Spiritualist. he

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THE PROTECTION OF MEDIA.

WITHIN the last eighteen months a vast proportion of the popular prejudice against Spiritualism has been removed, more especially in consequence of the publication of the report of the Dialectical Committee, and because of the recent discussions of the subject in the Times and other newspapers. Undoubtedly, also, a very considerable amount of prejudice still remains. Perhaps advantage should be taken of the improved state of feeling to make the lives of mediums more pleasant than has hitherto been the case, for there is not a medium of any importance whose life has not been chequered with public abuse. Who, for instance, has been more continuously abused, in the newspapers and out of them, than Mr. Home, simply because, through no fault of his own, some of the powers possessed by the prophets of old have fallen upon his shoulders. The younger Mrs. Mary Marshall for years was subjected, from time to time, to similar abuse. In fact, all celebrated mediums at times feel their lives to be burdensome to them, because of the general bad treatment. Public and private mediums suffer alike, for in the latter case, although they may unwillingly admit visitors, after much pressure, as guests, caring nothing whatever for the belief or disbelief of the said visitors, the latter often make no scruple of considering themselves to be judges upon the bench, and their host or hostess a criminal upon trial; they also modestly consider that their own limited experience settles the whole question, not only as to the integrity of the unfortunate medium, but as to the genuine nature of Spiritualism itself, notwithstanding the experience of the millions of its adherents, and its enormous litera-

ture. Who does not remember how a person was admitted twice to Mr. Serjeant Cox's house, and then made no scruple of denouncing Mr. Home as an impostor? The Times correspondent was recently permitted as a very great favour to have a seance with Mrs. Mary Marshall, who refuses sittings to nearly everybody; she received the said correspondent as a guest, treated him handsomely in every possible way, allowed him to see certain startling phenomena which he admitted he could not explain, then he very coolly intimated in print that he believed Mrs. Marshall to have been too sharp for him. This is the one objectionable spot in the *Times* article, which otherwise did so much good for Spiritualism. Who, then, can blame the various non-professional mediums for the increasing stringency with which they close their doors to all but personal friends?

An improvement upon this state of things would be effected, if it were a generally accepted principle among Spiritualists, that none but Spiritualists shall have access to the seances of any private medium. This will be a boon rather than a hardship to the outside public. because professional mediums usually have great power, and great certainty in obtaining manifestations under adverse conditions, so that less time is lost by going to them first. "But I should not believe anything I saw in the presence of a professional medium," is a common remark with inquirers. They should be answered that if their interest in where they are going to after death is so slight, they had better not inquire into the subject at all, and it cannot be expected that private mediums who care nothing for them or their opinions, should allow them to see manifestations for the purpose of sitting in judgment thereon. Moreover, inquirers have the power of forming family circles in their own homes, and that is the very best way of beginning to investigate.

The proposed plan will be a great boon to Spiritualists. How many *seances* with Mr. Home have been spoilt because of the presence of one sceptic? Time is spent in "convincing" the unbeliever by allowing him to examine common table motions and raps, in which phenomena the experienced Spiritualists present feel comparatively little interest. After an hour has been consumed in this way, perhaps some of the more remarkable phonomena may be seen, weakened, however, by the want of knowledge of the inquirer, of the conditions which sitters should observe to get the best manifestations. It would have been better for the inquirer, and better for the Spiritualists, had the former been compelled to begin his experiences in his own home, or with a professional medium. Just as some of the best telegraphic instruments require to be under the care of a skilled electrician, and not an ordinary clerk, even so should a very sensitive medium be surrounded by experienced Spiritualists only, that the best results may be obtained. Then a person wishing to enter the ranks of Spiritualism will have to begin his inquiries at home, or with a professional medium. After passing through his first difficulties, and learning the impossibility of reducing Spiritualism to mechanics, a course of moral improvement will go on within himself. He will gradually be permitted access to higher circles, and at last, perhaps, enter the highest of all, composed of people who do not cheat each other, who, therefore, require not ropes or chains to compensate for the absence of integrity within themselves, and who, consequently, have reached the mental and spiritual

altitude necessary to permit the higher denizens of the next world to get near the circle, to manifest with great power. Sooner or later, such circles must be formed, whether Spiritualists or disbelievers like it or not, for the very simple reason that the best manifestations cannot be obtained in the absence of these conditions. In Spiritualism matter is subordinate to spirit. A hard materialist who attempts to put physics before spiritual truth, does not see the finest manifestations, or the full extent of the power of spirits over matter. The phenomena, therefore, so operate upon him, as to put him through an educational process, resulting in his own mental and moral improvement. There is not a materialist who has passed many years in the honest attempt to reduce Spiritualism to mechanics, but has found himself to have been made a better and a kinder man, through circumstances which appeared to him to be failures. Is not this result a better one for him, than if he had succeeded in applying a new force to the moving of carts? Such work which might better be done by a donkey, than by the spirits of the departed.

There is not a shadow of a doubt that manifestations are greatly strengthened when there is a thoroughly harmonious, happy eircle, all bound together by the affections, and not by the hollow conventionalities of the hag, "Society." Systematic endeavours should, therefore, be made to furnish the best conditions for pure spiritual influx, to the greater happiness of the mediums, and the greater benefit to the Spiritual movement. The remedy for present troubles rests somewhat in the hands of mediums, who should limit the admission of non-Spiritualists more than at present, and not give seances away from home without first sanctioning what guests shall be present. Also, if the master or mistress of the house permit any rudeness to them, they should leave the house and not enter it again. The result of this will be that guests will not be admitted so freely as at present, and will have very stringent conditions imposed upon them beforehand as to their behaviour. Any great man who thinks it to be a favour on his part that he consents to attend a spirit eircle, should never be asked at all; Spiritualists are not street preachers, and we need not cheaply press an inestimable blessing upon anybody and everybody, nor is much real progress made by such injudicious forcing. All persons naturally Spiritualists will find their way into Spiritualism very easily, but attempts to force Spiritualism upon uncongenial minds result in weariness and vexation of spirit to all concerned. Indeed, it is doubtful whether taking no notice of the outside public whatever, and devoting energy to the work of raising the character of the Spiritual movement, and elucidating the principles which govern the phenomena, would not result in quite as many converts being made as at present, without trouble or anxiety to anybody. What objection is there to the issuing of a manifesto to the effect that "because Spiritualism is true, and men may prove it for themselves in their own homes, Spiritualists have determined to attempt to make no more converts beyond bearing publie testimony to the truth of the facts, and have resolved to expend energy instead in establishing institutions to aid in the work of self-improvement?" No theological sect dares to take such an independent position; but we, having so much truth with us, may just as well take advantage of the power. There is another point. Spiritualists have been battling with public want of

knowledge for years, to raise the movement to its present strength, and outsiders, who have done none of the work, have no right to claim to be admitted to our best spirit eircles till they have fitted themselves for entrance by passing through the necessary preliminary practical education. Professional mediums might save themselves from considerable annoyance by eeasing to advertise, and by admitting visitors to their seances only by previous appointment and introduction, so that the general public shall not have the right to attend at pleasure. Whatever steps may be taken, it is high time that something should be done to relieve mediums from much of the abuse hitherto showered upon their devoted heads, and the remedy rests very much in their own hands, but partly in the hands of the great body of Spiritualists.

THE ROYAL INSTITUTION.

DR. RUTHERFORD ON THE FORCES AND MOTIONS OF THE BODY.

On Tuesday, Jan. 14th, Professor Rutherford, M.D., gave the first of a course of lectures at the Royal Institution, on "The Forces and Motions of the Body." He began by defining the various modes of motion produced in the body, explaining the differences between atomic, molecular, mechanical, electrical, and other kinds of movement. He also described the phenomena of various kinds of force. He said that force might be defined to be that which can change the direction of motion, but that the nature of force is utterly unknown. All force is either attractive or repulsive. The force of gravity acts between the material particles of all bodies, however distant they may be from each other. Another kind of force, known as chemical attraction, acts only at insensible distances between the atoms of bodies. Cohesive force is that which holds the particles of matter together, and adhesive force acts only at small distances between unlike substances, as in the example where two pieces of paper are held together by gum or glue. Then there is repulsive force, which is best seen in the repulsive action between the particles of gases. Electrical or magnetic force is both attractive and repulsive, therefore is considered to be a dual or polar force. The word "energy" implies the existence of force and its power to produce motion.

CORPUSCULAR AND CILIARY MOTION.

Dr. Rutherford then spoke of the simplest forms of animal life, beginning with the protamœba, which is so small that it ean be examined only under a microscope, and resembles a little atom of jelly containing granules; it can elongate or contract itself in various directions, and in that way is able to move through liquids. There is quite a thick layer of these animals at the bottom of the Atlantic, and the jelly-like substance of which they are composed is "protoplasm." The amœba is much the same kind of animal, but rather more complicated in structure, as it contains a nucleus. There is scarcely any difference between the amœba and the white eorpuscles in the blood of men and animals; the corpuscles consist of protoplasm. They have a power of motion, and the cause of that motion is not known. The mucus corpuscles, which are so plentiful in the mouth and other parts of the human body, are of the same nature. They have the power of motion; they are protoplasmic; they can throw out processes and draw them in again. When an electrical shock is given to these corpuscles they draw in their processes. The nerves do not cause their motion, neither does electricity; in fact, the cause

of their motion is not known, and may, possibly, be due to chemical changes. Carbonic acid is poison to protoplasm, and stops its motions; heat accelerates the motions, and cold retards them. The motions are called "spontaneous," because the cause is not known. The cilia are filaments of protoplasm, which have the power of "lashing," so as to drive a fluid in a particular direc-tion; many vegetables as well as animals are furnished with ciliary processes: these processes are found in many parts of the human body, including the brain. There are, moreover, ciliary processes on the gills of the oyster and mussel. Dr. Rutherford cut a piece out of the gills of one of the latter shellfish, put the fragment in a glass cell, and dropped upon it some water containing particles of blue colouring matter; then he placed the whole in the electric microscope, so that a magnified image was thrown upon the screen. This enabled everybody in the theatre to see the motions of the floating particles of matter as they were driven along by the cilia, and, on closer inspection, the ciliary processes could themselves be seen, waving like the stalks in a field of corn on a windy day.

On Tuesday, Jan. 21st, Professor Rutherford delivered his second lecture at the Royal Institution, on the same subject. He once more called attention to the fact that the white corpuscles in the blood have the power of motion, and very strongly resemble the little animals called the protameba and the ameba. The amœba resembles a particle of jelly with a few granules inside. It has the power of wrapping itself round little particles of solid matter, and of deriving nourishment from them. The white corpuscles in the blood of animals do not, however, seem to possess this power. They appear to derive their nourishment from the liquid in which they float. The cause of the motion of white corpuscles is not known; it is not the result of nervous action. The lecturer also spoke of the pig-ment cells in the skin of the frog. The pigment con-sists of small dark particles floating in a protoplasmic or watery liquid. When the particles are close round the nucleus of the cell they form a small dark spot, and when they float away from it they form a large one. This explains why the same frog is sometimes light and sometimes dark; and the change is due to the action of light upon the optic nerves of the animal. When a frog is placed in darkness it will turn nearly black, but gradually grow lighter in colour when it is once more brought into the light. He said a little about the motion of the cilia, or fine hair-like processes which cover the lungs and most of the air-tubes of the body, stating that the cause of the motion is not known, but it is possibly due to chemical changes in the band of protoplasm in which they are rooted. Heat accelelerates their motion; oxygen is necessary for the motion. They have within themselves a little store of oxygen, but cease to move when they have used it up. Chloroform will send the cilia to sleep, or stop their motion; but when the chloroform evaporates, the lashing motion of the cilia begins again. Dr. Rutherford said much about muscles. A muscle, he said, probably never stirs of its own accord; it only contracts when some outside stimulus is applied. Nerves enter most of the muscles, and when nervous energy is made to act upon the muscle, the latter contracts; electricity, chemical irritants, and other things will also make a muscle contract. The motion of a contracting muscle is wave-like in its nature, and sometimes causes musical sounds.

