The Problem of Mind, propounded to Metaphysics and Science.

- I. La Vie dans l'Homme, par M. TISSOT, 1861.—II. Tableaux de la Vie Animale, par M. VOGT.—III. Le Cercle de la Vie, par M. MOLESCHOTT.—IV. Force et Matière, par M. L. Büchner. —V. Le Monde en tant que volonté et représentation, par M. SCHOPENHAUER.—VI. Anthropologie, par M. HERMAN FICHTE.—VII. Nature et Idée, par M. CARUS.
- I. Life in Man.—II. Pictures of Animal Life.—III. The Circle of Life.—IV. Force and Matter.—V. The World as far as Will and Performance.—VI. Anthropology.—VII. Nature and Idea.

OF late years, science has analysed more closely, than beforetime was practicable, the relations connecting the organic with the inorganic world. It has demonstrated that the substance of animated beings does not differ from that of inert and insensible bodies; life lays hold of its materials in the physical world without thereby altering their fundamental properties, and death returns them unimpaired to that abyss of material substance, whence they have been for a moment abstracted to be clothed in ephemeral forms. Science has made a further step; she is not content to prove the true and lasting identity of the simple bodies diffused through the inorganic and the organic kingdom; by a re-union of all the parts she has formed, if not a living being, at least the constituent parts of organisms; she has not formed a flower, a fruit, or a muscle, but she has made the chemical principles from which they are extracted. Will she go yet further? Will she be able some day to control or order those mysterious forces which unite these principles, so as to make of them true organisms, and combine these organisms together, and cause them to co-operate in the formation of a common and indi-vidual action? We may doubt this, and it even needs some audacity to propound such a question. Such problems can only present themselves to us within that vague and uncertain limit which separates the domain of science from that of metaphysics. Happy are they who, limiting their desires and their hopes, are content to extract some secrets from the world of phenomena, patiently analysing its laws and registering its facts, without seeking to penetrate the very essence of natural forces, or of the substance which they put in movement! He, on the contrary, who takes in the whole world in his ambitious investigations, who will not accept the convenient duality of mind and matter, who wishes at least to reconcile their limits, and to fix their point of contact, condemns himself to strange doubts, which scientific certainty cannot

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yet completely dissipate. Yet are there certain minds who cannot resist the attraction of these problems. Science always leads us towards man, and man towards philosophy. All optical science is in our eye-all acoustic science in our ear. The weight which old age drags, and which youth carries with so facile a grace, is that which binds the worlds in their orbits. The caloric which animates our bodies is a portion of the universal heat; the nerves are telegraphs which imprint upon the brain the sensation produced by our surroundings, and which transmit the dictates of our will to the senses. All the forces of nature, without exception, have been put in requisition to create the wondrous composition called man. Time, space, the world at large, can teach us nothing that we cannot study in him, and in him we shall find more than we can ever discover elsewhere. Man is not only a weight, a combination of chemical atoms, an aggregate of the most delicate physical instruments, he is besides all this, a personal force. It is not, therefore, without reason that biology or the study of life has been the keystone of the scientific edifice. After traversing the numerous circles of human knowledge, we are forcibly led to this centre, which on one side metaphysics takes as its point of departure, only studying the being in itself, without form or exterior support, without definite action upon that which surrounds it; on the other hand, science considers it chiefly in its manifestations, and only approaches by degrees that unknown which lies under the phenomena. These two methods each present a legitimate operation of the mind. To proceed from object to subject, or inversely from subject to object, is it not to clear the same interval, to pass over the same abyss? To study the relations of the corporeal substance with the hidden substance which regulates its movements, such is the grand problem of metaphysics; such also is the final aim of science. The former has more immediate reference to the mind, the latter to the life; but we do not know more of the mind than we do of the life, and under these differing terms is doubtless hidden one and the self-same mystery. Is the principle of life different from that of the mind? or, on the contrary, is it identical? Who are right, the materialists who identify mind and matter; the vitalists, who interpose life as a bond between body and mind; the animists, who make the mind the source and the principle, not only of intellectual phenomena, but also of organic functions? Such are the grave questions which I desire to examine with the aid of the most recent labours of metaphysicians and men of science. The physiological school of Montpellier did not invent vitality, neither did Stahl discover animism; the germs of these great doctrines are to be traced in the remotest antiquity. In reality, one can scarcely apprehend that man exists without demanding from himself, in terms more or less precise, what relation he bears to the rest of the world, in what manner he differs from inert

matter, if the secret principle which gives him life and thought must die with him or survive him. But these formidable questions do not assume the same aspect in the minds of all, and even in the same individual there are moments when they are rejected as useless, and other moments when they intrude themselves with irresistable authority. That which is true of man is true also of humanity. One of the strongest attractions of the history of philosophy is to show the successive weaknesses, the victories, and transports of a great soul which develops itself in time and circumstance. A rapid glance at the modern treatises will show what numerous solutions the problem of the mind has already received on the part of the materialists, the animists, and the vitalists, in France and Germany; we shall endeavour to show in what the several schools differ, and what sources of enlightenment must be sought from natural as well as from historical science.

The exact difference between mind and matter was not so distinct or so complete in past times as it has become in our own day. It may be said that for ages spiritualism and materialism have been confounded together, like the commingling of two streams whose waters unite. With the Greeks, enamoured of beauty of form, we find an instinctive tendency to substitute matter for mind : Thales recognised in the mind a force, a principle of activity and movement; but their notions of the corporeal and of the spiritual essence, were so indistinct the one from the other, that the same philosopher, perceiving the attraction of the loadstone for the iron, did not hesitate to endow it with a soul.

