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ELTKA

A MAGAZINE

EDITED FOR THOUGHTFUL PEOPLE

Psychology and
Psychic Phenomena

Physical,
Mental, and
Soul
Culture

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The chapter headings, condensed, are as follows:

PART ONE.—1. Introduction, Scope and Aim of this Science. 2. Mind. Materialism, Idealism. The Universal Intelligence. 3. Inspiration. Duality of Mind Theory. Self-conscious and Sub-conscious. 4. The Will. 5. Intention. The Universal Will. Concentration. 6. Confidence. Positive and Negative People. 7 and 8. Hypnotism. 9. Suggestion. Rapport. 10. Suggestive Therapeutics. 11. Magnetism. 12. The Power of Thought. 13. Personal Magnetism. Self-mastery. 14. Thought Transference. 15. Telepathy.

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Vol. V

APRIL, 1903

No. 28

Life Is Activity.

By O. O. Burgess, M. D.

If existence were possible in a state of absolute rest, there would be no need of the universal compensatory rule that existence in any one form can only be held at the cost of existence in other forms. There is, however, one all-important exception to that rule which serves but to establish its validity and to illustrate what may be termed the supreme law of compensation: While that activity which is eternal life gives birth and life to every other form of existence, it also sacrifices them all in turn to the support of itself.

A glance at the evolutionary development of mind shows that while the earliest departures from that which is ultimate carry the weakest intelligence, yet intelligence steadily and progressively expands until it reaches culmination in the human mind—which is an end product and a return to the point of departure. Therefore, Mind is the ultimateness in which all things have beginning and end.

Now it is in human mind that for the first time is seen capacity, and commonly opportunity, for the acquirement of personality—of a conscious selfhood, which is imperishable

because it is an inseparable part of that ultimateness which is Eternal Mind. Every form or condition of existence is in one sense a part of that ultimateness; but because all except the human mind are not really ultimate but composite, they are neither self-conscious nor exempt from destructive change. Compositeness, the starting point in materiality of form—such as that, for instance, which begins in the monad and ends in man—has no place in mind be it human or supreme. Nevertheless, it is under material conditions that the initial step in the soul's career is always taken. Everything that pertains to human existence begins in a mere speck of protoplasm out of which is developed the physicality which is the body and the mentality which is the soul. The true entity, the real man, is the mind, the soul. The body serves only to supply conditions under which the creation and objective development of the soul may take place. With a beginning like this it becomes clearly evident that, while the soul possesses individuality from the start, its personality must be largely acquired afterward through experience. Its life begins as a mere point of potentiality—a capacity for development; and should its physical relations happen to be destroyed before the oncome of experience sufficient to the creation of at least a beginning of personality, then it would rest with the future life to develop a personality beyond the limits of a mundane experience. Conditions like these are fatal to theories of pre-existence and re-incarnation. That a mature soul entity could ever retrograde to the requisite point of beginning and usurp the place of a nascent soul is both logically and physically impossible. It is well to note in this connection a recent saying of Ambrose Bierce to the effect that while we have a plenty of what purports to be intelligence from the Hereafter of souls we have none whatever from the Heretofore. There are primary and essential properties of eternality which

lend some color to the claim that evidence sufficient to disprove pre-existence and reincarnation of the soul would be quite as competent to prove that it can have no future existence. But in this instance truth of the premise does not establish truth of the conclusion. A self-conscious state or condition permanently established as an intrinsic element of that which is everlasting is itself everlasting also.

That the soul is mind is too obvious for comment; and that it is constituted of that phase of mind best known as the subjective is become an unquestionable fact. For ample proof of the verity of this statement the reader is referred to the learned and able treatises of Thomas J. Hudson, LL. D. and to the forthcoming volumes of the late Frederick Myers, posthumously edited and supplemented by Richard Hodgson, LL. D.; authorities whose ability and special competency for the work needs no advertisement here.

But there is a view of subjective mind which the present writer begs to present and insist upon, namely: The human mind, which is a unit, is endowed with dual methods of consciousness, one of which, the objective and rationalistic, is dependent upon organic sense-perception, and is, therefore, perishable with the organs that operate it; while the other, the subjective, intuitional and unreasoning, is the permanent inherent consciousness of the soul, and, therefore, of that all-comprehensive aggregation of mind in which the soul is constituted. For that the soul is as much part and parcel of the Supreme Mind before death as afterward is sufficiently evidenced in the well established fact, among others, that its existence is not dependent upon upon physiological function, and that it is the storehouse wherein everything that enters the memory is forever retained.

It need not be pointed out that memory dependent upon brain function is capricious, imperfect and sometimes completely

lost. Yet the fact is beyond question that in reality memory is so perfect that nothing ever escapes it. Memory must be considered not as an exclusive possession of the brain but as a self-conscious aggregation of elements belonging to and constituting not only the essential faculty of a human mind, but a feature of Mind as a whole. Objective consciousness controls much of it, but knows it not in its fulness. Strictly speaking, we do not recollect; we cognize what surges up into consciousness with or without effort of the will.

A fuller exposition of complete and cogent arguments in support of what may be looked upon as the subjective mind doctrine of immortality will be found in the literature above referred to. What is here insisted upon is the potent fact that life of the soul from its inception to eternity is sustained by the universal life of which it is an intrinsic element; while human animal life, with its objective consciousness, serves out its purpose to individualize and initiate the development of the soul, and then ceases to exist.