MUSCULAR MOTION.

On Tuesday, January 28th, Dr. Rutherford delivered the third lecture of the series. He said that muscles probably never contract of their own accord, but only when some stimulus is applied from without, and in the living body that stimulus is generally nervous He showed that by stimulating the nerve of a energy. frog with electricity, the nerve caused the muscles in the frog's thigh to contract, but when he paralysed the ends of the nerve by means of Indian arrow poison, the muscles did not contract when the nerve was stimulated by electricity, since the nervous energy could not then reach the muscle. On electrifying the muscles themselves they contracted, so it is possible for a muscle to contract without nervous stimulus. The excitement of a nerve fibre seems always to begin in a nerve cell, and it is upon some of the nerve cells that the will or thought of man seems to act. Nerve fibrils end in tho cell, which contains protoplasm, and a nucleus. Muscular motion may be either voluntary or involuntary ; for instance, the beating of the heart goes on without any exercise of will-power on the part of the individual. The nerve cells in the brain are connected with the evolution of thought; these cells are connected with other cells in the spinal cord, and when the cells in the brain are thrown into activity by the will, impulses travel down through the nerves to the muscles, and move such of them as are under the control of the individual.

The brain cells may be separated from the cells in the spinal cord, and the involuntary muscular motions of the body will go on as before. The lecturer cut the nerves in the upper part of the spinal cord of a frog, then put a drop of vinegar on the frog's back; instantly one of the hind legs of the frog contracted and began to rub the liquid off the back, although the frog could have exercised no volition in the matter. Dr. Rutherford said that the acid irritated the ends of the nerves in the skin, these conveyed the stimulus to nerve cells in the lower part of the spinal cord, which cells sent a nerve current down again through other nerves, so that by this automatic reflex action the muscles of the leg contracted. He said that sometimes when the human spinal cord has been accidentally broken, the feet will move on being tickled, yet the sufferer does not know of the motion of the feet or feel the tickling, it being simply a case of reflex nervous action, as in the case of the frog. A person will sometimes read aloud while he is thinking of something else, and that is an example of muscular motion without consciousness. There are striped and non-striped muscles in the human body, and the former are placed where rapid contractions are necessary. The force of muscular action depends upon the strength of the excitant; a muscle can lift 15,000 or 16,000 times its own weight, and no machine made by human skill, can turn chemical into mechanical energy so economically and completely. On Tuesday, Feb. 4th, Dr. Rutherford delivered his

On Tuesday, Feb. 4th, Dr. Rutherford delivered his fourth lecture. He said that muscles stiffen in *rigor mortis*, directly after death, because of the coagulation of a fluid called myosin, which they contain; some time afterwards they become supple again, and that is owing to the decomposition of the myosin. Living muscle in a state of rest has an alkaline reaction; a dead muscle is acid, so also is a living muscle after it has been continuously working for a long time. Living muscles "breathe" continually; they take oxygen from the blood, and give off carbonic acid to the blood. In all parts of the body

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a continual chemical change is taking place-even in the bones. The amount of carbonic acid given off through the lungs is enormously increased when muscular work is being done; but muscular work makes scarcely any difference in the secretions of the kidneys. In short, muscular energy is chiefly derived from the slow oxidation of hydrocarbons in the muscles, on the same principle that mechanical energy is obtained from the quick burning of coals in connection with a steamengine. Some nitrogenous substances assist a little in producing muscle. Nerve energy appears to be kept up by the consumption of albumenoid matters, but food rich in starch and sugar is good for muscular development. How chemical energy is transformed into mechanical energy in muscles is not in the least degree known. There is a motion of vibration when muscles contract, so that in some cases they give off a musical sound. If the jaws be clenched when the head is lying upon a pillow, a rumbling sound, due to muscular friction, will be heard; and Helmholtz has proved that this musical note is the same as that of a tuning-fork vibrating nineteen times per second; the more rapidly the muscles contract, the greater is the pitch of the sound.

ELECTRICAL MOTIONS IN ANIMAL BODIES.

Electricity is produced in a living muscle both when the muscle is in a state of rest and in a state of motion. There are some animals-all of them fishes-which have special organs for the production of electricity; eight species of fishes are known to have such organs. The torpedo, a fish which belongs to the skate family, has some organs for the purpose resembling a honeycomb in appearance, consisting of a number of cells; the walls of the cells are ordinary fibrous tissue. The walls contain a fluid, and in the fluid are a number of plates. In the accompanying cut, A B re-ID?

presents one of the cells, divided thronghout its length by the plates, and between the plates is a gelatinous fluid; the nerves shown at K are connected with the cell A B, and wherever they pierce its walls they are connected with the under surfaces of the plates inside. Blood-vessels also enter the cell, and are connected with the upper surfaces of the plates. Negative electricity is produced at the under surfaces of the plates, and positive electricity at the upper. The

nerve fibres pass from the electrical organs of the fish to what were called its "electric lobes," near the medulla oblongata. It was once thought that the electrical energy was developed in the electric lobes, that the current then passed down through the nerves, and was stored up in the cells with their plates, just as electricity may be stored up in a condenser or Leyden jar. But as mechanical energy does not pass down through nerves to muscles, the question was raised whether the electricity was not generated in the cells, the nerves merely giving the stimulus. Evidence was soon obtained that electricity was generated in the plates. On cutting off the action of the nerve cell F, by severing the nerve at E, and on applying a stimulus to the cut end of the nerve H, it was found that the organ A B evolved electricity, although separated from the "electric lobe" and brain of the animal. It was also found that the scratching of the electric organ would cause it to generate electricity. In short, the chemical energy in the plates scparates the two kinds of electricity. There are pseudo-electric organs, of complicated struc- | wet clay with a reflecting galvanometer, and on connect-

ture, in the common skate, but they have not been known to generate electricity. The torpedo, the gymnotus (or electric eel), the malapterurus, and the mormyrus, are the chief electrical fishes.

On Tuesday, Feb. 11th, Dr. Rutherford delivered his fifth lecture on the Forces and Motions of the Human Body. He said that when nerves stimulate a muscle they produce mechanical motion, but when they stimulate the electrical organs of the torpedo they produce electrical motion, but no mechanical motion. The cells N R are placed vertically in the torpedo, and the skin of the fish is a bad conductor of electricity, so that the electrical discharge has to pass outside the fish, through the water, in the direction denoted by the arrows in the cut. There is only a discharge when the animal wills it, and not a continual discharge; the organs are always developing a small amount of electricity, but not enough to pierce the skin. Walsh, in 1772, discovered the electrical discharge of the torpedo.

Electricity is continuously generated in the muscles, nerves, and glands of animals; probably it is also produced in all tissues wherein chemical changes are taking place. Galvani, in 1786, discovered that frogs' legs would show the presence of small quantities of electricity. Some years later he suspended some frogs' legs by the nerves to the iron trellis-work of a balcony, to see if they would indicate electrical changes in the atmosphere, and sometimes when the end of the leg was blown against the trellis the muscle contracted; the experiment attracted so much notice that it resulted in the extermination of most of the frogs in the district, since everybody was trying it. Volta discovered, in 1799, that the contact of two dissimilar metals would produce electricity, and he argued that the electricity generated in Galvani's experiment appeared in consequence of a copper hook having been used to suspend the leg of the frog to the iron trellis. Galvani found that one piece of metal in contact with the nerve of the leg and the outside of the muscle would sometimes cause a contraction, but then it could not be proved that the two ends of the piece of metal were in the same chemical, thermal, or mechanical state, so that elements of dissimilarity might still be present. He afterwards found he could produce the contraction without the intervention of any metal at all, by lifting the end of the nerve with a glass rod, and allowing the nerve to touch the outside of the muscle. Volta argued, that even in this case Galvani had not got rid of heterogeneous tissues, and had not proved the reality of elcctrical tissues. Unfortunately, Galvani was silenced by this argument, and his researches were stopped soon afterwards by his death. There is a real generation of electricity in a muscle, and an accumulation at the two ends of a muscle. Nobili, in 1827, showed the pre-sence of this electricity, by the aid of a galvanometer. Matteucci, in 1838, discovered the generation of electricity in tissues, and the subsequent researches of Du Bois Raymond brought the knowledge of animal electricity very nearly up to its present level.

In living muscles and nerves, negative electricity accumulates at the ends of the fibres, and positive electricity at the sides of the fibres. Plates of metal cannot be used as electrodes when measuring these currents, as the metal might cause the generation of electricity, therefore plates of moist pipeclay are used, so that both chemical action and polarisation are avoided. Dr. Rutherford connected two electrodes of ing the two electrodes with a piece of wet blotting paper, he showed that there was scarcely any motion of the mirror, consequently no electricity was generated in his apparatus. Then he took away the blotting paper, and substituted a frog's muscle, which at once gave off a continuous current of electricity, deflecting the mirror of the galvanometer, and the reflected spot of light upon the screen made the motion visible to everybody present. He then, by stimulating the muscle, made it contract and do work. During the contraction, the spot of light upon the screen was less deflected, proving that a muscle at work generates less electricity than a muscle at rest. The deflection was diminished by about one-third, when the muscle was made to do work. With the same apparatus he next proved that electricity is generated in nerves, and that a nerve at work gives off less electricity than a nerve at rest. The currents of electricity from nerves are much weaker than those from muscles.

On Tucsday, Feb. 18th, Professor Rutherford delivered his sixth lecture on the same subject, and said that medical men particularly want to know, but do not know, why a muscle contracts when it is stimulated. A muscle at rest generates clectricity, and one speculation is, that, perhaps, the muscle contracts when the electricity is discharged, and that at other times the one electricity attracting the other causes the muscle to elongate. When the opposite sides of a large long thick sheet of india-rubber are coated with goldleaf, and electrified with opposite kinds of electricity, the india-rubber elongates, and when the electricity is discharged, the india-rubber contracts. But, in the first case, it not only elongates, but becomes broader, whereas, when a muscle elongates, it becomes thinner, so the two cases are not parallel, and the explanation is not satisfactory. Is nerve-energy electricity? Nerveforce will not pass through a frozen nerve, but electricity passes through it more freely than before, therefore nervous energy is not electricity. A nerve is a bad conductor of electricity,-in fact, one authority has stated that the electrical resistance of a nerve is greater than the resistance of the whole length of the Atlantic cable. Nerve-energy is produced in nerve-cells from chemical energy, but how nerve-energy travels along a nerve is not known. It may be by a vibratory motion, or by a series of chemical changes. Electricity is produced in the glands and other tissues, but the use of the electricity produced in the human body is not known.

SPIRIT FORMS.

