THE

PHILOSOPHY OF NECESSITY;

OB,

NATURAL LAW

AS APPLICABLE TO

MORAL, MENTAL, AND SOCIAL SCIENCE.

BY

CHARLES BRAY.

SECOND EDITION, REVISED.

"Let the Dead Past, bury its Dead."-Longyallow.

- "That no idea or feeling arises, save as a result of some physical force expended in producing it, is fast becoming a common-place of science."--HERBERT SPENCER.
- "Everything that exists depends upon the past, prepares the future, and is related to the whole."--ORESTED.
- "The ordinary events of History instead of being causes are merely the occasions on which the real causes act."-H. T. BUCKLE.
- " Society prepares crime, and the guilty are only the instruments by which it is executed." -QUETELET.
- "The ultimate result of shielding men from the effects of folly, is to fill the world with
- "When men have once acquiesced in untrue opinions, and registered them as authentic records in their minds, it is no less impossible to speak intelligibly to such men than to write legibly on paper already scribbled over."--Honnes.

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PREFACE

THE establishment of the British Association for the Advancement of Social Science in October, 1857, was the practical recognition of the Principle that Mind is equally the subject of fixed law with Matter. The disputes touching Free Will and Necessity have hitherto been regarded as idle metaphysical controversy, having no practical result; but Free Will implies contingency or chance, and contingency is fatal to Law, and without Law there can be no Science; for Science is the power to predict the future from the past, by the aid of known, fixed. and determinate law, excluding all contingency. Philosophical Necessity, then, and Law are the same thing; and instead of the efforts to establish its truth being idle and worthless, its recognition must be the base of all progress, and can alone enable Social Science to take its place by the side of Physical, or indeed to deserve the name of Science at all. The object of this work is to inquire how far our present knowledge will enable us to apply this principle to mind and morals as it has hitherto been applied to Physics, and to determine thereby the important questions of, What is man? What are his obligations? and How may they best be performed?

The writer is aware how imperfect a work must be where so wide a range of subject is compressed into so small a compass, and how unattractive a dry detail of principles, without ornament and without illustration, is likely to be with respect to topics which, from their abstruseness, are ordinarily distasteful, even when touched by a master hand and relieved by all the graces of style. Ambitious as the task would seem, and wide as is the space to be travelled over, it is not so great as it appears if we leave out all the mere assumption and speculation which time has hallowed and prejudice sanctified, and are guided only by the light of present discovery, and proved and positive

science; and he trusts therefore that the searcher after truth, who, like himself, has felt the want of fixed principles in Ethical Philosophy, will forgive the imperfections of the manner, and find something to interest him in the matter of the following pages.

Physical science has made rapid strides, and knowledge has secured for us, to a vast extent, a dominion over earth, sea, and air. But the science of man, which alone can make this power available to the increase of happiness, has been in a corresponding degree neglected, and held to be of less importance than that knowledge which tends only to the increase of wealth. The knowledge that men have of their own minds, is ordinarily considered to furnish sufficient insight into human nature, without the aid of mental philosophy; and in Moral and Social Science, the opinions to which they are born, based on the theology of their country, constitute to most individuals a standard of truth. Hence there is no subject on which such various and conflicting opinions exist as upon that of the present inquiry; people feel rather than reason, and these great questions are considered so purely controversial, as to be hitherto inadmissible into British Associations, Mechanics' and Philosophical Institutions, and all other Societies devoted to the moral and intellectual culture of the people.

Men brought up in the same University, reading the same books, trained by the same studies, come to conclusions on these questions diametrically opposite. As an illustration of this diversity of opinion, Mr. G. W. Hastings, Hon. Secretary to the Social Science Association, is reported to have said at Glasgow, on the 20th of March, 1860:- "In regard to this Association, as it was called, for the Promotion of Social Science, he had heard several objections made to it. He had heard it said that there was no such thing as Social Science—that the whole thing was a delusion—that the term science was not applicable to the pursuits of the Association. He, however, must differ very strongly from such opinions. They might not be able to put their propositions in the same exact forms as the followers of the physical sciences had been able to do. But it was not very many years since some of the exact sciences themselves were in the very position in which Social Science was now; and he thought the philosopher who had written so much upon the subject of Social Science had said truly that it was the

greatest of all sciences, for it embraced all problems connected with mankind, morally, intellectually, physically, and existed to solve that great question-How could men live in a community to the greatest advantage of each other?" On the other hand, at the meeting in London, last year, (1862,) we find the President of the Section on Social Economy, Richard Monckton Milnes, Esq., in his address, repeating the very objection against which the Secretary protests. He says, "I own I almost prefer the name of 'Social Economy' to that of 'Social Science,' because I have always felt that in treating upon social questions it is hardly possible to do so in a really scientific manner." * * "If all mankind resembled one another; if you could predicate distinctly either of a nation or an individual what the mind were to be; if you could distinctly say that such and such a thing, such and such a series of actions, would produce such and such a series of results—then, I think, it would be quite right that we should talk of Social Science. But when we see that, as in the work of education, you may apply the same educational processes to a considerable number of individuals, and yet produce totally different results; when we see the same elements of civilization given to different nations, and yet those nations producing totally different results, both in their individual character and the place they occupy in the history of the world, I think we shall see that there enters into this question an element which is almost contradictory of strict scientific principle. That element is human liberty, the free-will of mankind. Without that free-will no man can have individual power of action, no man can call himself a man; and this free-will, when applied to the community of nations, assuming all the forms of public opinion and public estimates of great questions, this itself so modifies the questions of Social Economy that I think you will see what I mean when I say I much prefer that definition to the stricter one of 'Social Science.'"

Again, in opposition to this, we find the most advanced school of thinkers represented by Mr. H. T. Buckle, who says, "The actions of men being guided by their antecedents, are in reality never inconsistent, but, however capricious they may appear, only form one vast scheme of universal order, of which we in the present state of knowledge can barely see the outline." He also says, "It will be as rare to find an

historian who denies the undeviating regularity of the moral world, as it now is to find a philosopher who denies the regularity of the material world."

A writer in the "Westminster Review," (Oct., 1861,) in an article on Professor Goldwin Smith, on the Study of History, says, "He (Mr. Smith) may think that the scientific view of history accepts the other horn of the dilemma-the doctrine of Necessity. It does nothing of the sort. It stands upon its own proof. It leaves the antagonistic dogmas of metaphysics in their internecine struggles. It accepts and adopts the practical conclusions of both parties. * * How these two are reconciled, may still remain an insoluble problem in the eyes of metaphysicians, but it has now ceased to possess any interest or use. The practical issue is, that none believe the will to be the victim of circumstance, and none believe it to transcend the sphere of knowledge. In the system of a great metaphysician Free-Will and Necessity are two contradictories, either of which is inconceivable. With our faculties, he says, it is equally impossible to conceive choice combined with certainty, as it is to conceive volition without a cause." (p. 307-8.) It has been this unwise and unworthy spirit of compromise, this attempt to hold both doctrines-of Free-Will and Necessity, -of not clearly seeing that if one is true the other must be false, that has led to all the inconsistencies on this subject, and obscured the knowledge, and prevented the advance of a true philosophy of morals. A man is said to be "free" so long as there is no "compulsion from without overcoming resistance from within,"-so long as there is no physical obstruction or mental derangement interfering with the exercise of his natural powers; but it is evident that the will is the "victim of circumstance," so far as it is entirely dependent upon these natural powers; that a man did not endow himself with these powers, and although it is true he can do as he pleases, he can only please to act or will as they direct.

It is of no use, therefore, trying any longer to temporise with this fact, but our ethical code and our ideas of moral responsibility must be brought into accord with it. There would be little use in Law and Order in Physics, if one-half of nature, and that the most important—mind, were still left to chance or free-will, or rather "if choice were

not combined with certainty." What is called knowledge of human nature, and the skill, sagacity, or wisdom that manages and commands mankind, is nothing more than a better acquaintance than ordinary of the laws of mind; and our calculations of futurity thus formed, are made with almost absolute assurance of success. The recognition of Philosophical Necessity, or that Mind is equally the subject of law with Matter, involves the reconstruction of our whole ethical code, which must be rebuilt upon the principle that nothing is to be left to accident in the moral world, any more than in the physical. This element of chance must be excluded, for it has been truly observed that "five hundred people may be found to lead a forlorn hope, for five that would consent to take a red-hot poker in their bare hands." The present system, based upon a fiction, must be replaced by an exposition of natural law, and a clear elucidation of the natural and inevitable consequences of our actions.

Instead of the recognition of Necessity "ceasing to possess any interest or use," as observed by the writer in the Westminster, we may mention as illustrative of the contrary, that if the doctrine be accepted and logically used, we get rid at once of Revenge, Remorse, and Punishment, except such as is for the good of the individual offending: for the first would be absurd, the second useless, as the recognized and experienced consequences of our actions are sufficient for our future guidance, and "forgiveness," or remission of punishment that was for our good would be simply an injury. Revenge, remorse, and retributive punishment are the sources of half the crime and misery in the world.

The problem of man's nature,—of the why and the wherefore; of his relation to this world, and to the past, present, and future of his existence; of the origin and object of evil, must always have an increasing and absorbing interest, and every one has his own solution of such problems, founded ordinarily upon tradition and feeling, and not at all upon science, or upon what we really can know; and each trembles with alarm at every assault upon his time-honoured system, fearing that if his venerable solution must be laid aside, the bulwarks of virtue must go with it; but such persons may share the consolation and satisfaction which it has given the present writer to find that morality and

virtue are based upon laws as fixed and determinate as the law of gravitation which upholds the universe itself, and that the Universal Father thus reveals Himself, in a language that cannot be misunderstood or misinterpreted, to every seet and every clime.

Much in this Edition has been re-written, and much has been added; and although time has only strengthened the conviction which the writer entertained of the truth of the Ethical principles of the work; in its Political Economy it is believed that there is nothing now at variance with the doctrines so admirably laid down by J. S. Mill. The aspirations of the Socialists after community of interest and property are consigned, at least for many generations, to Utopia, although the economic principle in the form of Co-operative Societies, is shown to be making rapid progress.

It must be added that this work makes no pretensions to literary merit. The writer has been too much in earnest to find out the truth, even to think of the graces of style; he fears even that in some cases he has not been sufficiently full and explicit to make himself understood. This is a great fault, but he trusts that the seed thus sown will not in consequence be altogether fruitless, and that at no distant day, some mind more competent than his own to do justice to the all-important principles laid down, may be induced to do so by the imperfect effort now made.

ERRATA.

For "unusual" p. 208, line 24, read "universal."

For "intentions" same page, line 31, read "intuitions."

&c., &c.

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THE PHILOSOPHY OF NECESSITY.

INTRODUCTION.

THE Philosophy of Necessity is the "reason why" of Necessity. Necessity implies Law or a constant and invariable order of events in the physical and also in the moral world. Reason is exercised in the knowledge and calculation of this fixed order, and if in any department of Nature this order did not reign, in that department there could be no exercise of reason. This is the "reason why" of "Necessity."

"Man, the servant and interpreter of Nature, can only understand and act in proportion as he observes or contemplates the order of Nature; more he can neither know nor do."

It is now extensively admitted that Lord Bacon has defined in the above fundamental principle of the inductive Philosophy, the extent of the knowledge of which man is capable; what Nature has really enabled him and what she has forbidden him to do. For want of a clear perception of the boundaries of his mind, which Nature herself has fixed, man has in all ages dogmatized upon endless subjects, which from the very constitution of his being, are beyond his reach; and has formed, and is continually forming, theories upon points which lie beyond the range of his powers. Much speculation would be saved, much pernicious error would be prevented, if we would always

keep in view that it is the order of Nature alone, whether as relating to matter or to mind, that we are capable of observing and understanding; that we can know neither the beginning nor the end of things, but can only observe what is. We can know in itself, neither the real nature of matter nor of mind, but only the order in which one event follows another, or in which one sensation follows another. "To aspire to the knowledge of more than phenomena,—their resemblances, co-existences, and successions,—is to aspire to transcend the inexorable limits of human faculties. To know more, we must be more."*

Doubtless it is difficult to believe that all Science must be resolved into the knowledge of antecedence and consequence of cause and effect—of the powers of nature: for the power of producing a given effect, and the cause, or the invariable antecedent of such effect, are all synonymous terms; yet such, if we strictly analyse our knowledge, will be found to be the case, and that nothing is really known to us but this relation of things to each other and to ourselves. Thus one billiard ball striking another, communicates motion to it; yet, simple as this may appear, we know not how or why it does so. We say the striking is the cause of the motion; but we do not know why one body striking another should communicate motion to it, especially as it might be proved that it does not touch it. All we know is that the motion invariably follows what we call the striking. Again, heat converts water into steam; the expansive force of steam acts upon the piston; and the piston, by the intervention of many further antecedents, produces many further effects. Here again, all we know is that such causes. cateris paribus, will invariably produce the same effects; in other words, we know the relation of heat to water, of water to steam, of steam to the piston, and of the piston to what it has to perform. This kind of knowledge may be called certain or Positive, because it may be proved,—that is, made to take

^{*} Lewes's Biographical History of Philosophy, p. xvi. See Dr. Thomas Brown's "Theory of Cause and Effect," and his 7th Lecture on the "Philosophy of the Human Mind;" also, "First Principles," by Herbert Spencer, Part I., "The Unknowable."

place again in the given or recognized order. But it will be said that independently of the knowledge of the order of nature, and of the relation of things to one another, we possess a knowledge of things as individuals and also of their qualities. This, however, is only a knowledge of their relation to us. What we call individual existences and their qualities is the effect such existences have upon the senses, and the senses upon the brain; it is the first link in the chain of sequences.

Again, we know that due proportions of oxygen and hydrogen form water; that sulphur, nitre, and charcoal, form gunpowder; and that a spark applied to the latter mixture causes an explosion. But we know not how or why all this should take place; why a spark should have this relation to gunpowder. i. e. why it should have this power, or be the cause, or invariable antecedent of its explosion. We know it as we can only know everything else, by experience, from having observed that such is the ORDER OF NATURE. Now as regards our knowledge of the relation that this explosion bears to ourselves, it is exactly of the same character, merely the knowledge of the sequence of events. The powder acts upon the air and the air upon the tympanum, the tympanum upon the nerves and the nerves upon the brain, and the action of the brain is the only antecedent we can trace before the sensation which apprises us of the explosion. To say that the brain acts upon the mind is introducing a link in the chain for which, in the present state of our knowledge, we have no warrant. Not that I would be understood to affirm that the brain is the cause of the sensation: but the action of the brain is the invariable antecedent of sensation, and we have no knowledge at present of anything between; to add a link to the chain of causation is as unphilosophical as to leave one out. To make discoveries in science. therefore, is merely to show what antecedents precede such and such consequents; what causes invariably produce such and such effects; and by this knowledge we are enabled to adapt our relation to external things, or their relation to us, so as to

produce the effect we wish. Thus to know, with the vulgar. that the explosion produces the sound, is only available knowledge to a certain extent; to learn that the gunpowder acts upon the air is a discovery in science, and the various other links between are essential to certain knowledge; for by an alteration in the air, the tympanum, the nerves, or the brain, a different effect would be produced, i. e. the relation of the gunpowder to ourselves would be changed; or if a link were yet undiscovered and left out we might infer that the same cause did not always produce the same effect. Knowledge becomes certain in proportion as we discover the invariable antecedent to the consequent; it is therefore less certain where Life is concerned than it is in Physics, and still less so where sensation is added to Life. In the action of medicine upon the body it is seldom that the same remedy will produce precisely the same effect in cases which appear to us to be similar; the reason of which is that so little is at present understood of vitality that there may be many circumstances in each case which we are unable to calculate upon, any one of which might be sufficient to produce the different result. Knowledge is so much more uncertain when Sensation is added to Life that invariable antecedence and consequence is here supposed to cease, the same necessary relation between cause and effect not being held to exist in mind as in matter. But this is an error, arising from the circumstance that the causes that produce mental phenomena are not always so perceptible as those that admit of more direct experiment.* There is exactly the same connexion between

^{*} If such coexistences and sequences as those of Biology and Sociology are not yet reduced to law, the presumption is not that they are irreducible to law, but that their laws elude our present means of analysis. Having long ago proved uniformity throughout all the lower classes of relations; and having been step by step proving uniformity throughout classes of relations successively higher and higher; if we have not at present succeeded with the highest classes, it may be fairly concluded that our powers are at fault, rather than that the uniformity does not exist. And unless we make the absurd assumption that the process of generalisation, now going on with unexampled rapidity, has reached its limit, and will suddenly cease, we must infer that ultimately mankind will discover a constant order of manifestation even in the most involved, obsoure, and abstract phenomena.—"First Principles," by Herbert Spencer, p. 143.

every action of the mind and its cause as between things external to the mind; and not the slightest change takes place in the mind, nor the most transient idea passes through it, but has its cause; which cause is always adequate in the same circumstances, to produce the same effect; and it is only by such admission that we can infer the existence of anything external to ourselves, or even the existence of what we call ourselves. It is of very great importance that we should clearly see that the self of the conscious being is nothing but an object of observation, known only as everything else is known, by the chain of necessary antecedents and consequents. Thus all we can know of the mind of man is its successive changes which are best observed in others—in their effects or consequences; mere reflection on consciousness has produced all the errors of Metaphysics. We see at once what a wide field is cleared when we are obliged to admit that we know nothing of matter in itself, or of mind in itself, for all the speculations based on the essential difference in their nature at once fall to the ground, and materialist and immaterialist can no longer be said to exist

The object of all Science, therefore, is to show the relation of things to each other and to ourselves so as to anticipate To this it is limited. "All that we know is, nothing can be known," is true in one sense, for we know nothing of the essential nature of anything or of how any one cause produces its effect. One thing invariably precedes another, and we say that it has the power to produce it; but what this power is, or what makes the connexion, or whether the relation will always exist or has only been established for a time, we do not know, neither is it necessary, as far as we can see, that we should know, for the knowledge of the order of nature is all that is requisite for the proper exercise of reason, and for the perfection of our happiness. Let us not then feel ourselves degraded by the idea that the most diligent research has done no more, and can do no more than trace the relation of things here, and discover but a part of the order of nature; and

since our inquiries can but end in the discovery of the relations of things as discernible by our present faculties, let us cease from all those fruitless attempts to attain to knowledge upon subjects beyond the comprehension of beings in our scale of intelligence, which have hitherto so retarded the Science of Mind, and prevented the happiness of man from bearing any proportion to the means of happiness afforded him. says, "We shall not have much reason to complain of the narrowness of our minds, if we will but employ them about what may be of use to us, for of that they are very capable; and it will be an unpardonable as well as childish peevishness, if we undervalue the advantages of our knowledge, and neglect to improve it to the ends for which it was given, because there are some things set out of reach of it." Bacon says "the real cause and root of almost all the evils in science is this:-that falsely magnifying and extolling the powers of the mind, we seek not its true helps."

My object in the present treatise is to pursue this inductive method of inquiry in investigating the nature of man; his place in creation; the character of his mind; and particularly to trace to its legitimate consequences the doctrine of philosophical necessity, which the connexion between cause and effect implies. I would show that the mind of man is not an exception to nature's other works; that like everything else it has received a determinate character; that all our knowledge of it is precisely of the same kind as that of material things, and consists in the observation of its order of action, or of the relation of cause and effect. This is a truth which, although acknowledged by many writers, has never yet been made of sufficient importance in the science of Mental and Moral Philosophy. It has either been considered as a mere abstraction of no practical use, or else avoided and stifled as leading to fatalism, and otherwise dangerous in its tendency. But I hope to be able to show, on the contrary, that upon this truth alone,however it may be said to militate against man's free-will or accountability, in some acceptation of the terms, -our Educational and Political systems can be properly based, in accordance with the nature of the being to be educated and governed. If in setting a steam engine to work the engineer were to leave much to its *free will*, the work would be but badly performed. So as relates to man, if in our educational systems the causes are inadequate to the intellectual and moral results we desire, his *free will* will not supply the deficiency.

That the same certain and calculable laws exist in the departments of Life and Mind as in Physics is daily being made evident by Statistics. Uncertainty may exist in individual cases, er in a limited field of observation, but it is proved that in a larger field, in a given number of cases, invariable results may always be looked for. Thus, in a recent Report of the Registrar-General on the population of England, he shows the "law" to be that one person out of every 45 living at the commencement of any year will die within that year. The departure from this law is very trifling, and the most valuable applications of it are already made by Life Insurance Companies and others who base their calculations upon the absolute certainty of its invariability. In the 12th Annual Report of the Registrar-General we are informed "it may be broadly stated that 27 in 1,000 men of the population, of the age of 20 and under 60, are suffering from one kind of disease or other; that several of the diseases are of long duration, that others are recurrent, and that some are hereditary." But Statistics now show that a similar uniformity is found to prevail where mind is concerned as in matter. M. Quetelet has furnished tables relative to crime in France, by which he shows that "law" is equally certain and calculable with respect to crime as to deaths. The same effects have followed similar inquiries in this country. M. Quetelet says "the possibility of assigning beforehand the number of the accused and condemned which should occur in a country, is calculated to lead to serious reflections, since it involves the fate of several thousands of human beings, who are impelled, as it were, by an irresistible necessity, to the bar of the tribunal, and towards the

sentences of condemnation that there await them. These conclusions flow directly from the principle, already so often stated in this work, that effects are in proportion to their causes, and that the effects remain the same, if the causes which have produced them do not vary."

Year by year the same number of persons commit suicide, varying a little with varying circumstances. In London about 240 persons every year make away with themselves, while in 1846, the year of railway panic, 266 committed suicide. The number of marriages are not regulated as is ordinarily supposed by Love, but by the price of corn, that is, by the cheapness of provisions and by the rate of wages.

To show the influence of numbers in reducing apparently inextricable uncertainty to mathematical certainty, we will take as an illustration the hairs on our head. It might be supposed that the hairs on no two persons heads were exactly the same in number, but if we presume that the greatest number of hairs on any one person's head is 250 thousand, then all persons above that number must agree in the number of their hairs with one of the 250 thousand, and in a million there must necessarily be four alike. Varied as is human character and disposition,—as the hairs of our head, yet in the broad features there is considerable agreement; and, supposing the variety to be expressed by 1,000 or 10,000, then there would be ten persons in every 10,000 or 100,000 who would, in similar circumstances, act exactly alike.

"Everything throughout creation," says one of the most beautiful and philosophical writers of the present day, "is governed by law: but over most of the tracts that come within the active experience of mankind, the governing hand is so secret and remote that until very large numerical masses are brought under the eye at once, the controlling power is not detected. To an appreciating mind there is something attractively beautiful in the delicacy with which laws of unswerving regularity and resistless force are withdrawn from view, masked behind an apparently inexhaustible variety, an independence

and spontaneity of action, and a playfulness of 'accident,' seemingly without control or bounds. It is impossible too much to admire this indulgent feature of creative and administrative power, which permits thus its graciousness to be lost to general sight in the success of the very illusion employed. The whole vocabulary of those who talk of 'chance' and 'luck,' attests the matchless lightness and elasticity of gait which disguise the majestic onward tread and movement of natural law. Statistics are the touchstone under which the illusion at once vanishes. Like some potent chemical test it 'precipitates' at once, and exposes to view the latent law so skilfully held in solution." It is in this wide space that man finds room for an almost infinitely varied field of action for what he calls his freedom of will, and which is the source of an infinitely varied series of sensations, productive of much more happiness than were his actions apparently more "fixed in fate." But of course unless what is called "free-will" were ultimately governed by law as everything else is, man's actions could never be calculated, and a "Social Science," or a science of human nature, would be an impossibility. But "forgetfulness as well as free-will is under constant laws," for a late return, made by the Post-Offices of London and Paris, shows that we can calculate, that is, exactly foretell, the number of persons who will forget every year to address their letters.

"To those who have a steady conception of the regularity of events, says Buckle, and have firmly seized the great truth that the actions of men, being guided by their antecedents, are in reality never inconsistent, but however capricious they may appear, only form one vast scheme of universal order, of which we in the present state of knowledge can barely see the outline,—to those who understand this which is at once the key and the basis of history, the facts just adduced, so far from being strange, will be precisely what would have been expected, and ought long since to have been known. Indeed the progress of inquiry is becoming so rapid and so earnest, that I entertain little doubt that before another century has

elapsed, the chain of evidence will be complete, and it will be as rare to find an historian who denies the undeviating regularity of the moral world, as it now is to find a philosopher who denies the regularity of the material world."*

Bolingbroke observes that "Mankind, bred to think as well as speak by rote, furnish their minds as they furnish their houses or clothe their bodies, with the fancies of other men, and according to the mode of the age and country. They pick up their ideas and notions in common conversation or in the schools. The first are always superficial, and both are commonly false." Holding fast then to the principle of the inductive philosophy, and regardless of mere opinion, however prevalent, I shall proceed to the elucidation of the doctrine of Philosophical Necessity and its Applications, to the consideration of the Constitution of Man, and its relation to all that surrounds him.

^{*} History of Civilization in Eugland, p. 31.

PART I.

MORAL SCIENCE.

CHAPTER I.

PHILOSOPHICAL NECESSITY.

This subject has generally been considered as one of unusual difficulty, for the proper treatment of which human reason is scarcely adequate. But this view of it arises, not so much from any real abstruseness in the question itself, as from the apparent opposition which the doctrine offers to established opinions, and even to common sense itself. Many, therefore, and perhaps the greater number of those who have had their attention called to it, and who have not been able to resist the evidence upon which it stands, have found it necessary to admit the opposite doctrine of freedom of will also; the incompatibility of the two, although allowed to be somewhat a mystery, being a less difficulty with them than the giving up of many pre-established opinions.

There is, perhaps no proposition that admits of stronger proof, or that can be more logically, if not mathematically, demonstrated; but its supposed tendency has mystified an otherwise plain question. Many have admitted and proved the doctrine of philosophical necessity, to serve a sectarian purpose, who, when that object has been answered, have discarded it as of no farther use; as a mere abstraction, having no practical bearing upon any one of the important interests of mankind; and even of mischievous tendency, when permitted to escape from the closets of philosophers and to circulate amongst the vulgar. The author of "The Natural History of Enthusiasm," for instance, in his introductory Essay to Edwards' "Inquiry,"

considers the doctrine, the truth of which he appears not to deny, as useless when applied to questions of "common life, affecting the personal, social, and political conduct of mankind, or as applied to Theology and Christian doctrine, or to the physiology of man, or to the higher metaphysics." But no truth is unimportant, still less pernicious, and we think it may be shown that this doctrine, so far from being valueless to man in a practical sense, has a most important bearing upon all his best interests, and is also fundamental to all just views of the Divine Government.

Jonathan Edwards has hitherto been considered unanswerable. The following passages from the "Inquiry concerning Freedom of Will," contain the argument in its support, as stated by him:—

"The argument from cause and effect.

"Nothing comes to pass without a cause. What is selfexistent, must be from Eternity, and must be unchangeable; but as to all things that begin to be, they are not self-existent, and therefore must have some foundation of their existence without themselves. That whatsoever begins to be, which before was not, must have a cause why it then begins to exist. seems to be the first dictate of the natural and common sense which God has implanted in the minds of all mankind, and the main foundation of all our reasonings about things past, present, and to come. If once this grand principle of common sense be given up, that what is not necessary in itself must have a cause—and we begin to maintain that things may come into existence, and begin to be, which heretofore have not been of themselves without any cause—all our means of ascending in our arguing from the creature to the Creator, and all our evidence of the being of God is cut off at one blow. In this case we cannot prove that there is a God, either from the being of the world and the creatures in it, or from the manner of their being, their order, beauty, and use. Should we admit that things may come to pass without a cause, we should be without evidence of the existence of anything whatever but our own

immediate, present, ideas and consciousness. For we have no way to prove anything else but by arguing from effects to causes: from the ideas immediately in view, we argue other things not immediately in view; from sensations now excited in us. we infer the existence of other things without us as the causes of these sensations; and from the existence of these things we argue other things, which they depend on as effects on causes. We infer the past existence of ourselves, or anything else, by memory: only as we argue that the ideas which are now in our mind, are the consequences of past ideas and sensations. So if there is no absurdity or difficulty in supposing one thing to start out of non-existence into being, of itself, without a cause, then there is no absurdity or difficulty in supposing the same of millions of millions. For nothing, or no difficulty multiplied, still is nothing or no difficulty; nothing multiplied by nothing does not increase the sum.

"Now, according to the hypothesis of some, of the acts of the will coming to pass without a cause, it is the case in fact, that millions and millions of events are continually coming into existence, contingently without any cause or reason why they do so, all over the world, every day and every hour through all ages. So it is in a constant succession in every moral agent. This contingency, this effectual no cause is always ready at hand to produce this sort of effects, as long as the agent exists, and as often as he has occasion.

"If it were so, that things only of one kind, viz., acts of the will, seemed to come to pass of themselves, but those of this sort, in general, came into being thus; and it were an event that was continual and that happened in a course, wherever were capable subjects of such events, this very thing would demonstrate that there were some cause of them, which made such a difference between this event and others, and that they did not really happen contingently. For contingence is blind, and does not pick and choose for a particular sort of events. Nothing has no choice. This no-cause, which causes no existence, cannot cause the existence which comes to pass to be of one particular sort only, distinguished from all others.

"Some suppose that volition can arise without a cause, through the activity of the nature of the soul; but I can conceive of nothing else that can be meant by the soul's having power to cause and determine its own volitions, as a being to whom God has given a power of action, but this, that God has given power to the soul, sometime, at least, to excite volitions at its pleasure, or according as it chooses. And this certainly supposes in all such cases, a choice preceding all volitions which are thus caused, even the first of them, which runs into an absurdity.

"A great argument for self-determining power is the supposed experience we universally have of an ability to determine our wills in cases wherein no prevailing motive is pre-The will (as is supposed) has its choice to make between two or more things that are perfectly equal in the view of the mind; and the will is apparently altogether indifferent; and yet we have no difficulty in coming to a choice; the will can instantly determine itself to one, by a sovereign power which it has over itself, without being moved by any preponderating inducement. The very supposition which is here made directly contradicts and overthrows itself. For the thing supposed wherein this grand argument consists is, that among several things, the will actually chooses one before another, at the same time that it is perfectly indifferent, which is the very same thing as to say the mind has a preference at the same time that it has no preference.

"To suppose the will to act at all in a state of perfect indifference, either to determine itself, or to do anything else, is to assert that the mind chooses without choosing. To say that when it is indifferent it can do as it pleases, is to say that it can follow its pleasure when it has no pleasure to follow. And, therefore, if there be any difficulty in the instances of two cakes, or two eggs, &c.; concerning which, some authors suppose the mind in fact has a choice, and so in effect supposes that it has a preference, it as much concerns them to solve the difficulty, as it does those whom they oppose.

"It will always be among a number of objects in view. that one will prevail in the eye, or in idea, beyond others. When we have our eyes open in the clear sunshine many objects strike the eve at once, and innumerable images may be at once painted in it by the rays of light; but the attention of the mind is not equal to several of them at once; or if it be so. it does not continue so for any time. And so it is with respect to the ideas of the mind in general; several ideas are not in equal strength in the mind's view and notice at once, or, at least, do not remain so for any sensible continuance. voluntary changes in the succession of our ideas, though the cause may not be observed, have as much a cause as the changeable motion of the motes that float in the air, or the continual, infinitely various, successive changes of the unevenness on the surface of the water, so, though the falling of the die be accidental to him that casts it, yet none will suppose that there is no cause why it falls as it does.

"Concerning liberty of will consisting in indifference, the very putting of the question is sufficient to show the absurdity of the affirmative answer; for how ridiculous would it be for any one to insist that the soul chooses one thing before another, when at the same time it is perfectly indifferent with respect to each! This is the same thing as to say the soul prefers one thing to another, at the very same time that it has no preference. And should it be inquired whether volition is a thing that ever does, or can, come to pass contingently, it must be remembered that it has been already shown, that nothing can ever come to pass without a cause or reason why it exists in this manner rather than another; and the evidence of this has been particularly applied to the acts of the will. be so, it will demonstratively follow, that the acts of the will are never contingent, or without necessity in the sense spoken of, inasmuch as those things which have a cause or reason of their existence must be connected with their cause.

"If liberty consist in that which Arminians suppose, viz., in the soul's determining its own acts, having free opportunity,

and being without all necessity: this is the same as to say, that liberty consists in the soul's having power and opportunity to have what determinations of the will it pleases or chooses. And if the determination of the will and the last dictates of the understanding be the same thing, as Dr. Clarke affirms, then liberty consists in the mind's having power to have what dictates of the understanding it pleases, having opportunity to choose its own dictates of understanding. But this is absurd; for it is to make the determination of choice prior to the dictate of the understanding and the ground of it, which cannot consist with the dictate of the understanding's being the determination of choice itself.

"The argument from Fore-knowledge.

"Granting, as we certainly must do, that God has a certain and infallible prescience of the acts of the will of moral agents, I come now to show the consequence, to show how it follows from hence that these events are necessary, with a necessity of connexion or consequence.

"In order to this, I would observe the following things. It is very evident, with regard to a thing whose existence is infallibly and indissolubly connected with something that already hath, or has had existence, the existence of that thing is necessary. Here may be noted; that in things that are past, their past existence is now necessary; having already made sure of existence, it is too late for any possibility of alteration in that respect, it is now impossible that it should be otherwise than true that that thing has existed.

"If there be any such thing as a divine foreknowledge of the volition of free agents, that fore-knowledge, by the supposition, is a thing which already has, and long ago had, existence; and so, now its existence is necessary, it is now utterly impossible to be otherwise than that this fore-knowledge should be, or should have been.

"It is no less evident, that if there be a full, certain, and infallible fore-knowledge of the future existence of the volitions

of moral agents, then there is a certain infallible and indissoluble connexion between those events and that fore-knowledge; and that, therefore, by the preceding observations, these events are necessary events, being infallibly and indissolubly connected with that which has had existence already, and so is now necessary, and cannot but have been.

"That no future event can be certainly fore-known, whose existence is contingent, and without all necessity, may be proved thus: it is impossible for anything to be certainly known to any intellect without evidence. To suppose otherwise implies a contradiction; because, for a thing to be certainly known to any understanding is for it to be evident to that understanding, and for a thing to be evident to any understanding, is the same thing as for that understanding to see evidence of it: but no understanding, created or uncreated, can see evidence where there is none. And, therefore, if there be any truth which is absolutely without evidence, that truth is absolutely unknowable, insomuch that it implies a contradiction to suppose that it is known.

"But if there be any future event whose existence is contingent, without all necessity, the future existence of the event is absolutely without evidence.

"To suppose the future volitions of moral agents not to be necessary events, or which is the same thing, events which it is not impossible but that they may not come to pass, and yet to suppose that God certainly foreknows them, and knows all things, is to suppose God's fore-knowledge to be inconsistent with itself. For, to say that God certainly, and without all conjecture, knows that a thing infallibly will be, which at the same time he knows to be so contingent that it may possibly not be, is to suppose his knowledge inconsistent with itself, or that one thing that he knows is utterly inconsistent with another thing that he knows. It is the same thing as to say, he knows a proposition to be of certain infallible truth, which he knows to be of contingent uncertain truth. If volitions are in themselves contingent events, without all necessity, then it is no

argument of perfection of knowledge in any being to determine peremptorily that they will be; but on the contrary, an argument of ignorance and mistake; because, it would argue that he supposes that proposition to be certain, which in its nature, and all things considered, is uncertain and contingent. To say in such a case, that God may have ways of knowing contingent events which we cannot conceive of, is ridiculous, as much as to say, that God may know contradictions to be true, for aught we know; or that he may know a thing to be certain, and at the same time know it not to be certain, though we cannot conceive how; because he has ways of knowing we cannot comprehend.

"There is as much of an impossibility but that the things which are infallibly foreknown should be, (or which is the same thing), as great a necessity of their future existence as if the event were already written down, and was known and read, by all mankind through all preceding ages, and there was the most indissoluble and perfect connexion between the writing and the thing written. In such a case it would be as impossible the event should fail of existence, as if it had existed already; and a decree cannot make an event surer or more necessary than this."

The argument from cause and effect we consider to be conclusive, although the connexion between antecedent and consequent, or cause and effect, be not considered as a necessary connexion, but one established and upheld for a particular purpose. The argument from foreknowledge would appear to be less satisfactory; for the idea of prescience not being derived from experience, our knowledge upon the subject cannot be of such a character as to admit of our drawing logical inferences from it.

We shall now proceed to a more practical elucidation of the subject.

The doctrine of necessity, in plain language, means that a man could in no case have acted differently from the manner in which he did act, supposing the state of his mind, and the circumstances in which he was placed, to be the same; which is merely saying, that the same causes would always produce the same effects. Men are prone to suppose that they could have done otherwise, because, in reviewing their conduct, its consequences—the experience resulting from it—are mixed up with the motives that decided them before, so that if they had to decide over again, different circumstances must be taken into the calculation. Suppose a case: A man has to decide upon some speculation in business; his conduct is voluntary, that is, it is free from external compulsion, he is at liberty to do what he shall will to do;—what is to determine his will? Surely we need not consult Edwards to tell us that his will will be determined by the "greatest apparent good," not, perhaps, in the opinion of other people, but in his own opinion at the moment. This good is the motive which governs his will.

To suppose that the man is not governed by motives, or even to suppose that he acts contrary to motives, does not make the action less necessary, for there must be a cause why he acts in one way rather than another, and the cause must be sufficient to produce the act; for "Nothing comes to pass without a cause."

But upon what will the motives that decide the will depend? Upon the mental constitution of the individual, and upon the circumstances in which he is placed. If he has a strong sense of justice, he will consider whether what he is about to do is perfectly honest; if he is a benevolent man, he will take care to do nothing likely to injure his fellows, and so on with respect to all the natural feelings of which the mind consists; they will impel to action or restrain, according to their natural or acquired strength, and the direction they may have received from education. The intellectual faculties have reference to the circumstances which influence the determination of his will; they examine how far the speculation is likely to succeed, and the correctness of the judgment will depend upon the strength of the reasoning powers, the education they have received, and a more or less complete view of all the

circumstances. If however it is admitted, as it frequently is, that a man must now in any given instance believe what appears to him to be true, and also act upon that belief in determining "the greatest apparent good," yet it is thought that at some previous time he might have gained more knowledge which would now have enabled him to believe differently and to choose more wisely; but it will be found that if the present belief and motives to action are without his own control, and he must believe and act as he does, then every influence that has previously tended to make his mental constitution what it now is, and everything that produced the circumstances in which he is now placed, has been, in like manner, dependent upon causes over which he had no control.

In what, then, does the Liberty which man feels that he possesses consist? Certainly not in the being able to act without motive, or contrary to the strongest motive; but in freedom from external compulsion; in the wide field of action open to him, and in the almost infinite number of paths to the objects of his desires lying open to his choice. The brutes approach their objects directly, impelled by one or more simple instincts, while Reason offers to man a hundred different ways of approach, a vast variety of different means by which his aim can be accomplished; and he can suspend its pursuit until he finds the proper path, for he knows that if he take the wrong direction out of the many that she presents to him, pain and suffering will be the consequence of his error. Reason thus calls into activity a great variety of feelings, and keeps up an endless succession of sensations. If a man would eat, he is not confined to one or two simple articles of diet, but he can vary his food to suit his palate. Would he lay up store for a future dayhis stock is not of one kind only, like that of the bee, nor is his warehouse, like hers, of one particular construction, however perfect; but this desire, in combination with others, gives rise to the diversified products of commerce and the arts. Would he train up his offspring-he does not act instinctively, but adapts his treatment to the requirements of the mental and bodily constitution of his child, excited by all the hopes and fears of parental solicitude, which reason suggests. But because his choice of any one mode of action is still determined by the strongest motive, this kind of liberty does not take man from under the governance of necessity.

That which has most mystified this subject, and made men think the doctrine of necessity contrary to common sense, or what they imagine to be intuitive evidence, is the supposition that it annihilates the free agency of man: they reason in this way—we feel that we have the power to do as we please; we are not obliged by any physical necessity to do anything; we have the perfect control of our own actions; are we not then free agents? But true necessity is not opposed to that which is voluntary, but to that which is contingent. It is undoubtedly true, therefore, that man can always do as he pleases; but what he pleases to do will ever depend upon his mental constitution (which is only another word for himself) and the circumstances in which he is placed. This is no more than saying that man possesses a definite constitution, and that he must act according to it. Locke says in his Essay, "As far as man has power to think or not to think, to move or not to move, according to the preferences or direction of his own mind, so far is a man free." Here the only liberty acknowledged is that of acting according to the internal mechanism of a man's mind. He says also, "The mind having in most cases, as is evident in experience, a power to suspend the execution and satisfaction of any of its desires, and so of all, one after another, is at liberty to consider the objects of them, examine them on all sides, and weigh them with others. In this lies the liberty a man has. He has the power to suspend the execution of this or that desire, as every one daily may experience in himself: this seems to me the source of all liberty. In this seems to consist that which is, as I think, improperly called free-will." But this power of suspension is quite consistent with the doctrine of necessity; for, if we delay the performance of any action, it must be because we have a motive for doing so, and

that motive is the necessary cause. Kant says—" Every action or phenomenon, so far as it produces an event, is itself an event or occurrence which presupposes another state wherein the cause is to be met with; and thus everything that happens is only a continuation of the series, and no beginning which occurs of itself is possible: consequently, all the actions of the natural causes in the succession are themselves again effects." In fact, the Universe is one General Effect, both in Mind and Matter, and there is but one Supreme Cause.

Spinoza says-" In no mind is there an absolute or free volition; but it is determined to choose this or that by a cause, which likewise has been fixed by another, and this again by a third, and so on for ever."—Tractata Theologica-Polit, ch. xii, sec. 22. He also says, and which by some is held to contradict the above: "moreover, it is to be observed, although the mind is influenced by external circumstances to affirm or deny anything, nevertheless, it is not in itself so swayed as to be forced by external things, but always in its own nature remains free." True Freedom, as we have before said, is where a being is able to act by the law of its own nature without external com pulsion. This is the freedom which we all feel that we possess: this is the freedom for which Kant contends, based upon what he calls practical reason; this is evidently what Locke means and also Spinoza when he says the mind is not "so swayed as to be forced by external things." This in fact is the only freedom of which we can conceive, but it is not at variance either in God or man with necessity and belongs alike to mind and matter. Man acts spontaneously by the law of his own nature. and so does every atom equally in accordance with its tendencies; but in God we believe such nature to be self-existent. original, eternal; in man and matter it is derived. Of course we cannot speak dogmatically of the nature of God, for we really know nothing, but in this sense he must be the most free as well as the most "necessary" of all beings. We can conceive a hundred courses open to man, ninety-nine of which from his limited intelligence may be wrong, (limitations of real

freedom), but we cannot conceive of supreme intelligence taking more than one course—the right. Thus as we rise in the scale of intelligence, is the path of duty narrowed to us, and we lose that spurious freedom for which the advocates of free-will so strenuously contend.

Motive is to voluntary action in the moral world, what cause is to effect in the physical, and the order of nature is as fixed in the world of mind as of matter; for if the course of nature were not as fixed in the moral world as in the physical: if calculable laws did not regulate one as well as the other, man's reasoning power, which depends for its exercise upon the uniformity of events in both, would be of no use. If man could refuse to be governed by motives; if his conduct did not depend upon springs of action which could be calculated and relied upon, the superiority of his organization, which now raises him so eminently above the brute creation, would have availed him nothing. Reason is dependent for its exercise upon experience, and experience is nothing more than the knowledge of the invariable order of nature, of the relations of cause and effect. Man observing these sequences and expecting them to occur again in like circumstances, shapes his conduct accordingly. In the first ages of the world, when succession was only observed in a few simple things, such as the rising of the sun from day to day, it was thought that the same free will now attributed to man, belonged to the physical world also; that events might come to pass, or they might not, and the term chance denoted this uncertainty. But increased knowledge has tended to abolish this term, by showing the uniform manner in which events follow one another, and that under similar circumstances the same results may be expected to follow. explosion of gunpowder could not be predicted by the analysis of its parts, and the simplest phenomena were all at first at an equal distance from human sagacity. Having observed then the order of nature, we can anticipate events and regulate our conduct accordingly, suiting our circumstances to this known order of events; we regulate our conduct by what we expect

to result from it, by making use of the same causes to produce the same effects.

Admitting that this is a proper definition of the exercise of reason, it follows that if this uniformity did not exist, the exercise of it would be as likely to be ruinous as serviceable to us; our knowledge would in no way avail us, for we could not predict that things would occur again as we had before observed them. All the discoveries that man has made in the arts and sciences, everything in fact that has tended to ameliorate and raise his condition, depends on this known order of nature, and rests upon its immutability.

Because the causes of human actions have been hidden from us like those of physical action in the first ages of the world, such actions have been supposed to be contingent, to depend upon chance and not to follow the same law of invariable sequence; but if this were really the case—if the doctrine of philosophical necessity were not true, the regularity of events in the physical world would little avail us, neither would they afford sufficient foundation for morality and prudence, as the voluntary conduct of our neighbours enters into almost all those calculations upon which our plans and determinations are founded.*

* J. S. Mill says-"The conviction that phenomena have invariable laws, and follow with regularity certain antecedent phenomena, was only acquired gradually, and extended itself as knowledge advanced, from one order of phenomena to another, beginning with those whose laws were most accessible to observation. This progress has not yet attained its ultimate point; there being still one class of phenomena (human volitions) the subjection of which to invariable laws is not yet universally recognized. So long as any doubt hung over this fundamental principle, the various methods of induction which took that principle for granted, could only afford results which were admissable conditionally; as showing what law the phenomena under investigation must follow if it followed any fixed law at all. As, however, when the rules of correct induction had been conformed to, the result obtained never failed to be verified by all subsequent experience; every such inductive operation had the effect of extending the acknowledged dominion of general laws, and bringing an additional portion of the experience of mankind to strengthen the evidence of the universality of the law of causation; until now at length we are fully warranted in considering that law, as applied to all phenomena within the range of human observation, to stand on an equal footing in respect to evidence with the arioms of geometry itself.



"A person well acquainted with the necessary order in which events follow each other, (i.e.) well skilled in the ordinary movements of the machinery of life, may with confidence, if not with absolute assurance of success, risk his most important interests upon the issue of well concerted plans. Skill and sagacity in managing the affairs of common life, or wisdom in council or command, is nothing else than the knowledge of the fixed laws of matter and mind, which

"I apprehend that the considerations which give at the present day, to the proof of the law of uniformity of succession as true of all phenomena without exception, this character of completeness and conclusiveness, are the following: -First; that we know it directly to be true of by far the greatest number of phenomena; that there are none of which we know it not to be true, the utmost that can be said being, that some we cannot positively, from direct evidence, affirm its truth: while phenomenon after phenomenon, as they become better known to us. are constantly passing from the latter class into the former; and in all cases where that transition has not taken place, the absence of direct proof is eccounted for by the rarity or the obscurity of the phenomena, our deficient means of observing them, or the logical difficulties srising from the complication of the circumstances in which they occur: insomuch that not withstanding as rigid a dependence upon given conditions as exist in the case of any other phenomenon, it was not likely that we should be better acquainted with those conditions than we are. Besides this first class of considerations, there is a second, which still further corroborates the conclusion, and from the recognition of which the complete establishment of the universal law may resonably be dated. Although there are phenomena, the production and changes of which elude all our attempts to reduce them universally to any ascertained law; yet in every such case, the phenomenon, or the objects concerned in it, are found in some instances to obey the known laws of nature. The wind, for example, is the type of uncertainty and caprice, yet we find it in some cases obeying with as much constancy as any other phenomena of nature the law of the tendency of fluids to distribute themselves so as to equalize the pressure on every side of each of their particles; as in the case of the trade winds, and the moneoons. Lightning might once have been supposed to obey no laws; but since it has been ascertained to be identical with electricity, we know that the very same phenomenon, in some of its manifestations, is implicitly obedient to the action of fixed causes. I do not believe that there is now one object or event in all our experience of nature, within the bounds of the solar system at least, which has not either been ascertained by direct observation to follow laws. of its own, or been proved to be exactly similar to objects and events, which, in more familiar manifestations, or on a more limited scale, follow strict laws: our inability to trace the same laws on the larger scale, and in the more recondite instances being accounted for by the number of complications of the modifying causes, or by their inaccessibility to observation." - System of Logic, [c. II, p. 116.

together dictate the intricate movements of the great machine of the social system. It must be upon the immovable substratum of cause and effect, of motive and voluntary action, that our calculations of futurity are formed, and it is upon this basis alone, that a wise man rests his hopes and constructs his plans."

Mill also says, "Correctly conceived, the doctrine called Philosophical Necessity is simply this: that given the motives that are present to an individual mind, and given likewise the character and disposition of the individual, the manner in which he will act may be unerringly inferred: that if we know the person thoroughly, and knew all the inducements that are acting upon him, we could fortel his conduct with as much certainty as we can predict any physical event. This proposition I take to be a mere interpretation of universal experience, a statement in words of what every one is internally convinced of."

The "National Review" for January, 1858, in a notice of "The World of Mind" by Isaac Taylor says "On the supposition that man is not a free agent,—the master of his own sentiments and conduct, but on the contrary subject to the laws of physical causation which rule in the material world,—con-

G. H. Lewes says—" That the positive method (the observation of the order of nature) is the only method adapted to human capacity, the only one on which truth can be found is easily proved: on it alone can prevision of phenomena depend. Prevision is the characteristic and the test of knowledge. If you can predict certain events and they occur as you predicted, then are you assured that your knowledge is correct. If the wind blow according to the will of Borcas, we may, indeed, propitiate his favour, but we cannot calculate upon it. We can have no certain knowledge whether the wind will blow or not. If, on the other hand, it is subject to law, like everything else, once discover this law, and men will predict concerning it as they predict concerning other matters."—Biographical History of Philosophy, Vol. 4, p. 256.

It is true however that if we discovered the law or motives which governed the will of Boreas it might be the same thing. "Even the wind and rain, says Dr. Arnott which in common speech are the types of uncertainty and change, obey laws as fixed as those of the sun and moon; and already as regards many parts of the earth, men can fortel them without fear of being deceived. He plans his voyages to suit the coming monsoon, and prepares against the floods of the rainy season."



science,—the moral sense, though an essential part of his nature, has no foundation in it. It bids him do this, and restrain from that: though he has no power to determine what he shall do, being himself absolutely disposed of by laws as inviolable as those which keep the earth in her orbit, and provide that summer and winter, seed time and harvest, shall not fail. Any theory which fails to recognize man's moral freedom converts his nature into an incoherent delusion, to which we find nothing analogous in the other arrangements of the universe. however human free agency, and this incongruity vanishesconscience ceases to be 'a redundant endowment.'" jection arises from the limited use of language at our command and from our thus applying "necessary" to voluntary action in the same sense as we do to the laws of physical causation. Voluntary action is as much dependent upon the laws of mind as matter upon the laws of physics. As Priestly says-" It must be understood that all that is ever meant by necessity in a cause, is that which produces certainty in the effect." The proper answer then to the above objection of the "National" is, that man is not only governed by the external laws of nature, but by the internal nature or laws of his own mind, of which conscience is one. The pain of burning keeps him out of the fire and protects his body; the pain of conscience keeps him from doing what he considers wrong and protects his mind or moral being. As Buckle says, "On the one hand we have the human mind obeying the laws of its own existence, and, when uncontrolled by external agents, developing itself according to the conditions of its organization. On the other hand we have what is called nature, obeying likewise its laws; but incessantly coming into contact with the minds of men, exciting their passions, stimulating their intellect, and therefore giving to their actions a direction which they would not have taken without such disturbance. Thus we have men modifying nature, and nature modifying man; while out of this reciprocal modification all events must necessarily spring."

However it may suit the wants of certain creeds to deny

the necessity of all our actions, yet those who adopt them. acknowledge it in action, if they deny it in words. such persons expect from certain moral inducements to produce a certain voluntary line of conduct? All the arguments they use to excite our hopes or fears, proceed upon the supposition that mind is subject to certain laws, and that if their arguments are efficient as a cause, the effects desiderated will invariably follow. "Do you think such motives are sufficient to induce him?" is a question with them as pertinent as "Do you think this lever has the power to raise that weight?" But, say the advocates of freedom of will, necessity is not here implied, for though we are obliged to admit a connexion between motives and actions, yet this connection does not appear to us to amount to a certainty. The mind possesses an inherent activity. by which it can at pleasure dissolve this connexion; consequently when motives are presented to induce a particular line of conduct, it is not done with certain expectations of success, and we are not always disappointed if we fail. We make a reservation for a certain liberty of will a person is supposed to possess, which may cause him to resist all our inducements. objection is as forcible when applied to matter as to mind. arises from our not being sufficienty acquainted with the causes necessary to produce the effect we wish. A philosophical experiment may succeed ninety-nine times and fail the hundredth, not from any liberty of will that the materials possess, but from some counteracting cause that has crept in of which we are ignorant, but which farther investigation may discover. with respect to mind, if our arguments are not successful, it is because they are not forcible enough, or they do not apply to the state of mind of the individual, or there is some prejudice still unmoved; and not from any power he may possess of refusing to be moved, by a motive strong enough for the purpose. In the latter case, as in the first, we must not ascribe our failure to the free will of the individual, but to our own ignorance of how to move him, and if we would succeed, we must look in both cases for the hidden cause of the failure.

The character of a man is the result of the organization he received at birth, and all the various circumstances that have acted upon it since, and these, if that were possible, being given, a mental philosopher would predict the line of conduct that will be invariably pursued by each individual, as readily as the chemist can predict the exact result of the mixture of any chemical substances. Man, like everything else around, has received a definite constitution, and he is no more capable of acting contrary to that constitution, and of refusing to be acted upon by the influences that everywhere surround him, than the atoms of matter are capable of resisting the impulses of attraction and repulsion, and the various affinities from which result all the beneficial order and arrangement of the present material system. The same disastrous effects might be expected to result in the one case as the other; for if matter refused to obey the laws that pertain to it, we could not depend upon the causes that are capable of producing certain results to-day being efficient to the same ends tomorrow: and if there were no certain connexion between motive and action, we should never be able to predict what men would be from what they had been; thus reason would be of no use, all progression would cease, and man would be as the beasts, moved by immediate impulses, and confined to an equally limited range of ideas and enjoyments.

SECTION L

THE APPLICATION OF PHILOSOPHICAL NECESSITY TO RESPONSI-BILITY, PRAISE AND BLAME, REWARD AND PUNISHMENT, VIRTUE AND VICE.

So clear is the evidence in favour of Philosophical Necessity that it would never for one moment have been doubted if it had not been for its supposed consequences. It was supposed to lead to fatalism—to darkness and death; to the doctrine of non-responsibility, and consequently to be subversive of the



very foundations of morality. We should never attempt however to stifle truth from its supposed consequences, but either make it harmonise with other truth or quietly wait till we can. had followed this course in this direction we should earlier have discovered that Induction applies to Mind as well as to Matterand that as the great desideratum in Nature is Unity, Law, and Order, we should not have left it out of one-half creation, and that the most important, and having banished Miracle and the supernatural from the physical world, we should not have left it in the world of mind and morals. We should have been able to banish half the misery of life that arises from the supposition that things might have been otherwise—that they ought to have been otherwise, and at the same time we should have banished the cause of at least one-half the crime in the world, that arising from the feeling of revenge and the desire of what is called retributive justice, and the origin and use of what is called "evil," would have been made much clearer. We shall now proceed to trace the doctrine to its legitimate consequences.

RESPONSIBILITY. If a man's actions are determined necessarily by the previous state of his mind, and the circumstances or influences to which he is exposed, and if, consequently, no action of his life could possibly have been different from what it actually was, in the circumstances,-responsibility, in the sense in which it is generally used, is without meaning. A man is usually considered to be responsible, or accountable, for having acted in a certain manner, because it is supposed that he might have acted differently; but this not being the case, all responsibility for such actions would be unjust; besides, as such actions are already past and perfectly inevitable, -- for actions that are already past God himself could not prevent,-it is evident that any such responsibility would be as useless and absurd as it would be unjust. Is then man not accountable for his actions? Most certainly he is, for he can never get away from their consequences, and these are made pleasurable or painful as the actions are right or wrong. All true responsibility must have reference

to the future, never as is commonly supposed to the past. The Creator has attached responsibility in the shape of inevitable pain, moral or physical, to every breach of his laws; or if not in all cases of positive pain, of diminution or loss of happiness. He has given to man a frame, "fearfully and wonderfully made," and his happiness is dependent upon the proper regulation and protection of its complicated mechanism. anything that has a tendency to injure this constitution, either bodily or mental, pain follows and obliges him to desist. if he put his hand into the fire, he is subjecting it to an influence that would soon destroy it, and with it all the powers and pleasures that are dependent upon its use; the pain that he feels, therefore, or the punishment that is inflicted upon him for doing so, quickly obliges him to take it out. Here, then, he is responsible for the ignorance or carelessness that induced him to put his hand where, from the relation that heat bears to the body, it must be injured; and this whether the action be voluntary or not; for the object of the pain being to deter the individual and others from the breach of this law, the pain must be attached to the act. So also with reference to the mind; if a man commit an act of injustice or treachery, he suffers its consequences in the distrust and resentment of his fellow-men, though his evil action be the result of bad education and temptation; because the certain connexion of such conduct with such consequences, is necessary to make men attach importance to good education and to the avoidance of temptation. If a man says what is false, he suffers from not being believed for the future, and so every fault has its unpleasant consequences. Not an evil thought can pass across the brain, without leaving its trace, in less aptitude for good, and therefore for pleasurable sensation. This view involves a much stricter responsibility than the common one, for we are thus accountable to our Maker for the breaking of his laws, whether such breach proceed from our ignorance, our convictions, or our feelings; whether our actions be voluntary or involuntary, or proceed from free will or necessity; and we are made to suffer for that which is already done,

that the further evil may be prevented which would ensue from the repetition of the offence. Man is, thus, not only responsible for that portion of his happiness which depends upon his own body and mind, but for that which he derives from the great body of Society, of which he is a member; and if he commit any offence against this latter, that is, if he inflict any injury upon it, he is accountable in the same sense, and in no other. For such breach of the moral law he suffers, or ought to be made to suffer, just so much as will prevent the same fault in future. If its recurrence could be prevented without any suffering at all, we only do an injustice to the individual in subjecting him to it, since he could not have acted otherwise. If we are made to suffer, then, it is for our protection, and "punishment" is for our own good; and to ask to be relieved from it, or to have our sins forgiven, would be asking for that which would simply do us an injury. "Forgiveness of sins" then is out of the question. To suppose that God is angry and wishes to take vengeance, is transferring human passion to the Creator, and to ask Him to interpose miraculously to save us from the consequences of our actions, would be asking for the greatest curse he could bestow upon us, for such consequences are all that reason has for its guidance. "Forgiveness of sins," "Atonement," "Vicarious Sacrifice," are all based upon the common but erroneous notions of the nature of "Sin" and the use and necessity of "punishment." Then "let the dead past bury its dead." The past is past and cannot be altered or recalled, and what is more, nothing could have hap-The full conviction of this truth would save pened differently. half the misery there is in the world, which is made up of vain regrets for events which it is supposed might and ought to have been otherwise. Experience, or knowledge of the consequences of the past, ought to guide our conduct for the future, but REMORSE should be banished from the world. Repentance, so far as it consists of a full perception of evil consequences, and sorrow and humiliation for the state of mind which caused them, and which may therefore influence our coming actions, is

a rational and wholesome feeling,—but when, as is too generally the case, remorse is mixed with it, it is a useless sacrifice of happiness based upon popular error.

Praise and Blame. Upon a cursory view of the subject, the difficulty naturally arises, that if actions could not have been otherwise under the circumstances, then merit and demerit are mere names, denoting only the character of certain actions; and that, in consequence, man is not, properly, the subject of praise and blame. Upon reflexion, however, it will be found to be just the reverse; for if there were no necessary connexion between motives and actions, if a man might refuse or not to be guided by the former, then, indeed, all praise and blame would be useless; for we praise a certain line of conduct because it is right and that it may be pursued, or we blame it that it may be forsaken, and our approbation or disapproval act as motives that are calculated to produce one kind of action more than another.

We naturally approve of, or praise, that which is agreeable to us, from its being right or otherwise, and disapprove of, or blame, that which is disagreeable; and that this sense of what is pleasant or unpleasant to us, may have proper weight with those upon whom our happiness in a great measure depends, nature has given us a disposition by which such praise or blame become a great source of enjoyment or discomfort, and a strong motive to incite to some actions and to restrain from The expression of praise and blame, of approbation or disapprobation is, therefore, necessary and proper, although a man could in no case act otherwise than he did act under the What a complete revolution will take place in circumstances. society when the expression of this praise and blame shall be no longer made instinctively, but be brought into accordance with the doctrine of necessity! A child knocks its head against the table, and thinking the table had a choice in the matter, turns round and beats it. So man, "a child of larger growth," knocks his head against some rough corner of another's disposition,—he meets with some injury or offence, and not knowing, or not thinking, that the offender could not possibly have done otherwise, he acts as instinctively as the child, and expresses his disapprobation in all probability in the same way. What, however, would be the conduct of a person brought up from infancy as a disciple of necessity? He would know, that of whatever action a person might have been guilty against him, in the state of such an individual's views and feelings he could not have acted differently, and that it would be as absurd to give way to the feeling of anger in this case as in that of the That to produce a different effect towards himself he must alter the cause, that is, he must change the views and feelings of the offender towards himself. If the offence were a personal insult, and the object to prevent it in future—if knocking the person down were the best mode of doing this, why then knock him down; but this display of the combative propensity would probably produce a similar exhibition on the part of the other, and if they were well matched they would leave off just where they began. But if inquiry were calmly made into the motive of the insult, and the cause removed if possible-according to the dictates of the moral feelings, with kindness and justice-in the generality of cases there would be no fear of its repetition. It can only be this mode of looking at injuries, and the temper of mind consequent upon it, that can give that "soft answer that turneth away wrath." By the predominance of feelings, the produce of opposite views to these, many minds dwell in a state of perpetual irritability, occupied in resenting not only real injuries, but imaginary offences; and it is a question, whether a larger amount of unhappy feeling in the world is not occasioned by the latter class than the former.