In the Pythagorean school we may observe the first effort towards what may be called the analysis of mind; it attempts the classification of functions and of attributes. Pythagoras distinguished the reasoning and immortal mind, offshoot of the universal mind, and echo of the universal harmony, from the unreasonable and ephemeral mind. Anaxagoras clearly distinguished the sensational mind from the reasoning mind, endowing animals and men alike, only that the reasoning mind united to the body of an animal was destined to a state of inferiority. In this system it is the body which perfects the mind, and is the limit of its development. Epicurus attributed even less to mental power, nor did he distinguish between the reasoning and the sensational mind; but his analysis cleared the way for a deeper research into sensational phenomena. He foresaw the distinction, so well established by modern physiology, between animal life, properly so called, and the life of vegetables. Plato unhesitatingly sacrificed matter to mind; comparing the soul to a pilot, of which the ship is the body; he asserted that their union is a temporary violence, and death a deliverance; a doctrine at least seductive and ideal. Although Plato discerned in the mind a principle unique and eternal, he recognised three functions in

it, namely, sensibility, desire, and reason. The first two are only in play during the short marriage of mind and matter; once set free, the mind ceases to feel and to desire, and immortality is only found in the reason.

Aristotle did not, like Plato, recognise the entire independence of mind and body; he did not, as the latter had done, dig a gulf between the two substances. Above all, he regarded the mind as a force, a powerful principle of activity: with him, the mind is not the body, but it cannot exist without the body; as, for instance, there cannot be weight without a body having weight; nor light without a luminous body. This doctrine may be interpreted in favour of more than one theory; the ancients and the stoics chiefly forced it into materialism, the Christian philosophers endeavoured to reconcile it with spiritualism. But the spiritualism of the ancient fathers gave a far wider scope to matter than modern spiritualism allows; to the body was assigned not only sensibility, but also common sense and memory, a kind of judgment; they only reserved to the immortal animus the most subtle powers of reason. Saint Thomas, the angel of the school, had, to use the words of Pascal, duly recognised the rights of the brute ; he thought it amiss that Plato, in his sublime scorn, should pretend that the destiny of the mind was not to be united with the body, but to be definitively separated from it. He did not, for his part, consider them complete, the one without the other; he did not place the mind in one definite part of the body: it is everywhere, it is a substantial form, it does not differ from the vital principle. "The mind," he writes, "is so much the reality of the animated body, that it is through it that the body exists, that it is a bodily organism and a living faculty." This doctrine was the general belief of the middle ages. The mind united to the body enjoyed its complete life, separate from it, it existed only as a kind of dream; the dogma of the resurrection of the body completed that of the immortality of the soul. Thus Catholicism, whose greatest strength lay in harmonising itself with the most instinctive and spontaneous wants of human nature, felt the necessity of making the resurrection of the body the completion of immortality. The desire of immortality is felt, as much and as often for the sake of others as for our own. That which is repugnant and saddening to us, is the thought that those whom we love, those whom our hands, our lips, our eyes, have met, those whose life has been bound to our own with ties so sweet and so strong that we had thought them indestructible, should disappear, and be lost in annihilation. We wish them to live again, but our thought can only clothe them with immortality in the form which has been familiar to us, and since this has changed with time and years, our hope fixes it and clothes it with the features with which we have been most deeply impressed. The mother bending over the cradle of her newly-born,

can she see it in heaven otherwise than with the innocent graces of infancy? The poets have comprehended this want of our nature; when Virgil and Dante conduct us to heaven or to the infernal regions—what do we find there? The earth. When man will only listen to his hopes, he strips himself of cold reason, that he may be dominated by sentiment.

The disunion of mind and matter was never complete among the disciples of the Aristotelian school, and those philosophical reformers who aimed at founding independent doctrines yielded this point to the opinions of their time. Bacon, exclusively physician, recognised vital and corporeal, as well as invisible mind; Van Helmont gave a precise form to the doctrine now understood by the name of *Vitalism*; he admitted that the principle which gives us life is distinct from the mind. This principle, named by him *archeus*, serves to unite the spiritual and corporeal substances. Wherever life exists there is the *archeus*: each organ has its own *archeus*; but in the living being this is subordinate to a central *archeus*, which in man is again under the subjection of the mind.

Descartes tore asunder the ontological tie which united mind and matter: to the first he attributed thought, to the second extension, and thus left them face to face, in eternal opposition. Up to his time all the doctors, whether theologians or philosophers, had given extension to mind, infinity to the Deity, and a finite nature to angels and to reasoning beings. This great philosopher revived the science of metaphysics, divided substance into two parts, without always explaining the reciprocal action of each one to the other. Where there is no thought, he saw only material movement; animals were reduced to the state of simple automata; the mind of man found its confines in the thought-the secondary need of sensibility was wholly abandoned to the animal mind. Nothing is more curious than to observe these great intellectual revolutions which take place among mankind. While for many ages the attributes of extension and thought had remained confounded together in all theories, they suddenly became detached one from the other, and the world found itself doubled. The incompatibility of extension and thought was universally accepted, and the Cartesian doctrine has left traces so profound that even in the present day no philosophical mind is uninfluenced by it, but, even while protesting against it, shows the marks of the chain which it has broken.

The founder of vitalism, Van Helmont, endeavoured to reunite the two substances by an intermediate vital principle. The attempt which Liebnitz made with the same purpose is well known, being the original theory of pre-established harmonies. God intervenes here directly; in His hands He holds the threads which animate the body and those which move the mind; all the modifications of the one correspond to the modifications of the other, arranged from

the very origin of all things. This ingenious system pleases, but it is so artificial that opinion rejects it, almost without the aid of reason. A mind which represents essentially the body, a body the essential instrument of the mind, this mind and body nevertheless strangers to each other, except that which proceeds from the external will of the Divinity—such is the system of Liebnitz.

