum for whose benefit it was sold. Other books of his have described his explorations in the Mountains of the Moon in central Africa, and in the Himâlayas; all are books which stand in no need of their author's relationship with a reigning family to give them fame.

Now also the Duchess of Aosta and the Count of Turin are to join the ranks of authors; books by both of them, detailing their travels in central Africa, are to appear this season. Letters of the duchess, which have been published in a French journal, have by the beauty of the descriptions they contain, served to stimulate public interest in her forthcoming work. The Count of Turin, it is said, had never had any thought of writing a book, before his return from Africa. During his travels, however, he kept a diary, which he showed to some of his friends on his return; and which he has been prevailed on by them to publish.

The literary activity of the royal family is only another indication of the way in which Italy, that phoenix among nations, is once again capturing with her genius the attention of the civilized world.

JI.

THE Locos or Creative deity, the "Word made Flesh," of every religion, has to be traced to its ultimate source and Essence. In India, it is a Proteus of 1008 divine names and aspects in each of its *personal* transformations, from Brahmâ-Purusha down through the Seven *divine* Rishis and ten *semi*-divine Prajâpati (also Rishis) to the *divine-human* Avatârs. The same puzzling problem of the "One in many" and the multitude in One, is found in other Pantheons, in the Egyptian, the Greek, and the Chaldaeo-Judaic, the latter having made confusion still more confused by presenting its Gods as euhemerizations, in the shapes of Patriarchs. — H. P. Blavatsky, in The Secret Doctrine, I, 349.

AGAINST CAPITAL PUNISHMENT: by W. J. Renshaw



SAY," said Wild to his new friend More as they sat together in their luxurious club-room, "I was very much surprised in the court-room the other morning when you declared your opposition to capital punishment. I think all the other fellows were surprised too,

taking it for granted that all level-headed men accepted capital punishment as a matter of course: as the only effectual means of deterring criminals from taking life and the only adequate punishment for *murder* — besides being a Divine command!"

It was mildly dramatic. The case was one of great notoriety, involving the capital charge. The accused was a well-known man and local feeling ran high. Member after member of the panel had been struck off on expressing convictions as to the guilt or innocence of the accused. It seemed as if a jury would never be formed. When eleven men had been selected it came to More's turn. He answered the questions satisfactorily and a general feeling of relief came at the close of the long-continued strain. Almost mechanically the final question was put: "Are you opposed to capital punishment?" "Yes, I am," came the quiet but firm reply, and the whole thing had to be repeated until the twelve good men and true were sworn in, ready to condemn a fellow man to death should the law require it.

To his friend's remarks More answered: "Yes! I too, like all 'level-headed' men, once took capital punishment - for the other fellow — as a matter of course. The fact is, I was on the level of accepted opinion and had not thought about the matter at all, much less studied it in its many bearings. But if, as you say, murder is the most heinous of crimes, it would seem that the argument is infinitely strengthened when the State perpetrates it judicially, in cold blood; and as for its deterrent effect — that seems to me now to be the most foolish of all arguments. Pray, whom does it deter? The efficacy of a remedy is in its power to cure. Long before murder is committed the criminal has passed the rubicon and ordinary motives have ceased; he is driven, the victim of psychological disease. This is recognized in the case of self-murder; for the usual rider to a verdict of felo de se is, 'during temporary insanity,' or 'whilst of unsound mind.' If a sane man is 'his brother's keeper,' a murderer is obviously insane, has temporarily lost all sense of human brotherhood. As for the idea of the death penalty being 'adequate punishment' — 'a life for a life'

is mere vindictive retaliation (whose motive is base, either fear or vengeance, or both) which the world has in most things outgrown. It is a mockery of justice and reason; not 'adequate' but exterminative.

"Granting man's right to punish, the best punishment *per se* would be to place the murderer under restraint and leave him to his own reflections. The awful reaction when the insane fit has passed is powerfully drawn by Dickens in several places, and in the vivid verse of *The Dream of Eugene Aram*. But he needs, more than any other, restoration to the human brotherhood from which his act has severed him, and wise sympathy and help so that the punishment of his own remorse shall be remedial, sanative. As it is, we descend to the murderer's level by paying him back in his own coin, even if after due process of law's formality.

"I suppose that by a 'Divine command,' you mean the Biblical text, 'Whoso sheddeth man's blood, by man shall his blood be shed.' This is not a command that blood *must* be shed, but a statement of a probable fact of retribution inherent in the laws of things — a very different thing indeed! You know it is said, 'the devil can quote scripture to suit his own purposes!' So let us look on both sides of the question. I would remind you of another Biblical text: 'Vengeance is mine, saith the Lord, *I will repay*.' And there are the words of Jesus in answer to the retaliative spirit of 'an eye for an eye' — 'But I say unto you, Love your enemies. . . .'

"But I was not led to oppose capital punishment in the first instance by arguments; as I said, I had not thought about it any more than have others who unthinkingly support it. It was through a terrifying experience that I revolted against the very idea; and then all the argument, all the logic, the justice, the reason, the sense of human brotherhood, were so patently against it that I wondered why it had never so struck me before, like a bullet from a gun. Since then I have studied the matter in the light of the Theosophical teachings and am convinced that capital punishment is one of the gravest crimes of civilization, fraught with terrible consequences to the community that tolerates and practises it."

Impressed by the eloquence and earnestness of his friend, Wild asked him to recount the experience which made the idea of capital punishment revolting to him.

"Did you ever hear of the 'Black Jury 'which gained such unenviable notoriety in ------ some years ago?" said More. "Yes!" answered Wild. "I was living in the next State, and at the time had some business in the town where the trial was held. I well remember the sensation of its sequel."

"Well," said More, "I was a member of the Black Jury."

"You — !" exclaimed Wild, making an involuntary movement in his chair. "Why — I — I — " unable to proceed, he stared at his friend in blank amazement.