A CORRESPONDENT has sent us the following extract from the *Banner of Light*. The spirit circle which obtained the manifestations must have consisted of pure people, linked together by harmony and good-feeling, and experienced in all the conditions which favour spiritual influx :—

As much has been and is being said of an uncharitable character relative to the reliability of the materialisations presented through Dr. H. C. Gordon's mediumship, I desire to be one to raise my voice in declaring the manifestations which I have witnessed at his residence, 406, Fourth Avenue, New York, to be *unquestionably spiritual*. On the 13th of last month I first visited his room; I arrived early at his abode, and had every facility afforded me for searching not only the apartments but the closets attached thereto, his trunk, sofa bedstead, and rear of the altar, which is erected in the inner parlour, and neither masks nor habiliments for clothing automatons nor automatic figures were there dis-

covered. The circle, consisting of six persons, arranged themselves around a table at about eight o'clock p.m., and shortly after the manifestations commenced. Eight spirits successively presented themselves, of whom six were recognised. Of two only (for fear of occupying too much space) will I especially speak : one of these was my own brother ; only his head and face were visible; the resemblance was perfect. That it was neither a mask nor India rubber form, I am ready to affirm in any court and under any prescribed oath. The other to which I would draw attention, was the entire figure of a lady, the only entire one I have as yet seen, although I have attended several seances since. This lady had beautiful dark curly hair; over her head was thrown a white veil, that enveloped her form to the waist; over the vcil and around her head was a wreath of white rosebuds, which extended partially down her neck. She wore a thin white dress, and as she entered the room where the circle was assembled, in placing her foot on the carpet, she displayed a *white silk shoe;* her shoulders and neck were very symmetrical and perfect, as was also her left arm, which was extended towards her head. With her left hand she grasped the medium's wrist. This lady seemed very desirous of being known, and was extremely persevering in her efforts. She advanced three times from the inner room ere she succeeded in entering the apartment where the guests were, and where there was a gas chandelier in full play. She took her position in proximity with a lady next to me, surveyed the circle generally, remained about three minutes, but awakened no recollection in the one to whom she came. She then returned to the inner room, in the centre of which she vanished, themedium, at the same time, dropping on the carpet apparently quite exhausted. The cause of departure was subsequently announced, when the lady to whom she evidently came elaimed that she was her niece.

On the 18th of this month I was again at Dr. Gordon's, and then saw his controlling intelligence, Bishop White, a venerable figure with attenuated countenance, straight, sharppointed nose—(I dwell on this because some of the savans assert that all the forms have hooked, or as they term it Jewish noses)—grey hair and beard. He was clad in the robes worn by the Episcopalian ministers. In the medium's parlour there is a photograph of Dr. Gordon, with the rev. gentleman as a disembodied intelligence standing behind him. This was taken by Mr. Mumler. As the different figures disappeared, the medium would face the audience, throw open a surplice which he wears and shake it, thus showing any mind disposed to be convinced that there was no deception. MARY R. TUCKER.

19, West 22nd Street, New York, Dec. 23, 1872.

All the more remarkable spiritual manifestations began first in America, but in England spirit forms have begun to make their appearance; the power, however, is as yet undeveloped here.

On Wednesday, February 19th, a public seance was held at 16, Old Quebec-street, Oxford-street, London, W., Mr. and Mrs. Holmes being the mediums. Twenty or more ladies and gentlemen were present, and as the circle was a very harmonious and friendly one, the manifestations were strong. In the dark seance, while all hands were held, and Mrs. Holmes tied, the musical instruments flew about the large room like bats; they tapped nearly everybody gently on the head frequently in their flight, and occasionally flew up and beat against the very lofty ceiling the instant they were requested to do so. Three of the visitors had the ring test.

Afterwards there was a sitting for spirit-faces, Mr. and Mrs. Holmes, with all the observers, being, as usual, outside the dark room used as a cabinet. The light was stronger than usual, as the power of producing the faces is gradually increasing, and the circle was a harmonious one, consequently, on Wednesday, all the faces were very clearly seen. The first one was a noble-looking man, with fine intellectual features of the highest order. He had grey curly hair. The face evidently had life in it, and was less masklike than some of those which appear. Several other faces came, and at last a slightly dark one. It was

MARCH 1, 1873.

living, had its head bound up in white drapery. Some of the features, we thought, bore a little similarity to Mr. Holmes's, but it had no beard or moustache. Mr. Holmes was outside the cabinet looking at it. It went away, and then raps asked Mr. Holmes and Mr. Blackburn to go inside the dark room. They did so; and after they had been there some time, the face just described came again to the opening. What was seen inside is stated in the following letter from Mr. Blackburn :---

To the Editor of the Spiritualist.

SIR.-Respecting the excellent scance held last Wednesday at the Holmes's, Old Quebec-street, Oxford-street, I wish to draw your attention to several ideas, arising after reflection. draw your attention to several ideas, arising after renection. When spirit hands appear, I have always thought they were manufactured, or formed, close to the cabinet window, and then presented to our outside view; and, in like manner, also the faces; but when I went inside the cabinet with Mr. Holmes alone, I found my mistake. We placed ourselves close together in the dark cabinet room, on two chairs, with our backs to the fire-place, say about seven feet from the square hole. As soon as we were scated, Mr. Holmes quickly took hold of both my hands, and shortly he began squeezing them with great in-tensity, writhing about as though he had spasms; then came over him several shocks, just such as trace mediums make just before recovering their normal condition. He then said, "Are you afraid ?" I replied, "Not a bit of it." He said, "Don't you see something ?" I said, "No, I've been looking at that square hole all the time, but have seen nothing." Then came another shock, and his hands became cold and of a nasty clammy nature. He again said, "Don't you now see some-I then withdrew my eyes from the square hole, and thing? looked all round, but the darkness was so black, I felt as if blind; then my eyes began to see a "misty white form," in the furthest part of the room or cabinet, and I said, "I see something white over there." He replied, "Yes, they always come in white." It moved about a little, and then came right past us, and went to the square hole, though it hesitated to go close up; it then went close up, and the people out-side can say what face they saw; it was not transparent; it retreated and came and stood in front of me. Mr. Holmes asked it to say something, and it answered in a low voice, "My son, we cannot give more demonstrations for our power is expended—good-bye." Now during my first sight of the form, I never could see any formation, nor any face, but I saw the white misty light in the shape of a force form with a never with drower of with a fail nor any face, but I saw the white misty light in the shape of a female form with nice waist, with dress, and with a frill round its neck. The dress appeared when nearest me to shine as if of Persian silk, and as it glided along I distinctly heard it rustle while it passed and repassed. When it stood in front of me I asked it to touch me, and it then stroked my beard twice, for which I said "Thank you." It then went towards a chest of drawers, and vanished through the wall at that point. Now I should like you to privately see these mediums, and get to know their experiences, and let the public have the benefit thereof. CHAS. BLACKBURN. Parkfield, Didsbury, near Manchester. February 20th, 1873. At the time of writing the above letter, it is evident

At the time of writing the above letter, it is evident Mr. Blackburn had not been informed that the face was the same one which he saw before he entered the cabinet, so the spirit had been more or less materialised some time before he entered the dark room.

We have been informed that on the following evening (Thursday, Feb. 20th) some rough people attended, and misbehaved themselves all the evening, purposely annoying the mediums in every possible way. Although conditions were so much broken, Mrs. Holmes's mediumship was, as usual, so strong, that three of the visitors had the ring-test, and other manifestations were obtained. With a thoroughly friendly circle of respectable people, her power is very great, when she is not unwell, and has not had a previous sitting the same day. We have been present at five or six *seances* with Mr. and Mrs. Holmes, who arrived a few months since from America, and a fair proportion of the manifestations took place under test conditions.

The following letter has been sent us by Mr. G. R. Tapp :---

To the Editor of the Spiritualist.

SIR,-I think it right to send to you a detailed account of a scance at which I was present, which took place yesterday evening at the residence of Mr. Henry Cook, Hackney; it occurred through the mediumship of Miss Florence Cook. Several friends were expected, but did not come. I was, in consequence, the only visitor. The other sitters were Mr. and Consequence, the only visitor. The other sitters were M Mrs. Cook and family, Miss Till, and the servant Mary. The medium was disappointed at the absence of her friends, and was disinclined to comply with my suggestion that a sitting for the materialised spirit faces should be held, but proposed an ordinary dark sitting at the table instead. I persuaded her, however, to refer the decision to her spirit guides, who wrote, through her hand, that we were to throw the door of the cabinet (fully described in No. 46 of the Spiritualist) wide open, hang a shawl across the opening, and sit in the dark first for "spirits full length" at once. I accordingly opened the two doors of the cabinet to their full extent, propping them open with a couple of weights from the kitchen. I then nailed a string from the outer top end of one door to the outer top end of the other, and suspended from the string a large shawl, completely covering the opening. The aperture above the doors I closed from the light by throwing across it a travelling wrapper, and by these means extemporised an additional space to the cabinet. I then went inside the cabinet, and carefully examined it, placing in the right hand corner the little low seat which is now used by the medium. The spirits had previously written that it would be better not to tie or fasten the medium; and to this condition I willingly consented, having, in company with many others, on previous occasions, wit nessed the most striking manifestations when Miss Cook had been tied, sealed, and secured in every possible way. The other sitters then arranged themselves in the usual way round the room, and I closed the room door, led the medium to her seat in the cabinet, came out, dropped the shawl down after me, and turning out the gas, took my seat the other side of the room, directly opposite the cabinet. The firelight rendered objects in the room dimly visible.

Almost as soon as I sat down, brilliant phosphorescent lights were seen moving up and down before the shawl, and Katie's voice was heard apparently *outside* the cabinet, and from the floor, assuring us of a capital *seance*, if we implicitly followed her directions, and did not try to grasp at anything. We all promised compliance, and after we had sung a little, Katic was seen to slowly raise the shawl and step outside in front, letting the shawl fall down after her. The light being so very faint, we could simply see the white outline of her figure. We were then severally called up by her to shake hands. When it came to my turn, she took my right hand in hands. When it came to my turn, she took my right hand in hers, and passed it over the upper part of her white dress. The texture was like that of fine canvas or bunting, and it rustled with every movement of the spirit. My impression (which I did not mention at the time) was, that she had on only one gament. This was confirmed by the servant Mary, who on going up to shake hands, was told to pass her hands, down the materialised body of the spirit from head to foot. This she did, and said at once that Katie had nothing under her white robe, as she could feel her joints through it. Mrs. Cook was then called up to shake hands, but as she approached, Katie caught hold of her by the shoulders and kissed her heartily. Katie then went back into the cabinet, and said that when she came out again she could bear more light. I accordingly lit the telescope burner attached to the ceiling, and pulled it down to its full extent, so that the light was exactly in the centre of the room. Katie allowed the gas to be turned up sufficiently high to allow all to see what followed quite distinctly. I then resumed my seat, and "Katie" stepped out into the room again and again, nine or ten times, and langhingly chattered to each of us, asking us to admirc her pretty white dress, and saying it was not like the medium's (Miss Cook was dressed in deep mourning). She held up her arms, which were long, but shapely, and asked our opinion of her sleeves, which were tight fitting, and plaited in folds at the wrists. She then turned about from side to side, putting out her naked feet alternately from under her dress, observing that she could not afford to waste her power in materialising shoes and stockings. She then stood perfectly still, smiling at us, beating time with her hands, while two verses of the hymn "Shall we gather at the river?" were sung. She then retired into the cabinet, drop-

ping the shawl after her, and re-appeared almost instantaneously, and held up her hands, when the right one was observed to be black. She then lowered her hands, and raising them again directly, both hands were the usual flesh colour. Then, again directly, both hands were the usual flesh colour. again directly, both hands were the usual fiesh colour. Then, after a short pause, she came out once more, and told me to go up and look at her. I advanced, and when about three feet away, was told to stop. I did so, and for about two minutes we looked at each other. The dress she wore was pure white in colour parching in the lock of the dress she wore was pure white in colour, reaching just below her ancles, but searcely covering It was gathered in a fold at the waist, and bound her feet. with a broad white girdle. From the waist upward it was fastened in front like a dressing-gown, and it was plaited in several folds close round her neck. The sleeves were long, and fitted elosely. She wore the usual white nun's head-dress, fitted closely. She wore the usual white nun's head-dress, which, however, was so arranged, as to admit of her features and part of her neck and hair been seen. Her eyes were bright and sparkling, and she appeared full of delight at her success. The resemblance of her features to those of Miss Cook (which has so often formed the subject of discussion and com-nent) was not now perceptible. Her chin was round, and large, and dimpled, and her face (which was most animated and beautiful) was apparently that of a woman of five or six and twenty. Her shoulders and waist were broad and solid look-ing in fact "Katia" was rather stout. She segmed to be about twenty. Her shoulders and waist were broad and solid look-ing, in fact, "Katie" was rather stout. She seemed to be about five feet six inches in height, or rather more, for as she stood firm on her feet, with her hands folded in front of her, her head was above the top of the shawl (which hung on the tight string, level with the top of the cabinet doors). Her voice, though not loud, was elear and distinct, without any of the oceasionally imperfect articulation which usually accompanies the manifestation of her face alone. It most certainly was not like the voice of Miss Cook. She told me to go back to my seat, and asked me what I thought of her "full length."