About the same epoch a very different doctrine was promulgated, which wholly subjected the material substance to the spiritual substance; this is the animism of Stahl, the physiologist of Halle, and the celebrated author of the 'Vraie Théorie Médicale.' Matter was reconciled with mind by becoming its docile slave, its outward and spontaneous expression, its perpetual product. In this case the mind constructs the body, an intelligent force choosing its materials from the inorganic world assimilating them, impressing upon them a special form, endowing or clothing them with new properties, compounding their organs, and grouping them in such a manner as to co-operate in the development of a living being: the nutrition, the circulation of the blood, the respiration, are its manifestations, as well as the thinking powers. None of the acts observed in the living organism are effected by the body alone, but by the mind, the principle and cause of life. This it is, according to Stahl, that preserves the body, that develops it, fits it for its purposes, for the body is made for and by the mind, rather than the mind made for and by the body. Here then, it may be said, is a very wise mind! If it discerns the nature of its organs, why suffer them to be weakened by disease, without endowing them with the power to preserve health? Why permit death to seize them, having the gift of life to bestow? She is, therefore, bound by some fatalism in her affinities with the organism, although the latter be her own immediate workmanship. Here we trench upon the most delicate portion of the problem of mind.

May this mysterious substance be identified with the ego, or, in other words, must every operation of mind be accompanied by the phenomena of conscience and liberty? or must we rather admit that mind is not intelligible even to itself, and is free only in certain acts, and that it can pursue a dull and hidden toil in the domains of those objects which have direct reference to life, beside and beneath the operations of thought. The school of Descartes confounded mind with the ego; the animists only acknowledge the ego to be one of the expressions of mind, and that it exists even where there is neither consciousness nor liberty-in sleep, in ecstacy, in madness, in the instinctive and spontaneous completion of all the organic functions. Physiology and psychology are thus confounded. At the lowest degree of animist phenomena commence the functions of nutritive life, regular as to their principle, fixed by an instinct which never deceives, perfect in the embryo as in the adult. The functions of relation hold a higher place; by them the being is in affinity with

the external world; the mind is compelled to educate the senses and to direct the movement of the locomotive organs: all its solicitude is held in suspense during the period that its movements and its sensations continue in disorder. In proportion as the acts of this life of relation fulfil their task more easily, with habitual exactitude, the mind, less absorbed, little by little loses the consciousness of it; enters more freely into the world of thought, yet ceases not to act instinctively in all the phenomena of vitality.

Is such a system materialistic, or is it spiritualistic? It would seem that this question cannot be answered with certainty. To identify the vital principle with the mental principle is, perhaps, logical; but doubtless it is to approximate the intellectual phenomena to the vital phenomena, which we are naturally disposed to regard as phenomena of a purely material order. In the animalism of Stahl the organic phenomena, it is true, are never referred to the body, and in this sense Stahl is removed from materialism; but instead of being joined to the thinking mind, and having consciousness of its operations, they are joined with the non-thinking mind, acting without will, without ideas, or at least without the consciousness of this will and of these ideas. This contrast between the conscious and unconscious operations of a unique agent has impressed many minds, and the theory which is named Vitalism has no other object than to efface this, and to attribute to distinct agents these diverse operations. Can they admit the existence of a double force, to explain, on the one part, that which relates itself to the organization, properly so called, and what, on the contrary, emanates from the thinking mind? That would seem so much the more doubtful since consciousness deserts us, and leaves us at fault, not only in the performance of certain organic actions, but even in that of thought itself. It often allures us, dominates us, carries us to new scenes without our opposition or resistance as conscious individuals. Something suddenly arouses us as out of the middle of a dream, and it is then only by a sudden reaction that we return into the path we have travelled over, and that our thought manifests itself to the consciousness. If the mind ceases to be mind in those moments when she ceases to have consciousness of herself, to what guide shall we then be given up when we follow the capricious flight of certain ideas our memory brings together, confusedly and without apparent order? Who has not yielded to the oppression of a thought that he had never invoked, starting up perpetually against the rebellious will? Who has not experienced presentiments or felt the goad of a thought wholly unexpected? Who has not in moments of introspection made acquaintance with thoughts and images, with combinations and hopes, which a moment after, lit up by consciousness, have filled him with trouble and sometimes with shame? There is, therefore, in the mind itself, in its purely ideal operations, something of

unconsciousness, of fatality, a part abstracted from the law of liberty and of reason. It is, therefore, wrong to invoke the phenomena of consciousness in order to divide the internal being into two parts, and to distinguish the mind from the vital principle.

Nevertheless, this is what all the vitalists have done, from Barthez down to the present day. Also their theories, are they less interesting from the proposition of the mind's affinity with a hypothetical vital principle, than from the physiological point of view, properly so called? The vitalists, for the most part medical men, have nevertheless demonstrated that the explanation of the phenomena of living being is incomplete with the intervention only of inorganic forces-light, heat, gravitation, chemical affinity, electricity. This, it may be affirmed, is the strong point of the vitalist doctrines; apart from mechanical, physical, and chemical forces, they admit of special forces which act primarily as auxiliaries and counterpoises in the living-being. All vitalists are agreed on this point, they only differ when proceeding to define the plastic forces which give form to the living-being. Barthez, the celebrated founder of the physiological school of Montpellier, recognised one vital force only, the unique cause of all the vital phenomena of the human body; but the difficulty which the vitalists met with in defining the vital principle, to show how it demonstrates itself simultaneously in the body and mind, this by degrees compelled them to limit themselves to discover in each particular phenomenon the particular force which produced it. They were thus led to reject the unity of the vital principle, to localise the vital forces in the different organs, the seat of irritability in the muscles, of sensibility in the nerves, &c. From this point of view, it becomes easy to look upon matter as susceptible of self-organization-that is to say, materialism. From thence, in truth, the vital school of Paris took its rise, the rival of that of Organicism is the barbarous name given to the Montpellier. doctrine which long prevailed in the Academy of Medicine of our Following the adepts of this theory, force is a special capital. faculty inherent in organised bodies, a law of life. Yet more, it is the life itself, the completion of the phenomena which compose it; vital force is no more a cause, an agent to explain organization; it is a phenomenon, an effect of this organization itself. M. Cayol, who long upheld this doctrine in 'L'Union Médicale,' compared vital force to attraction, stating that it is the law of organized bodies, as attraction is the law of inorganized bodies. Life thus constituted becomes an effect only, a mode of existence of the organism, as attraction is a mode of existence of heavy bodies; the true and only cause is in God. Thus, on one side we approach materialism, on the other mysticism; we accord everything to matter, and prudently shelter ourselves under the name of the Divinity.