Therefore with regard to the relations of eternalism and the soul, we may justly conclude that the soul has beginning and continuance of existence in that which knows neither beginning nor end; so that its personality, once created becomes co-eternal with the essentiality of its constitution. For the soul's consciousness of its own existence is not that objective consciousness which perishes with the body, but the subliminal or subjective mind consciousness, which is the rightful and permanent consciousness of the soul. Hence the paramount question is not so much a question of continued existence as of continued consciousness of existence. One who says we should sink into a sea of eternal forgetfulness happy and content in the thought that our lives have been of benefit to humanity, can hardly speak from the innermost aspirations of his soul.

Now, the modifications of consciousness which must follow the loss of sense perception and ratiocination at death, provide a subject for study which is of the greatest interest and importance. It is study of the soul in the reality of its existence; and among the great discoveries already made is that of the possession of perfect memory by subjective mind. For this gives certainty of conservation of the ego, the conscious self, though there be limitless diffusion of the mind elements which constitute it. And what gives that certainty is not so much to know as to *realize* in memory every event of personal experience. Another might know them, but realization of them belongs alone to self. A most important demonstration of experimental psychology is the fact, so clearly presented by Dr. Hudson, that mental faculties exist which are practically unused in this life, but are of use in the next—like that of telepathy, for instance, which is of no practical use in this life, but is especially fitted to play an important part in the future life when apprehension of ideas must be had by intuition, in the absence of organs of sense. The faculty of telepathy thus supplies the language of the disembodied soul, instead of the symbolism of words before made use of, and demonstrates a function which is neither normal nor useful in this life. We will not stop to consider the phenomena of Spiritualism, apparitions, etc., because they deserve a fuller and more careful presentation than can be given them here. They who feel like rejecting them all without study should bear in mind that the reasons so far given why telegraphy is possible without wires, or why vision may traverse opaque solids, would be deemed wildly speculative and untenable were it not that, under proper conditions, those facts are demonstrable to anybody at any time. Comparatively few have ever seen the demonstrations, but nobody doubts them. Now the fact of the future life is also considered capable of

demonstration, under proper conditions; but attempts to demonstrate are often so suspicious and uncertain that the majority question the possibility of it.

In all these instances what has to be combatted is the facts of daily experience which apparently prove exactly the opposite of what is claimed for the new facts. Thus it is impossible to see through a board or a human body: to send an electric message into space and expect it to reach any definite point: or to expect intelligent communications from anything likely to survive the dead bodies hid away in the earth every day. But experimental study has brought understanding and control of the conditions under which skiascopy and wireless telegraphy become possible and at all times available, while the conditions which shall control and render available the phenomena ascribed to disembodied spirits, are as yet so little understood that the majority even of those who believe in a future life, hesitate to accept them as really what they purport to be. That phenomena are witnessed which are veritably psychic is beyond question. It is only the source of the intelligence and force displayed in them which remains an open question, with the preponderance of proof, when weighed intelligently and without prejudice, going to support the spiritualistic theory as opposed to the telepathic. Popular belief goes for little either way; but the consensus of opinion of judicial minds, rendered competent by careful and patient study of the phenomena under conditions but rarely available, favors the view that disembodied spirits do communicate with us.

It is claimed that the future life has been emotionally, logically and even scientifically demonstrated. Firm establishment of the truth of a single one of the phenomena—spiritual, apparitional, or what not—rightly or wrongly ascribed to discarnate spirits, would absolutely demonstrate it.

Hence the necessity of further experimental study which shall supplement the remarkable results already obtained by members of the Society for Psychical Research and others, with a view to a complete elucidation of the relations of eternalism with the human soul.

What Shall We Eat?

W. H. WILEY,

Chief of the Bureau of Chemistry under the Agricultural Department in
Washington, favors a Cereal Diet.

The Griddleman, of "Ad Sense"
Makes Some Remarks on the Subject.

There is no doubt of the fact that meat eating is not essential to human life, and that man can be nourished without resorting to a flesh diet. The statement may be accepted without question that, as a rule, we eat too much, not only of meat but of all forms of food. At the early breakfast which Americans are wont to indulge in, the omission of meat is to be earnestly advised. Many of the ordinary breakfast foods are to be preferred, especially oatmeal, with sugar and cream, and this, together with a couple of eggs, a few slices of toast and a cup of coffee, makes a breakfast which is entirely sufficient for the man of sedentary employment, and with a little addition of materials of the same kind, quite enough for the laboring man.

The ordinary cereals of commerce contain only about 10 per cent of waste, and this is an exceedingly small proportion as compared with the percentage in meats.

If meats should be used more for condimental purposes, as in the making of soups, stews, etc., and not more than once a day as one of the staple articles of the table, it would be better for the health and strength of the consumer, and especially would it be a saving in the matter of household expenses.

It is well known that men who are nourished very extensively on cereals are capable of the hardest and most enduring manual labor. Meats are quickly digested, furnish an abundance of energy soon after consumption, but are not retained in the digestive organism long enough to sustain permanent muscular exertion. On the other hand, cereal foods are more slowly digested, furnish the energy necessary to digestion, and the vital functions in a more uniform manner, and thus are better suited to sustain hard, manual labor for a long period of time.

In cereals, however, the starch is combined with an abundant supply of nitrogenous materials, of which the gluten of wheat flour is a type. It so happens that the cereals contain all the elements necessary to the nutrition of the body, having in themselves the types of food which are represented by the fats, the nitrogenous or portein bodies, and carbo-hydrates. In addition to these, they contain those mineral elements of which the bony structure of the body is composed, viz: lime and phosphoric acid.