The evils resulting from the ordinary mode of considering this subject are very numerous. The common notions concerning merit and demerit, praise and blame, and responsibility, give rise to the worst abuses of our selfish propensities, to envy, hatred, malice, and all uncharitableness. If we were early taught to feel and know that a man's character is the result of

his mental constitution, and the circumstances in which he is placed, all such feelings would be kept in check from the mere absurdity of giving vent to them. True, the exhibition of anger and of those feelings that induce us to take immediate vengeance for an offence, may to a certain extent, have the effect of preventing offences; and among the inferior animals this is apparently the legitimate and only mode of doing so; but man possessing additional faculties, his reason enables him to foresee the direct consequences of open violence, and to avoid them, whilst producing secret and much more complicated mischief. How is it possible to "Love our enemies, to bless them that curse us, and to do good to them that hate us," so long as we look upon them as the cause of our suffering in the sense that they had liberty to do otherwise? But when they are considered as mere instruments, as acted upon by causes over which they had no control, then indeed we may "love our enemies," love them as fellow-creatures, pity them as being in all probability greater sufferers than ourselves, and with calmness and reason, guided by benevolence and justice, endeavour to remove the cause of their enmity; or if that be impossible, to guard ourselves against it with as little suffering as may be to them.

It may be said perhaps, it is impossible but that by a law of our nature we should hate that which is unpleasant to us. This is true, but let the feeling receive its right direction, let us hate vice, not the vicious. The precautions we take to secure ourselves against that which injures us, are not necessarily connected with our hatred of the injurer. We guard ourselves sedulously against the poison of the viper, and the destructive propensities of the tiger, although, knowing as we do that their power and disposition to injure is the inevitable condition of their nature, we cannot be said to hate them.

A man cannot be a true Christian or a true philosopher, until he is a practical Necessitarian. It is then only that he can exercise a perfect control over his own feelings, and cease to be acted upon, to his own discomfort, by the bad feelings of others.

It is then that he feels himself master of his own fortune in the strictest sense of the word, for he knows that nothing is uncertain, but that he has only to seek and apply the proper cause, and the effect desired will inevitably follow.

REWARD AND PUNISHMENT. After considering Responsibility, and Praise and Blame, little remains to be said under this head. We have shown that the responsibility of man consists in his experiencing always the natural and necessary results of his actions, and that praise and blame, and consequently reward and punishment, can be employed by the Necessitarian only as motives to the adoption or abandonment of any given line of conduct.* Desert and merit being entirely out of the question, where a man could not possibly have acted otherwise than he did act, so also are all rewards to which a man may consider himself entitled. The rewards of nature are the pleasureable sensations, the happiness consequent upon the study and observance of, and obedience to, her laws; her punishments are the pain that follows the breach of them. It is in this way that Nature is more powerful than mere doctrine all over the world, and it is well for mankind that she is so, for had man been a free agent, such as he is represented, capable of observing and following the pernicious creeds and dogmas that selfishness has never failed to instil into his mind, he must long since have ceased to exist on this earth. But in spite of what a man professes to believe, he cannot help invariably seeking, in practice, that which is pleasurable, and avoiding that which is painful; and this it is that secures to him, on all occasions, the

^{*&}quot;Please Sir I could not help it," says a school-boy very truly to his master, with reference to some offence he had committed; "I know you could not my dear boy," says the master, "you left out of consideration the flogging you were to have if you did it; when I have given it you, you will think of it another time, and it will enable you to help it for the future." Whether we hold the doctrine of free-will or necessity, whether our conduct be voluntary or involuntary, it can never save us from the consequences of our actions, and the great object of all education and government should be to make them clear and inevitable.

object of his being, a balance of enjoyment; and preserves that consistency in his conduct, which would be lost, if his actions were guided solely by his opinions. This balance of enjoyment is the natural reward which a man receives for having sought for happiness where it was to be found; but given to him without any desert on his part. So suffering is the punishment that nature inflicts upon those who have sought for happiness where it was not to be found. But we nowhere find nature inflicting this punishment, excepting for the good of the person offending, or of society at large, which, as man is necessarily a part of society, is the same thing; for where a man has offended against the physical or organic laws of his being, so that the pain or punishment resulting can be of no use in a remedial point of view, the pain does not last long, for death mercifully takes him from this state of existence.

But, says the advocate of freedom of will, it is not enough that punishment should be merely remedial, that it should merely have for its object the prevention of the repetition of the offence—a criminal should be made to suffer in exact proportion to the fault he has committed; and this idea of retributive justice, as it is called, but more properly vengeance, lies at the foundation of all criminal codes throughout society, is the main cause of their inefficiency, and of a vast amount of unnecessary suffering. It is assumed that by allotting a certain amount of suffering to a certain amount of "sin" all wrong is made right, and God is necessarily satisfied, but to the consistent Necessitarian, any punishment beyond such as is requisite for the purpose of amendment, must appear an injustice of the highest degree towards the individual upon whom it is inflicted, because it is evident that under the circumstances in which he was placed, and with his views and feelings, his conduct was inevitable. Our Criminal Codes cannot be radically reformed and made effectual, until this view of the question with respect to accountability and punishment becomes general; until the very idea of retribution be dismissed from our thoughts, and, consequently, the principle of it from our Institutions.

wicked must be regarded as the truly unfortunate of the earth, and punishment the means which true kindness would dictate of correcting vicious habits, and of clearing away the obstacles to that large amount of enjoyment of which their bad dispositions deprive them.

VIRTUE AND VICE. But if philosophical necessity be true, what becomes of all the distinctions between virtue or vice? If all actions are necessary, are not all equally virtuous or vicious? They would undoubtedly be so if there were no difference between pleasure and pain, happiness and misery; but so long as there is this difference, the inherent distinction between actions must continue, as they tend either to one state or the other. Thus, if they tend, all things considered, to produce happiness, they are virtuous; if they tend to misery, they are vicious; and it would be difficult to prove any other distinction between virtue and vice, if considered with reference either to this world or another.

Much has been said and written upon this subject, and although plain in itself, so much has it been mystified, that it has become the general opinion that there is something in actions themselves, that places them in the one class or the other. order," says Edwards, "to a thing's being morally evil, there must be one of these things belonging to it; either it must be a thing unfit or unsuitable in its own nature; or it must have a bad tendency; or it must proceed from an evil disposition, and be done for an evil end." Now if it were possible to conceive of anything unfit or unsuitable in its own nature, supposing that the doctrine of necessity were unproved, it is impossible to believe it together with the conviction that nothing could possibly have been otherwise than it was, and that everything was ap-The same act according to pointed by an All-Wise Creator. circumstances, is sometimes either virtuous or vicious: thus the act of killing a man, when done in our country's defence, is meritorious, but when committed to suit private revenge or interest, it is murder, and a crime of the deepest dye. We



might easily multiply instances to show that in the moral world, there is no difference in the character of actions, when considered separately from their effects upon happiness or misery, but that will be unnecessary, as they must present themselves to every one. "Morality is the science of the means invented by man, to live together in the most happy manner possible." It is impossible to conceive that God can have any other view, in laying down laws, than the happiness of his creatures; to make man a better is to make him a happier being.

Are all therefore to be put upon the same level in society? Are the vicious upon an equality with the virtuous? when the tiger and the lamb are so. When the lap dog gives place to the wolf, when vipers are hidden in men's bosoms; in fact, when we prefer the company of that which gives us pain, to that which bestows happiness. Virtuous, holy, pure, and other terms of like import, have no meaning when applied to actions, in any other sense than as they tend to happiness or misery; and when we speak of any kind of discipline as having a tendency to perfect our character, to make us more pure and holy, we cannot mean anything else but that it tends to increase our capacity of enjoyment, and our power of adding to the happiness of all around. That man is most perfect who is capable of giving and receiving the greatest sum of enjoyment. Neither can we admit that actions are virtuous or vicious. according to the motives that dictate them, for all motives are equal, being all dependant, like the actions to which they give rise, upon the mental or bodily constitution and circumstances. "All motives," says Bentham, "are abstractedly good; no man ever has, ever had, can, or could have, a motive contrary to the pursuit of happiness or the avoidance of pain." All feelings, both propensities and sentiments, in which motives generally arise, good or bad, whichever they may be called, are mere blind impulses requiring the guidance of the reason, which shows that the intellect must be cultivated, in order that we may do well, as well as mean well. It is not enough to

wish to do right, we must set ourselves diligently to learn what is right. If we do mischief we are responsible for it, whatever our wish or motive might have been. Benevolence and Destructiveness are equally hurtful if misdirected or unrestrained. We must be judged then by our actions, not by our motives, for we are as much responsible for the direction of our feelings as for the feelings themselves.

CHAPTER II.

ON THE ORIGIN, OBJECTS, AND ADVANTAGES OF EVIL.

EPICURUS says, "Is God willing to prevent evil, but not able? Then he is not omnipotent. Is he able but not willing? Then he is malevolent. Is he both able and willing? Whence then is evil?" It is probable that what we call evil is the best, if not the only means of producing and preserving the good. Is our calling it evil then merely a misnomer, or must we not rather admit that we are obliged to limit the power of God, and that He cannot produce the good in its full amount without the evil, and that one is absolutely necessary to the production of the other?

Turnbull, in his Christian Philosophy, as quoted by Edwards, observes, "If the Author and Governor of all things be infinitely perfect, then whatever is, is right; of all possible systems, He has chosen the best; and, consequently, there is no absolute evil in the universe. This being the case, all the seeming imperfections or evil in it are such only in a partial view, and with respect to the whole system they are good."

"Whence then comes evil? is the question which hath in all ages been reckoned the Gordian knot in philosophy. And, indeed, if we own the existence of evil in the world in an absolute sense, we diametrically contradict what hath been just now proved of God. For if there be any evil in the system that is not good with respect to the whole, then is the whole not good, but evil, or at the best, very imperfect; and an author must be as his workmanship is; as is the effect, such is the cause. But the solution of this difficulty is at hand; that there is no evil in the universe. What! are there no pains, no imperfections? Is there no misery, no vice in the world? or, are not these evils? Evils indeed they are; that is, those of one sort are hurtful, and those of the other sort are equally

hurtful and abominable; but they are not evil or mischievous with respect to the whole. * * * God intends and pursues the universal good of His creation; and the evil which happens is not permitted for its own sake, or through any pleasure in evil, but because it is requisite for the greater good pursued."

Archbishop King says, "Natural evils proceed from the original condition of things, and are not permitted by God, but in order to prevent greater. Neither the goodness of God, nor the perfection that belongs to the nature of things, required that all natural evils should be removed: for some created beings have evils inherent in their very natures, which God must of necessity either tolerate, or not create those things in which they do inhere."*

Leibnitz says "God has permitted evil, because it is enveloped in the best plan which is found in the region of possibles, and that divine wisdom could not fail to have chosen." Dr. Chalmers, commenting on this idea, remarks: "He could not by this hypothesis, expunge the evil that is in our actual universe, but at the expense of a shortcoming from the maximum of good that is rendered by it. We cannot positively affirm this to be true; but we can at least say, that for aught we know, it may be true."

The previous inquiry into the nature of virtue and vice is essential to the proper understanding of this question of acknowledged difficulty, and the Necessitarian is alone able to put it in its simple, true, and proper light. The supposition that man could have done differently in the state of mind and circumstances in which he was placed, has been the cause that has enabled Theologians to introduce most of the mystery that ordinarily is made to surround this subject. We hear consequently of supreme justice; of judicial retribution; of the sanctity of moral laws, irrespective of the tendency of such laws to produce good; of the sovereignty of the Almighty; and that the Most High must vindicate his authority, &c., as if God had

^{*} King on the Origin of Evil, vol. i., p. 220.

some other object in his laws, either physical or moral, than the good of his creatures, or as if like some earthly potentate his dignity and self-importance could be outraged! Now all this is perfectly childish, and when we know that "nothing could have happened but what did happen," or as the Rev. J. Mailler says, "every change, however slight, and every movement, however minute, and every event that comes to pass, are fore-ordained and regulated by the Almighty," equally untrue.

The doctrine of Philosophical Necessity assumes that there is no such thing as sin and evil, only pains and pleasures, the pains being necessary to the production of the pleasures: in fact, virtue is virtue only because it promotes the one and avoids the other: and if the directly opposite course conduced to the highest good, that would be virtue and not what we now assume to be such. The virtues have all been named accordingly-in accordance with this tendency to produce the general good; it is impossible therefore, in a general sense to do evil that good may come, because if the general good did come from what we call evil, it would not be evil but good. The supposition that there is something in actions themselves, something unfit or unsuitable in their own nature, that renders them virtuous or vicious, unacceptable to God, has tended to involve the subject in mystery. The distinction between physical and moral evil however, cannot be maintained: sin, vice, and moral turpitude, are only evils from their tendency to produce physical evil, that is, pain and misery; consequently, there is no evil but pain; pain, either mental or bodily, in all its different degrees, from mere uneasiness, to that agony which can be supported only for a few moments: and the question, on being extricated from all those difficulties with which the notion of man's free agency has encumbered it, assumes its simplest form, viz., what is the use of pain?

The Deity, of course, cannot but be regarded by the Necessitarian as the Author of all things, of the evil as well as the good; and that evil has its use, and that a benevolent one, cannot

^{*} Philosophy of the Bible, p. 237.

be doubted by him whose knowledge of our Creator has been gathered from the numberless instances of benevolent design throughout the universe, which, whilst they manifest the power of God, show us plainly the direction of that power towards the production of the greatest possible enjoyment. If, therefore, it can be demonstrated that pain, which is the only evil, is a necessary agent for the production of this balance of enjoyment; that it is the only effectual guardian of that system of organization upon which our happiness depends; that it is essential even to our very existence; will not the question in part be stripped of its mystery, and the ways of God to man be justified even to our finite comprehensions?

To creatures possessing our modes of intelligence, there are some propositions which appear by their nature to be absurd and contradictory; thus, that the half of a thing can be equal to the whole, and that an event which has already taken place can be caused not to have taken place, we instinctively feel to be contradictions, and the reverse of each of these propositions we constitute into an axiom which serves as a basis of reasoning. In the same way we deduce the axiom that God could not create an intelligence equal to himself; for, to suppose that he could do so would involve the absurdity of two infinite existences. All created intelligences must, therefore, be finite; limited in their powers of knowing; and such limitation implies a certain degree of imperfection which must extend throughout the whole universe of mind. But we cannot conceive of perfect happiness consisting with any degree of imperfection; for in the space between finite and infinite knowledge there must be numberless things, the nature and tendency of which the highest order of created beings cannot know, and with reference to which they must be continually liable to do wrong; that is to act in opposition to the laws which constitute the definite character which everything has received, and in disregard of the relation which has been established between such objects and the subject or intelligence, thus causing a perpetually increasing amount of disarrangement. To check, therefore, that utter

subversion of order, and consequently of happiness, which the necessary ignorance of created intelligences would occasion, a something must be appointed which shall constantly act as a warning whenever these laws are transgressed. It is doubtful whether a monitor more effectual or better adapted for the purpose than Pain could possibly have been selected.

It is probable even that no part of the creation is free from evil, in the sense in which we thus use the term, as it is the invariable accompaniment of that error which is consequent upon the necessary limitation of the powers of knowing. George Combe in his "Constitution of Man" has very clearly shown that "All objects that exist, animate and inanimate, have received definite qualities and constitutions, and that good arises from their proper, and evil from their improper use." The field of choice is immense, and our powers are limited; how then are we on all occasions to distinguish the proper from the improper use? Pain and pleasure attend the selection and thus guide and even dictate our choice. This is the most effectual teaching we can have, and very probably the best possible arrangement that can be made. Why then call the pain that seems absolutely necessary to warn us when we are doing wrong, that is, making an improper choice, an evil?

Not only is Pain the best Schoolmaster, but much of what we call evil is nothing but the natural adaptation of beings to the necessary conditions of their existence, on the principle of "Natural Selection" by which the weak and bad are destroyed, to make room for the strong and good, which only ought to be preserved. In fact, what we foolishly call evil, is only the natural and necessary law of progress, from good, ever on to better and better. With respect to the employment of pain for the correction of error in other worlds, it must be mere matter of conjecture, for "what can we reason but from what we know?" It would appear however to be probable that wherever there are beings susceptible of enjoyment there also is pain.

SECTION I.

PAIN CONSIDERED AS THE NECESSARY AND MOST EFFECTUAL
GUARDIAN OF THAT SYSTEM OF ORGANIZATION UPON
WHICH HAPPINESS DEPENDS.

As the capability of enjoyment is ever found to increase with complexity of structure, the power of feeling pain always increases in the same proportion. For the more complex and delicate the nervous system, and consequently the more varied and intense the powers of thinking and feeling, the more necessity has it for a protection from the numerous surrounding influences which would tend to throw it into disorder, or to destroy it. Pain, in many cases intense pain, could alone compel us to desist from subjecting our body to such influences, and thus destroying the power of enjoyment dependent upon the perfection of our organization. Extraneous substances introduced into the body, are, by a long and intricate process, fitted for becoming part of a living structure, and by a still further process are adapted not only for living, but for feeling and thinking: -out of the same blood are formed all the different materials of which our frame consists, each new atom being deposited in its proper place, and the old materials, by a variety of processes, carried out of the system, or mixed up with new matter to be revivified. It is necessary that each atom should assume exactly its proper place in the system, and if any derangement or artificial obstruction prevents this, we are immediately warned and made conscious by pain that something is wrong, the pain being generally in proportion to the importance of the derangement.*

[&]quot;Unless the whole constitution of the world were altered our very existence depends upon our sensibility to suffering. " " Without the warning voice of pain, life would be a series of disasters. " " Without physical pain, infancy would be maimed, or perish, before experience could inform it of its dangers. Lord Kaimes advised parents to cut the fingers of their children 'cunningly' with a knife, that the little innocents might associate suffering with the glittering blade before they could do themselves a worse injury; but if no smart accompanied the wound, they would cut up their own fingers with the same glee that they cut a stick, and burn them in the candle

We thus find man possessed of a complicated apparatus, consisting of numerous functions; first, those necessary for the preservation of life, and secondly, those essential for the support of the nervous system upon which sensation depends; and he is surrounded on all sides with objects bearing a fixed relation to himself, the greater part causing pleasurable sensations, but all, when calculated to injure him, causing painful ones. Experience, thus tutored by pleasure and pain, is his only guide as to what is injurious and what salutary; and real Education consists in imparting a knowledge of the nature and tendencies of everything around us.

with the same delight that they burn a piece of paper in the fire. Without pain we could not proportion our actions to the strength of our frame, or our exertions to its powers of endurance. In the impetuosity of youth we should strike blows that would crush our hands and break our arms; we should take leaps that would dislocate our limbs; and no longer taught by fatigue that the muscles needed repose, we should continue our sports and our walking tours till we had worn out the living tissue with the same unconsciousness that we now wear out our coats and our shoes. The very nutriment which is the support of life would frequently prove our death. Mirabeau said of a man who was as idle as he was corpulent, that his only use was to show how far the skin would stretch without bursting. Without pain, this limit would be constantly exceeded, and epicures experiencing no uneasy sensations, would continue their festivities until they met with the fate of the frog in the fable, who was ambitious of emulating the eige of the ox. Sir Charles Bell mentions the case of a patient who had lost the sense of heat in his right hand, and who. unconscious that the cover of a pan which had fallen into the fire was burning hot, took it out and deliberately returned it to its proper place to the destruction of the skin of the palm and fingers. This of itself would be an accident of incessant occurrence if the monitor were wanting which makes us drop such materials more hastily than we pick them up. Pain is the grand preserver of existence, the alcepless sentinel that watches over our safety, and makes us both start away from the injury that is present, and guard against it carefully in the time to come.

The same Infinite Wisdom which has contrived pain for our protection has also distributed it in the manner which causes it to fulfil its defensive purposes with the least suffering to its subjects. * * * The skin is the advanced guard through which every injury to the other parts must make its way. The skin, therefore, required to be the seat of a peculiar sensibility both for its own security and to impel us to flinch from the violence which would hurt the flesh beneath. Forming our notions of pain from what we feel at the surface, we imbibe the idea that the deeper the wound the more severe would be the suffering, but this, says Sir Charles Bell, is delusive, and contrary to the fact. The surgeon, he adds, who makes use of the knife, informs the patient that the worst is over when the skin is passed, and if, in the progress of the opera-

It is easy to make apparent the objects and advantages of evil, as it is denominated, in the physical world, by showing that the benevolent guardianship of pain alone could maintain our bodily frames in the state requisite for the enjoyment of which they are the source. Thus, if a person fall into the fire,

tion, it is found necessary to extend the outer incision, the return to the skin proves far more trying than the original cut, from the contrast it presents to the comparative insensibility of the interior. The muscle is protected not by its own tenderness, which is by no means acute, but by the tenderness of its superficial covering, 'which affords,' says Sir Charles, 'a more effectual defence than if our bodies were clothed with the hide of a rhinoceros. dowed the delicate internal textures with an exquisite susceptibility to the gash from a knife, or a blow from a stick, would have been superfluous torture. The end is effectually attained by spreading over them a thin layer of highly sensitive skin, which is too intolerant of cuts or bruises to allow any harm to approach it, which it is in our power to avert. In addition to the protection which is thus provided against occasional dangers, the skin by its sensibility, is essential to our existence under the hourly conditions of life. It is the skin which acts as a thermometer to tell us whether the temperature is suited to our organization, and warns us alike to shun pernicious extremes of heat and cold. It is the skin again which prompts the instinctive restlessness that preserves the entire frame from decay. * * Even in the unconsciousness of alumber the contrivance continues to act, and, were it otherwise, sleep, instead of being 'nature's sweet restorer,' would derange the circulation and cripple our frames. * * The nerve of the coat of the eye is sometimes injured, and is no longer sensitive to the dust which adheres to the ball. Then the lid is not excited to work or the tears to flow. The particles which are carried into the eye cease to pain, and being allowed to remain, they set up inflammation, and the inflammation renders opaque the transparent covering through which the light flows. Blindness is the result, and the sight itself is found to be dependent upon the refined sensibility of the outer membrane. * *

"As pain has been diversely distributed over the body of man in the manner which his safety and comfort requires, so it must be meted out to each order of beings in the degree which consorts with their position in the world."—Quarterly Review, Jan., 1858, p. 190, et seq.

That pain only exists among animals—the highest order of sensitive creatures where it can serve a purpose, is a very comforting idea, and it is becoming general among naturalists. As it exists in different degrees in the human body, according to the purpose it is intended to serve, so it may and doubtless does exist in different degrees in the sensitive creation, but precisely to what extent,—so as to be able to say, this creature does not feel pain at all, our present means of knowing do not enable us to specak positively. Look at the expression of agony in the face of a fly in a spider's web and hear its cries, and yet it seems to do as well almost without its legs as with them. We are not yet able to say which are nerves of sensation and which of motion in a fly, or even whether in any case nerves of sensation are capable of pleasurable feelings only and not at all of painful ones.

pain compels him to extricate himself in the most speedy manner possible; if a limb be fractured, or any important bodily function deranged, pain obliges him to seek a remedy and to repair the mischief. In all these cases, the benevolent intention to the individual sufferer is evident, and he who would consider bodily pain as an evil and not as a good, is like the unruly child that quarrels with its nurse for not allowing him to play with a razor, or to drink poison. But in the moral and intellectual world, suffering, though no less remedial, is less evidently so to mankind at large; although it is incalculable the extent to which the comfort and welfare of all may be enhanced, when it is universally understood that mental as well as bodily suffering is intended to apprise us of the infringement of some important law of nature upon which the preservation of happiness depends. A large class of those sufferings which are thought to be purely mental, may, upon further investigation into the intimate connection between matter and mind, be found to be solely referrible to peculiar states of the bodily system, and may be capable of much alleviation when the corporeal functions upon which they depend shall be better known, so as to come within the province of medicine.

With respect to the sufferings to which we are liable in consequence of the relation in which we stand to society, the benevolent tendency is less obvious, by reason of our present ignorance as to the nature of that relation, and of our own mental constitutions. Our ideas of justice have been formed upon notions of free-will; we have regarded ourselves strictly as individuals, instead of mere parts of the great body of society, united to it by ties quite as strong as those that unite one part of our body to another, not indeed by contiguity of atoms, but by contiguity of feeling; and it would be quite as reasonable for one part of the body to object to suffer for the derangement of another part—for the lungs to expostulate with the stomach, 'Why must I suffer for your imprudence?' as for one man to complain to the body of society, of which he forms only a member, 'Why must I individually suffer for your misdeeds?'

The same answer might be given in both cases, that, as one part of the body could not exist without the other, an injury to one is felt by all, that all may feel interested in the restoration of the injured member; that, as one man could not exist (in a state in which existence would be a blessing) without society, he suffers from the sins of another, that he may have an interest in removing the ignorance or ill-feeling from which he suffered, and in keeping every member of the general body sound. Society is, in fact, so organized, that so long as there is one of its members ill-disposed or ignorant, all are liable to pay the penalty; and although this distribution of evil may not seem in accordance with the common notion of justice, viz., that each man should suffer only for his own misconduct, yet if it can be shown that each individual gains infinitely more than he loses by such an arrangement, justice cannot be said to be outraged by a system which produces the greatest possible happiness to all; or if it can, injustice becomes the virtue and not iustice.

The following is a pleasing picture of the advantages we derive from living in society: Dr. Arnott says-" Every one feels that he is a member of one vast civilized society which covers the face of the earth; and no part of the earth is indifferent to him. In England, for instance, a man of moderate fortune may cast his looks around him and say with truth and exultation, 'I am lodged in a house that affords me conveniences and comforts which some centuries ago even a King could not command. Ships are crossing the sea in every direction to bring what is useful to me from all parts of the earth. ·In China, the men are gathering the tea-leaf for me; in America they are planting cotton for me; in the West India Islands, they are preparing my sugar and my coffee for me; in Saxony they are shearing the sheep to make me clothing; at home, powerful steam-engines are spinning and weaving for me, and making cutlery for me, and pumping the mines, that minerals useful to me may be procured. Although my property is small, I have post-coaches running day and night on

all the roads, to carry my correspondence, and I have protecting fleets and armies around my happy country, to secure my enjoyments and repose. Then I have editors and printers, who daily send me an account of what is going on throughout the world, among all those people who serve me. And to crown the whole, I have books; the miracle of all my possessions, more wonderful than the wishing-cap of the Arabian Tales; for they transport me instantly, not only to all places, but to all times. By my books I can conjure up before me, to vivid existence, all the great and good men of antiquity; and for my individual satisfaction I can make them act over again the most renowned of their exploits: the orators declaim to me: the historians recite, the poets sing: and from the equator to the pole, or from the beginning of time until now, by my books I can be where I please." Such has been the effect of the combined powers of man, giving "to each individual of the civilized millions that cover the earth, nearly the same enjoyments as if he were the single lord of all."* Compare these advantages with those which an individual might possess by his own unaided powers, and it is evident how much more he gains by the social arrangement than he loses by being a part of the The object of creation is to produce the largest great whole. possible sum of enjoyment to all, considering individuals not as individuals, but only as parts of the sensitive world, and it is to the practical ignorance of this wise arrangement, and to the tendency that all have to individualize their enjoyments, that we must attribute much of the moral evil, or mental pains, now prevalent throughout society? The advantages that ought to be derived by the race generally from the progress of civilization, are too much monopolized by the few, whose happiness, meanwhile, would be far better secured if they were made to participate only in the general well-being. The overgrown wealth which tempts the possessor to the destruction of the power of enjoyment which nature gave him, would suffice to call into healthy and vigorous action hundreds now cramped

^{*} Elements of Physics, Introduction, p. 26.



and stunted under the chilling influence of want. The sum of ease and leisure which eats into the soul of the indolent in the lap of luxury, would refresh the minds, and cheer the spirits of a multitude whose incessant toil furnishes the perverted blessing to its victim. The object and advantage of what is called moral evil then is to extend these advantages to the whole of mankind.

What then, will it be said, are crimes against the person and property, robberies and murders, good upon the whole to society? These evils bear the same relation to the body of Society, as physical evils do to our own bodies, and are intended for the same purpose—to secure the health and happiness of the system. Some vital organ is diseased, and the consequent pain drives the individual to seek a remedy before the organic functions are destroyed. Robbers and murderers are diseased parts of the body of society, and the evils resulting from the inroads of such parties, serve to induce men to look to the causes of crime, and to apply those measures that are calculated to restrain it; thus diminishing by the most direct means crime, and the suffering thence resulting.

It has been objected that virtue does not, in the present state, on all occasions, produce a balance of good to the virtuous. As a general rule, it is admitted that it does so, and that when the laws of nature have free operation, there are no exceptions; but it is urged, that since the laws and social institutions of mankind are at variance with the laws of nature, particular cases do occur in which a man suffers for acting virtuously.

Virtue, to the Necessitarian, means that line of conduct which, all things considered, shall be productive of the greatest happiness to all. Now suppose that in consequence of some human law made for individual advantage, or the advantage of a class, a person in calculating the results of a certain action, perceives that though it may tend to the advantage of the whole, yet that he individually must suffer by it. Still the strength of his moral faculties, his innate love of virtue, and

the persuasion in which he has been brought up, that virtue is the best policy, induce him to choose the virtuous path. What good arises from his suffering in the cause of virtue? Thus much. The evil he suffers induces him to look to the cause—he discovers it in the unjust law, and he joins others who have felt the ill effects of the same law, in obliging legislators to repeal it. It is in this manner that the state of society is continually improved. But this particular individual may not live to enjoy the fruits of his virtue—how then is he benefited by it? He has been benefited all his life, by the state of society in which he has lived having been improved by similar means: others have suffered, in the past, more for him than he has for the people now in being, and he is a proportionate gainer. He reaps in this way, the reward of virtue, though not of his own individual virtue.

As earthquakes, storms, and hurricanes tend to restore the equilibrium of nature's powers, a few suffering by them, but thousands benefiting, so moral tornadoes help to maintain communities in a healthy state.

By the French revolution, the moral atmosphere of France was rendered far more favourable to the growth of virtue, and, consequently, of enjoyment, to the whole of its inhabitants.*

"History, looking back over this France through long time, back to Turgot's time, for instance, when Dumb Drudgery staggered up to its King's Palace, and in wild expanse of sallow faces, equalor and winged raggedness, presented hieroglyphically its Petition of Grievances, and for answer got hanged on a 'new gallows, forty feet high,' confesses mournfully that there is no period to be met with, in which the Twenty-five Millions of France suffered less generally than in this period which they name Reign of Terror! But it was not the Dumb Millions that suffered here; it was the Speaking Thousands, and Hundreds, and Units; who shrieked and published, and made the world ring with their wail, as they could and should; that is the grand peculiarity. The frightfullest Births of Time are never the loud-speaking ones, for these soon die; they are the silent ones, which can live from century to century! Anarchy, hateful as Death, is abhorrent to the whole nature of man; and so must itself soon die."

"Wherefore let all men know what of depth and of height is still revealed in man; and with fear and wonder, with just sympathy and just antipathy, with clear eye and open heart, contemplate it and appropriate it; and draw innumerable inferences from it. This inference, for example, among the first:



The evils of WAR present great difficulties to those who regard only its immediate effects upon a people or district; but to such as study the history of civilization, the wars which have accompanied its progress, appear, not as unmixed gratuitous evil, but as the means of working out the good of evil; by forming the character of nations; introducing light where darkness and night before existed; uniting by one bond of brotherhood the people of each nation, formerly consisting of detached individual families or clans; breaking down old and useless institutions that had answered their ends, and now served merely as clogs to the advancement and happiness of society; by clearing away old and decayed states in which, from defective institutions and the misgovernment of ages, the balance of happiness was reversed and turned against the people.

That if the gods of this lower world will sit on their glittering thrones, indolent as Epicurus' gods, with the living Chaos of Ignorance, Hunger, weltering uncared for at their feet, and smooth Parasites preaching 'Peace, peace, when there is no peace,' then the dark Chaos, it would seem will rise; has risen, and O heavens! has it not turned their skins into breeches for itself? That there be no second Sansculottism in our Earth for a thousand years, let us understand well what the first was; and let Rich and Poor of us go and do otherwise."—Carlyle's French Revolution, vol. 3, p. 434.

"Mr. Arthur Young has truly described the deplorable indigence of the French peasantry prior to the Revolution, and the present age has sufficiently experienced the evils arising from the miserable condition of the Irish poor. Posterity, however, will not fail to remark, that the sufferings of the peasantry in France brought about the Revolution, by which the condition of the labouring poor was, in the first instance at least, considerably, and but for the enormous sins they committed during its progress would have been durably improved; and we are ourselves witnesses to the formidable weight which the Irish people have acquired, since the redundance of their population has swelled the ranks of the disaffected, and deluged their neighbours with distress.* * * The misery, therefore, which is the immediate consequence of the redundant population which flows from political oppression, is in fact the means which nature takes to hasten the downfall of the institutions which have occasioned it; like the swelling of a limb which has been wounded or imbibed poisonous matter, it is the effort of nature to discharge the noxious substance which occasions the suffering. The benevolent laws of nature are incessantly operating for the good of man, even when their tendency is most mistaken by numerous observers. At the moment when the misery of Ireland was confidently appealed to, as demonstrating the unavoidable pressure of population upon subsistence, that very misery was the means which she was taking to terminate the distresses of the country, and heal the wounds of the social system."—Alison on Population, vol. 1, p. 247.

The wars of the Crusades, mad as they would appear, yet were the means of spreading throughout Europe the light that broke the bonds of superstition, and gradually led to the Reformation, which again contributed to that freedom of inquiry from which the present advance in science results. The wars between France and England, notwithstanding their many disastrous consequences, helped to strengthen the character of both people, and to give that spirit and hardihood by which the greatness of each has been maintained. The wars of the White and Red Roses, whilst they ravaged our country and weakened the aristocracy, emancipated the people—the masses, from civil bondage, and led to the formation of those institutions upon which British freedom has been dependent.

"War," says Mr. Alison, "is the great instrument by which the agency of some important laws of nature is maintained. It is the decay of military virtue which exposes civilized states to destruction from the efforts of their barbarous neighbours. Their fall does not take place till they have conferred all the benefits on mankind of which they were capable, and till their further continuance would be a misfortune to humanity. The destruction of Nineveh by the Medes, of Babylon by the Persians, of Rome by the Goths, and of Constantinople by the Turks, served only to extinguish so many branches of the human race, in which age had withered the sinews of virtue, and prosperity exhausted the sources of happiness."

Upon the same subject Mr. Combe observes, †"There is more of benevolent arrangement in the tendency of savage and barbarous tribes, to wage furious wars with each other than at first sight appears. The Irish peasantry are still barbarous in their minds and habits, and but for the presence of a large army of civilized men, who preserve the peace, they would fight and exterminate each other. It is questionable whether the miseries that would attend such a course of action would exceed those which are actually endured from starvation. The

*On Population, vol. I., p. 268. † Lectures on Moral Philosophy, p. 228.

bane of Ireland is, that her population has increased far more rapidly than her capital, morality, and knowledge. Where a nation is left to follow its own course, this does not occur. Dissension keeps down the numbers, until intelligence, capital, and industry take the lead. England prevented the Irish from fighting, but she did little to improve them."

Destruction and renovation is the great law of nature. This is infinitely better than that nations should drag out "a slow and snake-like life of dull decay" and decrepid old age. A generation of a thousand millions is swept away about every 35 years; and should it be cleared off a few years before its time, what is that to the necessity for a clear and healthy atmosphere for all the generations to come.

These are some of the effects of Evil considered with reference to society as a whole: with respect to the individuals of which the social body is composed, the subject has been partially considered in treating of Rewards and Punishments.

SECTION IL

PAIN NECESSARY AS A MOTIVE AND STIMULUS TO ACTION.

The greater part of mankind being imbued with a notion that the will is free, are in the habit of regarding more the objects and ends of actions, than the causes which originate them; intent chiefly upon results, the delicate and wonderful machinery that produces these results is comparatively unnoticed. A large part of that which is called "evil" in the world consists of nothing more than the wants, the desires, that furnish the motives to action, and without which we could not maintain our existence for a day. All the faculties of man, when active, constitute wants or desires. Thus he wants food, he wants some one to love, and who shall love him in return; he wants the approbation of his fellows, he wants to see every

one receive that which is his due; his happiness consists in the gratification of these and his other wants, and pain results when from any cause they remain ungratified. But these wants are the impelling forces which irresistibly set him in motion, securing an infinite diversity in the direction of his powers, and a never-ceasing succession of sensations.

Some of our most pressing wants have relation to the very preservation of our existence, the appetite for food, for instance: and could we have been made to live without sustenance, freedom from all liability to the pains of hunger would not compensate for the loss of the pleasures of appetite. Nor would the privilege of requiring no bread, be equal to the advantage we derive from the law of nature which compels us to earn it by the sweat of the brow. Laing, in his "Journal of a residence in Norway," observes: "The food best for a country is clearly that which it requires the greatest exertion of industry and skill to produce. That which requires but little of such exertion, as potatoes, would undoubtedly, reduce a nation to a low state of industry and skill. in the wrong path who would reduce the rate of pauperism in England by reducing the standard of subsistence for the poor. If the English labourers, instead of considering wheaten bread and meat necessary for their proper subsistence, were to be contented with potatoes and salt herrings, the increase of pauperism among them would be in proportion to the diminished value of their food and the ease of obtaining it." "Potatoes are the worst food for a nation to subsist on, because in proportion to their nutriment as food, they require less labour, less exertion of body and mind to bring them to a state of food than any other article of human culture. The planting and digging up, the boiling or baking, are almost the only operations required with the potato; and therefore, the nation which is satisfied with a potato diet must be in a state of sloth and inactivity, bodily and mental. The most complicated manufacture, perhaps, which we have among mankind, and which in all its parts requires the most continual exertion of

human industry and skill, is the production of a quartern loaf from a few seeds of wheat put into the ground."

Thus necessity is the mother of invention. The ordinary and common wants of our nature, of food, clothing, and lodging, always recurring and never satisfied, set us in motion, bring into action all the powers of our mind, and call for that exercise which is as necessary to the mental powers as aliment to the body. Locke says, "all our actions owe their rise to a state of uneasiness" which uneasiness is more or less intolerable as the action to which it would urge us is more or less important. The disposition to activity increases with exercise, the more we do the more we seem disposed to do; and it may with truth be said that never are we so happy as when every moment has its full employment. Take away the common wants of our nature, and you take away that which produces all this activity. that these constantly recurring wants, so far from being infirmities in the body of society, are its very principle of life, the source of all its health and enjoyment.

It is not uncommon to hear the solid and perfect happiness of the future state described as consisting in total rest, inactivity, and freedom from all wants and desires; but whatever may be the the case in the unknown world, constituted as we are with respect to this, we can conceive of no possible degree of happiness resulting from such a state; for all our ideas of enjoyment are ideas of wants gratified; and man is unquestionably infinitely the gainer by being surrounded perpetually by wants, than he is the loser from their occasional nongratification.

Evil, then, is the result of the necessary limitation of our faculties, and without pain we should have no means of knowing or avoiding what would injure us; and none of our motives would be sufficiently strong to induce us to seek our own welfare. Now if a man is idle, and refuses to perform his allotted part in the labour of the world, nature pinches him in the stomach and obliges him to move on. Hunger is the great conservator of all law and order, it sets every one to

work, it keeps every one in his place, and if it is an evil at all, every one must admit it is a very necessary one.

The ordinary idea of philosophical Christians differs apparently but little from this view of the nature of the evil, viz., that it is permitted by an All-wise Providence, and that in His hands, it on all occasions tends to good; that it is the means of the improvement and purification of our characters, and a preparation for a future state. But there is considerable practical difference between the two views. Pain, says the advocate of one, is intended to prepare you for a future state; bear it therefore with resignation, looking to a hereafter for the reward of your patience. Pain, says the advocate of the other, is the invariable intimation that you have disobeyed some of the Creator's laws upon which happiness is dependent here; look to its cause, therefore, and remove it.

But if evil results from ignorance, might not Almighty Power and Wisdom have interfered to save us from the effects of our conduct when injurious? Certainly, but it would be by cutting the spirit of action and of right conduct at the root, and we should have no interest in rectifying error; and as the exercise of reason is based upon the uniformity of nature's laws, any interference with this uniformity by such special providence, would make reason a useless, if not a fatal gift. It may be asked is not reason itself then an undesirable gift, and would not man have been better left to the mere guidance of Instinct as the brutes are?

Isaac Taylor, the Author of the Natural Happy of Enthusiasm says, "The reader need not be reminded that the application of the word Instinct comprehensively, and without distinction, to all the actions of the brute orders, is a popular impropriety. One might as well call all the actions of man rational, as all of the inferior order instinctive. When an animal acts in a manner, which differs in no essential circumstance to a corresponding action in man, a delusion must be engendered by applying to the two actions different terms. We should confine the word Instinct to those instances in which a

course rational as to its end, is pursued by a voluntary agent, under circumstances that forbid the supposition that it springs from a perception or calculation of the connexion of means and end. The instance usually adduced, that of the construction of the honey-comb, is one of the most popular that can be named, especially because it involves some of the highest and most abstruse principles of geometry. Philosophical writers must be understood to use the words reason and instinct in a popular sense, when attributing one to man as his prerogative, and the other to the brute as his blind faculty. The terms reason and instinct thus vaguely used mean, more reason and less reason. For if the brutes were altogether destitute of reason and liberty, in the same sense in which the bee is destitute of both in building her cells, rewards and punishments would have no operation or efficiency."

Instinct appears to be a power impelling voluntary agents to act in a single direction, without any perception of the connection of means and ends, and little capable of adapting itself to circumstances; consequently it has a very limited field of action. If, therefore, we were to be governed entirely by instinct, in order to our possessing the large field of action that we now enjoy, we should require ten thousand at least. all the instincts with which we are acquainted we find acting by means of organization; and a brain containing the organs of ten thousand instincts would, it is to be feared, be inconveniently large. Man is a creature possessing a variety of instincts, which give him his purpose and disposition to act; but instead of being directed to their objects in one unvarying manner. they are put under the charge of a generalizing instinct, which we call reason, and which gives to each a liberty of acting in a hundred different ways, calling at the same time our other feelings into sympathetic action. It must be evident that this is a means of increasing our sensations a hundred-fold, and it is the aggregate of pleasurable sensations that constitutes happiness, and the evil, or the painful sensations resulting from the wrong direction which our instincts sometimes take, are not in the proportion of one to a hundred of the extra sensations we receive.

Suppose appetite in man, as in the lower animals, infallibly directed him to eat only at proper times and in proper quantities of some few things that are the most wholesome, the many evils bodily and mental, which arise from gluttony and drunkenness, would be spared, but we should lose the varied pleasures of the taste, with all the sympathetic pleasures which accompany its gratification.

Take another instance, the love of offspring. Suppose that children could run about as soon as they were born, and were protected by the perfection of their instincts; much trouble in nursing would be saved, and all the evils of physical mismanagement; but all the pleasures, the hopes and fears, joys and sorrows, of parental solicitude would be lost. Perhaps nothing shows more the folly of those who would take the place of the Almighty and make a better system, than the fact that the pleasures derivable from offspring, more intense perhaps than any other, depend, in a great measure, upon what may be called the evil of the helplessness of the object.

Happiness is made up of units, of single pleasurable sensations, and the object of nature is to bring us into such circumstances as shall produce a constant succession of such sensations; and even if they are partially painful, they are preferable to the pains of ennui, "which is the absence of sensations sufficiently acute to engage attention." Habitual sensations also are too weak to avert ennui, and none but habitual sensations could be experienced by us if we were guided by infallible instincts without the diversifying power of reason; for all progression would cease, and comparative stagnation would be the consequence.

SECTION III.

DEATH.

"How strange is human pride! I tell thee that those living things. To whom the fragile blade of grass, That springeth in the morn And perisheth ere noon. Is an unbounded world: I tell thee that those viewless beings, Whose mansion is the smallest particle Of the impassive atmosphere. Thirk, feel, and live, like man: That their affections and antipathies. Like his, produce the laws Ruling their moral state: And the minutest throb. That through their frame diffuses The slightest, faintest, motion, Is fixed and indispensable As the majestic laws That rule you rolling orbs." SHELLEY.

Such, though a poetical, is yet a logical deduction from the doctrine of "Necessity." Man and the whole world, of which he forms an insignificant item, is one general "effect," not a He prides himself upon his separate independent existence and freedom of will, but he has no such existence, he is part only of a great whole, and he cannot be separated. lions of causes helped to bring him into existence and made him what he is, and millions of causes playing upon this mental mechanism produce all the effects of his varied being. is dependent upon the human race, and the human race on the great whole of animated existence; and animate and inanimate "The simplest germination of a lichen are again inseparable. is," says Lewes, "if we apprehend it rightly, directly linked with the grandest astronomical phenomena; nor could even an infusory animalcule be annihilated without altering the equilibrium of the universe.

> 'Nothing in this world is single, All things by a law divine In one another's being mingle.'

Plato had some dim forecast of this when he taught that the world was a great animal; and others, since Plato, when they considered the universe the manifestation of some transcendent life, with which every separate individual life was related, as parts are to the whole." Emerson says, "everything in nature contains all the powers of nature; everything is made of one hidden stuff. The true doctrine of Omnipresence is, that God reappears in all his parts in every moss and cobweb; thus the universe is alive." The Christian Philosopher (Rev. J. White Mailler, M.A.,) says, *" When we view the world as one universal effect, we are at once led to the contemplation of a universal Divine Agency. Does not the Infinite act on every God never delegates his power; He cannot transfer divinity to a substance: there is no power therefore separated from himself. In Him all things have their being." As Pope says:---

> "All are but parts of one stupendous whole, Whose body nature is and God the soul."

In fact, let us look at it from whatever point of view we will, we cannot disjoin man from the rest of creation and consider him individually and separately. Neither can we give him the supreme importance that he arrogantly assumes; the race of flies is more important perhaps to the good of the whole than he is.

Then what is death? It is simply the removal of the old worn out, and useless matter, from the great body of sentient existence, leaving that body always young and vigorous; the old matter taking new forms and immediately passing into new life. To individual man, "Death is the sleep of the weary. It is the repose, the body's repose, after the busy and toilsome day of life," and when natural and not violent it is as painless as birth—of the beginning and the end of life we are equally unconscious, "the exhausted faculties sinking to their mortal repose, as they do to nightly sleep. Death is as natural as Birth, and equally necessary, for it is the parent of life."

* The Philosophy of the Bible, pp. 85 and 40.

Had man made the world, he would have made himself immortal, for in the "future" world he does create, immortality is to He would probably have made a great mistake. Individual drops of water are collected on the brows of the mountains, they flow down into the valleys and form rivers, flowing on to the great ocean. By a silent and imperceptible force, calculated by Leslie to be two-hundred thousand times greater than that of the combined exertions of the whole human race, this water raised in vapour, descends in rain, again forms the river, which with sparkling vivid vitality flows again to the ocean, and so goes on in an unbroken circle. The same river flows on in never ending succession and is thus immortal, though not one drop of water retains its individuality; but had the river been immortal in man's sense of immortality, in identity of individual drops or atoms, the river had been a stagnant, stinking, death-diffusing ditch. Again the leaves of the trees are born in spring in tender variegated greens, in summer they take a darker sameness, and in autumn they change again in hues all beautiful, and then comes winter, when pierced by insects, covered with dust, shrivelled by the frost, they fall off and die, that they may again be born in spring. Would we change this that the same leaves might be everlasting? with man's coveted immortality, would we change the present vigourous everlasting babyhood, childhood, and youth of society, that a comparatively few old people, like the withered leaves of autumn, might boast that they had retained their identity from the beginning of the world till now, selfishly keeping out all others from their term of existence. This change of seasons is closely typical of man's existence. In spring everything is young, fresh, vigourous and green, and all the hilarity and sunshine of early youth belong to it. Summer has its flowers, Autumn its fruit, and then comes old age and decay—the sere and yellow leaf—the death of winter. So man has his year of three score and ten journeys round the sun allotted to him, and then come winter and death and his reappearance in the new growth of spring, and what does it matter whether the

new body be called Dick Snooks, as before, or Tom Styles. Happiness depends upon a continuous succession of new sensations; were we organized as we now are, to live much longer than the time allotted to us, our sensations from being habitual and from the decay of our nervous system would be too weak to afford us enjoyment, and life would become a burden to us. When time has blunted the feelings, or the objects of them no longer exist, knowledge, so much coveted, is of little use unless it can be, as it now is, infused into new forms capable of all that freshness of feeling in which youth so much excels old age.

With the present arrangement, the great Body of Humanity, (considered as an individual,) with its Soul, the principle of Sensation, is ever fresh and vigorous and increasing in enjoyment. As yet it is but in its childhood: as its knowledge increases, so will its happiness. Death and Birth, the means of removal and succession, bear the same relation to this body of society, as the system of waste and reproduction do to the human body: the old and useless and decayed material is carried out, and fresh substituted, and thus the frame is renovated and rendered capable of ever increasing happiness. parallel between the soul of society and that of the individual man is equally complete; as with respect to the latter, all the aimless studies and useless accomplishments of youth are soon forgotten, while only the knowledge that is serviceable is remembered, so in the great mind of society, the absurd theories and systems that occasionally rear themselves into notice are shortly consigned to oblivion, and all the useful ideas that have existed in the individual minds of the human race, are retained. While our thoughts traverse, as if in personal recollection, the different by-gone ages of society, the minds of all the illustrious men that have lived form part of our own, until we arrive at its infancy, concerning which, as of our own infancy, we can remember nothing. The minds, that is to say, the ideas and feelings of which they were composed, of Socrates, Plato, Epicurus, Galileo, Bacon, Locke, Newton, are thus for ever in

existence, and the immortality of the soul is preserved, not in individuals but in the great body of Humanity.

The song of the lark is as sweet to-day as a thousand years ago-what would be gained therefore by its being the same lark?-but doubtless he also sighs for immortality and a place not in but beyond the skies. What in man is worth preserving but his song, and what matters it in what body that is preserved? A series or succession of being seems decidedly the best for this world, and may be the best for all worlds. most that the Natural Theologian is justified in asserting with reference to a future life is, 'If it is better, all things considered, that I should live again in another world, I shall be certain to do so; if it is not better, all things considered, I do not wish it.' There need be no forcible rupture of the known order of God's providence to enable us to retain an indistinct and troubled dream of previous existence, the cessation of which existence could be no more regretted than our non-existence before we were born. The present recognized order of things would certainly be better than a reservation for suffering even of a few, much better indeed than the infinite suffering of the many. The finite happiness of all that have ever lived could never equal the infinite suffering of one.

To the race, although not to individuals, all beautiful things are preserved for ever; all that is really good and profitable is immortal. The lovely world, although created anew every year, is yet the same that Adam saw in Paradise. "Life is then like a beautiful starlight night, in which no long-seen constellation sets without the rising of another," and thus generation after generation has risen and set. And yet for all the elements of happiness—

"For love and beauty and delight
There is no death, nor change,"

* * * *
"'Tis we, 'tis ours are changed; not they."*

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[&]quot;There is nothing new under the sun, and in the view we have taken above it would seem that we only agree with the Realist, in the world-wide dispute between Realist and Nominalist. The Realists maintain, that every

It is true-

"All things that we love and cherish
Like ourselves, must fade and perish;
Such is our rude mortal lot—
Love itself would, did they not."

SHELLEY.

We have hitherto considered Death in the light of a succession of being as opposed to immortality; as a constant change of the material frames, the receptacles for the time of all alone worthy of continued existence. We have referred principally to natural death as it is called, that is, death without violence—but natural death in all but man does not take place in the slow process of decay, but in the being eaten. Life is always preserved at high pressure: population always pressing on the means of subsistence. Nature is no respecter of individuals. Her object seems to be to keep the largest possible number in the greatest possible strength and vigour and efficiency for enjoyment. "There is no exception to the rule," says Darwin, "that every organic being naturally increases at so high a rate, that if not destroyed, this earth would soon be covered by the progeny of a single pair." The rate of increase is geometrical. Mr. J. A. Rowell has calculated that from a single specimen of the flesh fly there would proceed in six generations sufficient flies to cover the world to the depth of about a mile and a quarter. Life presses towards existence in a similar way in almost all departments, General Term (or abstract idea), such as Men, Virtue, &c., has a real and independent existence, quite irrespective of any concrete individual determination, such as Smith, Benevolence, &c. The Nominalists, on the contrary, maintain, that all general terms are but the creation of human ingenuity, designating no distinct entities, but merely used as marks of aggregate conceptions."-

> "For love and beauty and delight There is no death, nor change;"

sympathy, and youth and health,

Lewes' Biographical History of Philosophy, vol. ii. p. 61. Both individuals and Generals are equally the creations of the mind, and Generals or what we call Abstractions, paradoxical as it may seem, would appear to be, if not the only real, certainly the only permanent existences. For hope and peace, contentment and

individual bodies and minds are constantly changing, but they and all that constitutes pleasurable existence transmitted from one generation to another are unchangeable and eternal.

and the most perfect order and arrangement exist in the mode in which it is kept within due bounds; the good and strong preserved, the weak and bad destroyed. It is most astonishing the systematic provision that prevails for this purpose, and the general ignorance on the subject is if anything still more astonishing. Man would get no "cabbage" if not for the ichneumon fly which destroys the caterpillars that are hatched from the eggs of the common white butterfly. "On the oak," says Dr. Carpenter, "not less than two hundred kinds of caterpillars have been estimated to feed, and the nettle, which scarcely any beast will touch, maintains fifty different species of insects. but for which check it would soon annihilate all the plants in its neighbourhood." Check is placed on check, the death of one superabundant population supporting the life of other descriptions of beings. "After the inhabitants had contrived to extirpate the little crow from Virginia, at an enormous expense, they would gladly have given twice as much to buy back the tribe. A reward of threepence a dozen was offered in New England for the purple gracle, which commits great havoc among the crops, but protects so much more herbage than he destroys, that the insects when he was gone caused the total loss of the grass in 1749, and obliged the colonists to get hay from Pennsylvania and even to import it from Great Britain. A few years since an Act was passed by the Chamber of Deputies to prohibit the destruction of birds in a particular district of They had been recklessly killed off, and the harvest France. being swept away in its first green stage by millions of hungry reapers, the earth had ceased to yield its increase.* Extensive

* In the Spring of 1861, while Italy and in fact Europe generally were rising in the interests of the Nationalities, the French Legislative Body were engaged in taking into their serious consideration the interests of small birds, a question of far more national importance to them; and the Times of to-day, August 21st, 1861, says, "the poverty of the French harvest this very year is attributed to the ravages of a particular worm, which it is the function of a certain bird to destroy," and M. Marshall, ex-Deputy of La Meurthe, the Agricultural Society of Toulon, the Acclimatization Society of Nancy, and M. P. Schæffer, of Robertsau, (Haut-Rhin), have petitioned the French Corps Législatif, requesting that steps may be taken for the preservation of those birds that destroy insects detrimental to Agriculture. The Report says—

inroads like these upon the economy of nature reveal to us its wisdom, and clearly show us that if one while it is a blessing that particular animals should eat, at another it is a benefit to the world that they should be eaten. A flight of rooks renders services which could not be performed by all the cultivators of the soil put together, and if the poor birds are occasionally

"Against such enemies man is powerless. His genius may enable him to follow the course of the planets, to penetrate mountains or steer a ship against a storm; he can kill, or bend to his will the monsters of the forest; but in presence of these myriads of insects which, from every point of the horizon, settle upon his fields, cultivated with so much care, his strength is sheer weakness. His eye is not even sharp enough to discern many of them, his hand too alow to eatch them. And even were he to annihilate them by millions they would reappear by milliards. From above, from below, from right to left, they come in legions innumerable, without relapse. In this invincible army which advances to the conquest of the labour of man, each member has its month, its day, its season, its tree, its plant; each knows its own battle ground, and never mistakes its post.

"At the beginning of the world man would have succumbed in his unequal struggle if God had not given him in the bird a powerful auxiliary, a faithful ally, who wonderfully accomplishes the task which man is incapable of performing. * * *

"You will easily understand, gentlemen, the mischief done by these insects if you call to mind that the cockroach deposits from 70 to 100 eggs at a time, which soon are transformed into white worms, which for two or three years live exclusively upon the roots of our most valuable vegetables. The weevil produces from 70 to 90 eggs, which, laid in so many grains of corn, become larvæ that cat them all up. Thus, one single weevil destroys a whole ear of corn. The pyrale lays from 100 to 130 eggs in as many shoots of vine. Thus attacked, the shoot pines and dies. From 100 to 130 grapes are thus destroyed by one pyrale before their formation.

"And now, if you will compare the two orders of figures which I have just submitted to you, admitting that on 500 insects destroyed in one day by a single bird there be only one tenth of those noxious creatures; for example, 40 weevils and 10 pyrales (and this is below the mark)—that is to say, on an average, 3,200 grains of corn, and 1,150 grapes, which in one day this little bird will have saved you.

"Give as large a margin as you choose to any other natural causes which might have stopped the ravages of these insects; reduce as much as you choose that of the bird, and there still remains enough to justify the profound saying of a contemporary:—'The bird can live without man; but man cannot live without the bird.'

"And in fact, who but the little bird could be continually looking out for and catching the weevil five millimetres in length, while depositing its eggs in a cornfield in the young incipient grain? Who could catch the small butterfly of the pyrale when flying about with the same object in view?

mischievous they are richly worthy of their hire. Make the largest probable allowance for their consumption of a portion of that crop, the whole of which they preserve, and they are still immeasurably the cheapest labourers upon a farm. Pages would be required to tell all the mistakes which are committed in the blind rage for destruction, and in the readiness of the lord of creation to believe that everything which tastes what he tastes is a rival and a loss. Even wasps, which find no friends, chiefly because they are armed with a sting, which, unlike man, they rarely or ever use unprovoked, are an important aid in keeping certain tribes within bounds."—Quarterly Review, Jan., 1858.*

"Who, especially, could find those minute eggs and larve of which one single mesange consumes 200,000 in one year?"

The Globe's Paris correspondent says, August 21st, 1861, "Le Courrier du Bas Rhin informs us to-day that the hervest time in that district has been heralded by a proclamation from the local authority offering a reward of a penny a dozen for the carcases of field mice killed and produced; already a hecatomb of 56,000 has been piled up at the Mayoralty of St. Hypolite, after six days slaughter." The people having destroyed their owls are now destroying their mice; they will probably have to replace both let it cost what it may.

A correspondent of the Times, writing August 23rd, says that the keepers, in a mistaken notion of strictly preserving the game, having killed the stoats or weasels, the polecats, the hawks and owls, "rats swarm to an extent almost incredible," defying the farmers to put them down, and preying not only on the eggs and newly-batched young of partridges and pheasants, and newly-born leverets, but on the crops of the hard-working and industrious tenants. The writer says, "let them inquire, and the keepers will think it worth while to restore the balance between the rats and their natural enemies."

*In fact, although the common spelling book teaches that the pig is man's best friend, because he can eat him every bit, yet it is certain that he does not always recognize his best friends. The rat, so much persecuted, eats animal matter that would poison and pollute the atmosphere, and the toad, seathetically considered, not handsome, yet protects from slugs the strawberries he is supposed to steal. The writer in the Quarterly quoted above, says "Mankind have then a direct interest, on their own account, in enforcing mercy to brutes. But it is the imperative right of the animals themselves. The notion of coarse and ignorant minds is that all which exists has been created for the sole service of the human race, to use or abuse as the fancy takes them."

The Spectator Newspaper, one of the highest of its class, says, March 2, 1861, p. 219, "They (the Committee for the Protection of Animals) must know that the whole race of animals in existence are not worth one human life; that the entire brute creation might justifiably be left to perish to save a pauper one hour of pain." It is questionable I think whether the whole race of paupers

The same writer says—" Intimately associated with physical injuries and pain is the death in which they ultimately result. This necessary end constitutes to many minds the chief terror of the incidents which produce it. That all which lives should be born to die detracts nothing from the wonders of their being. Which would be the greater marvel, a ship whose timbers should never rot, or a ship which itself should gradually decay, but before its lease was out should give birth to new vessels, which again should bring forth fresh fleets to be multiplied from age to age in increasing numbers and unimpaired vigour? This last is the prodigious method of Providence. A solitary oak contains within its trunk a power to generate future forests, which will spread their giant arms and rear their kingly heads when their progenitor is returned to the soil from whence it

could not be better spared than even the smallest link in the animal chain of being. The bird, profound Mr. Speciator, can live without man; but man cannot live without the bird. In nature's plan there are no "paupers." Whatever cannot keep itself is obliged to make way and give its place to that which can.

As to the ignorant, conceited, and presumptuous idea, that the world was made for man alone, we cannot turn our eyes in any direction in which pleasurable sensation is not spread around; every leaf, every blade of grass, the atmosphere, the waters, swarm with creatures in a state of positive happiness, the collective sum of which, perhaps, may greatly exceed that of the human race.