my seat, and asked me what I thought of her "full length." I said I could scarcely find words to express my gratification, and she kissed her hand to me, and walked backwards to her eabinet, holding up the shawl to peep out roguishly, and nod farewell to the other sitters. While she manifested at first she stood rather timidly just outside the shawl, but as the power got stronger, her confidence increased, and she eame forward in front of it fully a foot, or a foot and a half. Miss Cook was entranced at the commencement of the *seance*, and did not speak throughout. Before Katie finally retired into the eabinet as above stated, she said, "Oh, Georgie, I am so glad. I can do no more now, but if my medium has her gift properly developed under good influences, there is nothing we won't be able to do. Tell Willie that." Then, "Wake the medium up gently when I rap." In about two minutes, three raps were given inside the eabinet. I at once pulled back the shawl, and found Miss Cook entranced, and seated just as at the commencement, with her head resting once pulled back the snawl, and round arts over christer, and seated just as at the commencement, with her head resting against the wall. I roused her with upward passes, and led her out of the cabinet, and thus ended this most remarkable seance, which lasted about three quarters of an hour. G. R. TAPP.

Queen Margaret's Grove, Mildmay Park, London, N, Feb. 24th, 1873.

Last Tuesday evening Mr. J. C. Luxmoore, of 16, Gloueester-square, Hyde-park, W., eame with a friend of his to Miss Cook's seance ; the latter gentleman (a county magistrate and deputy-lieutenant) had never entered the house before; he clearly recognised the spirit-face which appeared as that of his father. The face bore a strong light; at first it was very much muffled up in white drapery, but by dint of singing, and giving it good conditions, it at last uncovered itself all but the chin and ears, and repeatedly showed itself in a strong light. Miss Cook's hands had been tied together and to her waist by Mr. Luxmoore with tape; he also fastened her by her waist with tape, so that no upward movement exceeding one inch was possible. The knots and screws were earefully sealed by him. This was done mcrely for the sake of publication, not because any of the friends present desired it, or thought it necessary. No other face came that evening. Katie says now that she is going away and strange spirits coming, Miss Cook is passing through a critical period in her mediumship, and it will probably be three weeks before this stage of development is passed over. Remarkable

knocking noises and disturbances now frequently take place in the house, showing that strange influences are about.

Poetry.

THE SONG OF A SCEPTIC. THE sky is dark behind, Jack, The sky is dark before, And we drift along in a current strong, Without helm, sail, or oar.

We know not whither we wend, Jack, We are sure that the voyage must end, Jack, We are sure that the voyage must end, Jack, But where is the haven home?

No star in the sky to guide, Jack, But all is dark, dark, dark, And still colder runs the tide, Jack, The longer floats our bark.

We hear not the noise of the stream, Jack, But we feel that we hurry on— And where we shall go—shall we never know Till the weary voyage is donc.

And when our bark has arrived, Jack, Oh what will the welcome be? Why, no one can tell, whether ill or well, It will fare for thee and me.

So hand me the bottle aft, Jack, And I'll hand it you fore again, And cheered by the thoughtless draught, Jack, We'll float down the darksome main.

Fraser's Magazine, Vol. III.

THE HINDOO SCEPTIC.

I THINK till I weary with thinking, Said the sad-eyed Hindoo King, And I see but shadows around me-Illusion in everything.

How knowest thou aught of God, Of His favour or His wrath ? Can the little fish tell what the lion thinks, Or map out the eagle's path ?

Can the finite the Infinite search, Did the blind discover the stars? Is the thought that I think a thought, Or a throb of the brain in its bars?

For aught that my eye can discern, Your God is what yon think good, Yourself flashed back from the glass, When the light pours on it in flood.

You preach to me to be just; And this is His realm you say, Yet the good are dying of hunge And the bad gorge every day!

You say that he loveth mercy, And the famine is not yet gone; That He hateth the shedder of blood, Yet He slayeth us every one.

You say that my soul shall live, That the spirit can never die— If He were content when I was not, Why not when I have passed by?

You say I must have a meaning; So has dung, and its meaning is flowers. What if our souls are but nurture For lives that are greater than onrs?

When the fish swims out of the waters, When the birds soar out of the blue, Man's thoughts may transcend man's knowledge, And your God be no reflex of you,

The Spectator.

MRS. BASSETT, the well known non-professional medium, is in Portsmouth.

MR. BASSETT recently opened a public discussion on Spiritualism, at the Workman's Hall, Stratford, E. Mr. Somerston presided; Mcssrs, Jeffries, High, Dooley, Lemon, Dixon, and others, took part in the debates.

WITH reference to the public subscription to diminish the losses over the fortnightly publication of the *Spiritualist*, we wish the sum total to be raised to a minimum of $\pounds 20$ more than at present, and if $\pounds 30$ more were subscribed, the external support given would only adequately and fairly balance the extra responsibilities of changing from a monthly to a fortnightly issue. As the spiritual periodicals have been sys-tematically aided by subscriptions, but the *Spiritualist* never opened a subscription list before, perhaps the moderate amount of aid suggested may be fortheoming before the list is elosed.

THE ANTHROPOLOGICAL INSTITUTE.

ON Tuesday evening, February 18th, at the ordinary fortnightly meeting of the Anthropological Institute, 4, St. Martin's-place, Trafalgar-square, Professor George Busk, F.R.S., President of the Institute, oecupied the chair. There was a good attendance of members.

THE MACAS INDIANS.

Two human heads were exhibited by Sir John Lubbock. They were the heads of Macas Indians, who had been murdered, and the heads afterwards reduced to the size of a cricket ball, by the process described in the paper. The features were perfect, and the little heads were almost hidden by their long glossy locks of raven black hair.

by their long glossy locks of raven black hair. Mr. E. W. Brabrook read the paper by Sir John Lubbock, Bart., F.R.S., Vice-Chancellor of the University of London, which set forth that the Macas Indians of Equador are seatwhich set forth that the Macas Indians of Equador are scat-tered tribes, occupying the country immediately on the eastern side of the Andes, a few degrees south of the Equator. They have recently been visited by Mr. C. Buckley, who spent eighteen months in the district. He brought back with him four prepared heads, two of which I have now the honour of exhibiting to the Society. They belong to a chief named Hilinchima and his wife Wahaii. This chief had also another wife, and the three lived with the man's father and mother, forming a family party of five. The Macas Indians are divided into small tribes, which are constantly at war with one another. This unfortunate family belonged to the Atchweli tribe, and were attacked and murdered one night in their sleep by a party of Xebros Indians, making, however, a desperate resistance, in the course of which they received numerous wounds, some of which are still visible. The heads numerous wounds, some of which are still visible. The heads are very remarkable on account of the small size to which they have been reduced. The process of preparation, accord-ing to Mr. Buckley, is very simple. The head is removed, and after being boiled for some time with an infusion of herbs, and after being bolled for some time with an infusion of herbs, the bones, &c., are removed through the neck. Heated stones are then put into the hollow, and as they cool are continually replaced by others; the heat thus applied dries and contracts the skin, reducing the head to the size shown in the figures. It will be seen that Mr. Buckley's account confirms that given by M. Barriero.* A string is then run through the head; it is suspended in the hut, and solemnly abused by the owner, who is answered by the priest speaking for the head, after which the mouth is sewn up to prevent any the owner, who is answered by the priest speaking for the head, after which the mouth is sewn up to prevent any chance of reply. The abuse is repeated on feasts and any special occasions. According to M. Barriero the heads thus prepared are treated as idols, and the first which came to Europe was obtained by a ruse, the owner being assured that the head wished to travel. The same custom and mode of preparing the heads is common to other neighbouring tribes. The Macas Indians live by hunting, though the tribes. The Macas Indians live by hunting, though the women grow some maize and a little grain, as well as a few plants of tobacco. The men use spears, but their principal weapons are blowpipes and poisoned arrows. Their huts are oblong in form, built of palms, and thatched with palm-leaves. The men are polygamous, but never have many wives; they acquire wives by purchase or by capture; by purchase if the woman belongs to the same tribe, but other-wise by force. The captured women are generally murdered after awhile for the sake of their heads. The women do all the household work. They have no temples or priests, but are firm believers in witchcraft: Mr. Buckley, however, found are firm believers in witcheraft; Mr. Buckley, however, found it difficult to obtain any clear insight into their religious views, and is reluctant to place on record statements which views, and is reluctant to place on record statements which might not be strictly correct. It would have been well if all travellers had been equally cautious. They have doctors, whose remedies however are mainly, if not entirely, magical. If they fail to effect a cure they are sometimes put to death themselves. The Macas Indians are generally named after animals. When the head of a family dies, he is placed on a bed of milt between the doct is fortuned up, and the bet d bed of split bamboo, the door is fastened up, and the hut de-serted. Children are buried in the ground without any ceremony. Some food and water are generally placed with the dead, but not as a general rule at any rate, either arms or implements. Property descends in the male line. The Macas Indians are not cannibals. They keep dogs and fowls, and are very fond of pets, especially monkeys and parrots. They count up to teu. The dress consists of a waistcloth, and there is little difference between the sexes. Their feet are bare.

* Ethnological Journal, Vol. II., p. 112.

They are very fond of ornaments, and some women pierce the under lip. Earrings are also worn. The son succeeds to the father's property. They make rude pottery, which they burn in open fires.

The President—Several similar heads were shown in the Exhibition of 1862, so that they are not altogether new. It is a curious method of preserving the heads of relatives.

Mr. Franks-Of relatives ?

The President—Of their enemies I mean. But as they sometimes kill their wives, and preserve their heads, it is hard to say whether some of the heads are those of enemies or not.

Mr. Hyde Clark said that there were some examples of nearly the same kind of practice among some of the savages in the Old World. The more men investigated, the more resemblance did they discover between the Old and New Worlds, especially in the languages.

The President said that the New Zealanders burn the heads of their friends and enemies in the earth, but do not take the bones out; then they hang the heads up as ornaments in their huts. America seemed to be the only place where the heads were reduced in size.

Mr. Franks said that on the Amazon the Indians preserve the heads of their enemies, and carry them on a staff, but they do not diminish the size of the heads, or take out the bones.

PHYSICAL FEATURES AND PARISH BOUNDARIES.