"Yes," answered More, "I was. And I can fathom some of the thoughts arising in your mind. The Black Jury is held in execration as responsible for what might have been a serious miscarriage of justice; and though it is now an old sensation, the Black Jury is supposed to have been composed of individuals unworthy the name of citizen. But the sensation was developed by the sequel. Apart from that, and its curious foreshadowing in 'popular instinct,' the case was an ordinary one."

Here he paused, noting the intent but divided look on Wild's face.

"Please go on," said Wild, "I'm interested."

"The details of the case do not matter now," continued More. "The accused was on trial for murder. The evidence, purely circumstantial, was dead against him from beginning to end. The defense was unsatisfactory. We were sworn to render verdict on the evidence. The judge's summing-up of course pinned us to 'Guilty or not guilty' on the evidence — and left us no choice. The verdict was 'Guilty,' and the prisoner was condemned to death in due form.

"That night I had a most terrifying dream which haunted me for many weeks. I dreamt I was being tried for murder, and was unable to prove my innocence. I went through all the forms of a legal trial and heard the verdict given—'Guilty.' When the judge was about to pronounce sentence it seemed as if the horror of it all annihilated me, and—I awoke. Bathed in icy sweat, trembling from head to foot, I lay in a state of nervous prostration in which wave after wave of horror swept over me. It was several days before I was sufficiently recovered to go about my business, and my sleep was broken for a long period. But from that night, having been in the condemned man's place, I conceived a horror of capital punishment which led me to search for a reasoned basis of opposition to it. You have mentioned the sequel to the case and I referred to its foreshadowing how, though no fresh evidence was produced to reopen the case, an agitation was started against the sentence; how popular instinct swept the State with a mammoth petition; and how the sentence was commuted to imprisonment for life."

"And the sequel was," said Wild, "that the man was innocent after all, the murderer confessing on his deathbed before a year had passed! So you were a member of the Black Jury! I must say I think differently of it now. And as for capital punishment — 'almost thou persuadest me.' An experience such as yours must have been very convincing. But you spoke of some 'Theosophical teachings.' I presume that in these you found the 'reasoned basis ' or philosophy for your inner conviction? I should be glad to have them outlined and to read the matter up. It is certainly a most serious question."

"First and foremost, then," More went on, " is the Theosophical teaching of human brotherhood: how each is an essential link in the great human family, learning the lessons of life and character through experience; through failures and mistakes, it may be, or even crimes. If my own brother were on trial I would spare no effort to establish his innocence, or to mitigate his punishment if adjudged guilty. So would you, or any man with a heart. Theosophy brings home this fact of brotherhood in such a way as to make it the corner-stone of life. Indeed Universal Brotherhood, of man and all creatures, is not only its cardinal teaching, but to establish at least the nucleus of such brotherhood as the pattern for succeeding ages is its entire practical effort. I must leave you to study this grand idea at your leisure.

"This brotherhood is based deep on man's essentially divine nature. But this divinity is evidently not yet realized. So we have the Theosophical teaching of the dual nature of man: a divine, immortal soul, dwelling in an animal body; that strange mystery, a human personality, being the battleground between the two, becoming more personal and animal when the lower, earthly nature predominates; and approaching nearer to the divine 'Heavenly Man' as the higher nature subdues, controls, and refines the lower. 'Know ye not,' says Paul, ' that ye are the temples of the Holy Ghost, and that the Spirit of the Most High dwelleth in you?' The so-called myth of the crucified World-Saviors is a literal, if symbolic, statement of the idea of the Divine Soul nailed to the cross of the animal passions and desires. Theosophy teaches that this divine soul is the real man and will redeem and make of its own godlike nature the individuality of all who will make the 'sacrifice' of the lower to the higher. This the individual man has to do, and the whole purpose of life is to lead him to 'the

moment of choice.' 'Be ye perfect, even as your Father which is in heaven is perfect,' the kingdom of heaven is *within you*,' said Jesus.

"Manifestly, in one life we contact only one or two phases of existence, and can at best learn but a few of the infinite lessons of the mighty Mother. So Theosophy teaches the reincarnation or repeated rebirth of the divine, immortal soul of man, the real man, throughout the ages of earth-life, the earth being his field of experience. Immortality must be endless — a piece of string has either two ends, or none; life and death being but the extension of the smaller life-cycle of day and night — the day and night of the soul."

"What determines the How, When, and Where, of this rebirth?" asked Wild, interested in what was to him a new range of ideas.

"Obviously everything has its 'appointed time'; or, as Emerson has taught the western world in part, everything runs in cycles. Cyclic Law is one of the main teachings of Theosophy. Under this law every manifestation of Being: life, energy, consciousness, having its roots in the unseen, the 'subjective,' emerges, in its cycle, into visible, objective manifestation; it has its beginning, middle, and end — infancy, youth, old age — completing the other half of the cycle in the unseen: night, sleep, 'death.' There is no *death;* all is Life, transforming itself from passive to active, subjective to objective, and back, in its cyclic journey from inner to outer and back again to inner planes of being. Of the various 'planes' of being Theosophy gives a coherent and convincing philosophy.

"But that is as it were only the machinery of Reincarnation. The moving power, the twin doctrine to Reincarnation, is known in the Theosophical philosophy as Karma, or the Law of Cause and Effect. This, more familiarly, is Emerson's law of 'Compensation'; or more simply still, 'As a man sows, so shall he also reap.' Reincarnating from age to age, through Cyclic Law, determined by the Law of Karma, set in motion by human acts, the divine soul of man reaps in mortal lives of weal or woe 'the Karma' of all past thoughts, words, and works of its fleeting personalities. Another way of stating the Karmic Law is that it is the Law of Action. 'Action and reaction are *equal and opposite*' is a fundamental law on all planes of nature. One's 'Karmic results' (good and bad, note) may manifest on any or all of the planes of human life or character and thus is explained the otherwise insoluble riddle of the contradictions in human nature."

