

WHAT IS THE MOTIVE POWER OF MAN?

The Physiology and Pathology of the Mind. By Henry Maudsley, M.D., London, Physician to the West London Hospital, Honorary Member of the Medico-Psychological Society of Paris, formerly Resident Physician of the Manchester Royal Lunatic Hospital, etc. New York. D. Appleton & Co., 1871.

The Brain and its Functions. By J. Luys, Physician to the Hospice de la Salpêtrière. With illustrations. London. Kegan Paul, Trench & Co., No. 1 Paternoster Square, 1881. International Scientific Series, vol. xxxvii.

Body and Will; being an Essay concerning Will in its Metaphysical, Physiological, and Pathological aspects. By Henry Maudsley, M.D. London. Kegan Paul, Trench & Co., No. 1 Paternoster Square, 1883.

THE fundamental idea in modern philosophical discussion lies in the question, whether the human intellect is a manifestation of physical force on matter, or the brain the instrument of a something superphysical, called mind.

That man is largely automatic in his brain processes and in his bodily actions is amply demonstrated by the facts which are here set forth and generally known. Let us frankly concede that man is largely automatic. Let us, at the same time, however, try to see if his automatism may not hold the secondary place in his being; whether that is not the fairest induction from all we know. The things—the mysteries—that surround him interest him deeply, because, ulteriorly, they are related to his being. This has always been so, and it is doubly so now, because, whereas only a few years ago, comparatively, nothing had been effectively done, impugning the spirituality of man, now a powerful, materialistic school, armed with the latest results of science, has arisen, ready to do battle against all comers. It contends that there is naught in man, non-physical, non-dynamical, ethical, spiritual; nothing that can justify the ascription to him of that which is termed soul. It contends that man is of the earth, earthy, an evolution of matter directed in certain grooves of action by physical forces. It finds itself as unable to conceive of a psychic force—soul, emanating from a supreme psychic force—God, as to conceive of a cloud-compelling Jove.

Let us first proceed to the consideration of automatic man, to that in him which has been demonstrated by physiology to be automatic, and then, proceeding beyond, see if we do not find a resi-

duum for which the theory of his essential automatism in everything is utterly unable to account.

It is a part of popular misconception regarding man, that his every act is the result of an exercise of will, and this in face of daily evidence to the contrary. A man has, let us say, the habit of winding his watch as he takes it from his pocket on retiring for the night. Many times he withdraws it, winds, and lays it in a safe place, without any conscious perception or will whatever having been concerned. Or he has, we will say, lived for many years in a certain house, and moves away from it to one a few doors off. Shortly afterwards he passes his own door unknowingly, his steps not arrested until he finds himself in front of his former residence, when he is aroused suddenly to his mistake. Will certainly does not enter into these acts. Whence are they then derived? They are clearly ideo-motor, as contradistinguished from volitional acts. They are as somnambulistic acts, compared with ordinary waking acts. Just as, waking, it is possible to see without perceiving, so it is possible to act without willing.

Man's few first simple movements as an infant are either inherited or automatic. Thenceforward, as the adjustment of his life with reference to his environment proceeds through the nervous centres and the machinery which they actuate, which gradually learn the lesson of greater or less adaptation to his needs, he becomes endowed with manifold secondary automatic movements, which serve in the commonplace actions of life, that call for no exercise of the powers vested in the supremacy of the brain. The brain, it would seem, like a chief of state, can withdraw itself into the seclusion of the closet, having relegated to well-instructed ministers the petty details to which it is below its dignity to attend.

