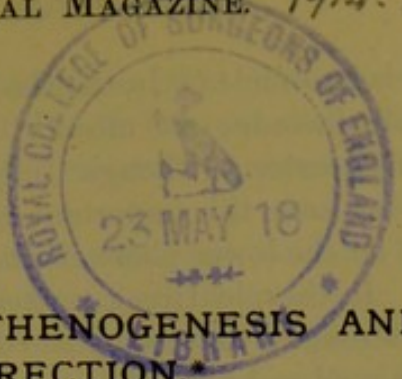
Miracles : parthenogenesis and resurrection : (some side-lights on theological subjects) / by J. Foster Palmer.



MIRACLES: PARTHENOGENESIS AND RESURRECTION.*

(SOME SIDE-LIGHTS ON THEOLOGICAL SUBJECTS).

BY J. FOSTER PALMER.

Augurium futurorum in maximis ingeniis altissimisque animis et existit maxime et apparet facillime.—CICERO.

"The presage (or assurance) of a future existence takes the deepest root, and is most apparent, in the greatest geniuses and the most exalted souls."

I AM making no attempt in the following remarks to bridge over the great gulf between the physical and the metaphysical.† I am only stating a few physical facts, which may be well-known to you, in the hope that certain metaphysical matters may become more conceivable, more realizable, by reference to physical analogies.

"Silanus the Christian," a believer in the New Testament but a disbeliever in miracles, thus explains the turning of water into wine at the marriage feast at Cana of Galilee. He says it simply means that the insipid and ineffectual *water* of the *Law* was changed into the good wine of the *Gospel*. Does this explain it? Is the miracle any the less a miracle by changing its venue? Surely so vast and far-reaching a change in the destiny and tendencies of mankind would be a far greater miracle.

There are those who, like Silanus, unable to believe in miracles, attempt thus to explain them away by transferring them to another plane, the mental, moral or spiritual. Is the difficulty thereby removed? Is a miracle any easier to perform or more comprehensible in the moral or spiritual than in the physical world? Is it any easier to say "thy sins are forgiven thee" than to say "arise and walk"? In other words, is it easier for a hardened criminal to become a just man than for a leper to become sound?

---

* A paper read before the Kensington Clerical Club, October 9th, 1914.

† I use the word "metaphysical" in preference to "spiritual" because I do not know what is the exact meaning of the word "spiritual" as used by theologians. Whatever that meaning is it will be included in the more comprehensive term "metaphysical."

What is a miracle? In the theological sense, of course, the idea of a miracle includes an ulterior purpose, a "sign" of something higher and greater. Though fully recognising it as an essential factor, I must leave this important aspect out of sight, and only speak of miracles on the lower plane, in their relation to natural laws and sequences. In the old Greek writers *δυνάμις* seems to mean simply unwonted strength to accomplish difficult things. In S. Matthew's Gospel it is rendered "mighty works," without defining them. They may be mental, moral or physical. Each man has his own conception of a miracle, and, generally speaking, it practically amounts to this:—Some occurrence outside his own experience, and of which he is unable to trace the cause. I would express it as follows:—"Something transcending our personal experience and our personal mental perception." It has been defined by an extreme High Churchman* as "the orderly operation of a higher law of God, of whose working we know nothing, within the sphere normally occupied by a lower law of God, with the working of which we are familiar by virtue of our powers of observation and reasoning." I have no fault to find with this definition. It is, indeed, one of the best I have seen. Provided, of course, that there *are* higher and lower laws. And, as there are higher and lower moral laws, the higher superseding the lower, as in the case of the law of mercy and the law of the Sabbath, we may judge from analogy that there are also higher and lower laws in the realm of nature. Indeed, the definition appears to correspond pretty closely with my own, which thus turns out to be far more orthodox than I had any idea of:—Something transcending our personal experience and our personal mental perception." Is it anything more than this? Can we say that we know the whole realm of nature, and understand all her laws and sequences? If not, a miracle may be due to an unknown or misunderstood law. And if we did, it would still seem *ultra vires* to deny the *possibility* of exceptional Divine interposition, or, as Wirgman more accurately puts it, "the operation of a higher law of God."

