



The Mind-Body Problem

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IS THE MIND IN THE BODY?

There was a time, as we have seen in the last chapter (section 30), when it did not seem at all out of the way to think of the mind as in the body, and very literally in the body. He who believes the mind to be a breath, or a something composed of material atoms, can conceive it as being in the body as unequivocally as chairs can be in a room. Breath can be inhaled and exhaled; atoms can be in the head, or in the chest, or the heart, or anywhere else in the animal economy. There is nothing dubious about this sense of the preposition “in.”

But we have also seen (section 31) that, as soon as men began to realize that the mind is not material, the question of its presence in the body became a serious problem. If I say that a chair is in a room, I say what is comprehensible to every one. It is assumed that it is in a particular place in the room and is not in some other place. If, however, I say that the chair is, as a whole, in every part of the room at once, I seem to talk nonsense. This is what Plotinus and those who came after him said about the mind. Are their statements any the less nonsensical because they are talking about minds? When one speaks about things mental, one must not take leave of good sense and utter unmeaning phrases.

If minds are enough like material things to be in anything, they must be in things in some intelligible sense of the word. It will not do to say: I use the word “in,” but I do not really mean *in*. If the meaning has disappeared, why continue to use the word? It can only lead to mystification.

Descartes seemed to come back to something like an intelligible meaning when he put the mind in the pineal gland in the brain. Yet, as we have seen, he clung to the old conception. He could not go back to the frank materialization of mind.

And the plain man to-day labors under the same difficulty. He puts the mind in the body, in the brain, but he does not put it there frankly and unequivocally. It is in the brain and yet not exactly in the brain. Let us see if this is not the case.

If we ask him: Does the man who wags his head move his mind about? does he who mounts a step raise his mind some inches? does he who sits down on a chair lower his mind? I think we shall find that he hesitates in his answers. And if we go on to say: Could a line be so drawn as to pass through your image of me and my image of you, and to measure their distance from one another? I think he will say, No. He does not regard minds and their ideas as existing in space in this fashion.

Furthermore, it would not strike the plain man as absurd if we said to him: Were our senses far more acute than they are, it is conceivable that we should be able to perceive every atom in a given human body, and all its motions. But would he be willing to admit that an increase in the sharpness of sense would reveal to us directly the mind connected with such a body? It is not, then, in the body as the atoms are. It cannot be seen or touched under any conceivable circumstances. What can it mean, hence, to say that it is *there*?

Evidently, the word is used in a peculiar sense, and the plain man cannot help us to a clear understanding of it.

His position becomes intelligible to us when we realize that he has inherited the doctrine that the mind is immaterial, and that he struggles, at the same time, with the tendency so natural to man to conceive it after the analogy of things material. He thinks of it as in the body, and, nevertheless, tries to dematerialize this “in.” His thought is sufficiently vague, and is inconsistent, as might be expected.

If we will bear in mind what was said in the closing section of the last chapter, we can help him over his difficulty. That mind and body are related there can be no doubt. But should we use the word “in” to express this relation?

The body is a certain group of phenomena in the objective order; that is, it is a part of the external world. The mind consists of experiences in the subjective order. We have seen that no mental phenomenon can occupy space—real space, the space of the external world—and that it cannot even have a position in space (section 34). As mental, it is excluded from the objective order altogether. The mind is not, then, strictly speaking, *in* the body, although it is related to it. It remains, of course, to ask ourselves how we ought to conceive the relation. This we shall do later in the present chapter.

But, it may be said, it would sound odd to deny that the mind is in the body. Does not every one use the expression? What can we substitute for it? I answer: If it is convenient to use the expression let us continue to do so. Men must talk so as to be understood. But let us not perpetuate error, and, as occasion demands it, let us make clear to ourselves and to others what we have a right to understand by this *in* when we use it.

THE DOCTRINE OF THE INTERACTIONIST

There is no man who does not know that his mind is related to his body as it is not to other material things. We open our eyes, and we see things; we stretch out our hand, and we feel them; our body receives a blow, and we feel pain; we wish to move, and the muscles are set in motion.

These things are matters of common experience. We all perceive, in other words, that there is an interaction, in some sense of the term, between mind and body.