That it is not the brain only which, so to speak, possesses memory and will and executive powers is readily perceived upon slight consideration of some facts open to daily observation. Recollect how slowly and laboriously many movements are acquired, and it will be seen how little conception and will are competent in these to insure success. Recollect, further, how easily, from want of practice, a movement which has reached perfection is imperfectly executed or lost entirely, without any diminution of the appropriate conception or of the will to execute. With regard to some movements, it is only in the general immaturity of youth, at a time when, of course, the brain also is immature, that certain movements can be thoroughly acquired, and this apart from any question of flexibility of muscles and joints. The difficulty of acquiring the manual of arms, dancing (in the rhythmical, not in the agile sense), instrumental music, and the succeeding diminu-

tion in facility in proportion to want of practice, are examples of the slowly acquired action, and the gradually lost action of co-ördinative nervous centres possessing capacity independent of conception and so-called memory and will. The brain's mandate may or may not issue for a particular action. Its sway, in proportion to the individual's elevation in the scale of being, and the consequent training which it has imparted to his life-work, is not exercised save in a supervisory capacity, which generally takes in the whole situation represented by the actions to be performed, and the greater or less degree of excellence with which they are performed.

Having now considered in this cursory, but sufficient, manner, the automatism of man in his waking life, let us consider it in the other aspect of his existence, the sleeping life. In sleep the response of simple reflex action and of sensori-motor reaction to external stimulus is plainly to be observed. The tickling of a sensitive part of the body, as of the nostril, with a feather, or the application of cold or heat, will bring about the same reactions that would be produced by the same causes during waking. Everyone knows that, in sleep, sound is readily taken up and appropriated by the dreamer, and assimilated with the subject of his dream, or may initiate a dream; that it may give a new direction to a dream, or a modification to a theme proceeding quietly to its *dénoûement*; or that, reaching the climax of an explosion or a roar, it may cause a sudden awakening. This last effect is produced by sensori-motor reaction. On the other hand, a noise may not cause awakening, even when violent. It may not cause an expenditure of outward energy. It may, even although violent, be accommodated by the dream; so that a violent concussion shall appear, in a dream of battle, the report of a cannon, the springing of a mine, or a signal-gun from a rocky coast. Or, so accommodating are dreams, a battle, or something else where noise would be a concomitant, lends itself at once to the imagination of the dreamer, solely for the purpose of accounting rationally for the noise. A dream, to a sound sleeper, can accommodate much, for all things that the sleeper has experienced are, fundamentally at least, memories recombined, lending themselves in profusion to his phantasy. Why should a sound, or a touch, or a smell, refuse to assimilate itself with the manifestations of a life in which the laws are but amplifications of the laws among which, awake, he has lived and moved and had his being? Amid dream-perceptions, whether derived from inward or outward impulse, or from them combined, the sleeper is thinking, under the limitations of dream-life.

Having thus afforded a rapid but well-balanced survey of the

two lives of man, the waking life and the dream-life, turn we for a moment away from both (to recur later to some of their phenomena in detail), in order that, upon the basis of what has been already said as to automatic man, whether awake or asleep, we can proceed with discussion from this point, beyond which he, as he seems to us, whether awake or asleep, ceases, at least mainly, to be automatic. The exception to which we refer in saying "mainly" is that relating to "unconscious cerebration," the very terms of which, admitted, concede automatism in action. We admit formally, however, that there is no question in our mind, that "unconscious cerebration" exists, and is, moreover, as active in waking as in sleeping moments. In the first, it is coupled with other cerebration; in the second, it is almost alone.

When we consider, from the psychological point of view, the processes constituting the law of thought, we find that related sequence is the first in importance. A man cannot have a single thought. One thought engenders another—not another entirely diverse, for if it were, there would be no related sequence, but another which in turn transmits its ancestral attributes, and bears the same relation to it as parent to child, however at the first glance seemingly dissimilar. If this be not so, it is impossible to conceive of individuality, or of variety in individuality. Individuality consists far less in features, form, and other bodily attributes (these change greatly merely from the advance of age) than in character, of which we possess no other manifestation besides expressed thoughts and acts, which, through all disguises, in the long run always correspond; and character, which is only another term for individuality, is regarded by modern science as being as persistent as anything in nature. It certainly would not be regarded as persistent, if thought in the individual were not so related to thought as to cause him to be best known through his mind. If we experience a difference in a friend's expressed ideas, we say with surprise that he is changed. If his ideas, although coherent, are utterly different from those with which we are familiar as emanating from him, we are alarmed lest he may be verging on insanity. So strongly as this do we confess our faith in the persistence of individuality. At the same time, however, that the law of related thought, through heredity, is not to be disputed, it is only a general law of sequence, conservative of individuality, and is immeasurably far from involving the narrow limitations enunciated by Lord Kames in his *Elements of Criticism*, who makes thoughts, through generations of thought from the cradle to the grave of every man, one long line of generations, each linked indissolubly to its predecessor, of necessity its progenitor. To hold this is certainly to admit that man has no con-

trol over his action, is to make of man the merest automaton passing over the stage of life.