I was much struck with this truth while recently reclining on a bank in a very beautiful grove some two miles in circumference. Its lordly owner and its keepers were absent, and I was probably the only human being there; but the whole area seemed quite complete without man, and only his "madness, pride, impiety" could have supposed it made for him alone. There was not an inch untenanted. There was the voice of the pheasant and the jay, of the wood pigeen and the rook, of the jackdaw and the hawk, and fifty smaller birds; there was the hare, the rabbit, the hedge-hog and the dormouse and shrew, and the sun-beam and the half-shut eye showed the air full of humming life; and the moss on which I lay was full of green and golden beetles, and grass-hoppers and long-legged spiders and the thrifty ant. There was one continued song and hum of enjoyment, and I could not help thinking how vain and presumptuous was man's pretension to monopolize it all. Here at least the owner was the instrument only of a happiness far greater than his own, and probably than of all his dependants. It is true all were happy in eating up each other, but this detracts very little from the sum of enjoyment. "The perch swallows the grub-worm, the pickerel swallows the perch, and the fisherman swallows the pickerel; and so all the chinks in the scale of being are filled."

sprung; while their numerous progeny, from the first-born which rivals the parent stem to the sprouting acorn which just lifts its leaflets above the earth, will continue to maintain the succeeding line in an unbroken gradation. The system runs through all creation, from man, who is the lord of it, down to the meanest piece of moss that grows upon a wall. In such profusion are the germs of animated things produced, and then cast forth to perish, with no opportunity, from their very excess, to evolve the structure of which each contains the rudiments, that we might think there was prodigality, even to wastefulness, if waste were possible where power is infinite. Without death, far narrower limits must have been put to propagation than prevail at present. The same set of men and animals must have occupied the globe, and myriads of creatures, we of this generation included, could never have tasted the delights of existence. Death therefore may be said to be the parent of life. What would have been the scheme of the Almighty if sin had never entered into the world is altogether beyond our faculties to conjecture. Our knowledge, we find from experience, is limited to observing what actually exists. and it is with admiration that we perceive how the general good is maintained through the general mortality, and each creature is made to contribute both by its life and by its death to the benefit of the rest. The examples are innumerable, and

For myself I willingly acknowledge my relationship to the whole of the sensitive creation. I am anxious to reciprocate the great benefits I receive, and I am prouder of the disinterested friendship of my horse and dog, than of that which is contained in many an invitation to dinner. As to the supposed vast intellectual superiority of man, we are, probably, not competent judges, not understanding the language of the brutes; where we do, we often find that the constitution of their minds enables them to go more surely and directly to the object of their desires than man. Speaking of Natural Selection, Darwin tells us that "the rock-thrush of Guiana, birds of Paradise, and some others, congregate; and successive males display their gorgeous plumage and perform strange antics before the females, who, standing by as spectators, at last choose the most attractive partner." Does not man do the same, although not so gracefully, yet for the same object and with the same result? So much for love, and in war surely the animals are more intelligent: in fact, further observation in all directions tends to show that our vast pretensions are based very much on ignorant presumption.

we select a few out of the thousands that might be adduced. "There is a class of animalcules called Infusoria, because they can be obtained by infusing any vegetable or animal substance in water, which, says Professor Owen, 'are the most minute, and apparently the most insignificant of created beings.' Many of them are so diminutive that a single drop of water may contain five hundred millions of individuals. Nevertheless the varieties in size are such that the difference between the smaller and the greater 'is greater than between a mouse and an elephant,' though even the elephant of the race is invisible to the naked eye. 'They are the most widely diffused, and by far the most numerous of all the forms of organized life'; and whether in fresh water or in salt, 'there is hardly a drop of spray flung from the paddle of a steam boat which does not contain some specimens of the race. They pervade every clime -torrid, frigid and temperate-and extend their reign in the northern latitudes beyond that of the vegetable kingdom. When we consider their incredible numbers, their universal distribution, their insatiable voracity, and that it is the particles of decaying bodies which they are appointed to devour, we must conclude that we are in some degree indebted to these active scavengers for the salubrity of our atmosphere. Nor is this all: they perform a still more important office in preventing the progressive diminution of the present amount of organized matter upon the earth. For when this matter is dissolved or suspended in water, in that state of comminution and decay. which immediately precedes its final decomposition into the elementary gases, and its subsequent return from the organic into the inorganic world, these wakeful members of nature's invisible police are everywhere ready to arrest the fugitive organized particles and turn them back into the ascending stream of animal life. Having converted the dead and decomposing particles into their own living tissues, they themselves become the food of larger Infusoria, as, for example, the Rotifera, and of numerous other small animals which in their turn are devoured by larger animals, such as fishes; and thus a pabulum,

fit for the nourishment of the higher organized beings, is brought back by a short route from the extremities of the realms of organic nature. Truly indeed, says Ehrenberg, as quoted by Professor Owen, 'the microscopic organisms are very inferior in individual energy to lions and elephants, but in their united influences they are far more important than all those animals.' Their own life sustained by the product of death, the Infusoria are destined themselves to perish that they may sustain the frames of the creatures above them, death continuing to support life throughout the graduated scale of existence, until, the circle run, the food once more comes back to the nutriment of animalcules from which it originally proceeded.

"The flesh fly species is another indefatigable scavenger, as they increase their weight two hundred-fold in twenty-four hours, and Professor Owen states that there is no exaggeration in the assertion of Linnæus that three flesh flies would devour the carcase of a horse as quickly as would a lion.

"The animalcules supported the dragon-fly, the dragon-fly the newts, the newt the beetle, the beetle the sparrow, and most likely the sparrow some bigger creature before the animal compound was given out to the inexorable maggots, and revivified anew in the shape of flies, again to run the destructive round. Nature seems to have taken special pains to maintain in vigour the carnivorous element wherever animal life is congregated together. If the pike is carefully excluded from a fish-pond, he appears there after a time just as though he had smelt out his prey, and made his way to it over earth or through air. The eggs have been carried there on the legs and feathers of the water-fowl, or else been eaten by them, and passed from their bodies undigested. The due balance is maintained in spite of the jealous preserver of fish.

"In respect of death Pope puts man and his victim on equal terms:—

The creature had his feast of life before:
Thou too shalt perish when thy feast is o'er.'"

Thus we find, as Darwin remarks, "that the structure of every organic being is related, in the most essential yet often

hidden manner, to that of all other organic beings, with which it comes into competition for food or residence, or from which it has to escape, or on which it preys. can do is to keep steadily in mind that each organic being is striving to increase at a geometrical ratio; that each at some period of its life, during some season of the year, during each generation, or at intervals, has to struggle for life, and to suffer great destruction. When we reflect on this struggle, we may console ourselves with the full belief, that the war of nature is not incessant, that no fear is felt, that death is generally prompt, and that the vigorous, the healthy, and the happy, survive and multiply." If we do not more justly appreciate the plan of creation, it is owing to the false light that Theology throws upon it; misrepresenting the aim and object of existence, and assigning to man a thoroughly false position in relation to the whole. What Bishop Berkelev says of Metaphysicians is true of Theologians, "They have first raised a dust and then complain they cannot see." Mankind cannot be separated from the rest of creation which must be regarded as one and indivisible. Judged as a whole it is ever progressing; the good, the strong, and the beautiful, daily more predominating. Wherever in the "struggle for existence" and in the ever changing circumstances and conditions to which it gives rise, variations occur favourable to individuals, such improvements, by the law of hereditary descent or "Natural Selection" are retained and transmitted; and the new and improved specimens having the best chance in the struggle, gradually but necessarily extinguish the old, and take their place. law of progress—this extinction of the less improved forms of life—this death of the bad to make room for ever better and better, is regarded by Theologians as a cunningly devised scheme of the devil to thwart and blight the objects Let us hope that we are approaching the of creation. dawn of a brighter day, in which the true nature of evil will be recognized and the glory of creation manifest even to our prejudiced, short-sighted, and imperfect vision. With a fuller knowledge of the "Origin, Objects, and Advantages of Evil" will come a clearer perception of the beneficent purposes for which it has been allowed, and more strenuous efforts in the direction of our own welfare towards which it was intended to In the infancy of our race the causes of all great evils were hidden and mysterious, and were consequently ascribed to supernatural intervention; and were worshipped instead of being sought and removed. Mankind, like a great pig under a burning glass, lay still and squealed instead of getting out of the way. Certain barbarous tribes from reverential fear, refused even to destroy wild beasts* and noxious reptiles, and "plague, pestilence, and famine" were manifestations of divine anger. Now although the light of science has dissipated these illusions in the physical world, in the mystery of mind and the moral world they are still as strong as ever; the investigation of natural causes is neglected and events still ascribed to supernatural ones. But we are approaching the dawn of a brighter day-although, according to some, day-light is still far off. As Buckle says, "The progress of inquiry is becoming so rapid and so earnest, that I entertain little doubt that before another century has elapsed, the chain of evidence will be complete, and it will be as rare to find an historian who denies the undeviating regularity of the moral world, as it is now to find a philosopher who denies the regularity of the material world."t

^{*}We learn from a Report made by General Sir William Sleeman, quoted by Dr. Neil Arnott, that "Wolves are numerous in the ravines along the banks of the river Goomtee, on which the City of Lucknow stands. The Hindoos have a superstitious dread of destroying or even injuring them. As a consequence, a great many children are carried off by them to the towns, villages, and camps, to be devoured—so many, that some vagrants make their living by searching near the dens of the wolves for ornaments of the precious metals which had been worn by the children. "In the two years 1859 and 1860, no less than 998 children were killed by wild beasts, principally by wolves."—A Survey of Human Progress, p. 133.

[†] History of Civilization in England, vol. I., p. 21.

SECTION IV.

ON THE SLOW PROGRESS OF KNOWLEDGE AND CIVILIZATION.

There is still one question on this subject of evil, to the solution of which the present state of our knowledge seems hardly equal, and on which we have still to offer a few suggestions. Considering that happiness is so much dependent upon knowledge and civilization, how is it that society has made such slow progress in knowledge and civilization? Why is it still in its childhood? Why has moral science, upon which happiness is as dependent as health upon medical science, kept so far in arrear of the other? No man or people can advance alone. It is necessary that the whole earth should be peopled, the object being to ensure the largest sum of enjoyment the world will contain. It is probable that if civilization had progressed more rapidly, this would not have been effected: mankind would have preferred keeping their numbers within the means of subsistence in a particular country, to going forth into the wilderness of a new world, if instinct rather than reason had not dictated their increase, and had not necessity in consequence obliged them to encounter all the trials and difficulties of new settlers. Such difficulties are not slight; Mr. Alison says, "The immense and apparently insurmountable obstacles which present themselves to the extension of industry on the first cultivation of the earth; the extent of morasses, the thickness of the forests, the ruggedness of the mountains, forbid the hope of success but from the accumulated force of multitudes. In the first attempts to clear the ground. numbers perish from the unhealthiness of the atmosphere, the severity of the labour, the magnitude of the hardships to which they are exposed. From the narratives of the extreme sufferings undergone by the first settlers in distant colonies in our own times, even with the aid of iron instruments and the arts of civilization, we may gather what must have been the

condition of the human race in remote and now forgotten periods."*

Another reason why society has advanced so slowly is, that physical comforts must be first secured, before moral and intellectual pleasures can be enjoyed, and necessity was required to drive men forward to the discovery of those arts and sciences upon which the increase of physical comforts depends. We appear to be fast approaching that state in which the powers of production will be so far increased, as to afford leisure for moral and intellectual pleasures to all. To have given man such moral and intellectual desires, at the same time that he was obliged to work eight or ten hours per day in order to supply his physical wants, must have diminished rather than increased the amount of his enjoyment; wants and desires, without the means of gratification, being pains.

Again, if either individuals or races rise much above their fellows, they are soon choked in surrounding barbarism. Nations seem also to have their natural periods of decay the same as individuals; they have their youth, maturity, and old age, and then are swept away. As Mr. Alison says, "the corrupted communities, and now decayed empires, which have successively risen and fallen during the constant but unobserved progress of civilization, have been swept away when they had performed their mission in human affairs. There are destroyers provided for the carrion of nations, not less than the corpses of individuals; pernicious remains are not permitted to taint the moral any more than the natural atmosphere; unseen in ordinary times, the vultures of the North appear in the distance, when their cleansing is required; the Scythian cavalry scent from afar the odour of human corruption, and the punishment of the vices of nations conducts the mighty system of human advancement."†

There is another consideration of great importance to which we cannot attach too much weight, viz., that all knowledge to be available, must partake of the character of experience: it is

^{*} Principles of Population, vol. 2, p. 467. + "On Population," vol. 1, p. 80.

probable, therefore, that any quicker mode of revealing knowledge to mankind than the present slow, experimental process, would have been ineffectual. The wisdom of others is of little or no use to ourselves, until experience has made such wisdom peculiarly our own; and the same law applies to society at large.

The present physical perfection of the world is now recogmized as the result during countless ages of the same laws at present in operation. Every educated person is sufficiently familiar with geology to know how this has taken place, by the gradual operation of varied physical agencies producing stratum after stratum, with organized beings adapted to the varied conditions of existence in both earth and water, each continuing till another set had arisen apparently more perfectly organized to take its place; and in a continuous succession from very early periods, when beings now totally extinct prevailed, down to a time when some now in existence began to divide the world with them. At last came man, at some comparatively very recent epoch, but there is no evidence at present to fix the date. Science speaks only of slow and gradual changes. there has been no sudden cessation of one order of being and equally sudden commencement of another. We can trace no beginning, no chaos, but law and order and supreme intelligence acting through "natural law" throughout.

The earth has thus been very gradually preparing for its present covering of delicately-framed and highly-organized sentient life. Its external coat is now one net-work of nerves—it feels all over. Professor the Rev. Baden Powell says, "If we admit that the earth being still hot internally, must have cooled at its surface, and that this cooling must, in its progress, have caused contortions, dislocations, upheavals of strata; and again, that the water charged with matter must have deposited it; and that the various crystalized bodies and metallic veins must have been formed during certain stages of these formations,—it is only by parity of reason affirmed that the rudiments of all organic as well as inorganic products and structures must

have been evolved in like manner, as they were alike included and contained in the same fused, and therefore once vapourised, or nebulous, mass. In that mass all kinds of physical agents, or the elements of them, thermotic, electric, chemical, molecular, gravitational, luminiferous, and by consequence, not less all organic and vital forces, must have been included. Out of it in the same way by equally regular laws in the one case as the other, must have been evolved all forms of inorganic and equally of organic existence,—whether amorphous masses, crystals, cells, monads, plants, zoophytes, animals or man,the animal man; the spiritual man belonging to another order of things, a spiritual creation." + * * "A rational physicotheology teaches that the succession of forms of organized life on the globe, up to the first organization of all animated nature, were acts of the Divine will, wisdom and power, in precisely the same sense as the revolutions of the double stars and planets, the daily tide, the fall of rain, the ascent of vapour, the action of the sun's light and heat, and all other natural phenomena, regulated by similar recondite laws, are direct and immediate acts of the same Divine will, wisdom and power."

"We are led by all analogy" remarks Sir John Herschel, "to suppose that the Creator operates through a series of intermediate causes; and that in consequence, the origination of fresh species, could it ever come under our cognizance, would be found to be a natural, in contradistinction to a miraculous process; although we perceive no indication of any process actually in progress which is likely to issue in such a result."

And to a similar effect, Professor Owen observes, "To what natural laws and secondary causes the orderly succession and progression of such organic phenomena may have been committed, we as yet are ignorant. But if without derogation of the Divine Power we may conceive the existence of such ministers, and personify them by the term *nature*, we learn from the past history of our globe that she has advanced with slow and stately steps, guided by the archetypal light, amidst

+ Unity of Worlds, p. 79; # Idem p. 451.

the wreck of worlds, from the first embodiment of the vertebrate idea under its old Ichthyic vestment, until it became arrayed in the glorious garb of the human form."

Mr. Powell says, "In regard to man's spiritual nature, so far as that is concerned, it is wholly independent of all material things, and is therefore relieved from all possibility of connection, or collision, with any physical truths or theories." This distinction between the animal and spiritual man is a pure assumption, which the last sixty years' study of man has entirely disproved. All the mental powers of man, animal and spiritual, are connected with the brain, and obey precisely the same law, and of this the Professor seems to have at least a suspicion, which might very easily have become a conviction. He says, "If any peculiarity could be shown in man's brain, to confer powers of abstraction, moral consciousness, or the like, which is deficient in the animal brain, this, in like manner, would indicate a clear physiological distinction, and would bring the case under the category of degree of physical organization or development." There is no if,—sixty years ago it was demonstrated by Gall that such a peculiarity in man's brain did exist, and this fact ought to have reached the most advanced men even at Oxford before this. The existence of man upon this earth is of comparatively recent date, and he is evidently in his childhood; the development of his mental growth being slow. keeping pace with the previous slow growth of the material world: there is a close analogy throughout. We find man at first very little in advance of other animals; as they preved upon one another, he prezed upon them, and as they often eat their brothers and sisters, so did he his fellow man, until he found him too expensive eating, and that it paid better to set him to work as his slave. As his numbers increased population began to press upon his means of subsistence, and he found it easier to tame animals, and breed and feed them, than to hunt wild ones; and from a hunter he became a shepherd. The natural fruits of the earth he found also very much increased by cultivation, and he began to sow and reap and settle down upon

the land, and to insist upon vested rights. But the strong found it easier to steal than to work, and wars became common; and men organised themselves into communities and countries, and gave up their liberty to a king or leader, for a common defence of life and property. Wars were then made for power and distinction; and to enable men to live under all these disadvantages and conflicting circumstances, many mental faculties were called into activity, and the brain grew and the faculties increased in strength proportionate to the exercise they thus received. In mountainous countries, where the temperature was cold and the means of subsistence scarce, and it required all the energies of man's nature, and every faculty to be brought into exercise to enable him to live: and in temperate climates, where men could work and the rewards of industry were great, the brains grew the largest, and these men have gradually extended their sway over all the rest. Man unlike other animals has a power of profiting by his experience,—of saying what effects follow from known causes, and of thus predicting consequences; and when this knowledge became too great to be handed down from father to son any longer, it was stored in written records, and his progress has always been in proportion to his experience, and has been based entirely and solely upon it; and it is only as knowledge can be thus verified, that is, recorded facts be made to take place over again before his own eyes that experience is of any Deductive reason may point to such facts, but they must be tested to be of use. Individual facts were gradually generalized into laws, and one such law included thousands of facts, of which he had no individual experience. speculations, metaphysical or theological, upon the nature or essence of the things surrounding him, of either mind or matter, have had little to do with his real progress. At first he supposed a god to preside over every power in nature that was unknown or mysterious to him; and as he generalized such powers, so he did his gods. A religion based upon such superstition, the produce of the highest minds of the

period, might assist a people at its first establishment; but when the minds of the people have grown beyond this, it then becomes even a greater impediment from its religious sanction than it was originally a help. Necessity, the mother of invention, and circumstances, calls the different mental powers of man into exercise, and they grow with such exercise, and experience, or the Positive Philosophy, as it is called, directs and regulates such powers; and this is the real law of the mind's evolution. While different philosophers have been perfecting their methods, mankind generally, everywhere impelled instinctively or intuitively by their faculties - by the law of their minds,-have been acting upon the Inductive or Baconian philosophy, ordinarily not aided but impeded by method. The faculties naturally take their own method, and most of the discoveries that have been made in science have been made by practical men ignorant of all method. It is quite true that a tortoise in the right path will beat a race-horse in the wrong. and fortunately, however philosophers or the race-horses may wander, nature keeps the tortoise, or the bulk of mankind in the right path. Their wants are constantly craving for their gratification, and accumulated experience points the way. The Theological and Metaphysical stages through which the mind passes, as pointed out by Comte, are not the law, but merely the history of its evolution. The laws of the moral are as stable as those of the physical world, and apparently as slow in their operation. It may suit our pride to talk of our fallen nature, but history nowhere supports this assumption. The spiritual nature in the savage man is all but rudimentary, and the mass of mankind are still mere animals, acting only in accordance with animal feeling; in the most advanced race and best specimens of other races, layer after layer has been added to the brain until the animal has been lost in the man,



^{* &}quot;Man, like other warm-blooded animals, must always have the four prime essentials to life—fit air, warmth, aliment, and rest after action; and that to obtain the pleasure from using, and to escape the pain from wanting these, are the chief motives to his voluntary action."—Dr. Neil Arnott's "Survey of Human Progress."

and the good, the true, and the beautiful predominate, and he is just, respectful, and benevolent. Why the progress of the physical world or of man should have been so slow we cannot say: but the same law of development seems to govern both. cannot say what ought to be; we can only say what is. That it could have been different—that progress could have been more rapid, is more than we know. All seems the result of fixed law: there is no evidence of what is called special Providence, or interference with law, either in Matter or Mind. On this subject, Professor Powell truly says, "To speak of apparent anomalies and interruptions as special indications of the Deity, is altogether a mistake. In truth, so far as the anomalous character of any phenomenon can affect the inference of presiding Intelligence at all, it would rather tend to diminish and detract from that evidence. But, on the other hand, precisely in proportion as the apparent exception might be explained. and made to vindicate its position in a more comprehensive system of order, so would the evidence be increased and elevated.

"In the present state of knowledge, law and order, physical causation and uniformity of action, are the elevated manifestations of Divinity, Creation and Providence. Interruptions of such order (if for a moment they could be admitted as such) could only produce a sort of temporary concealment of such manifestations, and involve the beautiful light shed over the natural world, in a passing cloud. A supreme moral cause manifested through law, order, and physical causes, is the confession of science: conflicting operations, abrupt discontinuities, are the idols of ignorance, and if they really prevailed, would so far be to the philosopher only the exponents of chaos and atheism; the obscurations (as far as it extends) of the sensible manifestation of the Supreme Intelligence."* We know that Mr. Powell intends these observations to apply only to the physical world, but we have shown that they are equally applicable to the moral or spiritual world, and that the

* Unity of Worlds, p. 157.

perfection and even the use of reason itself depend upon the equal supremacy of law and order in the world of mind as of matter.

Had history been written with a right view of the nature and objects of evil, much light would have been thrown upon the question, as well as upon all those connected with the advancement and slow progress of the race. Even now a universal history of civilization would dispel much of the darkness which still envelops the subject. When the common superstitions concerning Evil, shall give place to the above views of its nature and objects; when it shall in all cases be regarded as remedial, and its causes, therefore, inquired into, a much more rapid advance of the race towards the perfection of which it is capable may be expected to take place. Nature will then no longer be judged by her dealings with regard to a single people, nation, or even generation—whom she no more hesitates to cut off, if the general good requires it, than a surgeon does to amputate the limb which threatens the life and welfare of an individual-but with regard to the general good of all her children in all times and places; and the dispensations which to our short-sighted wisdom, frequently appear as unmixed evils, will then prove her to be guided by an unerring and benevolent Power. Although there must still be many difficulties attached to this subject, and the causes of many evils must still remain unexplained, yet to those who trace out final causes, who study the Creator in his works, the mystery of Evil may be sufficiently unravelled to give infinite confidence in His providence, and faith that farther knowledge will make manifest the benevolent tendency of all creation, and bring home to every heart the all-cheering conviction that "WHAT-EVER IS, IS RIGHT."

CHAPTER III.

THE PRINCIPLES OF MORALITY.

SECTION I.

MORAL OBLIGATION.

We hear of Moral Obligation, of acting according to conscience, and not according to self-interest, pleasure, appetite, desire; but it is seldom clearly defined in what Moral Obligation consists. Some say it is acting in accordance with the will of God: but then arises the question, what is the will of God? Others say that we are to be governed by an inward monitor, which all possess: but then what is to be the standard by which the indications of this inward monitor are to be judged, since we seldom find two persons in whom its promptings coincide on all subjects. "We are to do so. because it is right," says one; "Because common sense, reason, the fitness of things, the law of nature, justice, the public good, require it," say others. But as Mr. Bentham has ably shown, all these are mere modes of expressing the individual opinion of any one who chooses to dogmatise concerning right and wrong, without assigning any reason for it beyond his own internal conviction.

The science of Morality goes farther than merely to lay down rules of conduct: it has to show the reason for them, and the foundation of the obligation to obey them. The Foundations of Morality can only be discovered by studying the constitution of man and its relation to everything around him. The application of the doctrine of Philosophical Necessity to Virtue and Vice, Praise and Blame, Reward and Punishment, has shown us that, abstractedly, all actions are alike, both with

respect to their fitness and unfitness, or with reference to the motives that produce them; that, in themselves, they are all equally deserving of praise or blame, reward or punishment, because they are all the produce of causes, arising out of natural constitution and circumstances over which the individual has no control; and that, therefore, the only distinction which can be made between actions is with regard to their tendency. Individuals may be estimated by their motives, because we cannot help loving that which is amiable and loveable and generally produces good; but actions must be viewed as right or wrong, as in accordance with common sense, reason, the fitness of things, the law of nature, justice, the public good, not with reference to anything in themselves, that marks them as such, but according to their tendency—their tendency to produce happiness or misery, pleasure or pain. That it must be as their tendency to produce happiness or misery, has been proved by showing the nature of man's responsibility or obligation to act in one way rather than another; as it appears that such accountability is founded upon pain attending some actions, and pleasure others, in proportion as such actions are or are not calculated to promote the welfare of the individual and the happiness of all the sensitive crea-It is to this issue that all the advocates for different standards of morality are obliged to come, if pushed to a conclusion: they are all obliged to acknowledge that the fitness of things means their fitness to produce happiness; and so of the rest; and that conscientiousness and veneration, which teach us to "do justly and to walk humbly with our God," are virtues only because they promote the general happiness. All moral rules are derived originally from utility, but the pleasures and pains, or likes and antipathies on which they are based are transmitted to offspring and thus become intuitions, similar to the feelings with which the kitten regards a dog, it sets up its back and spits at it directly it opens its eyes; the cow also from the same cause, from its having been the custom years ago to bait her fore-fathers, keeps making imaginary tosses of the dog, whenever she sees one; and the bull himself is still made furious by the sight of a red colour, although the feeling may have been derived ages ago in the bull fights of Spain. In this way are mixed the tendencies of actions and the feelings with which in a long course of time we intuitively come to regard them, and their original source is thus sometimes lost. What is called the Intuitive School of Moralists—bases its conclusions partly on utility, and partly on such internal convictions, for which no reason can be assigned, except a certain feeling on the subject, and which usually takes the shape of "all men think," "we cannot help feeling," &c. To recognize however the obligations of morality is simply to recognize the conditions on which it is desirable men should live, and the authority is enforced by pains and penalties which all are forced to attend to whether the obligations are recognized and acknowledged or not.

It is often said that it is impossible to speak definitely of the objects of creation, that happiness is not a sufficiently worthy object, but that development seems more the end and aim of the Creator than happiness. But what is the use of "development" unless attended by consciousness and that a pleasurable consciousness? a painful consciousness would be worse then nothing. World on world, in infinite beauty would be the same as none without beings conscious of their existence, and unless that beauty gave pleasure—a happy consciousness,—it would be useless. Were a universe developed in all possible power and beauty and but one little fly conscious of its existence, that little fly would be of vastly more importance than the universe. Beings might be "developed" in infinite number, size, and power, but of what use would their existence be if they were not happy, or at least a source of happiness? Pain checks development, and all legitimate development is attended with pleasure, and, in fact, we can see no good in development unless it produces happiness. We cannot see or even understand any other purpose in creation: to be without consciousness is the same as not being; and consciousness that was neither pleasurable nor painful would be no consciousness, for there is no negation or state of indifference, no sensation, or feeling, or idea, attending either the intellect or sentiments that is not slightly either one or the other. Certainly pain would not be worth living for, and happiness is the only thing left. People speak of pleasure with contempt, because by it is usually meant something carnal and resulting from the lower feelings, but happiness is simply the aggregate of pleasurable sensations from whatever source derived: again, you hear people talk and decry happiness as poor and paltry,* as something scarcely worth having, and speak of blessedness as the end to be attained; but by blessedness they evidently mean a refined kind of happiness, composed principally of the religious and æsthetic feelings. We hear much also in the present day of "Law, Order, and Unity;" but law, order, and unity, that serve no purpose, are no evidence of wisdom of design. But though all are ultimately obliged to admit that happiness must be the end and aim of creation, yet a great point of dispute still remains, whether happiness here or hereafter in another world, is the end, and ought to be the aim, of our existence. question must be decided by the relation which our faculties bear to things around us. We know, from the relation that the lungs bear to water, that we were not intended to live in the water: we know from the relation that the human stomach

" The teaching of the miserable Theology of the last century," says Miss Cobbe, in a clever and admirable paper in Fraser, "infects us still, though there are signs on every hand that we are outgrowing it. The doctrine that Paley taught so lucidly, that virtue consists in doing right, for the sake of everlasting felicity, is perhaps rarely preached now in all the effrontery of its baseness. Yet we go on most of us mixing up such hopes with more disinterested motives, and in the depths of our hearts longing-not for more work to do and more power to do it to serve God and man—but for mere rest, or poor paltry happiness." It is true that virtue consists in doing what is right. without reference to the consequence to ourselves, here or hereafter; but right is right, only because it leads to happiness. More work to do and more power to do it in the service of our fellow-creatures is ordinarily the most direct path to the highest happiness, but if in particular cases it should not be, we are bound to go on, and although we may not meet our reward for this particular act, we meet it in the same principle of self-sacrifice that has been and is similarly at work elsewhere for our benefit.

bears to the different kinds of food, that it was not intended to digest grass, like that of a cow; from the relation of the eve to light, we know that we were not intended to live in darkness; so with respect to the relation that the mental faculties bear to things around us, we find that they have direct reference to the present life, and that they would be as useless in a state unlike the present, as the fins of a fish on land or the wings of a bird in the water. So that whatever may be the intention of our Creator with regard to us in a future state. we are certain that he intended us for happiness in this, as happiness is the natural result of the legitimate exercise of all our faculties; and those faculties, although some few of them are capable of a direction towards a future state of being, have all direct reference to the present world. The obligation, then, that a man is under to act in one way rather than in another, is owing to its tendency to happiness or to the avoidance of pain, and Morality may be defined as "the science which teaches men to live together in the most happy manner possible."—(Helvetius.)

SECTION II.

PAIN AND PLEASURE.

The ground being so far cleared before us, our line of reasoning is henceforth simple and straightforward, relating only to the question of Pain and Pleasure—Happiness and Misery. These will be found the ultimate springs of all our actions. Pain and Pleasure, which are only other names for desire and aversion, liking and antipathy, being to volition in the sensitive creation, what attraction and repulsion are to the motions that go on in the physical world. Man, as we have seen, is equally the agent of Necessity with all other created beings, and this is the law, the first law of his nature, that he should wish for and

seek his own happiness; and he is no more capable of avoiding it, or of acting contrary to it, than the atoms of matter can refuse to be guided by the influence which is called attraction. This proposition, however, requires explanation, for it will be immediately denied by many, who, from want of clearly understanding the nature of the law referred to, feel convinced that they are impelled to action by a thousand motives which cannot be said to partake of the character of either pleasure or pain. But those who reason in this way, for the most part think only of mere bodily pleasure and pain. All kinds of feelings emanating from any part of the body; all actions of the mind. whether proceeding from the Intellectual Faculties, the Sentiments, or the Propensities, come under the denomination of Sensations, as before explained; and all sensations are pleasurable or painful, though in a thousand different degrees, at least all that are powerful enough to impel to action. Locke says. "all action has its source in uneasiness;" at all events, we have previously seen that all action has a cause. We act either instinctively or from motive. If instinctively, we are impelled directly by some desire, which desire proceeds from the action of some faculty, and each faculty, when indulged in its natural action, is the source of pleasure, and when ungratified, or disagreeably affected, produces pain; pains and pleasures are thus as numerous in their kind as the faculties. One individual will feel pleasure in doing good, another in doing mischief; one in saving money, another in spending it; one will instinctively run away at the slightest cause of alarm, another will as instinctively face it. In all which cases it is not the less a pleasurable or painful sensation that induces each individual so to act, because he does not stay to make a calculation of the balance of pleasures or pains. When we act from motives and calculation does take place, we have seen that the will is determined by the greatest apparent good; good meaning right, duty, &c., which really means pleasure or happiness or the avoidance of The lower animals are impelled immediately to action by pleasures and pains, without even knowing that there are

such feelings, i.e. without having any abstract notion of either one or the other, and by far the greater part of our actions are performed in the same way, instinctively, and without any calculation or reference to either pleasure or pain. the most intelligent of the animals, dogs for example, are enabled to make some sort of calculation, and to balance future punishment against present enjoyment, and so also does man in proportion as he becomes enlightened and his feelings are put under the direction of reason. It is here that the moralist can be of use, by enabling us to make a more correct calculation than our unassisted reason could otherwise accomplish; by showing from experience and from our own constitution and from the constitution of nature, what conduct invariably leads to happiness in the end, and what to misery. The duty of the moralist then is to enable us to make a correct calculation of our pleasures and pains.

If the common objection be urged—Are all men, then, eternally calculating pains and pleasures in all their actions? we answer, no; they more frequently act instinctively, that is, without calculation; but the pain or pleasure of the gratification or non-gratification of their wish, or desire, impel them into action. Take, for instance, the most common desire, that of food—appetite. A man, before he eats, does not sit down to calculate the pleasure he shall have in eating, or the pain he shall suffer if he do not; but he feels a desire to eat, which desire, if analysed, will be found to consist of a slightly painful or uncomfortable feeling which increases in intensity until it is gratified. All other desires which form the motives to action, are similar in character, but not being equally necessary to the preservation of self, if not gratified the uneasy feeling ceases instead of increasing in intensity.

Again, are all men moved to action only by the expectation of self-enjoyment, or is it possible to disregard our own individual interests? Self-enjoyment or individual interest may form no part of our object or aim, and yet it is not the less pain or pleasure that impels us to action. It may be the pleasure

of performing what we conceive to be our duty, or the pain following the neglect of it. It may be the pleasure we have in promoting the interests of others, or the pain of seeing them in want of such assistance; at any rate we cannot be indifferent, whether the end of the action regards ourselves individually or not; for in a state of indifference there is no motive, nothing to move the will, and we must will before we act. Our choice may lead us willingly to great and continued suffering, but the pains of remorse and self-reproach may be less easy to bear.

Bentham says, "No man ever had, can, or could have a motive differing from the pursuit of pleasure or the avoidance of pain." And also that "the first law of nature is to seek our own happiness;" and in illustration of this he says, "Prudence, in common parlance, is the adaptation of means to an end. In the moral field that end is happiness. The subjects on which prudence is to be exercised are ourselves and all besides: ourselves as instrumental, and all besides as instrumental to our own felicity."

"Of what can the sum total of happiness be made up, but of the individual units? What is demanded by prudence and benevolence is required by necessity. Existence itself depends for its continuance on the self-regarding principle. Had Adam cared more for the happiness of Eve than for his own, and Eve, at the same time, more for the happiness of Adam than for her own, Satan might have saved himself the trouble of temptation. Mutual misery would have marred all prospects of bliss, and the death of both have brought to a speedy finale the history of man."

"But self-regarding prudence is not only a virtue—it is a virtue on which the very existence of the race depends. If I thought more about you than I thought about myself, I should be the blind leading the blind, and we should fall into the ditch together. It is as impossible that your pleasures should be better to me than my own, as that your eye-sight should be better to me than my own. My happiness and my unhappiness

Deontology, vol. 1, p. 18.

are as much a part of me as any of my faculties or organs, and I might as well profess to feel your toothache more keenly than you do, as to be more interested in your well-being than in my own well-being."

"It will scarcely be denied that every man acts with a view to his own interest—not a correct view, because that would obtain for him the greatest possible portion of felicity; and if every man acting correctly for his own interest, obtained the maximum of obtainable happiness, mankind would reach the millennium of accessible bliss; and the end of morality—the general happiness, be accomplished. To prove that the immoral action is a miscalculation of self-interest; to show how erroneous an estimate the vicious man makes of pains and pleasures, is the purpose of the intelligent moralist. Unless he can do this he does nothing: for, as has been stated above, for a man not to pursue what he deems likely to produce to him the greatest sum of enjoyment, is in the very nature of things impossible."

"Every man is able to form the best estimate of his own pleasures and his own pains. No description of them, no sympathy for them, can be equivalent to their reality. No story of a blow ever produced a bruise; nor was the agony of toothdrawing ever felt by mere interest excited in the sufferings of a friend under the hands of a dentist. Even were it otherwise. the power of sympathy is nothing till it acts upon self; a truism, which is almost reducible to the self-identical proposition that a man can feel nothing else but his own feelings. To escape from one's self, to forget one's own interests, to make unrequited sacrifices, and all for duty, are high-sounding phrases, and, to say the truth, as nonsensical as high-sounding. preference is universal and necessary: if destiny be anywhere despotic, it is here. When self is sacrificed, it is self in one shape to self in another shape; and a man can no more cast off regard to his own happiness, meaning the happiness of the moment, than he can cast off his own skin, or jump out of it. And if he could, why should he? What provision could have

been made for the happiness of the whole, so successful, so complete, as that which engages every individual of that whole to obtain for himself the greatest possible portion of happiness? and what amount of happiness to mankind at large could be so great, on the aggregate, as that which is made up of the greatest possible portion obtained by every individual man? Of the largest number of units, and those units of the largest amount, the largest sum total must be the necessary result."*

The above quotations speak very plainly, and it is absolutely necessary that the principle should be stated as broadly as possible, because there has been and still is, among moral philosophers, considerable mystification of the subject. want of proper attention to two facts has mainly caused this obscurity, one of which is, that mankind do not seek happiness or pleasure immediately, but they seek the object of their desires, children, friends, property, to do what is right and just and kind, and happiness attends upon their gratification: the other, that one class of these desires has the happiness and welfare of others for its object, and it is supposed that in attending to such impulses we disregard ourselves, which is not the case, as we merely sacrifice "self in one form to self in another." To be constantly preaching self-sacrifice is of no avail, for it is only where those feelings predominate that give a pleasure in acting for the good of others, that the good of others will be preferred. An habitual disregard of self and attention to the interests of others, is frequently found, but it is only where there is more pleasure in attending to others than to self. When this is clearly understood, the folly of preaching selfsacrifice to the selfish will be manifest; and it will be seen that to further the interests of morality, we must strengthen by cultivation that part of our nature, those moral feelings, that have the good of others for their object: in short, would we have a man pay habitual regard to the welfare of his neighbour, we must address those feelings, and place him in those circumstances that will make it both his pleasure and his interest to do so.

^{*} Deontology, vol. 2, p. 121.



Religion is now ordinarily used for that purpose, and people are told that unless they "love their neighbour as themselves" they will not go to Heaven, but quite the reverse. Their conduct in consequence where such teaching acts as a motive, shows at least how much they love themselves.

We need not fear the conclusion to which we are constrained to come, that pleasures and pains are the sole springs of action, and that a man necessarily seeks his own happiness, as the law of his being; in fact, "that he can feel nothing else but his own feelings." The object of the Science of Morality, therefore, is simple; it is to show what conduct will, on all occasions, best promote our real interest; what will produce to mankind the largest sum of enjoyment; for this only constitutes duty. We shall find that the conduct which produces the greatest happiness to the whole of the sensitive creation, produces the greatest amount of enjoyment to the individual.

We have before asked the question, are men always calculating pains and pleasures? and we have answered it in the negative, we now ask "ought they always to be so doing?" and again we most emphatically say "No." The laws of morality are such as produce the greatest good to the whole and not always the greatest good to the individual at the time. calculation of consequence must be used therefore only to establish general laws which admit of no appeal-from which there can be no deviation whatever the interest of the individual may appear to be. We act instinctively in obedience to the laws of gravitation and we have besides certain general laws of motion and mechanics, and so it ought to be in Morals. Mankind might as reasonably be expected to determine, on all occasions, the effect of the varied influences of attraction and repulsion, or to state at once what chemical results would be produced by the combination of different materials, as to be able, without reference to general laws, to decide what conduct would lead to the greatest happiness on the whole. The error most to be guarded against in the carrying out of the greatest happiness principle, according to the utilitarian Philosophy, is,

as remarked by Mackintosh, "that of sliding from general to particular consequences; that of trying single actions, instead of dispositions, habits, and rules, by the standard of utility; that of authorizing too great a latitude for discretion and policy in moral conduct; that of readily allowing exceptions in the most important rules; that of too lenient a censure of the use of doubtful means when the end seems to them to be good; and that of believing unphilosophically, as well as dangerously, that there can be my measure or scheme so useful in the world, as the existence of men who would not do a base thing for any public advantage. It was said of Andrew Fletcher, 'he would lose his life to serve his country, but would not do a base thing to save it.'* These principles have been strongly and legibly marked in our constitution. It is a matter of calculation for the intellect, based upon experience and forethought, to tell on all occasions what is right, what is just, respectful, and kind; but there is a principle implanted within us that gives us great pleasure in acting up to it, or great pain if we do not: and it is this feeling that we properly dignify by the name of conscience. The object of morality therefore is to associate what is right, calculated in the widest circumstances by the highest minds, with these feelings, so as to generate a habit of mind that shall instinctively and at once, without calculation, act up to it. To act, in fact, in accordance with the dictates of conscience, regardless of consequence, whether that lead us direct to the gulf of Curtius, the spiked-barrel of Regulus, the cannon's mouth or the burning stake. In such a state of mind, wherever it may in exceptional cases ultimately lead us, is to be found the greatest happiness to the race, and as may be readily proved, to the individual also. Although therefore we are moved, and ought to be moved, by the pleasures or pains of conscience, -in a rightly constituted nature the strongest feeling of all,-still morality, based upon the greatest happiness principle, is not, as it has been falsely represented by short-sighted or narrow-minded people, a selfish

^{*} Mackintosh's Dissertations, Encyc. Brit., p. 383.

calculation of individual interests, or in action a calculation at all, but its universal prayer is—

"What conscience dictates to be done, Or warns me not to do; This teach me more than Hell to shun, That more than Heaven pursue."

SECTION III.

THE PRACTICE OF MORALITY.

The object of this Chapter is an exposition of the Principles of Morality and not the carrying out of those principles into practice; the practice of Morality would require a book in itself. As regards the Practice of Morality, if Law rules in mind as well as in matter, the distinction hitherto set up between the physical and moral laws does not exist, and moral actions have their causes, or invariable antecedents, as well as physical. If Morality then is "the Science which teaches men to live together in the most happy manner possible," if more than this, it includes his well-being altogether, it must take a wider range than has yet been given to it, and it must embrace the physical and mental as well as moral laws as equally obligatory.

By the study of the physical laws we make ourselves acquainted with the great forces of nature, and according as we use them they either become our servants or overwhelm us in their resistless energy. All material civilization is based upon the study of Physics, and a man with a weekly income of a pound sterling, is now enabled to the extent of a pound to set other men in all parts of the world to work for him. It is not easy to calculate the number of men that may be thus set in motion on his behalf; there is his tea, sugar, coffee, tobacco,—silk for his wife's dress, wool for his own,—the men to take

his letters and to print his penny paper-in fact in half the earth they are at work for him for his pound a week. For his rates and taxes, which he so much grudges, he has an army to guard him and to keep all those sources of enjoyment open to him, and judges to see justice done to him, policemen to protect him and his property while he makes this pound a week; roads mended, drained, and lighted for him; bridges kept in repair, &c.; the river is turned in a gentle stream, not as a raging torrent through his house; a church is opened for him for his Spiritual needs: and all this may come within this pound a week, so much have the powers of production been increased by enlisting the forces of nature in our service. By the study of the mental laws we become acquainted with our own constitution. This includes the organic laws, for mind is connected with organization. On the knowledge of the organic laws health is dependent, and the transmission of a strong mind and body to our children; and upon the ignorance of the laws of the mind is based not only increased mental disease—but all

* The Sciences of Physiology and Pathology are doubtless yet in their infancy, and our leading physicians sometimes candidly admit that in our attempts to interfere—at least by the aid of medicine—with Nature's operations in the cure of disease, we, oftener than not, interfere injuriously. Mr. Buckle no doubt is right when he says "Even now, and notwithstanding the great steps that have been taken in morbid anatomy, in animal chemistry, and in the microscopic investigation both of the fluids and solids of the human frame, the treatment of disease is a question of art, far more than a question of science. What chiefly characterises the most eminent physicians, and gives them their real superiority, is not so much the extent of their theoretical knowledge,—though that too is often considerable,—but it is the fine and delicate perception which they owe, partly to experience, and partly to a natural quickness in detecting analogies and differences which escape ordinary observers."—(History of Civilization in England, vol. ii, p. 538.)

Nevertheless the Registrar-General's Quarterly Return, ending June 30, 1861, shows how much we have benefited by the greater attention we have lately paid to the little knowledge we have. The Report contrasts the statistics of disease, so far as we are possessed of them, of two centuries back with those of the present day. It takes 100,000 people of the London of 1660-79, and compares them with the same number of 1859. The same number presents at the two different dates respectively 357 and 42 annual deaths by smallpox; 759 and 227 by fever, ague, scarlatina, quinsy, and croup; 1,079 and 611 by consumption and diseases of the breathing organs; 763 and 8 by dysentery; 142 and 2 by scurvy; 298 and 26 by dropsy; 1,175 and 136

those superstitions that at present so much impede the progress of the race. We have banished chance and supernatural agency from physics, but from ignorance of the laws of mind as being equally fixed with those of physics, we have retained them in this department to the great detriment of certain and scientific progress.

The moral laws are supposed only to regulate the intercourse which men have together in society, that they may live together as happily as possible; but it is right, and what is right constitutes the essence of morality,—that we should attend equally to all the natural laws, for unless we do so we cannot be happy ourselves or make others happy. Each set of laws has its own sanctions, its own rewards and punishments, and they all act in harmony. Fire will burn, water will drown the virtuous man no less than the vicious; but upon him whose bodily frame is in a healthy state physical injury is less likely to take serious effect than upon him who has neglected the organic laws; while he whose moral faculties have their proper supremacy, is less liable to incur the risk of such injury, than he whose reason and moral powers are disordered by headlong passions and blind propensities. This subject has been so admirably treated

children's deaths from convulsions and teething, and 86 and 17 women's deaths in childbearing. All this decrease in the modern figures is over and above the decrease which we gain when we count the deaths of the Great Plague. In one article, however, - that of diseases of the brain, apoplexy, paralysis, epilepsy,—the older figures have the advantage of the latter, being 57 then to 151 now. Some forms of violent death, too, are more numerous now than then, especially deaths from fire, which are 13 at the present date to 3 at the former date. The opposite element, however, restores the balance. cases of drowning being 10 now to 20 then. "The supply of food, and particularly of vegetable and fresh animal food, in certain seasons of the year was defective, so that a large portion of the population became scorbutic. The houses were nearly as close and dirty as the houses now are in Constantinople and Cairo; the water supply was imperfect. Parasitic insects and diseases of the skin betrayed its impurities. The dirt of the houses struck foreigners, the sewers were imperfect, and the soil gave off marsh malaria." The present great difference is doubtless very encouraging, and illustrates the nature of "evil," and also how it is to be got rid of. The increase of disease of the head is caused by the prevailing ignorance or disregard of the connection of the mind with the brain, and the tendency in consequence to overwork the latter organ.

in Mr. George Combe's Constitution of Man that it is unnecessary to pursue it here. When a good and pious man, negligent of the organic laws and of the laws of political economy, falls into ill-health and poverty, it is thought to be a mysterious dispensation of Providence for which provision requires to be made in another and a better world. The mass of suffering incident to ignorance and the consequent neglect of the natural laws is incalculable; plague, epidemic, disease, melancholy, madness, poverty; and these continue to be represented by our religious teachers, not as the consequence of our ignorance and transgression of laws with which we ought to be acquainted, but as a necessary part of human nature, consequent upon the transgression of Adam; inflicted as arbitrary chastisements or trials by God, to be removed only by Him in the same manner, prayer being the only proper way to effect their removal. Whereas were they removed by prayer without our first having our attention called to their cause and removing it, it would probably be to our destruction and not our good.

It is our moral duty then to study the nature of everything around us, and to make ourselves acquainted with the particular constitution it has received from the hand of the Creator, and its relation to our own organization, for whether it will do us good or harm depends upon the adaptation of our conduct to such properties and relations.

It is the province of Moral Science to teach us what our duties are, and of Social Science to place us in circumstances that will best enable us to perform them. Perhaps the most direct means of ascertaining what our duties are,—that is, what are the purposes for which we have been made, is to study the faculties and attributes with which we have been endowed, and thus basing our moral code upon the use of each in the direction for which its nature shows it was evidently intended. I have endeavoured to work out this principle in my "Education of the Feelings and Affections," which will make it unnecessary to pursue the subject at any length here. Morality ought to be at least as certain a science as Chemistry or Medicine; a

Moralist ought to be able to speak as certainly, as the Chemist or Physician each in his department, of what a person with a definite mental constitution ought to do, and in what circumstances he ought to be placed to make him as happy as possible. Under the head of Mental Science we shall see how far our knowledge of the mental constitution will enable us to do this.

As I have said, my object here is the elucidation of Principles, but I may just mention two or three things in the practice of Morality, that are calculated to work the greatest change for the better in the present state of society, when they come to be clearly recognized as duties. Now they are either overlooked or completely ignored. Thus, no man will consider it right, either with a license or without, to bring children into the world for which he has not a moral certainty of providing properly without the assistance of others. Surely it would be wrong to bring children into the world that we knew would die of starvation; is it not also wrong to bring them into the world with the certainty that their support must depend upon other people, either in an exacted poor's rate or any other way? When a provident person has economised his time and done his work it is quite unjust that he should be set to work again to help to keep a dozen children for another man whose own earnings have never been properly equal to the support of one. Strange as it may seem, the opposite feeling to this almost universally prevails, and prizes are given to agricultural labourers for having families of 12 or 16 children upon twelve shillings a week. Any improvement in the condition of the Working Classes must be based on provident habits; and all providence, to be effectual, must commence here.

Again, it will not much longer be considered right and fair that when the Capitalist and a hundred Labourers shall work together an equal number of hours with a common object, that the Capitalist shall carry off as his share one half of the common produce, merely because the present working of the law of supply and demand gives him power to do so. Attention to the "moral check" on population, mentioned above, will stop

this abuse and enable the workman by lessening his numbers to make a better bargain for himself.

A more equal and just division of the produce of labour will be a check on the present luxurious mode of living, which is the scandal of the present age; and the upper and middle classes will be obliged to return to nature's more simple pleasures, which are higher, purer, more lasting, and distinguish man peculiarly as man. Pure air, exercise, healthy appetite, the pursuit of truth, the poetry of nature in beautiful scenery, change of season, the blue sky and clouds and sunsets, the hum and buz and quietude of enjoyment of insect and animal life, books and the company through them of all the great and good that have departed, how cheap are these, yet how lasting!

It is often thought that vice would be pleasant enough in this world if it were not for the penalties that attend it in another; but this is a great mistake, for every deviation from the moral laws is attended with suffering as certainly, although not so directly and immediately, as in the physical or organic laws, and a person guilty of an immorality will be as surely punished for it as if he were to put his hand into the fire. instances given above are certainly breaches of the moral law, although, as I have said, not generally recognized and acknowledged, and very much of what is called "evil" in the world is consequent upon them and may be removed upon the removal of the cause. Mankind are scrambling to get all the good they can for themselves individually, and they miss in consequence the higher good to be attained only by arrangements made best to promote the happiness of all. The Mysteries of God's Moral Providence are principles owing:-

First, to the non-recognition that all God's laws, physical, moral, and mental, are equally binding upon us.

Second, we compare our condition with that of other people, both real and imaginary, and we consider ourselves entitled to something better than the state and position in which we find ourselves; whereas, if we carry out the doctrine of Necessity to its legitimate consequences, we are really entitled to nothing, save a balance of enjoyment, as all our merit is derived.

Third, we have looked upon ourselves as individuals, and have acted too much without reference to the whole, of which we are only a very small part. But what is man, looked at through the doctrine of Philosophical Necessity? A mere link in the chain of causation, connected with innumerable links before his existence, and with the future chain ad infinitum. the consequences of his existence being endless; calling, probably, numberless beings into existence by the same necessary law by which he himself began to be. A mere atom in the mass of sensitive creation, called into existence without any choice on his part, and moved by influences over which he has no more control than an atom of matter over attraction or repulsion, or whatever other laws it may be constituted to obey. He, an atom of the great body of mankind, bearing the same relation to it as a single atom of the human body does to the whole: the atom is introduced into the system by the laws of nature: it passes through the several stages of assimilationbecomes capable of feeling, and again passes away; so does man from the great body of society. He, however, makes himself the centre of time and space, and if one within his little world is removed by death, the whole economy of nature must be inverted to afford him relief; yet from the great body of mankind some hundreds depart and are born every minute. the eye that views mankind and not man, it would seem as wise to mourn for the departed,-supposing even that they exist no more, and are to us as before they were born,—as to mourn for those who might have been born, but yet were not.

In the moral government of the world we everywhere find individual happiness made subservient to the general good. Moved on all occasions by necessity, man can merit nothing, and can, in justice, claim nothing but a balance of enjoyment upon the whole of his being. To the very existence of man, as man, general laws are necessary, and the result of these general laws is to produce great variety of conditions with

reference to the relative quantity of happiness enjoyed by each creature. Throughout social existence, as we have previously seen, man is made to suffer for the faults of his fellows; the effects of his neighbour's ignorance or injustice fall upon himself, and by this arrangement the general well-being is secured, by creating the strongest of all motives for each to dispel the clouds of ignorance around him, and to endeavour to carry others forward with himself in the march of improvement.

The principal reason why Morality has not advanced as a science is, that the mental constitution has not been understood, and in ignorance of this, laws for the production of the greatest happiness were empirical and fruitless, as they could have no more foundation in real knowledge than the science of Medicine before the discovery of the circulation of the blood; but as knowledge of the structure and functions of the several organs of the body is essential to minister to their disorders, so an intimate acquaintance with the faculties and functions of the mind is requisite to remedy moral disease.

Man is a compound of instincts, and of reason or intellectual faculties for the proper direction of these instincts. The instinct is the incentive to action, and reason the guide to the object of such action. Some of these instincts have reference to our individual welfare. They induce us to cling to life, though excessive pain should for the moment predominate, rendering life for the time being undesirable; they induce us to supply our body with the material necessary for its sustenance; to attach ourselves to those who administer to our pleasures; to accumulate for a future day; to defend ourselves and repel aggression; to meet necessary danger; cautiously to avoid that which has a tendency to injure; to desire approbation; to exalt ourselves, and to view things only with reference to self. These are called the selfish feelings. Another class of our instincts leads us to seek for gratification in the welfare of the great body of society; to desire the happiness of our fellowcreatures; to treat them with deference and respect; to do justly ourselves, and to see that justice is done to others. These

are termed disinterested feelings, not because they have not as direct a reference to individual happiness as any of the others, but because the happiness derived from their gratification is a consequence and reflection of the happiness of others. We are thus connected by one part of our organization with the earth, and our happiness requires obedience to the physical and organic laws: by the other portion we are connected with the whole mass of sensitive existence, and our happiness equally requires that the laws that connect us with these should be obeyed.

All our faculties are sources of happiness when exercised legitimately, and all have a wide field of action without interfering with the rights or happiness of others, and the object of the moralist is to show how each may be gratified consistently with this limitation. The greatest possible amount of happiness can only be experienced when the disinterested feelings predominate, and in proportion as these take precedence over the rest, does happiness increase; the reason of which is, that the gratification of the selfish desires decreases with age,—it is single and solitary, and confined to one object,—while that of the disinterested feelings is boundless in its range, and is composed, not only of the enjoyment which always results from the legitimate exercise of the faculties, but also of the happiness reflected from that of all benefited by such exercise: the former is ever but an unit; the latter always compound.

Not only is it necessary to morality that those feelings which have the interest of others for their object should have the supremacy, but the intellectual faculties must also be cultivated and enlightened; for the feelings that prompt us to action are mere blind impulses; those that have for their object our own individual welfare are as likely to destroy as to benefit us, unless guided by reason, and those that have for their object the welfare of our fellow-creatures are as likely to injure them as to increase their enjoyment, unless similarly directed.

As almost all the "evil" in this world originates in passion and perverted feeling, and in error consequent on the

mmitation of our faculties, and as it is not only necessary to wish to do right, but we must also know what is right, perhaps the highest pursuit of all is the elucidation and spread of truth. We may not all be able to discover new truths, but we may all aid in making what truth there is shine a little brighter. Truthfulness and sincerity therefore must always be reckoned among the first moral duties. It is the one thing needful in this world of shams. While merit and demerit are attached to opinion, as if we could form what opinions we liked, insincerity is likely greatly to prevail. The best mode of attacking error is by spreading truth, and whatever may be the convictions at which we may arrive, and whatever may be the opinion of society with respect to such convictions, we are bound to state them if called upon. Were each mind thus honestly to declare the faith that it holds, truths that are now treated as errors dangerous to the interests of society, would be at least regarded with respect, out of deference to the talents and character of those that entertain them, and the improvement of our institutions would be more rapid. For though the "world has ever shown but small favour to its teachers;"* though it has ever regarded with an evil and a jealous eye the propounders of new truths, yet the honest expression of all that we believe will be found to be most in accordance with the promotion of our own well-being. We may be neglected and even persecuted by society at large; yet the sympathy and friendship of the few real lovers of truth, who are capable of appreciating our motives and views, and the internal consciousness arising from the activity of the highest feelings, will more

^{* &}quot;The world has ever, we fear, shown but small favour to its teachers: hunger and nakedness, perils and reviling, the prison, the cross, the poison-chalice, have, in most times and countries, been the market-price it has offered for wisdom, the welcome with which it has greeted those who have come to enlighten and purify it. Homer and Socrates, and the Christian Apostles, belong to old days; but the world's martyrology was not completed with these; Roger Bacon and Galileo languish in priestly dungeons, Tasso pines in the cell of a madhouse, Camoens dies begging on the streets of Lisbon. So neglected, so 'persecuted they the prophets,' not in Judea only, but in all places where men have been."—Carlyle's Miscellanies, vol. 1, p. 341.



than repay us for all that the world is capable of withholding. Unless this virtue of perfect sincerity be practised, it is impossible that a man's friendships and connexions can be formed upon the only lasting and desirable footing, viz., sympathy of thought and feeling; and though the friends of the man who dares to promulgate and support unpopular truths are necessarily few, yet they are more valuable, and are the source of more happiness than a host bound to him by the ordinary worldly ties, or than the stupid staring and loud huzzas of the multitude.

By expediency we generally mean the adaptation of abstract truths to the present circumstances of the world; giving a body to what has hitherto been a mere spirit; and no spirit can live here without a body, and that adapted to the conditions of its existence. But exceptions to general rules, the dictates of the higher feelings never can be really expedient, and therefore can never be allowed. Attempting to do good by the habitual disregard of any of the great moral laws is a fatal mistake. The history of the Jesuits is an instructive illustration. The Jesuits' was the holiest of causes—the support of Religion and the Church,—but unfortunately they taught that all means were fair and right in such a cause—they held "that they might do evil that good might come," and what was the consequence? Macaulay says, "Before the order had existed a hundred years, it had filled the whole world with memorials of great things done and suffered for the faith. No religious community could produce a list of men so variously distinguished: none had extended its operations over so vast a space; yet in none had there ever been such perfect unity of feeling and action. There was no region of the globe, no walk of speculative or of active life, in which Jesuits were not to be found. They guided the counsels of Kings. They deciphered Latin inscriptions. observed the motions of Jupiter's satellites. They published whole libraries, controversy, history, treatises on optics, Alcari odes, editions of the fathers, madrigals, catechisms, and lam-But with the admirable energy, poons."* * Macaulay, vol. 2, p. 54.

disinterestedness, and self-devotion, which were characteristic of the society, great vices were mingled. It was alleged, and not without foundation, that the ardent public spirit which made the Jesuit regardless of his ease, of his liberty, and of his life, made him also regardless of truth and of mercy; that no means which could promote the interest of his religion seemed to him unlawful, and that by the interest of his religion he too often meant the interest of his society. Consequently at the end of this hundred years these principles had brought the whole of the Catholic Church into disrepute, and we find that Tillotson, whose indulgence for various schismatics and heretics brought on him the reproach of heterodoxy, told the House of Commons from the pulpit that it was their duty to make effectual provision against the propagation of a religion which demanded from its followers services directly opposed to the first principles of morality. Macaulay tells us that the inference popularly drawn was "that, however fair the general character of a Papist may be, there was no excess of fraud or cruelty of which he was not capable when the safety and honour of his church were at stake:"* and that the extraordinary success of the fables of Oates is to be chiefly ascribed to the prevalence of this opinion. He says, "It was to no purpose that the accused Roman Catholic appealed to the integrity, humanity and loyalty which he had shown through the whole course of his life. It was to no purpose that he called crowds of respectable witnesses, of his own persuasion, to contradict monstrous romances invented by the most infamous of mankind. It was to no purpose that with the halter round his neck, he invoked on himself the whole vengeance of God, before whom in a few moments he must appear, if he had been guilty of meditating any ill to his prince or to his Protestant fellow-countrymen. The evidence which he produced in his favour proved only how little Popish oaths were worth. His very virtues raised a presumption of his guilt. That he had before him death and judgment in immediate prospect only made it more likely that

^{*} Macaulay, v. 2, p. 9.

he would deny what, without injury to the holiest of causes, he could not confess. Among the unhappy men who were convicted of the murder of Godfrey was one Protestant of no high character, Henry Berry. It is a remarkable and well-attested circumstance, that Berry's last words did more to shake the credit of the plot than the dying declarations of all the pious and honourable Roman Catholics who underwent the same fate.*" The Jesuits sought power at the expense of truth and mercy, they outraged the fundamental laws by which alone society can be held together, and notwithstanding their training, their talent, and the high objects for which they sought that power, they lived to be powerless, except when working in the dark or under false colours, for in their own characters no one could trust them or place the slightest reliance upon anything they said or did, since with them truth was not sacred and no contract was binding.

A serious mischief is done to the mind by admitting even the supposition that, in any case, the greatest happiness principle will allow of a departure from the general rule of right. Conscience can admit of no appeal; it must be a supreme ruler; for habitual obedience to its dictates is the only means of preventing the mind from being divided against itself, and of keeping it in a healthy state. The Utilitarian Philosophy requires, therefore, to be used with caution. It serves to test the soundness of general rules, and to supply a motive where no such general rules exist: the well-being of society can never be secured by leaving it to every individual to calculate the consequences of each action, but by the obedience of each to those rules that experience has shown generally to tend to happiness. The performance of duty-to do on all occasions what is right, therefore, not the pursuit of happiness, may be considered as the safest road to happiness; trusting, as we may do implicitly, that if we act in obedience to the moral law, our well-being will be best secured.