But it is important to realize that one may be quite well aware of all such facts, and yet may have very vague notions of what one means by body and by mind, and may have no definite theory at all of the sort of relation that obtains between them. The philosopher tries to attain to a clearer conception of these things. His task, be it remembered, is to analyze and explain, not to deny, the experiences which are the common property of mankind.

In the present day the two theories of the relation of mind and body that divide the field between them and stand opposed to each other are *interactionism* and *parallelism*. I have used the word “interaction” a little above in a loose sense to indicate our common experience of the fact that we become conscious of certain changes brought about in our body, and that our purposes realize themselves in action. But every one who accepts this fact is not necessarily an interactionist. The latter is a man who holds a certain more or less definite theory as to what is implied by the fact. Let us take a look at his doctrine.

Physical things interact. A billiard ball in motion strikes one which has been at rest; the former loses its motion, the latter begins to roll away. We explain the occurrence by a reference to the laws of mechanics; that is to say, we point out that it is merely an instance of the uniform behavior of matter in motion under such and such circumstances. We distinguish between the state of things at one instant and the state of things at the next, and we call the former *cause* and the latter *effect*.

It should be observed that both cause and effect here belong to the one order, the

objective order. They have their place in the external world. Both the balls are material things; their motion, and the space in which they move, are aspects of the external world.

If the balls did not exist in the same space, if the motion of the one could not be towards or away from the other, if contact were impossible, we would manifestly have no interaction *in the sense of the word employed above*. As it is, the interaction of physical things is something that we can describe with a good deal of definiteness. Things interact in that they stand in certain physical relations, and undergo changes of relations according to certain laws.

Now, to one who conceives the mind in a grossly material way, the relation of mind and body can scarcely seem to be a peculiar problem, different from the problem of the relation of one physical thing to another. If my mind consists of atoms disseminated through my body, its presence in the body appears as unequivocal as the presence of a dinner in a man who has just risen from the table. Nor can the interaction of mind and matter present any unusual difficulties, for mind is matter. Atoms may be conceived to approach each other, to clash, to rearrange themselves. Interaction of mind and body is nothing else than an interaction of bodies. One is not forced to give a new meaning to the word.

When, however, one begins to think of the mind as immaterial, the case is very different. How shall we conceive an immaterial thing to be related to a material one?

Descartes placed the mind in the pineal gland, and in so far he seemed to make its relation to the gland similar to that between two material things. When he tells us that the soul brings it about that the gland bends in different directions, we incline to view the occurrence as very natural—is not the soul in the gland?

But, on the other hand, Descartes also taught that the essence of mind is *thought* and the essence of body is *extension*. He made the two natures so different from each other that men began to ask themselves how the two things could interact at all. The mind wills, said one philosopher, but that volition does not set matter in motion; when the mind wills, God brings about the appropriate change in material things. The mind perceives things, said another, but that is not because they affect it directly; it sees things in God. Ideas and things, said a third, constitute two independent series; no idea can cause a change in things, and no thing can cause a change in ideas.

The interactionist is a man who refuses to take any such turn as these philosophers. His doctrine is much nearer to that of Descartes than it is to any of theirs. He uses the one word “interaction” to describe the relation between material things and also the relation between mind and body, nor does he dwell upon the difference between the two. He insists that mind and matter stand in the one causal nexus; that a change in the outside world may be the *cause* of a perception coming into being in a mind, and that a volition may be the *cause* of changes in matter.

What shall we call the plain man? I think we may call him an interactionist in embryo. The stick in his hand knocks an apple off of the tree; his hand seems to him to be set in motion because he wills it. The relation between his volition and the motion of his hand appears to him to be of much the same sort as that between the motion of the stick and the fall of the apple. In each case he thinks he has to do with the relation of cause and effect.

The opponent of the interactionist insists, however, that the plain man is satisfied with this view of the matter only because he has not completely stripped off the tendency to conceive the mind as a material thing. And he accuses the interactionist of having fallen a prey to the same weakness.

Certainly, it is not difficult to show that the interactionists write as though the mind were material, and could be somewhere in space. The late Dr. McCosh fairly represents the thought of many, and he was capable of expressing himself as follows:[1] “It may be difficult to ascertain the exact point or surface at which the mind and body come together

and influence each other, in particular, how far into the body (Descartes without proof thought it to be in the pineal gland), but it is certain, that when they do meet mind knows body as having its essential properties of extension and resisting energy.”