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life appears bound up with the mind, and the mind with life, burst through these limits, and an invincible logic impels certain doctrines in the direction of pure and simple materialism, the others towards idealism, properly so called. Characteristic circumspection in our country usually arrests the mind on these fatal descents; but in Germany they allow themselves to be carried away without resistance : theories there assume forms more systematised and original. Beyond the Rhine, it is no more a question of vitalism; materialism there boldly asserts itself; writers and men of science, animated with ardent zeal and incontestable talent, tear off all the disguises of the ancient metaphysics, attacking it with the fury of idol-shattering iconoclasts. Elated by the discoveries of modern sciences, ardent friends of political and social progress, they accuse metaphysics of having too long sent the mind of their country to sleep by sophisms and chimeras, rendering it indifferent to liberty, by exhibiting to it all things submissive to eternal and necessary contradictions. Charles Vogt, Moleschott, and their followers, use their materialism in the service of political radicalism. The former, early known to fame, as the fellow-labourer of Agassiz, and the author of scientific works highly valued, occupied the extreme left in the parliament of Frankfort in 1848, and there delivered certain speeches full of eloquence. He is now proscribed, and lives an exile at Geneva, where he has become professor of geology, and a member of the council of state.

According to Vogt, the brain secretes thought as the liver secretes bile; the body is only a certain combination of matter subservient to diverse actions; the mind is but the result of complex forces developed in the animal organism. These doctrines are set forth in the 'Tableaux de la Vie Animale' of the professor of Geneva, and in his 'Lettres Physiologiques.' "The development of the intellectual faculties," says Vogt, "keeps pace with the development of the brain, with the improvement of its parts, with the consolidation of its substance, precisely in the same manner that in other organs the development of the function keeps pace with the development of the organ. The same theory must consequently be admitted for these functions as for those of the brain, presuming that the functions of sight, of hearing, of the circulation of the blood, and of respiration, are no more inherent in the organs, and that they continue after the annihilation of the organs, in such a manner that sight, hearing, the circulation and respiration continue even after death, even at the time that the eye, the ear, the heart, and the lungs have been long since annihilated and decomposed. The absurdity of avowing such a thing is obvious. Thus, it will be said, the door is opened to downright materialism ! What! man a mere machine like the other animals, thought the result of a fixed organization, and, as a result, the freedom of will destroyed! Every modification of the function infers a material change in the organ which precedes it, or rather which takes place

at the same time ! I can only reply by saying :— 'In truth, thus it is, thus it is.'"

In the foremost ranks of the positive school of Germany, we find M. Moleschott, professor of physiology at Zurich. In his letters addressed to the famous chemist Liebig, and collected under the title, 'The Circle of Life,' the doctrine of the soul, of immortality, of human liberty, the hypothesis of final causes are attacked with vigorous eloquence. To M. Moleschott matter, only is immortal, subject to incessant transformations. Force cannot be conceived to exist apart from the material substance, and the mind cannot be thought of as apart from the body. A force without material agency which supports it, is an image absolutely void of reality, an abstract idea deprived of sense. "To uphold the existence of vital force," he says, "we rely upon that which we cannot produce in animal or plant; but are we then able to create at pleasure every compound mineral, even when we know its component parts perfectly well? And yet who attributes a vital force to the mountain ?" All the science of life is but an extension of chemical and physical science, thought reduces itself to a movement of cerebral matter, as sound is the result of the vibration of the air, and light of æther. We are plunged into a sea of moving substances, and we are ourselves but a wave among the waves of this infinite ocean. As to our will, it is the necessary consequence of all the movements which we produce, and, as the planet is fixed in its orbit, so is it invincibly bound to a natural and general law. "If any statesman," writes the pitiless author, " or more probably some pedant of the study, objects that whoever denies the liberty of the will cannot attain unto liberty, I reply that he is free who has acquired the consciousness of feeling his own existence face to face with nature, the evidence of his existence, of his wants, his desires, his exigencies, the limit and the range of his activity."

There are many other names yet to mention besides those of Vogt and Moleschott, to show the energetic reaction of Germany at this time against the metaphysical doctrines with which she was, as it were, intoxicated during the former half of this century. The fundamental doctrine of the new school is, that there is nothing real without substance, nothing eternal, except substance, except the atom. Hear M. Dubois-Reymond, the able physiologist of Berlin. "Matter and force complete one the other, reciprocally suppose each other; isolated, they have no existence" he writes in the preface to his great work upon 'Animal Electricity.'

work upon 'Animal Electricity.' M. Hermann Burmeister, professor at Halle, and an eminent zoologist, affirms, as do Vogt and Moleschott, that the mind is but the result of forces inherent in the substances united in an ephemeral animal organism. M. Büchner, professor at Tubingen, in his works entitled 'Force and Matter,' and 'Mind and Naturc,' has, engrafted the modern materialism on the old atomistic theory. "The atom, or the smallest indivisible and fundamental part of matter, is the deity to which all life, the lowest as the highest, owes its existence. Existing from all eternity, the atom participates in an eternal evolution without truce, to-day in this form, and to-morrow in another, and it remains identical with itself in the midst of all these transformations, always the same, immutable. The same atom which beforetime helped to form the stone, the air, the water, at the present time forms a part of the body, and perhaps at this moment participates in the most complicated labour of the intellect, soon quitting its theatre of activity, returning into the permanent round of material exchange, and following the most diverse paths. Do you not here recognise something which is everywhere the condition and cause of all things, without which neither form, nor thought, nor body, nor mind, nor in general any existence, could be possible, and which, as a consequence, in the eternal metamorphosis of all phenomena, is alone worthy of the name of principle? This unique thing is the atom or substance."