From outward experience, and from self consciousness, one must concede the existence of the law of related sequence in ideas, but consideration of the evidence deducible from both proves that the law is no more than general in its binding force. It is true that we should refute ourselves if, by way of showing that an existing thought is not the parent of the succeeding one, we were to say, "we shall prove our position by conceiving here and now a thought that shall be utterly unlike what the succeeding thought would, without the intervention of our act of will, have been," and were then, in pursuance of our intention, to leap instantaneously in mind from this essay to some idea foreign to all our surroundings, as, for instance, to the conception of the frosty Caucasus, or to the perforation in manufacture of the eye of the needle. For these conceptions are merely drawn from the storehouse of memory, and the thought, of which they are the form, was born of the thought of avoidance of parentage, and therefore is the veritable child of the first thought.

But no regular sequence can be proved of many evolutions in the mind, especially in the mind actively and multifariously engaged. There are to be discerned other laws, by virtue of which the memory and the will, sometimes in conjunction, sometimes separately, assert their claims. It is a matter of daily observation to the man earnestly employed, that he has other things to attend to, besides those represented by the thoughts which are for the moment in a determinate direction passing through his brain. He is often, without individualizing one of them, conscious that many things are awaiting his attention. Some one or more of these may obtrude themselves upon him, but many more may still await in the antechamber of his mind the pleasure of his memory to introduce them, or of his will to summon the memory to introduce them to his presence. What is of commoner occurrence than that, when his preoccupation slackens, he invites them one by one to appear before him? Was his last thought, in the previous absorption of his mind, in any wise the parent of the next thought, directed to an entirely different quarter? Assuredly not—he merely became at leisure to entertain thoughts which, previously, he had not had leisure to entertain. If his preoccupation continues inordinately long, we find him often losing all hold upon the circumstance that something had required his attention; he has forgotten something, often to the point of never knowing of it, except, perhaps, through "mechanical memory," over which he can, of course, exercise no control.

Notwithstanding this, M. Luys, the French physiologist, says:

"I imagine that I think of an object by a spontaneous effort of my mind; it is an illusion—it is because the cell-territory where that object resides has been previously set vibrating in my brain. I obey when I think I am commanding, merely turning in a direction towards which I am unconsciously drawn. A phenomenon quite analogous to the conjuring trick of forcing a card takes place in this instance; the conjurer forcing us unconsciously to take a card, while letting us imagine we have liberty of choice."¹

Can this be the process always, seeing that memory sometimes calls a man's attention to a subject dormant in his mind, in regard to which consciousness admits the importance (presumably associated with energetic cell-activity)? and that, although he strives to convert the warning as to the existence of a something important, to be attended to, into a recollection of the subject-matter, he may or may not succeed; for he sometimes does and sometimes does not? If he does, can the rescued idea possibly be physically represented by a previous specific cell-vibration? Is it also, of necessity, the lineal descendant of the last one of his preoccupation, or of an intermediate phase of thought? If it had been, it would not have required to be dragged forth into the light. If he does not succeed in rescuing it from oblivion, its lineage is, of course, disproved by the fact of its eluding observation. In point of fact, not only are volition and memory capable of instituting as well as breaking trains of thought, but circumstances in the outward world are continually engaged in instituting and breaking them. On the one hand, an episode of any sort, great or small, may institute a new train, and on the other, the thought that would have been born, but for the interposition of an exterior force, in the voice of a friend or an enemy, in a sudden accident or a catastrophe, may never come into being.