After all, in whatever sense we use the word, was not the beginning of organic life a miracle? We assume that it must have had a beginning, and, whenever it began, have been contrary to all previous experience. Take the Creation of Man. We know, of course, that man was evolved from Pithecanthropus Erectus, Pithecanthropus from the Trilobites, the Trilobites, by long stages, from some unicellular zoophyte. But however far back we place the beginning of life, the miracle, *i.e.*, the initiation of something new and unprecedented, is as great as ever. Then, the law of organic life once set

* Archdeacon Wirgman, of Grahamstown.

in action, can we, with any confidence, say that it has never deviated since? If it has not, why has it not? Because such deviation has not come within our experience. No other answer can be given. Reason there is none.

Professor Sanday divides miracles into two kinds:—Those which are *super naturam*, and those which are *contra naturam*. The latter would comprise contradictions, which Duns Scotus said were beyond the power even of the Deity. The distinction is a valuable one, but I have a suspicion that different minds draw the line in different places, and that this accounts, practically, for all the difference of opinion on the subject. That two and two make five, that two straight lines can enclose a space, all would agree to be *contra naturam*. But this does not apply to all phenomena. To me it would be *contra naturam* for one body to be in two places at the same time, but I am not so sure that it would be *contra naturam* for two bodies of a different nature to occupy the same space. I cannot tell why. Dr. Sanday, I believe, draws the line at the Virgin Birth and the physical resurrection. These, as I understand, he considers to be *contra naturam*. Well! are they? There seems to be no necessary contradiction about them, and, as I hope to point out, they are not altogether without parallels, or analogies, in nature. Their acceptance appears to be a question of historical evidence. If it is proved that certain verses, essential to a belief in these doctrines, were interpolated, and have no historical value, that is purely a matter of higher criticism, in which Dr. Sanday is an expert, and about which I know nothing. But if he says that these statements will not stand, not because they lack evidence, but because they are *contra naturam*, that is a matter of physiology, in which I may claim to have had, at any rate, a rudimentary training. If this is taken as a ground of rejection, it is presumably, because they are inconceivable. But are we to go back to the scholastic teaching of Abelard, and make conceivability the test of credibility? Is it not the fact that different minds have different powers of conception? To me, at any rate, and, I think, to many others, these phenomena are not altogether inconceivable; not, at least, in the sense of a mathematical impossibility. They are contrary to our ordinary experience. That is all that can be said against them. But is not that the case with many things which have been proved to be true after all? It was said, more than 40 years ago, by an old and far-seeing physician, that in the future we should be able to see into the interior of the living body, heart, lungs, etc. "Oh! no," it was said. "He is in his dotage. Miracles don't happen. We cannot see through opaque bodies. The laws of light and of optics are constant. It is impossible." Is it? I have lived to see the heart beat through

the opaque skin. It is now a matter of daily experience. Is the action of the X-rays a miracle, or is it simply a law we did not understand? If the evidence had been historical it would have been emphatically, if not contemptuously, denied. In view of these well-known facts he would be a bold man (as a scientist) who would venture to say what is impossible and what is not.

Contra naturam. Against Nature's law. Can we dogmatise about it at all? Is not what we call a law of Nature just "the expression of an observed fact," and true only with respect to substances and sequences hitherto observed? "The laws of Nature are unfailing in their action," said John Stuart Mill. An unproved dictum. Do we *know*, and have we any right to *assume*, that they never vary. Is not the assumption due to our mathematical training? Or is it, after all, mere subservience to a supposed authoritative statement? A bowing down to dogmatism? In the last century scientists and philosophers railed against the dogmatism of the Church, and then proceeded to "better the instruction." It is quite as unscientific, quite as unreasonable, to be restrained in the search for truth by the dogmata of positivisit bigotry as to be restrained by those of religious bigotry.

Let us admit, with Hamlet, that "there are more things in heaven and earth than are dreamt of in our philosophy," or our science. It has been well said that "there is nothing absolute in the whole objective world—there is no law of physics, not even the law of gravitation, without great growing exceptions—theories of natural phenomena are merely provisional—at present finality in this region is neither visible, attainable, nor clearly conceivable."

A few concrete instances will illustrate this.

(1) Liquid bodies, on becoming solid, increase in weight. This is a well-known law, but it is not universal. Water, a body we are all familiar with, is an exception. Icebergs float on the water, so the exception is not likely to be overlooked. Yet, on assuming a *gaseous* state, water follows the usual law, and becomes lighter.