Mr. William Topley, F.G.S., then read a paper "On the Relation of the Parish Boundaries in the South-east of Eng-land to Great Physical Features, particularly to the Chalk Escarpment." The author first described the line of the chalk escarpment, which is known in different parts of its course as the Wolds of Yorkshire and Lincolnshire, the Chiltern Hills, the North and South Downs. All along the base of this escarp-ment there is a fine arable soil; the situation is sheltered, and springs of good water abound. A continuous line of villages occurs along here, often lying quite close together. The parishes belonging to these villages have a remarkably con-stant relation to the face of the chalk escarpment; nearly the stant relation to the face of the chark escarpment; nearly the whole of them go up the steep slope; sometimes they end at the summit of the hill, but more generally they take in a good deal of the chalk table-land beyond. The face of the chalk escarpment (the steep slope of the downs, &c.) is thus almost escarpment (the steep slope of the downs, &c.) is thus almost entirely divided amongst parishes whose villages are below the hills : exceedingly few villages upon the chalk table-land send their parishes down the hill. This is a very remarkable circumstance; for water and a productive soil are always found in that direction. The fact can only be accounted for by assuming that the settlements along the base of the hill were the earliest formed, all the land along the face of the hill being appropriated by them. These points were illustrated by a series of maps; some coloured geologically to show the line of the ehalk hills and the outcropping of other strata; some coloured in parishes. Maps of the entire Wealden dissome coloured in parishes. Maps of the entire Wealden dis-trict were shown, and on them the parishes around the border were coloured according to their relation to the escarpment. Along the whole range of the North Downs, stretching through the counties of Surrey and Kent, there are only four exceptions to the rule laid down. The chalk escarpment forms a well-marked rim or border to the Weald. Within that outer rim there is another line of escarpment, formed by the lower greensand : the quarry hills of Kent and the Leith hill range of Surrey are examples of this. The inner escarpment acts as regards parish boundaries, in a manner precisely the reverse of the chalk escarpment; for the villages upon the high ground generally send their parishes down the escarpment; comparatively few of the villages on the plain below sending their parishes up the hill. This, again, can only be because their parishes up the hill. This, again, can only be because the edge of the central Wealden country was appropriated by parishes just outside its border ; these parishes being obliged to extend themselves into the Weald because the land behind them, nearer the chalk, was already appropriated by the settle-ments earlier formed. The order of settlement in the Weald in the weald be a well-defined line of vilthem, nearer the chark, was aready appropriated by the settle-ments earlier formed. The order of settlement in the Weald was, therefore, as follows:--lst, a well-defined line of vil-lages along the foot of the chalk escarpment; 2nd, villages *upon* the lower greensand; 3rd, villages within the Weald. We know that the boundaries of the parishes within the Weald were not finally settled till the century after the Norman Conquest, when the See of Selsia was removed to Chichester, Domesday mentions but few manors within the Weald, but describes a large number around the border which are partly within it. The third stage is, therefore, nearly coincident in time with the Norman Conquest, but how much earlier the second and first stages were than this there is no evidence to

show. The author briefly noticed the great importance of this subject as bearing upon recent discussions concerning the primitive land systems of England. The paper concluded with some observations upon old lines of road, those of Roman construction being frequently parish boundaries.

The President said that in early times it was almost self-evident that physical lines formed natural boundaries. The old division of France into provinces was at first an entirely natural one; the Champagne country is, for instance, almost entirely upon the chalk

Mr. Charlesworth and Dr. Clement Le Neve Forster made a few remarks, after which

Mr. Hyde Clarke said that ecclesiastical divisions in England were made later in history than the civil divisions into townships. The former were more arbitrary.

Mr. Franks said that a paper had recently been read before the Anthropological Society of Berlin, bearing upon the origin and boundaries of villages.

Mr. Topley made a few remarks in reply, and the meeting returned thanks to him for his paper.

THE MAMMOTH, THE ELEPHANT, AND MAN.

Mr. Charlesworth exhibited two tusks, said to be African tusks, so curved as to resemble the tusks of a mammoth, more than those of an elephant. He raised the question whether the mammoth might not be still living in Africa; if so, the proved fact that man lived upon the earth at the same time as the mammoth, might be no proof of the great antiquity of man.

The President said that if the tusks on the table came from Asia there was nothing wonderful about them, the Indian elephant being of the same type as the mammoth of old. He questioned whether the tusks came from Africa in the first instance. Any continuously growing teeth of animals had a tendency to curve in a spiral form. The spiral tusks were interesting; he had never seen such large ones before.

The proceedings then closed.

THE HUMAN SPIRIT.*

BY EDWARD W. COX, SERJEANT-AT-LAW.

Few words are more frequent in conversation and in books than "SOUL." But ask the most intelligent and reflecting of those who use it to describe in plain words *what it is* they call a "SOUL"—what definite *idea* of "a SOUL" they have -what form, material, qualities, they intend by that name, and they will be compelled to confess that, in very truth, the and they will be compelled to contess that, in very truth, the word "SOUL" is to them little more than an unmeaning phrase, and that they have a very vague notion indeed—if any at all—of the *thing* they are talking about. If it be so with the most intelligent and thoughtful, what must be the blankness of conception in the minds of the inverse and unreflecting?

ignorant and unreflecting?

Not so, however. As always, the thoughtless and the un-informed find no difficulty in attaching an idea to the word. "Of course," they say, "I know what the soul is ; everybody knows *that* who knows anything. The soul is—is—is some-thing in us that lives after we die."

Ask their notions of the nature of this something, of its structure, its dwelling-place in the body, its functions there, its material, its shape, by what process it is severed from the flesh, where it goes, what they imagine to be the manner of its existence in its new life, what are the new conditions and new natural laws to which it must then be subjected, what are its capacities and its occupations, where is its abode and what its ultimate destiny? Not the unreflecting only, but the vast majority of those who are accustomed to think, will then admit that these questions of overwhelming interest to them had never or very rarely occurred to their minds, although not doubting in the least the fact that they *have* a Soul.

not doubting in the reast the fact that they have a boun. It is a startling truth that few of these momentous ques-tions have ever been seriously considered even by the most educated. Why? Because their attention has not been directed to them as questions to be practically and scientifically examined. Stranger still it is that such an inquiry has not been eagerly courted. Who is there, knowing that next year he may go to dwell in a distant land, who would not make anxious inquiry for information concerning the country, the climate, the conditions of existence and the nature of his abode there, and if there be any and what means of communication with the friend he will leave behind him? Nevertheless.

* From "What Am I?" an interesting book by Mr. Serjeant Cox, just published by Messrs Longman's.

there is scarcely one among us who, although knowing that his soul must depart from its present dwelling in a few years. and may be summoned to its new abode to-morrow, has ever given thought to the question what, viewed by the light of science, must and will be the probable conditions of its existence without the body.

Is it that we fear to think, or that we do not firmly believe? Is it that with usit is assent only, not conviction? Do we believe confidently and clearly, as we believe in the rising of the sun to-morrow; or is it only a dreamy hazy notion of something very far off, very doubtful, and very uncertain?

In times past, where the existence of the soul was recognised, Imagination invented a futurity for it, every people painting that future according to its own notions of pleasure and pain. The differences in these pictures proved them to be productions of fancy not founded on any fact. They were drawn in utter disregard alike of the known laws of nature and of the teachings of reason and of science.

But this is not an age of faith. We are not content to dream. We demand facts. We have learned many of Nature's laws, and we require that all knowledge shall be pursued in accordance with those laws. The structure, qualities, and functions of soul and the conditions of its existence—that is to say-its physiology-must be investigated with the same reference to reason and science as those of body.

But has the question been so treated?

On the contrary, the diversities of individual conception of the conditions of a future state are as conflicting now as ever they have been. If any twenty educated persons who believe in the existence of soul were required to write each his own ideas of its present and future dwelling place, of its structure, its qualities, its powers, pleasures, and pains, it might be safely predicted that there would be as great a diversity of description as of persons. It would be found that each had depicted for it a future which was nothing more than the present amplified and beautified, its bliss and its woe being precisely that which the speaker regards as pleasure or dreads

as pain. The conclusion from this is that the subject has not been examined with reference to scientific law.

Why this neglect of a matter of such surpassing interest? Years are expended in experiment and discussion upon the chemical composition of a stone ; but the composition of our-selves is treated with contemptuous neglect, as if a matter of no moment. The lips acknowledge the being of a sOUL as well as of a body, but while the mortal body is laboriously studied, the immortal is never examined. This treatment of it seems to betray a want of confidence in its reality. Science says that, from its nature, soul is out of her province, for she cannot subject it to the knife, the crucible, and the microscope. True; but is no other proof admissible in science than that which instruments supply ? Is our capacity for knowledge limited to things palpable to our senses ? Nay more, is it certain that the senses themselves supply *no* evidence of the existence of something in us other than that material structure which the physiologist manipulates? May chemical composition of a stone ; but the composition of ourmaterial structure which the physiologist manipulates? May there not be found in man something positive and substantial, from which we may fairly and reasonably arrive at the conclusion, or at the least form a probable anticipation, that we are not wholly material; that we are more than protoplasm; that theology teaches a substantial truth, to be demonstrated by science, and not merely a dogma that science looks upon as a dream; that even in science itself we may hope to find, scientifically shown, a reasonable probability that we possess a soul, or, I should rather say that we are souls.

I admit that nothing short of such reasonable and scientific proof should completely satisfy the inquiring mind. But what truth should be so eagerly desired and sought; what other has so profound a personal interest for us as the question of questions:

HAVE we a SOUL?

It is necessary to remind the reader that this inquiry is designed to be purely *scientific*. It purposely avoids all re-forence to the question in its *theological* aspect. It is addressed mainly to those who reject the authority of the theologian; to those who accept the existence of Soul as a dogma, but have not that firm and clear faith in it which never feels a qualm of doubt creeping over it, as well as to those who accept the theological assertion fully and sincerally how the theory the theological assertion fully and sincerely, but who desire some probable knowledge of the *nature* of the soul they firmly believe themselves to possess, some definite conception of its mode of existence here and the conditions of its existence hereafter so far as science can trace them by applying to the investigation the known laws of nature. Theology,

which affirms the existence of the soul and proclaims its immortality, does not attempt to teach us anything whatever about its structure and qualities, save that it exists in the present and will live in the future ; but of what it is, how it is, and what and how it is to be, it reveals almost nothing.

Is there any reader who would not express himself after this fashion? "I have a passionate longing to know more of this immortal spirit of mine. I am not content with the vague conception I have of it. I desire something more definite and distinct. I cannot accept a mere phrase. A name does not satisfy me. I am not the wiser for authoritative assurance that I have a soul, unless a definite idea is conveyed to me by that term. I turn that word over and over in my mind and try to comprehend its meaning. I ask myself what *definite image* that name summons before my mind's cye. I can discover none—neither shape, nor substance, nor qualities —no distinct idea which, when invoked by the word or coming involuntarily into the thought, I can contemplate as clearly as I can think of my body. More eagerly still do I desire to be assured that I have a soul, not as a matter of faith alone, but as positive *knowledge*, as certain and definite as my knowledge that I have a body. I am impatient to ascertain what *evidencee* founded on fact, and what argument based upon the laws of Nature and Science, reason can produce to me of the probable future of that soul—if it has an existence in that future, if it retains there a consciousness of its past existence here and what under the new conditions of its being are its probable powers and capacities." Doubtless thousands of thinking men and women are at this

Doubtless thousands of thinking men and women are at this moment experiencing this desire and thirsting for this knowledge; not questioning the theological Authority that affirms it, but anxious, in a matter of such supreme importance to themselves, to confirm assertion by *proof*, to convert a name into a thing, and to change a shapeless shadow into a cognizable substance. The number of such eager inquirers cannot be measured by outward expressions. Like children in a churchyard at night shouting, "Who's afraid," many try to assume a confidence they do not feel. The doubting and failing in faith, anxious to have doubt removed and faith confirmed, turn to science and say, "Tell me, you whose lives have been devoted to the investigation of Nature's facts and the laws of Divinity as exhibited in His works, tell me, *have I a soul*?"