In this concert, in which Germany vaunts the material substance, discord is always to be found; idealism yet has eloquent and clever advocates. I desire no better proof of this than the posthumous fame which attaches to the name and to the works of Schopenhauer. This eminent philosopher, who through the whole of his life was unable to break through the circle of indifference and neglect which soured his genius, now finds passionate admirers. He beguiles by the depth and originality of his views, by the vigour of his style, and even by the haughty and bitter melancholy which from idealism conducted to quietism, and even as far as the nirvana of Buddhism. Schopenhauer sets out from the absolute scepticism of Kant, and entertains a suspicion of the reality of the exterior world, and of ephemeral appear-ances. How did he resolve this doubt? Not after the manner of Descartes, by saying, "I think, therefore I am." It is by making an appeal to the will : his formulæ is :---"I am, because I will to be." The will is the force which is mistress of the world, conscious in men, unconscious in nature; it is the activity which creates all phenomena, intellectual as well as material. "The body," writes Schopenhauer, in his principal work, entitled 'The World as far as Will and Performance', "is nothing else but the will interpreting itself visibly, the objective will." It is by it that our faith in immortality is explained. If we desired not to live tomorrow, we could not live to-day, but wishing to live to-morrow, is it not to wish to live always?

As the will is the thing itself, the internal substance, the essence of the world as of the other part of life, the visible world, the phenomenon is but the mirror of the will. The German philosopher infers from it that life accompanies the will as invisibly, as inseparably

as the shadow follows the body. To live always, it needs but to wish it. He does not pronounce hesitatingly the famous " to be or not to be; he firmly believes that it only depends upon himself to prolong the union of the will to a form which is its instrument. But what if this union is not happy, if this immortality is but a chain, if nothing can break it, not even suicide, for this only shatters the body, what is left us except to destroy within ourselves the will to live? All you who are weary of bitter destiny, of the pitiful labour of daily life, wounded in your hopes, your desires, seek oblivion in yourselves, sacrifice your individuality, plunge into the Lethean flood of selfabnegation. "Thus," says Schopenhauer, " in the contemplation of the life and practise of the saints, we recognise the sombre impression that nothingness which floats, as the ultimate end, behind all virtue and all sanctity, and which we fear to dispel, as children fear the dark. I confess willingly, that which remains after the entire destruction of the will seems to all those who are yet embued with the desire of life, a mere nothingness; but, on the other hand, for those with whom the will is renounced and denied, all this world so real, with its suns and its milky ways, in its turn is but naught." Thus this philosophy, which rests its base upon the will, has likewise for the topstone the destruction of the will. The work of Schopenhauer, so rich in details, of so profound discernment, resembles a palace built upon the borders of the sea; we admire the sumptuous façades, the long porticos, one walks through well designed alleys, among clumps of verdure; but shortly we arrive upon the shore, where ocean opens his caves and murmurs that monotonous chant which summons thought to eternal repose.

We have opposed Schopenhauer to the contemporaneous materialists of Germany; but the animist school numbers other representatives beyond the Rhine. M. Herman Fichte, the son of the celebrated philosopher, has attempted to re-animate animalism in his *Anthropology*. He attributes to the mind a real and individual existence. In his system, each particular mind itself organizes the body which is appropriated to it; this last is not, as in the doctrine of Schopenhauer, an objective will; it is mind manifested in time and space. The mind, then, may be extended? Yes, and no; for it is not limited geometrically by the body, it has yet a definite abode, that which M. Fichte names—an internal body (innerrer Leib,) endowed with organising power, and passing through successive evolutions from life to death. This is the new idea of the Anthropology—a strange and difficult one to comprehend. The internal body, this mystic bond between body and mind, is it not, under another name, the *archeus* of Van Helmont?

Among the German physiologists who support spiritualist doctrines, we must also mention Carus, the distinguished correspondent of the Institute of France, who was honoured with the friendship of Goethe. It is necessary to go back to Plato, in order to find anything analogous to the doctrine of the learned professor, systematically exposed in a recent work, 'Nature and Idea.' As the title indicates, Carus accepts the body only an objective idea; the soul is the indestructible idea of the body, unconscious of that which relates only to organic transformations properly so called, conscious in the domain of thought, but always principle and cause of all the phenomena of the living being, from that of thought to the act of nutrition. The mind is not localised, she is not like the spider in the centre of her web : she has her seat in all the living cells, in each organized monad, of which each one is in a manner an abstract of the universe.

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What impression remains upon the mind after the examination of so many systems? At what fixed point can we stop? One thing is certain-it is this, that in order to explain life and thought, it is needful to interpose something more than the qualities known as that which is commonly called matter. In inorganic bodies, the combinations result from forces inherent to the very substances which combine themselves; but in a living compound, the power which forms and sustains the organisms, does not only reside in the properties of the elements : there is something else which preserves the equilibrium between the chemical affinity and the physical forces. What may this new agent be? Is it simple or complex? Vitalism is impotent to define this principle, which it interposes between body and mind. The animists leave indefinite all the space between intel-lectual and organic phenomena, and moreover, do not shew with sufficient precision all their bonds of union. In the inquiry of the problem of the mind, they take too limited a view of anthropology. Let them first ask what is the chief, essential, fundamental difference between the inorganic and the organic kingdoms, and the reply to this question will furnish a sure method by which to explore the general phenomena of the organic world, of which man forms a part, of which he occupies the highest place, but in which there is moreover something else besides.