(2) Evolution, too, has been claimed as a law of universal action. But has it never deviated? The continent of America is, or was, peopled by a race of copper-coloured savages. Yet, deep down in the earth, under primeval forests, are found the remains of highly-civilised races. Evolution, at one time, must have gone backwards. We cannot state that it is an eternal and unchanging law.

Why, indeed, should we assume that if evolution began when life began, it should ever since have proceeded without deviation? Professor Bateson, the President of the British Association, said, at the Royal Institution, that Darwin's theory of the origin of species was

inadequate to explain the changes that have taken place since the beginning of life on earth. There is little evidence of evolution among the pathogenic bacteria, and in the geological strata there are breaks which show that life in the world has not been continuous. Geologists tell us no living form can have survived the Lias period.

(3) Before approaching directly the subject of the third of the series of natural laws I am bringing forward, viz., bi-sexual generation, I must introduce it with a few preliminary observations, from a more or less theological point of view, on the great exception to this law which fills so important a place in theology. I am not a theologian nor a casuist, and must venture to ignore what appear to me to be more or less subtle theological distinctions. I can only speak of parthenogenesis in terms of conception. I assume (rightly or wrongly) that those who deny the Virgin Birth deny it *in toto* and *ab initio*. It may be otherwise. There may be those who separate conception from pregnancy, and pregnancy from parturition, and deny one, or two, or all. To me the question of conception covers the whole ground. Some theologians, I am aware, insist also on a miraculous and painless delivery,* or rather, perhaps, no delivery at all, but a miraculous transference from a completely closed uterus to the outside world.† Those who do so rely chiefly on the word ἐσπαργάνωσεν,‡ the idea being that it would be impossible for a mother personally to wrap up a child immediately after a normal delivery. This, of course, is an unwarranted assumption, while the words ἐγκύω "great with child," αἱ ἡμέραι, pointing to a definite period of time,§ and the verb τίκτω, "to bring forth," repeated twice, all seem to indicate a normal pregnancy and a normal delivery. The miracle, as I see it, is in the conception only. The discussion above referred to, in fact, is patristic, or perhaps scholastic,‖ and much as the fathers and the schoolmen have done in keeping up the intellectual evolution of the race in the early and middle ages, I hope that in the present age we have learned the lessons they taught us, and, though perhaps we hardly recognize it ourselves, have advanced beyond them. To put it plainly, I suggest that the members of the Kensington Clerical Club are quite as well

---

* "Sine dolore matris."—S. Thomas Aquinas.

† Christus exivit de claustro virginis utero, et ita vulva non aperuit.—Ibid.—Summa Theologiæ.

‡ S. Luke ii, 7.

§ Christmas Day is exactly nine months after Lady Day (The Annunciation).

‖ NOTE.—In the present day the discussion practically resolves itself into one between the orthodox theologians and the "higher critics," as the Scriptural historians now call themselves.

qualified to discuss theological matters as the Schoolmen of the Middle Ages.*

Bi-sexual generation among vivipara and ovipara was spoken of by Wallace as "one of the widest and best established laws of nature." Yet he has since admitted that the exceptions to it are "now universally admitted to be true, and the *supposed* law ceases to be universal." Huxley, too, refers to the exceptions found in bees, and says that "throughout almost the whole series of living beings we find agamogenesis, or non-sexual generation."

The examples are numerous. Reaumur, Bonnet, and other naturalists have shown long ago that the Aphides bring forth living young without pairing. Bonnet traced this reproduction by "fruitful virgins" through nine generations, Duvan through eleven. Male and female insects are found in the autumn: they copulate, and the females lay eggs. These are hatched in the spring, but produce females only. This continues, as we have seen, for several generations; in fact, until the autumn, when the original process is repeated. But it may be artificially prolonged beyond this. Kyber, a German naturalist, by keeping these eggs and their offspring in a heated room, was able to continue this process for four years. Some naturalists are of opinion that, with suitable surroundings, it might be continued indefinitely.

Parallel phenomena may be observed among the bees. Dzierzon found that male bees arise from unfertilised eggs, workers and queen bees from fertilised eggs. When the queen bee lays an egg in the *drone* cell, it is found that no sperm fluid is ejected to make it fertile: when she lays an egg in the *worker* cell, the sperm fluid *is* ejected. In the case of bees, it is the *male* insects only which come from unfertilised eggs: in the case of plant-lice, it is the *female* insects only.