"I can understand that there are, must be, 'inner planes' of life

in Nature. Does man partake of this complexity, and how?" asked the listener.

"I am necessarily giving but the briefest outline of the Theosophical teachings (which include the whole of Nature in their scope) in order to put the case against capital punishment clearly from the Theosophical standpoint," replied More. "I was coming to the point of the constitution of man himself. We have seen that, broadly speaking, man is dual in his make-up: the higher, immortal nature, and the lower, perishable, personal, animal nature. The complete man, according to Theosophy, is sevenfold in nature: three ' principles ' belonging to the higher (triad), and four to the lower (quaternary). Man not only 'partakes' of the sevenfold constitution of Nature, he is in himself an epitome of Nature, and his full perfection will include knowledge and mastery of all the planes of his own being, and through that of greater Nature. It will help you to fix the sevenfold constitution of man if you recall the seven colors of the spectrum, the seven notes of the musical scale, and the sevenfold classification of the chemical elements in Mendeleyef's table. Other 'sevens' will occur to you later.

"You now have the framework: Universal Brotherhood; the Divinity and Perfectibility of the Divine Soul of Man; the law of Reincarnation, Rebirth, or Re-embodiment, universal in Nature; the law of Karma, also universal; the Cyclic Law of the whole universe; the sevenfold or 'Septenary' constitution of Man, and Nature; these are the essential outlines of the Theosophical teachings.

"Thus — to go back a little — an erring brother is a divine soul temporarily switched off the path of duty and self-conquest, blinded by desire, ambition, hatred, or any of the many shadows that beset human life — and offer opportunities of mastery."

"So far, good," said Wild. "These ideas seem to me to open up vistas of new and elevating thought, which I thank you for introducing me to. I understand they are necessarily brief and general. How do they apply to the case of capital punishment more particularly?"

"You will see, of course," resumed More, "that for men who do not even profess to have knowledge of man's nature and destiny, and particularly of his after-death state, to cut off another soul, however erring, from its experiences (always, remember, brought about by the operation of Karmic law along the line of its own acts) is a very serious matter, involving grave and inevitable Karmic consequences to themselves. Even by our errors we see deeper into life; a great mistake will often reveal to a man heights and depths which bring him very near to great possibilities."

"Yes!" said Wild. "How often is it said: 'Well, I shall never make *that* mistake again!' But go on please."

"True," observed More, " and the greater the mistake the greater the recoil of the lower nature, and of the opportunity under wise treatment of once and for all facing the weakness, and mastering it for ever — though of course the Karmic effects would have to be reaped, at-one-ment made, in this or another life. We all know people who have ' a perfect horror ' of some one thing or another. Such things are probably recent karmic milestones, the record of some great shock."

"It is not necessary to our present purpose to go deeply into the Theosophical teachings on the septenary nature of man. Nor will I use the Theosophical names for the 'principles.' Like all religions, sciences, arts, and even trades, Theosophy has a technical phraseology, a complete terminology, to use which would but confuse one not familiar with it. You will find it in its place in Theosophical literature. In the modern schools all man's nature not his body is lumped together under the term 'psychological.' This is more familiar and will serve well enough if we remember that it belongs to the *lower*, perishable man only. Apart from Theosophy, and some vague and misunderstood 'religious' ideas, the notion of man's higher nature is not current today.

"Broadly, then, as to this lower, perishable nature of man, divided for our purpose into physical and 'psychological': just as the physical body belongs to and is taken from the great earth-reservoir of matter, is indeed 'dust of the earth,' and when done with at the close of each earth-life is resolved 'ashes to ashes, dust to dust,' so the 'psychological' portion of the lower man is part of the great 'psychological' ocean of earth life. The average man of any age thinks, feels, and functions as the age. His impulses, good and bad, are mostly mere drift-wood, so to say, from that ocean. The case of the petition against the verdict of the Black Jury is in point, an example of good 'crowdpsychology.' A few, those in whom the higher nature is awakening, are always in advance of the mass and doubtless originate the waves of good 'popular instinct,' as the powerfully evil few doubtless originate evil tendencies which sometimes sweep the mass of men blindly on. The 'psychological attributes' of the mass of men, just as their physical dust is, are resolved back into the great ocean at the close of life,

impressed with the stamp of their characters. And as the physical form persists for longer or shorter periods after death, so does the 'psychological form' (and also the other, more subjective, forms, for each and all of which Theosophy has definite names and teachings) persist for a while. As each physical body is a congeries of energies which will run, barring accident or disease, for a certain number of years, largely determined by heredity, environment, habits, and character, so the 'psychological body,' being in tune with the physical (which is actually the expression of the former), lives, grows, persists, and perishes *pari passu* with the physical, with this difference: that *it will run its natural term, or cycle, even if divorced prematurely from its physical envelope*.

"We have agreed that a murderer is insane, and doubtless will that his insanity is of a peculiarly intensified degree. In the state of mind immediately following the crime a murderer is even less ready for dissolution than was his victim. His 'psychological body' is in a very disturbed state, with all its lower tendencies extremely accentuated, and with a terrible karmic load; he is literally 'out of his mind.' Imagine then, if you can, the effect of capital punishment in liberating such an intensified mass or center of evil psychological forces into the atmosphere of earth-life, to be contacted by the weak, the morbid, the mediumistic, those who have lost self-control, or who are passionately harboring revenge!

"Now, presuming that Theosophy satisfactorily fills in the details of what I have thus briefly outlined to you, with a perfectly consistent philosophy, you will easily see, as I said at the commencement, that capital punishment is one of the gravest crimes of civilization, fraught with terrible consequences to the community that tolerates and practises it. And you will understand why Katherine Tingley and her Theosophical students the world over oppose it and seek to have it abolished from the statute-books of all countries."