If one considers the special characteristics of inert matter, and of that which is organised, one mark of difference (striking from its universality) is easily laid hold of: the inorganic substance is independent of time, the organic substance is dependent upon it: it is with it, as the geometricians say, a function; that is to say, the movement of time develops continual variations in it. The mineral never changes; it is to-day what it was yesterday, what it was in ages past. Without doubt, external agencies, chemical and physical, are able to alter and decompose it; but there does not exist in itself a cause of change, and in this sense it is never a function of time. This inertia,

this deficiency of variation removes from objects in the inorganic kingdom all characteristics of individuality. A crystal is not an individual : it possesses the property of special form, but here the limits have nothing fixed or determinate. This crystal may be considered as the aggregate of an infinity of similar small crystals; I can decompose them endlessly, and in each particle discover all the fundamental properties of all.

The organized being, on the contrary, by the very fact that it is modified during time, possesses a certain individuality which attaches itself to the aggregate of the organisms, on which time imprints changes; each of these molecules is indestructible alone, but their changing aggregate constitutes a little world, which is the individual. A variation cannot be understood without the force which produces it: all the varieties of the organised being must therefore be connected with correlative forces; but these variations are besides of one kind. Take man; if he changes from hour to hour, and from one instant to another, it is, firstly, because he is organized, but he has this character in common with all the other animals, and all the vegetables. There is a certain vegetative life diffused throughout the world, of which he partakes, and which represents a certain order of variations in the human body.

By the side of these variations, we observe others. Man is not fixed to the soil as the plant is; he has a life of relation, and organs which are its instruments. The acts of his animal life are not arbitrary; they are determined by the species to which he belongs. What is the force which subjects him to the exigencies of his species, and obliges him to perpetuate its type? It is instinct. In short, the circle of free and personal action is supplied by a force which constitutes individuality, and which is essentially the mind. The mind of the plant comprises only the force destined to the development of the vegetative life. The mind of the beast contains, besides that of the plant, forces of a new kind; the mind of man comprises at once the mind of the plant, of the beast, and a mind endowed with higher intellectual faculties. I would not attach more importance than is necessary to these words, mind of the plant, mind of the beast, so little capable of being strictly defined. What slone is important to be well understood is this, that in the forces to which our being is subjected, there is a prescribed hierarchy. Stahl and the animists go too far when they place the manifestations of the mind which are accompanied by consciousness, upon the same level as organised force, which manifests itself through a blind necessity. The first characterise us as individuals, and distinguish us from the rest of the creation; the second does not belong to us in particular, and only acts within us as it acts around us. "Consciousness," says Müller, "is wanting to vegetables from the absence of a nervous system, and yet there is in them an organic force operating according to the prototype of each plant." Consciousness, which does not

give rise to any organic product, and forms only ideas, is the slow result of development of itself, and it is bound to an organ upon which its completeness depends, whilst the first moving power of all harmonic organization continues to act even upon the monster deprived of an encephalon. The mind, as far as it is only organic force, manifesting itself after rational laws, must then be carefully distinguished from the mind which creates ideas with conscious intent. This simple distinction is not enough: psychology will only make true progress so far as it strives to make a complete analysis of the mind, as chemists make analysis of matter. It remains to separate in man the free and conscious portion of the mind from the part belonging to the species, for we are not only individual agents, we are part of a vast collection of beings formed upon the same type; our history intermingles itself with theirs, we inherit the past of humanity, and we transmit our legacy to the future. Besides the individual, besides the man, there is in us the animal, the vegetable, and below all that, the being already freed from physical inertia, but yet without form, and indeterminate.

An analysis of this kind, has something in it to tempt the philosopher, as much as the physiologist : the forces which hold our being in suspense are in ceaseless conflict; it is from this point of view that we must study the strange phenomena of sleep, of madness, of mono-mania, of death itself. In each of these phases the equilibrium is different. In the state of sleep we only live, as it were, a vegetative life, and perhaps besides this, the life of the species, for certain instincts of the species do not sleep. Dreams, which have been sometimes wrongly regarded as the freest flights of the mind, dreams shun the abstract and the ideal, and principally confine themselves to concrete images and objects: the thinking mind gives place to that of sensation. Monomania and madness are in one sense the reverse of sleep: the life of the species is therein sacrificed, all its wants are forgotten, sympathy, which in the order of nature attaches itself to the other members of the species, is stifled or at least deadened; individuality triumphs and seeks by all means to satisfy its fixed idea, be it furious or docile. The mind in this state of defiance, headstrong, isolated, becomes occasionally so independent of the organizing force, that it voluntarily sacrifices all the instincts, overcoming even the natural fear of death. The generality of physicians no longer doubt that suicide is almost always the effect of monomania. Forgetful of all, possessed by an unique idea which becomes all the world to him, which inexorably bounds the horizon of his thoughts, so that he discerns everything like the multiplying heads of the hydra, the wretched man, affected by this gloomy madness, in vain endeavours to fly from himself, and at last demands from death that repose he cannot find elsewhere. A too keen wound inflicted on the instincts of the species, especially on the affective instincts, also

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destroys all the equilibrium of the human being, takes away all energy of personality, depriving it even of the sad power of formulating its grief, and planges the man into that state which is called melancholy, a tomb in which he is buried alive. In that disease called reasoning mania certain instincts of the species are in a state of complete aberration, although the individual preserves all the faculty of judging and of reasoning. If physicians were philosophers, or if philosophers were physicians, what valuable observations should we not possess on all these strange phenomena! The most detailed analysis with which I am familiar is contained in 'Les Maladies de l'Ame humaine,' a work of the German physiologist, Schubert, who was formerly one of the professors of the duchess of Orleans, and continued afterwards in correspondence with this eminent princess. He thinks that disease, in interrupting the equilibrium of the forces which work in unison during health, throws great light upon the relations between body and mind, just as a broken watch shews more plainly the mechanism which puts it in movement.