Some species of butterflies have been found to produce larvæ from unfertilised eggs. Among the moths, the Bombyx Mori, or silk-worm, is a well-known instance of this form of parthenogenesis. Thus we find agamogenesis prevailing in three distinct orders of the class Insecta:—In the Hemiptera, in the Hymenoptera, and in both the sub-orders of the Lepidoptera.

---

* I hope it will not be thought by the above remarks that I am presuming to claim hyper-scholastic wisdom and knowledge. I thought that by confining them to the *members* of the Society, who are all in priests' orders and all theologians, I had entirely excluded the possibility of such an imputation. Such a claim could not possibly include an outsider who had been called in to give a little special evidence on a collateral subject more or less remotely connected with theological system and doctrine.

More recently, however, experiments have been made as to the possibility of producing parthenogenesis artificially in unimpregnated ova. Hertwig, another German naturalist, found that the unfertilised eggs of the Echinus* showed commencing cell-division in sea-water. Cell-division alone, however, although it suffices for the propagation of the Protozoa and some of the lower Radiata, is not all that is required for this purpose in the case of the Echinodermata, the highest class of radiate animals, and a class in which the sexes are distinctly separate. It is the action of the spermatozoon which causes the development of the ovum into the complete larva.

Professor Loeb has found that for this "mysterious complex" called a living spermatozoon there may be substituted certain well-known chemical and physical agents. The effects of the spermatozoon on the ovum are two:—development into a living germ, and the transmission of certain qualities from the male parent which we call hereditary.

Oxygen is required both for segmentation and for development. A fertilisation membrane surrounding the ovum is also essential for development. It was found that this fertilisation membrane could be artificially produced by exposure of the ovum to a solution of butyric acid, or of some other fatty acid.

But the fertilisation membrane thus formed, if left to itself, tends to disintegration. A second process, therefore, is required. This process consists in submitting the egg with its fertilisation membrane thus formed to a hypertonic solution containing oxygen: or, on the other hand, keeping it for some time in sea-water which is devoid of free oxygen.

Strangely, too, the blood of other animals (even of mammals), and tissue extracts of such animals, will also cause fertilisation (*i.e.*, will produce the fertilisation membrane) in the egg of the Echinus and some other Radiata, and then these will develop when treated with oxygen. Their *own* blood and tissue extract, however, will *not* produce this fertilisation. This is a very significant fact, that for the artificial, or ultra-natural fertilisation of an unimpregnated ovum, the blood or tissue of a *higher* organism should be required. In any case, it is an ascertained fact that, under certain conditions, the unimpregnated ovum may become fertilised and proceed to further and complete development without any contact with the spermatozoon of the male.

It was, I believe, in 1905 that Loeb found that the exposure of the egg of an Echinus, in sea-water, to a solution of butyric acid, led to the formation of a typical fertilisation membrane. Other substances,

* Sea-urchin.

indeed all hæmolytic agents, were capable of producing the same effects. "All hæmolytic agencies," he says, "effect the activation of the unfertilised egg, and this activation consists in a cytolysis of the cortical layer."*

These experiments have had a far wider significance than at first sight appears, for they have been followed by others on higher organisms. These include not only (i) radiate animals, as sea-urchins and star-fish, but (ii) articulate animals, annelids, (iii) molusca, and even (iv) vertebrata, for they have been extended to frogs.

Thus they practically cover all the four great divisions of the animal kingdom, the Radiata, the Articulata, the Mollusca, and the Vertebrata. In the great Insecta class of the Articulata the same process of agamogenesis, as we have seen, occurs normally in certain species. On the other hand there has been no known instance of development from a spermatozoon alone. This, too, accords with all the old traditions. We never hear of androgenesis. There is no such word.

Parallels and analogies, of course, are not proofs. But, to some minds, they may be helpful. They may assist in simplifying the point of view by clearing the ground, and showing that what is beyond our experience and comprehension is not necessarily *contra naturam*. When parthenogenesis has been shown to occur in certain instances it is more easy to conceive of it in others. When we find that certain chemical compounds, organic or inorganic, will suffice to bring about the fertilisation of an ovum without the intervention of the spermatozoon, it does not appear altogether inconceivable that under extraordinary (perhaps supernatural) conditions, certain equivalent substances might be secreted through the action of the nervous system under exceptional psychological influence, in a condition of what might be called "ecstatic tension."