If, therefore, man were confined to a single article of diet, there is nothing which would be so suitable for his use as the cereals. Starch and sugar are primarily the foods which furnish animal heat and energy, and hence should be used in great abundance by those who are engaged in manual labor.

The working men of our country, especially, should consider this point, and accustom themselves more and more to the use of cereals in their foods. When properly prepared and properly served, they are palatable as well as nutritious, and their judicious use in this way would tend to diminish the craving for flesh.

THE "GRIDDLEMAN" SAYS:

I understand that a new article is about to be placed on the market, the name of which is Nearwater.

This is something we need—particularly those of us who use water for purposes other than bathing.

We have all noticed the gradual narrowing of the things which it is possible to eat and drink and reach the ripe age of thirty-five. There isn't anything left to eat, except the things represented by the output of Battle Creek, Michigan.

Malt and spirituous liquors have been proved to be fatal; there is at least one skull and cross-bones in every pint of milk; coffee is only a trifle more desirable than carbolic acid; and now the facts are at hand to prove that every drop of even the purest distilled water contains the active, eager and energetic germs of 1,678 contagious diseases.

Hence the necessity of inventing something altogether new to drink.

Hence, we have Nearwater, the composition and virtues of which I shall have to explain at some future time.

By the way, just at this moment, I notice an advertisement in Physical Culture, in which Mr. William E. Towne, of Holyoke, Mass., invites us in a startling display heading to "eat some air." This is probably the food of the future, and I am going to investigate and report.



The Editor says:— "EAT WHEATLET." And he doesn't say this just because it's advertised in Eltka, but because he has eaten it and found it to be a good thing.

THE VALUE OF THOUGHTS AND EMOTIONS.

I have discovered that bad and unpleasant feelings create harmful chemical products in the body which are physically injurious. Good, pleasant, benovelent and cheerful feelings

create beneficial products which are physically helpful. These products may be detected by the chemical analysis in the perspiration and secretion of the individual. . . . To sum it up, it is found that for each bad emotion there is a corresponding chemical change in the tissues of the body, which is life-depressing and poisonous. Contrariwise, every good emotion makes a life-promoting change. A noble and generous action blesses the doer as well as the beneficiary. Every thought which enters the mind is registered in the brain by a change in the structure of its cells. The change is a physical change more or less permanent.—*Professor Elmer Gates.*

ORDEAL BY FIRE.

(Continued.)

The Fire Walk Ceremony In Tahiti.

By S. P. LANGLEY.

From the Smithsonian Report for 1901.

[NOTE.—While the Editor has some reason for believing that a further study of psychic phenomena will develop the fact that a human being may in certain states resist the action of fire, yet the present series of articles is intended, not so much to uphold that belief, but rather to arrive at the facts. Prof. Langley's article is given in full, more especially on account of the varying comments which have been made upon it by other periodicals. One journal in mentioning it, says: "It shows that the persons who perform this ceremony are protected by spirit power from injury which would usually follow contact with fire." This is exactly opposite to anything we understand Prof. Langley to say. One leading "New Thought" magazine contains an article from which we quote the following: "Prof. Langley scientifically determined that Papa-Ita's feet trod upon stones containing heat of 1,200 degrees F., while others had trodden upon stones nearly as hot. To understand what this means we must remember that water boils at 212 degrees F., that the hottest

temperature that can be endured in a Turkish bath is about 175 degrees F., and that several of the metals melt at a much lower temperature than 1,200 degrees F.—tin at 442, lead at 612, zinc at 773, antimony at 810—and mercury boils at 675 degrees F. A higher degree than 1,200 is required to melt silver, copper, iron, etc. Many persons have found the marble flooring of a Turkish bath unbearable when the stones contained between 175 and 200 degrees F. of heat." This, while not exactly mis-quoting Prof. Langley, yet leads the reader to infer that Papa-Ita trod upon surfaces hotter than the melting point of tin, lead, zinc, etc. The reader will find by referring to Prof. Langley's account that while he gives the *mean* temperature of the stone as 1,200 degrees yet he takes pains to state that "the temperature of the surface must have been indefinitely lower."]

The very remarkable description of the fire walk collected by Mr. Andrew Lang and others had aroused a curiosity in me to witness the original ceremony, which I have lately been able to gratify in a visit to Tahiti.

Among these notable accounts is one by *Colonel Gudgeon, British resident at Raratonga, describing the experiment by a man from Raiatea, and also a like account of the Fiji fire ceremony from *Dr. T. M. Hocken, whose article is also quoted in Mr. Lang's paper on the "Fire Walk" in the Proceedings of the Society for Psychical Research, February, 1900. This extraordinary rite is also described by Mr. Fraser in the Golden Bough, and by others.

I have heard that it was performed in Tahiti in 1897, and several persons there assured me of their having seen it, and one of them of his having walked through the fire himself under the guidance of the priest, Papa-Ita, who is said to be one of the last remnants of a certain order of priesthood of Raiatea, and who had also performed the rite at the island of Hawaii some time in the present year, of which circumstantial newspaper accounts were given, agreeing in all essential particulars with those in the accounts already cited. According to these, a pit

*For the accounts of Colonel Gudgeon and Dr. Hocken, see last month's *Eltka*.

was dug in which large stones were heated red-hot by a fire which had been burning many hours. The upper stones were pushed away just before the ceremony, so as to leave the lower stones to tread upon, and over these, "glowing red-hot" (according to the newspaper accounts), Papa-Ita had walked with naked feet, exciting such enthusiasm that he was treated with great consideration by the whites, and by the natives as a god. I found it commonly believed in Tahiti that anyone who chose to walk after him, European or native, could do so in safety, secure in the magic which he exercises, if his instructions were exactly followed. Here in Tahiti, where he had "walked" four years before, it was generally believed among the natives, and even among the Europeans present who had seen the ceremony, that if anyone turned around to look back he immediately was burned, and I was told that all those who followed him through the fire were expected not to turn until they had reached the other side in safety, when he again entered the fire and led them back by the path by which he had come. I was further told by several who had tried it that the heat was not felt upon the feet, and that when shoes were worn the soles were not burned (for those who followed the priest's directions) but it was added by all that much heat was felt about the head.