The main thing to be sought is the habitual predominance
* Idem. vol. 2, p. 8.



of the moral feelings: the maintenance of them in a state in which "the prospect of advantage through unlawful means should never present itself to the mind:" or if it did, that its expulsion should follow instinctively, without any calculation on the subject as to whether the "particular circumstances" do not make it lawful: for he that hesitates is lost. If an action be considered at all doubtful, the thought of it is occasionally entertained, the mind becomes accustomed to the possibility of its performance, and will then generally yield to the first strong temptation. Thus even thoughts at variance with the highest purity of mind should never be permitted to gain entrance, for evil thoughts invariably lead to evil deeds, as minor crimes to greater. So the habitual indulgence of one fault lowers the tone of the whole of the moral sentiments, and is incompatible with the higher virtues. It acts physically as well as morally by depriving the moral organs of the nervous energy requisite for their full activity. A certain portion of nervous fluid is generated by the brain, and if this is used by the propensities, it is at the expense of the moral and intellectual organs.*

In the present artificial state of society, where its laws are in so many instances opposed to the laws of nature, every individual act of virtue cannot be supposed to lead directly to happiness. The sacrifice of external advantages required by such an act may even be very great; but we must bear in mind, what moralists too often forget, that it is not in every

^{*} J. S. Mill says, "Capacity for the nobler feelings is in most natures a very tender plant, easily killed, not only by hostile influences, but by mere want of sustenance; and in the majority of young persons it speedily dies away if the occupation to which their position in life has devoted them, and the society into which it has thrown them, are not favourable to keeping that higher capacity in exercise. Men lose their high aspirations as they lose their intellectual tastes, because they have not time or opportunity for indulging them; and they addict themselves to inferior pleasures, not because they deliberately prefer them, but because they are either the only ones to which they have access, or the only ones which they are any longer capable of enjoying. It may be questioned whether any one who has remained equally susceptible to both classes of pleasures, ever knowingly and calmly preferred the lower; though many, in all ages, have broken down in an ineffectual attempt to combine both."—

Fracer, Oct. 16, 1861.

act of virtue that the reward is to be looked for, but in the general amount of happiness resulting from virtuous dispositions, habits, and feelings; a state of mind which is only attainable by the invariable and constant practice of virtue. A man's virtue may be of the negative kind, that is, confined to doing no one any injury; but if he do to no one any good, although he may not actually suffer in consequence, he will lose all the happiness derived from active virtue. His condition will be similar to that of a man born blind, who suffers not positively from the want of sight, never having known what it is to see, but who loses all the advantages derivable from that sense. the man of low moral manifestation may not be a greater sufferer, but he is susceptible of many degrees less happiness than the highly moral man, in the same way that the brutes are capable of less enjoyment than himself: a pig eats and drinks and sleeps and grunts away his life in a comparatively low kind of enjoyment, and so may he. "If we know a man who is palpably cold-hearted, grasping and selfish, we are authorised to conclude, First, that he is deprived of that delicious sunshine of the soul and all those thrilling sympathies with whatever is noble, beautiful, and holy, which attend the vivacious action of the moral and religious faculties: and, Second, that he is deprived of the reflected influence of the same emotions from the hearts and countenances of the good men around him."* Mackintosh, in speaking of Leibnitz's Ethics, observes, "It entirely escaped his sagacity as it has that of nearly all other moralists, that the coincidence of morality with well-understood interest in our outward actions, is very far from being the most important part of the question; for these actions flow from habitual dispositions, from affections and sensibilities which determine their nature. There may be, and there are, many immoral acts, which, in the sense in which words are commonly used, are advantageous to the actor. But the whole sagacity and ingenuity of the world may be safely challenged to point out a case in which virtuous dispositions, habits, and feelings,

[·] Combe's Moral Philosophy.

are not conducive in the highest degree to the happiness of the individual; or to maintain that he is not the happiest, whose moral sentiments and affections are such as to prevent the possibility of the prospect of advantage, through unlawful means, presenting itself to his mind. It would indeed have been impossible to prove to Regulus that it was his interest to return to a death of torture in Africa. But what if the proof had been easy? The most thorough conviction on such a point would not have enabled him to set this example, if he had not been supported by his own integrity and generosity, by love of his country and reverence for his pledged faith. What could the conviction add to that greatness of soul, and to these glorious attributes? With such virtues he could not act otherwise than he did. Would a father, affectionately interested in a son's happiness, of very lukewarm feelings of morality, but of good sense enough to weigh gratifications and sufferings exactly, be really desirous that his son should have these virtues in a less degree than Regulus, merely because they might expose him to the fate that Regulus chose? On the coldest calculation he would surely perceive that the high and glowing feelings of such a mind during life, altogether throw into the shade a few hours of agony in leaving it. And, if he himself were so unfortunate that no more generous sentiment arose in his mind to silence such calculations, would it not be a reproach to his understanding not to discover that though in one case out of millions such a character might lead a Regulus to torture, yet, in the common course of nature, it is the source, not only of happiness in life, but of quiet and honour in death? A case so extreme as that of Regulus will not perplex, if we bear in mind, that though we cannot prove the act of heroic virtue to be conducive to the interest of the hero, yet we may perceive at once that nothing is so conducive to his interest as to have a mind so formed that it could not shrink from it, but must rather embrace it with gladness and triumph. Men of vigorous health are said sometimes to suffer most in a pestilence. No man was ever so absurd as for that reason to wish that he were more infirm.

The distemper might return once in a century. If he were then alive he might escape it; and even if he fell, the balance of advantage would be in most cases greatly on the side of robust health. In estimating beforehand the value of a strong bodily frame, a man of sense would throw the small chance of a rare and short evil entirely out of the account. So must the coldest and most selfish moral calculator, who, if he be sagacious and exact, must pronounce that the inconveniences to which a man may be sometimes exposed by a pure and sound mind, are no reasons for regretting that we do not escape by possessing minds more enfeebled and distempered."*

It may be asked, whether our own happiness be an inducement to morality sufficiently strong? Whether it will be able to produce the self-denial necessary to form a highly moral character? For morality constantly requires the sacrifice of immediate pleasures to greater ones more distant, and of present enjoyment to the good of others. But if our own happiness is not a sufficient inducement to morality, what is? It is true we never directly seek our own happiness, but happiness results from the gratification of our desires and affections; we desire the approbation of the public and our own esteem; the love of those with whom we associate: we desire to do what is right; the happiness of others; the love of God; and if stronger motives to action than these can be pointed out, what are they? Are not these the principles of action by which the generality of mankind are influenced? The enjoyments proceeding from the highest feelings of our nature, the love of mankind and of that which is right, are beyond all comparison more animating and durable, as well as more refined and elevated, than those proceeding from selfish or sensual gratifications; and all that can be said, therefore, of him who is called the sufferer for conscience sake, is, that he prefers the higher pleasure to the lower, or the great good in the future to the little good now.

One more essential to the interests of morality we shall * Mackintosh's Dissertations, p. 838.



mention. It is requisite that the mind should be freed from the degrading notions of the character of the Deity that have been handed down to us from the dark ages of ignorance and superstition, and that it should entertain views more consistent with the Divine Perfections. We must be able to reject, as derogatory to the character of God, whatever is inconsistent with the highest principles of our nature. We must not allow ourselves to suppose that what are Benevolence and Justice to us, are not so to God; or that He has a love of adulation that we should despise in a human being; that Infinite Benevolence can ordain a balance of misery, or that a balance of misery in this world, and infinite misery in the next, must necessarily be the portion of one part of God's creatures to ensure the welfare of the rest; or that punishment is vengeance, and that vengeance everlasting; or that a disinterested lover of truth and rectitude will be lost, when belief because it is safest would save him; that the Omniscient Deity can propose a plan for the temporal and eternal interests of His creatures, which at the same time He knows is inefficient to the purpose, because it will not be accepted by them; that the best and highest happiness of his creatures here is inconsistent with their happiness hereafter; or that the final purposes of creation are God's honour and glory. No; from the mind that has contemplated the perfections of the Almighty in the book of his works, such degrading notions will be banished, and it will tremble to impute motives and actions to God that are inconsistent with the highest virtue even of His creatures; though they should be revealed by an angel from heaven, or by a priesthood claiming for itself inspiration from the Highest. More consistent is the Atheist than he who allows himself to entertain such ideas; more reasonable were it to believe in no God, than in one possessing such attributes! But he who looks deeper into the ways of Providence, finds a scheme worthy of Omnipotence, in the production of the largest sum of enjoyment possible; finds that He works not by partial laws, but by such as pervade the whole sensitive creation, and cannot be resisted by any supposed

freedom of will. He feels the most implicit confidence in God. finding that there is no evidence for the existence of any other object but the good of his creatures; that pain is necessary for his preservation, and is as his schoolmaster to instruct him and impel him forward in the race of improvement—that it is intended to correct error, not to punish it. He feels and knows that the laws of God are not changeable, but that he may depend upon them in the calculation of his well-being; and that there is no necessity for us to pray to God that He will alter His laws for us to be happy, but that if we do but study and obey them, our happiness will infallibly follow; that, as it is the law of his existence that he should desire his own happiness. and morality is the most direct road to it, he must, as he adyances in intelligence and sees more clearly this connexion between virtue and happiness, of necessity choose the former. To the man who can divest his mind of the degrading superstitions of his childhood, and exercise it upon the great plan of Providence, every cause and effect that he may witness, every truth that he may discover, is a new illustration of the goodness To see Him in His works: to know what he does. and wherefore he does it, is to feel for ever in His presence; he who thus seeks the Pervading and Creating Spirit of the universe, sees on every side of him wonders going forward which only a God can perform; each atom obeying the laws of order given to it; each plant elaborately and systematically assuming the form peculiarly its own; each animal working out the object of its being, and Sensation-Feeling-the great Soul of the world, periodically changing its garment, as generation after generation of men, and all living creatures, are organized. vitalized, and again return to their mother Earth to form new "Is not God's Universe a Symbol of the Godcombinations. like, is not Immensity a Temple? Listen, and for organmusic thou wilt ever, as of old, hear the morning stars sing together." *

Sartor Resartus, p. 263.

PART II.

CHAPTER I.

MATTER.

Substances appear naturally to divide themselves into three grand classes: inorganic; organic, or those which have Life; and those organic structures which have received another and apparently totally distinct principle, viz., Sensation or Sensibility.

Inorganic Matter is distinguished by the possession of properties which we call Attraction, Repulsion, Inertia, that is to say, without sensation, and consequently without volition; it possesses certain tendencies to act in a certain way, which tendencies are called the laws to which it is subjected, and which are always uniform. It is to these tendencies that all the motions going on in inorganic matter are owing-all the phenomena of Physics. In relation to such laws, however, when we say that it is attraction that causes all bodies to tend towards each other, we are not in the least better instructed with respect to the cause of this tendency, for attraction is only a name invented to express the fact. Newton, therefore, when he showed that the heavenly bodies in revolving round each other obey the same law as the apple in its descent to the earth, did not make us better acquainted with the cause of the motion of either; although he explained the phenomenon in the only way that it admitted of explanation, by showing that the order in which it takes place is similar to the observed succession of more familiar facts. There are also other general laws or tendencies which are probably only modifications of those above mentioned. Such are chemical affinities; which, by

variously combining what are supposed to be the different kinds of matter, form all the endless variety of bodies on the face of the globe.

By tracing out and registering the tendencies or laws of matter in the departments of Physics and Chemistry, and by acting in accordance with them, have we been able to turn her powers to our own use and comfort. Such powers now at our command in this country are said to be equal to the joint force of 900 millions of men, or to the inhabitants of the whole globe.*

Organized or living matter possesses the same properties and is subjected to the same laws as inorganic; and such laws are so little suspended with regard to organic bodies as to determine the size of both plants and animals all over the world, and ultimately causing old age, decay, and death, or the extinction of life.

Striking as are the phenomena revealed to us in the first-named departments of nature, the phenomena of Life are still more so. Two bodies, almost identical to the eye, a stone and a seed, are buried in the ground. In the one there is little or no change; the other expands, bursts, rises from the ground, and makes to itself organs whereby its various functions are performed; the matter of which it is composed is continually changing, throwing off the old and useless material, and converting other matter into its own substance to supply its place; giving to other bodies the power of exercising the same vital energy, i. e., producing forms similar to itself; and then it

^{*} Men, stimulated by their natural wants, and using their faculties of mind and body to supply these from sround them, have gradually discovered that all the things or objects in nature are but repetitions or multiplications of a few kinds which they conveniently class as being of three kingdoms, called Animal, Vegetable, and Mineral: and further, they have discovered that all the changes or motions incessantly going on among these objects are of but four great kinds, which they have called Mechanical, Chemical, Vital, and Mental. By study of fit types in these simple classifications, men have acquired such wide knowledge of things and their changing conditions as has enabled them to devise very numerous processes or arts, by which they prodigiously advance human well-being.

dies—the vital power leaves the individual existence and is incapable of being further traced by us.

Thus the characteristic of vegetative life is to perform the functions of nutrition, respiration, circulation, secretion, excretion, and reproduction; the object of these functions being to produce the changes above mentioned, and thus to preserve the individual existence and the life which supports it.

Two seeds very much alike, shall in their growth present altogether opposite appearances, and the same power acting upon what appear to us to be similar structures and upon others in which there is very little difference, produces all the varied beauties of the vegetative kingdom. With reference to the primary laws which regulate these differences we are at present little enlightened; one thing, however, appears certain, that however complicated the peculiar laws of life may appear to us to be in the present state of our knowledge, they are fixed and invariable.

Life proceeds only from life;* no instance having been known of its existence where it has not been transmitted from one organized body to another; in its lowest state of energy it requires to be placed in certain relations to light, heat, and moisture; it depends upon organization. Sensation depends upon life, and all things in inorganic matter, body, and mind, bear a fixed relation to each other, and if this relation be altered in one part the whole is destroyed.

• We are told by some naturalists that the nervous system does not mark the distinction between the animal and vegetable Kingdom, because there are large classes of animals which have none; for instance, its existence has not been yet traced in all infusoria, in the myriad species of Hydrozoa and Anthozoa, and it is now doubted whether what has hitherto been taken for a nervous system in the Echinodermata has any real existence. But as life appears only to proceed from life, and all sensation to depend upon a nervous system in like manner where we can see clearly, all that we can say is that a nervous system in some cases has yet to be discovered, and with clearer vision and more knowledge it is a fair inference that it will be, for what did we know of the circulation of insects, or of the organ of hearing in the cephalopoda, before John Hunter's time? We are justified, we think, by analogy in saying that the nervous system in these minute classes has not yet been clearly demonstrated, and that is all.

As there is an apparent difference between inert or dead matter and matter which possesses life, so there is an important difference between mere organic life and animal life, or that which has received the additional principle of Sensation. Life and sensation appear to be entirely distinct principles; for although sensation cannot exist without life, yet life may exist altogether independently of sensation.

Life seems to be carried on in the same way in animals as in vegetables. In both, the materials for growth and reproduction of waste particles are supplied by means of the circulation of a fluid through innumerable tubes; the root may be said to be the stomach of the plant, imbibing nutrition from the soil; a system of tubes rising upwards, called the common vessels, correspond to the lacteals and pulmonary arteries of animals; these are distributed in minute ramifications over the surface of the leaves, which may be termed the lungs of the plant, as here the sap is exposed to the agency of light and air, and like the blood in animals, undergoes a change which adapts it to the wants of the vegetable; this sap then descends through another system of minute tubes in the inner layer of the bark, yielding all the juices peculiar to the plant.

There is, however, a difference and a very striking one in the nature of the food proper to plants and animals; by means of which difference the vegetable kingdom is made to prepare the way for the animal. The plant subsists upon inorganic matter, whilst organic is the necessary food of the animal. Life in the vegetable converts inorganic into organic matter. Thus the soil is subservient to the plant; the plant to the animal; one animal lower in the scale of sensation to another that his higher; and all to the superior capabilities of enjoyment in man.

Another noticeable difference between plants and animals, in reference to the organic processes upon which life depends, is that the former are fixed to the soil and are therefore always in contact with their food; whereas in animals which possess a power of locomotion a different arrangement is necessary for

the supply of nutriment, and these are, consequently, provided with a receptacle by which they can carry their food about with them. To convert this food into a proper supply to replace the waste particles, other functions are requisite, more numerous and complicated in the animal than in the plant.

At the commencement of the scale of organization, i.e., where life seems least removed from inorganic matter, the structure is so simple that a single organ seems all that is necessary for the existence of the individual. But the higher the individual in the scale of existence and the more its vital energy, the greater is the multiplication of its organs, the more numerous its functions, and the more elaborate and complex its structure. From the lowest end of the scale to the highest for every different function performed by either plant or animal an additional organ is necessary. The animal performs more functions than the plant, and its structure is, consequently, much more complex; but the organs in both are neither more nor less than are required for their individual wants.

Life, then, is common to both plants and animals, and is supported in the same way in both; the only difference being complexity of structure in proportion as the functions are more numerous and of a higher order.

The chief distinction between them is now to be noticed, viz., that to animals is given sensation, or the power of feeling, in addition to life. Living and feeling are distinct states, although both existing in one frame. Each state has its own organs and distinct functions, and though sensation is nowhere known to exist without life, yet life continues some-

^{*} The term sensation throughout this work is not used in the accepted sense of that term in this country, as denoting the feeling which we have by the senses, but as the particular characteristic of the animal life, and as synonymous with sensibility or feeling, but not the sense of feeling. Consciousness, which is the term many writers make use of to express this faculty, appears to me to result only from Reflection, which no animal but man possesses.

[†] I would here refer the reader to the three first chapters of Dr. S. Smith's "Philosophy of Health," in which, and more especially in the second, this subject is admirably elucidated.

times to exist when all sensation has ceased or is even extinct. Thus we continue to live when sensation is lost in sleep, and sleep which is rest to the organs of sensation is necessary to the healthy exercise of their functions and even to their very existence. The organs which support life, on the contrary, work without intermission, death being the consequence of their ceasing to act. Could they rest when we are no longer conscious, they would not in all probability wear out so soon, and we should live longer. In cases of apoplexy sensation frequently becomes extinct, at least to all appearance, some days before the merely vital functions cease. In drowning, also, sensation ceases some considerable time before death, and may be again restored if the organic functions have not quite stopped; so also the stoppage of the heart, or of the circulation of the blood in the brain from pressure, immediately entails unconsciousness; thus proving the fact that sensation is distinct from life though dependent upon it.

Dr. S. Smith observes in reference to the distinction between organic and animal life, "The action of the apparatus of the organic life when sound is without consciousness; the object of the action of the apparatus of the animal life is the production of consciousness. The final cause of the action of the apparatus of the organic life is the maintenance of existence: the final cause of the action of the apparatus of the animal life is the production of conscious existence." "When, however, consciousness of the organic processes would be of service to us; when they are going wrong; when their too feeble or intense action is in danger of destroying existence, the animal life is made sensible of what is passing in the organic, in order that the former may take beneficial cognizance of the latter, may do what experience may have taught to be conducive to the restoration of the diseased organ to a sound state, or avoid doing what may conduce to the increase or maintenance of its morbid condition." Again, "The two lives are born at different periods, and the one is in active operation before the other is even in existence.

first action observable in the embryo is a minute pulsating point. It is the young heart propelling its infant stream. Before brain or nerve or muscle can be distinguished the heart is in existence and in action; that is, the apparatus of the organic function of the circulation is built up and is in operation before there is any trace of an animal organ. Arteries and veins circulate blood, capillary vessels receive the vital fluid, and out of it form brain and muscle, the organs of the animal, no less than the various substances that compose the organs of the organic life. The organic is not only anterior to the animal life, but it is by the action of the organic that existence is given to the animal life. The organic life is born at the first moment of existence, the animal life not until a period comparatively distant; the epoch emphatically called the period of birth, namely, the period when the new being is detached from its mother; when it first comes in contact with external objects; when it carries on all the functions of its economy by its own organs, and consequently enjoys independent existence."*

It is difficult to tell when and where the animal life is first added to the organic. So feeble is the energy, so indistinct is the appearance of sensation when it is first added to matter, that naturalists have mistaken what are now known to be animals for plants. The energy of sensation, however, gradually increases as we trace it upwards in the scale of creation, and always with it the enlargement and complexity of the nervous system. The senses and voluntary motion gradually make their appearance in worms, insects, &c., the extra necessary vital functions being at the same time added. We thus ascend the scale through fishes, reptiles, birds, and quadrupeds, the complexity of organs, both nervous and vital, increasing in proportion as sensation and motion become more energetic. Thus the cerebral functions or the diversified powers of thinking and feeling gradually increase until they receive their final development in man, where they produce all the phenomena of Intellect, so far surpassing anything analogous in animals that it requires considerable knowledge of comparative anatomy to refer them to the same source.

^{*} Philosophy of Health, Chap. 2.

Dr. Smith says, "The relation is still stricter between the complexity of apparatus of sensation and the range of feeling than between the complexity of the inferior or organic functions. The greater the number of senses the greater the number of the organs of sense; the more accurate and varied the impressions conveyed by each, the more complex the structure of the instrument by which they are communicated; the more extended the range of the intellectual operations, the larger the bulk of brain, the greater the number of its distinct parts, and the more exquisite their organization. From the point of the animal scale, at which the brain first becomes distinctly visible, up to man, the basis of the organ is the same; but as the range of its functions extends, part after part is superadded, and the structure of each part becomes progressively more and more complex. The evidence of this, afforded by comparative anatomy, is irresistible, and the interest connected with the study of it can scarcely be exceeded." *

Again, observes a writer in the Edinburgh Review, No. 94, "In the nervous system alone we can trace a gradual progress in the provision for the subordination of one animal to another, and of all to man; and are enabled to associate every faculty which gives superiority with some additions to the nervous mass, even from the smallest indication of sensation and will, up to the highest degree of sensibility, judgment, and expression. The brain is observed to be progressively improved in its structure; and, with reference to the spinal marrow and nerves, augmented in volume more and more, until we reach the human brain, each addition being marked by some addition to, or amplification of the power of the animal, until in man we behold it possessing some parts of which animals are destitute, and wanting none which they possess."

All facts seem, then, to imply that in precisely the same way that life depends upon organization, so sensation or the animal life depends upon a superstructure raised upon this

^{*} Philosophy of Health, Chap. 1.

organization, viz., the nervous system. Neither is there a single fact to prove that man is in any way an exception to this rule. His mind and feelings seem to be equally dependent upon his nervous system, and the difference between him and other animals, however great, seems owing to the greater complexity of this system; from which it is evident that, important as this difference may be, there is no necessity for the introduction of a fourth principle, as distinct as life from sensation, to account for it. The functions of parts of the brain which man has in addition to those possessed by the highest order of brutes, enable him to communicate his ideas and to register and generalize his experience, and these powers constitute his distinguishing characteristic, without which he would never have risen above the savage state.

That he is a progressive being is the grand distinction of man, and the reason of an intelligent individual of the present age is not so much the reason of one, as of the whole human race: everything worthy of being preserved in every mind that has existed having been handed down to us, first by oral tradition and then by written records, making ultimately a greater difference between a cultivated mind of the present day, and that of one who has only had the experience of a life to teach him, than between the latter individual and one of the higher order of brutes. It is well said by Dr. Arnott that "a well-informed man of the present day may be said to possess within the boundaries of his mind the universe in miniature, where he can contemplate at pleasure, past events and the present and the future."

To those who are unaccustomed to trace the origin and growth of ideas through successive ages, and to consider the expansion of mind as the result of the registered experience of all that have preceded us, it is difficult to perceive the resemblance between the wonderful powers of man and those that are developed in a minor degree in the brutes. The following passage from the "Philosophy of Health," seems to prove, nevertheless, incontrovertibly, that the mind of man is not an excep-

tion to the universal law, which makes the animal life, viz., sensation—thought—consciousness—dependent upon the brain and shows also, in a highly interesting manner, the progression of the mind from childhood to manhood, and the retrogression from manhood to second childhood, as the organs of the brain gradually attain maturity with age, and again with age decay:—

"The functions of the organic life are perfect at once. The heart contracts as well, the arteries secrete as well, the respiratory organs work as well, the first moment they begin to act as at any subsequent period. They require no teaching from experience, and they profit nothing from its lessons. On the contrary, the operations of the brain, and the actions of the voluntary muscles, feeble and uncertain at first, acquire strength by slow degress, and attain their ultimate perfection only at the adult age."

"In the descending series, the animal life fails before the organic, and its nobler powers decay sooner and more speedily First of all the impressions which than the subordinate. the organs of sense convey to the brain become less numerous and distinct, and consequently the material on which the mind operates is less abundant and perfect; but at the same time, the power of working vigorously with the material it possesses more than proportionally diminishes. Memory fails; analogous phenomena are less readily and less completely recalled by the presence of those which should suggest the entire train; the connecting links are dimly seen or wholly lost; the brain itself is less vivid and less coherent; train succeeds train with preternatural slowness, and the consequence of these growing imperfections is that at last, induction becomes unsound just as it was in early youth; and for the same reason, namely, because there is not in the mental view an adequate range of individual phenomena; and the only difference being that the range comprehended in the view of the old man is too narrow, because that which he had learnt he has forgotten; while in the youth it is too narrow, because that which it is necessary to learn has not been acquired.

"And with the diminution of intellectual power the senses continue progressively to fail; the eye grows more dim, the ear more dull, the sense of smell less delicate, the sense of touch less acute, while the sense of taste, immediately subservient to the organic function of nutrition, is the last to diminish in intensity and correctness, and wholly fails but with the extinction of the life it serves.

"But the senses are not the only servants of the brain; the voluntary muscles are so equally; but these ministers to the master power, no longer kept in active service, the former no longer employed to convey new, varied, and vivid impressions, the latter no longer employed to execute the commands of new, varied, and intense desires, become successively feebler. slower, and more uncertain in their action. The hand trembles, the step totters, and every movement is tardy and unsteady. And thus, by the loss of one intellectual faculty after another, by the obliteration of sense after sense, by the progressive failure of the power of voluntary motion, in a word. by the declining energy and the ultimate extinction of the animal life, man, from the state of maturity, passes a second time through the stage of childhood back to that of infancy; lapses even into the condition of the embryo; what the fœtus was. the man of extreme old age is: when he began to exist he possessed only organic life; and before he is ripe for the tomb, he returns to the condition of a plant.*

On the same subject Dr. Elliotson, in his Human Physiology, p. 1,028. remarks, "In this miserable state of wreck, the power of the brain called mind. like the power of all other organs, and every organ, is reduced to the lowest point compatible with life, and without Divine assurance to the contrary, must indicate a final extinction, since a gradual expansion of intellectual and high moral faculties might be expected the nearer our entrance into a higher state of existence, and not a steadily increasing decline into childishness, incapacity, and absolute fatuity-dementia senilis, as it is technically called, in which no evidence can be appreciated, no views conceived; and the longer life is pushed, -the nearer to another world the individual arrives, the more fatuitous does he grow,—the more and more below the brute creation. Though few live long enough to die thus fatuous, it must be remembered that the faculties of the old are always more and more impaired and employed upon old experience without the power of advancing, and that, among those who perish in the vigour of their minds, they who are not out off suddenly, nay even they who become very acute before death, generally become delirious or unintelligent ultimately before they expire."

"And even this merely organic existence cannot be long maintained. Slow may be the waste of the organic organs; but they do waste, and that waste is not repaired, and consequently their functions languish, and no amount of stimulus is capable of invigorating their failing action. The arteries are rigid and cannot nourish; the veins are relaxed and cannot carry on the mass of blood that oppresses them; the lungs, partly choked up by adventitious matter, and partly incapable of expanding and collapsing by reason of the feeble action of the respiratory apparatus, imperfectly aerate the small quantity of blood that flows through them; the heart, deprived of its wonted nutriment and stimulus, is unable to contract with the energy requisite to propel the vital current; the various organs, no longer supplied with the quantity and quality of material necessary for carrying on their respective processes, cease to act; the machinery stops, and this is death.

"And now the processes of life at an end, the body falls within the dominion of the powers which preside universally over matter; the tie that linked all its parts together, holding them in union and keeping them in action, in direct opposition to those powers dissolved, it feels and obeys the new attractions to which it has become subject; particle after particle that stood in beautiful order, fall from their place; the wonderful structures they composed melt away; the very substances of which those structures were built are resolved into their primitive elements; these elements, set at liberty, enter into new combinations and become constituent parts of new beings; those new beings, in their turn, perish; from their death springs life, and so the change goes on in an everlasting circle."

As the elements of which the body has been composed "enter into new combinations and become constituent parts of new beings," so, even with reference to this world, may it be truly said that the mind does not perish, but that the essential parts of it descend to our children, or in the shape of written documents—registered experience, help to form the minds of hundreds of the human race.

CHAPTER II.

MIND.

In the previous chapter we have seen how nature, in the vast variety of her movements, seems systematically to approach towards one object, the production of Sensation or Sensibility or Consciousness. The laws of inorganic matter prepare the way for organic, for plants and vegetables possessing life; the vegetable kingdom prepares the way for the animal, and upon the vital functions of animals is dependent the nervous system which it seems to be the object of all the other complicated processes to produce, and with which Sensation or feeling is as intimately connected, as Attraction with inorganic matter, or Life with organic.

The world appears to have been created with the view of containing the largest possible amount of sentient existence. Not only organized structures possessing life, but beings endowed with sensation teem on every side of us; the widespreading ocean, the earth, the air, are full of them; each possessing a constitution adapted to the sphere in which it moves. There appears to be no situation where vegetation or the effects of vegetation exist that does not support some kind of animal life: stagnant water and noxious marshes, decaying vegetable and animal matter, all swarm with sentient beings, and what is death to the more perfectly organized beings, is the source of life to others lower in the scale. Distinct worlds of sensation seem to exist, in the water, in the air, in the earth. as well as on the earth, all possessing a wonderful adaptation of structure to their place in creation. How beautiful, for instance, is the world of insects, fitted as these are, in their various transformations, to inhabit the different elements. How complicated is their structure, bodily and mental, enabling them to live in a world of their own, inaccessible to the obtuser senses of man. They hear and see and feel and smell and taste what is too subtle for his perception: they have music and a language that he cannot understand: they sport in all the colours of the rainbow, and delight in their own gay clothing. The variety of structure in the organs of the senses. in the wings, legs, stings, ovipositors, mouths, and internal machinery for the supply of waste, of these little creatures. is among the great wonders of comparative anatomy. Not less wonderful is the perfection with which such internal machinery, in beings so frail and low in the scale of existence. performs its work; turning death into life, putrefaction into the most beautiful and variegated structure; eliminating the lamp of the glow-worm, the sting of the bee, and the venom that maddens the sluggish ox. No less admirable and appropriate is the structure of every living creature, from the tribes of infusoria upwards, each possessing the powers of sensation. and consequently intelligence, in the degree that is requisite for its happiness and maintenance in creation.

The most highly organized being is Man, and the aggregate of all his sensations, whether proceeding from external or internal impressions, we denominate his mind. The mind, therefore, is intimately connected with the brain and nervous system, and all the functions of the body are important only as they promote the healthy action of the brain, for it is sensation alone that makes life of any value. The due regulation of such functions is essential, therefore, to the proper action of the mind.

It is represented by some who fear the supposed results of what is called materialism, that the brain is merely the instrument that the mind makes use of in its connexion with the body. On the other hand, it is said "Mind is the functional power of the living brain." "As I cannot conceive *Life* any more than the power of attraction," says Dr. Elliotson, "unless possessed by matter, so I cannot conceive mind unless possessed by a brain, or by some nervous organ, whatever name we may

choose to give it, endowed with life. I speak of terrestrial or animal mind; with angelic and divine natures we have nothing to do, and of them we know, in the same respects, nothing. Observation shows that superiority of mind in the animal creation is exactly commensurate with superiority of brain;*

* "The same progression which exists in the gradual perfection of animal organisation, as far as regards vegetable life only, is observed in the gradual perfection of the nervous system, and of animal life which depends upon it. Comparative anatomy has followed the gradual perfection of animals, from the most simple absorbent vessels to the most complicated apparatus of mastication, deglutition, and digestion, to the most perfect circulation. With every fresh viscus, every fresh apparatus for sensation, is discovered a fresh function, and this function is more complicated in proportion as the organisation of the viscus or apparatus of sensation is more perfect. The stomach, kidneys, lungs, heart, eyes, ears, are the more complicated as the functions become so.

"The same gradation may be demonstrated in the structure of the brains of the different species. I have demonstrated in the preceding chapter that the existence of each moral quality and intellectual faculty depends solely upon the presence of certain determinate cerebral parts, and not upon the whole mass of brain. It follows, that the number of the faculties is in direct proportion to the integrant parts of the brain. In insects, fish, and amphibis, the nervous mass contained in the cerebral reservoir is still divided into several distinct masses. The greater part of these are not integrant parts of the brain, properly so called; they are ganglia, from which arise the nerves of smell, hearing, sight, &c. The two hemispheres, properly so called, are placed behind the two ganglia of the olfactory nerves, and are the more complicated as the industrial instincts are more numerous; the cerebellum in these animals generally forms a hollow pouch, sometimes placed horizontally, sometimes folded together.

"In birds, the two hemispheres are slready more considerable, although distinct convolutions cannot be discerned. The cerebellum still consists merely of its middle or fundamental part; but already appears composed of many rings placed side by side.

"In the small mammalia, the shrew-mouse, mouse, rat, squirrel, weasel, &c., convolutions are not yet discoverable. But as they are already distinctly found in other larger rodentia, the beaver, kangaroo, &c., we may suppose that they equally exist in them.

"In the larger mammalia, the cat, polecat, fox, dog, ape, the convolutions are more distinct and numerous, but their form varies according to the species.

"In the dolphin, elephant, and man, they are more numerous and deep than in the beaver, kangaroo, &c., and their form and direction vary completely according to the species."

"In all the mammalia, the cerebellum possesses, besides the middle or fundamental part, two lateral parts, which are more or less complicated, according to the species; and as the soi-disant pons variolii, or the soi-disant that activity of brain and of mind are coequal; and that, as long as the brain is endowed with life, and remains uninjured, it, like all other organs, can perform its functions, and mind continues; but, as in all other organs, when its life ceases, its power to perform its function ceases, and the mind ceases; when disease or mechanical injury affects it, the mind is affected—inflammation of the stomach causes vomiting, of the brain delirium; a blow upon the head stuns; if originally constituted defective, the mind is defective; if fully developed, and properly acted on, the mind is vigorous: accordingly, as

cerebral ganglia, i.e., the transverse layers of nervous bands, are only the commissure or junction of the lateral parts of the cerebellum, they are found in all the mammalia, and in none of the ovipara.

"The number of the integral parts, or of the convolutions of the brain, varies equally in the different species of mammalia; in some the anterior lobes of the hemispheres are larger or more elevated; in others, again, the inferior parts of the anterior lobes are nearly wanting. The middle lobes, and the other convolutions, present similar varieties.

"In this way, the integrant parts of the brain augment in number and development, as we pass from a less perfect to a more perfect animal, till we arrive at the brain of man, who, in the anterior-superior, and in the superior region of the frontal bone, possesses several parts of which other animals are deprived, and by means of which he is endowed with the most eminent qualities and faculties, with reason, and the feeling of religion and the existence of God.

"Some pretend to discover a striking resemblance between the brain of an orang-outang and that of man. But, in the first place, the difference of their volume is as five to one; their convolutions differ considerably in number and structure; the anterior lobes, especially, are contracted into a cone, flattened above, hollow below, &c.; and the difference is still more remarkable in other simise."—Gall, as quoted by Elliotson, in his "Human Physiology," p. 82.

Professor Owen, at the Meeting of the British Association for the Advancement of Science, 1861, speaking of the Gorilla, said:—"What then were the differences between the gorilla, and boschman, the negro, or the lowest in form of our species? First, there was a difference in the position of the innermost digit of the lower limb. The upper limbs were made in an harmonious kind of proportion to the lower limbs, not longer, but somewhat shorter. These differences were associated with still greater modifications of the skull. There were the same bones and in the same relative position, but there was an almost hydrocephalous expansion of the head in man as compared with the gorilla. The brain cavity in man was a fine globular part, with which we associated the idea of highest beauty, and the Greeks exaggerated it to show that beauty; yet there was a connection between the vast head of man and the mere spines sticking upon the head of a fish."

it varies with age, in quality and bulk, is the mind also varied -the mind of the child is weak and very excitable; of the adult, vigorous and firm; and of the old man, weak and dull, exactly like the body; and the character of the mind of an individual agrees with the character of his body, being equally excitable, languid, or torpid, evidently because the brain is of the same character as the rest of the body to which it belongs; -the female mind exceeds the male in excitability as much as her body; the qualities of the mind are also hereditary, which they could not be, unless they were, like our other qualities, corporeal conditions; and the mind is often disordered upon the disappearance of a bodily complaint, just as other organs, besides the brain, are affected under similar circumstances,the retrocession of an eruption may affect the lungs, causing asthma; the bowels, causing interitis; or the brain, causing insanity,-phthisis and insanity sometimes alternate with each other, just like affections of other organs; the laws of the mind are precisely those of the functions of all other organs,a certain degree of excitement strengthens it, too much exhausts it; physical agents affect it, and some specifically, as is the case with other functions, for example, narcotics. argument of Bishop Butler that the soul is immortal and independent of matter because in fatal diseases the mind often remains vigorous to the last, is perfectly groundless, for any function will remain vigorous to the last, if the organ which performs it is not the seat of disease, nor much connected by sympathy, or in other modes with the organ which is the seat of the disease,—the stomach often calls regularly for food, and digests it vigorously, while the lungs are almost completely consumed by ulceration. All the cases that are adduced to prove the little dependence of the mind upon the brain, are adduced in opposition to the myriads of others that daily occur in the usual course of nature, and are evidently regarded as extraordinary by those who bring them forward. An exact parallel to each may be found in the affections of every other organ, and each admits of so easy an explanation, that it may be truly said, "Exceptio probat regulum."*

* Human Physiology, p. 32,

But whatever may be the way in which Sensation is connected with the nervous system, it does not at all affect the reasoning founded upon the fact of that connexion. We do not call attraction a function of matter, but we never find matter existing without attraction—so we never find Life without organization, or Sensation without a nervous system.

The world is sustained and governed by "forces" of which we really know nothing, although we hide our ignorance under high-sounding names, such as Attraction, Repulsion, Chemical, Electrical, Vital, Mental, &c. When we say a thing takes place by the force of attraction, we think we have explained it, but it is no such thing; we have merely named a certain group of phenomena occurring in a certain order, and which occur uniformly or invariably in that order. We know nothing of the "force" of attraction in itself—it is only known to us in its effects; we have no powers which enable us to lift the veil and look beyond.* Apart from what it does we have no knowledge of it, and we separate it from other forces by any dissimilarity in its action. Mind as a force should be treated in the same way, for we know nothing of it apart from what it does, and we can define it only by the appearances it puts

• The theory of "force" is that it is equally indestructible with matter. Like matter, it may change its forms in a thousand ways, but it cannot be lessened or annihilated. Light and heat are forces, and heat may become what is called latent, but it is not the less present and at work, although for a time hidden from us. If we may theorise on the formation of worlds, and on this "interchange of forces," we may suppose that when the stars or planets, from their original nebulous state, took a more solid form, there would be a great evolution of heat, which force would gradually take other shapes, such as attraction, light, electricity, chemical affinity, life and nervous force, and feeling or mind. We hear much of the power of mind over matter, and it is popularly supposed that it is the soul that sets the body in motion; but the force that moves the steam-engine and that which moves the body are precisely similar and generated in a similar way. Thus Dr. Arnott says:—

"James Watt, when devising his great engine, knew well that the rapid combination of the oxygen of atmospheric air with the combustible fuel in the furnace, produced the heat and force of the engine; but he did not know that in living bodies there is going on, only more slowly, a similar combination of the oxygen of the air with the like combustible matter in the food, as this circulates after digestion in the form of blood through the lungs, which combination produces the warmth and force of the living animal. The chief

forth, that is, by its effects. The Irishman's directions for making a cannon, were to "take a round hole and pour metal

resemblances of the two objects are exhibited strikingly in the following table of comparison, where, in two adjoining columns, are set forth nearly the same things and actions, with difference only in the names:—

The steam-engine in action takes-

- 1. Fuel, vis., coal and wood, both being old or dry vegetable matter, and both combustible.
 - 2. Water.
 - 3. Air.

And produces-

- 4. Steady boiling heat of 212 degrees by quick combustion.
- Smoke from the chimney, or air leaded with carbonic acid and vapour.
- 6. Ashes, part of the fuel which does not burn.
- 7. Motive force, of simple alter. nate push and pull in the piston, which, acting through levers, joints, bands, &c., does work of endless variety.
- 8. A deficiency of fuel, water, or air, first disturbs, and then stops the motion.
- 9. Local damage from violence in a machine is repaired by the maker.

The animal body in life takes-

- 1. Food, viz., recent or fresh vegetable matter and flesh, both being of kindred composition, and both combustible.
 - 2. Drink (essentially water).
 - 3. Breath (common air).

And produces-

- 4. Steady animal heat of 98 degrees by slow combustion.
- 5. Foul breath from the windpipe, or air loaded with carbonic acid and vapour.
- 6. Animal refuse, part of the food which does not burn.
- 7. Motive force, of simple alternate contraction and relaxation in the muscles, which, acting through the levers, joints, tendons, &c., of the limbs, does work of endless variety.
- 8. A deficiency of food, drink, or breath, first disturbs, and then stops the motion and the life.
- 9. Local hurt or disease in a living body is repaired or cured by the action of internal vital powers given by the Creator."

- A Survey of Human Progress, p. 158.

This generation of force it is which makes the inactivity of solitary confinement and ennui so painful, and which makes employment necessary.

"Generally speaking, the average amount of daily food necessary for healthy men is estimated at 12 oz. of beef, 20 oz. of bread, with about ½ oz. of butter. These articles contain a force capable, if applied by a machine, of raising fourteen (f) million pounds weight to a height of one foot; that is, the oxidation of the elements contained in them would give rise to an amount of heat equivalent to that effect. But in the human body, though it far surpasses all machines in economy of force, the utmost amount of power attainable from them is not more than equivalent to three and a-half millions of pounds raised to the height of a foot; and an average day's labour does not exceed two millions of pounds thus raised. The difference is mainly due, doubtless, to the number of internal actions which are carried on in the living body;

round it." Now this is the process the metaphysicians have been pursuing in the construction of their psychological systems;—

such as the circulation, the movements of respiration, and the production of animal heat. These consume a great part of the force of the food, and leave only a remainder to be disposed of in muscular exertion."—Cornhill Magazine, September, 1861.

The action of the cerebellum is the most expensive of all forces, and if this begins too early it seriously impairs the growth of the body; if it is too large and active in after life it very much decreases the muscular energy.

We require a new system of hygiene in which "force" shall be properly and proportionally distributed. The thinking powers probably absorb a larger portion than the vital, and the vital than the merely muscular. A due balance is required between the feelings and the activities—between bodily labour and head work.

The force generated or the energy of the locomotive organs in the animal is supposed to depend upon the quantity of the red globules which carry the oxygen, the union of the oxygen and carbon taking place in the general circulation, and not, as is usually supposed, in the lungs only, in respiration; the lungs not being hotter than the rest of the body. On the other hand, it is well known that increased respiration consequent on exercise generates an increase of heat, so that it is probable that the union goes on in both. In some admirable papers, called Physiological Riddles, in the Cornhill Magazine, the writer says:—

"Living bodies grow by the operation of chemical force, which exhibits in them a two-fold action, and produces subatances which tend to decompose. Chemical change, or decomposition, causes the nourishment of the body, and the opposite forces of growth and decay proceed in mutual dependence. It is this chemical action produces the vital action; and the vital action furnishes the conditions under which the chemical action can again take place.

"The body, thus growing, receives its FORM or structure from the conditions under which it is placed in its development.

"This form adapts itself to its functions. The body tends to decompose, or to undergo chemical changes which give rise to force. The absorption of power in nutrition—by which is meant those minute changes by which the growth and repair of the body are effected; and the evolution of it again in the decomposition of the tissues, (the muscles, brain, &c..) is precisely analogous to that which takes place in forcibly separating the poles of the magnets, retaining them spart for a certain time, and suffering them to return by their attractive force to their former union. The energy developed in the approach of the magnets towards each other is exactly equal to the force expended in their separation. In the case of the living body, the force thus developed within it necessarily produces the actions to which its structure is adapted.

"Thus, for example, when a seed is placed in the ground, the first process which takes place within it is one of decomposition. The mass of the seed consists of starch and albumen, in the midst of which is placed a small cellular body, called the germ. This germ will grow, and develop into the future plant, but only on condition that a process of decay goes on in the starchy and

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they have been studying the nature of the force—of the spirit by a process called "reflection on consciousness" instead

albuminous matter with which it is in connection. Part of the latter sinks into the inorganic state, uniting with oxygen, and passing off as carbonic acid. The young plant is at first of less weight than the seed or root which has disappeared in generating it. When it arrives at the surface of the soil, a new process commences. The rays of the sun, falling on its leaves, maintain in them a continuance of the same process (one of chemical change) by which the first development of the germ was determined. Thus new materials are added to the plant, the light exciting those chemical processes which produce the organic arrangement of fresh portions of matter. The leaves, under the stimulus of the sun's rays, decompose carbonic acid, giving off part of the oxygen, and 'fix,' as it is said, the carbon in union with hydrogen, and sometimes with nitrogen, &c., to form the various vegetable cells and their centents.

"An animal now consumes this plant. In digestion there takes place again a precisely similar process to that with which we started—the germination of the seed. The substance of the plant partially decomposes; a portion of it sinks into a state approximating to the inorganic, while another portion (doubtless by means of the force thus generated) becomes more highly vitalized, and fitted to form part of the animal structure. The germination of the seed, and animal digestion, are parallel processes. Each of them is twofold-a decomposing and a vitalising action going on together, the latter having its origin in and depending on the other. Having formed part of the animal structure for a time, this living matter decomposes yet again, and again gives off its force. But now, instead of effecting, as in the previous cases, a vitalizing action, the force produces a mechanical action in the muscles, or a nervous action in the brain, or, in short, the function of whatever organ the matter we are tracing may have been incorporated with ; -the function being but another mode of operation of the same force which caused the nutrition. And thus, supposing the action to have been a muscular exertion, say the lifting of a weight, we shall have traced the force, which came from the inorganic world at first, in the form of the sun's rays, and was embodied in the substance of the plant, back again into the inorganic world in the form of motion. * * * The plant yields up its life to nourish the animal body, as that body, so nourished, in its activity yields up its life to impart force to the world around. * * Every giving off of force has for its necessary effect the storing up of force in equal amount elsewhere. The two halves of this process cannot be divided."

The original mind of George Stephenson was among the first to perceive these truths. He said of the power propelling his locomotives, that it was the light of the sun bottled up in the earth for tens of thousands of years—"light, absorbed by plants and vegetables, being necessary for the condensation of carbon during their growth, if it be not carbon in another form,—and mow, after being buried in the earth for long ages in fields of coal, that latent light is again brought forth and liberated—made to work, as in that locomotive, for great human purposes."—The Life of George Stephenson, by Samuel Smiles, p. 475.

of its conditions and manifestations, and their practical progress has been in proportion. Dr. Gall was the first to

This does not in any way, however, account for the origin of the germ, nor are " the conditions under which it is placed in its development" sufficient to account for the difference in the form or atructure between one germ and another. The Cornhill writer, however, tells us that "the organic world does not differ from the inorganic in its essence;" but he says, "there is a difference in their mode of operation though the elements are the same. The physical powers have received in the organic world a particular direction, and are made to work to certain results which are attainable only through living structures." Thus it is easy, he says, to understand how there has arisen the conception of a peculiar vital Eutity or Principle. "This was a rapid generalization before the working of the various forces that conspire in life had been discorned. For the peculiar results, a peculiar agent was supposed, instead of a peculiar mode of operation." He quotes Coleridge for the opinion that "life" is "a mode of operation" of the same powers which we recognize under other names, as magnetism, electricity, or chemical affinity. A living body, we are told, is an individuation of the forces of nature. "Nothing is there which is not elsewhere in nature, but a limit is applied to that which is freely circulating." "No new or special power is required for organic life; the common and all-pervading powers of nature are enough. * * That which constitutes matter living, in the ordinary sense, is a certain arrangement of its elements, in relations opposed, more or less, to their chemical tendencies. This arrangement of the elements gives rise to a substance in which there exists a tendency to decompose the organic substance. This substance, moulded into adapted structures, constitutes an organic body. The conditions essential to organic life are these two: an opposition to chemical affinity in the arrangement of the elements, and a structure adapted to the performance of the necessary functions." We are all more or less familiar with the experiment of Cross and some others who are supposed to have originated life by electrical currents, but these have not been considered as satisfactory by the scientific world.

Thoughts and feelings are now supposed to be the immediate correlates of the vital forces, and the vital of the physical. The quantity or intensity of consciousness or feeling is determined by the constituents of the blood, as is familiarly seen in the action of alcohol, opium, and hashish upon the mind.

Herbert Spencer says—" Various classes of facts thus unite to prove that the law of metamorphosis, which holds among the physical forces, holds equally between them and the mental forces. Those modes of the Unknowable which we call motion, heat, light, chemical affinity. &c., are alike transformable into each other, and into those modes of the Unknowable which we distinguish as sensation, emotion, thought: these, in their turns, being directly or indirectly re-transformable into the original shapes. That no idea or feeling arises, save as a result of some physical force expended in producing it, is fast becoming a common-place of science; and whoever duly weighs the evidence will see, that nothing but an overwhelming bias in favour of a pre-conceived theory, can explain its non-acceptance. How this metamorphosis takes place—how a force existing as motion, heat, or light, can become a mode of con-

follow the right method. He observed mental manifestations and characteristics, that is, Mind in its effects only.

sciousness—how it is possible for aerial vibrations to generate the sensation we call sound, or for the forces liberated by chemical changes in the brain to give rise to emotion—these are mysteries which it is impossible to fathom. But they are not profounder mysteries than the transformations of the physical forces into each other. They are not more completely beyond our comprehension than the natures of Mind and Matter. They have simply the same insolubility as all other ultimate questions. We can learn nothing more than that here is one of the uniformities in the order of phenomena."—First Principles, p. 280.

"Of course if the law of correlation and equivalence holds of the forces we class as vital and mental, it must hold also of those we class as social."—p. 281.

—That is, what is true of man is true of mankind—what is true of the individual is true of the race.

"If we sak whence come these physical forces from which, through the intermediation of the vital forces, the social forces arise, the reply is of course as heretofore—the solar radiations. Based as the life of a society is on animal and vegetable products; and dependant as these animal and vegetable products are on the light and heat of the sun; it follows that the changes going on in societies are effects of forces having a common origin with those which produce all the other orders of changes that have been analyzed. Not only is the force expended by the horse transferred to the plough, and the labourer guiding it, derived from the same reservoir as is the force of the falling cataract and the roaring hurricane; but to this same recervoir are eventually traceable those subtler and more complex manifestations of force which humanity, as socially embodied, evolves. The assertion is a startling one, and by many will be thought ludicrous; but it is an unavoidable deduction which cannot here be passed over. Of the physical forces that are directly transformed into social ones, the like is to be said. Currents of air and water, which before the use of steam were the only agencies brought in aid of museular effort for the performance of industrial processes, are, as we have seen, generated by the heat of the sun. And the inanimate power that now, to so vast an extent, supplements human labour, is similarly derived. The late George Stephenson was one of the first to recognize the fact that the force impelling his locomotive, originally emanated from the sun. Step by step we go back - from the motion of the piston to the evaporation of the water; thence to the heat evolved during the oxidation of coal; thence to the assimilation of carbon by the plants of whose embedded remains coal consists; thence to the carbonic acid from which their carbon was obtained; and thence to the rays of light that de-oxidized this carbonic acid. Solar forces millions of years ago expended on the Earth's vegetation, and since looked up beneath its surface, now smelt the metals required for our machines, turn the lathes by which the machines are shaped, work them when put together, and distribute the fabrics they produce. And in so far as economy of labour makes possible the support of a large population; gives a surplus of human power that would else be absorbed in manual occupations; and so facilitates the

At school he observed that the boys most famous for verbal memory had very prominent eyes; he also observed

development of higher kinds of activity; it is clear that these social forces which are directly correlated with physical forces anciently derived from the sun, are only less important than those whose correlates are the vital forces recently derived from it."—p. 282, et seq.

"The universal truth above illustrated under its various aspects, is a necessary corollary from the persistence of force. Setting out with the proposition that force can neither come into existence nor cease to exist, the several foregoing general conclusions inevitably follow. Each manifestation of force can be interpreted only as the effect of some antecedent force: no matter whether it be an inorganic action, an animal movement, a thought, or a feeling. Either this must be conceded, or else it must be asserted that our successive states of consciousness are self-created. Either mental energies, as well as bodily ones, are quantitatively correlated to certain energies expended in their production, and to certain other energies which they initiate; or else nothing must become something and something must become nothing. The alternatives are, to deny the persistence of force, or to admit that every physical and psychial change is generated by certain antecedent forces, and from given amounts of such forces neither more nor less of such physical and psychial changes can result. And since the persistence of force, being a datum of consciousness, cannot be denied, its unavoidable corollary must be accepted."- p. 284.

Dr. Laycock says:—"Now, the most general force of this kind is the force of gravity or attraction, and its correlate, repulsion. Motion is the result of the reciprocal action of these forces. The derivative physical forces are those termed the imponderables—namely, heat, light, magnetism, chemical affinity, in an evolving scale of progress. Derivative again from these are the vital forces, which finally culminate in the vis nervosa and Mind." * * * * • — —Mind and Brain, p. 279.

"The life of a man is therefore like a stream of events or changes in linked sequence, flowing on as necessarily as the waters of Niagara. It is true that, in common language, the will is spoken of as the first cause of conscious thoughts and acts, but no act of will (that is, of mental energising) can occur without its necessary co-existents and antecedents—that is, its causes; and such as these are, so will the act of will be. There is, in fact, no more a spontaneous act of will than there is spontaneous generation. Strictly, such an act is a creation, and belongs only to creative power.

"And this general truth points to another—viz., that the causes of every present state of consciousness of organisms extend far back into time. Tracing the life of any organism whatever, we find that the necessary antecedent to its existence in time and space is the existence of another organism in time and space."—p. 275.

"That no idea or feeling arises," as Mr. Spencer says, "save as a result of some physical force expended in producing it;" "that each manifestation of force can be interpreted only as the effect of some antecedent force: no matter whether it be an inorganic action, an animal movement, a thought, or

that there were large and prominent eyes without this mental characteristic. He afterwards discovered that in the case where it was connected with verbal memory and a facility of learning languages the prominence of the eye was owing to the large size of a convolution of the brain at the back of it, which pushed it outwards and a little downwards, and thus enabled him to distinguish it from a mere large and prominent eyeball. He conceived that if there was an external sign of one mental faculty there might be of others, and he set himself henceforth to observe. He heard of people celebrated as mathematicians, for mental calculation, for drawing, music, &c., and he examined and took casts of their heads. He found that a faculty for drawing was much too general, for many who had a very correct appreciation of form had little of size, and where the idea of form and size was correct there was none of relative proportion. He found many also with colour blindness-that is, who could not distinguish one colour from another, or particular colours from others. He found in all these cases particular parts of the brain more or less developed, and by comparing one brain with another he ascertained which part was connected with particular mental faculties. So that by this means of investigation he did not discover faculties of perception, conception, memory, imagination, and judgment, as the metaphysicians had done, and which are merely modes of action of all the faculties; but he discovered faculties of form, size, weight, colour, order, number, time, tune, &c. He found similar differences between the brave and the timid. the firm and the yielding, the cruel and the humane, the hopeful and the desponding, the rogue and the honest, feeling;" "that no act of will," as Dr. Laycock says, "(that is, of mental energising) can occur without its necessary co-existents and antecedents, and that "the causes of every present state of consciousness of organisms extend far back into time," what is this but the last proof of the doctrine of "Necessity" we are inculcating? The forces of nature culminate in mind, and then react on nature, through the mental organism thus generated, as an ordering and regulating power, and, as Dr. Laycock says, there is "no more a spontaneous act of will (of free will) than there is spontaneous generation." Is it not time, therefore, that Scientific men began to endeavour to reconcile this fact with their theory of Ethics ?

the open and the secretive, and wherever he heard of any mental peculiarity, any great virtue or deficiency, there he directed his observation; and we are told that "abandoning every theory and preconceived opinion, Dr. Gall gave himself up entirely to the observation of nature. Being a friend to Dr. Nord, Physician to a Lunatic Asylum in Vienna, he had opportunities, of which he availed himself, of making observations on the insane. He visited prisons, and resorted to schools: he was introduced to the courts of princes, to colleges. and to courts of justice; and wherever he heard of an individual distinguished in any particular way, either by remarkable endowment or deficiency, he observed and studied the development of his head. In this manner, by an almost imperceptible induction, he at last considered himself warranted in believing that particular mental powers are indicated by particular configurations of the head." In this way commenced the purely inductive mode of studying the mind: he did not sit down and reflect upon his consciousness-upon the various trains of thought and feeling that passed through his own mind, but he looked at mind objectively as it displayed itself in others, showing what it could do from what it had In fact, it was the order of nature only in this department as in every other that he set himself to observe. The mode of investigation has been assiduously followed by others. and thence has arisen a tolerably complete list of the primitive mental faculties, and a system of mental philosophy which furnishes the key to most of the disputes upon the subject which have occupied so much of the time of ancient philosophers and modern metaphysicians.

Dr. Gall did not confine his observations to man, but turned his attention to animals also, and found their intellectual faculties and what are called their instincts—that is, their peculiar habits and propensities, dependent upon their nervous systems, differing from man only in the degree and completeness of development. He says—"The integral parts of the brain

^{*} Combe's System of Phrenology, p. 69, 4th Edition.

augment in number and development, as we pass from a less perfect to a more perfect animal, till we arrive at the brain of man, who, in the anterior-superior and the superior region of the frontal bone, possesses several parts of which other animals are deprived, and by means of which he is is endowed with the most eminent qualities and faculties, with reason, and the feeling of religion and the existence of God."

All facts tend to prove that mind in man and in the lower animals is marked by a difference only of degree; the self-protecting, the self-regarding, the social, the perceptive faculties are common to both, and in both they are alike connected with organization. The mind of animals is what each requires for its peculiar position, and we find them combative, passionate, proud, vain, cunning, acquisitive, affectionate towards their wives, children, and friends, and possessing some of the intellectual powers in a higher degree than man. We have no wish to lower man in the scale of creation, and there is certainly great superiority in the human mind over the brute; but the airs of superiority which he gives himself, as if there were no relationship, are based upon pure assumption. Such airs are often superlatively ridiculous in those who think themselves the highest specimens of their race, as well as in the lowest. We may respect the noble brute, but to respect the human brute is impossible!

Phrenologists then have laid down as certain knowledge on the subject that the brain (in either sense as functional or as the medium of manifestation) is the organ of mind; that it is not a single organ, but consists of a number of parts, performing distinct functions, comprising all the different propensities, feelings, and faculties which distinguish one animal from another, and all others from man.

They have not only demonstrated that each mental faculty is connected with a particular part of the brain, but also that the power and intensity which each faculty is capable of manifesting is in proportion to the health, quality, and size of the part. Also that such health, quality, and size, depend upon hereditary tendencies as well as upon the health and strength of the vital functions and the general appearance of the person.

The power of manifestation of the mental faculties is found to increase with exercise, and to decrease with disuse.

Phrenologists have also shown that the size of the organs of the brain is indicated by the shape of the head; the health and quality are not so obvious, but may generally be determined.

A faculty is admitted as primitive; that is, as the function of a single organ, and not compounded of several united by a principle of association;

- "Which exists in one kind of animal and not in another;
- "Which varies in the two sexes of the same species;
- "Which is not proportionate to the other faculties of the same individual.
- "Which does not manifest itself simultaneously with the other faculties; that is, which appears or disappears earlier or later in life than other faculties;
 - "Which may act or rest singly;
 - "Which is propagated in a distinct manner from parents to children;
- "Which may singly preserve its proper state of health or disease."—G. Combe's System of Phrenology, p. 140, 4th Edit.*

* It is not my intention in this work to enter at any length into the merits of Phrenology as an Art; I merely adopt its Psychology as based upon its new method of investigation. There are few men in the present day with any pretensions to scientific reputation who deny altogether the truth of Phrenology both as an Art and Science; still it is too much the fashion with scientific men either altogether to neglect it, or to underrate what it either has done or can do in both departments. Thus in the 2nd Edition of Mr. Lewes's Biographical History of Philosophy-a standard work now at our Universities, and distinguished for its clearness and conciseness—the notice of this subject is decidedly of this character; for although the writer admits "that now there is no physiologist who openly denies that mental phenomena are directly connected with nervous structure," and although he ably points out how much there is still to do, and correctly indicates the direction in which it is to be done, still he altogether underrates what Phrenologists have done or can do. I allude to this notice because of the place in which it appears; the general excellence of the Biographical History of Philosophy is such that it may I think mislead people on this subject; and yet I have not space to reply to half the errors that it seems to me to contain.

Mr. Lewes says—" Had phrenologists kept themselves acquainted with what was gradually being discovered by physiologists, they would have dis-

covered that something more than prejudice must be at work when all the eminent neurologists, such as Serres, Flourens, Magendie, Leuret, Sélut, Lafargue, Boulland, Baillarger, Müller, Valentine, and comparative anatomists such as Owen, declare against Phrenology; although every one of these is ready to admit the importance of Gall's Method of dissection, ready to incorporate whatever results Gall arrived at, which can be in any way confirmed." The "something more than prejudice" that phrenologists have discovered in these gentlemen is their neglecting or ignoring altogether Gall's "Method." They admit the importance of Gall's method of "dissection." and continue to expect to discover, rather than to confirm, function by anatomy; but as to the attempt to confirm Gall's other discoveries in the way in which he made them, that is quite beneath them. Like the opponents of Galileo, they refuse to look through his telescope. We have never met with or even heard of one of these gentlemen who could correctly map out a skull as Gall and his followers would do it. As therefore they have never looked. and apparently do not know how to look, for Gall's discoveries, it is useless to talk about their accepting all of them that can be confirmed.