And what says MODERN SCIENCE in answer to this earnest questioning?

"I have looked for the Soul, but I cannot find it. All that I can discover with the most powerful microscope is, that your body is built of particles of matter, combined in various groupings and forming various organic structures requisite to the completeness of the human being. Life appears to be the product of organism, the result of a certain combination of matter; for when that combination is severed life ceases and the structure is dissolved into its elements. Viewed and the structure is dissolved into its elements. Viewed scientifically, dcath is not the departure of something from the body, but simply the cessation of vitality by the cessation of the conditions under which vitality exists. I discover no difference between the act of death in a man, a sheep, a fish, a flea, or a molluse; and after death the same process restores the bodies of all alike to the same elements out of which they were all constructed. You ask me if mind is not the soul? I answer that there is no evidence of it, but on the contrary, all the evidence points to the opposite conclusion. Mind is dependent upon the structure of the brain. A diseased brain makes a diseased mind. A well formed brain is attended with intellectual capacity in proportion to its size and quality. If you paralyse the brain with a blow, you for a time extinguish the mind. Destroy a part of the brain, and you destroy an equivalent portion of the mind. Arrest the motion of the fibres of the brain by congestion of the blood vessels, as in drowning ; there is temporary dcath, and life may be restored by making the heart pump again, thus relieving the congested blood vessels and removing the obtruction to brain action; upon which the mind revives too. Mind, we scientists say, is a secretion from matter, and every act of mind uses up a por-tion of matter. When the mind is paralysed by concussion or congestion, there is absolute insensibility, and there is no appearance in the senseless body of the presence of any other power. Only the ceasing of the heart's action marks the passage from life to death. There is no visible intimation of the severance of the soul from the body at the moment of death, and the act of death in a man differs in no discoverable particular from the act of death in the lower animals. Our foremost physiologist, Huxley, finds only "protoplasm" as the ultimate base of the human structure, and Dr. Carpenter

explains some of the most mysterious actions of the mind by a theory of "unconscious cerebration." Tyndall alone faintly acknowledges the possibility of the existence of other laws than those which govern the material world; but even he can find no better basis for his conjecture than an operation of the imagination, a faculty which he contends might be fairly enlisted in the service of science. So far as his investigations into nature have advanced, he can discover nothing but matter made perceptible to our scnses by certain "modes of motion" which those senses are constructed to perceive. Even he does not acknowledge that there may be other modes of motion, but which may be perceptible in abnormal conditions. Science can find no soul, no place in the structure where a soul could dwell, nothing in mind, in life, or in death, upon which to base even a probability that there is anything in us other than organic structure, performing organic functions and governed by organic laws."

Distracted between the divergent teachings of science and of authority, the one pointing to fact, and the other appealing to faith; the latter proclaiming the existence of a soul, the former as dogmatically asserting "I can find no trace of it," and even authority itself adventuring no definition of a soul, either as to form, substance, dwelling-place, in the body, re-lationship to the material structure, or the conditions of its existence in the future, it is not surprising that painful doubts should prevail, nor that thousands of thinking minds find their faith failing them. They try not to thinking minds and ther thrust out the intruding thought; not a few take refuge in authority from the agony of uncertainty, and surrender their liberty of judgment, because its exercise is a toil and a pain. Multitudes who endeavour to persuade themselves that they are believers still, because they close their eyes and their ears, nevertheless are conscious that their faith in the soul and its immortality is not so fixed as it was before the materialists of science had whispered doubts. Their confidence is not the same firm and perfect belief as that with which they accept the existence of the sun, their own bodily being, or the certainty of death. Hence in cultivated society, everywhere throughout Europe and America, there is a vast stratum of unbelief. If not openly confessed, it crops out continually, betrayed by insinuation and often by more expressive silence. It pervades the press, not, indeed, in the form of plain avowal of scepticism, but in a shape far more insidious, there-fore the more dangerous. Every opportunity is eagerly seized fore the more dangerous. Every opportunity is eagerly seized to give publicity and prominence to facts and arguments that appear to sustain the doctrines of materialism, and to laud its preachers and teachers. Whatever tends to *their* refutation is repressed or ridiculed; books are misinterpreted, writers are abused, letters are refused a place even in answer to false-hood or misrepresentation, if the writer's argument goes to establish the existence of the soul. Of this a striking instance was exhibited on the occasion of the recent experiments by Mr. Crookes, F.R.S., establishing the existence of a psychic force, and the report of the Dialectical Society completely confirming the results of his more scientific in-vestigation. The Press, with rare exceptions, misstated the conclusions drawn by the experimentalist, suppressed his ex-periments and all that portion of the report of the society which set forth the trials and tests by which they were convinced of the existence of a psychic or soul force after forty meetings, although almost every member had commenced the inquiry with a firm belief that he should detect a delusion or an imposture. The cause of this systematic misrepresentation was but too manifest. The existence of a psychic force, as exhibited by those experiments, went far to shake to its foundation the doctrine of materialism, and to support by scientific proof the probability of a soul in man. Therefore the disciples of the Materialistic creed used their great power in the press to extinguish, so far as the suppressio veri and the suggestio falsi could do it, the scientific discoveries that threatened the stability of their dogma. It is now, as it ever was; pride will not permit men to confess an error of opinion. They will not permit men to confess an error of opinion. form hasty judgments on insufficient facts, or on no facts at all, and having asserted them positively, it is a point of honour not to admit that they could have erred. They will not be convinced; they close their eyes and ears resolutely against proofs ; they look to the evidence on one side alone ; they are blind to the evidence on the other side. They shut their eyes and say they cannot see, and they endeavour to discredit the evidence of all who differ from them by declaring them to be deluded fools or impudent impostors.

It is to these and such as these that I address myself. They who, happily for themselves, have accepted with unswerving

faith the teachings of authority, who are satisfied to believe, and have no desire to *know*, need no other assurance of the soul, its present and its future, and will doubtless hold the looking for scientific proofs of its existence as a superfluous labour. To them it is so, and they are happy in that confi-dence. "They that are well need not the physician, but they that arc sick." It is for the sick at heart, for the minds that cannot accept as sufficient the mere assertion of any authority, but who crave for *proofs* before they can embrace a creed—for the multitudes whose faith has been shaken by the teachfor the multitudes whose faith has been shaked by the teach-ings of Modern Science, and the prevalent opinions of our Scientists—openly proclaimed by many, privitely acknow-ledged by most of them—that this investigation is invited. The province of Psychology is not to supersede authority, but to inquire if the *teachings* of authority may not be supported by the facts of science, and if *proofs* of the soul's existence may not be found in nature, the denial of science notwith-standing. I repeat that in this inquiry I purposely avoid all theological references, not because I doubt their authority, but because the very design of this treatisc is to inquire if there be any and what evidence of the existence and immortality of the soul, other than theological, that will give to those who dispute authority, or do not entirely accept it, that for which they are yearning—knowledge—not merely belief founded on faith—but knowledge—such as they have of the realities of the world about them. Let all who can do so be content to accept the assertions of authority, and in that blessed confi-dence seek to know no further. But to all who do not or can-not be content with this, to all who doubt, to all whose faith is not firm, to all who desire to strengthen their confidence in the teachings of religion by seeing if it may not be confirmed by science, I say, with respectful earnestness, " Come and join with me in a humble, but honest and patient inquiry, whether the modern Materialists are right in their conclusions, or does not Science itself give us proofs of the existence of a soul in man, and afford us some glimpses of its dwelling here and of the conditions of its existence hereafter ?" I am not blind to the difficulty of the task. I know that it dispute authority, or do not entirely accept it, that for which

I am not blind to the difficulty of the task. I know that it will be deemed presumptuous, and I am prepared for much misrcpresentation, and perhaps abuse, for having ventured upon ground which two opposing parties will claim for their own, and not improbably may unite for the expulsion of one whom both will look upon as a trespasser. I am conscious that at the best the performance must fall immensely into the rear of the design; that I am exploring a region as yet almost unexamined, and that I have little assistance to look for from previous labourers. Nevertheless I proceed with all humility, but without fear, sustained by the assurance that if anything like success should attend the investigation, invaluable benefits will flow from it to tens of thousands, to whom it will bring hope and happiness. If any scientific proof can be adduced to establish the probable existence of a soul in man, a mighty impulse will be given to the hopes and aspirations of humanity.

SOME EXPERIENCES AND CONCLUSIONS REGARDING SPIRITUALISM.

No. III.

BY J. M. GULLY, M.D.

HERE is another marvellous musical performance. My younger brother, educated by myself for our profession, lived with me in London more than thirty years ago. A kind, loving fellow, he had not the strength to say "No" to sundry tempters and temptations of London, and so it came to pass that he fell into wild ways, and gave us much trouble. At length I suggested that he had better go to our native place, Jamaica, and practice his profession there. He did so, and for many years he led a solitary life in the uplands of the island, yearning to be back with us. In 1848 I sent for him to join me at Malvern, and he was joyfully preparing to do so, when he was stricken with fever, in the delirium of which he, one night, opened his carotid artery, and died at once. Such was the "Life" which the spirits, one day, proposed, without the smallest hint from anyone, to describe for us in music, and which they did

beautiful cradle-song, for his childhood; then a cheerful melody for his happy boyhood, becoming fuller and louder, as if to show the passage into manhood; then wild strains, mournful, discordant, most unpleasing to hear, to mark the time of his disordered living in London, and enough to sadden any heart. Suddenly the discord ceased. A few low soft bars then followed, swelling out into a diapason unmistakably descriptive of the rise and fall of the ocean, and the movement of a ship on it, all indicating the passage over the Atlantic. This was followed by a low plaintive wail, with, every now and then, a harsh note of discord and distress, exhibiting the solitude and heartaches of the poor fellow; and this rapidly passed into a fearful burst of tumultuous, screaming (as it were) notes, telling of dreadful mental and physical suffering, beyond expression sad, and such as might moisten eyes less Then came a complete interested than ours were. pause of the music; then, in sweetest softness, the instrument played, "Home, sweet Home,"—his longing and his prospect of it, alas! Then another pause; and then, suddenly, one fierce crash of all the notes, to indicate the last tragical scene in the drama of the "Life," and, by mournful degrees, the instrument was silent. The whole performance occupied from eighteen to twenty minutes. Never before nor since have I heard any musical composition which equalled this in descriptive truth and pathos, not even Beethoven's *Pathetique*, nor his "Moonlight" sonata, nor his "Summer Storm;" and I think no compositions of the embodied spirit can equal these in descriptive accuracy. Immediately after the cessation of the music, the subject of it came and fondly patted and stroked our hands and knees, and told us how happy he was to be able to be with us again. I tried in vain, on other occasions, to induce the spirits to repeat their wondrous performances, but they would never give more of it than the exquisite cradle-tune which commences it, as if they would spare us the sounds of snffering, and treat us to those of innocence and peace.