"And I am with you," said Wild. "This very interesting talk has enlisted my sympathy. In our next conversation you might tell me something about the practical efforts you spoke of to establish a nucleus of universal brotherhood. Theosophy seems to have the merit of going straight to the point of getting its teachings realized. Though I do not fully understand all you have said, and foresee some difficulties, that may be only because it is new to me. But your outline is very illuminating, and eminently reasonable. I thank you."

LEARNERS: by Winifred Davidson



F you wish to find the way to knowledge there is choice before you of several directions. You may seek the company of the great, going along with them; you may ask questions; you may study books; or you may find a duty that holds you so close to an unarriving treadmill of action that you cannot help meditating upon and being illuminated by the limitless paths of the bright stars.

One who sits down humbly, like a little child, at the feet of the wise, will absorb the qualities of his high companions and come to know and use their words, their habits of thoughts, their very niceties of manner. We are all imitative. We have become what we are largely through following example and precept. Before we acquired accurate penmanship we copied, perhaps many times, the pages of the writing books; so the ways of our leaders have been set before us, and so we follow them, painstakingly, until we know the Law.

There must be humility in the company of the wise; no mockery, no hypocrisy, no groveling; but sincere humility. Perhaps the child learns easily because it is lowly-minded in the presence of its teachers, awed somewhat but ever loving and reverent.

Asking questions is a means. Indeed, we must go questioning along all roads to enlightenment, like the mendicant with his bowl. That my dish is empty, that I do not know the answers to my own questions (my hunger of soul) does not argue emptiness on the part of others. Yet, ordinarily, the one who asks many questions approaches the boundary posts of Boredom. We recognize the child's right to his whys and wherefores. The adult's we dispute. The grown person puts a question at his own risk. None the less, a question well asked has been known to bring a true answer. He who goes questioning ought to grow intuitive, to know the moment when to ask, to know when the answer had been given, and to know when not to ask.

Again, one may read the books, searching for that which is needed Somewhere between the covers of a printed book, or to be known. within the symbols of nature, or behind the manifesting Laws of Things, may await your answer. It does await you, you are sure; and that you shall find it you are more than sure, at times. If you are seriously determined to find out something really worth while, one of the Eternal Facts, your seriousness is a signal to those who are watching your progress that you are ready to use the information with profit. Then suddenly your opportunity to learn comes. Down

from the sky, up from the hollows, on the wind, the rain, the starshine, it comes. It is yours now. You know something that a moment since you did not know.

But the best of all means of learning comes while daily following the duty-path. You may choose to do your duty first and last and at all times, and so find yourself growing luminous, almost, because of the polish that the daily grind communicates. By doing service, say the books, putting this way first for emphasis; somewhat as if service were the royal road, the time-saver, the briefest short-cut to attainment.

Duty-doing has palled perhaps because it is an admonition that enters into all the old-fashioned precepts. Yet the actual doing of the duty, to the actual doer of it, is as interesting as an unwrapped gift at holiday time.

Few of us do our duties. In a community of the law-abiding, such as faithful parents and obedient children, the percentage of sted-fast duty-followers is always small. The truth is that few know their duties; and how can they perform that concerning which they have had no instruction?

How can I make straw hats if I have not learned straw-hat making? I can guess at methods, but until I learn that trade, my business is not in the straw-hat shop. Neither would it be mine now to make straw hats, if for good reasons, I had given up that work for some other. I am released from that old duty. I am in another place and must give attention to new rules that during my hat-making experience did not govern me.

Is not this precisely the situation concerning one's duty, on the lower levels of every day, where "Do your duty" means to attend to your own affairs; to mind your business and turn out your work?

Are there many who can and will do this? Rarely will such be found to be the case. Those who adhere strictly to this elementary kind of duty-doing are few. Yet we know that through this lowly devotion to the day's work many a brave man and woman has gained wisdom. In the end they found awaiting a crown made of the years and the hard work, and were astonished to find it glistening with jewels of knowledge.

Alongside of this there is another path of service. The road is double, perhaps. By this Wisdom herself must travel, and none can tread it without soon overtaking her. William Q. Judge was speaking

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of this path when he made the strong statement that "There must be in us a power of discernment, the cultivation of which will enable us to know whatever is desired to be known."

Discernment? Is duty discernment? Is the cultivation of the power of discernment the chief duty, the first duty?

At least, if we judge from the lack of discernment displayed by speech, manner, attitudes of mind, appetites, bearing, tastes, likes and dislikes of the most of us, the acquiring of discernment is one important duty.

Might we not perhaps quickly overtake Wisdom by making good use of this hint from our wise Leader William O. Judge? Without it we may be very like those who, not finding the key to the gate-lock, jump the fence and feel free to jump out again, at pleasure; with it, opening duty's portals ceremoniously (that is thoughtfully) we shall remain inside, because we shall find there awaiting us the company of the wise, the study-books needed, the answers to all our questions, as well as minute instructions to be followed. We must be learners.

THE COD: by Percy Leonard



HE flesh of cod is so nourishing, cheap, and abundant, that he has been appropriately called "the bread of the sea." Every particle of the cod is useful to man. From the skin and the bones we make glue. The swimming-bladder furnishes isinglass. The oil pressed from the liver is a valuable medical food. The dried heads serve as fodder for the Norwegian cows and the roe makes a splendid bait for other cod. The very bones when dried, are used as fuel in the Arctic regions and everything unfit for higher purposes may be dug into the soil as a fertilizer. The flesh itself, dried, smoked, or salted, finds its way to all the corners of the earth.