(4) Lastly, what can we say of death? Death, surely, is an unfailing law of organic life. So, at first sight, it appears to be. Yet, if we search the matter out, we shall find that there are planes even in organic life in which death is not the rule, but the exception. Death, our experience tells us, is universal and inevitable. Yet the true clinician acts as if it were otherwise. Whatever may have been our previous disappointments, we always hope that the particular case before us will be an exception, and that life will be prolonged.

---

* Artificial Parthenogenesis and Fertilisation. By Jaques Loeb, Member of the Rockefeller Institute for Medical Research. 1913. Translated by W. O. Redman King, Assistant Lecturer at Leeds University. London: Cambridge (University Press): Chicago.

The ultimate aim of clinical study has been rightly said to be "the realisation of immortality for man." We can take no lower aim, and, whatever else we know, we do *not* know that death is equally certain under all possible surroundings and at all varying times. It is only our own experience which tells us so: and, from the earliest periods of which we have any record there have always been traditions—few and far between, but nevertheless indications of a never-dying hope—of certain isolated instances among men of a continued physical existence under changed conditions and surroundings.

If such instances really occurred, they would not necessarily be *contra naturam*, nor even, in a certain sense, contrary to precedent. In some of the lower orders of animals, where bi-sexual generation does not obtain, immortality is the rule. A unicellular protozoon can never be said to die. He (or she, or it) divides into two equal parts, each equally alive and growing. There is no death here. There is double life. At any rate, there are no remains, and we cannot conceive of death without a dead body. It is not only unthinkable: it is a contradiction of terms. Death came into the world with bi-sexual generation. As Professor Geddes says, it was "the price paid for a body." "Immortality was pawned for love." "The Protozoa," Weismann says, "are immortal." It is the accumulation and differentiation of cells and their structural and physiological development which makes death possible—and inevitable. "In the day that thou eatest thereof thou shalt surely die." The lower animals seem to have undergone the same penalty, and, strangely enough, the account in the Book of Genesis points, in the origin of the first woman, to this very same form of reproduction by segmentation or cleavage. Adam was said to have been divided into two parts, each equally alive and active.

The account, therefore, is something more than a parable. It states a fact in organic life. It is a graphic, an artistic account, of a process which, we now know, actually took place in the organic world of nature. Life on the globe began with simple organisms, and these organisms were immortal. They reproduced their kind by cleavage. When the products of this cleavage became differentiated, and their mutual approach became the means of reproduction, when, in the dramatic words of the Pentateuch, they began to taste of the fruit of the tree of the knowledge of good and evil, of pain and pleasure, somatic death followed. The first attempt of each member of the animal kingdom thus to reproduce his kind is the precursor of his own decease.

We see then, that in the lower forms of animal life, the Protozoa

reproduction proceeds on a different plan, *i.e.*, by change into two or several parts, and without the intervention of somatic death.

This, perhaps, is hardly the form of immortality we are looking for, yet may it not be a kind of type, an earnest of a more continuous life, an analogy of things harder to understand? Both in the Old and in the New Testament the ordinary sequences and processes of Nature are used to shadow forth the higher moral and spiritual truths. We have ceased now to employ this method on account of a supposed, though wholly imaginary, incompatibility of science with religion. Are we justified in doing so? Is not the fact of our greater knowledge of the workings of nature only a further reason for employing them as a type of higher truths?

Here again we come in contact with that illogical frame of mind which distinguishes so sharply between physical and metaphysical. We never use the word resurrection except in the limited physical sense. But it may have also a metaphysical, i.e., a mental, moral or spiritual, sense. In the New Testament ἀνάστασις is used in all these senses, though it is not always translated in the same way. The first time we see it in S. Luke's Gospel it refers to a moral or spiritual awakening. The Child Jesus, Simeon says, is set for the fall and subsequent "Anastasis" of many in Israel.* In S. John's Gospel Martha speaks of the "Anastasis" of the last day.† Christ, the Giver of Life, speaks of Himself as the "Anastasis."‡ In the Acts of the Apostles the Athenians considered "Anastasis" to be a kind of demon, or perhaps a goddess.§ "Strange gods," they said, "Jesus and 'Anastasis.'"