Instead of regarding the mind as it were from the centre, one should approach the consideration of it by degrees and from the circumference; instead of stating man as the immediate subject of philosophy, let us start from the outer, inert world, at the disposal of physical and chemical forces: what do we see result? Another world where the forms individualise themselves, and of which the continual mobility attests the presence of new agents! Minerals, plants, animals detach themselves, and appear to us as the steps of evolutions in nature rising higher and higher. And man! he appears at the summit of this vast series, species among the species, individual in his species. But between the species and the individual is there not yet something? Between the human type, as it can be anatomically defined, and this same type such as it manifests itself in each one of us, as free and isolated agents, is there not a gap? And this gap is filled by the very history of the human species; for we pertain to races, to varieties of the human race, and we all accept the heritage of a long past; we have, if we may be permitted to employ the expression, a historical mind-we are one of the links of a long chain; the individual mind gives out a note more or less sonorous; but this note enters into the harmony of the concert, and mixes itself with a chant that, without ceasing, swells and develops itself. The Germans, equally devoted to metaphysics and to the learned sciences, have always allotted to the latter their share in their great philosophical systems : they have sought (to employ their favorite expressions) the being in its origin, its origin in the being. There is not one of the great German thinkers of cur time who is not preoccupied in seizing the development of a rational idea in the changes of history and in the succession of the diverse civilisations which have successively held the sceptre of human VOL. VIII. 13

thought upon our earth. Hegel, doubtlessly set out by logic, that is to say, by metaphysic; but he is immediately occupied in seeking the application of the laws of his logic, in the world of matter, and in the world of mind, that is to say, in nature and in history. The avidity with which in our country the public accepted the works of this critic, in which history controls philosophy, shews that the French mind is not so rebellious as might be believed to considerations which one might think it ready to condemn without appeal, when they have been met with in the region of Germanic reveries. What a change has taken place ! In the last century they applauded the witticisms of Voltaire upon the Bible; at the present time they study the most austere works of the exegesis. The Homeric world is better known to us than it was to the Romans, so much has erudition penetrated into the depths of the study of the monuments of Greek civilisation. In going back towards the past, we see opening out on all sides the avenues that ignorance and religious fanaticism had long closed, but which lead to the most precious intellectual treasures.

However great may be the discoveries which are yet to be made, it is an assured principle that humanity has not always been exactly similar to itself. The ideas which constitute our most precious patrimony have had their history; civilisations, which are nothing else than the aggregate of ideas dominant at a certain epoch, and in certain countries, have not been servile copies one of the other; mental enlightenment has changed its place, but at the same time it has increased. This historic mind of which the first impulses and the most spontaneous testimony remains lost in the darkness of the past, develops itself from age to age, from nation to nation; never definitely fixing itself upon one particular religion, æsthetics, or philosophy. Happy are those who have the power to aid at the flowering periods of the human mind, during which art, faith, science, all are renewed; the mind, wafted by a favorable wind, seeks new shores, and the world seems to be coloured with clearer light. These periods of glad excitement cannot always continue, but they are never wasted : nothing is lost, nothing is useless. The impulse then given diffuses itself elsewhere, extends itself, and never stops. Newton stands forward in all astronomy. The civilisation of Greece has not perished; it still fills the civilised world. Who is not pagan before the Venus of Milo, or the models of noble Greece? Homer lives again in every one of his readers. Plato is not dead, and will never die. The sweet and solemn words which in the sermon on the mount gave consolation to the weak, to the poor in spirit, to the oppressed, re-echo still and will do so through all the ages. Who is not moved as if he heard them falling from the Sacred lips?

It may be apprehended that criticism and erudition allot too large a part in man to the ethnological and historical mind, curtailing unduly the domain of his individuality. It is, doubtless,

difficult to find the medium, but this danger should not blind us to the existence of an element in the mind which represents the general action of humanity upon each individual, according to the time, place, and circumstances. Do not deny liberty to man; but understand that liberty itself is not to be conceived free from struggle and resistance, and no effort is more meritorious than that which is exercised under the name of personal liberty against the tyranny which would impose upon us opinion, tradition, custom, good sense, which are nothing else than the reason of the historic mind. Who does not know that these are the hardest forces to overcome, because they find an auxiliary power in ourselves? We wish to breathe the air of liberty, but our lungs are accustomed to the atmosphere of the age, of the nation, of the family, of a coterie. A hero worthy of the name is he who listening only to the voice of truth, stifles in himself all those fawning or irritating voices which urge him to lie and not to stand aloof from the current which impels the multitude and leads to easy success. Is, then, the part of moral greatness lessened by the avowal of the weight and resistance of those obstacles over which it has to triumph. Man, without doubt, is free; but then are there many men free? The multitude, does it do anything else than follow the collective mind which speaks in each of us? Many even have no desire to listen to this voice, and, claiming no part of the historic life of humanity, suffer themselves to live a purely animal life. The most zealous advocates of human liberty ought not to disregard that force which rivets us to our contemporaries and to our ancestors by blood, physical ties, moral, religious, and social influence. Nationality, patriotism, what are they but the noblest forms of that power which lays hold upon us in the cradle, and so often stifles in us the voice of truth and of reason.

The historic mind is, we may say, pre-eminently the human mind; animals have no history, the mind of the brute is a mind purely specific. Its instincts are perpetuated without change; individuals are only born for the conservation of a type, and to occupy one place in the picture. Some species, it is true, have disappeared after having lived long, but have they on this account a history? We can say nothing else of them than that they have been, and that they are not. Do we not offend our dignity by comparing the monotonous repetition of the phenomena of the animal kingdom with the drama of history, where races, nations, epochs express ideas, passions, and aspirations ever new? The mind which expresses itself in history is, so to speak, a sea, bearing on it the free, individual, personal mind—a sea which has its tempests and its calms, its currents and its rocks. Our liberty consists in finding our way upon it, in taking for our lighthouse and pole-star the ideal illumination of the mind. Whether the wave repulses or favours us, whether we advance or recede, our eye must be fixed upon the end and aim; our glory is not in the success, but in the effort.