What Phrenologists may expect from the mere physiologists who neglect to follow Gall's Method may we think be fairly inferred from the opinions of Dr. Carpenter, himself one of the first of our physiologists. He holds, we believe. that the cerebrum is not the seat of sensation, but is restricted to intellectual operations; but this, he says, allows full weight to the operation, through the instrumentality of the cerebrum, of what are commonly called the emotions, or the active principles in the guidance of our conduct; since the emotions are not simple but composite states, the formation of ideas being the part of them that is performed by the cerebrum, whilst the pleasure or pain, which is the real feeling connected with them, has its seat in the sensory ganglia. Now if Gall and his followers have established anything they have established the fact that the intensity or strength of the feeling, is in proportion to the size of the organ or part of the cerebrum with which such propensity or sentiment is connected, and that intellectual operations are connected with the anterior or frontal region of the cerebrum only; whereas Dr. Carpenter would have us infer that the emotions or most active principles of the mind, were located in a portion of the nervous centre, the size of which bears no relation to their importance. Mr. Lewes says phrenologists "are unable to accommodate their principles to the principles of Physiology." Are they then called upon to give up the whole of their 60 years' recorded experience and thousand times repeated observations, and remodel their science in accordance with these views of Dr. Carpenter! Mr. Lewes also says, "The neglect of which phrenologists complain, is entirely owing to their presenting a rude sketch as a perfect science, and to their keeping behind the science of their day, instead of on a level with it." We know that Mr. Lewes considers Auguste Comte quite up to the science of the day, and he in his Catechism of Positive Religion gives "Positive Classification of the internal functions of the Brain," wherein in virtue of a mental analysis purely hypothetical he throws several organs into one, reducing the number to 18. He might as well have thrown several nerves or muscles into one, notwithstanding their distinct organic structure. But are phrenologists called upon to give up their six or eight and thirty well-established organs, in order not to be behind this "science of their day!" The real questions are—Did Gall discover a new method of ascertaining the functions of the different parts of the brain? Is his the true method? Can the end be gained by any other method? If Gall's method be the only possible one, then he and his successors have been right, and every one else, however high in name and reputation, in the wrong, and their opinions can have and ought to have little weight against those of Gall and his followers.

Mr. Lewes's own criticisms on the subject are not distinguished by his The fundamental principles of Phrenology usual acumen and accuracy. are: -That the Brain is the organ of Mind; that it is not a single organ, but manifests a plurality of faculties; and that vigour of function is in proportion to the size of the organ, and not in proportion to the general size of the brain. Mr. Lewes's criticisms proceed in utter ignorance, or at least in entire disregard, of this latter distinction. Thus he says, "Large heads are sometimes observed in connection with very mediocre abilities; small heads, on the contrary, with very splendid abilities." No Phrenologist will deny this, as "ability" has nothing to do with the general size of the head, but with the size of a small part of it only. The intellect, on which ability principally depends, is connected with the anterior lobe, and may be very small, amounting almost to idiocy, in a very large head. Particular power does not depend upon general size, but upon the direction of the size. This is so elementary a principle in phrenology that we must in all candour have supposed Mr. Lewes as well acquainted with it as every one who has read a sixpenny book upon the subject, and we must have necessarily inferred that all he meant was that quality of brain and education made great differences in the abilities of the same sized heads, or even between a large and small one, had not the same error run throughout his whole notice of the subject. Thus he says, "I find M. Baillarger-who invented a new method of measuring the surfaces of brains, by dissecting out all the white substance from their interior, and then unfolding the exterior, and taking a cast of it—declaring from his measurements that it is far from true that in general the intelligence of different animals is in direct proportion to their respective extents of cerebral surface." No Phrenologist ever said it was true. Again, "The researches of M. Camille Dareste establish beyond dispute that the number and depth of the convolutions bear no direct relation to the development of intelligence; whereas they do bear a direct relation to the size of the animal: * * further, I am informed by Professor Owen that the grampus has convolutions deeper and more complicated than those of men." There is nothing here that militates against the principles of phrenology, and yet Mr. Lewes says, "From all which facts it becomes evident that the phrenological basis is so far from being in accordance with the present state of our knowledge of the nervous system as to require complete revision." Mr. Lewes still pursues the same error: he says. "Phrenology has another important point to determine. namely, the relation of the size of the brain to mental power. Is the size of the brain to be taken absolutely, and its functional activity in the purely mental direction to be measured by its absolute bulk? * * We find no such absolute and constant relation between size and mental power as would justify the phrenological position; the weight of the human brain being about three pounds; the weight of the whale's brain being five pounds; the weight of the elephant's between eight and ten pounds. If therefore the

function of the brain be solely or mainly that of mental manifestation, and if size be the measure of power, the whale and the elephant ought to surpass man as a Newton surpasses an idiot." We again must remind Mr. Lewes that general size of brain may have nothing whatever to do with the difference between Newton and an idiot; the difference is measured by the relative size of the anterior lobe, alone connected with intellect, and not only is this less in the whale and elephant than it is in man, but in them there is no brain at all in the direction of the reasoning powers—the highest powers of the intellect. Mr. Lewes says, "It is true that phrenologists have been aware of these discrepancies; and unable to admit the whale and elephant as superior to man, they have met the objection by saying the size must be estimated relatively, not absolutely. Compared with the weight of his body, the brain of man is certainly heavier than the brains of most animals, including the whale and the elephant; and this fact seems to restore Phrenology to its cheerfulness on the subject; but the fact does not hold good of monkeys, the smaller apes, many species of birds, and some rodents. This is the dilemma: either the ratio of mental power depends on the absolute size of the brain, and in this case the elephant will be thrice as intelligent as man; or it depends on relative size of the brain compared with the body, and in this case man will be less intelligent than a monkey or a rat, although more intelligent than the elephant. Moreover, if relative size is the basis taken, phrenologists would be bound to compare in each case the weight of the brain with the weight of the body, before they could establish a conclusion; and this is obviously impracticable. I have stated the dilemma; but having stated it, I will add that although phrenologists attach importance to questions of weight of the brain, there seems to me a great fallacy involved in such estimates. Intelligence is not to be measured by the balance. Weight is no index of cerebral activity, nor of the special directions of the activity."

When phrenologists say that size must be estimated "relatively" they do not mean the general size of brain in relation to the size of the body, as Mr. Lewes erroneously supposes. No phrenologist ever said that intelligence was measured by "the balance," that is, the difference between the general size of one brain and another; intelligence is measured alone by the size of that portion of the brain connected with it, and this is considerably less in monkeys and rate, even relatively to the size of their bodies, than in man. Relative size of body, however, is not to be left entirely out of consideration. for the fact would appear to be, that the brain generates a given quantity of nervous fluid, energy, or force, which if used in muscular exercise or vital action cannot be used in thinking and feeling; or if in feeling, not in thinking. People who spend much time in bodily labour or in out-door exercise never manifest much power of thinking, and the best quieter of the feelings and cure for love is a thirty-mile walk. We cannot think to any purpose immediately after dinner while digestion is going on, and men of great study are generally men of calm passions. Men of large bodies require proportionally large brains to carry them about; a large portion of the thinking power being used in muscular force. These facts are quite sufficient to account for the apparent discrepancies to which Mr. Lewes alludes. He says, however, "Enough has been said to show that Phrenology, so far from at present being the only true physiological explanation of the nerrous system, is in so chaotic

and unstable a position with respect to its basis, as to need thorough revision; and until some phrenologist shall arise who, following up the impulsion given by Gall, can once more place the doctrine on a level with the science of the age, all men of science must be expected to slight the pretensions of Phrenology as a Psychological system, whatever it may hereafter become." If it were not for Mr. Lewes's well-earned scientific reputation, I should be inclined to suspect that the "chaotic position" to which he alludes belonged more to the state of his own knowledge of the subject than to the basis of phrenology itself.

Mr. Lewes says, "Size is the measure of power, other things being equal. In this formula there is a truth, and an equivoque. The truth may be passed over by us, as claiming instantaneous assent. The equivoque must arrest us. Phrenologists forget that here 'the other things' never are equal; and consequently their dictum of 'size is a measure of power' is without application." Mr. Lewes might as well say that because no two cases in medicine are exactly alike, all our knowledge of anatomy, physiology, and pathology, upon which the practice of "Physic" is founded, is altogether inapplicable. The fact is, that no two things ever were exactly alike; that absolute certainty is an impossibility; that an approximation is all that can be effected practically, in any science. Mathematics is the only certain science, and that only in theory,-immediately you put it into practice in mechanics all kinds of allowances have to be made, and it is altogether inapplicable to living tissues and vital powers, which never can be measured mathematically. Phrenology is a branch of Physiology, and Physiology never can become an exact science. Can any one measure digestion, respiration, muscular motion, or arterial or venous circulation exactly? or is all our knowledge of them therefore "without application!" Physiology is a science of observation of structure and of "estimation" of magnitudes and forces, and in this respect Phrenology does not differ from any of the other departments of it.

Mr. Lewes says Phrenologists "present a rude sketch as a perfect science." We fear he must have taken his ideas on the subject from amateurs in society who with a sixpenny book and a marked cast profess to give every one's development, or from professors who engage to tell all about you for a shilling a head, instead of from the recognized leaders in the science. Too much cannot be said against this abuse of the subject-against this assumption of accuracy in a department in which accuracy has not yet been attained. But the true Phrenologist proceeds in quite a different way: he makes every allowance for temperament or quality of brain, for health, for exercise, for education and circumstances, for natural associations and combinations among groups of organs, and he knows besides the extreme difficulty of judging in ordinary cases of the relative development of 36 or more organs; but with all these known and acknowledged difficulties, he can do far more than Mr. Lewes allows. In cases of equally-balanced brains, education and circumstances may give the ascendancy; but in cases in which there are some organs very large and others very small, he can decide on the natural qualities by the brain, in preference to all other testimony, and experience of conduct will support his conclusion. With all the difficulties which phrenologists have to contend with, human nature may yet be more advantageously studied through this medium than through any other, and a single glance at the head may reveal more of character than years of ordinary acquaintance, and a correct general estimate may always be arrived at; but the practice of phrenology should be accompanied with long study, and with extreme caution, and after stating and allowing fully for the difficulties to be contended with and the consequent liability to error. The "temperaments" so much insisted upon by Mr. Lewes and anti-phrenologists generally do not furnish the difficulties supposed, for practically their effects can be correctly estimated, and their external indications are as marked as the want of due action in the liver or lungs is to the physician. As a psychological classification, Mr. Lewes allows it to be superior to those that preceded it, but says that daily experience shows it to be insufficient. May we be allowed to ask in what respect? Comte has required only half the organs (18) to make his classification complete and "positive." We are far from representing the mental analysis as complete or perfect, but our own consciousness supplies us with no strong feelings or emotions which have not already received their location in the brain; neither can the deficiencies be supplied from other writers on Mental Science, and phrenologists therefore, we have no doubt, would be delighted to fall back upon Mr. Lewes's "daily experience." It is true that they may not have arrived at the primitive functions of all the organs—that some of them may admit of subdividing, but this does not in the least invalidate what has been already discovered with respect to them. The knowledge we have of the properties of common air is not the less true and useful from our afterwards discovering that it is not simple, but compounded of oxygen and nitrogen.

On the whole, I think it will be found that phrenology, even at present, reveals enough of the Science of Mind to furnish ground for prudent foresight—and for the foundations of moral and social science. From the Constitution of man thus known, we can determine in what circumstances each person should be placed the best to enable him to do his duty and thus to make him most happy.

CHAPTER III.

ANALYSIS OF THE MENTAL FACULTIES.

Sensation may be said to be the Soul, the something that is distinct from that to which we give the name of matter, but of which matter we know nothing but as the cause or the immediate antecedent of Sensation. It is distinct, inasmuch as the cause must always be distinguished from the effect; but how it differs from matter in essence, or whether it differs at all, our faculties do not inform us.

Sensation, as far as we are able to trace it, exists only in connection with organization, and we have no evidence of its being able to exist separately; but we cannot say on that account that it is necessarily dependent upon it; the brain and nervous system may be only the conditions necessary for its manifestation. Electricity is made evident to us by a machine,

but it is known to exist independently and separately throughout the universe; so there may be a General Soul, individualized and made evident to us only in our various machines or organizations. As Coleridge says:—

"And what if all of animated nature

Be but organic harps diversely framed,

That tremble into thought, as over them sweeps,

Phatic and vast, one intellectual breeze,

At once the soul of each, and God of all?"

The Mind has previously been defined as the aggregate of all sensations, from whatever source derived;—the comfortable or uneasy feelings arising from the alimentary canal; the sense of feeling common to all parts of the body; the action of the intellectual faculties through the medium of the senses; and the variety of different feelings which propel to action, or which regulate and restrain it, constituting the mind in the general acceptation of the term.

These sensations are of a much more diversified kind in man than in other animals; for he not only possesses the feelings, or instincts, and intellectual faculties which belong to the most perfect of the brute creation, but many additional ones which raise him almost infinitely above them. He may, however, be considered as, in part, a representative of other animals, and the same causes that act upon them, put him in motion; like them he is influenced by strong desires, the gratification of which is highly pleasurable, and the nongratification, in some cases, insupportably painful.

The most simple division of the mind is into FEELING and INTELLECT; or, into Animal, Moral, and Intellectual faculties; comprising the feelings, or propensities, and intellectual faculties which we have in common with other animals, and those which are peculiarly our own. All sensations derived from other sources influence, directly or indirectly, some of these faculties, and may, therefore, be said to be included in them.

The Animal Feelings or propensities are instincts peculiarly selfish in their object; that is, they tend only to the welfare of the individual, or of those that are so intimately connected with him that they may be said to form a part of himself—viz., his wife, children, and friends.

Man, although his progressive nature and his highest enjoyments are made to depend upon reason, vet is kept in existence and preserved by instinct. Mr. Sidney Smith observes-" It cannot be too often repeated that none of those necessaries which an animal requires are ever left to reason or the mere perception of utility. The superstructure and basis of humanity is animalism. Man lives before he thinks; he eats before he reasons; he is social before he is civilized; loves even against reason; and becomes a Nimrod long before he is a Nestor. Had man not been an animal before he became rational, he would not have existed at all. Reason is evidently the last care of nature. She first secures existence, and then finds leisure to think. She begins with endowing man with the faculties necessary to enable him to provide for himself. before she ventures to animate him with the sentiments which dictate to him to look abroad for the help of others; and she bids him provide for others before she allows to him that high advance in reason which gives him leisure to indulge in the mere exercise of intellect. She has not formed him totally different from other animals, but rather added to his brain She has not, in his case, pulled down the fabric new organs. of sentient being, and reconstructed it upon a totally different plan. All that she has done, has been to add to the original edifice Corinthian capitals and Doric columns, bestowing reason, not to supersede, but to guide, direct, and perfect his animal nature. We may rest assured, therefore, that whatever principles in the shape of instincts are given to animals for their preservation and protection, are also instincts in man; and that what in them is a propensity or desire, is not in him anything else."*

^{*} Principles of Phrenology, p. 123.

We have not regarded the usually observed order, but have given our own classification of the faculties. The feelings consist of—

THE SELF-PROTECTING. THE LOVE OF LIFE. APPETITE FOR FOOD. COMBATIVENESS. DESTRUCTIVENESS. SECRETIVENESS. Acquisitiveness. CONSTRUCTIVENESS. CAUTIOUSNESS. THE SELF-REGARDING. Self-esteem. LOVE OF APPROBATION. THE SOCIAL. AMATIVENESS. PHILOPROGENITIVENESS. Adhesiveness.

THE MORAL.
CONSCIENTIOUSNESS.
BENEVOLENCE.
VENERATION.
HOPE.
WONDER OR FAITH.
THE ÆSTHETIC.
IDEALITY.

CONCENTRATIVENESS These & INHABITIVENESS. faculties
FIRMNESS. may
furnish
equal aid to all.

equal aid to all.

The Feeling of the LudicRous.

Suggested faculties—
Mental Acquisitiveness, and Mental Imitation.

To these must be added the intellectual faculties, consisting of THE EXTERNAL SENSES.

THE PERCEPTIVE FACULTIES, AND THE REFLECTIVE.

THE SELF-PROTECTING.

The Love of Life. Nature has made two especial provisions for the protection and support of life, besides that of pain in general, which she always inflicts when anything is done calculated to injure those organs on which the vital functions depend. First, an instinctive propensity or desire to preserve life for its own sake, independently of the pleasures with which it is accompanied. Without such a feeling the temporary predominance of pain over pleasure, which we are frequently called upon to endure, would often not be supported,

and suicide would be resorted to as the easiest and most obvious mode of escaping from suffering. Man clings. however, instinctively to life, in circumstances in which its continuance can scarcely be thought desirable, and some would wish still to be, though everlasting pain should be their por-It is this feeling, assisted, perhaps, by Hope and Wonder or Faith, that has in all countries, unaided by supposed supernatural revelation, originated the idea of a future state. It produces an instinctive dread of annihilation: to be as if we had not been-if we may use such an expression—is an idea that few like to entertain. Yet, said one of the sages of old—"Where I am, death is not; where death is, I am not." This instinctive desire for the continuation of life, which has for its object the preservation of our life here, is frequently brought forward as indicating nature's intention with respect to our existence in a future state of being. said, because we have this strong desire for a continued existence, therefore we shall live again; but when we know the use in this world for which this feeling is intended, we shall feel that such an argument has little weight as evidence of a future state of being. The principal abuse of this faculty is the great dread of death that it so frequently inspires; superstition, aided by the overwrought activity of this impulse, creates the most horrible forebodings, and draws the most dreadful pictures of what, in the ordinary state, is no more than a falling asleep, a gradual and insensible suspension of the mental faculties, and what may be only a change from one state of being to another. Another abuse is, that, owing to the tendency it gives to look forward to continued existence in another state of being, the advantages of the present are too much neglected and too little appreciated. The numberless bounties that Providence has bestowed on us here are ungraciously received: our beautiful world is called a vale of tears, the mere passage to a better; and we thank God not so much for what he has already given, as for what we consider we are, and ought, to rcceive.

The question of Suicide, or, as Shakspeare puts it-

"Whether 'tis nobler in the mind, to suffer The alings and arrows of outrageous fortune; Or to take arms against a sea of troubles, And, by opposing, end them?"

has been argued and variously decided in all parts of the world, in all ages. The noble Roman thought death by his own hand always preferable to dishonour. The sacredness of human life increases always with civilization, so that self-murder in Christian countries has come to be regarded in the same light as any other murder. Those even who are not bound by such views yet regard suicide as cowardice, and if one single duty remains to be performed that can be performed they are right; but it is a question whether in cases of hopeless bed-ridden suffering and poverty, where life becomes a burden to its possessor and to all around, to cling to it under such circumstances, the cowardice, as mankind advances, will not come to be considered as on the other side: neither God nor man calls for useless suffering.

Secondly, ALIMENTIVENESS, or the desire of Food, is a means which nature has taken to preserve life. The necessity exists for food to be taken to supply the force and the waste in the human frame, as death must be the inevitable consequence of the neglect of this duty. But the mere knowledge of this would not be sufficient to induce us to attend regularly to this want of the system. To prevent. therefore, any neglect on our part, a strong desire or appetite for food is given, which when too long unsatisfied amounts to the pain of hunger. The ultimate function of this faculty is the preservation of the vital principle, by obliging man to supply the necessary aliment; the object of the desire is the gratification of appetite, or the assuaging of hunger. It is most important, both as a physical and moral agent. It is the prime mover in man and in all other animals. It is a main source of order; for if mankind could do without food, they would, as now constituted, soon be independent of all rule

and control, and necessary subordination would no longer exist. It has been the chief impulse to man's progression, constituting, principally, that necessity which is the mother of invention. It has been instrumental in taming all animals, and man no less than others. The abuses of this faculty are Gluttony and Drunkenness in all their various degrees; the sacrifice of that nervous energy in digestion which ought to be used in supplying the organs of our highest and most ennobling faculties with their necessary stimulant, and thus diminishing the moral and intellectual pleasures.

COMBATIVENESS or OPPOSITIVENESS. In a world in which difficulties and dangers abound, and where the path to everything really good and excellent is strewn with obstacles, it is not enough that man should only possess the power of overcoming them; there must be a pleasure attending the contest, and a desire to overcome; and these are furnished by this faculty. Its office is

"Firm Against the torrent and the stubborn hill, To urge bold Virtue's unremitting nerve And wake the strong divinity of soul That conquers chance and fate."

Courage is its use, and the love of contention and opposition for their own sakes constitute the abuses of the faculty.

Destructiveness. Destruction is as necessary as Creation; to make room for young and vigorous and improved organizations, the old ones must be destroyed, and among animals it is much better that they should be violently destroyed than that they should linger out "a long and snake-like life of dull decay" and decrepitude. "By the existing dispensations of sudden destruction and rapid succession, the feeble and disabled are speedily relieved from suffering, and the world is at all times crowded with myriads of sentient and happy beings; and though to many individuals their allotted share of life be often short, it is usually a period of uninterrupted gratification; whilst the momentary sudden and unexpected death is an evil infinitely small, in comparison with the enjoyments of which

it is the termination."* Throughout all nature Life is everywhere bursting out into luxuriant existence; it is ever pressing upwards and outwards; and it requires the strong instinctive action of this faculty to keep it down within the bounds in which enjoyment is possible. Among animals it constitutes the preventive check, and keeps the population within the means of subsistence. In the aggregate the "good" is most evident; yet in each individual case it is called "evil."

This faculty also writes with the finger of nature, in a language perfectly intelligible to all, nemo me impune lacessit, upon the whole of the animal creation. The selfish propensities of man are very strong: many of them necessarily so, even to keep him in existence, and in their exercise he is frequently tempted to encroach upon the happiness and interests of others. How is this to be prevented in cases where the selfish feelings predominate, and where benevolence is consequently partially inoperative for that purpose? Nature. for the protection of man against the assaults of his fellow-man, has furnished each with this faculty, which is a strong desire to give pain to those who give pain to us; who disagreeably excite our feelings, or otherwise encroach upon our happiness or interests. As the pain a child experiences on approaching too near the fire deters it in future, so the fear of the unpleasant manifestation of this faculty, often instinctively, and almost unconsciously, affords a more effectual check to the improper exercise of the selfish propensities than the whole combined action of the moral feelings. The manifestations of destructiveness have been considered by some to result only from the depravity of our nature; but if utility is to be constituted our standard of excellence, this principle will be allowed to be one of nature's best gifts, in this age in which the mere animal feelings so decidedly predominate, when we consider that by its expected reaction alone are we preserved from being

^{*} Buckland's Bridgewater Treatise, Chap. 13, on the "Aggregate of Animal Enjoyment increased, and that of Pain diminished by the existence of Carnivorous Races." See the whole Chap.



continually trampled upon, and from having our interests interfered with by those of others in all the daily occurrences of life. This is an important use of the organ in the present state of society, but we may hope that as mankind advance in civilization and those faculties increase in energy which distinguish our race from the rest of the animal creation, its chief and proper office may be to act as a stimulant to the other faculties, when unduly depressed, and to supply determination, energy, and force to the character. It may well be compared to fire; if improperly used, that is, if so as to interfere with the happiness of others, it gives us pain; but when confined within due bounds, it answers a thousand useful purposes. It would be equally sensible to call fire an evil because we sometimes suffer from its destroying and desolating ravages, when allowed to escape from its natural boundary, as this feeling, because it sometimes acts without the restraining and guiding influence of the sentiments and intellect. Passion, revenge, and malice are the abuses of this faculty.

Secretiveness. The mind, like the body, requires a covering. If we cannot always determine what emotions and thoughts shall pass through the mind, yet the happiness of others, as well as true dignity, requires that expression shall not be given to them till the intellect shall have decided upon their propriety. This faculty gives a tendency to conceal our thoughts, feelings, and purposes; and it is true that the thoughts and feelings on which most happiness depends, are not such as will flourish when exposed to the cold gaze of the world, neither would the best and most laudable objects always succeed, were they first made public. One great abuse of this faculty, in the present, as it has been in all previous ages, is to conceal what we believe to be the truth, out of deference to public opinion.

Acquisitiveness. To increase and multiply is a law of the human race, and that the population of a country may be able to live in comfort, it is necessary that capital should increase as fast as population. The object of this faculty is to

promote that end, by furnishing an instinctive desire to save, to make accumulations; not only to provide against want, but to add store to store. Generation after generation are thus provided for, at a period when they must needs consume, but are unable to produce. It is not this organ by itself that gives pleasure in individual acquisitions; but when joined with Self-esteem it gives the desire to possess, and the tendency to accumulate, for the purpose of calling such property "mine." This faculty up to the present time has acted as a mere instinct, and every one has been anxious to accumulate, to possess as much of the common stock as possible, at whatever expense of the labour and happiness of others. The whole world has been appropriated, and those who came into existence too late to be present at this appropriation, and who, therefore, possess nothing, are allowed to make use of the world's wealth upon such terms only as reduces the great body of them to incessant labour. This division of society into capitalist and labourer, if it has been and still is useful, produces a manifestation of this faculty which constitutes its greatest abuse.*

Constructiveness. The last faculty was regarded as nature's instinctive mode of teaching that capital is to keep pace with population; to this end Constructiveness seems also intended to lend its aid; not by teaching man how to invent or to construct, but by giving him the desire to do so, and affording a high pleasure when the intellectual faculties are so employed. "Man is a tool-using animal. Weak in himself, and of small stature, he stands on a basis, at most, for the flattest-soled, of some half square foot, insecurely enough has

^{*} The tendency of this faculty, it is said, is to make individual accumulations; but in those among the lower animals in which it is most marked, the beaver, the bee, for instance, this is by no means the case. So man accumulates, his ultimate sim being the advantages such accumulations will confer upon himself and family, which family may be indefinitely extended. Thus individual families may be united into associations until they form much larger families of one or two thousand, and all that would be requisite for the gratification of acquisitiveness would be a joint proprietorship in the capital of the community, and the understanding that it should yield as many advantages as would the produce of each man's labour, if it belonged entirely to himself.



to straddle out his legs lest the very wind supplant him. Feeblest of bipeds. Three quintals are a crushing load for him; the Steer of the meadow tosses him aloft, like a waste rag. Nevertheless he can use Tools, can devise Tools: with these the granite mountain melts into light dust before him; he kneads glowing iron as if it were soft paste; seas are his smooth highway; winds and fire his unwearying steeds. No where do you find him without Tools; without Tools he is nothing, with Tools he is all."* Necessity is said to be the mother of invention: it never would have been sufficient in itself to have constituted man so completely a tool-using animal: that he is so, is owing principally to the instinctive impulses of this faculty; for the intellectual faculties work only for the desires, and work best for the strongest. Utility would have been powerless without the propensity. "Nature was too wise to trust to the theory of Bentham. She has made exertion for man's preservation and ordinary duties, not merely a necessary but a pleasure of his life; knowing full well that by nothing but an innate passion could she induce him to do what was necessary for carrying on the machinery of human and social existence."* This faculty is capable of taking all directions, according to the feelings or intellectual faculties with which it is combined. It has been used to save and to destroy. Its most important use is the invention of machinery to act as the servant of man; to be at work supplying the wants of his physical nature, while he shall be employed in the higher objects of his moral and intellectual being. As Society is now constituted, however, the majority of mankind have nothing to exchange for everything they require, but labour; and machinery has been allowed to come into too close competition in supplying that labour.

CAUTIOUSNESS. Delicately organized as man is, in both body and mind, and understanding in part only the nature of everything around him, caution is necessary to teach him to shun that which has a tendency to injure him. Nature,

^{*} Sartor Resartus, p. 40. + Sidney Smith, Principles of Phrenology, p. 126.

careful of the frame upon which his existence and happiness depend, has placed over him the most vigilant of all monitors in the shape of pain, which warns him and makes him desist from actions that have a tendency to injure himself or others. To aid this monitor, which is not always attended to until too late, the organ of Cautiousness is added, which gives rise to fear, to the desire to shun danger and avoid pain. In a moral point of view, it produces prudence and circumspection; and in abuse gives rise to cowardice, depression of spirits, and indecision.

THE SELF-REGARDING.

SELF-ESTEEM. This is the individualizing faculty; it is owing to its instinctive promptings that everything is judged of with reference to self. It mainly conduces to the preservation and welfare of man, by inspiring him with that good opinion of his own powers which is absolutely essential to self-confidence and decision of character, without which nothing good or great would be attempted. The opinion entertained of self by no means depends upon qualities and attainments, or upon situation and station in society, but upon this feeling. The scholar of centuries past had as high an opinion of himself and his attainments as he whose mind is now stored with the registered experience of all previous ages: and the cobbler and the king, each in his station, thinks equally well of himself. The happiness resulting from this faculty is incalculable, as it equalizes all states and conditions, for

> "Whatever nature has in worth denied, She gives in large recruits of needful pride."

It is also owing to this faculty that

"Whate'er the passion, knowledge, fame or pelf,
Not one will change his neighbour with himself."

And also that we

"See some strange comfort every state attend, And pride bestowed on all, a common friend."

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Its abuses are love of power and dominion, pride, self-conceit, selfishness.

LOVE OF APPROBATION. This faculty desires the applause and esteem of others, without any reference to the mode in which they may be obtained; that depends entirely upon other faculties. It is useful in giving the wish to please our fellowcreatures, but the direction it takes too generally depends upon the "opinion" and moral atmosphere in which it is placed. Present applause, or the applause of posterity, or of another world, is thought a sufficiently worthy motive to all action. In the present day it is too often satisfied with mere outward show,—it desires to appear, not to be. It usurps the place of the right and the true, and is satisfied with mere seeming. It praises others that it may be praised again; it dares even to "praise" the Deity that it may get favour in return. Its high sounding titles are fame and glory, and yet it is only the Mrs. Grundy of society. It will be a great aid to virtue when the conscience will receive no praise but what is just: when it is even prepared "to stand approved in sight of God though worlds judge it perverse." Its great abuses now are vanity and ambition, undirected by the wish to benefit our fellow-creatures.

THE SOCIAL.

The SOCIAL PROPENSITIES are those which relate to a man's own family and friends, thus:—

AMATIVENESS—produces the love between the sexes, and has for its object the transmission of life to other frames,—the continuation of our species. After a certain time the successive changes upon which man's feelings and ideas depend, produce in him, as we have seen in a previous chapter, that state of body which is capable of entertaining but a very limited degree of pleasurable sensation; it is a wise and benevolent provision, therefore, that the vital principle, which in the course of time ceases to be of use to him, should be transmitted to other frames, possessing all the capabilities of

enjoyment that at any time belonged to him. As our world is constituted, much more enjoyment results from the living of ten men, each seventy years, than from one man's existence being extended to ten times that period, or to seven hundred years; and happiness seems to be better secured by the succession of new beings, than from the immortality of one: because, resulting as it does from the strength and vividness of impressions, it depends principally upon novelty, and apparently upon the newness and consequent perfection of the machine. This feeling being one of the strongest of our nature, furnishes an admirable illustration of the extent to which the feelings are capable of influencing the judgment, as in the instance of a man in love. How differently is the object of his passion regarded by himself and by every one else; and how completely the subjective in us is capable of domineering over the objective.

PHILOPROGENITIVENESS. This function is what its name implies-the love of offspring; like every other feeling it must have exercise, and in the absence of children, which are its proper objects, it is capable of taking a variety of other directions. The final cause of all the faculties is the happiness they bestow in their exercise; and though, as we have seen. they may serve also another purpose, such purpose is secondary; for the preservation of the individual, and of the race, would not be desirable if happiness were not the result. instance: however necessary it may be, as human nature is now constituted, that a strong instinctive feeling should exist to induce the parent to undergo the incessant toil and fatigue incumbent on the rearing of offspring, there is no doubt that children might have been so framed as to render this toil and fatigue unnecessary, in which case this powerful instinct might have been dispensed with. But would any one, who has experienced the intense enjoyments dependent upon the exercise of this faculty, be willing to forego them on account of the necessary evil? We may consider, then, that the love of offspring has not been given to us mainly to induce us to

take proper care of children; but that children have been made to want that care, in order to bring into activity a faculty, from the exercise of which so much happiness results. The same may be said of other feelings: we might, perhaps, have been made to do without eating and drinking; but instead of this being a blessing, we should thereby lose the only stimulant strong enough in the majority to call the mental faculties into action; upon the action of which happiness alone depends.

ADHESIVENESS. It is this propensity that is the source of attachment, of an affectionate disposition, of friendship, and Society is said to result from it. Society as it is now constituted, split into families and clans, may certainly be said to result from it, but it must be founded upon a much broader basis than such a feeling affords, to furnish all the advantages derivable from the social state.

The domestic affections must certainly be classed among the selfish feelings; for though they desire the happiness of others, it is only of those others that are necessary to our own happiness. They form a limited circle, and are directly opposed to those sympathies that have for their object the whole human family; they not only are opposed, but they usurp the place in public opinion that is due only to a more enlarged affection. A man regards the interests of his own family, or of his friends, and makes this an excuse for neglecting the higher duties that belong to universal brotherhood. The moral law, that he should love his neighbour, not merely his friend, as himself, is disregarded, and public opinion is satisfied, not knowing how, or caring, to distinguish between selfish attachments and the higher feelings that induce sympathy with the happiness of all that is created.

THE MORAL

The feelings already considered are those that man has in common with other animals; they are strong desires, highly pleasurable sensations, prompting him to act so as to preserve his own existence, and attaching him to his own particular family, clan, and country. They supply the most pressing wants of human nature, and their exercise is pleasurable in proportion to the necessity of the actions to which they prompt. Had man no other feelings, he would have remained a mere animal, satisfying the wants of his animal nature, and, like the brute creation, preying upon his weaker fellows; restrained from aggression only from fear of the immediate consequences. But he has other feelings, which, in their joint action, constitute peculiarly human nature: some of these are possessed by other animals, but an accurate division, distinguishing those that belong to man alone, has not yet been made.

CONSCIENTIOUSNESS. Had mankind been furnished with a faculty that should inform them on all occasions what is right. what is the path of duty, as some writers on the moral sense affirm, such a faculty would have been useless and altogether inoperative, unless accompanied by a desire to act in conformity to its dictates, for to know the right and choose the wrong are by no means incompatible. But nature leaves it to the office of the intellectual faculties to discover in what our duty consists, and then induces us to discharge it by making the performance of it highly pleasurable, through means of the feeling of Conscientiousness. The object of the faculty is to afford security to the rights of others, by producing the disposition to do justice. The fact of the existence of this faculty settles the long-disputed question respecting man's possession of a moral sense. Some have argued that, because they traced a faculty that gave a strong disposition to do what was right, Nature had given to man a moral sense. or faculty that decided what was right. Others, seeing that men differed in all countries with reference to what they considered right and wrong, according to the amount of civilization and enlightenment possessed by each, denied not only that nature had bestowed a faculty for deciding what was the path of duty, but even that she had given any disposition to act right when the path of duty was decided.* Both were

* Paley says—"Upon the whole, it seems to me, either that there exist no such instincts as compose what is called the moral sense, or that they are not

right and both were wrong, and we shall find such to be the case with reference to many of the leading differences of the metaphysicians; from partial truths have been drawn wrong inferences.

Benevolence. If we reason upon man merely as an individual, we are led directly into error; an error the fatal source of much of the moral evil now in the world. He is individual in the same sense only as the members of his own body are individual; for he is as intimately connected with his family, his friends, and mankind at large, as those members are to the body of which they form parts. Man, though regarding himself as an identical individual, is only a part of the great body of mankind, and his happiness is as much dependent upon that body as upon his own. All relationships are created and established in the mind, and whether it sympathises with an injured limb, or with an injured member of society, it is still in the mind only that such feeling exists. Thus his mind is composed of feelings that have relation to his own body, and if they are not gratified he suffers; of domestic feelings that join him to his family and friends, and if these are not gratified he also suffers; and of moral feelings which connect him no less intimately with the whole human family, and if these are not gratified, great loss of the happiness that he is made capable of enjoying is the consequence, as well as, frequently, positive suffering. To disregard, therefore, the strict relationship that exists between individual man and society at large, in the framing of institutions and the conduct of life, is as absurd as to attend to the wants of one part of the

now to be distinguished from prejudices and habits; on which account they cannot be depended upon in moral reasoning: I mean it is not a safe way of arguing, to assume certain principles as so many dictates, impulses, and instincts of nature, and then to draw conclusions from these principles, as to the rectitude or wrongness of actions, independent of the tendency of such actions, or of any other consideration whatever." To which Archbishop Whately replies—"Is it not plain that this singularly perspicacious writer was labouring all along under the mistaken notion that, in showing that there are no innate general maxims of morality, he was disproving the existence of the moral faculty?"

bodily system and to neglect the others. It is the function of Benevolence to produce a lively interest in the enjoyment of all created beings; it induces us to "rejoice with them that do rejoice and to weep with them that weep;" it is the law of universal brotherhood written upon the heart, showing that the injunction to "love our neighbour as ourselves" is to be understood literally and not figuratively, for the object of its desire is the happiness of others. It is the source of what are called the disinterested feelings; although why the term disinterested should be applied to that class of feelings which induces us to seek the happiness of others, whilst those exclusively are called selfish which have reference to our own personal good, is not clear; it is clear, however, that such a division leads, in the estimation of moral conduct, to a very serious error, by inducing us to expect actions from insufficient motives. Man has as much interest in promoting the welfare of others as in promoting his own. Nature has planted within him two classes of faculties, the gratification of which. when proportionally developed, is equally pleasurable; one has reference to his own welfare, the other to that of his neighbours: why then is the one called selfish and the other disinterested? One induces him to do something for himself, the other induces him to do something for another; if equal pleasure to himself is made to attend upon both actions, why is one more selfish than the other? There may be many actions that have no direct reference to self, but there never was a strictly disinterested action; the supposition is an absurdity: it would be an effect without a cause; an action without a sufficient motive; and it would be well to keep this always in view; for if the feeling of Benevolence is not naturally strong, and the pleasure derivable from its exercise is not powerful enough to prompt us to promote the general good, the deficiency must be made up from other faculties, from the sense of duty, that is, from the pleasure we have in doing our duty, or the fear we have in neglecting it, or from the operation of some other moral feeling, otherwise the end

will not be effected. The knowledge of this would furnish to the moral and religious instructor many very valuable practical lessons, from the want of which his teachings are so generally insufficient.

VENERATION produces a feeling of respect and reverence for whatever we consider as great, good, and worthy of Its directions are very various, and no feeling hitherto has been so much abused and so widely misdirected. Its great use is the deference it induces us to pay towards our fellow-creatures: this use is not very perceptible until we observe the striking difference in the conduct and bearing of those in whom the faculty is small, and where it is fully manifested; no other feeling seems capable of compensating for its deficiency. It is decidedly conservative in its character, inducing us to look with respect upon whatever time has consecrated, whether opinions, customs, or institutions. produces subservience to authority; it is supposed also to generate humility—a sense of our own comparative unworthiness in opposition to the dictates of self-esteem. It is the source of the sentiment of awe entertained in all countries for mysterious powers and unknown causes, and produces the disposition to worship. When we are enjoined to love and fear God, it is intended to call into action this faculty with benevolence, not cautiousness and benevolence. The fear of God, therefore, is to be produced not by representing him as terrible, but as great, good, perfect, and worthy of homage.

HOPE. Cautiousness gives the tendency to look to the gloomy or dark side of things, and when properly balanced by other faculties it leads to circumspection and prudence: Hope, on the contrary, presents everything in gay and brilliant colours, gives to all things a smiling aspect, and when cautiousness is small, induces us to form immoderate expectations. It is the elastic principle of the mind; as cautiousness depresses, so this expands it. The disposition to look forward to the future may depend upon other faculties; but when we do look forwards, Hope gives our anticipations a joyous

complexion, producing a feeling of present happiness in the prospect of that in store for us.

"Hope springs eternal in the human breast.

Man never is, but always to be blest."

Or rather, when Hope exists in full strength in the mind, man always is blest in the anticipation of bliss. What the sun is to the external world, Hope is to the world of mind.

WONDER. This faculty had been better called "Faith," as that name much better expresses what appears to be its function. Faith or belief is not the action of the perceptive or reflective faculties, but is a feeling or sentiment consequent upon such action, in many cases completely overcoming the dietates of reason. The senses acting upon the intellectual faculties produce certain sensations, to which we give the names of substances, or individuals, possessing properties of form, size, colour, &c.; the instinctive feeling that we have, that those sensations or ideas represent real objects—that there exists something besides the sensations of which we are conscious—it is the function of this faculty to produce. association between mere mental ideas produced by the senses, and our belief in an external world, is formed so early that it is very difficult afterwards to separate them. For instance, we have in our minds the idea of a table, and it is very difficult for us to believe that that to which we give the name table is only a sensation, and not a real existence out of ourselves. The instinctive persuasion of its real existence is owing to Wonder. The action of the mind appears to be as follows: the perceptive faculties supply the ideas that it is their province to furnish, that is, of an individual possessing properties and relations which we call a table; and the reflective faculties give the idea that in similar circumstances (the office of comparison to determine) the same effects upon ourselves and others will ensue, and that our sensations have a cause, (the office of causality.) The personification of this cause, the belief in a real existence—a table, is the feeling furnished by this faculty. This must not be confounded with the function

of causality, whose office it is to distinguish between real and fictitious relations, that is, between variable and invariable antecedence. The intellectual faculties give ideas, each after its own peculiar mode or form of intelligence; but the practical belief attending the action of such faculties is altogether a different thing. It is the base of what Kant calls "understanding" as he distinguishes it from "reason," and of what Lewes calls "intuitional reason"-" or the process of the mind engaged in transcendental inquiry." Without such a sentiment ideas would pass over the mind like images over the surface of a mirror, reason would be paralysed, and we should act, like the brutes, only when impelled by instinct, and not from faith. The excess of Hope produces immoderate expectations of felicity not founded on reason; and the excess of Wonder produces credulity. The pleasure and wonder expressed by children and adults who have a considerable development of this faculty at the relation of marvellous stories, miraculous and improbable fictions, proceeds from their extra power of belief, from their giving to such tales a reality in their own minds which to others they do not assume. "I have met with persons," says Mr. Combe, "excessively fond of news, which, if extravagant, were the more acceptable; prone to the expression of surprise and astonishment in ordinary discourse, deeply affected by tales of wonder." May not this effect be ascribed to their being able to believe more than others, in consequence of the extra endowment of the faculty of Wonder which they were said to possess? All the facts that have been observed of the manifestation of this faculty agree with this analysis of its function. Gall was led to its discovery by meeting with persons who saw visions and who believed in apparitions. He says, "Some individuals believe themselves to be visited by persons dead or absent;" and he asks, "How does it happen that men of considerable intellect often believe in the reality of ghosts and visions? Are they fools or impostors? or is there a particular organization which imposes, in this form, on the human understanding, and how are such

visions to be explained?" Mr. Combe also says,* "The subject of visions is still attended with considerable difficulty;" and he gives an instance similar to some observed by Gall and Spurzheim. "In the London Bedlam," he says, "I examined the head of a patient whose insanity consisted in seeing phantoms, and being led to act as if they were realities; although, as he himself stated, he was convinced by his understanding at the very time that they were mere illusions, but could not regulate his conduct by this conviction." Now in what is this case different from that which takes place in ourselves? very little, I apprehend; for the external world consists of nothing else but phantoms—phenomena. Certain impressions made upon the senses from without, produce within us certain sensations; we mentally form these sensations into a whole external world, and believe in its existence as thus represented. "It is acknowledged on all hands," says Mill, "that we know nothing of objects, but the sensations we have from them."† In the case mentioned by Mr. Combe, the intellectual faculties were active from internal causes, not external, and they produced phantoms, which the man in Bedlam could no more practically disbelieve than we can disbelieve in an external world.

A strong association is early established between the action of the perceptive faculties and that of wonder, the perceptive faculties always calling the latter into activity; in some cases where it is naturally strong, or in disease, this action of the faculties is reversed, and wonder excites the perceptive faculties, producing a picture or phantom which appears no less real than if produced by an external object.

The difference in the cases is, that in the natural mode of action, the reasoning powers inform us that in similar circumstances the like effects are produced upon others as well as upon ourselves, and that they are always uniform; but in the case of the madman, there was the conviction that the appear-

^{*} Combe's System of Phrenology, p. 374. † Analysis of the Human Mind, vol. 1, p. 263.

ance could not be produced in others besides himself, and, therefore, that it was unreal; at least, that the cause was in himself. In this way reason corrects our belief all through our lives, causality informing us whether the connexion of antecedence and consequence, as it exists in our minds, is invariable and observed by others as well as ourselves. Considering that all we know is, that there is a cause for the sensations to which we give the name of objects, there is no great difference in the grounds of belief in the two cases. All the feelings are capable of carrying away, or overcoming the reasoning powers: and the seeing visions and apparitions is only an instance of the kind, where, from the naturally large endowment, or diseased state of the feeling of wonder, it has the power of calling the intellectual faculties into spontaneous activity, and a belief in the picture or phantom they produce is a necessary consequence. Dr. Spurzheim says, "The preceding facts determined me formerly to designate this feeling by the name of Supernaturality: and it is certain that it is principally manifested by a BELIEF in miraculous and supernatural circumstances, in the foundation of religion by supernatural means, and in its dogmatical points." This, however, is the abuse of the faculty, not its use; and Marvellousness, which he afterwards called it, is no more expressive of its function than is Wonder, the name given to it by "Some individuals, in whom this organ is Mr. Combe. large," observes the latter, "have informed me, that when any marvellous circumstance is communicated to them, the tendency of their mind is to believe it without examination: and that an effort of philosophy is necessary to resist the belief, instead of evidence being requisite to produce it."*

Thus the observations of both the above writers of the mode of manifestation of this faculty, are confirmatory of the opinion that its ultimate function is to give the sense of reality, the instinctive feeling of belief. When more than ordinarily developed, its tendency is to spiritualize all nature; to delight in creating imaginary beings, to people both this world and the

^{*} System of Phrenology, vol. 1, p. 384.

next; and a philosophy of realities that would prove the nonexistence of such beings is, of all others, the most distasteful. Such belief is generally admitted by persons of such a character of mind, to be founded upon feeling, and not upon reasoning; and the association between the creed and the feeling must be broken, before a practical conviction can be carried to the mind.

Among the Metaphysicians, Hume and his antagonist Reed are both agreed on this subject. Hume says "that belief is more properly an act of the sensitive than of the cogitative part of our natures," (Human Nature, part 4, sec. 1, p. 250;) and Reed, that as no reason can be given for our belief, it must be referred to an original instinctive principle of our constitution implanted in us for that express purpose.

Veneration, Hope, and Wonder or Faith, are usually called the Religious feelings, as having relation to some future state of being-some world beyond the present, but as we have seen, they have a direct relationship to our existence here, being in daily and hourly use. The small relative development of any one of them leaves a sad blank in the mind with respect to usefulness and happiness in this world, and to give their action, if it were possible, a direction entirely towards another state of being, would be maining ourselves in the present, for the sake of some unknown future. Veneration is supposed to have its highest and most legitimate direction in the worship of God, but are the Gods that mankind have usually made for themselves worthy of worship? The poor African has his fetish as the emblem of his deity, which he flatters and praises, and beats when things go wrong, and the Western nations have their God, sitting upon a throne, surrounded by superior intelligences, governing, loving, hating, requiring deference, praise. and worship; jealous of his authority, rewarding and punishing,-in fact, the very type of an Eastern Monarch, with almighty rather than limited power, the produce of our lowest

rather than of our highest feelings. Such a being is ordinarily the object of fear, not of love or veneration. Man makes a God in his own imagination, and thus prostrates his reason and all his highest feelings at its shrine. He necessarily makes God in his own image; it is impossible he can go out of himself, beyond the boundaries of his own mind; but it would be much better that he should fully admit his ignorance in this direction—that the finite cannot contain the infinite—he might then worship excellence, wherever he found it, as the only type of Deity with which he was capable of becoming acquaintedbeauty, love and truth, -abstractions which, as Plato shows, " are the only permanent and therefore the only real existences." Man is the highest intelligence really known to man, and he should seek out the noblest specimens as the proper objects of his love, veneration, and imitation. The world is "covered with beauty as with a garment;" the more we know of it, the more we bow down in veneration of its Great Author-

"At once the soul of each, and God of all."

We feel the instinctive promptings of the "Love of Life," dreading annihilation, and aided by Hope and Faith, drawing beautiful pictures of a world to come. We feel also the elevating impulses of Ideality, striving after perfection in ourselves and in the world around, not in the selfish hope that we may benefit by it in another world, but that we may leave this world as much better for our existence, as it is was made better for us by those who went before us. Religious people think they sanctify their selfish feelings by transferring them to another world, but let us give our hopes and aspirations an unselfish direction here, and that will bring us the nearest to heaven, whether that heaven be here or elsewhere—whether the "future state" be one of individuals or of the race.



^{*} I have been favoured, on special application, with the following account of the Positivist Religion, or the "Religion of Humanity;" I have no doubt it will prove interesting to my readers, as it bears intimately on the subject before us:—

[&]quot;Dear Sir,—In the limits of a note, I cannot do more than state the conclusions of Positivism, its religious creed.

[&]quot;Men in all times have created their own Gods. The Fetichist animates

THE ÆSTHETIC.

IDEALITY. This faculty supplies the love of perfection. Its tendency is to idealise and beautify all around it. It is the soul of poetry, and by Dr. Gall was called the poetical faculty. It puts out of sight all imperfection and sees things only as it imagines they ought to be. It creates a Heaven where all the fancied imperfections of this earth are left out, and this yearning after perfection—this constant desire for something better, is regarded as internal evidence that some time

the forms of things around him, all the material objects he sees, with the feelings and volitions of which he is conscious himself. The Polytheist forms beings wholly in his own image, and places under their government all the phenomena of the world without, and his own life and action. The Monotheist concentrates the Gods of Polytheism in one, but that one remains the image of himself. Reflexion leads higher minds to get rid of the human element, and to acquiesce in almost a negation of the human,—a negative rather than a positive idea. But this is never the religion of the majority. Pure Monotheism undergoes in general a modification. Its vagueness disappears; it ceases to be itself really, whatever its strict theory may be. In the worship of the Virgin and the Saints we see the Roman Catholic—in the triumph of the human element of the Christ we see the Protestant-modification of Monotheism.

"Under the guardianship of these self-created, self-modified Gods men have lived and are yet living. The observation of the different portions of our race which coexist leads to the same conclusion as the study of its successive generations. All the stages of religious existence are at the present day as traceable, as they are in the history of the past, in the African, the Hindoo, the Jew, the Christian, and the Deist. All these several religions have, under a wide variety of form, one common end. The profounder our researches, either in succession or co-existence, the more steady our conviction will be that the human race has in all its forms had essentially the same problem to solve. The Positivist reviews the different solutions of this one problem,-in other words, the different religions of man. He accepts them all as in their time true and useful. But he finds in their decay within themselves, and in their failure to become universal, a proof that they are none of them final; that some definitive and comprehensive solution is yet required. To his view, if I may use the expression, the religious disappear-Religion remains. They in their variety have had one common aim. They have each in its measure given an account to man of his existence—his existence in relation to the external world; his existence in relation to other men and to himself. They have aimed at the harmony of all his faculties; they have aimed at uniting him with a larger or smaller portion of his fellow-men. Positivism accepts the same problem; offers to man an account of his existence; gives him an object of faith; explains the conditions under which he

we are to attain to that perfection. Its use however is, to induce us to strive after perfection for its own sake without reference to its bearing upon our own interest. When we come into the world we find it much more perfect through the exertions of those who have preceded us, than we could possibly have made it by our own unaided efforts, and the object of this faculty is, to enable us, by striving towards greater perfection, to leave the world as much better for those who come after us,

lives and makes him lovingly accept them; unites him in himself by love, and binds him to his fellow-man in the threefold communion of faith, of worship, and of action—the two last the expressions of love.

"Unconsciously men have worshipped beings of their own creation. What has been done unconsciously the Positivist would do consciously and systematically. These beings have been in all cases equally but representatives of Humanity. Their time is past. She of whom they have been the representation appears to claim in her own right our worship directly for herself.

"We see in Space, the particular system of which the Earth is a constituent member. With love and reverence we trace her course as she rolled round the sun whilst in distant ages she was preparing herself for the habitation of vegetable and animal life. We see those two forms of life richly developed upon her when her preparation is complete. We see a number of animal races, with one of superior organisation. We trace the growth of that superior race, -its gradual conquest of difficulties, its rise from its earlier to its more mature form of existence. We see it in incessant labour and strife. modifying the condition of things around it, securing itself against danger, beautifying its home, organising itself socially on the basis of its primary element, the family, in larger forms, tribes, cities, nations, churches; worshipping itself under theocratic guidance; singing itself and its actions by its carliest poets when emancipated from that guidance; seeking the reason of its existence and of the world in which it lived by the agency of its philosophical organs: gaining from the answers that they gave a more definite consciousness of the laws under which it acted,—physical laws at the outset, but arriving finally at intellectual and moral laws, and learning from that consciousness at once the lesson of more perfect submission, and that of greater certainty of modification.

Natura non nisi parendo vincitur.

Thus we form our conception of the great organism—Humanity. Of this organism we are, as our fathers were, and our children will be, inseparable parts. We enlarge the language of Aristotle, and we say that man, the individual man, viewed apart from Humanity, ceases to be man; that only in relation to her can he be rightly viewed. As parts of a whole, we are nothing if detached from that whole. From Humanity we have received all; to her we owe all. We are her servants and organs, whether the service be paid in her own name or in the name of one of her representatives. She recognises as parts of herself all who in all ages and under all forms have aided her in her work, be they men or animals: all who have not served themselves, but

as it was made for us by those who immediately preceded us. Thus all are gainers in the progress of the race, and the happiness that posterity gains from our efforts towards perfection, we derive from the efforts of those that preceded us. The faculty thus points to the happiness of a "future state," of the race but not of individuals. Its abuse consists in its inducing us to live too much in a world of our own creation, to the neglect of the common duties of life; and in begetting a fastidious refinement which renders everything distasteful that does not come up to the ideal standard.

Concentrativeness and Inhabitiveness. Both these faculties have the same object, viz., the formation of habits. The first gives the desire to retain present emotions and ideas; an instinctive pleasure in dwelling upon them until an association is formed. The latter induces the same feeling with respect to localities that the former does to mental states. It is not single isolated thoughts and feelings that form the individual; man is a bundle of habits. "It is not every act of virtue," says Mackintosh, "but virtuous habits, dispositions, and feelings, that produce the highest degree of happiness to the individual." Hence the importance of these two faculties

have risen above themselves; she rejects as unworthy all others. From this conception we naturally and directly draw the great Positivist precept, Live for others—the summary of our practical religion.

"But Humanity works always by individual organs. This is but the consequence of her organisation. She is an organism compounded of separable organisms. These individual organs, well considered, require for their worship more concrete representatives of the great Being they worship. As the symbol of humanity we adopt with somewhat altered associations the beautiful creation of the medieval mind—the woman with the child in her arms; and to give life and vividness to this symbol, and to our worship in general, each Positivist adopts as objects of his adoration his mother, his wife, his daughter, allowing the principal place to the mother, but blending the three into one compound influence—representing to him Humanity in its past, its present, and its future.

"Such, apart from all special forms, from all details of worship, of faith, or of practice, is the general conception of the religion of Humanity.

"Faithfully yours, RICHARD CONGREVE."

which assist in the formation of these habits. They render great aid to the social affections no less than to other feelings: they beget a fondness for home.* Concentrativeness assists also the intellectual faculties in continuing their action; that is, in producing the state called attention. Mr. Combe says, "Concentrativeness gives the desire for permanence in place and for permanence of emotions and ideas in the mind." The abuses of these faculties are, the confining of the mind too exclusively to one object or pursuit, to the neglect of more general knowledge and utility; the formation of habits and associations which reason has taken no part in; and the indisposition to go from home.

FIRMNESS. Nature seems to have made great provision against sudden changes in man's purposes, pursuits, ways of thinking, and institutions. Time is required for everything; no change, to be beneficial, can be sudden. New opinions and thoughts can no more suddenly form a part of the mind, than fresh aliment of the body: a long and tedious digestive process is necessary. Bad institutions are better than those that are always changing, that are never fixed and settled. The seed in the ground must remain undisturbed, in order to develop its vital energy: we may be nourished on poisons by the power of custom. Concentrativeness, we have seen, gives pleasure in dwelling upon the feelings and pursuits that may at present occupy us: Inhabitiveness gives the same feeling with respect to places: Veneration respects what utility, or more often, what only time has consecrated: and Firmness gives strength and efficiency to every virtue and quality of mind, by giving the disposition or the power to maintain in action the state of mind for the time predominating. It pro-

* "As the appropriation of land was destined to produce such important effects in the progress of society, and in the habits and manners of mankind in general, a provision was made for it in some of the most powerful feelings of which our nature was susceptible. The desire of acquiring property in the soil, the attachment to a home, and the love of the place of their nativity, are among the strongest feelings of the human breast, and which, in the progress of society, are the first to be developed."—Alison on Population, vol. 2, p. 4.

duces perseverance and steadiness of purpose. It differs considerably from Concentrativeness, as is evident by our frequently finding persons who are occupied fully with one idea, one pursuit, and altogether deficient in determination, firmness, perseverance. Why it should have been placed by phrenologists among the moral feelings, it is not easy to say, as it assists the action of the mind, whether the faculties are directed to good or evil, and at present is more frequently found aiding the animal than the moral feelings.

IMITATION. Man was intended to live in society, and the moral feelings were given to him to unite him mentally as intimately to his fellow-creatures—to the body of society, as to his own body. Benevolence directly desires the happiness of others, and induces a sympathy of feeling. The function of Imitation produces a sympathy of action, and is intended to make the members of the social body move harmoniously. Imitation has so powerful an effect in forming the mind and habits, that a man's characteristics in a great measure depend upon the age or country in which he was born; he, imperceptibly to himself, imitates the manners and adopts the tone of mind of the society to which he is accustomed. It is chiefly through the influence of this faculty that each nation has its peculiar external characteristics, so that a European and a Chinese could scarcely be mistaken for one another. Powerful. well furnished minds alone, are able to break the spell which urges them to think, feel, and act with all around.

Since them mankind, and children especially, are so much the creatures of Imitation, the examples to which they are subjected and the circumstances in which they are placed are most important; for the direction of the feelings can scarcely be said to depend more upon the intellectual faculties, than upon the intuitive influences of this principle in our nature.

THE FEELING OF THE LUDICROUS. Phrenologists are divided with reference to the function of this faculty. It is said to give the *feeling* of the ludicrous. It might perhaps be more correctly said to give the *perception* of the ludicrous, or of

differences and incongruities; which perception may exist without gaiety or mirthfulness. Great wit and humour, and a high sense of incongruity, are sometimes found in the most lachrymose persons, who are never betrayed into the slightest disposition to mirthfulness. Those in whom it is but feebly developed can never see when a joke is intended; they take everything seriously, and are constantly offended from translating literally what others perceive immediately to be but jest. Ought not this rather to be regarded, as it is by some phrenologists, as an important intellectual faculty, essential, among other offices, to the production of that combination of ideas upon which wit depends;—whilst the feeling of the ludicrous, of gaiety, mirthfulness, hilarity, results from some other faculty or faculties, or from the particular state or condition of the brain at large?

We have thus furnished a list of all the Feelings yet acknow-ledged by phrenologists. There are two others to which I would beg to call their attention, not as established, but as suppositious, and I think more than probable; so that continued observation may affirm or reject them.

MENTAL ACQUISITIVENESS. The part of the skull immediately behind Ideality and above and adjoining Acquisitiveness, and marked in the phrenological busts with a cross as undetermined, I believe to be the site of this organ. What Acquisitiveness is to material products, this faculty is to mental. It is fond of knowledge for its own sake, without reference to its application. In its abuse it makes a book-worm.

MENTAL IMITATION. This organ lies immediately between the organs of Comparison and Benevolence, and is very large in the masks of Shakspeare and Sir Walter Scott, and its function is to give intuitive perception of character. Imitation gives the disposition to imitate bodily actions and peculiarities; this faculty instinctively appreciates the mental states, and by the aid of the intellect intuitively describes them, without any knowledge of how it does so, or without proceeding upon any system or principle. Each organ has its natural language

outwardly expressed, and it is the function of this faculty to read this language and to determine its relative action and influence in the character. Neither Scott nor Shakspeare knew why they were able to fathom so completely the depths of human nature and to describe it so accurately. It certainly was not from the study of character either in the world or upon any principles of Mental Science. Our first or intuitive judgments of character are often more correct than those afterwards formed by the intellect.

It is not assumed that the list of faculties is complete, or that the metaphysical analysis of the several functions is yet perfect; but there are few principles in human nature that may not be referred to one or other of the above feelings, or to a combination of them.

We have seen that the primary function of each faculty has reference either to man as an individual, to his family, to society, or to the beauty and perfectibility of the world around him.

Those feelings that have reference to the preservation of the individual are the most numerous, and generally the strongest; and perhaps necessarily so, for if every one were unmindful of himself and occupied only in taking care of others, the race must soon come to an end.

Happiness, however, consists in the legitimate gratification of all the faculties, and pain or unhappiness attends the denial of their gratification: to insure his happiness, therefore, man must not gratify one class of feelings at the expense of another, but must attend to the interests of society and of his family as well as to his own. But for the proper direction of the feelings, in order to insure to him this largest amount of enjoyment, he depends altogether upon another order of faculties. The Sentiments as well as the Propensities must be regarded as mere instincts, blind impulses, propelling him to action, or restraining him from it, by the strong pleasure there is in their gratification, or pain in their denial; but the Reason of man can alone direct them properly to perform their various offices.

In the brutes, the feelings or instincts direct them more or less perfectly to the accomplishment of their object; but as in man they all are or ought to be directed by the intellect, a much wider field of operation is open to him; and his pursuits are infinitely varied, for in the gratification of one feeling many others are called into action, and his pleasurable sensations are superior in intensity as in variety. Thus the instinct of animals prompts them to take but one or two particular kinds of food, while man may please his palate in a thousand ways: the mother of the brute creation is directed by instinct alone in the rearing of her offspring, while the human parent can perform the maternal duties properly only by the aid of reason, and by a certain acquaintance with the physical laws; but this very complexity in her maternal offices is the means of calling into action numberless pleasurable feelings, besides the mere "love of offspring" experienced by the brute.