Such absolutely extraordinary accounts of the performance had been given to me by respectable eyewitnesses and sharers in the trial, confirming those given in Hawaii, and, in the main, the cases sighted by Mr. Lang, that I could not doubt that if all these were verified by my own observation, it would mean nothing less to me than a departure from the customary order of nature and something very well worth seeing indeed.

I was glad, therefore, to meet personally the priest, Papa-Ita. He is the finest looking native that I have seen; tall, dignified in bearing, with unusually intelligent features. I learned from

him that he would perform the ceremony on Wednesday, July 17, the day before the sailing of our ship. I was ready to provide the cost of the fire, if he could not obtain it otherwise, but this proved to be unnecessary.

Papa-Ita himself spoke no English, and I conversed with him briefly through an interpreter. He said that he walked over the hot stones without danger by virtue of spells which he was able to utter and by the aid of a goddess (or devil as my interpreter had it), who was formerly a native of the islands. The spells, he said, were something he could teach another. I was told by others that there was a still older priest in the island of Raiatea, whose disciple he was, although he had pupils of his own, and that he could "send his spirit" to Raiatea to secure the permission of his senior priest if necessary.

In answer to my inquiry as to what preparations he was going to make for the rite in the two or three days before it, he said he was going to pass them in prayer.

The place selected for the ceremony fortunately was not far from the ship. I went there at noon and found that a large shallow pit or trench had been dug, about 9 by 21 feet and about 2 feet deep. Lying nearby was a pile containing some cords of rough wood and a pile of rounded, waterworn stones, weighing, I should think, from 40 to 80 pounds apiece. They were, perhaps, 200 in number, and all of porous basalt, a feature the importance of which will be seen later. The wood was placed in the trench, the fire was lighted and the stones heaped on it, as I was told, directly after I left, or at about 12 o'clock.

At 4 p. m. I went over again and found the preparations very nearly complete. The fire had been burning for nearly four hours. The outer stones touched the ground only at the edges of the pile, where they did not burn my hand, but as they approached the center the stones were heaped up into a mound three

or four layers deep, at which point the lowest layers seen between the upper ones were visibly red-hot. That these latter were, nevertheless, sending out considerable heat there could be no question, though the topmost stones were certainly not red-hot, while those at the bottom were visibly so and were occasionally splitting with loud reports, while the flames from the burned wood near the center of the pile passed up in visible lambent tongues, both circumstances contributing to the effect upon the excited bystanders.

The upper stones, I repeat, even where the topmost were presently removed, did not show any glow to the eye, but were unquestionably very hot and certainly looked unsafe for naked feet. Native feet, however, are not like European ones, and Mr. Richardson, the chief engineer of the ship, mentioned that he had himself seen elsewhere natives standing unconcerned with naked feet on the cover of pipes conveying steam at about 300 degrees F., where no European foot could even lightly rest for a minute. The stones then were hot. The crucial question was, How hot was the upper part of this upper layer on which the feet were to rest an instant in passing? I could think of no ready thermometric method that could give an absolutely trustworthy answer, but I could possibly determine on the spot the thermal equivalent of one of the hottest stones trodden on. (It was subsequently shown that the stone might be cooler at one part than another.) Most obviously, even this was not an easy thing to do in the circumstances, but I decided to try to get at least a trustworthy approximation. By the aid of Chief Engineer Richardson, who attended with a stoker and one of the quartermasters, kindly detailed at my request by the ship's master, Captain Lawless, I prepared for the rough but conclusive experiment presently described.

It was now nearly forty minutes after 4, when six acolytes

(natives), wearing crowns of flowers, wreathed with garlands and bearing poles nearly 15 feet long, ostensibly to be used as levers in toppling over the upper stones, appeared. They were supposed to need such long poles because of the distance at which they must stand on account of the heat radiated from the pile, but I had walked close beside it a moment before and satisfied myself that I could have manipulated the stones with a lever of one-third the length, with some discomfort, but with entire safety. Some of the uppermost stones only were turned over, leaving a superior layer, the long poles being needlessly thrust down between the stones to the bottom, where two of them caught fire at their extremities, adding very much to the impression that the exposed layer of stones was red-hot, when in fact they were not, at least to the eye. These long poles and the way they were handled were, then, a part of the ingenious "staging" of the whole spectacle.