How can an immaterial thing be located at some point or surface within the body? How can a material thing and an immaterial thing “come together” at a point or surface? And if they cannot come together, what have we in mind when we say they interact?

The parallelist, for it is he who opposes interactionism, insists that we must not forget that mental phenomena do not belong to the same order as physical phenomena. He points out that, when we make the word “interaction” cover the relations of mental phenomena to physical phenomena as well as the relations of the latter to each other, we are assimilating heedlessly facts of two different kinds and are obliterating an important distinction. He makes the same objection to calling the relations between mental phenomena and physical phenomena *causal*. If the relation of a volition to the movement of the arm is not the same as that of a physical cause to its physical effect, why, he argues, do you disguise the difference by calling them by the same name?

THE DOCTRINE OF THE PARALLELIST

Thus, the parallelist is a man who is so impressed by the gulf between physical facts and mental facts that he refuses to regard them as parts of the one order of causes and effects. You cannot, he claims, make a single chain out of links so diverse.

Some part of a human body receives a blow; a message is carried along a sensory nerve and reaches the brain; from the brain a message is sent out along a motor nerve to a group of muscles; the muscles contract, and a limb is set in motion. The immediate effects of the blow, the ingoing message, the changes in the brain, the outgoing message, the contraction of the muscles—all these are physical facts. One and all may be described as motions in matter.

But the man who received the blow becomes conscious that he was struck, and both interactionist and parallelist regard him as becoming conscious of it when the incoming message reaches some part of the brain. What shall be done with this consciousness? The interactionist insists that it must be regarded as a link in the physical chain of causes and effects—he breaks the chain to insert it. The parallelist maintains that it is inconceivable that such an insertion should be made. He regards the physical series as complete in itself, and he places the consciousness, as it were, on a *parallel* line.

It must not be supposed that he takes this figure literally. It is his effort to avoid materializing the mind that forces him to hold the position which he does. To put the mind in the brain is to make of it a material thing; to make it parallel to the brain, in the literal sense of the word, would be just as bad. All that we may understand him to mean is that mental phenomena and physical, although they are related, cannot be built into the one series of causes and effects. He is apt to speak of them as *concomitant*.

We must not forget that neither parallelist nor interactionist ever dreams of repudiating our common experiences of the relations of mental phenomena and physical. Neither one will, if he is a man of sense, abandon the usual ways of describing such experiences. Whatever his theory, he will still say: I am suffering because I struck my hand against that table; I sat down because I chose to do so. His doctrine is not supposed to deny the truth contained in such statements; it is supposed only to give a fuller understanding of it. Hence, we cannot condemn either doctrine simply by an uncritical appeal to such statements and to the experiences they represent. We must look much deeper.

Now, what can the parallelist mean by *referring* sensations and ideas to the brain and yet denying that they are *in* the brain? What is this reference?

Let us come back to the experiences of the physical and the mental as they present themselves to the plain man. They have been discussed at length in Chapter IV. It was there pointed out that every one distinguishes without difficulty between sensations and things, and that every one recognizes explicitly or implicitly that a sensation is an experience referred in a certain way to the body.

When the eyes are open, we *see*; when the ears are open, we *hear*; when the hand is laid on things, we *feel*. How do we know that we are experiencing sensations? The setting tells us that. The experience in question is given together with an experience of the body. This is *concomitance of the mental and the physical* as it appears in the experience of us all; and from such experiences as these the philosopher who speaks of the concomitance of physical and mental phenomena must draw the whole meaning of the word.

Let us here sharpen a little the distinction between sensations and things. Standing at some distance from the tree, I see an apple fall to the ground. Were I only half as far away, my experience would not be exactly the same—I should have somewhat different sensations. As we have seen (section 17), the apparent sizes of things vary as we move, and this means that the quantity of sensation, when I observe the apple from a nearer point, is greater. The man of science tells me that the image which the object looked at projects upon the retina of the eye grows larger as we approach objects. The thing, then, may remain unchanged; our sensations will vary according to the impression which is made upon our body.

Again. When I have learned something of physics, I am ready to admit that, although light travels with almost inconceivable rapidity, still, its journey through space does take time. Hence the impression made upon my eye by the falling apple is not simultaneous with the fall itself; and if I stand far away it is made a little later than when I am near. In the case in point the difference is so slight as to pass unnoticed, but there are cases in which it seems apparent even to the unlearned that sensations arise later than the occurrences of which we take them to be the report.