From February to May is the season for the laying of the eggs and females have been known to contain as many as nine millions! Fortunately the eggs occupy so much space that the mother is almost incapacitated from feeding until she has got rid of them and in consequence she escapes the fisherman's hook, and saving her own life, she saves her prospective family, a single family which considerably outnumbers the population of Canada. The eggs being lighter than

brine float upon the surface and thus are exposed to the genial warmth of the sun. When hatched the small fry grow rapidly and in two years arrive at the stage at which they are able to breed. The motherlove of a cold-blooded codfish we may suppose to be a very luke-warm affair at the best and when it has to be divided in equal shares among nine million codlings, the dividend is scarcely worth the having. In fact the mother makes no pretence about caring for her numerous offspring, but leaves them to shift for themselves entirely. A large part of their food-supply is derived from relations smaller than themselves, and a great proportion of the exciting incidents of their earlier days might be classified as " narrow escapes from ravenous relatives." But for the heavy mortality among infant cod it has been calculated that their shoals would completely fill the ocean in a very few years.

A cod will swallow almost anything dropped into the water, the anchors of big steamers being only protected by their size. Scissors, books, ducks, turnips, cartridges, tallow candles, and even old boots have been recovered from the undiscriminating stomachs of captured cod. A captain in the North Sea once lost his keys over the vessel's side; but they were subsequently found inside a cod and forwarded to their owner. This "snapping up of unconsidered trifles" is no evidence of stupidity on the part of codfish. The instinct that prompts him to engulf all loose articles found in the waves without inquiry would probably serve the cod well enough in a state of nature. It is only when man steps in and complicates the situation by introducing novelties, that the natural instinct of the fish is found to be at fault. Besides, a codfish cannot stop to analyse, hardly even to examine the articles on which he feeds. Unless they are promptly snapped and swallowed it is only too likely they will be secured by some hungry companion whose eagerness for eatables overpowers the promptings of his better nature.

Codfish are sometimes captured that are suffering from blindness, and curiously enough, others exhibit all the symptons of *rickets*. These latter frequently have humped backs. The largest cod ever caught in American waters, tipped the scale at one hundred and sixty pounds; but the average weight of those taken in nets is between three and four pounds. The severest drought never affects the animal harvest of the cod fishery, and however hard it may rain, he is never driven to seek shelter for fear of getting wet. Is it not his element? LIES: by W. D.

HENCE come these lies? What is their use?



One day I walked into that self that I had been calling myself. My astonishment was so great that I could not at first believe my own sight. I had seemed powerful and strong — and saw before me only large emptiness; I had seemed true — and saw there a combination of clever appearances,

seemings-so, and not-quite-realities. On my shoulders lay a bag full of my own and others' patched-together lies and demands for more lies. The road I was traveling was wearisome.

As I scrutinized myself, its bigness shrank and its burden toppled over its head and burst into rags and tatters. Then cautiously I and my small self picked our way out of the disorder and unpleasantness, and, within the hour, looked into the kind eyes of Truth. And so we have been going, a few little steps, a few little steps, a few little steps, happily along with her.

Thus fancifully let me say how Theosophy and Râja Yoga affect the lives of the sincere. The learner must come to see Truth — verily the Truth. He may not guess. He must know. And two horses will give him trouble. It is this way: however skilful he may fancy himself in springing from the dark horse to the light, the time always comes when he fumbles his bundle of lies into Truth's place. And then ——!

Answering the questions: Lies spring up out of corrupt soil. Is there any doubt of that?

The use of lies is, to the user, that he may seem what he is not, and through his seeming-to-be, gain that which he might better never have coveted. Were it diamond crystals, in his hands they would become only destroyers of plate-glass.

A lie is a gross foul thing that divides itself a thousand thousand times and goes wriggling here and there, poisoning the earth and its waters; borne on the clouds of heaven, it pollutes the airs; and would spring up into the beams of the Sun Himself, but that it cannot!

Whoever touches Theosophy and Râja Yoga has looked upon the glowing face of Truth itself; and if some fall back, scorched, what can be expected other than that they will bind up the smarting places with their tagged and tattered lies, and go blindly forth seeking comfort where it is not? Is not self-justification a treasured vice?

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SCIENCE NOTES: by The Busy Bee

WHAT IS SOUND?



CORRESPONDENT to a scientific periodical propounds the question, "Is the old theory that there is no sound unless there is some one to hear it. correct?" - and is answered that the above statement is a psychological one. The problem involved in this question and its answer may be described as etymological; for the word "sound" is used in various senses in our language. First of all, it means a sensation; and, taking that meaning, the above statement is evidently true. Next, it means the cause of such a sensation, or the causes, or some of the causes, or the alleged causes; and in this sense the word is used in science to denote an ill-defined category. We can say that a tuningfork emits a sound which we hear, implying by our statement that the sound and the perception thereof are two distinct things. In the ordinary phrase, "I hear a sound," the word " sound " may be defined grammatically as a cognate object, as in the phrases, "I dreamed a dream," or "I slept a sleep." Again, the word " sound " is sometimes used to denote a theory or a branch of science. The answerer of the above query says that to the physicist sound is "such a rate of vibration of ponderable matter as is able to excite the auditory system." Sound, in this sense, is therefore an abstraction; it is a rate — a rate of vibration. The physical theory of sound is that the particles of physical materials, when they oscillate in a particular manner and degree, are able to arouse in our minds, through sympathetic vibration of the tympanum or adjacent parts the sensation familiarly known as sound. The particles of matter can be made thus to oscillate by mechanical means, such as a blow.

The psychological part of the problem is not explained by science. How is the vibration of our tympanum and adjacent parts translated into a sensation? This difficulty, which is encountered in connexion with all the other senses, seems great enough to dwarf the importance of the other explanations; one is reminded of the "celestial railway" in a modern "Pilgrim's Progress," which conveyed passengers as far as the river of death and then dumped them; the engineer said: "We do not go any farther."

Evidently this problem takes us beyond the limits of physical science. The question then arises: To what branch of inquiry does this question belong? Where among extant means of information shall we seek for an answer? If science cannot furnish one, should we try any religion or church? Echo answers: "Scarcely!" If science does not reach up that far, religion does not seem to reach down far enough; the problem lies in neutral territory between the two. Let us inquire for a guide in this territory; and though we may be introduced to several different *-ologies*, we shall fail to find one that will tell us definitely how vibrations in the tympanum are turned into the charms that soothe (or otherwise) the savage beast.