The truth is, that when the power, called will, enters, the automatic man does not end, but the higher man begins. Certain of man's brain-processes do not cease to be automatic then; they continue to act for themselves, but they then begin to act also under the mandate of the higher man. "Unconscious cerebration" will often have taken place on a theme in which there has been conscious interest, but no intention of proceeding with reason to the ultimate point; but again, the higher man may consciously think upon a subject which he wishes to elucidate, and may also, at the same time, commit to "unconscious cerebration" the task of doing its part towards placing him in the mental frame in which he can best devote himself to the subject, when his will decides to

¹ J. Luys, "The Brain and its Functions." "The International Series"—translation. Kegan Paul, Trench & Co., London, p. 254.

attack it with his whole vigor. The higher man, in a word, can utilize the automatism of his being, as a machine, to grind out a portion of his work. But it does not follow that the higher man (and higher he is, in the supreme function assumed, without our begging the question by that term) is therefore no more than the machine. On the contrary, if he can use the machine, he must be a something separate and apart from it. Every man, who, from the beginning of the world, has thought or said, "I will take some time to think over this question," has to some degree, whether he knew it or not, committed his subject to his "unconscious cerebration," as well as to prospective, conscious thought. He has, whether knowingly or unknowingly, used the automatism of his being as a machine which he knew would yield him product which he could further shape through intending will.

Dr. Maudsley, in his *Physiology and Pathology of the Mind*, contends that character is not determined in the particular act by the will, but determines the will. That is true if sufficiently qualified. Unqualified, it will not stand the test of experience. Dr. Maudsley himself expressly says in the same treatise, "The way in which the will does operate upon the character, or affect the *ego*, is indirectly, by determining the circumstances which subsequently gradually modify it." These two propositions are irreconcilable. If character must always determine the will in the particular act, it must also determine the circumstances in accordance with its own bent. It is impossible to conceive of its determining an act in one direction and circumstances (which are to control acts) in the opposite direction. And yet, it is just these two propositions that Dr. Maudsley calls upon us to accept. The idea, that the process of which he speaks shall be gradual, is misleading; it could never be initiated. The propositions amount to saying, in sum, that it is in man, through character, to determine to act in a particular direction, and at the same time, or later, to act otherwise in future. The terms "circumstances" and "acts" are, in this connection, equivalent. The character (upon the assumption) must needs determine circumstances for the future, that would result in acts precisely like those which it, in the present, decrees. The well-known effect, too, of taking a direction is to strengthen a tendency. That fact also is irreconcilable with the statement that the same character can determine circumstances—virtually acts—conflicting with its acts. The whole difficulty is resolved, if we regard will as capable of determining against desire, and therefore, against character at a given point of time.

This is the true theory. We cannot accept Dr. Maudsley's theory that, in the individual act, one must, for "will," read "character." His answer would perhaps be, that we know what the

will is by knowing what the act is, but that we do not know what the character is, for that is not directly knowable; that, in a word, this unknown character determines, in strict accordance with itself, the known act. But we must assume that we can know character. All discussion of the question must cease if we cannot make that assumption. Dr. Maudsley's own conclusions are based upon that assumption. We therefore say emphatically, that we find in experience the individual act often in opposition to the character.

It is only upon the theory of the reciprocal action and reaction of will and character, that improvement or degradation in the individual is comprehensible. It is only upon this, the true theory, that Dr. Maudsley's own description of the efficacy of the will can be justified, and never has it been more brilliantly described. He says, "Without doubt the will is the highest force in nature, the last consummate blossom of all her marvellous efforts. . . . By the power of a well-fashioned will man re-acts with intelligent success upon the external world, brings himself into a complete harmony with his surroundings, assimilates and incorporates nature, and thus carries forward its organic evolution. The highest action of will is therefore truly *creative*."

Even in dreams, to which we will now revert, to show that even in that life where the mental powers are most in abeyance, the intelligence and the will of the individual man still bear witness by their persistence to the identity and the will of the man.