During the materialistic wave of the last century, which, after all, I believe, was just a normal re-action from the Berkeleyism of the century before, it became the fashion to say that life without a physical, organic body, was inconceivable. It may be so, to some minds; but here again we meet with the fallacy that conceivability is the test of credibility—a very worn-out doctrine—and that the field of conceivability is a constant quantity in all individuals. Is it not, on the contrary, a very varying one? The imagination, with which it is closely connected, varies infinitely. And is not this particular phase of its absence limited in distribution? It is certainly not universal, and I should think that the great majority of people in the world *can* and *do* conceive of a spirit as existing apart from a physical body. If this be so, why should a small minority make laws for the world from their limited experience and limited powers of conception? If A, for instance, is not able to conceive of a spirit existing without a

* S. Luke ii, 34. † S. John xi, 24. ‡ S. John xi, 25. § Acts xvii, 18.

body, is that any reason why B should not? or X, or Y, or Z, for the matter of that?

Whatever "Anastasis," whatever the resurrection of the body may mean, there is one thing which it certainly does not mean; and that is, the collecting together of all the atoms of which the body happened to be made up at the moment of death, and their reconstruction into a new body. You may ask, does anyone believe such a thing? Perhaps not. But I *know* that some 25 or 30 years ago there were some who did believe it. Eloquent preachers proclaimed it from the pulpit, and thereby put a stumbling-block in the way of scientific men who heard them, alienating them from the Church, if not from religion altogether. I remember two distinct cases. I understand, easily, how they arrived at it. They had had a smattering of science. They had heard it stated, as a scientific fact, that matter never perishes, but only changes its form, and they jumped at the conclusion that if the atoms are imperishable they can be brought together again in a similar form. But they had not heard, it would appear, that these same atoms were utilised again; that, in many cases, they entered into combination with the soil, that they became part of the grass of the field, were eaten by cattle, of which also they formed a part, and then by a further metamorphosis, entered into the composition of other human bodies. So that the same atoms may have taken part in the structure of many thousands of human beings! A little knowledge is a very dangerous thing. It was not theology: it was science gone wrong. S. Paul would have taught them better. If they had stuck to theology, and not dabbled in science, they would have escaped this quicksand.

And why, it may be asked, should the particular atoms of which the body is composed at death be those chosen to represent it in the future? A few years ago they were not identical. Ten or fifteen years before they might be entirely different, and would, perhaps, more truly represent the individual at his physical best. Are we, then, different people because the organic atoms of which we are constituted are different? There is no absolute relation between the identity—the soul, the spirit, the mind—and the particular atoms which, for the time, connect it with the organic world. It has been shown that the identity may remain constant when its connecting link with the organic world has been entirely changed. Therefore, so long as the identity remains, what can it matter what particular collection of atoms brings it into contact with physical life. Can anything be more absolutely dissimilar than the grub of an insect and the perfect imago? The crawling caterpillar and the magnificent

butterfly or moth, resuscitated from the apparently dead chrysalis? The subaqueous larva of the Libellula and the fully developed insect, so well described by Tennyson?* Yet we never think of doubting

* "To-day I saw the dragon-fly
Come from the wells where he did lie.
An inner impulse rent the veil
Of his old husk: from head to tail
Came out clear plates of sapphire mail.
He dried his wings: like gauze they grew;
Thro' crofts and pastures wet with dew
A living flash of light he flew."
(THE TWO VOICES).

their identity. Indeed, it appears that any difficulty which may have arisen is largely artificial, and, to some extent, a question of words. If we believe in our personal identity in a future state, it cannot be material what form it takes. Whether the human soul, or mind, or spirit (I must confess that I am unable to differentiate between them), will be complete in itself, or be incorporated with some organic substance does not appear to be of the first importance Τὸ πνεῦμά ἐστι τὸ ζωοποιοῦν, ἡ σὰρξ οὐκ ὠφελεῖ οὐδέν.* "It is the spirit which makes life; the bodily organ is no assistance whatever."