Now the most impressive part of the ceremony began. Papa-Ita, tall, dignified, flower-crowned, and dressed with garlands of flowers, appeared with naked feet and a large bush of "ti" leaves in his hands, and after going partly around the fire each way, uttering what seemed to be commands to it, went back, and, beating the stones nearest him three times with the ti leaves, advanced steadily, but with obviously hurried step, directly over the central ridge of the pile. Two disciples, similarly dressed, followed him, but they had not the courage to do so directly along the heated center. They followed about halfway between the center and the edge, where the stones were manifestly cooler, since I had satisfied myself that they could be lightly touched with the hand. Papa-Ita then turned and led the way back, this time with deliberate confidence, followed on his return by several new disciples, most of them not keeping exactly in the steps of the leader, but obviously seeking cooler places. A third and fourth

time Papa-Ita crossed with a larger following, after which many Europeans present walked over the stones without reference to the priest's instructions. The natives were mostly in their bare feet. One wore stockings. No European attempted to walk in bare feet except in one case—that of a boy, who, I was told, found the stones too hot and immediately stepped back.

The *mise en scene* was certainly noteworthy. The site near the great ocean breaking on the barrier reefs, the excited crowd talking about the "red-hot" stones, the actual sight of the hierophant and his acolytes making a passage along the ridge where the occasional tongues of flame were seen at the center, with all the attendant circumstances, made up a scene in no way lacking in interest. Still, the essential question as to the actual heat of these stones had not yet been answered, and after the fourth passage I secured Papa-Ita's permission to remove from the middle of the pile one stone, which, from its size and position, every foot had rested upon in crossing and which was undoubtedly at least as hot as any one of those trodden on. It was pulled out by my assistants with difficulty, as it proved to be larger than I had expected, it being of ovoid shape, with the lower end in the hottest part of the fire. I had brought over the largest wooden bucket which the ship had and which was half filled with water, expecting that this would cover the stone, but it proved to be hardly enough. The stone caused the water to rise nearly to the top of the bucket, and it was thrown into such violent ebullition that a great deal of it boiled over and escaped weighing. The stone was an exceedingly bad conductor of heat, for it continued to boil the water for about twelve minutes, when, the ebullition being nearly over, it was removed to the ship and the amount of evaporated water measured.

Meanwhile others, as I have said, began to walk over the stones without any reference to the ceremony perscribed by

Papa-Ita, and three or four persons, whom I personally knew on board the ship, did so in shoes, the soles of which were not burned at all. One of the gentleman, however, who crossed over with unburned shoes, showed me that the ends of his trousers had been burnt by the flames which leaped up between the stones, and which at all times added so much to the impressiveness of the spectacle; and there was no doubt that anyone who stumbled or got a foot caught between the hot stones might have been badly burned. United States Deputy Consul Ducorran, who was present, remarked to me that he knew that Papa-Ita had failed on a neighboring island, with stones of a marble-like quality, and he offered to test the heat of these basaltic ones by seeing how long he could remain on the hottest part of the pile, and he stood there, in my sight, from eight to ten seconds before he felt the heat through the thin soles of his shoes beginning to be unpleasantly warm.

A gentleman present asked Papa-Ita why he did not give an exhibit that would be convincing by placing his foot, even for a few seconds, between two of the red-hot stones which could be seen glowing at the bottom of the pile, to which Papa-Ita replied with dignity, "My fathers did not tell me to do it that way." I asked him if he would hold one of the smaller, upper hot stones in his hand. He promised to do so, but he did not do it.

The outer barriers were now removed and a crowd of natives pressed in. I, who was taking these notes on the spot, left, after assuring myself that the stones around the edge of the pit were comparatively cold, although the center was no doubt very hot and those below red-hot. The real question is, I repeat, How hot were those trodden on? and the answer to this I was to try to obtain after measuring the amount of water boiled away.

On returning to the ship this was estimated from the water which was left in the bucket (after allowing for that spilled over) at about 10 pounds. The stone, which it will be remembered

was one of the hottest, if not the hottest, in the pile, was found to weigh 65 pounds, and to have evaporated this quantity of water. It was, as I have said, a volcanic stone, and on minuter examination proved to be a vesicular basalt, the most distinctive feature of which was its porosity and non-conductibility, for it was subsequently found that it could have been heated red-hot at one end, while remaining comparatively cool at the top. I brought a piece of it to Washington with me and there determined its specific gravity to be 2.39, its specific heat to be 0.19, and its conductivity to be so extremely small that one end of a small fragment could be held in the hand while the other was heated indefinitely in the flame of a blow-pipe, almost like a stick of sealing wax. This partly defeated the aim of the experiment (to find the temperature of the upper part of the stone), since only the mean temperature was found. This mean temperature of the hottest stone of the upper layer, as deduced from the above data, was about 1,200 degrees F., but the temperature of the surface must have been indefinitely lower. The temperature at which such a stone begins to show a dull red in daylight is, so far as I am aware, not exactly determined, but is approximately 1,300 to 1,400 degrees F.

To conclude, I could entertain no doubt that I had witnessed substantially the scenes described by the gentleman cited, and I have reason to believe that I saw a very favorable specimen of a fire-walk.

It was a sight well worth seeing. It was a most clever and interesting piece of savage magic, but from the evidence I have just given I am obliged to say (almost regretfully) that it was not a miracle.

(Next month: The experience of D. B. Home.)

DIFFIDENCE.—The celebrated Aboo Yussuph, who was chief judge of Bagdad in the reign of the Caliph Hadee, was a very

remarkable instance of that humility which distinguishes true wisdom. His sense of his own deficiencies often led him to entertain doubts when men of less knowledge, and more presumption, were decided.

It is related of this judge that on one occasion, after a very patient investigation of facts, he declared that his knowledge was not competent to decide upon the case before him.

"Pray, do you expect," said a pert courtier, who heard this declaration, "that the Caliph is to pay your ignorance?" "I do not," was the mild reply; "the Caliph pays me, and well, for what I do know, if he were to attempt to pay me for what I do not know, the treasurers of his empire would not suffice."—*Malcolm.*

Social Consciousness.