It might be suggested, as a hint towards a possible explanation, that perhaps the vibrations of the tympanum, nerves, etc., excite vibrations in the *mind;* and between the mind and the body we might interpose a chain of intermediate links, passing from solids to fluids, thence to essences and ethers, or from molecular vibration to electronic vibration, and so on; throwing out, as it were, one arm of a bridge, in the hope of being able eventually to join it to the other side.

Most interesting is this debatable ground between mind and matter, mind getting more concrete, matter more refined, until they meet. Science has lately taken us farther into the regions of refined matter. But the field of inquiry, as from either end we approach its middle, lies within the human being, and we find that we are studying Man. Here, then, is an answer to the question asked above — the solution of the problem is to be sought in the science of self-knowledge.

But unless we are to plunge into the futilities and imbecilities of psychism and similar fads and superstitions, we must observe the conditions which ensure the safe and profitable pursuit of this science. "Self-knowledge is of loving deeds the child," is a maxim that means we must begin the study of this science from above, in order to preserve the balance of our nature; for the study of the finer forces in man arouses latent energies more potent than we are able to control until we have prepared ourselves by self-discipline.

Reverting to the question of the meaning of the word "sound," let it be said that in Occultism, as H. P. Blavatsky says in *The Secret Doctrine*, the word "sound" is used to denote a definite and actual *something* that exists. We have just seen that in physics it denotes an abstraction — a vibration or a certain kind or degree of vibration. Physics does not know of the existence of any independent entity which could be called "sound." It is the same with other conceptions entertained by physicists; thus, "heat" is an abstract noun standing for a certain condition of physical matter; "force" means another condition; and so on. But it is shown in *The Secret Doctrine* that these terms were used in certain ancient sciences to denote entities, and the author so uses them in her exposition of some of the teachings of Occultism. In other words, there is an actual something in nature which may be called "sound"; and it is this something that is the cause of the vibrations which physicists call sound, and of the sensation which psychologists call sound.

If sound is merely an effect, then all the marvelous fascination of music must be assigned to a cause that is casual and fortuitous, and the same must be said of the power of speech. In short, our philosophy is standing on its head. When a man speaks, the idea comes first, then a mental sound, and finally the physical sound; and this would seem to be the more logical sequence of events. It may be suggested that the molecular vibrations of a tuning-fork produce sound; but on the other hand sound will set a tuning-fork in vibration. According to the Occult teachings, sound can exist on many different planes, and physical sound, audible to the ear and carried by physical matter, is the lowest and grossest manifestation of this manifold cosmic potency. John Worrell Keely, of "motor" fame, hit upon some of the lost mysteries connected with the power of sound, but was fortunately not able to communicate his power to a world in whose hands it certainly would not have been safe. Sound is connected with the intra-molecular energies stored up in matter; and these energies are believed by physicists to be enormous. If any ancient civilizations knew how to avail themselves of such resources, this might explain how they were able to accomplish such results as the transporting and setting up of colossal monoliths.

THE MOON'S RELATION TO THE EARTH

It is an old theory of modern astronomers that the moon was once part of the earth and was thrown off therefrom in accordance with supposed laws of the formation of satellites; and this theory is still being worked upon. It is stated that Professor Pickering assumes it as a historical fact and is calculating the effects produced on the earth by the loss of this supposed offspring. It is well, therefore, to repeat the teachings of the Secret Doctrine on this subject, for they are destined sooner or later to be verified by science.

The moon never was thrown off from the earth. She is the mother of the earth, and the earth is her progeny. Yet this does not mean, as might at first be supposed, that the earth was thrown off from the moon, in the way in which Pickering supposes the moon to have been thrown off from the earth. Neither idea is true; there was no such transference of physical substance from one to the other. And it is only in a physical sense that the moon is a satellite of the earth; in every other sense the earth is the moon's satellite. The moon transferred all her life-energies to the earth, and remained but a cold residual shadow. This shadow, a dead world, in which rotation has almost ceased since the birth of our earth, is dragged after its new body, which it is doomed to follow. The influence of the moon upon the earth is very great, causing the tides and promoting vegetation; but it is not wholly good, for it emanates from what may be called a living corpse or vampire.

These are some of the teachings of the ancient Secret Doctrine, as gleaned from the pages of *The Secret Doctrine* by H. P. Blavatsky; and the numerous beliefs and superstitions regarding the moon and her influence are traceable to this ancient knowledge. The chief importance of these teachings is derived from the fact that there are very intimate analogies between the heavenly bodies — especially the sun, moon, and earth — and man; a fact which will be understood by astrologers. In studying the Secret Doctrine we study the macrocosm and the microcosm together, interpreting each by the aid of the other. The earth, sun, and moon have each its correspondence in the smaller universe of the human constitution; and a correct knowledge of astronomy is intimately bound up with right ideas concerning the interrelations of our own powers and faculties.

DISEASE GERMS

A WRITER in a scientific paper makes this remark:

If reasonable grounds were found for assuming disease germs had each a spirit, what a solid support it would be for diabolical possession.

It might be argued that the difficulty of assuming that it *has not* a "spirit" would constitute reasonable ground for assuming that it *has.* The disease germ is a very capable entity. One might just as well call it a devil as anything else; and, as to possession, it certainly does possess its victim fairly well. We speak of a single disease germ for convenience, for it does not signify, since one germ is enough to do the work; it has only to multiply, and in this it is as efficient as in other respects. Therefore, if it is a speck of inanimate matter, it is a very competent speck. It is interesting to let the imagination run on the idea that a disease germ is ensouled. In that case one would suppose that its soul would infect or obsess our soul, its mind would infest our mind. Thus the psychical and mental concomitants of the disease would be accounted for. And perhaps if we kept our minds immune, the germ would not be able to anchor in our bodies. This might explain why we sometimes catch cold and sometimes do not; and why some people can drink bad water with impunity while others succumb to the slightest thing.