Such considerations must impress us forcibly with the conviction of the necessity for the cultivation of the reasoning power, as without it we are worse provided for than the brutes, our instincts requiring on all occasions its aid for their proper gratification, and much misery resulting from their wrong direction. Writers on Morals describe us as being guided by a "moral sense," and we have seen that a love of justice and respect for the rights of others, a desire to do that which is right, is a strong feeling of our nature; but it is necessary that the intellect should first decide what is right, what is justice, before this "moral sense" can be a fit guide. same may be said of the other moral feelings; veneration itself cannot decide what is a fit object of worship; hope, what is a reasonable expectation; faith, what is worthy of belief; or benevolence, what will best promote the happiness of others; they all require the direction of the intellectual faculties to attain the ends they desire. These faculties then will next come under consideration.

INTELLECTUAL FACULTIES.

The faculties given to man to enable him to acquire a knowledge of himself and of the external world, and so to direct his feelings to the proper attainment of their end, are called the Intellectual Faculties. These are divided into the External Senses, and the Perceptive and Reflective Faculties. The following are the simple functions assigned to each, as defined by phrenologists:—

"Genus I .- EXTERNAL SENSES.

" FEELING or TOUCH,	Uses: To bring man into communication with
"TASTE,	external objects, and to enable him to enjoy them.
"Smell,	Abuses: Excessive indulgence in the pleasures
" Hearing,	arising from the senses, to the extent of impairing
" Sight.	the organs and debilitating the mind.

- "Genus II .- INTELLECTUAL FACULTIES, which perceive existences.
- "INDIVIDUALITY—Takes cognizance of existence and simple facts.
- "FORM—Renders man observant of form.
- "SIZE-Renders man observant of dimensions, and aids perspective.
- "Weight—Communicates the perception of momentum, weight, resistance, and aids equilibrium.
 - " COLOURING Gives perception of colours.
- "Genus III.—INTELLECTUAL FACULTIES, which perceive the relations of external objects.
 - "LOCALITY-Gives the idea of space and relative position.
 - " NUMBER-Gives the talent for calculation.
 - "ORDER—Communicates the love of physical arrangement.
 - " EVENTUALITY-Takes cognizance of occurrences and events.
 - "TIME-Gives rise to the perception of duration.
 - "TUNE—The sense of melody arises from it.
- "LANGUAGE—Gives a facility in acquiring a knowledge of arbitrary signs to express thoughts, readiness in the use of them, and a power of inventing them.
- "Genus IV.—REFLECTING FACULTIES, which compare, judge, and discriminate.
- "COMPARISON—Gives the power of discovering analogies, resemblances, and differences.
- "CAUSALITY—Traces the dependencies of phenomena, and the relation of cause and effect."*
 - · Combe's Constitution of Man.

Perception, Conception, Imagination, Memory, Judg-MENT, are not primitive or special faculties of the mind, but mere modes of action of the primitive faculties: thus "When the knowing or reflecting organs are powerfully active from internal excitement, whether by the will or from natural activity, ideas are vividly and rapidly conceived; and the art of forming them is styled CONCEPTION: if the act amounts to a very high degree of vivacity, it is called IMAGINATION. perception is the lowest degree of activity of any of these faculties excited by an external object; and conception and imagination are higher degrees of activity depending on internal causes, and without the interference of an external object. Each faculty performs the act of conception in its own sphere. Thus, if one person have a powerful organ of Tune, he is able to conceive, or call up in his own mind, the notes of a tune. when no instrument is sounding in his ears. If his organ of Form be very small, he may not be able to bring shapes before his mind with equal facility. Some persons read music like a book, the written sign of a note being sufficient to enable them to call up the impression of the note itself in their minds. This' is the result of a very high degree of activity of the faculties of Temperament has a great effect on activity: Form and Tune. the lymphatic temperament needs external objects to rouse it to vivid action, while the sanguine and nervous glow with spontaneous and constitutional vivacity. Hence imagination, which results from a high degree of activity, is rarely found with a temperament purely lymphatic, but becomes exalted in proportion to the approach of the temperament to the nervous."

According to the same authority, Memory, as a mode of action of the knowing or reflecting faculties, differs from the above actions of the mind in this manner, that whereas Conception and Imagination form new combinations of ideas, not only without regard to the time or order in which the elementary motions had previously existed, but even without any

^{*} Combe's System of Phrenology, vol. 2, p. 607.

direct reference to their having existed at all; Memory implies a new conception of impressions received, attended with the idea of past time, and consciousness of their former existence; and generally recalls events in the order in which they occurred.

"Each organ enables the mind to recall the impressions which it served at first to receive. Thus, the organ of Tune will recall notes formerly heard, and give the memory of music. Form will recall figures previously observed, will give the memory of persons, pictures, and crystals, and will produce a talent for becoming learned in matters connected with such objects. Individuality and Eventuality will confer memory for facts, and render a person skilled in history, both natural and civil. A person in whom Causality is powerful, will possess a natural memory for metaphysics. Hence there may be as many kinds of memory as there are knowing and reflecting faculties; and an individual may have great memory for one class of ideas and very little for another."*

"JUDGMENT, in the metaphysical sense, belongs to the reflecting faculties alone. The knowing faculties, however, may also be said to judge; the faculty of Tune, for example, may be agreeably or disagreeably affected, and in this way may judge of sounds; but judgment, in the proper acceptation of the word, is a perception of adaptation, of relation, of fitness, or of the connexion between means and an end, and belongs entirely to the reflecting powers. These, as well as the knowing faculties, have Perception, Memory, and Imagina-Causality, for example, perceives the relation of cause and effect, and also remembers and imagines that relation, just as Locality perceives, remembers, and imagines the relative Hence judgment is the decision of the position of objects. reflecting faculties upon the feelings furnished by the propensities and sentiments, and upon the ideas furnished by the whole intellectual faculties.†"

Each of the knowing faculties, which all brutes possess,

^{*} Combe's System of Phrenology, p. 627. + Ibid, p. 641.

thus possessing Judgment, according to the laws of its constitution, sufficiently accounts for most of the apparently reasonable actions of brutes, without supposing them to be gifted with any degree of reasoning power. Reflection, however limited, would unfit them for their place in creation, by enabling them to look back to the past and forward to the future, and thus to anticipate the time and mode of their death. A power of progression always attends Reflection.

EXTERNAL SENSES. According to the sense in which the term sensation has been used in this treatise, viz., as including every kind of feeling of which we are at any time conscious, ideas resulting from the action of the intellectual faculties are as much Sensations as any others. A right understanding of this may help to throw some light upon several hitherto obscure mental phenomena.

Sensations are very various in their character, and there are several that cannot be correctly referred either to the Senses, Propensities, Sentiments, or Intellectual Faculties: of this sort principally are those that accompany the action of the several muscles of the body, and those that are referred to the alimentary canal. But of whatever kind they are, or to whatever part of the body we are in the habit of referring them, still they depend entirely on the brain, and are noticed by, and form a part of the mind.

The kind of Sensations peculiar to the senses are obvious. They consist of heat and cold, smoothness and roughness, and the different kinds of smells, tastes, sounds, and sights: these only have ordinarily been designated sensations.

The feelings peculiar to the Propensities and Sentiments are of a different kind. The feeling resulting from each is quite distinguishable from that proceeding from every other. Each produces a particular tendency to action; a particular kind of emotion is also characteristic of most of them.

The action of the intellectual faculties is accompanied by what are termed thoughts and ideas: but these thoughts and ideas are only different kinds of feeling, of which each faculty

produces its characteristic one. Each faculty is accompanied by a particular power, but can scarcely be said to have any tendency to act, its tendency being dependent on the feelings; neither does any emotion attend its exercise, the sensation being much less intense than that proceeding from the action of a propensity or sentiment, and is derived, as might have been expected, from a much less part of the brain: when, however, the intellectual faculties are very predominant, they have decided tendencies amounting almost to intellectual passions.

The External Senses are instruments for the purpose of bringing the brain into contact with the external world, and for exciting it to that action which immediately precedes all those various sensations upon which thoughts and ideas depend; and to which sensations, through the medium of language, we give names, so as to excite in the minds of others similar ideas to those that we have ourselves.

The senses are the medium of our communication with the world, but their precise mode of action is not determined. Do they act immediately in exciting that part of the brain upon which our ideas of objects depend, or are they connected with a part of the brain upon which the function of the sense itself is dependent; and does this part react upon the organs of the perceptive faculties? The latter supposition would appear to be the case, although in the ordinary action of the senses we are by no means conscious of this link between, the instrumentality of the sense being combined with and undistinguishable from that of the internal faculties of the Thus the anterior pair of the corpora quadrigemina are connected with the sense of sight, and are absolutely essential to the performance of its function, and yet we are conscious of nothing but the ideas of form, size, colour, &c., as resulting from the action of that sense; and it is only in particular cases that a sensation of light, the function of the sense itself, distinct from those ideas, is produced. The same may be said of the sense of hearing; sounds ordinarily produce particular

ideas, but they are sometimes confined to the mere function of the sense. Thus Spurzheim quotes from Darwin the case of "an old man who had had a paralytic stroke and preserved the senses of hearing and seeing untouched: he, however, could only receive ideas by means of the latter; when he was told that it was nine o'clock and breakfast time, he repeated the words distinctly, yet without gaining any information from them; but if a servant put a watch into his hand, and showed him the hour gone by, he said, 'Why, William, have I not breakfasted?' On almost every occasion his servants could only converse with him by means of visible objects, although his hearing was perfect."

It is very desirable to determine the exact function of the senses, for much error is propagated from misconception on the subject. By one class of metaphysicians they are represented as the material organs which the immaterial mind makes use of in its connection with this world, and necessary here to its action: another class go so far as to assert that they are useless appendages, confining and deceiving the mind, which when free from them will be, consequently, much more perfect in its mode of manifestation. Mr. Combe says-"The following appears to me to be a correct mode of ascertaining the limits of the functions of the senses. Whatever perceptions or impressions received from external objects can be renewed by an act of recollection, cannot depend exclusively upon the senses; because the organs of sense are not subject to the will, and never produce the impressions which depend upon their constitution except when excited by an external On the other hand, whatever impressions we are unable to recall, must, for the same reason, depend on the senses alone.

"Dr. Spurzheim observes on this head, that where the same ideas are acquired by the instrumentality of two or more senses, the ideas cannot possibly be formed by the senses, because Nature, so far as man has discovered, never endows different instruments with the same functions, in the same

individual. For example, we can acquire ideas of form by the instrumentality of the sense of sight, and likewise by means of touch.

"Now, from this circumstance alone, it is evident that the conception of figure is formed, not by the eye or the nerves of feeling, because this would be an instance of two separate senses performing the same functions; but by an internal faculty which perceives figure, in consequence of impressions made on either of these two different senses. The impressions made upon the eye are totally different from those made upon the nerves of touch, but the internal faculty is adapted by nature to both; and hence the same perceptions are experienced by means of the same faculty, although through the instrumentality of different media; but the same function is not performed by different senses."*

The Perceptive Faculties. Whence comes our knowledge of the external world? The usual answer is that we see things, hear them, taste them, smell them, touch them; but this common mode of speaking is philosophically incorrect; for in seeing, the light alone affects the eye; in hearing, the vibration of the air, the ear; in smelling and in tasting it is supposed that particles alone affect the nerve; and as to touch. it can be demonstrated that no bodies ever are in actual contact, but are retained in their places by a balance between attraction and repulsion, and that, therefore, we never do touch anything. Whence then comes our knowledge of things? All that we know is, that the senses are mere instruments which have received a certain relation to external objects; that they are affected in a certain way by them, and are the means of acting upon the organs of the brain or mental faculties as they themselves are acted upon, and thus produce the knowledge we have of what are called external things.†

^{*} Combe's System of Phrenology, p. 442.

^{† &}quot;In the smell three things are commonly distinguished. There is the organ, there is the sensation, and there is the antecedent of the sensation, the external object, as it is commonly denominated, to which the sensation is referred as an effect to its cause. These three distinguishable particulars are common to all the five senses."—Mill's Analysis of the Human Mind, vol. 1, p. 4.

Of what character, then, are sensations and ideas thus produced, and what relation have they to the objects causing them? Their character is the produce of the joint action of the external cause or object, the sense, and the intellectual faculty; and an alteration in any of these would produce a different result; that is, a different sensation or idea. Of the relation that the idea bears to the object, all that we know is. that the sense has received a particular constitution, in consequence of which it is affected in a certain way by the object; and that the brain or mental faculty again has received its own particular constitution, and is affected in a similar manner by the sense, and the sensation or idea resulting cannot be said to belong exclusively to either the object, the sense, or the mental faculty, but is the consequence of the beautiful adaptation of each to the others. Thus the brain being acted upon through the medium of sense, by some cause which we intuitively suppose to be external, sensations are produced, which it is customary to call properties of matter: but it would be quite as correct to call them qualities or properties of particular organs of the brain; for all that we know is the order in which things take place; that which is evident in the case being that the brain is so constituted as to give ideas of extension, solidity, &c., when called into action by the senses. On this subject ordinary language is incorrect, inasmuch as it confounds the cause of our ideas with the ideas themselves, so that in naming mere internal sensations we might be supposed to be imparting real knowledge of the causes of such sensations, or of things external, and yet such may be far from being the Similar ideas sometimes occur without the instrumentality of either the sense or the object that acts upon the sense: as in certain affections of the faculty of wonder, to which we have previously alluded; in particular states of madness, in dreaming, and in sleep-waking; where the mere action of the brain produces vivid scenes which the patient cannot distinguish from real impressions from without. We may, in fact, conceive of a being so constituted as that by some internal action.

a circulation of fluids, for instance, the brain should be excited so as to produce all the variety of sensations of which we are conscious, all the feelings and ideas of which we are the subjects during the course of our lives. We cannot prove, therefore, that anything exists external to ourselves, although we necessarily believe it. We suppose that we prove the existence of an external world when we find other beings in similar circumstances affected in the same way as ourselves; but such other beings may exist like all things else, only in the succession of our thoughts.

But these speculations are somewhat irrelevant to our present subject, for whether we can prove it or not, we suppose that the Intellectual Faculties have received a definite constitution, that they perform certain functions, to the proper exercise of which the action of the external world upon them, through the medium of the senses, is necessary. It is their province to give that appearance to nature that shall best enable man to direct his feelings to their proper objects, and thus to carry out the purposes of his being in securing his happiness, nor is it at all essential that he should know more of matter than the mode in which it affects him. The real nature of things is probably known to God only; to all created intelligences, however high in the scale of being, they are known only as they act upon their particular kind of organization.

Dr. Thomas Brown says, "That we know matter only as relative to our own susceptibility of being affected by it, does not lessen the value of the knowledge of it which we are able to acquire; and indeed it is only as it is capable of affecting us that the knowledge of it can be of any direct and immediate utility. It would indeed be the very absurdity of contradiction to suppose ourselves acquainted with qualities which cannot affect us. But even though this were possible, how profitless would the knowledge be, compared with the knowledge of the qualities which are capable of affecting us; like the knowledge of the seasons of the planet Saturn, or of the planets that revolve round the Dog Star for their sun, compared with the

more important knowledge of the seasons of our own globe, by which we have the comfort of anticipating in the labour of Spring the abundance of Autumn, and gather in Autumn the fruits, which, as products of vernal labour, are truly fruits of the Spring."*

INDIVIDUALITY. The action of the intellectual faculties in imparting knowledge, is much more simple in its character than the infinite variety of our ideas would at first induce us to suppose. Thus we perceive qualities of form, size, colour, &c., and we attach these qualities to individual existences: we perceive the number, arrangement, and relative position of such existences, and conceive of them as existing in space; we have ideas also of motion and of active phenomena, and thus conceive of their existence in time: we trace also resemblances and differences, and relations of antecedence and consequence, and distinguish between invariable antecedents called causes, and such as are not permanent. Now some of the faculties that produce this mental action have direct relation to external objects, and others have relation only to the ideas furnished by them; so that part of our ideas only being furnished by external causes, and part by the action of the mental faculties upon those ideas, we cannot say that all our knowledge comes through the senses. Certain impressions received from without are by the mind itself worked up into a picture which we suppose to belong to the external world, but which is, in fact, manufactured in the mind, and exists only in minds similarly constituted.

As Form, Size, Weight, Colour, &c., give us the idea of the qualities or attributes of matter, it is from Individuality that our idea of matter or substance—of noumena, is derived, which is thus distinct from, although not independent of, its qualities. It is said by metaphysicians that we have ideas only of its properties—of solidity, and extension; but ideas of properties only would never give us the idea of individual existences, as we actually conceive of them; for such properties would, without the action of this faculty, be looked upon not as attributes of another object, but as individuals themselves.

^{*} Phil. Human Mind, Lecture 9.

Our belief in the existence of matter would seem, then, to be founded upon the action of this faculty; and it is the intuitive evidence which it furnishes that is so strongly insisted on by the Reid and Stewart school in opposition to the reasonings of Berkeley and Hume. Brown says, "The unity" (or individuality) "of the aggregate is no absolute quality of the mass, but is truly relative to the observer's power of distinguishing the component parts; the mass being one or many, as his senses are less or better able to distinguish these. This whole globe of earth, with its oceans and rivers and mountains and woods, and with all the separate multitudes of its animated inhabitants, may seem to some being of another species only one continuous and uniform mass; as the masses that seem to us uniform and continuous, may seem a whole world of separate and varied parts to the insect population that swarms upon its surface."

The faculties of Form, Size, Colour, Weight, furnish what are called the properties of matter, viz., of solidity, extension, and others. We allude to this merely to mention a curious distinction that has been made by the metaphysicians, viz., that the indications of the primary organs of form, size, and weight, which principally give rise to the ideas of the solidity and extension of matter, are real properties, existing in objects themselves, whilst colour, equally dependent upon a primitive faculty, is not a real property of matter, but exists in the mind alone. That such a distinction into primary and secondary properties is untenable, our knowledge now of the primitive faculties on which such ideas depend puts beyond doubt; but however untenable the supposition that colour exists only in the mind, and solidity and extension in matter, it tends to illustrate what has been previously inculcated respecting the nature of the mind, for, as that which we call colour is admitted to be merely an affection of the mind and cannot reasonably be said to exist in substances, so what we call solidity and extension, which are ideas furnished by the organs of Form, Size, Weight, and which are precisely of the same character

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as those we derive from the organ of Colour, are not less affections of the mind, and can no more reasonably be said to belong to substances, to which, however, we are in the habit of attaching them as real properties. Matter or substance may be regarded as the cause of such ideas, and we know nothing more.

The other intellectual faculties are those which are said to perceive the relation of external objects, and must, therefore, be dependent for their action upon those that first perceive existence, for a relation has no existence in itself. If we had, however, no other faculties but those that perceived existence, the world would appear to us a number of detached beings, and not as that great whole which we call nature and in which we at present believe. It is these superadded faculties that perceive or rather create relations, which acting upon the ideas they receive from the others, arrange them in classes, put them in order, and give them all the symmetry that we ascribe to the world without. Each faculty adds its part, the peculiar form it is its province to create, to the picture, and a universe is created within us which we perhaps erroneously suppose has its type without us.

LOCALITY is said to give the idea of space and of relative position. If solidity, extension, and colour are merely the properties with which our own mental faculties invest the something external, the same must be said of space, as it would appear to be nearly synonymous with extension. All of which we can speak is of feelings or ideas, and what relation can they have to space, supposing it to have a real existence? The idea would seem to be the result of the action of Locality upon the ideas previously formed by Form, Size, Individuality.*

* "Nothing can act but where it is: with all my heart, only WHERE IS IT!
Be not the slave of words: is not the Distant, the Dead, while I love it, and
long for it, and mourn for it, Here, in the genuine sense, as truly as the floor
I stand on! But that same WHERE, with its brother WHEN, are from the
first the master-colours of our Dream-grotto; say rather, the Canvas (the
warp and the woof thereof.) whereon all our Dreams and Life-visions are
painted. Nevertheless has not a deeper meditation taught certain of every
climate and age, that the WHERE and WHEN, so mysteriously inseparable

With respect to Time, "What we do is to take some wellknown case of successions, and to make that a standard by which to ascertain the rest. We take, for example, the oscillations of a pendulum. So many minutes we call an hour. These minutes and hours, then, are so many oscillations, that is successions. We call them measures of time. But things are measurable only by parts of themselves; extension by extension, weight by weight, and so on. What is measured by succession, therefore, is itself nothing but succession." It is easy to conceive that succession or time can have no real existence, but like other relations, is the creation of the mind, a form of thought, a mode of existence. Had this function been left out of our mental constitution there would have been to us no past and future; everything would have been conceived of as present. We should have been conscious of each train of thought as it passed through the mind, but as it really is, so would it have appeared to us, to be ever present only. would be no succession, no reference to past or future; for the idea, as it offered itself, whether of anticipation or retrospection, would belong only to the present, "now." "Time and Space are not God, but creations of God; with God as it is a universal Here, so is it an Everlasting Now. Know of a truth that only the time-shadows have perished or are perishable; that the real Being of whatever was, and whatever is, and whatever will be, is even now and for ever. This, should it unhappily seem new, thou mayst ponder, at thy leisure; for the next twenty years or the next twenty centuries; believe it thou must; understand it thou canst not.†"

from all our thoughts, are but superficial terrestrial adhesions to thought; that the Seer may discern them when they mount up out of the celestial EVERTWHERS and FOREVER: have not all nations conceived their God as Omnipotent and Eternal; as existing in a universal HERE and everlasting Now? Think well, thou too wilt find that Space is but a mode of our human sense, so likewise Time; there is no Space and no Time: We arewe know not what;—light-sparkles floating in the æther of Deity!"—Sartor Resartus, p. 53.

• Mill, p. 106.

⁺ Sartor Resartus, p. 272.

Tune. It is much easier in this faculty than in those that give rise to the ideas of Time and Space, to trace the character of its functions, for we can scarcely conceive of Melody, the sense of which it originates, as existing anywhere but in the mind. We regard it at once as belonging to the mind and not to the vibrations that cause it. There would appear to be no necessary office in the human constitution that it has to perform; it seems to tend directly and gratuitously to the production of happiness. With regard to most of the other faculties, happiness is the result, but not the end or object at which they aim; that object being to preserve man in existence, and in the due relation to his fellows.

LANGUAGE. The mental faculty that enables us to communicate our thoughts, and to express our ideas, has relation to our own internal ideas and not to anything external. seems to give only the power of remembering sounds, or audible signs, merely as such; the understanding of them or the connecting of them with ideas depends upon other faculties. And yet is it most important, for had man been without this power of comparing his invisible thoughts with those of his fellow-men; of handing down his experience first by oral and then by written signs, he would have made but little progress in all that now particularly distinguishes him as man. wonderful, as observed by Dr. Arnott, that "an audible sign, that is a passing sound, a fugitive breath, called by man a word. should have the power of calling to our remembrance, ideas of objects almost as vividly as the objects themselves, and that by a succession of mere sounds so little naturally connected with the thing signified, that they are totally different in different countries, and are changing from age to age, any train of thought may be made to pass through the minds of an audience so as to excite and to leave impressions almost as strong as if from realities." The arbitrary divisions or parts of speech. nouns, verbs, participles, &c., as they are called, represent only the natural language of the intellectual faculties. Language is invented to express their action, and if there were any

acknowledged part of speech, without a corresponding faculty in the Phrenological system of mental philosophy, it would be evidence of the incompleteness of that system. Thus the article, noun, pronoun, represent principally the functions of Individuality, but Order, Number, and Time appear to be also included in the article: the adjective represents the functions of Form, Size, Weight, and Colour: the verb and adverb, Eventuality: the preposition, Locality: and the conjunction has reference to both Individuality and Eventuality.

The Reflective, or Reasoning Faculties. What is reasoning? What is the exact mental process that takes place when we reason? Having observed, by means of the Perceptive Faculties, substances, their qualities and relations, and the order in which events follow one another, we are said to reason when we anticipate those events, and regulate our conduct by suiting it to the known order of circumstances: we regulate our conduct by what we expect will result from our making use of the same causes to produce the same effects. In reasoning, then, these two things are absolutely necessary: first, that we should observe the order in which events follow one another, viz. the order of cause and effect, of antecedence and consequence; and next, that we should be able to distinguish one event, or cause, or antecedence, from another, so as not to mistake one that only appears similar, for the real cause of the effect, for the antecedent of the consequent.

Two mental powers are engaged in this service, CAUSALITY and COMPARISON; some phrenologists suppose that there are three, including the organ called Wit, to which they ascribe the power of perceiving differences, and of detecting the intrinsic properties of things, which power has hitherto been included, by others, amongst those possessed by Comparison.

The knowing or perceptive faculties, as we have seen, give the knowledge of things within their own particular province. Eventuality notices simple events or phenomena: Causality discerns the order in which such events follow one another, and whether the connexion be variable or invariable; it is not called into action by external things, but by the ideas of them that the perceptive faculties have furnished.

The world is full of objects having various relations to each other; the function of Causality is necessary to distinguish between such as are related by mere contiguity of time or place, and those that are connected as cause and effect: in those persons who have not a considerable endowment of the faculty the power of tracing such relations is weak.

Comparison, whose office it is to trace resemblances and differences, aids Causality to discover what antecedents and consequents are the same with, or only similar to, other observed sequences, and thus gives the power of reasoning by analogy. That this mode of reasoning, which is so commonly adopted, is often a very erroneous one, is owing to Comparison not being always sufficiently accurate in observing resemblances and differences, and therefore taking those relations to be the same that are only like or similar.

With regard to the mere properties of bodies, the faculties that perceive them are sufficient to judge of their resemblance without any aid from Comparison: thus Form compares forms, and Colour compares colours; but there are a great variety of circumstances and conditions of which the knowing faculties take no cognizance, and here Comparison is needed.

So also with respect to Causality: something more than the mere discrimination of invariable from variable sequence would seem to belong to it. We perceive only properties, and Individuality gives us an idea of the something, which we call "matter," to which they pertain; so Causality not only discriminates cause and effect, but gives the idea of "force," or a supposed "power" in each cause to produce its effect.

We know nothing more of either matter or force than this. There may be, as some suppose, only force, and only one force, but the evidence for the existence of both matter and force is similar and equal, being based upon primary intuitions, which constitute our fundamental truths and the base of all belief.

The more perfect becomes our analysis of the mental constitution, and consequently, our knowledge of what it is capable, the more we become struck with the truth of Lord Bacon's celebrated aphorism, as the foundation of all reasoning, that "Man can only understand and act in proportion as he observes the order of nature." All reasoning is nothing more than a simple relation of facts, of the order of nature, of what causes have preceded, and will, therefore, precede certain effects. Dr. Thomas Brown has put this beyond doubt, the results of whose reasoning have been stated in the Introduction. Drawing inferences is merely stating what will take place from what has already been observed to take place. A rule is founded upon the resemblance we have observed between individual existences in their adaptation to one common effect. For instance, bodies had been observed to approach towards the earth and towards each other; but it required a Newton to trace the resemblance between these observed sequences and those which held the planets in their spheres, and to give us the rule or law which we call attraction. Since to reason is merely to state the order of nature, it might appear to be an easy process; but such is not the case, as investigation and analytical power are necessary for the correct perception of this order. To be aware of the fact that an explosion from gunpowder produces sound, is not to understand the order of nature sufficiently to enable us to reason upon the phenomena; for in order to do this, each separate link in the chain of sequence must be clearly perceived by the mind. To enable us to reason accurately, therefore, it is necessary that the knowing faculties should perform their offices properly, giving us correct intimations of the properties of things: that Eventuality should inform us truly concerning active phenomena: that Causality should observe every link in the chain of sequences, and Comparison discern what are similar causes and what are similar effects, in order to establish a like relation, or sequence in other circumstances and under other conditions.

If this view of the reasoning powers of man be a correct one, it is evident—and this it is important to observe—that all the knowledge that he can acquire by the unaided powers of his mind, which can be of any service to him, may be TESTED BY EXPERIENCE. Testimony is valuable only as showing what may be from what has been; and as man's reasoning power and his progressive nature, and consequently his welfare and safety, are dependent upon his observation of the order of nature, it would seem to be not a presumptuous or unwarrantable conclusion that the all-wise Creator does not suffer that order to be invaded by what is termed a special Providence: the interference of which would render his highest gift to man. that which places him so far above all other creatures here. valueless and inoperative. Cause and effect, the relation having been once established, must be invariable; and it is man's duty to trace out their connection and to adapt his conduct to it, rather than to petition the Deity to break such connection for his own individual advantage; a petition which, if answered, must bring curses rather than blessings to all around.

CHAPTER IV.

ON THE ORIGIN AND BOUNDS OF OUR KNOWLEDGE.

It is an acknowledged truism, "What can we reason but from what we know;" but had mankind given due weight and importance to this mere truism and have settled the not unimportant question, "What can we really know?" it would have saved them from the endless controversies concerning the nature of matter and of mind, materialism and immaterialism. that have occupied metaphysicians from the remotest ages until now. Had they seen the necessity of establishing first principles in Metaphysics, as in Physics, and of laying down a clear chart of the mental faculties, their powers, relations, and modes of action, it would, even as the spirit upon the face of the waters, have reduced the chaos of their systems to order and utility. As Locke says, "Men, extending their inquiries beyond their capacities, and letting their thoughts wander into those depths where they can find no sure footing, it is no wonder that they raise questions and multiply disputes; which never coming to any clear resolution, are proper only to continue and increase their doubts and to confirm them at last in perfect scepticism. Whereas, were the capacities of our understanding well considered, the extent of our knowledge once discovered, and the horizon found, which sets the bounds between the enlightened and dark parts of things: between what is not comprehensible by us, men would perhaps, with less scruple, acquiesce in the avowed ignorance of the one, and employ their thoughts and discourse with more advantage and satisfaction in the other."

'Dugald Stewart describes the aim of Kant in his "Critique of Pure Reason," to be "to lead reason to the true knowledge of itself; to examine the titles upon which it founds the sup-

posed possession of its metaphysical knowledge, and by means of this examination, to mark the true limit beyond which it cannot venture to speculate without wandering into the empty region of pure fancy."*

Such a chart, of the necessity for which Locke so forcibly expressed his conviction, but which neither he nor any one of those who have adopted his mode of investigation has been able to supply, has been furnished by the new philosophy of Phrenology, which has succeeded in pointing out the fundamental powers of the human mind, not by mere reflection on consciousness, but by a method strictly inductive.

According to this system, then, we find that we have been endowed with certain propensities and sentiments on which our happiness has been made to depend, for their exercise is attended with highly pleasurable sensations, the aggregate of which constitutes happiness. These faculties or feelings bear certain relations of love and antipathy to external things; we can trace no reason from the nature of things themselves why one object should excite love or antipathy more than another; but such a relation has been established between us and them to answer a certain purpose. Another set of faculties has been added to these, bearing that relation to the external world which shall best enable man to bring his feelings into activity, direct them to their proper ends, and thus insure that happiness which is the object of his being.

We can know nothing, therefore, but that which results from the relation established between our intellectual faculties. and what we intuitively believe to be an external world.

Each intellectual faculty has received a particular constitution, in consequence of which it is susceptible of a form of intelligence or mode of thought peculiar to itself; but there is no reason that we can discover why it should produce one kind of ideas more than another, except that it has been so constituted with relation to its external cause for a particular purpose.

^{*} Dissertations, p. 189.

The intellectual faculties are of two kinds, those which are acted upon by external causes, through the medium of the senses, and the ideas belonging to which, therefore, are modified by the sense; and those faculties that act upon these ideas when so furnished by the first class. They have been very properly divided into ideas of Simple and Relative Perception.

All the knowledge, therefore, that we acquire of an external world is of its action through the medium of the senses upon only a few of the mental faculties, and which action of the perceptive faculties alone would be quite insufficient to give us the idea of nature as we now conceive of it. world, as it appears to us, is created in our own minds by the action of the faculties of Relative Perception and of Reflection upon the comparatively few ideas furnished by the faculties of Simple Perception.

Our ideas of things result from the relation that has been established between the object or cause, the sense, and the three classes of intellectual faculties, and it has been the want of knowledge of this fact, and of what belongs to each of these departments, which has caused most of the differences, controversies, and obscurities of metaphysicians. has argued for the real existence of an external world exactly as it appears to us; another has maintained that the world only exists in part as it appears to us; and a third that it is solely and entirely a creation of the mind.

Much has yet to be learned in this department of Psychology, but enough is already known to show what degree of truth or error exists in the old systems, and it may not be uninteresting to examine briefly what light our more exact knowledge throws upon the Metaphysicians.

Hobbes tells us that the thoughts of man, singly, are a representation or appearance of some quality or other accident of a body without us which is commonly called an object. Which object worketh on the eyes, ears, and other parts of a man's

body; and by diversity of working, produceth diversity of appearance.

The original of them all is that which we call sense, for there is no conception in a man's mind which hath not at first, totally or by parts, been begotten upon the organs of sense. The rest are derived from that original.

Ideas are but apparitions unto us of the motion, agitation, or alteration which the object worketh in the brain, or spirits, or some internal substance of the head.

Hobbes is the precursor or founder of the School which held that to think is to feel.

There is nothing in the above to which the Phrenologist can take exception. By the sense he evidently means sensation, and we do not see that he can be charged with holding the dogma, "Nihil est in intellectu, quod non prius fuerit in sensu," for he says that "there is no conception in a man's mind which hath not at first, totally or by parts, been begotten upon the organs of sense;" as the Phrenologist holds that such conceptions are formed by the faculties of Reflection and Relative Perception acting upon those of Simple Perception, which are derived directly from the sense. He is said to have confounded thought with feeling; but thought is feeling; an idea is a feeling or sensation, slight or feeble in proportion to the relatively small size of the portion of the brain with which it is in connection. When the intellectual faculties are very large and much used, so great is the feeling of enjoyment in their exercise, that it amounts almost to an intellectual passion. Hobbes is also said to be a materialist, but we are not aware that he confounded an idea with its cause or the object, and as we know nothing of the essence of either, it is impossible to say wherein they differ.

LOCKE held that ideas are derived from two sources, Sensation and Reflection; he might more properly have said that most of our ideas are derived from five sources,—the object, the sense, and the three classes of mental faculties, Simple and Relative Perception, and Reflection.

He laid it down as a first principle, that the mind perceived only forms and qualities, and that our idea of matter was derived from reflection, as we could not but conceive otherwise than that there was a substratum or subject to which these qualities belonged. Now we perceive substance as directly through Individuality as we do its primary qualities of solidity, extension, &c.; and we perceive its primary qualities no more directly than we do what he calls its secondary of colour, &c. Locke was opposed to the doctrine of innate ideas, that is, of truths independent of experience, but by innate ideas in a phrenological sense is meant not the mind's own ideas, but its own modes of thought which it impresses upon the objects of our experience.

"When Berkeley denied the existence of BERKELEY. matter, he meant by 'matter' that unknown substratum, the existence of which Locke had declared to be a necessary inference from our knowledge of qualities, but the nature of which must always be altogether hidden from us. Philosophers had assumed the existence of Substance, i.e. of a noumenon lying underneath all phenomena—a substratum supporting all qualities—a something to which all accidents inhere. This unknown substance Berkeley rejects. 'I am not for changing things into ideas' he says, 'but rather ideas into things; since those immediate objects of perception, which according to you are only appearances of things, I take to be the real things themselves." "Berkeley therefore, in denying the existence of matter, sided with common sense. He thought, with the vulgar, that matter was that of which his senses informed him; not an occult something of which he could have no information. The table he saw before him certainly existed: it was hard, polished, coloured, of a certain figure, and cost some guineas. But there was no phantom table lying underneath the apparent table—there was no invisible substance supporting that table. What he perceived was a table and nothing more; what he perceived it to be, he would believe it to be, and nothing more. His starting point was thus what the plain dictates of his senses, and the senses of all men, furnished."*

^{*} Lewes's Bio. Hist. of Philosophy, 2nd edit., pp. 463 and 466.

Berkeley believed, in what we all necessarily believe, in the ideas furnished by individuality, by which we as directly perceive substance, as we do qualities by the faculties of form, size, weight, colour, &c. Berkeley was right so far, but wrong in the inferences he drew from his original induction.

IDEALISM. According to Locke the only reason for inferring the existence of Matter is the necessity for some synthesis of attributes. Berkeley assumed this synthesis to be purely a mental one; but as Individuality perceives matter as directly as we perceive attributes, no such synthesis is required, and both are wrong. "The objects of knowledge are ideas;" it is true we are only conscious or have knowledge of ideas, but reflection on that consciousness tells us that the ideas are not purely subjective, but are compounded equally of the object or cause, the sense, and the subject or intellect. We cannot resolve an idea so compounded into its elements; "it is God's synthesis, and man cannot undo it:" but it is only by assuming such idea to be simple or purely subjective, and thus confounding it with its cause—the objective with the subjective, the ego with the non-ego—that Idealism can exist. Ideas are found without any immediate cause without ourselves, as in dreams, visions, &c., and are therefore said to be purely subjective, but such ideas, however vividly repeated, must have been received originally from without. although ideas can only be known to us in this compound state, and although we have no power to analyse them, yet it is very possible to conceive that both subjective and objective may exist separately. We cannot but suppose that the causes of our ideas, whatever they may be, may continue to exist without our perceiving them. Ideas, based upon our forms of intelligence, may cease to exist, but the world may continue and create an entirely different set of ideas in the minds of beings differently constituted. Appearances may be the production of the mind to which they appear, (Idealism,) or they may be the pure presentation of the things themselves (Realism); we have no faculties that tell us anything of the purely subjective or the purely objective, and the supposed differences between Realism and Idealism are vain distinctions, based upon pure assumptions.

HUME. "Locke had shown that all our knowledge was dependent upon experience. Berkeley had shown that we had no experience of an external world, independent of perception; nor could we have any such experience. He pronounced matter to be a figment. Hume took up the line where Berkeley had cast it, and flung it once more into the deep sea, endeavouring to fathom the mysteries of being. deeper in the direction Berkeley had taken, he found that not only was Matter a figment, Mind was a figment also. occult substratum, which men had inferred to explain material phenomena, could be denied, because not founded on experience; so also, said Hume, must we deny the occult substratum (mind) which men have inferred to explain mental phenomena. that we have any experience of, is impressions and ideas. substance of which these are said to be impressions, is occult is a mere inference; the substance in which these impressions are supposed to be, is equally occult—is a mere inference. Matter is but a collection of impressions. Mind is but a succession of impressions and ideas."—Bio. Hist. Philo. p. 480.

As we have seen, we have a mental faculty whose function it is to give us our idea of matter; but we have none that I am aware of which gives us the idea of mind as distinct from "the succession of impressions and ideas." We are conscious of perceptions; the external cause of them we call matter, the internal or subjective, we call mind; the aggregate of the external we call the world, the aggregate of the internal the mind. The form of thought peculiar to Individuality probably originates the belief in the individuality of both, but whether in reality it belongs to either we do not know. Individuality may no more belong to mind, composed as it is of separate ideas and sensations, than to what we call the world; or it may belong to each only in the same sense; each separate simple idea or sensation, and each separate simple substance being

alone individual. Whatever we may be supposed to know of matter in consequence of our direct perception of it through Individuality and of its qualities through the other perceptive faculties, we certainly know nothing of mind, but as the aggregate of all our ideas and sensations; and as Hume says "mind is but a succession of impressions and ideas." Hume held that there is not, in any single instance of cause and effect, anything which can suggest the idea of power or necessary connection. Our belief in power he ascribes to habit. Now precisely as Individuality gives the idea of substance does Causality give the idea of power. Eventuality takes cognizance of the succession of phenomena -of mere antecedence and sequence; but consequence, or our perception of power in every causation, is derived from Causality. Our faculties thus tell us of substance and of power; whether they tell us truly or not we cannot say. but we necessarily believe them. We have treated of this belief and of power more at large farther on.

Kant. Knowledge derived from objects or causes without us we call knowledge derived from experience. Kant affirmed that besides this experience we had innate ideas not derived from without, which were necessarily true, because we could not conceive them otherwise. These ideas he held to be superior to those derived from experience because they were unusual and necessary, while those derived from experience were contingent; but as he believed the realities of things to transcend or to be above the range of our faculties, his philosophy was called Transcendental.

We conceive that he has not succeeded in proving that we have any ideas not derived from the sources we have already indicated, or if he has he certainly has failed to show that such "intentions" are absolutely or even necessarily more true than the truths derived from experience.

Time, Space, and Causality, Kant holds to be innate ideas, and to have no objective reality: we have already shown whence such ideas are derived. The celebrated categories are Kant's mode of arriving by Reflection on consciousness at the list of Intellectual Faculties or modes of thought which Gall arrived at by observation, and they correspond to his faculties of Simple and Relative Perception and Reasoning Powers. Kant's distinction between the Understanding or Judgment, and Reason, we have seen that phrenology confirms. Each faculty judges of its own objects, as form of form, colour of colour, &c., and in this sense animals have judgment, which is sometimes mistaken for reason: but reason is a higher power and generalizes such judgments, and traces the laws of cause and effect.

"God, the Soul, and the World, Kant holds to be the three ideas of Reason, the laws of its operation, the pure forms of its existence. They are to it what space and time are to Sensibility, and what the categories are to Understanding." These ideas are considered to be wholly independent of experience, and we have still to show that this is an error, and to trace their derivation to the source of all our other ideas—experience. Kant also holds that all belief, that is, all fundamental belief on which all reasoning is necessarily founded is instinctive or intuitive. In this he was quite right, as we shall hereafter make evident. The system of Fichte, Schelling, and Hegel are open to similar criticisms, but as substantially such criticisms would be a mere repetition of what we have already laid down, it is needless to go into them.

The great question at issue was, and still is,—Have we, or have we not any ideas which are absolutely, objectively true? It is generally supposed and affirmed that "nothing is known to us as it is," that is, per se, but only as it appears to us, or as it affects us;—but if we cannot know noumena, only phenomena—if we do not know what things really are in themselves, is it not equally unphilosophical to deny, as to affirm, anything with respect to them? Whether, therefore our faculties give us real knowledge and things are in reality what they seem to us; whether their intimations are absolutely as well as relatively true as far as they go, and appear the same to all intelligences, and the same to creature as Creator, is what we really

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know nothing about. Absolute truth like Eternity may belong only to the One, and may be even impossible to all finite intelli-Lewes says in his examination of the "Common Sense" philosophy, "No one doubts that we believe in the existence of an external world. Idealism never questions the The only doubt is, whether that belief be objectively as well as subjectively true. To say that the belief in objective existence is a Fundamental Law, is simply saying that we are so constituted that we are forced to attribute external reality to our sensations. As well say we are so constituted that fire applied to our bodies will give us pain. We are so constituted. What then? Does this advance us one step? Not one. We have still to seek some proof of the laws of our constitution being the measure of the laws of other existences-still to seek how what is true of the subjective must necessarily be true of the objective."-Bio. Hist. of Philo., 2nd Edit. p. 522.

But after all, this difference between objective and subjective may be a delusion—a riddle which in the nature of things is insoluble; for what is truth? What is real knowledge? Must not the idea of a thing and the thing itself be always something distinct? Can any intelligence, however high, know more than how it is affected by things external? It is true we can give no "positive" answers to these questions, and we must rest satisfied with probabilities only, and it certainly does seem most probable that things really are what they seem to us. That our knowledge, at least as far as it goes, is necessary and universal. That there is such a thing as space, that there is a universe of suns and systems and a world in which are real rivers and trees, and light and shade, and men and animals, and all that constitutes beauty and utility; and in fact, we will not say that what is subjectively true is objectively true also, but that subjective and objective are indissoluble.* But fortu-

^{* &}quot;One may say that the creation grows conscious of itself in man. What a glaring and absurd contradiction do our Byronic poets fall into, when they praise nature at the expense of man! What is nature till man is there to feel and understand? What are suns and stars, mountains and the ocean,

nately our real interests are not left dependent upon probabilities. It is of little consequence to us how other beings may be affected by their world or by ours. Man's intellectual faculties may supply him only with relative truth, but he has his own field of absolute truth and that is the region not of ideas, but of pleasures and pains. Absolute certainty is attainable here, for no "Intelligence," high or low, can confound one with the other, and our intellectual faculties are sufficient to guide us in the pursuit of one and the avoidance of the other, and that is all in which they could be useful to us, and possibly, therefore, all for which they were ever intended. Locke, who appears to us the most sensible of all our metaphysicians, seems fully to comprehend this, and in his researches stops here-He says, "How short soever our knowledge may be of a universal or perfect comprehension of whatever is, it yet secures our great concernments, that we have light enough to lead us to the knowledge of our Maker and the sight of our own duties." And again, "as to myself, I think God has given me assurance enough as to the existence of things without me; since by their different application I can produce in myself both pleasure and pain, which is one great concernment of my present state." He continues, "for our faculties, being not suited to the full extent of being, nor to a perfect, clear, comprehensive knowledge of things free from all doubt and scruple, but to the preservation of us, in whom they are, and accommodated to the use of life; they serve our purpose well enough, if they will but give us certain notice of those things which are convenient to us." If then our faculties

without the human eye? What that is that lies behind the eye—marvellous brain, or something more—I do not precisely know; but I know this, that it both receives from the eye and gives to the eye. What if I am indeed no other than this fine bodily instrument made sensitive to a thousand impulses—what if I am indeed this 'living lyre,' swept over by every wind, and tremulous to every ray of light—living lyre conscious of its own melody? I am still nothing less than that wondrous instrument that has converted motion into melody—the thing into a thought. Or, to change my metaphor, I am that sensitive mirror in which the reflected world becomes a conscious world, and knows itself as the creation of God."—Thorndale on the Conflict of Opinions, p. 859.

furnish us with all such knowledge as can be useful to us, we can afford to remain *sceptical* as to their correctness or power in departments in which they could be of no use. Pleasure and Pain are to voluntary motion what attraction and repulsion are to inorganic matter, and the Science of Morality is to the analysis of Pleasure and Pain what the Science of Chemistry is to the different substances that compose this globe.

CHAPTER V.

BELIEF.

"All belief, it is evident, must be either direct or indirect. It is direct when a proposition, without regard to any former proposition expressed or understood, is admitted as soon as it is expressed in words, or as soon as it rises silently in the mind. Such are all the order of truths which have been denominated, on this account, first truths. The belief is indirect when the force of the proposition, to which assent is given, is admitted only in consequence of the previous admission of some former proposition with which it is felt to be intimately connected, and the statement in words, or the internal development of these relative propositions in the order in which their relation to the primary proposition is felt, is all that constitutes reasoning. The indirect belief which attends the result of reasoning, even in the proudest demonstration, is thus only another form of some first truth which was believed directly and independently of reasoning; and, without this primary and intuitive assent, the demonstration itself in all its beautiful precision and regularity would be as powerless and futile as the most incoherent verbal wrangling."

"Without some principles of immediate belief, then, it is manifest, that we could have no belief whatever; for we believe one proposition, because we discover its relation to some other proposition, which is itself, perhaps, related, in like manner, to some other proposition formerly admitted, but which, carried back as far as it may, through the longest series of ratiocination, must ultimately come to some primary proposition, which we admit from the evidence contained in itself, or, to speak more accurately, which we believe from the mere impossibility of

disbelieving it. All reasoning, then, the most sceptical, be it remarked, as well as the most dogmatical, must proceed on some principles which are taken for granted, not because we infer them by logical deduction, for this very inference must then itself be founded on some other principle, assumed without proof, but because the admission of these first principles is a necessary part of our intellectual constitution."*

That belief or faith is something more than a mere intellectual perception there can be little doubt, and I have previously endeavoured to point out the particular part of the mental constitution to which it belongs. It must be regarded not as a mere perception, but as a sentiment dependent for its direction, like conscientiousness or benevolence, upon the intellectual faculties. Like the other feelings, it is a blind instinct, and as conscientiousness, or the disposition to do right, cannot of itself dictate what is right, so the instinctive tendency to believe, equally requires the guiding and restraining hand of reason. Faith, Hope, and Charity, are virtues only when properly directed, the first to truth, the second to reasonable expectation, and the third to the real interests of mankind.

But what are these first truths which Dr. Brown says are believed directly and independently of reason, and from which all other belief results. We find little difference in opinion between mathematicians, and it is because they first agree upon the grounds of reasoning; they lay down certain principles or axioms founded upon their own definitions, and these stand with them in the place of first truths. For instance, "A point is that which hath no parts, or which hath no magnitude." "A line is length without breadth." † "Let it be granted," says the mathematician, "that a straight line may be drawn from any one point to any other point," that is, from that which has

* Brown's Phil. of the Human Mind, Lecture 13, p. 78.

+ Elements of Euclid.

"The whole is greater than a part: how exceedingly true! Nature abhors a vacuum! How exceedingly false and calumnious!" Again, "Nothing can act but where it is: with all my heart; but where is it?" — Sartor Resartus, p. 52.

no parts and no magnitude, to that which has no parts and no magnitude; now we may readily grant this when it has been discovered where that is. Proceeding in this way, any kind of propositions may be proved. And yet, as Dr. Brown shows, it is the only way in which we can reason at all. From the want of such amditted grounds of reasoning in mental science, metaphysicians have, invariably, arrived at different conclusions.

The Phrenologists have discovered the connexion between the primitive faculties of the mind and certain parts of the brain, and by constantly repeated observations, have pointed out the relation between external objects and certain organs, and between other organs and these, so that the exact mode of manifestation of most of the fundamental powers of the mind is now known. The indications that such faculties give us, the modes of thought or intelligence peculiar to each, whether real or ideal, must be received as first truths, upon which all reasoning is founded.

Belief attends the action of each faculty, and cannot be separated from it. The most sceptical, if they express doubt in words, express belief in practice.

Thus, an object is presented to the senses, a tree, for example; we are impressed with ideas of its form, size, colour, and impenetrability, or power of resistance, and we believe it to possess all these qualities; and Individuality gives them unity and substance; so that we believe not in a separate form, size, colour, &c., but in an individual tree to which all these qualities are attached. The idea of substance, including that of extension and relative position, gives us the idea of space, and we believe that space exists, although our reasoning faculties tell us that that to which we have given the name is only an idea, a sensation, a kind of feeling.

Again, Eventuality notices the circulation of the sap in the tree, the budding forth of the leaves, the ripening of the fruit, and so on, and time gives the idea of succession in such phenomena; and we believe in both action and time. Causality

notices the connexion of the sap with the root, and of the root with the earth, and we believe that there is a real dependence and connexion, one upon the other—a real power in the earth to sustain the tree. If we possessed only the knowing faculties, we should perceive the earth and the tree and believe in them as existences, but Causality gives the idea of something more, of the relation that they bear to one another, and we believe that the tree could not exist without the earth, or, at least, that the earth causes the growth of the tree.

Comparison observes the situation necessary for the growth of the tree; that if the tree be placed in the earth, without the root, it will not grow; and takes note of all other conditions necessary to the continuance of its being, so as to be able to apply such knowledge to other situations; and we believe that the differences and resemblances, of which Comparison gives us the ideas, exist.

Causality also traces the connexion between these ideas and the brain, between the brain and the external sense, and between the sense and something acting upon it, and we cannot but believe that a real connexion exists between these sequences, one producing another; hence we believe in the actual existence of a something external, which something we call a tree. The idea of a tree, its properties and relations, are associated together in one idea in the mind, so that we are never conscious of it without the belief that it has a cause, that cause being the last link that we trace in the chain of sequences, and regarded consequently as an external existence.

Our reason is sufficient to show us that the greater part of those things in which we believe, are the produce of our own minds only: thus, number, space, time, action, motion, relation, the ideas of which are not formed by the senses, may be no more the real properties of substances than the names by which we designate them, which names themselves are supposed by the ignorant to be as much inherent parts of the substance named, as we are apt to suppose its relations to be.

So we believe in substance as perceived by Individuality, and in power as perceived by causality. With respect to the latter, seeing that one event always follows another, we regard the latter as the cause of the former. As, also, we find nothing existing by itself, but everything in the relation of antecedent and consequent, we become impressed with the belief that this relation is a necessary one, and invariably look for an antecedent or cause.

Dr. Brown says, "We see in nature one event followed by another. The fall of a spark on gunpowder, for example, followed by the deflagration of the gunpowder, and by a peculiar tendency of our constitution, which we must take for granted, whatever be our theory of power, we believe, that, as long as all the circumstances continue the same, the sequence of events will continue the same; that the deflagration of gunpowder, for example, will be the invariable consequence of the fall of a spark on it, in other words, we believe the gunpowder to be susceptible of deflagration on the application of a spark, and a spark to have the power of deflagrating gunpowder."

"Power is significant not of anything different from the invariable antecedent itself, but of the mere invariableness of the order of its appearance in reference to some invariable consequent; the invariable antecedent being denominated a cause, the invariable consequent an effect. To say that water has the power of dissolving salt, and to say that salt will always melt when water is poured upon it, is to say precisely the same thing; there is nothing in one proposition which is not exactly, and to the same extent, enumerated in the other.

"To know the powers of nature, is, then, nothing more than to know what antecedents are and will be invariably followed by what consequents; for this invariableness, and not any distinct existence, is all that the shorter term, power, in in any case expresses."*

It is true that this is all that we know of the powers of nature, but it is not all that we believe, for from the action of

^{*} Philosophy of the Human Mind, Lecture 6.

the primitive power of the mind, causality, an idea of force or power is derived, and we believe, and must believe, as implicitly in its existence as in the reality of anything the idea of which we receive through the senses. Thus, Mr. Combe says, "If a cannon be fired, and the shot knock down a wall. Individuality and some other perceptive faculties observe only the existence of the powder. Eventuality perceives the fire applied to it, the explosion, the fall of the building, as events following in succession; but it forms no idea of power in the gunpowder, when ignited, to produce the effect. When Causality, on the other hand, is joined with Eventuality in contemplating these phenomena, the impression of power or efficiency in the exploding gunpowder, to produce the effect, arises spontaneously in the mind, and Causality produces an intuitive belief in the existence of this efficiency, just because it is constituted to do so."

It is true Causality gives the impression of power or efficiency, but without another mental faculty no belief would attend it. Wonder, as we have endeavoured to show before, creates belief, as it invests all our ideas with a feeling of reality. It does more; it gives to this idea of *power* a personality; it dresses it in all the clothing that the other faculties furnish; adds to it unity, infinity, ascribes to it the tendency or design of all causation, and transforms it into a God, infinite in power and goodness.

Thus DIRECT BELIEF, that is—"where a proposition, without regard to any former proposition expressed or understood, is admitted as soon as it is expressed in words, or as soon as it rises silently into the mind," is founded and must attend upon the action of each of the primitive intellectual faculties; the indications that they give of the existence and relations of the external world, being the First Truths upon which all reasoning must be based.

Belief in Testimony is merely belief in ideas furnished by Causality, that is, the action of the primitive faculty of Causality gives us a perception of a relation existing in a train of sequences, and our belief is in proportion, as that relation seems sustained and unbroken. "For what is Testimony? It is itself an event. When we believe anything, then, in consequence of testimony, we only believe one event in consequence of another. But this is the general account of our belief in events. It is the union of the ideas of an antecedent and a consequent by a strong association."*

Belief in Propositions, or indirect belief, is founded upon a perception of relation between such propositions, and the knowledge previously furnished by the primitive faculties of the mind upon which direct belief depends. Such is the belief in God.†

* Mill, vol. 1, p. 290.

+ Mr. Herbert Spencer, writing on the Universal Postulate and its Corollaries. appears to agree mainly with Dr. Thomas Brown. He says, "We have seenfirst, that the existence of belief is, in so far as our reasoning faculties are concerned, the fundamental fact; next, that beliefs that invariably exist are those which, both logically and of necessity, we must adopt; further, that those are invariably existent beliefs, of which we cannot conceive the negations; and. lastly, that whether belief having this warrant be infallible or not, it must equally happen that the fewer times we assume the validity of such warrant in reaching any conclusion, the more certain must that conclusion be. These positions being granted; it inevitably results, as we have found, that the current belief in objects as external independent entities, has a higher guarantee than any other belief whatever-that our cognition of existence considered as nonmenal, has a certainty which no cognition of existence considered as phenomenal, can ever approach; or, in other words-that, judged logically as well as instinctively, Realism is the only rational creed; and that all adverse creeds are self-destructive."-Principles of Psychology, p. 59. We agree with Mr. Spencer "that beliefs that invariably exist are those which, both logically" and of necessity, we must adopt, but that these beliefs are tested, as he supposes, by our "inability to conceive their negations," we do not think is borne out by facts. Belief, as we have seen, attends the action of each primitive faculty, and cannot be separated from it; and we have seen also that we may have a speculative unbelief in the action of our faculties, that is "conceive their negations," but cannot have a practical one. Thus although we practically believe in the consciousness or form of thought supplied by each faculty. reflection on consciousness, or our reasoning powers, are quite capable of examining both the cause and grounds of our belief, and they show us that it is a blind instinct, and that the belief in Realism is only more probable than the belief in Idealism;-for notwithstanding all that we may believe, we really know only how we are affected by things without ourselves. That we can conceive the negation of all our fundamental beliefs is evidenced by the denial of

TRUTH.—Truth to man, is merely the record of his feelings and impressions. But what is the proof that this is true? There is no proof: we must take it for granted: we intuitively believe it, and we cannot for any practical purpose, believe otherwise. The present condition of self is all of which we can speak with absolute certainty. The existence of an external world, with its properties, connexions and dependencies: with everything relating to past, present, or future; and consequently our own identity, must all be taken for granted; the only evidence of their truth being that we feel with reference to them as we say that we do.

the very existence of matter, space, time, &c., a sensation or idea is certainly the negation of all these, and we may conceive that beings may be so constituted as to receive the very opposite impressions from the same external causes that affect us. We necessarily believe in the "intuitions of sense," but reason is quite competent to inquire into the causes of this belief and thus carry "the order of nature"—the sequence of events, which is all we know. several steps beyond or in advance of our intuitions. The "cognitions of external realities, immediately reached through the senses," have thus not a higher validity than any cognitions immediately reached by reasoning. Mr. Spencer says, "Though the Universal Postulate endorses our belief in an outer world and in personal existence—in Matter, Force, Space, Time, Change, Motion, Extension, Form, and the so called primitive attributes of things -it does not indorse our beliefs in colour, scent, sound, and the attributes classed as secondary-for while our beliefs in the first are of the kind whose negations are inconceivable, we can, after a little analysis, very readily conceive the negation of our ideas in the last." In our special analysis of the faculties, we have already shown that we can make no distinction between what have been called primary and eccondary attributes, that the evidence for one rests upon precisely the same evidence as the other, and that we really know nothing with respect to either one or the other of what is "inherent in things," but as effects produced by things upon us, that is, upon our primitive mental faculties: Colour being as directly derived from a primitive faculty as Form, and it being quite as possible to conceive the negation of one as the other. "Whilst it may ever remain impossible for us to think of them (external attributes as we believe in them) as otherwise," yet they may be otherwise. Mr. Spencer regards this as the last refuge of Scepticism, and says, "this position we shall find to be as logically inadmissible as it is practically unthinkable." "A higher knowledge," I think, enables us to see that this is neither one nor the other, for it shows us that the reason why we cannot possibly think of them as otherwise is owing to the peculiar constitution of our mental faculties -our forms of thought, the alteration of any one of which might enable us to think of things differently; and that although it is probable that things are what we believe them to be, it is quite possible they may be otherwise.

The evidence of Truth will, therefore, be different to every individual mind; neither can that which is truth to one mind be strictly said to be truth to any other; as no two minds are exactly organized alike, and no two minds are ever, therefore, affected exactly in the same way. We have seen that our ideas depend equally upon the object or cause, the sense, and the subject or intellectual faculty; and although the object and sense may be the same, yet the intellectual faculties differing, as they do more or less in all men, the perception of the object differs. We may readily conceive of an intelligence, with faculties so differently constituted from our own, that all which we call truth should to it appear falsehood. Matter might appear to such a mind to have different properties, different relations, different dependencies.* In minds constituted in other respects like our own, the addition of a single faculty might be sufficient to alter the whole appearance of nature. is unphilosophical, therefore, to suppose that the causes of ideas in us are necessarily what they appear to be; all that we can affirm respecting them is that they affect us in a certain manner; and the description of the mode in which we are affected is that which constitutes truth to us."†

^{* &}quot;To beings capable of perceiving and distinguishing the different particles that form by their aggregation those small masses, which after the minutest mechanical division of which we are capable, appear atoms to us, the pride which we feel, in our chemical analysis, must seem as ludicrous, as to us would seem the pride of the blind, if one, who had never enjoyed the opportunity of beholding the sun, were to boast of having discovered, by a nice comparison of the changing temperature of bodies, that, during certain hours of the day there passed over our earth some great source of heat. The addition of one new sense to us, who have already the inestimable advantages which vision affords, might probably, in a few hours communicate more instruction, with respect to matter, than all which is ever to repay and consummate the physical labours of mankind; giving, perhaps, to a single glance, those slow revelations of nature which, one by one, at intervals of many centuries, are to immortalize the future sages of our race."—Brown's Philosophy of the Human Mind, Lecture 5.

^{† &}quot;In all German systems since the time of Kant, it is the fundamental principle to deny the existence of Matter; rather, we should say, to believe it in a radically different sense from that in which the Scotch Philosopher strives to demonstrate it, and the English Unphilosopher believes it without

The "first truths" or fundamental principles upon which all reasoning is based being different in all men, our surprise need not be excited when we find that the line of argument that appears irresistible to one, utterly fails to convince another; and that two individuals seldom arrive exactly at the same conclusions. Thus, one sees only coincidence where another traces

To any of our readers who has dipped never so slightly into demonstration. metaphysical reading, this Idealism will be no inconceivable thing. Indeed it is singular how widely diffused and under what different aspects we meet with it among the most dissimilar classes of mankind. Our Bishop Berkeley seems to have adopted it from religious inducements: Father Boscovich was led to a very cognate result, in his Theoria Philosophia Naturalis, from merely mathematical considerations. Of the ancient Pyrrho or the modern Hume we do not speak : but in the opposite end of the Earth, as Sir W. Jones informs us. a similar theory, of immemorial age, prevails among the theologians of Hindostan. Nay, Professor Stewart has declared his opinion, that whoever at some time of his life has not entertained this theory, may reckon that he has yet shown no talent for metaphysical research. Neither is it any argument against the Idealist to say that, since he denies the absolute existence of Matter, he ought in conscience likewise to deny its relative existence; and plunge over precipices, and run himself through with swords, by way of recreation, since these, like all other material things, are only phantasms and spectra, and there-spectrum himself, all this will ultimately amount to much the same as it did before. Yet herein lies Dr. Reid's grand triumph over the Skeptics, which is as good as no triumph whatever. For as to the argument which he and his followers insist on, under all possible variety of figures, it amounts only to this very plain consideration, that 'men naturally, and without reasoning, believe in the existence of Matter;' and seems, philosophically speaking, not to have any value; nay, the introduction of it into philosophy may be conaidered as an act of suicide on the part of that science, the life and business of which, that of 'interpreting appearances,' is hereby at an end. Curious it is, moreover, to observe how these common-sense Philosophers, men who brag chiefly of their irrefragable logic, and keep watch and ward, as if this were their special trade, against 'Mysticism' and 'Visionary Theories,' are themselves obliged to base their whole system on Mysticism, and a Theory, on Faith, in short, and that of a very comprehensive kind; the Faith, namely, either that man's Senses are themselves Divine, or that they afford not only an honest, but a literal representation of the workings of some Divinity. So true is it that for these men also, all knowledge of the visible rests on belief of the invisible, and derives its first meaning and certainty therefrom !

