

Professor Tyndall's article on Materialism and its opponents, in the Fortnightly review / introductory address of the President, Mr. Serjeant Cox.

Contributors

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Psychological Society of Great Britain.

THURSDAY, DEC. 2, 1875.

SUBJECT OF DISCUSSION:

PROFESSOR TYNDALL'S *article on Materialism and
its Opponents, in the "Fortnightly Review."*
Introductory Address of the President, MR.
SERJEANT COX.

You have been invited to night to perform the most important duty of a Society formed for the scientific investigation of so much of the Mechanism of Man as relates to the forces by which that mechanism is moved and directed. Psychology as a science is based upon the assumption that Man is not wholly material—that he is something more than the molecular body. This assumption has been directly challenged by one of the very foremost of our Scientists, in a paper which has caused a great sensation in the world, and in which he answers the opponents of Materialism, which maintains that there is nothing but matter, or at least that nothing but matter is or can be known to us, and consequently that Soul or Spirit—call it which you will, or what you will—is only a dream, Mind

but a function of matter, and thought but a secretion of a material structure.

As this Society exists to maintain the opposite doctrine—not, however, dogmatically, but as a *scientific fact*, to be proved, like all other scientific facts, by *evidence*—it would have been negligent of its duty had it not accepted the challenge which that paper practically offers to all who assert the being of a something other than the material structure. The Council having well weighed the manner of dealing with this doctrine of materialism, came to the conclusion that the proper course was to do so by public discussion, where all opinions could be frankly expressed, fairly heard and fully answered, and we are now assembled for that purpose.

But before we enter upon it permit me to request that the debate may be conducted without heat and without personality. We are investigating a question of the utmost moment to mankind—but we are doing so purely from the standpoint of Science. We permit of no theological argument for obvious reasons. We are a scientific Society. This cannot be too often or too strongly repeated. We approach this great question as students of science, prepared to meet those who differ from us in their scientific views for scientific reasons, not as opponents, but as persons whom we believe to be moved by the same desire to learn the very truth that we profess for ourselves—giving them credit for equal honesty of purpose, equal readiness to hear what is to be alleged on the other side, and equal fairness to receive all evidences, to examine all facts and phenomena, to deduce from them the reasonable conclusions to which they conduct, and to avow those conclusions whatever they may be, even if they should overthrow the most cherished former beliefs and convictions.

It is in this spirit that I hope this controversy will be

conducted, acknowledging the consummate abilities of Professor TYNDALL, recognizing the great services he has done to Science, and giving to him the highest credit for the courage with which he has expressed unpopular opinions—conceding to him entirely honest intentions and a sincere desire to find the very truth.

I shall feel it to be my duty as Chairman at once to repress any expression of personal hostility or anything approaching to personality.

All, perhaps, have not read the article of Professor TYNDALL, and to those who have, it will be convenient to refresh the memory. I will therefore condense his argument as much and as fairly as I can, and so to keep the discussion to the real question at issue.

The article purposes to be a reply to those many persons, who, in so many places, adventured answers to that part of his great address at Belfast, in which he condensed the doctrine of Materialism into a short sentence, and avowed it to be his scientific creed. "I see in matter the promise and the potency of every form of life." The controversy in this paper is principally with Mr. MARTINEAU, whom he seems to have looked upon, if not as the most formidable of his opponents, as the one whose arguments were the most worthy of his attention.

I am bound to say that, upon a review of the argument on either side, Professor TYNDALL has the best of it. His Materialism has beaten Mr. MARTINEAU's Metaphysics. The Professor appeals to facts; the preacher to abstractions. The facts are with the Professor, so far as they go. It is *a fact* that our senses can perceive nothing but matter. We have no sensual knowledge of any existence but matter, and we can have none, if all our knowledge comes to us through the senses and we can communicate with the external world only through the material mechanism of the body.

Professor TYNDALL contends that inasmuch as we can obtain no positive knowledge of anything but matter, we have no right to assume the existence of anything but matter. Arrived at this point, there remains for him only the triumphant task of showing that matter is for ever changing its form but not its being, and that in all its changing forms it exhibits new phases of existence. He asserts the indisputable fact that the body is made of matter, as are all other things in the world,—that it decays, falls to pieces, and is resolved into its elements—that Mind is dependent on the condition of that material body, is feeble or strong with it, is affected by all its changes, grows with it and ceases with it.

Against these indisputable facts Mr. MARTINEAU adduces only hopes, desires, aspirations, his inner consciousness, the faith all men have in themselves that they are not their bodies, and that mind is not a function of matter.

But this is answering scientific facts with appeals to mental impressions. The arguments of Mr. MARTINEAU go no further than to raise a presumption that matter is not everything. He fails, as all metaphysicians have failed before him, and ever must fail. He does not meet fact with fact and answer the scientific conclusions of the Physicists with the scientific conclusions of the Psychologists. So long as by this metaphysical form of fighting alone the battle of Soul is maintained, so long will the Materialists enjoy an easy victory. They have but to point to their scientific *facts* and challenge the Metaphysicians to fight them with the weapons of argument *à priori*, and their triumph is secure.

It would be impossible in the time allowed to us to go further into the details of the controversy that is to be the theme of this discussion. I have in very few words stated the sum of the contention on either side, and now I will as briefly indicate the course which this Society, formed to promote *Scientific Psychology*, should adopt in dealing with

this great question of Materialism, of such overwhelming interest to every human being.