Thus, I stand on a hill and watch a laborer striking with his sledge upon the distant railway. I hear the sound of the blow while I see his tool raised above his head. I account for this by saying that it has taken some time for the sound-waves to reach my ear, and I regard my sensation as arising only when this has been accomplished.

But this conclusion is not judged sufficiently accurate by the man of science. The investigations of the physiologist and the psychologist have revealed that the brain holds a peculiar place in the economy of the body. If the nerve which connects the sense organ with the brain be severed, the sensation does not arise. Injuries to the brain affect the mental life as injuries to other parts of the body do not. Hence, it is concluded that, to get the real time of the emergence of a sensation, we must not inquire merely when an impression was made upon the organ of sense, but must determine when the message sent along the nerve has reached some part of the brain. The resulting brain change is regarded as the true concomitant of the sensation. If there is a brain change of a certain kind, there is the corresponding sensation. It need hardly be said that no one knows as yet much about the brain motions which are supposed to be concomitants of sensations, although a good deal is said about them.

It is very important to remark that in all this no new meaning has been given to the word “concomitance.” The plain man remarks that sensations and their changes must be referred to the body. With the body disposed in a certain way, he has sensations of a certain kind; with changes in the body, the sensations change. He does not perceive the sensations to be in the body. As I recede from a house I have a whole series of visual experiences differing from each other and ending in a faint speck which bears little resemblance to the experience with which I started. I have had, as we say, a series of sensations, or groups of

such. Did any single group, did the experience which I had at any single moment, seem to me to be *in my body*? Surely not. Its relation to my body is other than that.

And when the man of science, instead of referring sensations vaguely to the body, refers them to the brain, the reference is of precisely the same nature. From our common experience of the relation of the physical and the mental he starts out. He has no other ground on which to stand. He can only mark the reference with greater exactitude.

I have been speaking of the relation of sensations to the brain. It is scarcely necessary for me to show that all other mental phenomena must be referred to the brain as well, and that the reference must be of the same nature. The considerations which lead us to refer ideas to the brain are set forth in our physiologies and psychologies. The effects of cerebral disease, injuries to the brain, etc., are too well known to need mention; and it is palpably as absurd to put ideas in the brain as it is to put sensations there.

Now, the parallelist, if he be a wise man, will not attempt to *explain* the reference of mental phenomena to the brain—to *explain* the relation between mind and matter. The relation appears to be unique. Certainly it is not identical with the relation between two material things. We explain things, in the common acceptance of the word, when we show that a case under consideration is an exemplification of some general law—when we show, in other words, that it does not stand alone. But this does stand alone, and is admitted to stand alone. We admit as much when we say that the mind is immaterial, and yet hold that it is related to the body. We cannot, then, ask for an *explanation* of the relation.

But this does not mean that the reference of mental phenomena to the body is a meaningless expression. We can point to those experiences of concomitance that we all have, distinguish them carefully from relations of another kind, and say: This is what the word means, whether it be used by the plain man or by the man of science.

I have said above: “If there is a brain change of a certain kind, there is the corresponding sensation.” Perhaps the reader will feel inclined to say here: If you can say as much as this, why can you not go a little farther and call the brain change the *cause* of the sensation?

But he who speaks thus, forgets what has been said above about the uniqueness of the relation. In the objective order of our experiences, in the external world, we can distinguish between antecedents and consequents, between causes and their effects. The causes and their effects belong to the one order, they stand in the same series. The relation of the physical to the mental is, as we have seen, a different relation. Hence, the parallelist seems justified in objecting to the assimilation of the two. He prefers the word “concomitance,” just because it marks the difference. He does not mean to indicate that the relation is any the less uniform or dependable when he denies that it is causal.

IN WHAT SENSE MENTAL PHENOMENA HAVE A TIME AND PLACE

We have seen in Chapters VI and VII what space and time—real space and time—are. They are the plan of the real external world and its changes; they are aspects of the objective order of experience.

To this order no mental phenomenon can belong. It cannot...occupy any portion of space or even have a location in space. It is equally true that no series of mental changes can occupy any portion of time, real time, or even fill a single moment in the stream of time. There are many persons to whom this latter statement will seem difficult of acceptance; but the relation of mental phenomena to space and to time is of the same sort, and we can consider the two together.