"The Idealist again boasts that his philosophy is Transcendental, that is, 'ascending beyond the senses;' which, he asserts, all Philosophy, properly so called, by its nature is, and must be: and in this way he is led to various unexpected conclusions. To a Transcendental'st, Matter has an existence but only as a Phenomenon; were we not there, neither would it be there; it is a

causation, and is enabled to employ the same causes to produce the same effects in different circumstances. And yet is it not the commonly received opinion that all men naturally are equally capable of judging; and are not men frequently the most dogmatical on those subjects that they are the least capable of understanding, and the most eager to refute those arguments the force of which nature has given them no faculties to appreciate? This may be accounted for by the fact that each person instinctively believes that which he himself perceives, whether his perceptions be correct or not: and the greater part of such belief is formed at a period during which our percep-

mere Relation, or rather the result of a Relation between our living Souls and the great First Cause; and depends for its apparent qualities on our bodily and mental organs; having itself no intrinsic qualities, being, in the common sense of that word, Nothing. The tree is green and hard, not of its own natural virtue, but simply because my eye and my hand are fashioned so as to discern such and such appearances under such and such conditions. Nay, as an Idealist might say, even on the most popular grounds, must it not be so? Bring a sentient being, with eyes a little different, with fingers ten times harder than mine; and to him that Thing which I call Tree shall be yellow and coft, as truly as to me it is green and hard. From his nervous-structure in all points the reverse of mine, and this same tree shall not be combustible, or heat producing, but dissoluble and coll-producing, not high and convex, but deep and concave; shall simply have all properties exactly the reverse of those I attribute to it. 'There is, in fact,' says Fichte, 'no Tree there, but only a manifestation of Power from something that is not I.' The same is true of material Nature at large, of the whole visible universe, with all its movements, figures, accidents and qualities; all are impressions produced on me by something different from me. This, we suppose, may be the foundation of what Fichte means by his far-famed Ich and Nicht-Ich (I and Not-I;) words, which taking lodging, (to use the Hudibrastic phrase) in certain 'heads that were to be let unfurnished,' occasioned a hollow echo, as of Laughter from the empty apartments; though the words are, in themselves, quite harmless, and may represent the basis of a metaphysical Philosophy as fitly as any other words. . But farther, and what is still stranger than such Idealism, according to these Kantean systems, the organs of the mind too, what is called the Understanding. are of a no less arbitrary, and, as it were, accidental character than those of the Body. Time and Space themselves are not external but internal entities: they have no outward existence, there is no time and no space out of the mind; they are mere forms of man's spiritual being, laws under which his thinking nature is constituted to act. This seems the hardest conclusion of all; but it is an important one with Kant; and is not given forth as a dogma, but carefully deduced in his Critik der Reinen Vernunft with great precision, and the strictest form of argument."-Carlyle's Miscellanies, vol. 2, p. 106.

belief also being instinctive, is as readily extended to the *ideal* as to the *real*, to fancied relations of cause and effect as to true ones. Thus, when the judgment is not sufficiently strong to examine correctly the grounds upon which belief is founded, prejudice will come to its aid and cause a man to maintain his point in spite of reason, and even contrary to it. But since all men think and feel and believe differently, what is to be the test of truth? We can have no other than experience. The record of the mode in which the majority of men are affected by the external world must be considered truth with respect to it. That which appears blue to the majority, must be said to be blue, although to some few who possess a peculiar development of the faculty that perceives colour, it may appear to be green or pink.

With regard to the truth of those propositions upon which experience does not directly bear,—the existence of a Deitv. for example,—the only test can be the relation of such propositions to those of which experience does inform us. And here it is that mankind fall into controversy and error; for while all agree with respect to those truths of which direct experience affords everyday proof, the evidence for those truths which require to be searched out by the reasoning powers, must appear valid or otherwise, as those reasoning powers are more or less efficient; so that what seems indubitably true to one may be considered improbable or even absurd by another who is more capable of sifting evidence. To all thus acquainted with the diversified powers of the mind, dogmatism is not only wrong, but exceedingly absurd. All that the philosopher can do is to say what he sees, and invite other people to look and see if they can see it also.

That which Mr. Combe relates of a few individuals, will be found to apply to all mankind, viz., "That there is a tendency to believe without examination; and that an effort of philosophy is necessary to resist belief, instead of evidence being requisite to produce it." The natural tendency of all minds is to credu-

Lity and not to scepticism, and it is necessary that it should be so, for "faith removes mountains." Ignorance believes, but philosophy doubts and examines. Of that which constitutes the belief of the great mass of mankind, one half at least may be shown to be erroneous. They believe in things and beings for the existence of which there is not the slightest evidence, and their minds are filled with imaginary relations of cause and effect, which the experience of a life is insufficient to disprove or correct.*

To searchers after truth, then, it is absolutely necessary that nothing be admitted which is not either a first truth, or founded upon a first truth. A single proposition believed without sufficient evidence, is dangerous to all truth; it becomes with us a first truth, upon which we build all kinds of erroneous conclusions. If we attempt to go beyond that to which our faculties are limited, if we attempt to reason independently of those first truths which it is the province of each faculty to furnish, we immediately fall into absurdities and contradictions.

For instance, the term "infinite," used so much by theologians, is usually employed to designate that which is unlimited, boundless, to which nothing can be added or taken away. But this definition consists of words without meaning, for our

* In contemplating the character of the eminent persons who appeared about this era, nothing is more interesting and instructive than to remark the astonishing combination, in the same minds, of the highest intellectual endowment, with the most deplorable aberrations of the understanding; and even, in numberless instances, with the most childish superstitions of the multi-Of this apparent inconsistency, Bodinus does not furnish a solitary The same remark may be extended in a greater or less degree, to most of the other celebrated names hitherto mentioned. Melancthon, as appears from his letters, was an interpreter of dreams, and a caster of nativities; and Luther seems to have seriously believed that he had himself frequently seen the arch enemy face to face, and held arguments with him on points of theology. Nor was the study of the severe sciences, on all occasions, an effectual remedy against such illusions of the imagination. The sagacious Kepler was an astrologer and a visionary; and his friend Tycho Brahe, the Prince of Astronomers, kept an idiot in his service, to whose prophecies he listened as revelations from above."-Stewart's Dissertations, Encyc. Brit., p. 29.

faculties give us no knowledge of that which is boundless; and in reasoning upon it we necessarily plunge into obscurity. Thus, concerning "infinite" space, if this planetary system were to be deducted from the universe, we cannot suppose that the universe would be less infinite than it was before; therefore, a part is as great as the whole.

So of Infinite Duration or Immortality, as applied to beings who have begun to be: in consequence of this beginning of existence they can never be said to live for more than half an Eternity: therefore that which is infinite is capable of being halved.

Again, the doctrine of Infinite Divisibility implies the same absurdity and contradiction. "Everything," as Hume says, "capable of being infinitely divided contains an infinite number of parts; otherwise the division would be stopped short by the indivisible parts, which we should immediately arrive at. Finite extension must, in this case, suppose an infinite number of parts."*

• Upon this verbal quibble, or rather misuse of words, is based the celebrated Achilles puzzle, as given in "Mill's Logic," (2nd vol., p. 453.) It is said let Achilles run ten times as fast as a tortoise, yet, if the tortoise has the start, Achilles will never overtake him; for, suppose them to be first separated by an interval of a thousand feet; when Achilles has run these thousand feet the tortoise will have run a hundred, and when Achilles has run those hundred, the tortoise will have run on ten, and so on for ever: therefore Achilles may run on for ever without overtaking the tortoise. Now, says Mill, the "for ever" in the conclusion means, for any length of time that can be supposed; but in the premises "for ever" does not mean any length of time,-it means any number of subdivisions of time. It means that we may divide a thousand feet by ten, and that quotient again by ten, and so on as often as we please; that there never need be an end to the subdivisions of the distance, nor, consequently, to those of the time in which it is performed. But an unlimited number of subdivisions may be made of that which is itself limited. The argument proves no other infinity of duration than may be embraced within five minutes. As long as the five minutes are not expired, what remains of them may be divided by ten, and again by ten, as often as you like, which is perfectly compatible with there being only five minutes altogether. It proves, in short, that to pass through this finite space requires a time that is infinitely divisible, but not an infinite time; the confounding of which distinction Hobbes had already seen to be the gist of the fallacy.

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Upon speculative points like these, theory upon theory has been formed, and mankind have been engaged in perpetual controversy, and will be so to the end of time, unless, by a close analysis of the powers of the mind, showing the relation that has been established between us and the external world. the boundary of our possible knowledge be determined. With the help of an analysis like this, which will acquaint us with each intellectual faculty and its function, we shall be in no danger of wasting our powers in the vain attempt to overstep this boundary: we shall possess a standard by which first truths may be determined—the want of which has led to the unwise extension of them by one party, and the equally unwise limitation of them by others, producing thereby endless errors and uncertainty respecting that science which of all others ought to be the most certain, as in it are involved the highest interests of mankind.

Belief in Deity.—The belief in supreme power we find nearly universal in all countries yet known to us; and this power has been "in every clime adored" as far back as written records extend. In the first ages of the world the powers of nature were deified and worshipped under every variety of form, with attributes borrowed always from man's own nature, fashioned according to the laws of his own intelligence and the degree of civilization then prevailing. Every cause that was hidden, every antecedence not evident to the senses, a spiritual Being was created to supply; the earth was peopled with fairies and genii, and there were gods of the winds, of the sea, and of the air. As man increased in intelligence, his gods diminished in number, and as his knowledge enabled him to generalise the powers of nature, he attached them to one supreme source, the Great Cause of all.

This is only in accordance with the laws of the human mind; Wonder or Faith gives the sense of reality; and wherever this sense of reality exists, there is an irresistible tendency to invest it with the forms of our own intelligence. In this manner our sensations and ideas are to us realities, and although they are

known to us as a train of separate thoughts only, yet we invest them with the form of intelligence peculiar to Individuality, and we have the idea and speak of the mind of man as simple and indivisible—as one individual mind. We even individualize all things that exist, and call it the universe. So we individualize the separate impressions of power or efficiency derivable from every separate cause, and thus form the idea of God as one, as a personality. But it is evident that this is to invest the Great Cause of all with an attribute derived from our particular form of intelligence, and we may as much err in ascribing to Him unity or personality as if we were to depict Him under our own particular bodily shape.

But if it be irrational to measure the infinite by powers that have relation only to the finite; to invest the Deity with our own forms of thought, our own modes of intelligence; it is, if anything, more inconsistent to ascribe to Him feelings which belong to man, and have been given to enable him to perform his part upon this earth. Necessarily believing in a God however, we have formed Him after our own image, not unfrequently ascribing to Him some of the lowest of our feelings in their greatest abuse. We have no faculties that can make us acquainted with God as He is, or with his mode of existence, and we only degrade Him by reducing Him to our level.

What then do we know? Almost nothing: for "who by searching can find out God?" It is a great mystery before which we must be content to bow down in awe and reverence. The "forces" or powers of nature we have seen to be indestructible, they are transmitted, they may change their form, and all the varied effects we see may be, and probably are, the result of one original force set in motion at the beginning. But when we speak of beginnings, we immediately feel that we are out of our depth. "There is no efficient cause, or anything that exerts an agency in the dominion of nature. A cause is a thing uncaused; if produced, it must resign its title, and be ranked as an effect; consequently there cannot be a

string of causes in nature: one only is so, and all the rest are only passive results."—Rev. J. W. Mailler, p. 39. It is impossible to get away from this reasoning. Man's powers, mental, as well as bodily, are derived. The one only cause we call God.* But the "force" in nature is not a blind force, it is intelligent. The proof of intelligence is that it moves towards a given end or purpose; we judge of the nature of that intelligence by the object or worthiness of that purpose; the object of morality is universal happiness or good, and in proportion as the intelligence in nature tends towards that end do we say it is a moral intelligence and not a mere primum mobile.

We see a man working towards definite aims and we infer individual intelligence like our own, which on examination we find to be ruled by general laws; we see also all nature working towards definite aims, and we quite as logically infer general intelligence acting on the *body* of the universe, as our intelligence does on our bodies, and governing by general laws, if not like men governed by them.

Hume, Kant, Shelly, and Holyoake, have each shown that a Great First Cause is an assumption, and they hold it to be quite as logical and reasonable to suppose that causes have always had their efficiency as that they ever had a beginning. It may be so, for we know nothing about beginnings, but that there is a presiding Intelligence it is very difficult to doubt. The Atheist, however, does not think so; he assumes that there is an inherent power in each cause which has always existed

"Sweep away the illusion of time; glance, if thou have eyes, from the near moving cause to its far distant Mover. The stroke that came transmitted through a whole galaxy of elastic balls, was it less a stroke than if the last ball only had been struck and sent flying? Oh, could I, (with the time-annihilating Hat,) transport thee direct from the beginnings to the endings, how were thy eyesight unsealed, and thy heart set flaming in the light-sea of celestial wonder? Then sawest thou that this fair universe, were it in the meanest province thereof, is in very deed the star domed City of God; that through every star, through every grass-blade, and most through every living soul, the glory of a present God still beams: But Nature, which is the Timevesture of God, and reveals Him to the wise, hides Him from the foolish."—Sartor Resertus, p. 274.

and that in the infinite concourse and commingling of atoms in infinite time and space, the present order of things has arisen; everything inharmonious having a natural and necessary tendency to destroy itself, and only that which is good and harmonious being permanent or having power to continue in existence at all.

But we have something besides power,—we have beauty the garment of God; how do we account for this? It is true the great forces in nature are the aggregate of infinitely small ones; it is the animalcules, the corals, the imperceptible power that raises the waters from the deep, that work the great changes in the world; but whence come the flowers? thinks, if there were no other proofs of God's goodness, the flowers would supply them in abundance. Answer it to thyself, poor soul that doubtest of his love. * * Why has he made these flowers? Why does he send to thee these little joys, as gentle and unnoticed often as a mother's kiss upon a sleeping child? There is not, it would seem, a conceivable reason to be given for the existence of flowers, (at least for their beauty and perfume), other than the intention to provide for man a pure and most delicate pleasure. Geologists tell us that in the epochs there are few traces of flowers; such as there were being small and probably of the secondary colours, mere vessels for the ripening of the seeds. Only when the human era approached, the order of the rosacce appeared, the fruit trees with their luxurious burdens, and all our brightest and sweetest flowers, till the wilderness rejoiced and blossomed as the rose. Thus as the coal and the iron, and the stone, were laid up in the dawn of time for our use to-day, so the flowers sprout up over the earth for our delight, and to deck the cradle God had prepared for his child."-Miss F. B. Cobbe, Fraser, 1861. This is very prettily put, but it contains the old leaven of man's supremacy at the expense of the rest of creation. If in the epochs there were no flowers, so were there no insects. Flowers seem more by right to belong to the insect world, than to man.*

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^{*} It is singular how the a posteriori reasoning on Deity agrees with the a priori of Spinoza and others. According to Spinoza "There is but one

BELIEF IN REVELATION. We have shown that each man's own judgment is, and must be to himself, the standard of

infinite Substance, and that is God. Whatever is, is in God; and without Him nothing can be conceived. He is the universal Being of which all things are the manifestations. He is the sole Substance, Mode cannot exist. God, viewed under the attributes of Infinite Substance, is the natura naturans -viewed as a manifestation, as the Modes under which his attributes appear, He is the natura naturata. He is the cause of all things, and that immanently, but not transiently. He has two infinite attributes-Extension and Thought. Extension is visible Thought: and Thought is invisible Extension: they are the Objective and Subjective of which God is the Identity. Every thing is a mode of God's attribute of Extension; every thought, wish, or feeling, a mode of his attribute of Thought. That Extension and Thought are not Substances, as Descartes maintained, is obvious from this: that they are not conceived per se, but per aliud. Something is extended: what is ! Not the extension itself, but something prior to it, viz., Substance. Substance is uncreated, but creates by the internal necessity of its nature. There may be many existing things, but only one existence; many forms, but only one Substance. God is the 'idea immanens'-the One and All. . God is not the material universe, but the universe is one or part of His infinite Attribute of Extension: He is the identity of the natura naturas and the natura naturata."

It is a more verbal resemblance, therefore, this of Spinosaism to Atheism; but the history of Philosophy shows too many instances of the errors of language created into errors of fact, to astonish any reader. It was our place to point out the error, which we trust we have done; and the following paper from Schelling's Philosophische Schriften, accurately draws the distinction between Pantheism and Atheism :- "God is that which exists in itself, and is comprehended from itself alone; the fluite is that which is necessarily in another, and can only be comprehended from that other. Things therefore are not only in degree, or through their limitations different from God, but Whatever their relation to God on other points, they are absototo genera. lutely divided from him on this: that they exist in another and he is selfexistent or original. From this difference it is manifest that all individual finite things taken together cannot constitute God, since that which is in its nature derived, cannot be one with its original, any more than the single points of a circumference taken together can constitute the circumference, which as a whole, is of necessity prior to them in idea."-Lewes's History of Philosophy, vol. 3, p. 146. Schelling also says, "These are but the innumerable individual eyes with which the Infinite World Spirit beholds himself."-Ibid, p. 189.

Schiller says "Nature is an infinitely divided God," and again "The Divine One has dispersed itself into numberless sensible substances, as a white beam of light is decomposed by the prism into seven coloured rays. And a divine being would be evolved from the union of all those substances, as the seven coloured rays dissolve again into the clear light-beam. The existing form of Nature is the optic glass, and all the activities of spirit are only an infinite colour-play of that simple divine ray. Should it ever please the

truth; that what appears to him to be true, is, for the time at least, truth to him. This is simply making reason the test of

Almighty to shatter this prism, then the barrier betwixt himself and the world would fall to ruin; all spirits would disappear into one infinite spirit, all accords would melt into one harmony, all streams would rest in one ocean. The attraction of the elements gave to nature its material form. The attraction of spirits, multiplied and continued to infinity, must finally lead to the abolition of the separation, or (may I utter it) create God. Such an attraction is Love."—Philosophical Letter, p. 40.

Fighte says, all "appearance" whatsoever we see in the world is but as a vesture of the "Divine Idea of the world," for "that which lies at the bottom of appearing."

Emerson in his Essay on Compensation says, "Everything in nature contains all the powers of nature; everything is made of one hidden stuff. The true doctrine of Omnipresence is, that God reappears with all his parts in every moss and cobweb; thus the universe is alive."

The Rev. J. Whyte Mailler, M.A., says, "When we view the world as one universal effect, we are at once led to the contemplation of a universal Divine Agency. Does not the infinite act on every atom? It is only by so doing that He upholds and governs the mighty fabric of the world. In what manner His immensity comes into contact with matter, cannot be discovered. But the truth is obvious, that whether mediately or immediately, He guides and directs all things, and is the sole source of power. We are deceived if we suppose that the properties of substances have any inherent activity; as they depend on the Infinite not only for their fixed qualities but for their existence. Does man, therefore, make use of the power of God when he makes experiments with substances? In one respect he does, and that as often as he moves his arm. 'In Him we live and move and have our being.' * * * God never delegates His power; He cannot transfer divinity to a substance: there is no power, therefore, separated from Himself. In Him all things have their being."—The Philosophy of the Bible, pp. 35-40.

We are unable to see in what this view differs from Emerson's, although its author says Emerson's is Pantheistic and therefore Atheistic. "Matter," he says, "by Emerson, is esteemed an Almighty Being, animated with inherent life and power, and furnished with all the faculties of an intelligent existence:" but when Emerson says "everything in nature contains all the power of nature," he certainly does not mean separately and independently of Omnipresent Deity any more than the Rev. Mr. Mailler does.

In one thing only all the most advanced minds agree—vis., that it is as impossible to disconnect God from the material living universe, as it is to disconnect the Soul from the corporeal living body; still we know nothing "Positively;" the great mystery is still veiled. A very clever writer on the Nebular Hypothesis, in the Westminster, (July, 1858,) observes, "It remains only to point out that while the genesis of the solar system, and of countless other systems like it, is thus rendered comprehensible, the ultimate mystery continues as great as ever. The problem of existence is not solved: it is simply removed farther back. The nebular hypothesis throws no light upon the origin of diffused matter; and diffused matter as much needs accounting for

all truth, and it may be interesting to inquire whether we have, or can have, any higher standard. There are many who say "the revealed word of God" is the standard of truth, and we are called upon to "submit our reason to revelation." But this fundamental principle of priestcraft is an error, and we never are or can be called upon to submit our reason to anyone or anything. Reason was given to man for his guidance, and it must be supreme in everything. Admitting fully that "the revealed declarations of God" are the highest standard of truth, it is "reason" that has to determine where such

as concrete matter. The genesis of an atom is not easier to conceive than the genesis of a planet. Nay, indeed, so far from making the Universe less wonderful than before, it makes it more wonderful. Creation by manufacture is a much lower thing than creation by evolution. A man can put together a machine; but he cannot make a machine develop itself. The ingenious artizan, able as some have been, so far to imitate vitality as to produce a mechanical pianoforte-player, may in some sort conceive how, by greater skill, a complete man might be artificially produced; but he is totally unable to conceive how such a complex organism gradually arises out of a minute structureless germ. That our harmonious universe once existed potentially as formless diffused matter, and has slowly grown into its present organized state, is a far more astonishing fact than would have been its formation after the artificial method vulgarly supposed. The nebular hypothesis implies a First Cause, as much transcending 'the mechanical God of Paley,' as this does the fetish of the savage." The doctrine of the later Stoics was that the entire body of matter unfolded itself, from a principle of life as inherent in its constitution as the property of vegetation in the seed: it advanced from inorganic to organic, and thence through a series of ages to the highest intelligence in man. We cannot say we see how this theory differs from the above, or from the modern "theory of Development," and although it certainly appears most in accordance with all modern discoveries in Geological science, yet we cannot say with the writer in the Westminster, that it appears to us to show more power, or to excite more wonder that intelligence should be millions of years evolving than days in creating; the same general laws of Deity, and the same direct operation would appear to be at work in both cases. Anaxagoras says, (500, B. C.) "In the beginning there was the Infinite, composed of homosomerice, or elementary seeds of infinite variety. But the mass of elements were as yet unmixed. What was to mix them? What power caused them to become arranged in one harmonious all-embracing system ? This power he declared to be Intelligence, the moving force of the universe. He. on the one hand, had rejected Fate, as an empty name; on the other, he rejected Chance, as being no more than the Cause unperceived by human reasoning." (Biographical History of Philosophy, p. 66.)—The most advanced theories of the present day appear to go little beyond this guess of Anaxagoras's more than 2,000 years ago.

"revealed declarations" are to be found, and not only so, but to interpret them afterwards, and there is no possible means of determining that to be Revelation which is opposed to reason. There has been much useless discussion as to the possibility of working miracles, for granting to the fullest extent their possibility, what do they prove? It has usually been considered sufficient evidence that men were "sent of God" if they had this power of working miracles. But supernatural power contains no evidence in itself of whence such power is derived. may be a hundred sources from which such powers might be derived besides the One Supreme. There may be a hundred intelligences between us and Deity, with power little short of the highest, and such may not necessarily wish our good or have no interest in deceiving us. The fact is, we have no means whatever of discriminating between the power of God and the devil, but by the tendency of such power; that is, the purpose for which it is used, and our reason is the only means of determining this tendency. The Jews accused Christ of working miracles by the aid of Beelzebub, and if we know it was not so. it is from the tendency of that teaching which the miracles were wrought to confirm. Baxter says all creeds come directly from the devil. How are we to discriminate between angels of light and darkness, supposing the wings and the horns and hoof are myths? Who is to say what are the powers and intelligence of either? and if the existence of such "principalities and powers" be admitted, who is to say what "revelations," let them be accompanied by whatever signs and wonders they may, necessarily come from God? Can we be too cautious not to accept anything, from whatever apparent source derived. that may appear to derogate from His character? and have we not the right to say in all such cases to all unknown powers and intelligences, "Jesus I know and Paul I know, but who are ye?" No, there can be no sufficient external evidence of a Revelation; it must be internal; as Christ says "If any man will do his will, he shall know of the doctrine whether it be of God," and this is the only test. Power is and can be no evidence of

anything but itself, and each separate fact can only be proved by its own evidence. Experience, that is, conformity to the "order of nature," is the only test of truth. Mankind have always worshipped power and they still continue to do so, but there is no necessary connection between power and truth, or between power and goodness, and as we know nothing of the moral tendencies of created intelligences not of this world, we are called upon all the more to be true to the light of reason which our Creator has implanted within us. If the powers of Good and Evil-we speak with all reverence—are as equally divided as the common belief supposes, how is it possible to distinguish between them otherwise? It is quite impossible to accept any power, or revelation, or inspiration, as coming from God that is not in harmony with His creation, and with our highest feelings,—for those were imimplanted in us by our Maker. New acts of really divine power must always be in harmony with the old, for it is impossible that any authority can establish anything at variance with natural truth; that is, with the laws of God as inscribed in the Book of Nature. Consequently we find enlightened Protestants of the present day quietly abandoning whatever may run counter to this reason and moral sentiment, to the established facts of science, or to the daily. experience of human nature, just as the infallibility of the Pope was given up ages ago. It follows, that no miracle, or supernatural power merely, could prove the doctrine of a future state, for, as we have said, the doctrine could be proved only by its own evidence, viz., experience that people do live again after this life; -and the only miraculous attestation of such a doctrine that could be accepted as proof, would be to introduce us to those who have gone before us. Mere power then, in any shape, cannot attest a Revelation; after all it must be the accordance of such Revelation with the known order of God's providence, and reason only can show what that order is. Reason also can alone test the various claims to "Inspiration" which are advanced for the sacred writings of all nations, and Revelation and Inspiration being recognized, reason only can

interpret them and determine their true meaning.* Reason is thus the supreme arbiter here as in everything else, and the Protestant principle of the right of private judgment requires to be carried much farther than it has hitherto been,—and if we are not called upon to surrender our judgment to anything on earth, still less are we called upon to do so for anything beyond the earth, because we are still less able to determine its claim upon our faith. God has not left us without a sufficient test of what may come from Himself, but this test is and can only be the too often much despised Reason.

* "How do you know, it may be asked, that so and so is declared in the Bible! You will say, 'I so understand the words:' but it may be answered, 'Lean not to thine own understanding: how do you know that the Bible itself contains the revelation of God's will: or that there is a God at all! You think you have good reason for the belief; your Reason leads you to that conclusion: but your Reason is imperfect, fallible, and impaired; and is therefore 'an utterly incompetent tribunal.' Your argument therefore is completely suicidal; it leaves you no ground to stand on, no just assurance for believing anything at all."—Paley's Moral Philosophy, with Annotations by Archbishop Whately, p. 90.

CHAPTER VI.

MATERIALISM, CONSCIOUSNESS, IDENTITY, ASSOCIATION.

WITH reference to the truths called "first truths," although we must agree with Reid and Brown in placing them at the foundation of all practical reasoning and belief, they are merely instinctive indications given us for our guidance under the circumstances in which we are placed upon this earth, informing us of the temporal relation between external things and beings possessing our particular organization: and as we have faculties that test the evidence of the senses, so the evidence of one intellectual faculty, or class of faculties, may be tested by others in the same mind, proving that "Pure Reason" and "Practical Reason," are sometimes at variance.

MATERIALISM. Matter is known to us only as the cause of certain sensations which we call by various names, as solidity, extension, &c., but whether this cause be material or immaterial, substance or mere force, we have no means of determining.*

The Soul is the principle of sensation, dependent upon the nervous system; the nervous system depending upon life, and life upon organization.

The Mind, as we have previously stated, is only the aggregate of all the sensations of which a being is conscious; individuality and unity being given to it by a form of our own

"Matter" is a term also used to designate the cause of certain changes in our states of consciousness, which changes are due, as we have seen, to the action of the physical forces upon those tissues in and by which the organism is developed into a conscious state of existence.

Hence when used in this sense, the term Matter is synonymous with its forces, and not with inert substance.—Mind and Brain, Dr. Laycock, vol. 1, p. 326.

intelligence. What we term Perception, Conception, Memory, Imagination, Judgment, are only diversified sensations, different in their degree of intensity and in their character to the feelings resulting from the action of the Propensities and Sentiments, but still mere sensations. We are not justified in designating the mind as the cause of sensations; for of cause we know nothing but as the invariable antecedent, and the invariable antecedent of these sensations is, as far as we have yet discovered, the action of the brain. Nor are we justified in saying that the Mind is material, because that would be equivalent to saying that Sensation is material, which would be to make the cause and effect the same. All facts, however, justify us in saying that Sensation is caused by that which we call material, in the only sense in which we can use the term cause.

The fact that the properties of Matter are conceived of by different individuals, according to their own particular organization or internal forms of thought, and that the connexion between the mind and the real constitution of objects, is one of mere relation, shows that the question of Materialism is an idle question, and one of mere words; as it is impossible for man to separate the qualities really belonging to an object, from such qualities as modified by the forms and modes of his own intelligence.

Consciousness, as the term is used by one class of writers, the metaphysicians, means nothing more than the ordinary succession of our present feelings and ideas; to feel a sensation and to be conscious of it, being, according to them, synonymous. "There are not," Dr. Thomas Brown observes, "sensations, thoughts, passions, and also consciousness, any more than there is quadruped or animal as a separate being, to be added to the wolves, tigers, elephants, and other living creatures, which we include under these terms."

Again, Mill says, "It was of great importance for the purpose of naming, that we should not only have names to distin-

guish the different classes of our feelings, but also a name applicable equally to all those classes. This purpose is answered by the concrete term Conscious; and the abstract of it. Consciousness. Thus if we are in any way sentient: that is, have any of the feelings whatever of a living creature; the word Conscious is applicable to the feeler, and Consciousness to the feeling: that is to say, the words are generical marks, under which all the names of the subordinate classes of the feelings of a sentient creature are included. When I smell a rose. I am conscious; when I have the idea of a fire, I am conscious; when I remember, I am conscious; when I reason and when I believe, I am conscious; but believing and being conscious of belief, are not two things, they are the same thing: though this same thing I can name, at one time without the aid of the generical mark, while at another time it suits me to employ the generical mark."*

In the sense in which the term Consciousness is used by these writers, it is evidently common to all sensitive existence, and is in fact equivalent to that which we have hitherto denominated Sensation or Sensibility.

But this signification is not the one that the generality of mankind attach to the term, when they say that they are conscious of the operations of their own minds. With them, to have an idea, and to be conscious of the idea, are different things; such kind of consciousness implying reflection, and being the action of one part of the mind upon the other.

The phrenological definition of this term, would appear, therefore, to be the most correct. "Consciousness," says Mr. Combe, "means the knowledge which the mind has of its own existence and operations."† In this sense, Consciousness belongs to man alone; for though the brutes possess feelings and ideas—though they are endowed with perception, conception, memory, and a kind of judgment, yet there is not the slightest evidence that they are conscious of such states of

^{*} Mill's Analysis, vol. 1, p. 172.

[†] System of Phrenology, p. 647.

mind; they seem to experience mere trains of sensations, and to be impelled by them to action, without having any idea of their existence.

The question has often and naturally arisen, how is it that with a plurality of organs, and each of them double, Consciousness is invariably single; so that we are never conscious of more than one feeling or idea at the same time?

The answer is simple, viz., that however great may be the variety of feelings and ideas occurring in the mind simultaneously, they make but one sensation. A compound sensation it may be called, because composed of other sensations which may be distinguished separately when occurring consecutively, but not the less a simple and indivisible sensation at the moment of our being conscious of it; in the same way that a musical chord is not the less a single sound, because the notes of which it is composed may be struck successively, each producing a separate sound.

But it has been objected, that the mind has, in fact, the power of taking cognizance at the same moment, of the component parts of its compound sensations; for instance, that when, in a band of music, the different instruments combined make but one sound, a practised ear will listen to two or three of the instruments separately; but if this process of listening be carefully analysed, it will be found that the ear merely follows the different instruments one after another, so rapidly, that the idea of succession is lost, and the separate acts of attention appear simultaneous.

The notion of the simplicity and indivisibility of the mind itself seems to have originated from the observation of this law of our nature, viz., that more than one feeling or idea cannot exist simultaneously in the same mind, but, of whatever organs they may be the produce, they blend and make but one sensation.

IDENTITY. It has been previously explained that all our knowledge must be derived from the instinctive indications of

our Intellectual Faculties, which indications must be admitted as first truths in reasoning on all practical subjects, although they may not be intended to inform us of the real nature of things, but merely of the relation established between ourselves and the external world. Some of our faculties, our reasoning powers, for instance, are capable of passing judgment upon the other organs as to whether their indications be correct or not, and they suffice, in several instances, to show that what some of our faculties would represent to us as real existences, have no place but in our own minds.

It seems to be necessary to our present mode of existence, not only that we should have the power of individualizing, but that we should be able to attach a certain idea of sameness to individual existences, so that what appeared to be an individual yesterday seems to be that self-same individual, and no other, to-day, and will continue to be so. Without this sense of Identity, the world would seem but an assemblage of flitting phantoms, and all would be confusion and chaos; but that it is merely a feeling given to us for wise purposes, there being nothing answering to it in reality, our reasoning powers would render probable. Philosophically speaking, nothing with which we are acquainted remains the same for two seconds together. The same river flows on for ever, yet the same water never passes the same spot, and no one has ever really been twice on the same stream. The atoms of which bodies are composed are in strict union with the atmosphere, and are continually blending their particles with everything around them. Organized bodies are perpetually changing their structure by the vital processes of waste and reproduction; and if the mind continued the same for any perceptible time, we should lose all consciousness of its existence; for it is only by its successive changes that it is cognizable to us at all. No idea or feeling of the mind can ever be said really to be repeated, for whatever may be the character of memory, it never presents ideas, in every respect, as they at first occurred; either they differ in intensity or in their association with other ideas. So that, in

fact, at no two perceptible periods of an individual's existence is the mind strictly the same.

What is it that constitutes the sameness between the infant and the old man—between a person when possessing sound health and vigorous intellect, and when weakened in mind and body by disease? How is it, that although we perceive the process of change continually going on in ourselves throughout our whole system, so that from one important period of our lives to another we seem to be altered beings; yet still the feeling of Identity clings to us? Whence we know not—unless we believe it to proceed from a principle of our nature; to be the result of an intuitive or instinctive action of faculties, indications of which must always be admitted as the grounds of all practical reasoning, and taken for granted as they cannot be tested.

The belief that we are the same persons throughout our whole existence is commonly adduced as an evidence of the fact, and much ingenuity has been displayed in its explanation. Brown says that atoms are truly identical, and all the change that takes place is change of state; and that this analogy may be carried to the mind, the mind being like ultimate atoms, simple and indivisible. But both these propositions are mere assumptions, as we have no faculties that can inform us concerning atoms in their ultimate state, or even whether such atoms have any existence; and with reference to the mind's being simple and indivisible, the arguments that would prove it to be so, would also prove each separate thought and feeling to be simple and indivisible, and consequently indestructible. For it is quite true, as Brown says, that "if the mind of man and all the changes that take place in it, from the first feeling with which life commenced, to the last with which it closes, could be made visible to any other thinking being, a certain series of feelings alone—that is to say, a certain number of successive states of mind-would be distinguishable in it, forming indeed, a variety of sensations, and thoughts, and passions, as momentary states of the mind, but all of them

existing individually, and successively to each other."—Lectures on the Philosophy of the Human Mind, vol. 1, p. 245, Edit. 1820.

It is clear, however, that whatever our reasoning powers may tell us with respect to the instinctive action of our faculties, we still must put implicit faith in their indications, and since it is necessary for us to believe that there are individual existences, and that they possess identity, it is not put within the power of the strongest intellect to shake this belief in practice, whatever it may do in theory.

Association. Much has been commonly attributed to Association, which an intimate knowledge of the primitive faculties of the mind proves, in no way, to belong to it. Feelings—Propensities and Sentiments have been supposed to be formed by it. The observation of the fact that the Intellectual Faculties are necessary for the guidance of the feelings, for their direction in action, may have generated this error. Our thoughts have also been supposed to follow each other in an established order, and metaphysicians have endeavoured to base education upon general laws of such associations. But so great is the diversity in minds that such general laws may never be discovered, and the causes that determine a train of thought, a succession of ideas in one individual, can seldom, if ever, be applicable to another. But though the importance of the principle of Association has been, in some cases. misunderstood, it cannot be over-estimated. seen that it is upon a very narrow stratum of ideas that the external world, as it appears to us, is built; the ideas derived directly from the senses, such as sounds, smells, tastes, and touch, and from the organs of some of the perceptive faculties, are probably all that the other mental faculties have to act upon to create within us the whole order and beauty of nature, or the whole picture of the world as it appears to us. Any defect in the power of association of ideas would disturb the whole of this harmony.

But it is the association of feelings with ideas to which the highest importance attaches. The propensities and sentiments being mere blind impulses, and depending upon the intellectual faculties for their proper direction, every variety of erroneous association between the intellect and feelings is formed in early life, before the reason has been taught, or is capable of judging for itself of the correctness of the connexion. Such associations are common to all the feelings, and until they can be broken, tend on all occasions to mislead the judgment. One of the most common illustrations, and one familiar to every one, is the association so frequently formed between darkness and danger. Stories of ghosts and other frightful absurdities, are related to children, until they fear to be left alone in the dark. As they grow older they may reason very correctly upon the groundlessness of such fears, but darkness does not the less excite their feeling of Cautiousness. strong is the association in some cases, that there are instances on record of physically and morally brave persons who, after being in twenty battles without being conscious of fear, have vet dreaded to be left in the dark. There is a great variety of objects to which the same feeling may be as erroneously attached, and there are few persons that have not some antipathies, compounded of hatred and fear, that have no better foundation. "Some persons have what is called an antipathy to a spider, a toad, or a cat. These feelings generally originate in some early fright. The idea of danger has been, on some occasions, intensely excited along with the touch or sight of the animal, and hence the association so strongly formed that it cannot be dissolved. The sensation, in spite of them, excites the idea and produces the uneasiness which the idea imparts."*

False associations with the feeling of Conscientiousness are still more injurious in their tendency. This feeling, as we

^{*} Mill, vol. 1, p. 75.

There can be little doubt that such erroneous associations do not always originate with the individual, but that the state of the brain, on which they depend, is transmissible to offspring.

have seen, gives us no knowledge of what is right or wrong, but merely approves the right, and gives the disposition to act in accordance, when it is known to us what is right. In early childhood, before the judgment is active, it must be associated with what the tone of society approves; and whether the standard of morality be high or low, it is not the less difficult to break the association in after-life, and to make us feel that to be wrong, which we have been early taught to regard as right.

This law of the mind has been the great prop of superstition in all countries and ages; for the religious feelings, like all the others, are capable of any direction. The feeling of Veneration, which gives the disposition to venerate and respect, to worship and adore whatever we may be taught to consider worthy of such sentiments, may be associated equally in the infant mind, with a wooden idol, the sun, the moon, an animal, a prophet, a saint, a crucifix, or the God of the universe. Accordingly, there is scarcely anything that some superstition has not made to usurp the place of the Most High in the minds of the ignorant and deluded. "He in whom Veneration is powerful," says Mr. Combe, "and to whom the image of a saint has been from infancy presented as an object to be venerated, experiences an instantaneous and involuntary emotion of veneration every time the image is presented to him, or a conception of it formed; because it is now the sign which excites in him that emotion, altogether independently of reflection. Until we can break this association, and prevent the conception of the image from operating as a sign to excite the faculty of Veneration, we shall never succeed in bringing his understanding to examine the real attributes of the object itself, and to perceive its want of every quality that ought justly to be venerated." The same law applying, not only to the image of a saint, but to all creeds and dogmas, each sect of religionists have always shown themselves anxious to take advantage of it, by impressing the minds of the young with the doctrines of their particular persuasion, and associat-

ing their religious feelings with them, before the feeblydeveloped reasoning power is capable of forming a judgment for itself. Veneration, Hope, and Wonder, jointly compose the religious feelings, and in this way, may be made to take any direction; that is, a child may be taught to worship anything, however unworthy; to hope for anything, however unreasonable; and to believe anything, however monstrously Such associations, once formed, are not easily broken. and until they are, a person is disqualified from forming a philosophical examination of the grounds of his belief. Who does not see that such is the mode in which religious belief is generally propagated in all countries; that people are made to feel and not to reason upon the subject, and that such feelings constitute with each nation, whether Chinese, Hindoo, Mahometan, or Christian, the internal evidence for each particular religion, whether true or false? Feeling, therefore, can never be adduced as a proof of the truth of any religion; since this internal evidence is professed alike by the advocates of each nation's particular creed.

The law of association also explains another mental phenomenon, viz., sudden conversion, as it commonly takes place. A strong religious impression has been produced in childhood; the religious feelings, with Cautiousness, have been associated with particular creeds, with particular interpretations and passages of Scripture, but circumstances have, for a time, overcome those impressions, and such feelings have given place to others. The animal propensities have probably assumed the ascendancy; but the early association has not been broken, any more than the association of fear with darkness is broken because forgotten in the day-time. An allusion to the formerly-cherished creed-a passage of Scripture-a single word-is often sufficient to bring back these early impressions with redoubled force; and alternate fits of sorrow and remorse for former backslidings, and of joy from the natural rebound of the feelings from a state of deep depression. are the consequence. In most cases, however, the discarded worldly propensities will at times regain the ascendancy, which accounts for the frequent sinning and repenting during such states of feeling.

They who are ignorant of the natural mode of action of the mental powers, suppose that there is something supernatural in such phenomena; but it will be found, upon investigation, that all cases of "conversion" and "religious experiences," are strictly in accordance with the general laws of mind, and have no title to be classed amongst things miraculous. This knowledge of the mental constitution seems to be absolutely necessary to rescue some minds, and those, too, naturally strong ones, from the depths of superstition, and to dispossess them of the belief that they are the instruments of divine and spiritual influences. Thus, in cases where the religious feelings have been cultivated to the exclusion of others, and where means have been taken to keep them predominant by the continued and invariable repetition of devotional exercises, by "coming out of the world," and by constant attendance upon public religious services—the judgment, meanwhile, being systematically excluded from having any share in their regulation—the high enjoyment resulting from the natural exercise of such feelings is imagined to be of a supernatural character. And when these feelings, proceeding principally from Veneration, Hope, and Wonder, are internally active, without any apparent external stimulant; when strong faith, brilliant hopes of eternal felicity, and a feeling of self-abasement take possession of the mind, it is not to be wondered at that the conviction is irresistible that such aspirations proceed from more than natural causes, and that the Spirit of the Most High possesses the heart. And so, in truth, it does, and ever does; but God "acts not by partial, but by general laws."

It is thus that each religion has its "internal evidences," which, being planted in the inmost recesses of the heart, render any external evidence unnecessary; and, in fact, are

capable of resisting it, and of supporting any amount of positive contradictions and absurdities.*

* "The name given to the intellectual ideas which enter into the composition of religion is THEOLOGY. It means the notions which we form concerning the Being to whom, or the objects to which, our reverential and devotional emotions should be directed.

Lo the poor Indian! whose untutored mind Sees God in clouds, or hears Him in the wind.

This is the theology of the Indian. The Hindoos and Mahommedans have embodied their theology-in other words, their notions concerning the objects to be reverenced and worshipped—in books. The emotional faculties of the people being trained to reverence, as Divine revelations, the parratives and dogmas which these books contain, the compound becomes in their minds religion. Hence, an individual may be highly religious, and know nothing of theology beyond the narratives and dogmas which have been entwined with his religious emotions from his infancy; while another may be a profound theologian, acquainted with the original languages of Scripture, skilled in all the controversies which have taken place concerning the authors by whom its different parts were written, the time and order of their appearance, their title to the attribute of inspiration, and the true meaning of their texts, yet not be religious. In point of fact, experience shows that, in many instances, the more an individual knows of these subjects, the less religious, in the common acceptation of the word, he becomes-i.e., his reverence for the special dogmas and observances, which in his youth he was trained to regard with religious awe, diminishes.

"The difference between religion and theology, which I have here endeavoured to indicate, may be farther illustrated by comparing them to the warp and woof of a web. The weaver fixes in his loom, first, long threads stretching out directly from his own position, and these are called the warp. Then he puts thread upon a shuttle, which he ever and anon casts between the long threads, and these cross threads are called the woof. The web or cloth is composed of the two series of threads closely pressed together. Now. in our present problem, the native sentiment of reverence and devotion may be likened to the warp. It is the foundation or first element of the web. The theological ideas may be considered as the cross thread or woof. As the shuttle adds the woof to the warp to make the cloth, the intellect adds theology, or particular notions about God, to the emotion, and the two combined constitute what we commonly call religion. The Hindoo religion is the primitive pure emotion, with such intellectual ideas as the pricets of the country have been able to weave into it. The Mahommedan and Christian religions may be described in similar terms; and thus it is that the composite web of reverential emotion and intellectual ideas which each nation has formed for itself, is called its religion. The compound nature of this web is not usually perceived by its votaries. The Hindoo regards his sacred web as altogether pure religion; and the Mahommedan, and the Christian, of whatever sect, do the same.

"The primitive emotion, when energetic and excited, is so overpowering, that it carries the whole mind captive. When it acts blindly, it dethrones reason, stifles conscience, and enlists every passion to vindicate the honour and glory of the Being whom it has been trained to reverence. When the woof of error has been added in infancy, and the web of superstition formed, every thread—that is to say, every notion concerning God, and his priests, and man's duty to both—becomes sacred in the eyes of the devotee, and stirs the emotion into a glow of rapture if gratified, and of pain, accompanied by indignation and fury, if offended. In this state of mind, barbarous nations plunder and slay in honour and to the glory of their gods.

"In Christian nations, analogous phenomena appear. We all profess to draw our religion from the Bible; but in Scotland, one woof is woven into the warp, in England another, in Ireland a third, in Germany a fourth, in Russia a fifth, and so on."—Science and Religion, by G. Combe, p. 18.

CHAPTER VII.

ON THE CONNEXION OF THE MIND WITH ORGANIZATION.

Many important deductions result from our knowledge of the connexion between the Mind and Brain; and many facts there are now on record that point to general principles yet to be discovered, that, in all probability, are of equal, if not of much greater moment than those with which we are now acquainted.

One of the most important of the practical principles derivable from the knowledge of this connexion is, that all the physical laws that tend to increase the health of the body generally, and of the brain as a part of its organization, must tend also to increase the health and strength of the mind. It is found, by experience, that, as the muscles of the body become larger and stronger by use, so the brain increases in activity and size by judicious exercise—and with it the mental powers. The brain also grows or acquires firmness, health or strength, unconsciously, that is without conscious exercise, both in sleep and when awake, and the processes of thought in which we have been previously engaged unconsciously attain clearness and strength, and when after rest—when a subject even has been laid aside for weeks or even months, we find ourselves advanced in it and thinking easier.* So also the feelings take a

* "It has often happened to me," says Sir Benjamin Brodie, "to have been occupied by a particular subject of inquiry—to have accumulated a store of facts connected with it, but to have been able to proceed no further. Theu, after an interval of time, without any addition to my stock of knowledge, I have found the obscurity and confusion in which the subject was originally enveloped to have cleared away, the facts seemed all to have settled themselves in their right places, and their mutual relations to have been apparent, although I have not been sensible of having made any distinct effort for that purpose."—Psychological Inquiries, by Sir B. C. Brodie.

bent or direction not known until new circumstances call into conscious manifestation the new condition the organ has acquired.*

Peculiar dispositions, aptitudes, and tendencies of the mind, as well as general bodily constitution, are also transmitted from parents to offspring.

It is also known that activity and power of mind depend greatly upon quality of brain. Some are capable of great mental endurance, whilst others sink under the slightest exertion; some are active, others slow: all of which differences are dependent, not so much upon organization, as upon quality of brain. It has not yet been discovered what it is that causes these varieties.

Of the action of the mind upon the body, and the body upon the mind, and of the causes and modes of this mutual influence, many very curious facts have been registered, but our present knowledge is insufficient to enable us to generalize them and turn them to much practical account.

* "That our feelings towards persons and objects may undergo most important changes without our being in the least degree aware, until we have our attention directed to our own mental state, of the alteration which has taken place in them, a very common but very characteristic example of this kind of action is afforded by the powerful attachment which often grows up between individuals of opposite sexes, without either being aware of the fact; the full strength of this attachment being only revealed to the consciousness of each when circumstances threaten a separation, and when each becomes cognizant of the feelings entertained by the other. * * We continually speak of the 'feelings' which we unconsciously entertain towards another, and of our not becoming aware of them until some circumstances call them into activity; so that it would seem as if the material organ of these feelings tends to form itself in accordance with the impressions which are habitually made upon it, and that we are as completely unaware of the changes which may have taken place in it, as we are of those by which passing events are registered in our minds (in the memory), until some circumstance calls forth the conscious manifestation, which is the 'reflex' of the new condition which the organ has acquired."-Dr. Carpenter's Human Physiology, pp. 609-10, 5th edit.

"As a general rule, the exceptions to which are probably apparent rather than real, it is said that a man's brain 'grows to' the kind of activity most habitual to it, whether sensational or intellectual, and a tendency to the character thus impressed upon it is transmitted, in some measure, to his offspring."—Transactions of the Social Science Association. Physiological Influences of certain Methods of Teaching, by R. B. Carter, p. 223.



The following are some of these facts; detailed, not for the purpose of drawing inferences from them, or as being necessarily connected, but because they appear to point to some important principles yet to be discovered.

"Professor Ehrenberg asserts that by means of the microscope he has discovered the fibres of the encephalon, spinal chord, and nerves, to be tubular, (i.e.) that they do not consist of solid fibres, but of parallel or fasciculated tubes, dilated at intervals, or jointed, and from $\frac{1}{95}$ to $\frac{1}{5000}$ of a line in diameter. Also, that they contain a perfectly transparent tenacious fluid, never visibly globular, the *liquor nervens*, which differs from the *nervens medulla* as the chyle does from blood."*

"When the pneumo-gastric or chief nerve of the stomach is tied or cut through, and its end separated so as to interrupt the flow of nervous energy towards that organ, digestion is either entirely arrested or greatly impaired. As, however, the direction of a current of galvanism to the cut end of the nerve, next the stomach, suffices to re-establish digestion after that process has been suspended by the interruption of the nervous influence consequent on its division, we may reasonably infer that, in the healthy state, the nerve merely transmits to the stomach a stimulus or energy generated for the purpose either in the brain or in the spinal marrow and ganglia—that the nerve, in short, acts only as a conductor, and does not originate the influence which it evidently imparts."

This nervous energy, however generated, or from whatever source derived, seems equally essential to thinking and feeling as to digestion; for whenever it is drawn off to assist in digestion, or other mere bodily offices, the power of thinking and feeling is proportionally decreased. Deep study and digestion mutually impede each other. So, if the nervous energy is spent in bodily exercise, great mental activity is impossible. A certain portion only of nervous fluid, or whatever else it is, is generated, and if used in one direction cannot be used in another.

^{*} Dr. Elliotson's Human Physiology, p. 466. † Dr. A. Combe on Digestion and Dietetics, pp. 77, 79.

Thus the activity of one mental organ is quieted by calling another into exercise; so also deep study or great activity of the anterior lobe of the brain decreases the energy of that portion of it connected with the feelings, and the undue indulgence of a propensity weakens and frequently prevents the proper predominance of the moral feelings.

There are cases in which this nervous energy appears to be deranged, as in epilepsy; or in which it seems to be increased almost without limit, as in the paroxysms of passion or madness, or in the temporary excitement occasioned by the use of stimulating drinks; during which time persons naturally weak, seem to acquire a supernatural strength, so as often to require the force of several strong men to restrain them.

Each organ of Propensity and Sentiment appears to exercise its peculiar influence upon the body, and to have its particular set of muscles attached to it. This influence produces what is called the natural language of the faculty; appearing when it is strongly marked, not only on the countenance, but throughout the whole person. Who is not more or less acquainted with the impress of Benevolence, of Veneration, Firmness, Conscientiousness, Hope, Wonder, Self-Esteem, Love of Approbation, Combativeness, Cautiousness? This natural language of the faculties gives rise to a great variety of important mental phenomena; for each feeling has not only a strong influence over most of the bodily functions, but is also, when manifested in this way, intelligible to others, and has the power of calling into activity the same feeling in them: thus harshness produces harshness, and kindness kindness; it is in this way that good or bad feelings may be stimulated, and this kind of sympathy become an important element in moral training. There is a manifest difference in the influence of the speaker who feels forcibly what he is expressing, and who therefore throws the natural language of that feeling into his manner, and the one who delivers the same speech heartlessly, and without feeling his subject.

"True sympathy," says Mr. Combe, "arises from the natural language of any active feeling exciting the same feeling in another, antecedently to any knowledge of what excited it in the person principally concerned; and this is sufficient to account for the origin of panics in battles and in mobs, and for the electric rapidity with which passions of every kind pervade and agitate the minds of assembled multitudes." The epidemical mental diseases that sometimes pervade particular countries and districts, manifesting themselves by suicide, tumults, riots, acts of violence, and fanaticism, may be accounted for partly in this way and partly by nervous disease, bordering on madness, caused by mental excitement and religious emotion. Imitation, Mental Imitation, Veneration, Hope, Wonder, Cautiousness, when called into violent and continued action under abnormal conditions, produce the most unlooked for and extraordinary effects. Thus we have the Crusades, and more extraordinary still,—the Children's Crusade in 1212. Plague or Black Death, which between the years 1347 and 1350, carried off in Europe full 25,000,000 of people, produced the Brotherhood of Flagellants; in Germany, the St. Vitus's Dancing Mania; and in Italy the same effect was said to have been produced by the bite of the tarantula, a large spider. St. Vitus's Dance was attended by a religious element; in the tarantism this element was wholly wanting. This mania continued through the 15th and into the early part of the 16th century, and we are told that it frequently happened (like sceptical spiritualists of the present day) that unconcerned and mocking spectators were drawn into the vortex by an irresistible impulse, and also that a Bishop of Foligno allowed himself to be bitten by a tarantula, professing himself utterly sceptical, but that the usual symptoms soon began to show themselves, and he, like the others, was obliged to dance to obtain relief; so also were many others of the clergy, who altogether disapproved of dancing; music and dancing being the sole means of cure. The Revivals in America and Ireland are similar phenomena, and the Shakers, Jumpers, Barkers,

Spiritualists are no doubt, in some degree aided more or less by imposture, similarly affected. Women, from their more excitable temperaments, are the soonest affected, and the mania always increases with the accession of numbers.*

The nerves connected with the brain are everywhere distributed over the body with the minutest care, and are also intimately connected with each other throughout the whole system. Every impression occurring at the extremity of the system is instantaneously propagated to its centre; and for every action of the mind there is a corresponding action outwards in the organ intended to administer to its gratification. If this intimate connexion and communication be interfered with, either by being checked or suspended, some particular form of disease is the consequence. It is with respect to these kinds of diseases that miraculous cures are often said to be performed; for any strong mental emotion that shall send the nervous current through the system with more than ordinary force, will frequently restore the nervous communication that has been impeded, and cure the disease consequent upon it. Implicit belief, or faith, itself a strong feeling, is necessary to call the other faculties into the simultaneous action required to

* A writer in "Fraser," writing on Mental Epidemics, says-"Fanaticism. credulity, fear, sympathy, have combined to spread the infection; the element of imposture has seldom been wholly wanting. From the united operation of these agents disease has extensively resulted; disease, partly physical, partly mental, depriving the patient, for a time at least, of all power of selfcontrol, and propagating itself by the very sight of its symptoms. Hysteria. and the kindred affections, are as certainly present in the most recent of these demonstrations as in the most ancient. Physiological laws have undergone no change. Dr. Hecker remarks-' Demonomaniacs' convulsions, somnambulism, catalepsy, emotional disorders of every kind, are manifested at the present day in all places where fanatical sects pursue their practices, with quite as much importance as at any other times, only in more limited circles. In these cases it is easy to observe that in the great majority of the lookers-on. nearly the same excitement is evinced as in any previous century; and those morbid phenomena are very commonly regarded as the revelations of a most hallowed inspiration, and even as miracles, when they are often nothing more than the physical consequences of a nervous irritant. Practical psychology seems in many circles not yet to have got out of its infancy.' Especially it may be added, the pathology of religious emotions deserves deeper study than it has perhaps ever yet received."-Fraser, April, 1862, p. 500.



produce a strong mental emotion; faith, therefore, is the first thing necessary; nothing can be done, in such cases, without it. If we observe even the ordinary effects of the mind upon the body, we must feel convinced that the combined action of some of our strongest feelings, in such extraordinary cases, is sufficient to produce the so-called miraculous cures on record. We see how readily tears or blushing are produced by the slightest mental emotion: we witness the ordinary effects of grief in deranging the system, and the opposite effect of joy and a happy state of mind in promoting a cure. In fact, no emotion takes place in the mind without some temporary effect upon the bodily system; which ordinarily passes unobserved from the want of the recognition of the strict communication that exists between the mind and the body.

Amongst the most extraordinary of the phenomena connected with this subject are undoubtedly "sleep-waking" and "sleepwalking." Under the influence of somnambulism, people are said to read and write with their eyes shut, and in the dark, and to do other wonderful things. This is accounted for on the supposition that one sense, under particular circumstances, may be so excited and become so exalted, as to supply the place of another. Thus Dr. Carpenter, speaking of what Mr. Braid calls hypnotism, says:-"The exaltation of the muscular sense. by which various actions that ordinarily require the guidance of vision, are directed independently of it, is a phenomenon common to the mesmeric, with various other forms of artificial as well as natural somnambulism." He has repeatedly seen, he says, Mr. Braid's hypnotized subjects write with the most perfect regularity, when an opaque screen was interposed between their eyes and the paper, the lines being equidistant and parallel; and it is not uncommon for the writer to carry back his peneil or pen to dot an i, or cross a t, or make some other correction in a letter or word. Mr. B. had one patient, who would thus go back and correct with accuracy the writing on the whole sheet of note paper; but if the paper was moved from the position it had previously occupied on the table, all

the corrections were on the wrong points of the paper as regards the actual place of the writing, though on the right points as regarded its previous place. Sometimes, however, he would take a fresh departure, by feeling for the upper left-hand corner of the paper; and all his corrections were then made in their proper positions, notwithstanding the displacement of the paper.

In the phenomena classed under the head of electro-biology, the will of one person appears to become completely under the control of another.

Many of the phenomena of Animal Magnetism, or Mesmerism, are attested by such high authority as to leave no room for doubt as to their general truth. We quote the following passage from Dr. Elliotson:-" Among all the phenomena,' says Professor Dugald Stewart, 'to which the subject of imitation has led our attention, none are, perhaps, so wonderful as those which have been recently brought to light, in consequence of the philosophical inquiries occasioned by the medical pretensions of Mesmer and his associates. That these pretensions involved much of ignorance, or of imposture, or both, in their author, has, I think, been fully demonstrated in the very able report of the French academicians; but does it follow from this that the facts witnessed and authenticated by those academicians should share in the disgrace incurred by the empirics who disguised or misrepresented them? For my own part, it appears to me that the general conclusions established by Mesmer's practice, with respect to the physical effects of the principle of imagination, (more particularly in cases where they co-operated together,) are incomparably more curious than if he had actually demonstrated the existence of his boasted science: nor can I see any good reason why a physician, who admits the efficacy of the moral agents employed by Mesmer, should, in the exercise of his profession, scruple to copy whatever processes are necessary, for subjecting them to his command, any more than he should hesitate about employing a new physical agent, such as electricity or galvanism."

"The result of Gall's investigation was this :- 'Neither we. nor any other dispassionate observers, who have been present at the famous experiments of which such wonderful accounts have been given, have witnessed anything supernatural or contrary to nature: we ought therefore to abandon the belief of the metamorphosis of nerves, (the performance of the function of one nerve by another,) to those who are better organised for the marvellous than ourselves. in intoxication, hysterical and hypochondriacal attacks, convulsions, fever, insanity, under violent emotions, after long fasting, through the effect of such poisons as opium, hemlock, bella-donna, are we not, in some measure, transformed into perfectly different beings, for instance, into poets, actors, &c.?' 'Just as in dreaming, the thoughts frequently have more delicacy, and the sensations are more acute, and we can hear and answer; just as in ordinary somnambulism we can rise, walk, see with our eyes open, touch with the hands, &c.' 'We acknowledge a fluid which has an especial affinity, with the nervous system, which can emanate from an individual, pass into another, and accumulate, in virtue of particular affinities, more in certain parts than in others.' 'We admit the existence of a fluid, the subtraction of which lessens, and the accumulation augments, the power of the nerves; which places one part of the nervous system in repose, and heightens the activity of another; which, therefore, may produce an artificial somnambulism.'"

"A rigid mathematician, La Place, observes, that 'of all the instruments which we can employ, in order to enable us to discover the imperceptible agents of nature, the nerves are the most sensible, especially when their sensibility is exalted by particular causes. It is by means of them that we have discovered the slight electricity which is developed by the contact of two heterogeneous metals. The singular phenomena which result from the extreme sensibility of the nerves in particular individuals have given birth to various opinions relative to the existence of a new agent, which has been denominated animal

magnetism, to the action of the common magnetism, to the influence of the sun and moon in some nervous affections, and, lastly, to the impressions which may be experienced from the proximity of the metals, or of a running water. It is natural to suppose that the action of these causes is very feeble, and that it may easily be disturbed by accidental circumstances; but because, in some cases, it has not been manifested at all, we are not to conclude it has no existence. We are so far from being acquainted with all the agents of nature, and their different modes of action, that it would be quite unphilosophical to deny the existence of the phenomena, merely because they are inexplicable in the present state of our knowledge."