Problems that have eluded the thinker in his waking hours have sometimes been solved by him during sleep; perhaps because the synthetical process is then less embarrassed by the commonplace surroundings of the waking life. Sometimes, as though by intuition, is grasped by the sleeper what had been denied him when awake. As if by intuition it must be, for deliberation is impossible to the dreamer. But what, after all, is intuition at any time, awake, but the synthetical faculty unconscious of acting? It, like the best brain product of other kinds, is from the mind at the time unconscious of its processes, working with the maximum of power, because with the minimum of friction. In the case described, the ideation may be held to be automatic just because of its rapidity. We have a right to reply that that adverse criticism is not applied to rapid waking thought.

Considering that Newton struggled to bring to the surface a thought which seemed to him great, and succeeding, found it unutterable nonsense, it may be inferred by some persons, unaware of very different cases, that dreams must always be of such stuff, for what could be expected of lesser men? But appeal to some experience of every one, and principally to that of certain great men who have told of their dreams—Condorcet, Franklin, and

others,—proves that true thought is sometimes evolved in dreams. Even Sir Humphry Davy's experience when experimenting with nitrous-oxide gas, and under its influence conceiving that the universe resolves itself into thought, cannot be held nonsensical. His thought was a beautiful abstraction, but another form of the conception that Goethe makes the Earth-Spirit utter, when he says :

" 'Tis thus at the roaring Loom of Time I ply
And weave for God the Garment thou seest Him by."

How defenceless the sleeper lies, open to all potentialities! Well may Shakespeare speak of dreams abusing the curtained sleeper! His brain, with all its accumulated treasure of ideas, is ready to respond to an impulse from within itself, ready to respond to an impulse initiated in the sensory system, or to one due to that system's communicating with the outer world. Ideas, abstract and concrete, roll onward, directing and directed by ceaseless phantasmagoria—the sensible images that people this special world invisible to all but himself, visible to him as if he saw them with his bodily eyes. Probably the molecular changes in the sensory ganglia, which would accompany actual sight, are the same in kind as they would be if the images were received upon the retina, and thus excited vision. Sight, which, as Dr. Johnson says, can, of all the senses, occupy itself longest without satiety, asserts its predominance over the other senses in our sleeping as well as in our waking moments. These phenomena are, of course, for the most part automatic, but much thought is mingled with them, however evanescent, and it is not always evanescent.

Dreams are as various in character as the men who dream them; but one essential quality underlies them all—that they are, as one ought to know they must be, wrought out of the nature of the individual sleeper. There are men and women who lead humdrum lives within the same lights and shadows from the cradle to the grave; and they, perhaps, as the father of Robinson Crusoe said to him of the middle estate, are the happiest of mortals. Others there are who have lived lives within lives, which, viewed from their present standpoint, seem eras distantly related. To the people and places associated with these, the dream-visits from the last period have often more than the ordinary reality of dreams, and present truthful scenes more vividly than their counterpart real prototypes appear in waking hours. The dreamer bears with him, as the ordinary traveller does, the thoughts and feelings of his present home, and sits in melancholy musing near the ashes of his former hearths. He even sees people, not as they were when he lived among them, but as they ought to look from the actual lapse of time, regarding which he is often wonderfully accurate.

One man, as intimated, does not dream as another dreams. A man is no other than himself when he dreams; he never loses his identity. The dreams of each person are the resolution of the whole person, plus or minus something—a variable quantity for each person, when asleep, as compared with awake, but a different and constant quantity in comparing one person with another. It is as the *ego*, not the *eidolon*, that one threads the labyrinth of dreams. High or low as he may rise or sink in fortune, as he occupies the stage of his fancy's creation, where he has furnished every actor's part and the whole *mise en scène*, he never loses his identity. If he should be then asked his name, he may not know it, but he is in some subtle sense himself, and knows that.

It will be apparent to any one who may choose to investigate the subject, that, although man shows much automatism in sleep, yet the higher man, the intellectual, ratiocinative man, capable not only of reasoning, but of what is called intuition, is not always absent in sleep. It remains to consider whether the highest part in man—the will (without which the whole man is neutralized) is absent in sleep. We think that to a certain degree the will is not absent, Miss Frances Power Cobbe to the contrary notwithstanding. Released as all mankind are by the fact of sleep from moral obligation, the will, nevertheless, asserts and effects in sleep a certain restraining influence.