The problem of the mind has always been the chief object of metaphysics; but we see it also confronting science, when, rising by degrees above the laws which govern the whole world, it approaches the study of organized beings, and at last that of man, and of the great human family. The mind passes through a natural and simple transition from the inorganic to the organized world, from the stone to the vegetable, from the vegetable to the animal, from the animal to our own proper species. Metaphysics and science always apply different methods; the first views the mind as an indivisible whole, as an ideal entity, which is all sufficient and independent of the external world; science, on the contrary, seeks to analyse, considers it under many aspects, studies it from the outside, and in its connection with the whole of creation. There is, so to speak, no branch of human knowledge which does not furnish some element to this curious analysis; is it not time that metaphysics should at last draw from the treasures accumulated by the physical sciences, chemistry, physiology, zoology, ethnology, and history? A higher and universal science which includes at once the natural sciences and the historical sciences, might become the solid base of a philosophy whose doctrines established à posteriori, and not preconceived like those of the old metaphysics, this would be the résumé of all the events, of all the relations, of all the laws of which this world is at once the permanent and ephemeral expression, always old and always new.

Doubtless such a science will always remain incomplete; but what doctrine can satisfy the human mind? To complain that. learning and science afford only imperfect solutions, is a reproach which is easily made against speculative philosophy. Has it not already built structures that it has boasted of as immortal, and of which nothing is left but ruins! Instead of halting unceasingly between the most opposite systems-from the grossest materialism to the most intangible idealism-may she honestly become the ally of science and found human beliefs, not indeed upon absolute certainty, but upon relative certainty, resting on a uniformity of laws more and more comprehensive. Recent efforts, such as those of M. Tissot, a philosopher who seeks the aid of science, and of M. Carus, a physiologist who attempts to found a metaphysical school, show that eminent men are prepared to sign this alliance. Both sides will find it advantageous; science will lose nothing of its rigour when her researches are made with a high and general aim; philosophy throws light on the problem of the mind when she asks of physiology, wherefore the phenomena of life cannot be explained by the simple play of chemical and physical forces, and of zoology, what is the nature of instinct; of medicine, what share the body has

in mental disease, or the mind in that of the body; and when ethnology is interrogated in order to discover what difference exists between one race and another; history and erudition, to ascertain how ideas have arisen and developed themselves in the world and in the succession of time.

The true analysis of the mind, is it not all contained in studies such as these? Is there not an immaterial principle in action in the cosmos, in the plant, in the brute, in the man? As the narrowing circles converge towards a common centre, in the same manner all the forces that we see playing their part in the world, upon the earth, in the groups of organized beings, concentrate themselves in the human mind as in a focus. There are within us many ideas which stamp us: one as an organized being; another as an animal; another as man; these ideas have one unique result, which is none other than the mind. This is what the animists clearly understand; only the mind, as they define it, possesses all these ideas alone-it creates them, the source of all is in itself. The mind of Stahl builds even the organs, and defines the bodily form which fixes the genus and the species. To resolve the question of the mind in these terms is to sacrifice the general too much to the individual, and to disown the essence of the ideal principle spread abroad in the world. Whatever in the infinite universe is a function of time, whatever has a history can only be the external development of a law, of a divine idea; shut out from the infinite in time, whatever assumes form or a transitory life enters these by thought. The animal species is ephemeral: it has a beginning and an end; it has its proper laws in what we call instinct. This collective consciousness is recognised in man so far as he belongs to a peculiar animal species; but do we not instinctively feel that this specific force, divided among millions of individuals, does not exclusively belong to the mind, as the Stahlians assume? It is something which imposes itself upon us and comes from without. How name that other feeling which animates us in the simple capacity of living beings, belonging to the organic creation of our planet, a creation which had its beginning and shall have its end? Nothing is to be accounted of lightly in our inner being; if the dull and obscure manifestations of life do not awake in us the phenomena of consciousness, they are not the less necessary; they are the base, the foundation, upon which the unfettered and personal mind erects its daring edifice.

There can be no doubt that the attention of the thinker always manifests a predilection for that part of ourselves which connects us directly with the life of humanity, and for that which limits the personal will upon the historic mind, and what I shall call the individual mind. Why be astonished at it? It is in this domain that our most cherished and most pressing interests are at stake; curiosity here becomes emotion, doubt becomes inquietude. We seek

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the dread secret of our fate in retracing the wave of history, and in fathoming the abysses of our own proper thought. We feel that all our greatness is in reason and liberty. The triumphs of geniusthe noble spectacle of right struggling against force-the upward aspirations of the religious soul-in a word, the human drama-this it is which always captivates our mind most forcibly. But in its silence and its majesty the world has something also to teach us. Beneath the numberless shows that it reveals to us, we likewise find thought. That we may thoroughly understand ourselves, we must equally understand what that is which is outside of us. When we have recognised, or at least divined the laws, the divine ideas which the body serves to express, we can look more firmly on our destiny and on our future. We ought to acknowledge the immortality of our material substance, as none of the molecules which compose it can perish; but we know that these elements now combined in the human microcosm must disunite and relapse into inorganic inertia. Immortal in our flesh, we are so equally in our mind, because every one of the ideas which it receives emanates from the Divine Thought. The organic creation may disappear from off our planet frozen by congelation, the species may be destroyed and give way to other species, nations have perished and left no history, individuals perish by thousands every day; but a thought develops itself through all these events-God lives in time, in creation, in history, in man. That which is divine in us cannot perish; our individuality only, that is to say our transient form, must fade away. The vase breaks, but the perfume which it holds preserves all its strength. We earnestly desire immortality in our actual shape, because our imagination, fettered by the senses, is powerless to conceive it otherwise. This yearning after infinity is the highest privilege of our nature.

It is, no doubt, useless to seek to fathom the mysteries of futurity: we shall never know ought of that bourne from whence, as the English poet says, no traveller returns. Let us study everything in the present, let us analyse our mind, let us understand our duty towards the animated creation, towards our species, our age, our country, and towards ourselves. Our task accomplished, we have nothing more (following an expression grand in its simplicity) than to commit our soul to God.

> (From the French of Auguste Langel.) M. A. B.