Germs seem to be more vicious at some times than at others — like their bigger brothers the mosquitos and the fleas. They are more than usually charged with venom, as it were. Perhaps these germs have stronger souls, keener intellects. The bodies of germs are bred in filth, and one supposes the souls of them must be bred in similar circumstances. A soul is a thought, so possibly the souls of the germs are bred in impure thoughts. This would explain the supposed connexion between wickedness and calamitous visitations. Possibly, after all, the ancients, when they spoke of devils, meant much the same thing as we do when we talk of germs; and where they said possession, we say infection. The practical results are the same — namely, that to be immune, we must keep ourselves clean.

AN ANTHROPOLOGICAL EXPLANATION OF FAIRIES

SOMETIMES an unpleasant medicine which cannot be swallowed alone may be taken down quite pleasantly by the aid of some vehicle or solvent. And it is the same with some awkward facts. Such facts may be stubbornly rejected for a long while, until perhaps somebody finds a suitable theory that will enable him to get the fact down.

The existence of fairies is a case in point; and we learn now that a prominent member of the anthropological section of the British Association has found that the fairies were "in a sense" real people. Though fairy women are usually described as beautiful, he says, yet *some* of the men are described as ugly, and fairy changelings are generally considered to be ill-favored and dwarfish. This is enough. The fairies were a dwarfish race of men, living mostly underground, hunters, of thievish propensities, inordinately fond of music and dancing, and so forth. Such then, according to this theorist, is the origin of the universal belief in fairies.

But a considerable stretch of the swallowing capacities is still neces-

sary if we are to get this theory down comfortably. First we have to believe in the universal diffusion of such a dwarfish race; and Theosophists would find it easier to accept that than most scientific men would. But no Theosophist, unless possessed of a dislocatable jaw, like a snake, would be able to swallow the theory that every people in the world has always agreed by a tacit conspiracy to call swarthy dwarfs fairies and to describe a race of men in the way in which the fairies are described. This theory, too, if it explains what it is meant to explain, explains also a good deal more than it was meant to explain; and it may not be so easy to turn it off and on to suit convenience. What about giants, for instance? To what belief would they give rise? To a belief in genii, presumably. And then take animals; primitive man, seeing an animal, would naturally suppose it was something supernatural and would proceed to weave legends of romance about it, and in this way perhaps arose the belief in dragons and griffins. (!)

Altogether it is easier to believe in the fairies as described than in such weird and wonderful theories.

It is surely quite possible that fairies at one time existed and no longer do so — not among the haunts of civilized man. Read the descriptions of the good folk and their doings, and ask yourself what object they could have among us of today. We have driven away quite a number of things — animals, plants, etc. — and in our big cities we bid fair to drive away most natural objects and replace them by inventions. Judging from what is said of the good folk, they would naturally have fled long ago to climes and associates more congenial. So here is one hypothesis to begin with: that there may have been actual fairies (not swarthy Bushmen) at one time among men. And the same may apply to other things that ancient writers talk about, such as nymphs and the various *genü loci;* beings which, supposing they ever existed, might well flee from the smoke of a locomotive or the haunts of civilized uncleanness.

But the people of today are far too superstitious to be trusted with any information about fairies. They would be sitting around tables and putting tests to the fairies and getting responses by automatic writing, and so forth. And we should have societies with big names and professors advertising in the papers. Nevertheless Nature doubtless still has her treasures ready for the sympathetic and appreciative eye. Our scrutinizing science observes the external effects, dissects

the outer structures, and classifies the parts; but the causes and intelligences at work in Nature can only be guessed at, unless we have the eyes to see them. "Howbeit this kind goeth not out but by prayer and fasting" — or, let us say, by devotion to truth and by self-restraint.

HIGH TEMPERATURES IN TECHNICAL CHEMISTRY

THE highest temperature reached for general technical purposes in a fuel furnace, says a writer in *Merck's Report*, is 1800 C., the melting-point of fire-clay. With the oxyhydrogen flame 2000 C. is reached, equivalent to 3600 F. By means of this latter heat artificial rubies are made, so perfect that they cannot be distinguished from the natural gem. A solution of alum, with a trace of chrome alum, is precipitated by ammonia, and the resulting aluminum and chromium hydrates are dried, calcined, and ground to a fine powder. This powder is passed through the flame of the oxyhydrogen blowpipe at 2000 C. The same flame has enabled laboratory vessels to be made out of quartz instead of glass, of such quality that they will stand any heat and can be plunged while white-hot into water without cracking.

Thermit is another means of producing a very high temperature. It is a mixture of aluminum and iron oxide, which is touched off by igniting a small quantity of a mixture of magnesium and barium peroxide placed in contact with the thermit. The aluminum then combines with the oxygen of the iron oxide with evolution of heat at an enormous temperature. The great evolution of energy which thus takes place when aluminum combines with oxygen corresponds to the great amount of energy that is required to break up alumina into aluminum and oxygen. Thermit is invaluable in welding, especially steel rails. Other similar mixtures have been tried and experiments are still being made in this direction.

The oxy-acetylene blowpipe flame reaches 3482 C., and is used for cutting up large masses of iron and steel. Its little luminous pointed cone eats its way through the steel like a string drawn through cheese and accomplishes tasks beyond the reach of mechanical means.

Moissan's electric furnace reaches a temperature of 3500 C., and stops at that only because the carbon electrodes have their boilingpoint at that temperature. Utilizing the power of Niagara Falls to generate the current, we can thus make carborundum, calcium carbide, and artificial graphite, and can extract the most refractory metals. But its most interesting use is in the manufacture of artificial dia-

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monds. Pure carbon is vaporized and dissolved in boiling iron in the electric furnace, and the mass is then plunged into water. The enormous pressure caused by the sudden shrinkage of the iron makes the carbon crystallize out. The iron is dissolved away by an acid and the diamonds are left — microscopic in size, but true diamonds.