That course will probably be a startling one at the first sight.

We admit that it is a question of *fact* to be determined according to the rules of scientific investigation.

We admit frankly and fearlessly all the facts upon which Professor TYNDALL bases his doctrine of Materialism.

That is to say, we admit that the substance of the body, however highly organised, is material; which means, composed of molecules—the only combination of atoms the human senses are constructed to perceive.

That the brain and the nerve system is the material mechanism through which the operations to which we have given the collective name of Mind are performed.

The Mind is dependent for its power of expression upon the material mechanism of the brain, insomuch that it is less or greater in precise proportion to the quality and quantity of that mechanism—grows with it, fades with it, is extinguished when it is diseased or dies.

Admitting, then, all the facts and arguments of Professor TYNDALL, we nevertheless contend that his conclusion is erroneous. Maintaining this, we start from the point at which his inquiry ceases.

He says in effect: "Here I can go no further; I can perceive nothing but this matter. I have no means of knowledge if there be anything outside of this matter. I am on solid ground so far. I object to advance into a region at once unknown, unknowable, and even unthinkable."

Professor TYNDALL's argument rests upon assumptions which we emphatically dispute.

First, he assumes that what we call "matter" is the only form of being.

Second, he asserts that if there be any other form of being it is imperceptible to us, therefore unknown and

unknowable, and therefore out of the circle of *knowledge*—an imagination merely—incapable of exploration, and that time and thought bestowed upon it are merely wasted.

Third—that all we see and know of ourselves is material—that is to say, we are made of matter and obey the laws of matter, we are formed of matter and as matter we are dissolved and dissipated and disappear and are seen and known no more.

We distinctly challenge these conclusions. I can but very briefly state the outlines of the argument by which we do so—to be a sort of guide in the discussion that is to follow—hoping that they who take part in the debate will enlarge upon the various points thus indicated.

First, we dispute the meaning of the term "*matter*." We say that what we call matter is only one form of atomic structure—namely, the molecular form—which our senses are constructed to perceive. We say, not only that there may be, but that it is almost certain that there are, a vast variety of other combinations of atoms, which our senses are incompetent to perceive, and therefore of whose existence they can give us no knowledge, even though they may be thronging everywhere about us. It may well be that other beings are formed like ourselves to perceive only some one other combination of atoms, as we perceive molecular existence only, and to them we should be as imperceptible as they are to us. We know how small a portion of the Universe is perceptible to us. There is ample space within its range for a multitude of beings made of some other atomic combination than molecules. What right have we to assume that the infinitely small portion of existence our limited senses can perceive is all that exists—even immediately about us.

But he contends that if there be other forms of being they are imperceptible and therefore unknowable.

We say, that it is possible to obtain a knowledge of

things that are imperceptible—that we do so by observing the effects of their presence on perceptible matter. It is thus that you, Professor TYNDALL, obtain your knowledge of Electricity and Magnetism and the other imperceptible and imponderable forces. So we contend that we can attain to a knowledge of the existence of other forms of being imperceptible to our senses by observing the operations of that being upon the material—that is the molecular—structure our senses can perceive.

We conclude, therefore, that your argument *à priori* is not conclusive. We deny that such being cannot be, and we deny, also, that even if it is, its existence and its qualities cannot be proved. We say that they *not* unknowable.

If we are right in this argumentative answer, it becomes simply a question of FACT—is there any, and what evidence, as a matter of *scientific fact*, not dogma or conjecture, that there are psychical phenomena from which the conclusion may be reasonably deduced that there is some other than molecular being—some other intelligence than the material structure of the brain?

We assert with the most entire confidence that there is cogent, if not conclusive, evidence of such existence—I mean *scientific* evidence of it as a *scientific fact*—and we challenge Professor TYNDALL and the Materialists to examine these proofs and refute or explain them, if they can.

The first fact is *ourselves*—Consciousness. Is this a conceivable property of molecules or of any combination of molecules? A stone is made of the same molecules that make the Man. It is not pretended that a stone has consciousness—its molecules have no consciousness nor intelligence in that form. Why should consciousness be a property of those same molecules when reconstructed in another form and called brain? But consciousness implies something that is conscious of something else, not of itself.

You are conscious of your body and brain. How can "you" be that body and brain? The Materialists have never yet got over this first difficulty.

Then thought—imagination—emotion—reason—according to the Materialists are the products of matter—secretions of the molecular combination! More impossible surely than the existence of Spirit or Soul!

All men are conscious of *individuality*—of "Self" as distinct from the machinery of the body.

These are argumentative presumptions only, but we assert there are *facts* and *phenomena* that admit of no other conclusion than the existence of some intelligence in the body that is not the body. It would take a volume to describe them—I can only suggest a few of them—the phenomena of dream, of somnambulism, of trance, of psychism, prove to demonstration that there is something in the body that can perceive and act without the aid of the material senses and far beyond their range of action; that being is manifestly something other than the body, something not molecular, constructed of some other combination of atoms,—that is the thing, whatever it be, we call SOUL—and this is the thing whose existence Psychology therefore affirms, and whose nature and qualities it is the province of Psychology to investigate.

What that Soul is, its capacities, and its destinies, are other questions for future discussion. Our present contention with the Materialists is only *that it is*.

The work of the *Psychological Society* will be to collect from all sources past and present the best authenticated facts and phenomena upon which it may hope to construct a Science as certainly and securely based as are any of the Physical Sciences.