The most marked characteristic of dreaming, however, is the weakening of morality in the dreamer. The consciousness which accompanies the *ego* of the dreamer is the same consciousness in kind, but not in degree, as that which accompanies him as a man awake. He commits or allows certain actions impossible for him to commit or allow if he were awake. And yet, if he be at all a moral man, there are bounds beyond which his weakness never passes, by which his individuality is still preserved. If, awake, he be a man incapable of fraud, he cannot, asleep, conceive himself guilty of fraud. If, awake, he cannot lie, neither can he when asleep. With self-consciousness, which we have said exists in the dreamer, must be associated conscience. In a superficial sort of way the terms consciousness and unconsciousness serve to distinguish between the states of waking and sleeping; but not otherwise. Self-consciousness—the presence of the *ego*—belongs to both waking and sleeping thought, and the most essential difference between waking and sleeping thought is in the diminution of the power of will. Physiologically speaking, a man's mental and moral condition in sleep is owing to loss of coördination of the nervous centres; psychologically speaking, that involves the diminution of reflection and will. Asleep, a man's intellect for single, isolated ideas is often as brilliant as in his waking moments. Tested by comparison,

under the different conditions of sleeping and waking, as the Persians, according to Herodotus, and the ancient Germans, according to Tacitus, tested an important question, drunk and sober, they often stand the ordeal. They sometimes add a happy conception which had failed to offer itself under the noonday sun. The memory is not dulled; it unlocks its treasures and pours them forth in reckless profusion, but so blended and transfused that the owner cannot always recognize them as his own. The imagination does not lack wings, and the mind is seldom unequal to accepting its flights as realities. We say "seldom," advisedly, because there are cases where the mind refuses its assent. But memory in profusion, without order, imagination almost without bounds, affords no resting place for any but the most transient reflection—deliberation in the true sense is impossible, so that real thought in dreaming comes in flashes, and the moral force and will-function suffer from the absence of deliberation. The sleeping adult becomes in a measure like the child, which possesses but little of either reflection or will.

The true test to apply, after all, to the solution of the problem that has been set before us is to try to ascertain whether or not the manifestation of thought—mind—is not in some particulars, and indeed the chief, so unlike, as far as we know them, other manifestations of force upon matter, as to lead to a definite conclusion, either that they are like or unlike. We think that it will be found that the manifestations are so little alike as not to be analogous. Mingled with and dominating the physical aspect of the case is a superphysical one, just as plainly as the other, by painstaking observation, to be perceived. Granting all that has preceded regarding the automatism of man, we may still dissent from the view that his brain-product is mere manifestation of physical force in matter.

What right is there to infer, when we consider that discrete intelligence acts upon discrete intelligence, that the physical force and matter which, associated, seem to make man, represent in sum his intelligence? We find intelligence present even when the body is being renovated through the process of sleep. We find in that state the individual man duly represented in the character of his mind, even to its most distinctive trait—his will. Is it not rationally deducible from all we know, that the brain is the instrument of the mind?—the machine for all directive life purposes,—and that its synchronous response to the mind depends upon whether or not the master is at the keys? In the opposite view, it would seem that the fallacy of the *post hoc, propter hoc* argument is apparent. It seems to us as irrational to hold that mere numerals and algebraic signs, which are but the symbols of computation, contain in themselves all the possibilities of mathematics, as to hold that it is

through a synthesis from the revelations of the senses, that we reach abstract ideas. All that is included in man—body, sensorial apparatus and brain proper, however they may have acted in the beginning of life, when they were informing and educating each other; later, when the education is completed to the possible extent in the individual, are dominated by the brain, for which term read *mind*. This to some physiologists would seem hyperbole, rather than a scientific conception; but ought not, consistently, to one who, like Dr. Maudsley, can say, as already quoted, "Without doubt the will is the highest force in nature" and that its highest action is "truly creative." Unless it be creative, it is not the highest force in nature, but is merely on a par with other forces; and if it be not creative, it has not, as Dr. Maudsley also says, power to affect the *ego* indirectly, "by determining the circumstances which subsequently gradually modify it."¹