The very existence of matter cannot be proved. The existence of mind is inherent, self-evident, demonstrable. When it comes to a contest between mind and matter there can be no doubt of the ultimate result. The appearance of the material universe, the appearance of our own bodies even, may be pure hallucination. We may be "such stuff as dreams are made of." But the dreams themselves are there. The existence of our own minds we *know*, if we know nothing else. In the eighteenth century Berkeley, so far as words can prove a negative, denied, *in toto*, the existence of matter. In the following century a perfectly natural re-action took place, and rampant materialism became the order of the day. Matter was everything; mind a mere emanation of matter. But this statement, though dogmatically laid down, was never convincing, and the twentieth century has already seen a distinct recoil, not only in the wide acceptance by scientific men of the truths of revealed religion, but also in the realm of pure philosophy, even of an agnostic character. The philosophy of Bergson I make no claim to understand: I can only say that if the words in which he conceals his thoughts carry the meaning they appear to convey, his description of the appearance of matter is that it is only the result of a section at a given moment through the ever-active phenomenon of ceaseless movement. This, to me, seems to imply that matter does not really exist, at least in the form in

* S. John, vi, 63.

which we see it, but is merely a kind of hallucination caused by a particular aspect of mind. It is not quite clear whether Bergson is a realist or an idealist. I believe he claims to be neither. In any case, there is no nineteenth century materialism about him. Whether this be so or not, and it is not a matter of great importance, we may be content to know that, whenever or wherever any contention arises between mind and matter, mind will always, and inevitably, come out "top dog."

After all, there is far more true philosophy and a deeper wisdom in the masterly summing up of the subject by Lord Byron in "Don Juan" than the somewhat flippant style of language would, at first sight, lead us to expect.

> When Bishop Berkeley said there was no matter,
> And proved it—'twas no matter what he said.
> They say his system 'tis in vain to batter,
> Too subtle for the airiest human head:
> And yet who can believe it? I would shatter
> Gladly all matters down to stone or lead,
> Or adamant, to find the world a spirit,
> And wear my head, denying that I wear it.
>
> —(Canto xi, 1.)

Harveian Society of London.

Mr. J. JACKSON CLARKE, President, in the Chair.

AT a meeting of this Society, held on Thursday, October 22nd, a number of clinical cases were shown.

The PRESIDENT (Mr. J. Jackson Clarke) showed a series of four cases of gunshot fractures incurred in the war. One of these was a comminuted fracture of the humerus caused by a rifle bullet, the remainder were due to shrapnel.

Dr. S. MELVILLE spoke of the difficulties met with in the localisation of bullets by X-rays.

The cases were discussed by Mr. V. Z. COPE, who recounted an example of severe shrapnel wound in the forearm. Troublesome hæmorrhage had occurred some time after the injury. The bleeding points were widely distributed all over the wound. Apparently both the radial and ulnar arteries had been severed, and a free anastomosis had resulted.

Dr. LEONARD GUTHRIE showed a case of congenital syphilis of the nervous system in a girl aged nine years. The knee-jerks were absent, but there was bilateral extensor plantar response. The gait was typical neither of cerebellar nor spinal ataxy. She walked in an awkward shuffling manner, swaying the trunk from side to side, the feet overted, with a tendency to drag them. The pupils reacted neither to light nor accommodation. There were pegged teeth and old disseminated choroiditis. The Wassermann reaction of the blood was positive. Her mental capacity was good.

Sir JOHN BROADBENT showed a case of pulmonary stenosis, and also one of aortic regurgitation and stenosis with mitral stenosis.

Dr. W. H. WILLCOX showed cases of temporo-sphenoidal tumour; rat-bite fever in a boy, in which the symptoms were recurrent fever and erythema; neoplasm of the stomach, in which a large stomach tumour had arisen without previous gastric symptoms, and which was thought to be a sarcoma; and pituitary tumour in a man who had the usual evidences of acromegaly.

Dr. FREDERICK LANGMEAD showed a case of congenital family cholæmia. It was that of a man, aged 45, whose two daughters, aged four and six respectively, suffered from the same complaint. The usual features were present except increased fragility of the red blood cells. The question of splenectomy was raised.

Dr. G. DE BEC TURTLE showed a case of patent ductus arteriosus in an adult. A systolic murmur was audible with greatest intensity in the pulmonary area, but not in the back. Signs of heart failure were present.