All progress, all healthy growth, in humanity is based upon development and recognition of the social consciousness. Consciousness of kind is the fundamental sociological element. Its absence from the individual make-up, in our present stage of human evolution, is an abnormality, a diseased state of mind. What has been achieved in the wonderful nineteenth century, and the still greater things we are going forward to in this twentieth century, we owe, and shall owe, most distinctly to the splendid stirrings of that social sense that joins man to man the world over—unites men, gathers them into families, organizes them into cities and states and, lifting them out of the narrowness and isolation of the separate individual life, endows and imbues them with the larger, livelier, grander spirit of the social organism. Day by day this splendid drawing

together of men into conscious oneness, into recognition and expression of the truth that "we are all members of one body and one of the other," is becoming more intensive as well as extensive. This oneness is finding more and more perfect expression in the character of modern altruistic aspiration and endeavor. Public service grows more inclusive and effective as it finds its place in the organized self-conscious activity of the state.

All normal, healthy growth in the individual and in society is the product of harmonious association. Already any distinctively human life is impossible except in such association. The more harmonious, complete and inclusive our associative life becomes, the more perfectly human is that life. As the social spirit finds fuller expression in more and more perfectly organized living, men will understand and obey the "new commandment" in which Christ summed up all religion and philosophy, all science and art, the law and the prophets—aye, the law written in the heart of men and inherent in the very nature of man's world—that we "love one another." This more perfect understanding and obedience is exemplified in the modern state—especially in the democratic conception of the state—in ever increasing degree. By the slow but sure steps in social evolution, we are approaching that development of state in which recognition of common rights, interests, needs and aspirations will leave none unprovided for or neglected; when no man shall seek to live to himself alone, or be willing to enjoy wealth or other advantages unshared by the least of his brothers.—PAUL TYNER, *in the Medico-Legal Journal*.

No great work, no good thing was ever accomplished by worry. No book fit to live was ever written, no noble thought ever evolved, no little home ever made sunny and happy by

worry any more than Mozart ever performed rhapsody on a piano with tangled wires. In all the world there's no state so senseless, so useless as worry. Calmness is power and it may be cultivated by saying that whatever comes is best, by cheerfully searching out the lesson, and by minding our own business."—GRANT WALLACE, in *San Francisco Bulletin*.

"Query No. 50."

(Continued)

Last month we reproduced the articles of Henry Harrison Brown, editor of *Now*, and Herbert A. Parkyn, M. D., editor of *Suggestion*, in which these authors express their opinions as to the causes of certain phenomena which frequently occur in hypnosis.

Although we believe that the conclusions of Mr. Brown and Dr. Parkyn cannot furnish an adequate explanation of the facts, yet the following is not written in a spirit of controversy. It is our wish, instead, to help gain a better knowledge of the subject, and to further this object we give a report of experiments conducted by us several years ago. A greater part of this was published by us at the time, and we quote freely from the same, knowing that it will be new to the greater part of our present readers.

There is a certain class of phenomena which has been accounted for by many experimenters as being due to hyperæsthesia; and while many things have been done during the hypnotic condition that it is thought would be hardly possible of occurrence in the normal state, yet it has been believed that the class of which we intend to give examples become possible

during hypnosis on account of the exceptional exaltation of the senses which can be produced; aided, of course, to a great extent by the exclusive concentration of the attention in one direction.

In the somnambulistic state, which, of all hypnotic conditions, is perhaps the most interesting, psychologically, the mental faculties and the senses may reach a state of exaltation almost beyond belief. According to Braid the sense of hearing may be sharpened to fourteen times the normal; and the sense of smell in one case became sufficiently acute to guide the blind-folded subject unerringly in quest of a rose which was kept at a distance from her of forty-six feet. The same author's experiments demonstrated that a somnambulist's supposed power of seeing with some other organ than the eye is an error; at least it was shown when descriptions were given of objects held within one or two inches from the skin of the head, arm or other parts of the body, that the perception was imparted by the sharpened sense of the temperature.

That the sense of sight may be highly sharpened was proved by the remarkable case exhibited by Taguet before the medico-psychological society of Paris. In this case while the subject was in the lethargic state lines were drawn upon her face with lead pencil and ink, some distinct, others hardly noticeable. Then, after inducing the somnambulic state, some flat object with a dull, not a reflecting surface, for instance, a piece of pasteboard, was held before her. She at once expresses astonishment that her face is soiled and "wipes off one line after another, using the pasteboard as a real looking glass."

She could also describe any object behind her head when it was held in such a manner that its reflection could reach her eyes; and could, by their reflection, readily recognize any of her friends who stood behind her.

The following few experiments, although apparently simple ones, are yet to us in some particulars incomprehensible. Just how far an exaltation of the senses, or any other known theory, may account for the facts is left for the reader to decide.

The first experiment was made with a pack of playing cards. After one of the observers had selected a card, the tray of hearts, it was shown to G—, who was in the hypnotic state, and he was told to look at it carefully, both face and back. The suggestion was given that this card would be easily distinguishable from the rest, whether seen on face or back.

The operator then shuffled the cards and held several with the backs toward the subject, who had no difficulty in recognizing the tray of hearts. Others shuffled the cards and displayed them in the same manner, and with the same result.

As it was thought possible that the sense of sight had become sufficiently acute to aid G— in distinguishing the card by some difference in the depth of color of the printed backs, or had helped him to discover some accidental markings too slight to be perceived by normal vision (The theory advanced by Dr. Parkyn. See last month's *Eltká*), another experiment was tried.