Psychologists speak unhesitatingly of the localization of sensations in the brain, and they talk as readily of the moment at which a sensation arises and of the duration of the sensation. What can they mean by such expressions?

We have seen that sensations are not in the brain, and their localization means only the determination of their concomitant physical phenomena, of the corresponding brain-change. And it ought to be clear even from what has been said above that, in determining the moment at which a sensation arises, we are determining only the time of the concomitant brain process. Why do we say that a sensation arises later than the moment at which an impression is made upon the organ of sense and earlier than the resulting movement of some group of muscles? Because the change in the brain, to which we refer the sensation, occurs later than the one and earlier than the other. This has a place in real time, it belongs to that series of world changes whose succession constitutes real time. If we ask *when* anything happened, we always refer to this series of changes. We try to determine its place in the world order.

Thus, we ask: When was Julius Caesar born? We are given a year and a day. How is the time which has elapsed since measured? By changes in the physical world, by revolutions of the earth about the sun. We ask: When did he conceive the plan of writing his Commentaries? If we get an answer at all, it must be an answer of the same kind—some point in the series of physical changes which occur in real time must be indicated. Where else should we look for an answer? In point of fact, we never do look elsewhere.

Again. We have distinguished between apparent space and real space (section 34). We have seen that, when we deny that a mental image can occupy any portion of space, we need not think of it as losing its parts and shrivelling to a point. We may still attribute to it apparent space; may affirm that it seems extended. Let us mark the same distinction when we consider time. The psychologist speaks of the duration of a sensation. Has it real duration? It is not in time at all, and, of course, it cannot, strictly speaking, occupy a portion of time. But we can try to measure the duration of the physical concomitant, and call this the real duration of the sensation.

We all distinguish between the real time of mental phenomena, in the sense indicated just above, and the apparent time. We know very well that the one may give us no true measure of the other. A sermon *seems* long; was it *really* long? There is only one way of measuring its real length. We must refer to the clock, to the sun, to some change in the physical world. We *seem* to live years in a dream; was the dream *really* a long one? The real length can only be determined, if at all, by a physical reference. Those apparent years of the dream have no place in the real time which is measured by the clock. We do not have to cut it and insert them somewhere. They belong to a different order, and cannot be inserted any more than the thought of a patch can be inserted in a rent in a real coat.

We see, thus, when we reflect upon the matter, that mental phenomena cannot, strictly speaking, be said to have a time and place. He who attributes these to them materializes them. But their physical concomitants have a time and place, and mental phenomena can be ordered by a reference to these. They can be assigned a time and place of existing in a special sense of the words not to be confounded with the sense in which we use them when we speak of the time and place of material things. This makes it possible to relate every mental phenomenon to the world system in a definite way, and to distinguish it clearly from every other, however similar.

We need not, when we come to understand this, change our usual modes of speech. We may still say: The pain I had two years ago is like the pain I have to-day; my sensation came into being at such a moment; my regret lasted two days. We speak that we may be understood; and such phrases express a truth, even if they are rather loose and inaccurate. But we must not be deceived by such phrases, and assume that they mean what they have no right to mean.

OBJECTIONS TO PARALLELISM

What objections can be brought against parallelism? It is sometimes objected by the interactionist that it abandons the plain man's notion of the mind as a substance with its attributes, and makes of it a mere collection of mental phenomena. It must be admitted that the parallelist usually holds a view which differs rather widely from that of the unlearned.

But even supposing this objection well taken, it can no longer be regarded as an objection specifically to the doctrine of parallelism, for the view of the mind in question is becoming increasingly popular, and it is now held by influential interactionists as well as by parallelists. One may believe that the mind consists of ideas, and may still hold that ideas can cause motions in matter.

There is, however, another objection that predisposes many thoughtful persons to reject parallelism uncompromisingly. It is this. If we admit that the chain of physical causes and effects, from a blow given to the body to the resulting muscular movements made in self-defense, is an unbroken one, what part can we assign to the mind in the whole transaction? Has it *done* anything? Is it not reduced to the position of a passive spectator? Must we not regard man as "a physical automaton with parallel psychical states"?