The musical spirits were very fond of this descriptive music. Some one of the circle asked the spirit-child if she was often with her papa at night, and she replied by playing, "Oft in the stilly night." Once we asked the spirits present if they would distribute some flowers to us, and they immediately struck in with "The last rose of summer," and then gave us what we asked for. On the same evening the child said, "Here is joyous love," and gave some thrilling bars to describe it; then, "Here is prayer," and the long-drawn, soft, and softly-swelling notes, told it clearly: then, "Here is the reply to prayer," which we pronounced to be gentle and exquisite. "Yes," said the spirit, "Gentle, but love is gentle, but strong is truth," followed by full, strong chords. Then she said, " Earthly love is apt to be"-discordant music played; and when asked what heavenly love was like, she replied with the gentlest and most solemn-sounding music. All the above performances took place on the same night. She volunteered to describe my mother's character on the accordion, with a fidelity for which I, who so well knew the tenderness and lovingkindness of her nature, could unhesitatingly vouch. Then she said, "And here is your character," and gave us an air overflowing with mirth and cheery delight. After the first time, she frequently at the commencement of the seances indicated her presence by repeating this air, and of another's describe with a most pathetic accuracy. First came a presence by that which characterised her. I once asked her to play "Adeste Fideles," but she replied, "We prefer one of our own hymns of praise," and then came, for an entire ten minutes, an exalting and exulting music, which I hold it would puzzle a musician in the flesh to repeat or imitate: it was loud-swelling, to show the enthusiasm of devotion; joyous, to show the glad and willing devotion; soft and slow, to show the humble, prostrate devotion of the soul. Frequently the accordion was played whilst lying on the floor or on the sofa, not near to any of us; and once I recall how it was played whilst in the air over our heads, but very soon it fell, in consequence of our movements to observe, and the consequent disturbance of the conditions. I have myself held the instrument close to a bright lamp, Home only standing by the side, but not touching it, and marked the bellows' movements and those of the keys while the spirits were executing the ehords. Only once had I the good fortune to listen to a spiritual performance on the piano. An American lady and her husband, Home and I, were the sitters at a table about three yards from the instrument, which was open. A strong full moon-light shone upon us and the instrument, and we distinctly saw the notes moving as the spirit performed. The spirit methodically drew the music-stool from the side to the centre of the keyboard, and then began to play-of all pieces in the world-the funeral march in " Saul !" For some time the power and the performance were complete, but the latter became halting towards the end, probably from failure of the former; for the spirit was unquestionably a musical one. Not so another who followed, and who was only able to attempt one air after another, with one finger, like a child.

If I mistake not, Mr. Jencken has already published the account of a seance in my house at Malvern, when the spirits present gave us a wonderful musical descrip-tion of "Dan's life," as they called it. And an astounding history it was, to be given with unmistakable indications by an instrument which was four yards from any human hand all the time! I only allude to it here as another instance of some condition in the house which rendered such manifestations more than usually frequent and speaking. Home used to say that he "got no music elsewhere such as he got at the Pri-ory." On several occasions at night I have heard music On several occasions at night I have heard music in Home's bedroom there, which was separated from mine only by a lath and plaster wall. I heard no particular airs, but the swelling and falling of sounds which resembled those from a wind instrument like the accordion, and of others which were those of a reed instrument like the flute. But the capo d'opera of all the spiritual music performances was afforded to us one evening when Home suddenly left the drawing-room where we were en seance, and ran up, two steps at a time, to the bedroom on the first-floor. Thence we heard the sweetest sounds in the world proceeding-organ, harp, trumpet-but all as if mellowed by a long distance. Home called out to ask whether we heard them singing: we only heard the instrumental music at the door of the drawing-room where we were. In a brief time he came down and told us the room was in a blaze of light, and the music and voices distinct. After a time I asked the spirits if they would manifest here with us as they had done up stairs; and very shortly we were delighted with the most delicious distant music, solemn and soft beyond expression; and we heard, too, their voices as they sang these words, "Holy, holy, holy, Lord God Almighty! we praise Thee." Ear never lis-

tened to anything more sweet and solemn than these voices and instruments. In the midst of it I inquired if my little Fanny was among the performers, and three notes from some wind instrument told me she was. It is needless to add that no wind or other instrument (save a piano) was present in either of the rooms where these phenomena were experienced.

I have given a written account of these manifestations; but if it be true, as almost all investigators find, that it is impossible to impart the whole integrity and intensity of the sensations presented, and the convictions that flow from, the most usual manifestations at a seance with a good medium, much more impossible does it seem to convey to another, by relation, the impression which such descriptive musical manifestations as I have here mentioned make upon the listener. I honestly and earnestly tried to bring mysclf to the earth-level, and hear with the ears I should listen to a flesh musician withal; but it will not do; that poor instrument, the accordion, does not make the same impression on the ear and brain when played by spiritual agents; the very individual sounds are different, and when combined to describe the events of a life, with all its joys and sorrows, you find that the performers in it have gone to the very spiritual depths of those joys and sorrows, and engraved them, as it were, on your brain, with a truth and accuracy which renders all other attempts at the same history appear slight and superficial. And when one hears voices of unseen singers and sounds of instruments which to human eye do not exist, one feels how rude are our contrivances to form and convey the poetry of sound; what glorious concerts speaking of love, wisdom, charity, mirth, and joy await us when, as spirits, we shall have a thousandfold more power over the physical agents of the universe, and be able to produce results which the miserable, earth-formed materialist little dreams of, and refuses to aspire to or hope for.

MANIFESTATIONS SOON AFTER DEATH.—" Passed away," on November 30th, 1872, in his sleep, and of pulmonary phthisis, aged 28, at 5, Maldon Villas, Chaucer-road, Dulwichroad, London, Mr. Frederick Harben, son-in-law of the editor of the *Christian Spiritualist*, the Rev. F. R. Young, of Swindon. Before his transition Mr. Harben became a believer in Spiritualism, and his widow now shares that belief. During the process of disposing of the household effects and clearing up, preparatory to the removal of the widow and surviving child to Swindon, a singular phenomenon occurred, which ought to find brief record here. The mantlepiece of the front sitting-room had been for days covered with various articles, in entire confusion, the mantlepiece itself being used as a kind of temporary table for the writing of letters, postcards, and luggage labels, while the dust lay thickly upon it. One evening, December 12th, while three persons and three only were on the premises, Mr. Young, Mrs. Young, and Annie Baines the servant, and while they were unitedly partaking of a hurried tea in the adjoining room, all the articles on the said mantlepiece were carefully sorted into the most perfect order, and the thick dust totally removed. Mr. Young is prepared to affirm, deliberately, and with a full knowledge of what he is saying, that all this was done by hands other than human, for at the very moment of his being called to tea the disorder and the dust were there, while on the return of the three parties herein mentioned back to the room, the change we now report was found to have taken place. It cannot be said with absolute certainty nho effected the alteration, and when we do not know it is simple fairness to admit our ignorance. But Mr. Harben's well known and almost morbidly delicate love of order and cleanliness obliges us to suppose that he was the person who did the deed. At all events it *was* done, and nothing can be more certain than that it was not done by either of the three persons who alone were in the house

Correspondence.

[Great freedom is given to correspondents, who sometimes express opinions diametrically opposed to those of this journal and its readers.]

MARKS ON SPIRIT HANDS.

SIR,—A striking example apparently bearing on the phenomena of marks being transferred from spirit hands on to their medium is given by the late Hugh Miller, the geologist. Several remarkable cases of apparitions in Scotland are to be found amongst his writings. This one is descriptive of to be found amongst his writings. This one is descriptive of a woman who died. A few days after the event she was seen a wohn who died. A few days after the event and was seen passing behind some cows which were tied up in a shed; one of them kicked at her, striking her on the side; a shriek was heard, and she vanished; the body was at no great distance and still remained unburied; a mark was visible on the side of the corpse, such as would be caused by the hoof of a cow. CHAS. E. ISHAM.

Lamport Hall, Northampton, Feb. 12th, 1873.

[A lady informs us that last week she was at a private scance, and one of the spirit-hands which came out of the cabinet, had marks upon it re-sembling some surface smears which chanced accidentally to be upon one of the hands of a mediumistic lady who was then sitting outside the cabinet, but who was not the medium through whom the manifestations were supposed to come.—ED.]

SPIRIT FACES.

SIR,-You have often remarked that home seances, where the medium is happy, are more successful and convincing than any other; this has been verified many times by my own experience, but never more completely than last Saturday evening. I went with my mother in the afternoon to pay a friendly call on Mrs. Cook, who had no previous knowledge of our visit, and was out when we arrived. We spent a very pleasant evening in friendly chat, and were preparing to leave early, when Mr. Cook requested his daughter to try a short sitting in the cabinet. Miss Cook required no urging and no preparation, but entered the cabinet at once, and took her seat on a low chair, from which the back had been cut away (and with it the possibility of standing on a rail), first showing us that when she stood upon the seat her forchead was on a level with the lower ledge of the opening. This was our only level with the lower ledge of the opening. test, and even this was not required. I am sorry for those who are obliged to be continually applying tests, because, as the finest manifestations are generally spontaneous, unlooked for, and rarely repeated, and take place when mediums are free and happy, surrounded by those whom they love and trust, and who love and trust them, persons in the above predicament can never witness anything exceptional. Let sceptics make what they like of this. I suppose it is a law that "to him that hath shall be given."

hath shall be given." On Saturday the first face presented was that of an old man, whom Mrs. Cook and her sixter, Miss Till, soon recognised as their father. The face had black, shaggy eyebrows, dark eyes, a long nose, and sunken mouth. It retreated, and re-presented itself five successive times, so that there was plenty of time Itself five successive times, so that there was piency of time for recognition, and it once spoke a few words at the opening; the spirit then showed his hands, of which the fingers were contracted, as had been the case with Mr. Till in his old age. All this time Miss Cook was not entranced, but was making

her remarks on the doings and appearance of the spirit, talk-ing in a distinctly audible voice from the bottom of the cabinet, while the old man's head was at the opening. Mrs. Cook told us this was the first time also that any spirit, except Katie, had spoken at the window; another consequence, doubtless, of good conditions. It seemed almost a pity that there were no carping critics present; and yet, if they had come, there would have been

constraint instead of freedom, effort instead of ease, and a great expenditure of power with very poor results. As it was, when Miss Cook, after sitting rather less than an hour, came out of the cabinct, she said she was not in the least tired, and did not feel as if she had given a seance at all

When Katie herself came and showed a fair complexioned, large, massive face, and mouth set with brilliantly white large, massive face, and mouth set with brilliantly white teeth, I failed to see in it any resemblance to her medium, and my mother, who saw Katie now for the first time, ex-pressed her surprise that a comparison should ever have been made between them. I have, however, *under more strict test conditions*, seen in the spirit-face a very striking resemblance to Miss Cook, and I can fully sympathise with those who ex-perience a shock or a feeling of suspicion when viewing for the first time these astounding phenomena, and without having any previous knowledge of kindred facts with which to associate them.

By-and-bye Katie put out a large hand and arm, bare to the elbow, and asked for the guitar, which she drew from me with a vigorous pull through the opening. How could Miss Cook have done this, seeing that her low chair, even when she stood upon it, did not raise her to the level of the opening, and that there was not even so much as a peg on the wall on which to balance herself while thrusting a bare arm down-wards through the hole? Katie could make nothing of the guitar; it was "flat," she said, and she would have the con-On this a slow tune was played with great exprescertina. sion inside the cabinet, while a voice sang to it in the thril-ling tones of a high soprano. Those who have heard Miss Cook sing, know that her voice inclines to a contralto. Katie

Cook sing, know that her voice inclines to a contralto. Katie next asked me, to my astonishment, to sing the song beginning "Du bist die Ruh', der Friede mild," and she would follow me. "But," I said, "Katie, you can-not sing the German words." "Oh, can't I," she said. "My mcdium can't, but I am not so stupid; you try me." I sang the song through, and the same clear, bell-like voice again followed mine, pronouncing the German perfectly. "Now, repeat the lines ending Schmerz and Herz," she said; "I like the rhyme so much." An Italian song was gone through in like manner. "Next time I'll do it alone; good-bye, now; let the medium out." the medium out."

I opened the doors, and found Miss Cook fallen forward in her usual trance-state, in which she had apparently been during the whole of the musical manifestation. I should have mentioned that, while the concertina was playing, two hands were exhibited at the opening.