Several sheets of plain white paper (white enameled, an exceptionally perfect grade) were taken from a newly opened package. Upon one was laid an ordinary business card, and the suggestion given that a line was drawn around its edge with "pen and ink." A match was used in place of a pen, and care was taken while pretending to draw the line that it should not touch the paper, thus avoiding the possibility of making any recognizable mark.

The suggestion was post-hypnotic, and before the subject was awakened the visiting card was hid from sight. In this case it was difficult to make G—believe that the paper, upon which to

him appeared the outline of a card, was in reality perfectly blank; and it was some time before he could be induced to show where the lines appeared to him. At last, to indicate their position, he took a lead pencil and drew lines exactly on what to him seemed to be ink lines. Then the real card was laid within these lines to test their correctness and they were found to be *exact*.

Although I have since tried many times to have people draw an outline of a card in this manner, yet I have never met one who could, in his normal state, give an *exact* reproduction.

An optical illusion seems to be fixed only in the mind of the subject, lacking all reality, yet in the above case the subject seems to have some power of giving it a physical reality. If the outline is purely a mental illusion, why does the subject discover it on this certain piece of paper only? And even on this particular piece of paper, why does he always find it exactly where the original card was placed?

As some of the observers present still thought that the phenomena produced depended upon an exaltation of the sense of sight, a third experiment was made as follows:

Three sheets of paper, of the same kind that had been used in the above experiment, were selected. One of these was held between G—and the light, and he was told to look through it. The suggestion (post-hypnotic) was then given that instead of being a blank white piece of paper that it was of a "bright blue color," and would remain so. The second sheet was then shown in the same way and the suggestion given that it was "red;" and the third sheet was called "yellow."

When the subject was awakened this time nothing was said to him as to what suggestions had been given, nor as to what was the purpose of the experiment. To avoid any possible recognition of the sheets from the supposed increased visual power, G—was required to stand at a distance of several feet and look through *two* of them at a time.

The two sheets had been carefully placed together without G—'s knowledge, and in such a manner that it is unreasonable to suppose that he knew it was two sheets instead of one through which he was looking.

Upon being asked to tell the color of the paper, he replied: "It is very nearly the same color as that window curtain across the street." The curtain mentioned was of a dingy green color. The two sheets which had been held together were the "blue" and the "yellow." At no time did G—make any error in selecting the "blue," "red" or "yellow," or when two were held together, in giving the corresponding color.

It is easy to say that blue and yellow when mixed produce green, but it becomes far more difficult and complicated when we try to explain how blue and yellow, both in themselves hallucinations, can produce green.

A person who is unfamiliar with the work done by a subject during hypnosis, is always looking—and quite rightly to a certain extent—for a "common-sense" explanation of the effects produced; and, as in the case when G—could readily select any certain card from a pack of playing cards by seeing the backs only, the spectator is quite likely to come to a hasty conclusion that there is some real difference in the appearance of the cards which makes them recognizable, some slight markings which are invisible to all except the person hypnotized. This theory would be more valued as an explanation of the facts were it not known, as a careful operator is sure to soon learn, that the subject is seldom looking for anything of the kind. In the above case no illusion was produced, as, for instance, to change the color of the cards; G—was told simply that he could recognize a certain card by seeing the back only; and this he could readily do at any time, the suggestion having been post-hypnotic. In reply to questions afterwards, G— states emphatically that to

him there is absolutely no difference in the appearance of the cards, and that he cannot tell how the sense of sight or any other sense aids him in detecting it.

In the second experiment he also in the same manner states that to him the sheets of paper are exactly alike except that the one has an outline of a card (the illusion) drawn on it with ink.

It is evident in this experiment that if the subject, as per the theory of Dr. Parkyn, relies upon minute markings to help him recognize the card, that such markings must be infinite in number to aid in an exact reproduction of the outline.

In the third experiment it was the same; all the sheets of paper were alike to him except in the (illusory) color.

The fourth experiment was the outcome of an attempt to discover if G— could detect an object which was absolutely and without doubt exactly like its companions. It was thought that nothing could be more like than two glasses of water poured from the same pitcherful. But that even these may not be exactly alike, that through the mere handling of them by the operator they may undergo some change to which the subject is sensitive, is shown to be possible by the investigations of the celebrated Austrian chemist, Baron von Reichenbach, who, over forty years ago, discovered the "luminous effluvia," or phosphorescent-like emanations from animals, plants and magnets.

He found that a sensitive person placed in a perfectly dark room will finally be able to see the operator. At first as a gray smoke; then different parts of the body will appear with their own light. "He will see a luminous protuberance at each finger, sometimes as long as the finger itself. You will then probably hear him say with much surprise that the colors of the light are not the same in all parts of the body; that the right hand shows a blue light, and the left hand a yellow reddish light; that the same difference appears at your feet; and also that all

the right side of your body and face is bluish and darker than the left side, which is yellow reddish and much lighter." It was also found that under similar conditions a magnet emits a blue light at its north pole and a yellow reddish light at its south pole.

Reichenbach's experiments were repeated in England by Alfred Russel Wallace, and other prominent naturalists and were fully confirmed.