If it be true that the mind is exercised upon the basis of life experience, internal and external; that it makes laws of conduct, subject to its own revision, amendment and abrogation, it is evident that, trammelled though it be by its corporeal entanglement and its environment, it is the most independent of all agents in nature, enjoying legislative, executive, and judicial functions. In an analogous manner to that in which a man's conduct is modified by his environment in the world, by what is imposed upon him, so the brain, as the organ of the mind, entangled with internal forces, has its product modified by them. Although this is inseparable from the constitution of man, yet, in sanity and health, his mind is master of all else in his composition, originating and developing thoughts never received, excepting in the form of signs and symbols with which, according to greater or less capacity, to work out the problem of life.

Yet there are those, as intimated, who would have us believe, from analogy and experiment, that, whether waking or sleeping, mental phenomena are merely modes of motion; who seem to forget that the integrated entity which we call mind communicates with exterior force and matter by the determination of what kind, of what complexity, and of what amount the communicated energy shall be. The modes of motion belonging to the brain end there, unless man chooses to let them proceed beyond. There, in the brain—in the mind—they, unlike other modes of motion, reach conclusions, which may or may not, in accordance with, and in proportion to, the individual man's knowledge and will, affect external force and matter.

If it be affirmed, as is true and conceded, that in following their

¹ Dr. Maudsley has recently published a volume entitled "Body and Will," in which his views are even more explicitly adverse to those herein set forth than they are in his "Physiology and Pathology of the Mind."

transitions, the modes of motion whose existence and action have been demonstrated, and that matter also, implicitly obey their own laws, unless when sometimes interfered with and utilized by man, how can it possibly be held that in creating, say, a great poem, the steamship, the telephone, exterior force and matter are directly acted upon only through physical forces by which he is himself actuated? Unless that view be held, the notion of his mental manifestations being merely modes of motion is inconsistent with our knowledge of the correlation and conservation of force, the theory of which is that the chain is unbroken. There can be no correlation and conservation of physical forces involved in the transmutation of the idea of the poem, the steamship, the telephone, into the concrete creation of these and a thousand other things. If the truth of this be granted, it follows, of course, that what we call mind acts upon internal and external physical force and matter through something superphysical, is, in a word, superphysical.

Nature, however we may choose to formulate our idea of her, is certainly intelligent. So far as experience goes, she does not palter with the truth, but is, so to speak, brutally straightforward, even to the point, to our limited vision, of cruelty. She does not divulge, nay even, to appearance, sometimes jealously guards her secrets; while at other times it seems marvelous, when one is discovered, that we have not seen what she was clearly pointing out. We may or may not understand the lines which she puts before us to read, but in them is never found, if at last interpreted, any evidence of deceit or subterfuge. The great majority of men cannot believe, with M. Luys, in her juggling with the consciousness of her highest type. Beginning with the *Cogito, ergo sum*, there are other axiomatic postulates of life, rendering inconceivable to most men the proposition that freedom of action within the limits defined (limitation encompassing all nature) can be a visionary concept.

Some forty years ago we had not reached further than knowledge of the indestructibility of matter. Since then, Helmholtz, Mayer, Grove, and others, have demonstrated the indestructibility of force. May we not rationally conclude, although unable to demonstrate it, that, as we know force, and what we call mind, only through matter, and both force and matter (through ever extending bounds) as directed and ruled by mind, that it too is indestructible? The vast majority of men have held, and will continue to hold, if for no other reason than that man is creative, that a scintillation of a Great Intelligence shines on earth. If, as Mr. Herbert Spencer says, "Force, as we know it, can be regarded only as a certain conditioned effect of the Unconditioned Cause," must not what we call mind, with its limited creative power and dominion over both force and matter, be regarded as a conditioned effect, but none the less as a conditioned cause, and, like force and matter, indestructible?