Such an account of man cannot fail to strike one as repugnant; and yet it is the parallelist himself whom we must thank for introducing us to it. The account is not a caricature from the pen of an opponent. "An automaton," writes Professor Clifford,[2] "is a thing that goes by itself when it is wound up, and we go by ourselves when we have had food. Excepting the fact that other men are conscious, there is no reason why we should not regard the human body as merely an exceedingly complicated machine which is wound up by putting food into the mouth. But it is not *merely* a machine, because consciousness goes with it. The mind, then, is to be regarded as a stream of feelings which runs parallel to, and simultaneous with, a certain part of the action of the body, that is to say, that particular part of the action of the brain in which the cerebrum and the sensory tracts are excited."

The saving statement that the body is not *merely* a machine, because consciousness goes with it, does not impress one as being sufficient to redeem the illustration. Who wants to be an automaton with an accompanying consciousness? Who cares to regard his mind as an "epiphenomenon"—a thing that exists, but whose existence or nonexistence makes no difference to the course of affairs?

The plain man's objection to such an account of himself seems to be abundantly justified. As I have said earlier in this chapter, neither interactionist nor parallelist has the intention of repudiating the experience of world and mind common to us all. We surely have evidence enough to prove that minds count for something. No house was ever built, no book was ever written, by a creature without a mind; and the better the house or book, the better the mind. *That* there is a fixed and absolutely dependable relation between the planning mind and the thing accomplished, no man of any school has the right to deny. The only legitimate question is: *What is the nature* of the relation? Is it *causal*, or should it be conceived to be *something else*?

The whole matter will be more fully discussed in Chapter XI. This chapter I shall close with a brief summary of the points which the reader will do well to bear in mind when he occupies himself with parallelism.

- (1) Parallelism is a protest against the interactionist's tendency to materialize the mind.
- (2) The name is a figurative expression, and must not be taken literally. The true relation between mental phenomena and physical is given in certain common experiences that have been indicated, and it is a unique relation.
- (3) It is a fixed and absolutely dependable relation. It is impossible that there should be a particular mental fact without its corresponding physical fact; and it is impossible that

this physical fact should occur without its corresponding mental fact.

(4) The parallelist objects to calling this relation *causal*, because this obscures the distinction between it and the relation between facts both of which are physical. He prefers the word “concomitance.”

(5) Such objections to parallelism as that cited above assume that the concomitance of which the parallelist speaks is analogous to physical concomitance. The chemist puts together a volume of hydrogen gas and a volume of chlorine gas, and the result is two volumes of hydrochloric acid gas. We regard it as essential to the result that there should be the two gases and that they should be brought together. But the fact that the chemist has red hair we rightly look upon as a concomitant phenomenon of no importance. The result would be the same if he had black hair or were bald. But this is not the concomitance that interests the parallelist. The two sorts of concomitance are alike only in the one point. Some phenomenon is regarded as excluded from the series of causes and effects under discussion. On the other hand, the difference between the two is all-important; in the one case, the concomitant phenomenon is an accidental circumstance that might just as well be absent; in the other, it is nothing of the sort; it *cannot* be absent—the mental fact *must* exist if the brain-change in question exists.

It is quite possible that, on reading this list of points, one may be inclined to make two protests.

First: Is a parallelism so carefully guarded as this properly called *parallelism* at all? To this I answer: The name matters little. I have used it because I have no better term. Certainly, it is not the parallelism which is sometimes brought forward, and which peeps out from the citation from Clifford. It is nothing more than an insistence upon the truth that we should not treat the mind as though it were a material thing. If any one wishes to take the doctrine and discard the name, I have no objection. As so guarded, the doctrine is, I think, true.

Second: If it is desirable to avoid the word “cause,” in speaking of the relation of the mental and the physical, on the ground that otherwise we give the word a double sense, why is it not desirable to avoid the word “concomitance”? Have we not seen that the word is ambiguous? I admit the inconsistency and plead in excuse only that I have chosen the lesser of two evils. It is fatally easy to slip into the error of thinking of the mind as though it were material and had a place in the physical world. In using the word “concomitance” I enter a protest against this. But I have, of course, no right to use it without showing just what kind of concomitance I mean.

NOTES

1. “First and Fundamental Truths,” Book I, Part II, Chapter II. New York, 1889.
2. “Lectures and Essays,” Vol. II, p. 57. London, 1879.

George Stuart Fullerton. *An Introduction to Philosophy*. New York: MacMillan, 1915.

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