THE VORTEX THEORY OF ATOMS

VORTEX motion in liquids is the subject of a series of papers now running in a scientific contemporary. It will be remembered that Lord Kelvin, J. J. Thomson, Balfour Stewart, and Tait, and others, have investigated theoretically the properties of vortical motion in an ideal "perfect fluid," and experimentally the properties of such motion in actual fluids, notably the air. In the experiments, a box is taken, a circular hole made in the bottom, a diaphragm stretched across the lid-opening, the box filled with smoke, and the diaphragm patted; whereupon there issue from the hole smoke-rings like those emitted by the pouting lips of the tobacco-pipe expert. They are shaped like a curtain ring, but their component particles are in rapid motion around the circular axis of the ring. This motion endows the rings with a power of rapid locomotion, so that they rush across the room with a speed altogether unlike the usual slow progress of smoke through air. When they approach the opposite wall, they stop short and swell. If one ring be sent after another, it goes through the first ring, then expands; and then the first ring in its turn goes through the second. These and other interesting properties are deducible from the peculiar intestinal motion of the rings. The theoretical interest lies in the considering of what would happen if such vortices were to exist in a "perfect fluid" — an ideal fluid whose particles are supposed to move without mutual friction. Such a vortex could never be created by any conceivable mechanical impulse; nor, if once created, could it ever be stopped. Hence we should have something analogous to the supposed atom of matter, uncreate, indestructible. Further, the mutual attractions and repulsions between these vortices would imitate the similar actions attributed to atoms. This is the vortex theory of atoms, and is very convenient, provided that we are granted our perfect fluid. The question of the structure of this fluid is still unsolved, but perhaps it in its turn is composed of vortical atoms in another and still finer fluid; and so ad infinitum!

Professor J. J. Thomson showed that a chain composed of simple

brass links, like that on a Swiss clock, could be hung on a vertical wheel which was made to rotate with great velocity; and that then, if the chain were struck in one part, a dent would be made in its catenary, the dent remaining in the same place while the chain itself flowed around the dent. Finally the chain could be struck off the wheel and would then bounce along the ground like a stiff hoop. This again shows how a fluid substance in rapid motion behaves like a rigid solid, and it helps us to understand how our apparently so rigid matter may after all be very fluid. We may also recall experiments made with jets of water issuing under enormous pressure and with consequent enormous velocity, so that they will turn a sword. These experiments and the reasoning therefrom are interesting as showing how the properties of solids can be referred to motions in a fluid; but we still need two primary factors which may be called motion and mass.

ELECTRO-MAGNETIC CREATIVE FORCES

PROFESSOR BIRKELAND, who has been studying the aurora borealis at his observatory in the Finmark, is about to publish a book giving his ideas about world-formation; and this will be an illustration of the way in which electric and magnetic forces are now being called upon in place of the former mechanical and gravitational theories. He holds (according to a report in a Swedish paper) that magnetic and electric forces have played an equal part with gravitation in the formation of worlds. Around each heavenly body there acts a primordial directing force which is of an electromagnetic nature. This power was operative at the formation of the worlds, it has helped to shape the planets and after them their moons. These forces explain to us also the movements of the planets, the reverse motions of some of the satellites, and other astronomical phenomena. The professor has set up a large searchlight at his observatory, with which to study the opaque parts of the aurora; and he expects thereby to obtain confirmation of his theories as to the connexion between the aurora and the cathode rays in those high regions.

As to the mechanical theories, it may be said that in assuming gravitation, the theorists assumed a great deal; for gravitation is thus left without an explanation, and no explanation can be found for it in terms of the atomo-mechanical theory. It becomes reduced by that theory to an occult influence acting across void intervals. But it seems that even assuming gravitation we cannot explain all the celes-

tial phenomena on mechanical principles, and that there is therefore an opening for the electromagnetic forces, the cathode rays, and other recent discoveries. Besides, it is necessary to find these new forces a rôle in the universe. Thus we have proceeded from gross physical matter to finer kinds of matter, the latter being as steam-power to the former; but it is neither logical nor likely that we should stop there. There is still plenty of room left for the operation of intelligent beings; and an analysis of motion must sooner or later lead us back to mind, the cause of motion.

DESTRUCTIVE AND CONSTRUCTIVE SOIL-BACTERIA

SCIENTIFIC agriculture is coming to be more than ever a question of bacteria. There are two main classes of these: those which extract nitrogen from the air and convert it into plant-food, and those which decompose nitrogenous materials and set the nitrogen free as gas. The latter kind are of course wasteful of nitrogen. The rapid deterioration of some rich virgin soils after a few years of pioneer farming is considered to be due to the presence of these bacteria. Mr. A. D. Hall, F.R.S., Director of the Rothamsted Experimental Station in England, in a recent Royal Institution lecture, divides agriculture into three stages: the pioneer stage, when the virgin fertility of the soil is exploited by skimming methods; a stage when a regular rotation of crops insures a permanent but not very high average production; and intensive farming. In the second stage the land continues to vield its average for centuries, the nitrogen taken out by the crops that are removed being replaced partly by the clover and turnips that are not removed, and partly by bacteria of the fertilizing kind which flourish in the decayed vegetation. Highly intensive farming turns the soil into a kind of laboratory; its natural resources are not drawn upon, but it serves as the medium for turning manure into crops. But waste comes in through the fact that the destructive kind of bacteria are speeded up, so that only a fraction of the nitrogen introduced into the soil goes into the crop. This was ascertained by analysis, which showed that a large part of the nitrogen added in the fertilizers was unaccounted for, as it did not go into the crop or into the soil. The problem, therefore, is to find out how to promote the right kind of bacteria without speeding up the destructive ones. Mr. Hall refers to some experiments with anaesthetics such as chloroform and toluene, which had this effect when tried on the small scale.