Col. A. De Rochas, of Paris, the well known scientist and director of the Ecole Polytechnique, hypnotized at different stages two subjects at the same time and in the same room. One of these could see the luminous effluvia on the other's body; he could see that the eyes, mouth, ears, nostrils, and finger ends were emitting flamelike light, blue on one side of the body and yellow reddish on the other. We make the following extract from an article in the ARENA, by Henry Gaullieur, who gives an account of Col. De Rochas' experiments with subjects above mentioned. He says: "A common glass of water being brought, it was put within the radius of B's luminous effluvia as described by A, who could see how far they reached. After a few minutes A reports that the water itself has become luminous, and that it remains luminous for a long while, even if removed to the other end of the room out of reach of B's effluvia. B's sensitiveness of the skin has been made to disappear by the hypnotic process; but any touch or puncture of a pin or needle on the outside edge of the phosphorescent or luminous coating perceived by A's eyes is immediately perceived by B. His body does not feel the sharpness of a needle, but the outer edge of his luminous effluvia, several feet away from the skin has acquired that sensitiveness lost by the body. And here appears a wonderful fact. The water in the tumbler removed to the end of the room has acquired that same sensitiveness. If you pinch the water with your fingers or touch it with a pin, B will

scream that you pinch him or prick him with a pin. But B will not feel the action if performed by a person who has no magnetic relation to him; in other words, the action of the magnetizer alone will be felt in the water by the subject."

It will be seen by the above that although, as in our present experiment, great care is taken to select objects which are undoubtedly alike, yet even these may undergo a change which, however slight, may still be perceptible to a sufficiently sensitive person.

Two glasses were procured which could not be distinguished from each other. Each of these were partly filled with water; both from the same pitcherful. The operator after carefully cleansing his hands held the right hand over one glass and the left over the other for a period of five minutes; care being taken that neither hand should in any way touch the water. G—, after being hypnotized, was given the two glasses of water and requested to state if he could tell by tasting of each whether there was any difference between them. No attempt was made to produce any illusion; G— being told that so far as was known the two were exactly alike unless they had in some manner been differently affected by the operator's right and left hands. (Perhaps we should state that G— had a strong auto-suggestion that any such effect was impossible.) After twice tasting of each G— declared emphatically that one was "stale" and the other was not. The glasses were taken from the room and then returned. G— had no difficulty in detecting the "stale" one from the other, and declared it to be "still more stale." The glasses were again taken out and returned with four others like them; care being taken that each of the six should contain an equal quantity of water. After tasting of all G— readily selected the two original glasses.

To repeated questioning as to what was the difference to him between the two original glasses of water, and also between

them and their four companions, it was impossible to get any satisfactory reply, G— seeming to find it impossible to select any words which would convey the exact meaning of the difference there seemed to be to him. He said that “stale” and “fresh” was not exactly what he meant, nor could it be expressed as a difference in “flavor;” in fact the difference seemed to contain some idea new to him and inexpressible with the words at command.

The operator in the above knew, of course, each glass from its companions, and as phenomena of this kind is sometimes—perhaps too often—accounted for by the theory of thought-transference, the experiment was repeated as follows.

A third person removed the six glasses from the room and marked them in such a manner as to be unknown to both subject and operator. A fourth person, not knowing the glasses to be selected, brought back all six; and both third and fourth persons were required to be absent from the room during the test. G— after tasting of the six glasses experienced no difficulty in selecting the original two and being able to distinguish these two apart.

We submit the above report to thoughtful observers along this line hoping to hear their explanation of the facts or to learn of similar experiments, a comparison of which may lead to the solution of all.

NEW BOOKS.

[Our space being already taken for this month, the following list of books received will be given fuller mention in another number.]

ALL THESE THINGS ADDED. By James Allen (Author of *From Poverty to Power*). In purple and gold, cloth bound.

Price, post-paid, 3s. 3d. (\$1.00) The Savoy Publishing Company,
1, Savoy Steps, Strand, London, Eng.

VAUGHT'S PRACTICAL CHARACTER READER. By L. A. Vaught, editor of *Human Culture*. Cloth, 260 pp.; profusely illustrated. Price, \$1.00. Published by the author, 130 Dearborn St., Chicago, Ill.

THEORETICAL ASTROLOGY. By H. S. Green. Being the Third of a Series of Astrological Manuals issued at the *Modern Astrology* office, 9, Lyncroft Gardens, West Hampstead, N. W., London, England; or L. M. Fowler & Co., Imperial Arcade, E. C., London. 96 pages. Price one shilling, nett.

THE ONE DIVINE PURPOSE. By Meredith B. Little. Full title: The One Divine Purpose through evolutionary processes fulfilled in the individualization of substance, life and intelligence in man. Paper 80 pp. Published by the author, Glens Falls, N. Y.

CLAIRVOYANCE; The Seventh Sense. By Mrs. Excell-Lynn. Purple and gold; paper. Price 25 cents. Published by the author; Akron, Ohio.

THE SECRET OF OPULENCE; or, The Royal Road to Wealth. By Charles W. Close, Ph. D. Paper, 16 pp. Price, 10 cents. Published by the author, 126 Birch St., Bangor, Maine.

UNITY OR FOR LIFE, LIBERTY AND FREEDOM. By R. H. Bates. Paper; 56 pp. Price 30 cents, postpaid. Published by the author, Torbay Villa, Hockliffe Road, Leighton, Beds, England.



A considerable amount of matter which was intended for the "Home Study" and correspondence department we are obliged, from lack of space, to omit from this number.

Next month we will give our readers another excellent article from the pen of A. C. Halphide, M. D., author of *MIND AND BODY*, etc., etc. Its title is *The Psychic Man*, it being the synopsis of a lecture delivered by Dr. Halphide to the Society of Anthropology, Chicago.