If I have written rather a long letter about what has been so often described, it is because the variations on this par-ticular occasion, though apparently trivial, have, to my mind, an important bearing, which I think will be appreciated by the more thoughtful and experienced of your readers. I therefore beg you to insert it in justice to Miss Cook, and all honest mediums, for an attack upon one must be considered as an imputation upon all. EMILY KISLINGBURY.

93, Clarendon-road, N.W. Feb. 24th.

MEN AND WOMEN.

SIR,—Mr. White's remarks on Mrs. Somerville recall a slight particular bearing upon this subject, which I heard related some years ago. Mrs. Somerville, it was said, did not commence her scientific researches, nor discover her talent for mathematics, until after her marriage, which took place comparatively late in life. Her interest in these studies was comparatively late in life. Ther interest in these studies was awakened, and the stimulus given to her researches by her husband. I cannot vouch for the truth of this statement, but it might be partially tested by any person interested com-paring the date of Mrs. Somerville's marriage and of the publication of her scientific works.

This cannot, however, be considered as giving support to the argument that women do not love science for its own sake. Mrs. Somerville's studies must have tended more or sake. Mrs. Somervine's states must have bended how of less in this direction from an early age, or her mind would have been unfit to grasp the subjects she is said to have handled so successfully. Elizabeth Barrett, also, was a pro-ficient in Greek and Latin before she became acquainted with Robert Browning. ADAMANTA.

VERIFICATION OF A DREAM .- Some years ago when all VERIFICATION OF A DREAM.—Some years ago when all the world was mad upon lotteries, the cook of a middle-aged gentleman drew from his hands the savings of some years. Her master, curious to know the cause, learned that she had repeatedly dreamed that a certain number was a great prize, so she had bought it. He called her a fool for her pains, and never omitted an occasion to tease her upon the subject. One day, however, the master saw in the newspaper, or at his bookseller's in the country town, that the number was actually the £20,000 prize. Cook is called up, a palaver ensues—had known each other many years, loth to part, &c.—in short he proposes and is accepted, but insists upon the marriage being celebrated next morning. Married they were, and as the carriage took them from the church, they enjoy the following dialogue. "Well, Molly, two happy events in one day. You have married, I trust, a good husband. You have something else—but first let me ask you where you have locked up your lottery ticket?" Molly, who thought that her master was only bantering her again on the old point, cried, "Don't ye say no more about it. I thought how it would be, and that I never should hear the end on't, so I sold it to our baker for a guinea profit. So you need never be angry with me again day, however, the master saw in the newspaper, or at his guinea profit. So you need never be angry with me again about that."-Blackwood's Magazine.

MR. DARWIN was one of the subscribers to the fund for the benefit of the widow of the late Mr. J. W. Jackson.

COLONEL A. LANE FOX, V.P.S.A., of 10, Upper Philli-more-gardens, Kensington, W., has been appointed a member of the Psychological Committee of the Anthropological Institute.

PROFESSOR PEPPER IN CANADA .- On Wednesday, Jan. 22nd, Professor Pepper, of the Royal Polytechnic Institute, London, delivered in the Music-hall, Quebec, the first of his series of three lectures, under the auspices of the Young Men's Christian Association, the subject being "The Apparent Contradiction of Science." There was a large audience.

ANSWERS TO CORRESPONDENTS.

ANSWERS TO CORRESPONDENTS. A Correspondent writes:—"In page 103 of The Spiritualist Mr. Theobald asks where the song, 'I live for those who love me,' can be bought? It is by Pelzer, and is sold by Blockley, 3, Argyll-street, Regent-street, W." W. S.—The words "first picture" in our last note to you, should have been "first spurious picture." L.—The joint in the string at Miss Cock's searce, described in our last, was in the part behind her back. The two ends of the string did not overlap each other at the joint, and touched so evenly that the question was raised whether there was any severance of the string at all. A lady then pulled out some ends of fibres. The string was of the coarsest and commonest kind, ragged and uneven, quite unfit for use for a serious purpose. Dr. John Purdon, of Sandown, who once had a much worse seance with Miss Cook than Lord Arthur Russell had, wrote her two cheer-ing kindly letters directly after he saw the last number of the Spiritualist, expressing also his full confidence in her integrity, and in the genuineness of her mediumship. and in the genuineness of her mediumship.

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An experimental trial at home, among family friends and relatives, often gives the most satisfactory evidence of the reality of spiritual phenomena, and this is the best way for enquirers to begin. At the same time, as no fully developed medium is present among those who have never obtained manifestations before, possibly thero may be no results. Nevertheless, it is a very common thing for striking manifestations to be obtained in this way at the first sit-ting of a family circle; perhaps for every successful new circle thus started without a medium, there are three or four failures, but no accurate statistics on this point have yet been collected. Consequently, to save time, investigators should do as the Dia-lectical Society did, form soveral now circles, with no Spiritualist or professional medium present, and at one or other of them 're-sults will probably be obtained. When onee manifestations have been obtained they will gradually increase in power and reliability at successive sittings. The following is a good plan of action:— i. Let the room be of a comfortable temperature, but cool rather than An experimental trial at home, among family friends and relatives

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EVIDENCE THAT SPIRITUALISM DESERVES INVESTIGATION.

EVIDENCE THAT STRATCALISM DESERVES INVESTIGATION.
 SPIRITUALISM deserves investigation because within the last twenty years it has found its way into all the civilised countries on the globe; it has also a literature of thousands of volumes and not a few periodicals.
 The London Dialectical Society, Adam-street, Adelphi, under the pre-sidency of Sir John Lubbock, Eart, M.P., appointed a Committee to inves-igate spiritual phenomena. The Committee was appointed on the 26th January, 1869, as follows:- "H.G. Atkinsou, Esq. F.G.S., G. Wheatley Bennett, Esq.; J. S. Bergheim, Esq., C.E.; H. R. Fox Bourne, Esq., Charles Bradlaugh, Esq.; G. Fenton Cameron, Esq., M.D.; John Chapman, Esq. M.D.; Rev. C. Maurice Davies, D.D.; Charles R. Drysdale, Esq., M.D.; Mrs. Edmunds; James Gannon, Esq.; Grattan Geary, Esq.; Robert Hannah, Esq., F.G.S.; Jenner Gale Hillier, Esq.; Mrs. J. G. Hillier; Henry Jeffery, Esq.; Abert Kisch, Esq., M.R.C.S.; Joseph Maurice, Esq.; Inomas Reed, Esq.; C. Russell Roberts, Esq.; Ph.D.; William Volekman, Esq.; Horace S. Yoomans, Esq.
 "Professor Huxley and Mr. George Henry Lewes, to be invited to co-operate. Drs. Chapman and Drysdale and Mr. Fox Bourne declined to sit, and the following names wero subsequently added to the Committee:---"George Cary, Esq.; H. D. Jencken, Esq., Parrister-at-law; ; H. Levy, Esq.; W.H. Swepston, Esq.; Solicitor; Alfred R. Wallace, Esq., F.R.G.S.; Josiah Webber, Esq.
 After inquiring into the subject for two years, the Committee issued its peort, which, with the evidence, forms a bulky volume, published by Mesrs. Longmans. Among other things this Committee reported:--"That sounds of a very varied character, apparently proceeding from articles of furniture, the floor and walls of the room--the vibrations

accompanying which sounds are often distinctly perceptible to the touch-occur, without being produced by muscular action or mechanical con-trivance.

trivance.
"2. That movements of heavy bodies take place without mechanical contrivance of any kind, or adequate exertion of muscular force by those present, and frequently without contact or connection with any person.
"3. That these sounds and movements often occur at the time and in the manner asked for by persons present, and by means of a simple code of signals, answer questions and spell out coherent communications. One of the sub-committees of the Dialectical Society reported :-"Your committee studiously avoided the employment of professional or paid mediums. All were members of the committee, persons of social position, of unimpeachable integrity, with no pecuniary object, having nothing to gain by deception, and everything to lose by detection of imposture." In another part of the report the same committee stated :p

In another part of the report the same committee stated:— "After a committee of eleven persons had been sitting round a dining table for forty minutes, and various motions and sounds had occurred, the chairs were turned with *their backs to the table*, at about nine inches from it. All present then knelt upon their chairs, placing their arms upon the backs of the chairs. In this position, the feet were of course turned away from the table, and by no possibility could be placed under it or touch the floor. The hands were extended over the table at about four inches from the surface.

backs of the chairs. In this position, the feet were of course turned away from the table, and by no possibility could be placed under it or touch the floor. The hands were extended over the table at about four inches from the surface.
"In this position, contact with any part of the table was physically impossible.
"In this position, contact with any part of the table was physically impossible.
"In this position, contact with any part of the table was physically impossible.
"In less than a minute the table, untouched, moved four times; at first about fore inches to one side, then about twelve inches to the opposite side, then about four inches, and then about six inches.
"The hands were next placed on the backs of the chairs and about a foot from the table. In this position, the table again moved four times, over spaces varying from four to six inches. Then all the chairs were removed twelve inches from the table. All knelt as before. Each persou folded his hands behind his back, his body being about eighteen inches from the table. So the chair between himself and the table. In this position the chairs were removed trable, and having the back of the chair between himself and the table. In this position the chairs were removed four times, in less than half an hour, the table moved, without contact or possibility of contact with any person present, twelve times, the movements being in different directions, land some according to the request of different persons present.
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Descriptions of this work have already appeared in "The Graphic" for oth December, 1871.
It is interesting as recording very faithfully the Devonshire idiom, and also as illustrating a curious phase of English domestic history. It was at the persuasion of Mr. Glasscott, the late Vicar of Secton and Beer, that Rattenbury wrote the autobiography, which has been read in its manuscript form by many visitors to those Devonshire villages, and is now put into the publishers' hands in the hope of realising some small sum which may save the aged smuggler from the workhouse. Mr. Ruskin, who has read the original manuscript, writes:—"I shall have much pleasure in subscribing for two copies of the 'Life of the Old Smuggler,' and am glad it is to be published".

Ior two copies of the 'Life of the Old Smuggler,' and am glad it is to be published." Amongst other subscribers are the following:—Earl of Devon, the Earl of Pembroke, Lady Mary Herbert, Lady Taunton, Sir John D. Coleridge, M.P., Sir Walter C. Trevelyan, Bart, Sir Charles E. Trevelyan, K.C.B., Sir John Bowring, Admiral Sir Jas. D. H. Elphinstone, Bart, M.P., Sir Massey Lopes, Bart, M.P., Sir Stafford H. Northcote, M.P., Sir Sydney H. Waterlow, Admiral Sir Thomas Pasley, Bart, Sir Frederick Bathurst, Lady Rolle, Lady Jane Swinburne, Sir Charles Isham, the Hon. Mark Rolle, J. Gwynne Holford, Esq., M.P., S. Morley, Esq., M.P., Dr. John Brown ("Rab and His Friends."), Dante G Rossetti, Esq., John Forster, Esq., A. Locker, Esq. ("Graphic"), Mrs. Garrett Anderson, M.D., Rev. Canon Kingsley, Rev. J. Llewelyn Davies, Rev. C. A. Johns, W. D. Christie, Esq., C.B., W. Cave Thomas, Esq., Rev. H. Vyvyan (Vicar of Seaton and Beer), Charles Hutton Gregory, Esq., C.E., Captain Dslrymple Elphinstone, R.N. Rev. Compton Reade, Mrs. Stirling, Algernon C. Swinburne, Esq., William Morris, Esq., (Earthly Paradise), F. Madox Brown, Esq., B. Coleman, Esq., P. McLagan, Esq., M.P., Jos. Aspinwall, Esq., &c., &c.

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