"Cuvier fully admits Mesmerism:—'We must confess that it is very difficult, in the experiments which have for their object the action which the nervous system of two different individuals can exercise, one upon another, to distinguish the effect of the imagination of the individual, upon whom the experiment is tried, from the physical result produced by the person who acts upon him. The effects, however, on persons ignorant of the agency, and upon individuals whom the operaration itself has deprived of consciousness, and those which animals present, do not permit us to doubt that the proximity of two animated bodies in certain positions, combined with certain movements, have a real effect, independently of all participation of the fancy. It appears also clearly that these effects arise from some nervous communication which is established between their nervous systems.'"

"I have no hesitation in declaring my conviction that the facts of Mesmerism which I admit, because they are not contrary to established morbid phenomena, result from a specific power. Even if they are sometimes unreal and feigned, and, when real, are sometimes the result of emotion,—of imagination, to use continon language; but that they may be real and independent of all imagination, I have seen quite sufficient to convince me... To ascribe the phenomena which I have witnessed to emotion and fancy, to suppose collusion and

deception would be absurd. They must be ascribed to a pecuhiar power; to a power acting, I have no doubt, constantly in all living things, vegetable and animal, but shown in a peculiar manner by the processes of Meamerism. I have witnessed its power at least three times a week for two months; and should despise myself if I hesitated to declare my decided conviction of the truth of Mesmerism. I am willing to believe that a aleep-waker may prophesy morbid changes in himself with accuracy, as the boy mentioned by Gall predicted the termination of his fit if his friends would lead him into the garden. and the girl mentioned by Lord Monboddo, predicted the cessation of her disease with equal accuracy. * * But I have never witnessed more than what, it is certain, takes place in health and disease. I have seen persons sent to sleep, I have felt and heard others declare they had tingling, and heard some declare they had various other sensations and pains, I have seen twitchings, convulsions, and spastic contractions of muscles. loss of power of muscle, and the most profound coma; and I have seen these evidently and instantly removed by the process. I have seen one sense restored in the coma by the process, so that the person was insensible in taste, smell, sight, and yet heard and answered questions well. I have seen paroxysms of sleep-waking and ecstatic delirium, which had been originally induced by its disturbance of a system already epileptic, put an end to evidently, and in general quickly, by Mesmerism. But I have not witnessed persons seeing through walls or pasteboard, nor tasting or smelling with the epigastrium or fingers; nor speaking or understanding languages they had never learnt; nor telling the circumstances past, present, and to come, of persons they had never heard of before. * * * No marvel has yet presented itself in my experience: nor has any good been yet effected in the diseases of my patients; but the perfect coma induced in some of them would be an inestimable blessing in the case of a surgical operation, which I am positive might have been performed without the slightest sensation on some of the female patients, exactly as took place at the

Hotel-Dieu, where a cancerous breast was removed in Mesmeric coma from a poor woman, without her knowledge. I have no doubt that I shall in time see all the established phenomena of sleep-waking,—writing, reading, and doing endless things, even better than in the waking state. But, before I see, I cannot believe more."*†

Most physiologists are now prepared to admit with Dr. Carpenter, 1st, A state of complete insensibility, during which severe surgical operations may be performed without the consciousness of the patient. 2nd. Artificial somnambulism, with manifestation of the ordinary power of mind, but with no recollection in the waking state of what has passed. 3rd. Exaltation of the senses during such somnambulism, so that the somnambule perceives what in his natural condition he could not. 4th. Action during such somnambulism, on the muscular apparatus, so as to produce, for example, artificial catalepsy; and 5th. Curative effects. Dr. Carpenter, however, has not yet seen sufficient evidence for belief in the higher phenomena of clairvoyance. Others, however, go much farther; thus, Walther, the Professor at Landshut, quoted by Gall, "for a description of the stages of Mesmerism, in the highest of which (clairvoyance,) time and space no longer present obstacles to the penetration of the magnetised,' 'who sees as distinctly into the interior of the magnetiser's body as into his own,' the reason of which is, that, 'all the nervous system is an identity and a totality—a pure transparence without cloud, an infinite expansion without bounds or obstacles. such is universal sense;' and as, 'in the waking state the soul is more closely and intimately united with the body;' and 'natural sleep is a more intimate communication of our soul with the universal soul of the world; so in magnetic sleep our soul is united in the most intimate manner with the soul

[†] In a later edition of the Physiology Dr. Elliotson, I believe, professes his belief in Clairvoyance, he having witnessed unmistakeable proof of it. Also Hospitals for the cure of disease by Mesmerism have been established under his guidance and direction.



Human Physiology, p. 677, et seq.

of the world and with the body, and with the latter not by means of the nervous system only, but immediately in all its parts and members, so that life is no longer a particularity, but original life."

Dr. W. Gregory thus summarizes his belief in his Letters on Animal Magnetism :- "I think we may regard it as established; first, that one individual may exercise a certain influence on another, even at a distance; secondly, that one individual may acquire a control over the motions, sensations. memory, emotions, and volition of another, both by suggestion. in the conscious, impressible state, and in the magnetic sleep, with or without suggestion; thirdly, that the magnetic sleep is a very peculiar state, with a distinct and separate consciousness; fourthly, that in this state the subject often possesses a new power of perception, the nature of which is unknown, but by means of which he can see objects or persons, near or distant, without the use of the external organs of vision; fifthly, that he very often possesses a very high degree of sympathy with others, so as to be able to read their thoughts; sixthly, that by these powers of clairvoyance and sympathy, he can sometimes perceive and describe, not only present, but past, and even future events; seventhly, that he can often perceive and describe the bodily state of himself or others; eighthly, that he may fall into trance and extasis, the period of which he often predicts accurately; ninthly, that every one of these phenomena has occurred, and frequently occurs. spontaneously, which I hold to be the fundamental fact of the whole enquiry, Somnambulism, Clairvoyance, Sympathy, Trance, Extasis, Insensibility to pain, and Prevision, having often been recorded as natural occurrences. Tenthly, that not only the human body, but inanimate objects, such as magnets, crystals, metals, &c., &c., exert on sensitive persons an influence, identical, so far as it is known, with that which produces Animal Magnetism; that such an influence really exists, because it may act without a shadow of suggestion, and may

^{*} Elliotson's Human Physiology, p. 674.

be transferred to water and other bodies; and lastly, that it is only by studying the character of this influence, as we should those of any other, such as Electricity or Light, that we can hope to throw light on these obscure subjects."

The last proposition refers to the discoveries of Baron Reichenbach, who has shown by a great number of experiments, that there exists in all bodies, and throughout the universe, a peculiar principle, analogous to magnetism, electricity, light, and heat, yet distinct from them all, to which he gives the name of odyle. It is most manifest in powerful magnets; next in crystals, and exists in the human body, the sun, moon, stars, heat, electricity, chemical action, and, in fact, the whole material universe. Those who are most sensitive to this influence are persons of feeble health, especially somnambulists; but it is found that about one-third of individuals, taken promiscuously, and many in good health, are sensible of it; and it was by a series of observations on persons of all classes and conditions for years, that the facts have been elicited.

Baron Reichenbach says, "There is nothing in these observations," which he had just detailed, "that, after the contents of the preceding treatises, can surprise us; but they are certainly a fine additional confirmation of what has been stated in regard to the sun and moon, and also of the fact that the whole material universe, even beyond our earth, acts on us with the very same kind of influence which resides in all terrestrial objects; and lastly, it shows that we stand in a connection of mutual influence, hitherto unsuspected, with the universe; so that in fact the stars are not altogether devoid of action on our sublunary, perhaps even on our practical world, and on the mental processes of some heads."

That Mesmerism may be true in all its stages, we think can scarcely be disputed by those who have followed us in our investigation into the present extent of our knowledge of both mind and matter. The phenomena alluded to in this chapter, relating both to animal magnetism and to sympathy, in its

various modes of manifestation, seem all to emanate from one source, and to point to some nervous agent, some general power or force, or perhaps some fluid, which, if it exist at all, must perform a most important part in the human constitution; the discovery of which will be a vast step gained towards the knowledge of all the influences that affect and rule over the mind of man.

If we allow ourselves to enter the field of speculation there is much to be said. I have heard of great wonders, upon testimony the most respectable, but I have witnessed nothing more than what may be accounted for from the heightened action of the sense, or of the mental faculty; sight and hearing greatly increased, and the abnormal, not the normal condition of the mind in action. We do not know of what the natural faculties are capable, if greatly enlarged or greatly excited. The large size of the organ of number will enable an idiot to calculate mentally what another can scarcely do with the slate, and the large size of the mathematical faculties in Sir Isaac Newton enabled him to anticipate results that took hours to work out in the regular way. The building instinct of animals seems to result from some peculiar constitution of the organ of constructiveness. Cats and dogs can find their way home across hundreds of miles of country, without any assistance from the finger posts, being able to do so apparently from the peculiar or exceptional action of the same organ of Locality, which enables man to find his way with facility in proportion to the size of the organ. There is nothing probably more wonderful in Mesmerism than the faculty manifested by the carrier pigeon; it is taken hundreds of miles away, and then released; it ascends into the air, makes two or three turns, and then flies straight home again. Some of the phenomena of Mesmerism, if true, would seem to annihilate the ordinary modes of thought in time and space, enabling us to know the past, and bringing us into an immediate contiguity with the absent as with the present. Might not this be through the action of some rudimentary organ, intended for service in some

very advanced state of the world's civilization, and which being more largely developed in some individuals than in others, is abnormally excited by the aid of Mesmerism, and casts its shadow before: or, might it not be by the odvlic force, which makes what we call solid matter, perfectly transparent to sensitives? As the heavenly bodies in their immeasurable distance act upon our brains, not only through the force of light, but through the odylic force, may not our brains also act, and be acted upon, by other brains at a distance? Electricity unites two batteries, and almost as quick as thought carries a message across the Atlantic. Why may not the more subtle force of odvle unite two brains? The electric battery of the brain carries its mandates instantaneously through the nerve wires to all parts of the body, why should they stop there? I believe there are many facts to show that they do not, but they want general-The American Davis, the Pough-keepsie Seer, and similar cases, would seem to indicate that the partitionwall of individuality, which separates the mind of man from that of mankind, can be broken down, and we may become all-knowing and intelligent, as regards all that hapever formed part of the knowledge of the race. But these, for the present, must be regarded as mere speculations.

As to the phenomena of what is called "Spiritualism," people of well-known character and undoubted powers of intelligence and habits of philosophical observation, tell us that after six or eight years' careful investigation in private families, and after sitting in many hundreds of "circles," they are obliged to come to the conviction that the phenomena are genuine, and that there are both forces and intelligences which do not come at present within any recognised law. Of course, there is much deception, and still more self-delusion, mixed up with the subject; but we think it is almost impossible not to come to the conclusion that there is a residue of truth. The question then is, whence come these phenomena? From whom, or what, are they derived? Here there is great difference of opinion, the great majority, as has ever been the case

since the world began, where the causes are hidden, ascribing them to spiritual agency. We are supposed to prove, every time when by an act of the will we move a limb, that spirit moves matter. Now, we know nothing of the nature or essence of "force," and we may call it "spirit," if we like; but we do know that precisely the same force that moves the steam-engine. moves the body, and this force is generated in precisely the same way, by the union of carbon and oxygen and the consequent evolution of heat. (See Note, p. 135). may have been the origin of all motion, this force is unattended with intelligence; but late investigations have proved that vital forces are correlated from physical, and mental from vital: and further investigation of the correlation of forces may show whence the particular force is derived, that is displayed in these so-called spiritual manifestations. As we have seen, all "force" is as indestructible as matter; it may change its form, but it cannot be destroyed; and, as Mr. Herbert Spencer says, "That no idea or feeling arises, save as a result of some physical force expended in producing it, is fast becoming a common-place of science," and also, "each manifestation of force can be interpreted only as the effect of some antecedent force: no matter whether it be an inorganic action, an animal movement, a thought, or a feeling. Either this must be conceded or else it must be asserted that our successive states of consciousness are self-created. Either mental energies, as well as bodily ones, are quantitatively correlated to certain energies expended in their production, and to certain other energies which they initiate; or else nothing must become something, or something must become nothing." It is probably to this correlation that we must look for the force displayed in these extraordinary phenomena; but whence the intelligence? This, further investigation, I think, will prove to be merely the reflex and reflection of our own embodied intelligence: as manifested in the abnormal conditions of mind to which I have alluded in this chapter. The conditions requisite for its manifestation are precisely those attending the preter-natural states of mind

attending mesmeric action, such as clairvoyance, electrobiology, &c. &c.: given constitutions and temperaments are necessary, and the failures consequently are more numerous than the successes. The mind acts through the brain, and the senses ordinarily are necessary to set the brain in motion: but that it may be acted upon directly by some other force, and without the aid of the senses, we believe is now an established fact; also, the nervous force, not generated but eliminated by the brain, and guided by the will, moves the body: but of what nature is this force? We know it is the correlate of physical forces, but what other "form" it may take, or how far and to what extent it can act upon other things and other brains, and consequently other intelligences, outside the body, is not yet known; but that it has such power to act. I think is more than probable. The discoveries of Baron Reichenbach and others prove that very much lies beyond the ken of ordinary sense and vision, and that our five senses are rather clumsy instruments to deal with the imponderables. microscope shows a material world within them, and a sensitive nervous system not only sees what is not apparent to ordinary sense, but appears even, as we have said, to break down the boundary of sense, and to reveal a world beyond.

There is quite a new world lying open for our investigation in this direction, and its pursuit is not calculated, *ultimately*, to lead us back into the bonds of superstition, but forward in the path of Cerebral Physiology and the true Science of Mind.

It might fairly have been expected that the light of Science and general Education would have dispelled for ever the darkness of superstition and fanaticism, but this cannot take place till the Science of Mind is much advanced, so as to lay bare the true causes of the "spiritual emotions" which generate, or lie at the root of, such states of mind.

PART III.

SOCIAL SCIENCE.

CHAPTER I.

ON THE PRESENT CONDITION OF SOCIETY.

WE have examined the Constitution of Man, and the laws of his Physical, Moral, and Intellectual Being: and we have observed that the laws of Mind are equally fixed with those of Matter.

Morality we have defined to be the science which teaches men the means by which they may live together in the most happy manner possible, the fundamental moral law being the production of the largest sum of enjoyment to all; and we have shown that man must necessarily obey such laws, when he discovers the connexion between them and his own wellbeing, as it is the law of his existence to follow that which will produce the greatest happiness.

The province of Moral Science is thus to teach us what our duties are, and it is the province of Social Science to place us in circumstances that will best enable us to perform them.

We have first, therefore, to examine the present condition of Society, in order to ascertain how far it is in accordance with those principles which have been shown to be essential to the production of the greatest amount of happiness. As the Working Classes are by far the most numerous part of the population in all countries, their condition must constitute the principal object of regard. Hitherto the Working Classes have seldom been viewed in so important a light; they have been looked upon (too much by Political Economists, and their

Rulers,) as means only to the production of the largest amount of wealth, not as means to the largest amount of happiness. Political Economy is without a moral sense; it has no conscience, and its calculations are based upon the supposition that each man as necessarily seeks his own individual interest as that a stone falls to the ground, but Trades Unions and Cooperative Societies show that the Working Classes are gradually coming to the conviction that there is a higher law, which will not allow us to pursue our interests separately, and which makes it imperative that we should do as we would be done by, and seek the good of our neighbour as well as our own. this conviction becomes general Political Economy will require to be re-written. Athens, in the time of Pericles, contained 30,000 free citizens and 400,000 slaves: what these slaves were to the free state of antiquity, have the working classes been to us; for necessity has been and is now, a harder taskmaster than any mere instrument of human tyranny. But the time for their emancipation must come, when the steam-engine shall take the place of the slaves, and do the drudgery of Society, and when all the higher and nobler parts of their nature, that peculiarly distinguish them as men, shall have full scope, and they shall no longer be regarded as the mere hewers of wood and drawers of water.

SECTION I.

DENSITY OF THE POPULATION. NUMBERS. WEALTH. OCCUPATION.
HEALTH. GENERAL CONDITION.

Density of the Population.—With a single exception, England is the most densely peopled country in Europe. On good authority we have—

England, Area		. 50,153	•••••	16,921,880	=	837	persons to 1 sq. mile.
Wales, do.		8,167	•••••	1,005,721	=	123))))
Islands in Briti	ish Sea	a 394		143,126	=	363	22 29
Scotland,	d٥.	31,324		2,888,742	=	92	17 21
Ireland,	do.	32,512		6,515,794	=	200	<i>n</i> n

Without going minutely into detail with other countries, we learn that Belgium has 382 inhabitants to the square mile; Saxony 328; Holland 242; Italy 208; Germany and Prussia 188; France 171; Austria 145; all Europe 82; Spain 81; Turkey 71; Russia 27; Norway and Sweden 16.

Numbers.—In absolute numbers, the population of Great Britain and the islands in the British seas, was on the 31st March, 1851, 21,121,967; and of the United Kingdoms 27,637,761. As to the rate of growth, it has been calculated that the population of the same countries was, in—

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1651 ... ... 6,878,090
1751 ... ... 7,392,000 = 1,014,000 increase in the century.
1851 ... ... 21,185,000 = 13,793,000 ,,
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The course of events, during the last fifty years, is well worthy of attention. The numbers of the people were, in—

1801	•••••	10,917,433	1831		16,564,188
1811	•••••	12,424,122	1841	••••	18,813,786
1821	•••••	14,402,648	1851	*****	21,121,867

Thus, within the half century there has been an addition of ten millions of people, which nearly equals the produce of the preceding eighteen centuries.

Between 1841 and 1851, 27 counties in England and Wales showed sensible diminution, which extended itself more or less over the greater part of Ireland, the north of Scotland, the north of Wales, and the west of England.*

* For the above facts, and for several others in this section, we are indebted to a paper by Jno. Gates, Esq., F.R.G.S., read before the British Association, "on our National Strength," and published in the Journal of the Statistical Society, December, 1855. The Census, for 1861, has not yet been published in detail, but we learn that the population in 1861 was in England and Wales, and the Islands in the British seas, 20,205,762, (exclusive of the Army, Navy, and Merchant Seamen abroad, estimated at 162,021); the number of males being 9,825,504, and females 10,380,258. The increase since 1851 was 2,169,576. The total population of Scotland was 3,061,251, the number of males being 1,446,982, and females 1,614,269. The increase since 1851 was 172,509. This low rate of increase is owing chiefly to emigration. The total population of Ireland was 5,764,543—less by 787,842 than it was in 1851. The Commissioners ascribe the decrease to emigration. The total Census for the United Kingdom gives the number of souls as 29,193,319. Thus there

"Above a third of the population of England and Wales resided in 1851, in towns, having a population of 20,000 and upwards. In 1851, the Population of Towns in Great Britain, was 10,556,388. In the Villages and detached dwellings in the country, 10,403,109. In England and Wales there were 5.5 individuals to a house; while in the great towns there were 6.5, and in the Metropolis there were nearly 8 individuals to every house."—M'Culloch.

Wealth. Sir Archibald Alison, in his Principles of Population, vol. 2, p. 48, tells us that "the returns of the Income Tax, in 1812, showed in Great Britain

1 2 7,000	persons	with an	income	from	£50	to	£200
20,000	,,	"		,,	£200	to	£1,000
8,000	,,	**		"	£1,000	to	£5,000
600	"	,,		above	£5,000	;	

152,600 persons in all, possessing an income of above £50 a-year; or 600,000 souls dependent upon persons in that situation. To so small a number is the immense wealth of Britain confined." The number is now, he says, greatly increased, but probably does not exceed 300,000. On the other hand, there are 3,440,000 heads of families, and 16,800,000 persons, living on their daily labour. "These facts," says Sir Archibald, "are deserving the most serious consideration. They indicate a state of society which is, to say the least, extremely alarming, and which, in ancient times, would have been the sure forerunner of national decline."

was a net increase of 1,681,457 persons in the ten years. 2,249,355 emigrants sailed from the ports of the United Kingdom between the Ceneus of 1851 and 1861; of whom about 194,532 were foreigners, 640,210 English, 183,627 Scotch, and 1,230,986 Irish. In the decennial period between 1841 and 1851 the total number was 1,692,063; and between 1881 and 1841 it was 717,913, showing an enormous increase of late years. The number of inhabited houses in England and Wales in 1861 was 3,745,463, against 3,278,039 in 1851, being an increase of 467,424; uninhabited houses in 1861, 182,325, against 153,494 in 1851, an increase of 28,831; houses building in 1861, 27,580, against 26,571 in 1851, an increase of 1,009.

D.—Trade and Profession

E. - Profits of Office

From a Parliamentary paper, issued in 1823, we get the particulars of the Property Tax ending April, 1815.

Re Schedule	presenting Property the value of
A.—Houses, manors, tithes, canals, mines,	£.
and ironworks 5,923,48	6 60,188,330
B.—Profits of Occupancy 2,734,45	38,396,144
C.—Dividends on Public Securities, Annui-	• •
ties, &c., estimated at 2,885,50	5 80,000,000
D.—Profits of Trade, &c 8,831,08	8 38,810,935
E.—Salaries, Pensions, &c 1,174,45	6 11,744,557
	£178,589,966
The Property and Income Tax ending April, 185	5-6, was—
140	Income on which
	it is charged.
ALand, &c £6,963,178	£104,447,670
B.—Occupation 860,571	12,908,565
C.—Funds 1,627,157	24,407,855

16,082,655 £232,397,291

74,551,046

4.802,943

1,007,678

Schedule A is here charged upon occupiers, who deduct it from their rent. It is for the most part charged at the highest rate of 1s. 4d. in the pound; and if the landlord's income is below £150 a-year, he has to apply to have it returned; but this, we are told, occurs but in few cases. Still, a portion of this sum must be assessed at the lower rate of 11½d., and as we have calculated it all at 1s. 4d., the nett amount must be larger than we have stated. This is evident, as in 1851 the real property assessed to the Property and Income Tax, under Schedule A, was £105,524,491. Personal property under Schedule D has increased even more rapidly than real, but part of this income is assessed twice over, as the income of the Professions and Retailers is derived from the other sources which have been taxed already. The difference may perhaps make up what is deficient under Schedule A.

There are two rates of assessment, 11½d. on £100 to £150, and 1s. 4d. on all above; there are two rates also under Schedule B and C. We have calculated the whole at 1s. 4d., having no means of separating the two portions. Schedules D and E

are from a Parliamentary return, and are correctly given, and there the portion of income under £150, and rated at 11½d., is about one-sixth under D, and a fourth under E. From this paper we learn that there are under Schedule D

139,709	persons with an	income from	£100	to	£150 ;
95,022	,,	••	150	to	500;
12,985	n	97	500	to	1,000;
7,989	,,	12	1,000	to	5,000;
701	**	**	5,000	to	10,000;
445	79	,,	10,000	to	50,000;
40	with £50,000 a	nd upwards;			

256,891 in all.

A Return has been just issued (August, 1862,) showing the number of persons charged to the Income Tax for the year ending on the 5th day of April, 1861, under Schedules D and E:—

SCHEDULE D.

CL	ASSES.		Amount of Income charged with Tax.	Number of Persons in each Class.	Amount of Tax charged upon each Class.
Under £100 a ye £100 and unde 150 ,, 200 ,, 300 ,, 400 ,, 500 ,, 600 ,, 800 ,,	200 200 300 400 500 600 700 800		£. 1,128,815 13,073,305 6,630,423 8,072,733 5,270,600 3,407,738 3,136,489 2,128,662 1,674,291 1,596,671	17,702 132,903 41,872 36,247 16,568 8,112 6,066 3,449 2,314 1,946	£. 32,923 446,288 276,268 386,364 219,608 141,989 180,687 88,694 69,762
900 ,,	1,000 2,000	•••	814,157 7,688,421	88 9 6,020	88,92 8 320,851
2,000 ,, 8,000 ,, 4,000 ,,	3,000 4,000 5,000	•••	4,044,638 2,902,963 2,116,221	1,761 895 493	168,526 120,957 88,176
5,000 ,, 10,000 ,,	10,000 50,000	•••	5,996,858 10.094,248 5,224,587	897 530 59	249,848 420,594 217,689
50,000 and upwa	rus	•••	85,001,265	278,728	3,429,175

SCHEDULE E.

CLASSES.				Amount of Income charged with Tax.	Number of Persons in each Class.	Amount of Tax charged upon each Class
Under £100 and und 150 " 200 " 300 " 400 " 500 " 600 " 700 " 800 " 300 "	der £150 200 300 400 500 600 700 800 900			£. 1,553,864 8,888,096 2168,390 2,858,800 1,767,812 1,070,246 775,451 467,578 880,805 830,774	22.763 89.551 13.353 12.129 5,317 2.495 1,441 746 516 408	£. 45,321 131,486 90,850 119,117 73,659 44,594 82,310 19,482 15,867 13,782
900 ,, 1,000 ,, 2,000 ,, 8,000 ,, 4,000 ,, 5,000 and up	1,000 2,000 8.000 4,000 5,000 vards	•••		230,706 1,615,826 355,841 189 225 87,536 520,411	245 1,367 157 56 20 69	9,618 67,305 14,806 7,884 3,647 21,684
				18,260,361	100,628	710,907

As the occupier pays the tax, it is impossible to arrive at the number of persons assessed under A and B; but from a Parliamentary paper issued (1857) we learn that the number of county voters in Great Britain is 556,391, and that of the county voters in England and Wales 163,785 are registered for property situate within the limit of boroughs. The county voters must include all who pay tax under Schedules A and B. and a great many more, as it includes all the 40s, freeholders. irrespective of the property in boroughs, and which are doubtless included under Schedule D. Porter, in his "Progress of the Nation," gave the occupiers of land, employing and not employing labourers, at 409,260; but this would include many with incomes under £100 a-year. If, therefore, we allow for a considerable increase, and give 400,000 as the number taxed under Schedules A and B, we believe it will exceed rather than fall short of the mark. Schedules C and E are paid out of National Revenue, and are paid, therefore, in part out of the income of A, B, and D; and the income assessed to the Income Tax, (1855-6) viz., £232,397,291, may be said to be assessed upon 256,891 under Schedule D, and 400,000 under Schedules

A and B; in all 656,891 persons, representing, inclusive of C and E, less than 3,000,000 of the population. As 21,000,000 was then the population of Great Britain, deducting the 3,000,000, it leaves 18,000,000 of people dependent upon the incomes of less than £100 a-year. Mr. McCulloch estimates the whole income of the Kingdom at £370,000,000. Deducting the £232,000,000 assessed to the Income Tax from this, it leaves £138,000,000 as the share of the 18,000,000. This amount of population must include many retailers and master-men in all departments of handicraft, and it would certainly not leave to the operatives and labourers dependent upon wages—a third of the annual income or produce.

With reference to the mode in which the Annual Income is distributed, from the best sources of information at my command I come to the conclusion that one-seventh of the population take rather more than three-fifths, that one-third take twothirds, and that thus for the use of land, machinery, capital, for superintendence and liberty to work, for distribution and protection, the working man gives eight hours' labour out of every twelve. He appears to give to the landowner and capitalist half or six hours; to the retailer one hour, and to Government one; that is, supposing he pays half the taxes-Government expenses being about one-sixth of the whole annual income. I presume the annual income of the Kingdom and the annual produce mean the same thing; and that for all we receive from abroad we give an equivalent in our Commerce, then, merely means exproduce in exchange. change, and exchange, although it facilitates production, really adds nothing to it; neither does trade, which is distri-The actual producers bear a smaller proportion to the whole population of the Kingdom than is generally supposed. although the actual number as shown by the last census (1861) is not yet at my command.

"The wealth of England has been estimated, but it must only be taken as an approximation to the true amount. The value of the cultivated soil, that is, the labour and wealth that is in the soil, is estimated at £1,700,000,000; mines, at £120,000,000; roads, canals, and other means of communication, at £500,000,000; dwellings, factories, and kindred erections, at £550,000,000; annual agricultural produce in land, the surplus of former years, and agricultural implements, at £230,000,000; horses, cattle, sheep, and other live stock, at £242,000,000; manufactured goods, new and in use, at £200,000,000: mercantile shipping, at £40,000,000; foreign merchandize paid for, at £50,000,000; fisheries, foreign and domestic, at £5,000,000; being a total of nearly £3,700,000,000. Now this is a sum of which few persons understand the extent. But suppose it was before us in sovereigns, and that we could count twenty in a minute for twelve hours in the day, it would take about 800 years to get through them. This immense sum, however, does not include the coin which is in circulation in the British Isles. The gold and silver is nearly £40,000,000, besides copper, bank notes, bills, and other mediums of circulation. The gold, also, which is in the coffers of the Bank of England is not included. The amount of this fluctuates, but it is seldom less than £15,000,000. Now this £40,000,000 of gold and silver, which is in actual circulation, and the £15,000,000 in the Bank of England, and other sums similarly situated, will amount to nearly £60,000,000 more. Here, then, we have a realized capital of £3,760,000,000 of productive property in the British Isles. This amazing sum is all at work in the three kingdoms, and forms our capital in trade. But besides this, we have an enormous sum in what may be called unproductive property. This may be enumerated as follows: - Waste land, public buildings, churches, chapels, hospitals, prisons, arsenals, forts, military stores, dockyards, ships of war, &c. All this is estimated at being equal to the national debt, about 750 millions. It may, therefore, be said that, notwithstanding our enormous debt, which we must remember is not owing to foreigners, but to Englishmen, we have the entire of our productive capital of three billions seven hundred and sixty millions clear, independently of what other

nations owe to us. Now this large sum, which represents everything that is useful and agreeable, and which affords subsistence and comfort to twenty-eight millions of people, is the result of labour. In other words, it is the difference between a desolate country, such as this once was, and its present condition. What mine, therefore, was ever so rich in gold, as the mine of industry? England has maintained all her inhabitants, supported all her wars, repaired all her disasters, and, after all, has a clear property of £3,760,000,000 in hand, or £134 sterling per head for every man, woman, and child, in the three kingdoms, besides her foreign property. It is also supposed that Great Britain and Ireland are saving, upon an average, about £60,000,000 every year."*

OCCUPATIONS. Occupations in Great Britain, and number of Persons engaged in them (arranged in the order of the Numbers), from the Census in 1851.

Occupations.	Persons.	Occupations.	Persons.
Agricultural labourer }	1,460,896	Nail manufacture	28,533
Farm servant, shepherd \$	l ' '.	lron miner	28.088
Domestic servant	1,038,791	Printer	26,024
Cotton, calico manufac- ture, printing & dyeing	501,465	Nurse (not domestic servant) Shipwright, ship-builder	25,518 25,201
Labourer (branch undefined)	376,551	Stone quarrier	23,489
Farmer, grazier	806,767	Lodging house keeper	23.089
Boot and shoe-maker	274,451	Lead-miner	22,530
Milliner, dress-maker	267,791	Copper-miner	
Coal-miner	219.015	Straw hat and bonnet-maker	22,886 21.902
Carpenter, joiner	182,696		,,,,,
Army and Navy	+178,778	Cooper	20,245
	152,672		19,159
Tailor	102,012		18,620
Washerwoman, mangler, laundry-keeper	146,091	Dock labourer, dock and harbour service	18,462
Woollen cloth manufacture	137,814	Clergyman of Established	10 705
Silk manufacture	114,570	Church	18,587
Blackemith	112.776	Protestant dissents minister	9,644
Worsted manufacture	104,061	Po'ice	18.348
Mason, pavior	101,442		17.980
Messenger, porter, and)	101 405	Warehouse—man, woman	17.861
errand boy	101,425	Saddler, harness-maker	17,583
Linen, flax manufacture	98,860	Hatter, hat manufacture	16,975
Seamen, (mrcht ser.) ashore) or in British ports	89,206	Coachman, (not domestic) servant,) guard, postboy (16,836
Grocer	85,918	Law clerk	16,626

^{*} This estimate is taken from a note signed "R. Edleston," in the paper before alluded to "On our National Strength." It was made ten years ago, and the amount must now be greatly increased.

[†]This is the Army and Navy of the United Kingdom, exclusive of the Indian Army and Navy.

Occupations.	Persons.	Occupations.	Persons.
Gardener	80,946	Coach-maker	16,590
Iron manufacture, mould- }	80,082	Cow-keeper, milk-seller	16 526
er, founder	00,002	Rope-maker	15,966
Inn-keeper, licensed victu-	75,721	Druggiet	15,648
aller, beershop-keeper	10,121	Surgeon, apothecary	15,163
Seamstress, shirt-maker	73,068	Tin miner	15,050
Bricklayer		Paper-manufacture	14,501
Butcher, meat-salesman	67,691	Coalheaver, coal labourer	14,426
Hose, (stocking) manufacture	65,499	Greengrocer, fruiterer	14.820
School-master, mistress	65,376	Muslin manufacture	14.098
Lace manufacture	63,660	Confectioner	18,865
Plumber, painter, glazier	62,808	Tinman, tinker, tin plate)	1000
Baker	62,472	worker	18,770
Carman. carrier, carter, (Stay-maker	18,699
drayman	56,981	Solicitor, attorney, writer)	
Charwoman	55,423	to the Signet	13,254
Draper (linen and woollen)	49,184	Dyer, scourer, calenderer	12,964
Engine and machine-maker	48,082	Currier	12,920
Commercial clerk	43,760	Builder	12,818
Cabinet-maker, upholsterer	40,897	Farm bailiff	12,805
Teacher (various), governess		Hair dresser, wig-maker	12,178
Fisherman, woman	38,294	Coal merchant, dealer	12,092
Boat, barge, man, woman	37,683	Glass manufacture	12.008
Miller	37,268	Carpet and rug manufacture	
Earthenware manufacture	36,512	Goldsmith, silversmith	11,942
Sawyer		Brass founder, moulder.	
Railway labourer	34,306		11,230
Straw plait manufacture	32,062		11,150
Brick-maker, dealer	31,168		
Government civil service	80,963	The state of the s	10,948
Hawker, pedlar	30,553	Bookbinder	10.958
Wheelwright	30,244	Road labourer	10,923
Glover	29,882		10,520
Shopkeeper, brnch undefined		Fishmonger	10,439
Horsekeeker, groom (not)		Merchant	10,256
domestic) jockey	29,408	Ribbon manufacture	10,234
domostic, lockey	ļ	I MOOOH MAHOIACCUIT	10,013

In the various branches of business some curiosities occur. The milliners and dress-makers, for one sex only we may presume, nearly equal the boot and shoemakers for both sexes. In time of peace the carpenters and joiners outnumbered the forces both by land and sea. The tailors outnumbered the butchers, bakers, and brewers, taken collectively. The laundresses nearly equal the tailors, and, according to Dr. Lyon Playfair, the washerwoman's interest in a dozen shirts amounts to £7. 16s., or more than double that of the producer, the cotton-spinner, and the shirt-maker. Messengers, porters, and errand-boys, are 101,425. For every inn-keeper, licensed victualler, or beershop-keeper, there seems to be a poor seamstress or shirt-maker. The coopers are rather more than the

clock and watch-makers (20,245 and 19,159). Medical men and their assistants are 18,728. The brewers are 18,620. The clergy of the Established Church 18,587. The police 18,348. Lawyers 16,763. The druggists and the surgeons differ little in numbers, but there are rather more drug-vendors than milk-sellers.

HEALTH. The probable lifetime of a male at birth, is nearly 45 years. The mean lifetime, or the average number of years that males live, after birth, in England, is rather more than 40 years (40.36 years). (Hence the majority of us live only about two-fifths of the years others attain to, (100) or, may we not rightly say, two-fifths of our appointed time?) The average duration of life is 45 years in Surrey, but 25 only in Manchester and Liverpool. Thus, one individual in the former place is equal nearly to two in either of the latter.*

Great as is our infant mortality and sickness, yet the proportion of children constantly ill is not by one-third so great as it was a century ago.—M'Culloch, vol. 2, p. 542. The children dying under five years, in London, in 1730, were 74.5; in 1830, 31.8.—p. 543.

"Relative vigour will not increase in the same ratio as population, in consequence of sickly children reared.

"There are on an average 2.5 years of sickness to every death, or, 2.5 persons constantly ill, to one annual death: and in a population of 17,000,000 in 1846, there must have been 744,600, 13th part persons down with sickness. One million and a quarter, in the United Kingdom. The mortality in the Metropolitan Workhouses, was 29-1 per 1,000; in the country, 18 per 1,000.

* Mr. Cowper, in his defence of the General Board of Health, in Parliament, said, "he had a list of 45 towns in which sanitary works had been completed, and it appeared from that list that there was a great decrease in the rate of mortality, since the completion of those sanitary works. In Coventry, the mortality had fallen from 27 to 24 per thousand; in Darlington, from 28 in 1852, to 23; in Derby, from 28 to 23; in Swansea, from 22 to 19, and so on. The Registrar-General, in his Report, said that the effects of the sanitary measures which had been recently taken were beginning to be apparent, and that the mortality in 1,000 had fallen from the average of 23, in the ten years between 1846 and 1855, to 21 in 1856."

"The physiological changes in the human body intimate that it was framed to continue in healthy action for 70 or 80 years: yet owing to hereditary weakness, or a vicious tendency, and the imperfect adaptation of parts of the external world to its organization, a certain number of every generation fall sick, and of these a certain number die at all ages; in such a ratio, however, that from birth to the age of puberty, the sickness and mortality decline; while from puberty they increase slowly, in a geometrical progression, up to the 50th or 60th year, and then more rapidly to the end.

"In 1841, the mean annual mortality, per cent., was, in Manchester, 3.6; Liverpool, 3.5; London, 2.7; Kent, 2.0; Surrey, 1.8. One male in 27 died annually in Manchester; 1 in 54 in Surrey. The mean duration of life, in Manchester, was 25 years; in Surrey, more than 45 years. While 48 boys under 5 years of age, die in Surrey, and 57 in Kent, 144 die in Liverpool, and 148 in Manchester. While 1 in every 37 die in Lancashire, only 1 in 55 die in Sussex, Surrey, and North Wales. The average of the Kingdom in six years, ending 1846, being 1 in 46."—M'Culloch.

Dr. Farr calculates that there are, every year, over 100,000 premature or avoidable deaths in England, and more than 1,000,000 persons who suffer from serious illness, also the direct result of neglecting the laws of health. In the extrametropolitan portion of Surrey, less than 18 persons in 1,000 die annually, while in certain manufacturing districts, the death rate is twice as high, or about 36 in 1,000; and throughout the whole of England, it is now, on an average, 22 in 1,000. In comparing the districts in which the death-rate is low with those in which it is high, some particular form of disease has been found to characterize the latter. In certain districts in England six times more people die from diseases of the lungs than in others, owing principally to want of proper ventilation, and to the action of certain work and manufactures upon the lungs. In many cases, now, this has been partially remedied.

- Mr. W. H. Porter has an excellent paper on this subject in the Assurance Magazine, vol. 9, p. 12. From this we learn, that it is Dr. Farr's opinion that phthisis, or consumption, is "the greatest, the most constant, and the most dreadful of the diseases that afflict mankind, and that it is the cause of nearly half the deaths between the ages of 15 and 35." The total number of deaths registered in the year 1857, under this head, was 50,106; if we add to these the deaths from all other diseases of the lungs, the number amounts to 124,082, or 30 per cent. of the whole number of deaths. This fearful mortality from one disease Mr. Porter ascribes to the following causes:—
 - 1. The unhealthy nature of certain employments.
- 2. The bad arrangements, as respects ventilation, in manufactures and works of all kinds in which large bodies of the labouring classes are employed.
 - 3. The quantity of drink taken by this class of people.
- 4. The apathy shown to the position in which they are placed as to sanitary matters, and the prejudices on the part of the operatives generally against all suggestions for the removal of the causes of the evils that injure them, in many conditions of life, particularly in the case of printers, millers, stonemasons, and persons employed in the manufacture of metals.
- 5. The defective sanitary arrangements as regards the Army.
- 6. The propagation of the disease by the marriage of those hereditarily affected with phthisis.

Compositors we are told frequently fall victims to phthisis at the early age of 30, and probably 40 would be too high a mean age to assign to them as a body.

Dr. Knight, of Sheffield, has shown that the grinding and polishing of steel causes phthisis in an unusually short period; and that out of 250 workmen engaged in the occupation of polishing steel, 154 suffered from affections of the chest; and that there was no case of a person engaged in polishing forks reaching his 36th year—magnets, wire masks, currents of air, and moisture, having been successively tried for the purpose of

arresting the passage of the metallic particles to the lungs, but without diminishing the mortality.

To give an idea of the excessive mortality among the operatives employed in the Sheffield grinding trade, I may mention that, in the fork-grinding branch—which is stated to be the most destructive—Dr. Holland found that, out of 1,000 deaths occurring among persons between the ages of 20 and 30, while the proportion in England and Wales was 160, among the Sheffield fork-grinders it was 475. In the next decade of ages, 30 to 40, a similar disparity was observed, the proportion in England and Wales being 136, among the fork-grinders 410. The mortality in this branch of the trade was, therefore, very nearly three times as great as that among the general population of the country; the death-rate from pulmonary affections, per 100,000 males, being, for England and Wales, 569, while for Sheffield it was as high as 839, and nearly the same for Birmingham, viz., 838.

The Registrar seems to consider that the great mortality among butchers may be owing to what he states to be the most probable cause, viz., the element of decaying matter by which they are surrounded in the slaughter-house and its vicinity. About this, however, there seems some difference of opinion. The Registrar also observes, that the red injected face of the butcher is an indication of disease—to the ordinary observer this might be an indication of robust health. Similarly with respect to brewers' draymen; their appearance would indicate that they were blessed with strong constitutions; this is not, however, the case.

The workmen employed in flour mills are grievous sufferers from a spasmodic affection of the lungs, caused by the inhalation of minute particles of dust with which the atmosphere of most flour mills, as usually constructed, is impregnated.

Hugh Miller, himself originally, I believe, a stonemason, states that few of the Edinburgh stone-cutters pass their 40th year unscathed, and not one out of every 50 ever reach their 45th year. It is considered, however, that there is scarcely any

employment where proper precaution would not very much reduce the present evil consequences, and that ignorance greatly increases the excessive mortality. The Registrar comes to the conclusion that "the ignorant evidently intermarry by choice and the force of circumstances to a much greater extent than would be inferred from their numbers," and that 24 in every 100 families are without the advantage of having either father or mother able to write. From the 20th Report, published in 1857, it appears that the number of persons signing the marriage register with marks was no less than 105,778—the proportions per cent being of the men 72, and of the women 61 only, who were able to write their names. The per centage has doubtless greatly increased during the last 5 years; still the ignorance was dense enough to make Mr. Close, the Dean of Carlisle, declare that, in his opinion, the education of the children of the working classes should be made compulsory. He says, "slowly and reluctantly, and after struggling against this necessity for nearly 40 years, I am an absolute convert to this necessity." This opinion has doubtless long been shared by many other sensible men.

Mr. Porter says, however, "Notwithstanding the evident unnecessary sacrifice of life in this country, there is no doubt that a gradual progressive increase in the mean duration of life has been maintained for some centuries past—with one exception, the 17th century—but it is probably only within our own time that any considerable increase in the longevity of the mass of the population will be apparent; and this will be owing as well to the improved habits of life of the people as to the reform in sanitary matters—to the improvements in the dwellings of the labouring classes—the greater attention that is now being paid to drainage—the abolition of intramural interment—the establishment of baths and wash-houses-to the shorter hours of labour that are becoming daily more general, owing in a great measure to the exertions of the "Early Closing Association," and of the Secretary of the Society, Mr. Lilwall-to the establishment of national play-grounds, and the encouragement

to indulge in manly exercises, of which the shorter hours of labour now more readily admit—and to the greater care that is now devoted generally to the promotion of the well-being of that large section of the community which the labouring classes form,—a duty which those above them in the social scale have heretofore too much neglected, to the consequent undue increase of the deaths recorded in the Registrar-General's annual returns, and the filling of our Prisons and Reformatories." To this increasing health, no doubt the admirable Reports by Dr. Simon, the Medical Officer of the Privy Council, and the careful researches of Dr. Greenhow, in our great towns, have greatly contributed.

GENERAL CONDITION OF THE WORKING CLASSES. M'Culloch says that "the labouring classes have been the principal gainers (by the improvements in the arts and sciences), as well by the large numbers of them who have succeeded in advancing themselves to a superior station, as by the extraordinary additional comforts that now fall to the share even of the poorest families." That they have been large gainers there can be no doubt, and that the poor can now obtain many things that were considered, fifty years since, as luxuries, even by the rich, and which even kings could not two centuries ago command, cannot be denied; still the classes above them have undoubtedly had the largest share of the enormous wealth that has been created in England from the commencement of the century. The condition of the working classes, however, has very much improved during the last twenty years, since the publication of the first edition of this work, and a higher standard of living and comfort has been permanently established among a great many of them. They are better clothed, fed, lodged, and have increased habits of providence and forethought.

By the working classes I mean those who are dependent upon wages, and the difference in their condition among themselves, is as various almost as in the classes above them. This depends principally upon the nature of the occupation. Un-

skilled labour, and the occupations which admit of the employment of women and children, are the worst paid. Mr. J. S. Mill truly says, "those trades are by far the worst paid in which the wife and children of the artisan aid the work. The income which the habits of the class demand, and down to which they are almost sure to multiply, is made up, in those trades, by the earnings of the whole family, while in others the same income must be obtained by the labour of the man alone. It is even probable that the collective earnings will amount to a smaller sum than those of the man alone in other trades; because the prudential restraint on marriage is unusually weak when the only consequence immediately felt is an improvement of circumstances, the joint earnings of the two going further in their domestic economy after marriage than before. Such accordingly is the fact in the case of handloom weavers. In most kinds of weaving, women can and do earn as much as men, and children may be and are employed at a very early age; but the aggregate earnings of a family are lower than almost any other kind of industry, and the marriages earlier."

These facts are strikingly exemplified in Coventry, where the population is divided between the Watch and Ribbon Trades. In the former women are not employed, and are generally to be found at home in attendance upon their families and husbands; children also are not employed, except as apprentices; in the latter women and children are both employed, and at a very early age. Both work in factories, but in the watch trade men only are employed; in the ribbon trade men, women, and children are indiscriminately mixed together. Early marriages are the rule, and young children are left at home in charge of a child or old woman, and a fearful infant mortality is the consequence.* If a girl of 14 or 15 disapproves of the



^{*} Speaking of these children Dr. Greenhow says, children left by their mothers during so great a part of the day are fed in their absence on artificial food, which is for the most part unsuited to their digestive powers. The children are thus almost entirely spoon fed, the mother being able to nurse them only at night and early in the morning. To remedy the illness caused by

conduct of her parents, from their not being sufficiently tolerant of the morals of the young gentlemen with whom she keeps company, or from other causes, she will leave home and take lodgings, sometimes even next door. The 8s. to 12s. a-week which she earns makes her thus early independent. If it is the latter sum she earns, she will probably spend 8s. a-week in board and lodging, and 4s. in dress and nightly dissipation; if the former sum, the additional income may perhaps be derived from some other source—not always moral. But there is a great improvement going on even in this class; for as the provident operative watchmaker soon becomes a small master; so the most respectable weavers save, purchase their own machinery, leave the factories, and bring up their families most respectably.

The Agricultural Labourers are put down at 1,460,896, and it is calculated that 26 per cent. of the men and 8 of the women, twenty years of age and upwards, with 8 per cent. of the boys and 3 per cent. nearly of the girls, under twenty years of age, are employed in agricultural pursuits. To these may be added the 376,551 who call themselves labourers only. Since the large influx of the Irish has ceased, and emigration has been more systematically carried on, the condition of this class has much improved, still we do not hear that an ablebodied man gets more than 12s. 6d. per week, (except at harvest times,) and not that all the year round, as the days during which he is unemployed must considerably reduce the annual

miamanagement, various domestic medicines are administered, more particularly some kind of opiate, such as Godfrey's Cordial, or laudanum. From a return procured by the Mayor, at Dr. Greenhow's request, it was ascertained that twelve retail druggists, in Coventry, sold at least ten gallons of Godfrey's Cordial weekly; equal to 12,000 doses. Coventry is probably no exception to other manufacturing towns. In what country then does infanticide prevail to a greater extent than here, for I understand that half the children die before who do survive! No wonder that our manufacturing population grow up feeble, sickly, and small in stature; there is enough in this cause alone to counteract all our improved sanitary arrangements, so that if we have an average longer life, we have a deteriorated race in the factory districts. The spread of hereditary constitutional disesses through cow-pox matter may also tend to this result in the country generally.

average. National Schools, the influence of the Clergy, Clubs, Clothing Societies, &c., are acting very beneficially on this class, and the children, at least, are growing up a different race.

The most numerous class of operatives is that employed in the manufacture of clothing of all sorts, cotton, silk, ribbons, trimming, cloth, hose, linen, lace, milliners, and dressmakers, and when the factory system and factory operatives are spoken of, it is to this class the terms are usually applied.

The Domestic Servants as long as they continue servants are comparatively well off, as they 'are at least well lodged, clothed, and fed, (and it is from this source the funds in the Savings' Banks are principally derived,) but they seem to value liberty more than these mere material benefits, and there is a very general desire to escape to the millinery and dressmaking, or some trade, or to enter the estate of matrimony. Servants who marry, having been accustomed to the comforts and luxuries of the higher class, and not having been brought up to any trade, are frequently worse off than their fellow operatives. Still we do not live by bread alone, and there are children, and independence, and a home of their own, to put against mere good living.

Seven per cent. of the 5,458,815 men above, of the age of 20 and upwards, are engaged in the construction of houses, and as this calling requires both strength and skill, and women are not employed, it is the best paid of all, and a man, if he is steady, usually earns enough to keep his wife and home comfortable, and to educate his children. A man knows exactly what he can earn, and what therefore he has to depend upon, and he is more provident and thrifty than those whose "comings in" are attended with greater uncertainty. This class constitutes the flower of our working-classes.

It is the Agricultural Labourers and Factory Operatives whose condition appears to be much the worst, still the following statements, descriptive of the condition of these classes principally, and of the effects of the incessant toil to which they are reduced, in the deterioration of the race in both bodily and mental constitution, were made by Dr. John Conolly, of Hanwell, in a course of lectures on Education, delivered at the Philosophical Institution, Birmingham, in the spring of 1839,* and their interest and value principally depend upon their being founded on personal experience, derived from long practice amongst the poor in both town and country. The enlightened and philanthropic lecturer defined the end of Education to be the improving and perfecting of every human being, in every bodily and mental faculty; and his object in the following quotations was to show the counteracting circumstances which make education in this sense quite unattainable by the mass of the people.

"The large manufactories of Lancashire, and some parts of Scotland, present a combination of all the evils incidental to the condition of a working man, and on a large scale.

"Too early employment—too long employment—too much fatigue—no time for relaxation—no time for mental improvement—no time for the care of health—exhaustion—intemperance—indifferent food—sickness—premature decay—a large mortality."

"There is every reason to believe the frame of body and mind of persons employed in manufactories, where they are on their feet all the day, in a heated atmosphere, and living on poor diet, becomes so feeble and irritable, as to lead, as a matter of course, to intemperance and disorderly passions, and to an actual degeneration of the species; so that the mortality becomes very great, and the sickly and imperfect state of a great proportion of the children who are reared, is such that a greater and greater deterioration in each generation is inevitable. visitor to the large manufactories sees little of the misery they entail. The sick and feeble are at home; in miserable houses or in cellars. Those who are present are interested by the coming of strangers, and their general appearance, it is only fair to state, bespeaks animation and pretty good health. The visitor sees them for half-an-hour, but he cannot forget that as he sees them-on their feet, and in continual, although not perhaps, laborious exertion, they remain during the whole of every day except Sunday. For the consequences he must go to their homes:

* These lectures were never published, and I am considerably indebted to their author for having allowed me to use them so extensively. I have retained the account here given in my 2nd edition because, although undoubtedly great improvements have taken place both in factories and among the country labourers, yet too much of it is still true, and it shows the condition of things from which we started less than a quarter of a century ago.



he must inspect their food; their lodging, accommodations; he must observe what are their relaxations, and, if they can so be called, their pleasures. Still more—he must examine their children, and particularly when all the causes acting upon them have brought them into the public Charitable Institutions; and then he will see what neglect and overwork can do for an industrious, and even an intelligent class of people.

"He will find these children, for the most part, not deficient in intelligence; but also for the most part, sickly. The remarkable thing, indeed, if the poorest children are looked at, in the workhouses and asylums, (the children of parents reduced to indigence, or gone to an early grave, entirely worn out.)—the remarkable fact is, that there is an universal appearance of sickliness among them; a healthy face and figure is an exception:—the spectator is surrounded with pale blue, flabby faces, inflamed eyes, diseases of the scalp. Many little creatures sit over the fire, with faces of old people; shrivelled, wasted, wretched objects, with slender limbs, a dry, harsh, loose, coarse skin; large joints, prominent eyes and jaws: - these little creatures are cold and feeble and fretful, and utter plaintive cries like a suffering animal. Ask the medical officers concerning these circumstances, and you will learn that the children are well fed, well lodged, well clothed, and allowed proper exercise in the open air, and the older children are instructed in a school. Education, physical and moral, is not neglected; but it is working on materials too imperfect to be much improved. The organization is frail and incomplete: the stock of life is barely sufficient for a few years. If the children are attacked with acute illness, they can neither bear the disease nor the remedies: the loss of a little blood in fatal to them. Chronic affections cling to them. Curative processes cannot be set up. The medicating power of Nature is not active in their frames. tissues of their bodies are all unfinished pieces of Nature's workmanship. and prone to disease; their hearts are feeble, and blood is not vigorously circulated, nay, it is not healthily elaborated in their bodies; and the regulating nervous system is as faulty as the rest of their economy. Herded together, without parental care, and the thousand little offices comforting to early childhood, their affections have a small range, and their countenances are blank and melancholy. They are even the victims of diseases never seen amongst the comfortable classes of society. Every common disorder leaves consequences not to be got rid of-measles and smallpox leaving opthalmia and blindness.

"All this is distressing, but not wonderful. In many a region, misery and exposure produce a marked physical degeneration, and even create diseases scarcely known in other circumstances.

"It might lead me away from my immediate subject, if I were to state how often epidemics of all kinds prevail among the poor alone. Yet you cannot be too often reminded that as such diseases find a reception in miserable courts and alleys, and from thence spread over the more happily circumstanced families, so also the moral infirmities

allowed to grow among any part of a population, spread their infectious influence all around. There is, however, another, and a very large portion of our community, whose state, although often boasted of, is not, in my opinion, more favourable to the preservation of perfect life of body and mind than that of the manufacturing poor. I mean the labouring poor of agricultural districts. What I say concerning these poor people is the result of much observation of them, and I consider it a duty to lift the veil from a subject surrounded by many respectable prejudices. I know that they are kindly visited and assisted by the wealthier classes living in the country, and charity waits upon them in every shape, in sickness, or for the education and clothing of their children. Indeed but for this charity-and often, but for the boundless charity of the clergyman alone—the people would be utterly lost. But their extreme poverty, and their constant labour, so influence them. that the majority-I am sure I speak within bounds-have never the enjoyment of health after forty years of age. A thousand times in the course of dispensary practice, I have felt the mockery of prescribing medicines for the various stomach complaints to which they are so liable, and which are the product of bad food-insufficient clothingwearing toil-and the absence of all hope of anything better in this world."

"The peasant's home is not the abode of joy or even of comfort. No 'children run to lisp their sire's return, or climb his knees the envied kiss to share.' The children are felt to be a burden, ill-fed. ill-clothed, and lying on beds worse than the lower animals; they are ragged or clothed by charity; untaught or taught by charity; if sick. oured by charity; if not starved, fed by proud charity; of which they bear the marks in the fantastic uniformity of their dress, or in the prison-look imparted by the general order under which they live, that their clustering hair shall be out close to their heads, lest they should grow up fond of admiration. Observe their look of humility, of discontent, their abject curtseys. In such a habitation in the poorhouse-is it possible to apply Physical and Mental Education! Its very elements are repelled from such a place. Dulness of the mental faculties, obtuseness of the moral feelings, and sickly bodies, can alone be formed." * * * "In agricultural districts, boys are very early employed in the fields; and their minds become utterly vacant. The scenes in which they live have no charms for them. They toil early and late in certain services; never live well; are condemned to poverty if they marry. For them also physical and mental education is quite out of the question.

"The girls are no better off—many of them work laboriously; and marry the poor labourers we have spoken of. Others become servants. Servants in underground or back kitchens—no out-of-door exercise—no friends—no followers—no visits to others—no mental or other variety—yet every virtue expected from them, and a good humour

which not even the inconsideration and injustice and caprice of others can ruffle."

"In the case of the manufacturing labourer, the necessary poverty is, I presume, by no means so pressing: their wages are better; they buy provisions in towns, at better advantage; but their exhaustion from over work, and their living surrounded by temptations to sensual gratifications, and particularly to intemperance, conspire to make them as destitute as the agricultural labourer. The latter, excluded from many temptations, never receives enough to support a family; his food is just sufficient to prevent divorce of soul and body for the best years of his sad life; if sickness assail him or his children he has no hope but the poor-house; and after toiling until he is old, the yawning poor-house still awaits him. On the brink of that gulf he has ever been, and he sinks into it at last."

"I lately accompanied a friend over a large and well-conducted Union Workhouse in an agricultural district. The persons whom I saw there were of two kinds; aged and helpless men who had toiled with the certain prospect of pauperism before them all their lives long; and younger men, who appeared to be deficient in intellect. Of the women, several also were old and helpless; a few were young, and of these, several, I am inclined to think more than half, were idiotic. There were nurseries and schools for the boys and the girls. In the nurseries I was shocked with the spectacle of little laughing idiots, the children of idiotic mothers; but in the older children, with a few exceptions so striking that one felt surprised to see them there, the children presented coarse features; their heads were singularly low and broad, as if they had a broad shallow brain; and in several instances the upper dimensions of the head were so evidently defective, that no one could help observing it. Every physiologist, nay, every ordinary observer, would say, of such a shaped head, that it was associated with very small intellectual power; and the figure of the head, taken with the faculties and expression of the face, was too manifestly such as every observer would say prophesied ill for the future character of the individual. Great care might possibly do much; but when you consider these evils of birth, and the unavoidable privations and neglect to which these human beings must be exposed as they grow up, the awful consideration presents itself that they are pre-doomed, from childhhood, -from birth-before birth-to ignorance and helplessness, or to crime : to the lowest toil—to want—to premature death, or to pauperism in age.

"As in the agricultural workhouse, we find the human brain brought to a very low state of development, and the faculties of the mind very limited, so in the manufacturing workhouse we find the results of causes of degeneracy acting on a population whose faculties are kept in greater activity, but whose bodies are deteriorated, and whose offspring are prone to every evil that belongs to an imperfect structure of every tissue of the body, and to the imperfect action of the

organs which circulate the blood, or which elaborate the chyle, or which should renew and repair the perpetual waste; so that, even in them the brain cannot long continue healthy and efficient. If the children in the agricultural workhouse were taken out and brought up ever so carefully, I believe that a very small proportion of them would exhibit a capacity of much mental improvement. If the children in the manufacturing workhouse were separated, and brought up in families where every article of diet and regimen was very carefully attended to, many of them would be found incapable of continued life beyond a few They might escape some of the worst forms of disease which now carry them off in infancy, but a considerable portion would eventually perish of some form or other of tuberculous disease-consumption—or disease of the mesenteric glands. With these, then, you see how limited must be the effects of the best physical and moral education that could be devised, even if it could be at once and in every case applied. And so long as these classes remain in this state, disease and premature death, and many moral evils which disfigure life, must be perpetuated. Of both these classes of the poor a proportion will still live to be thirty or forty, and become, unhappily, the parents of children who will inherit their infirmities of mind and body, and their tendencies to disease; until, by the gradual augmentation of the evil. successive families are extinguished. Less time is required for their total extinction than is commonly supposed. Sir A. Carlisle says, that where the father and mother are both town-bred, the family ends with the third generation.

"I am unwilling to accumulate painful images; it may be enough to quote the words of a very able writer on Medical Statistics, which point at several instances of human deterioration. 'Life and death. then,' says Dr. Bissett Hawkins, 'mainly depend on the prosperity of the circumstances which surround us; physical prosperity and moral happiness, which often depend and re-act upon each other, present a safeguard at every crisis of existence, both to individuals and to nations. We may often judge with tolerable accuracy of the mortality which is likely to exist in any given country, town, or hospital, from the degree in which poverty or wealth, knowledge or ignorance, misfortune or success, are seen to prevail. Wherever want or misery prevails, there the mother is more likely to die in labour, there stillbirths will be more frequent, there the deaths during infancy will be more numerous, there epidemics will rage with more violence, there the recoveries from sickness will be more tedious, and the fatal termination of it more probable; and there, also, will death usually approach at an earlier period of life than in happier situations.'

"My reason for dwelling on these points is, that I would fain show the mockery of expecting, by anything which philanthropy can devise, the production of mental power, or even of virtue, any more than of healthy bodies, in the children of a very considerable portion of all the

most civilized communities of Europe, in their present condition; and that until this condition is so modified that the human economy can be healthily exercised, no physical education—no general instruction—no scheme of benevolence—can train these children into healthy adults. You cannot engraft virtue on physical misery. To hope to plant Temperance, Forethought, Chastity, Content, in a soil where the body and soul are corrupting, where the materials of the body are advanced towards death, and incapable of the full actions of vitality, is the dream of benevolence. You must secure good food, clothing, lodging and cheerful mental stimulus to all classes, before you can raise them above that condition in which they will be glad to forget their misery in any sensual gratification that offers. Until then, they must continue feeble and sickly, discontented and fretful, and prone to fly for consolation to stimulants; and, becoming parents, their children will inherit their imperfections, some dying early, and others living in such a state that at length, perhaps, the intolerable magnitude of the physical and moral evil may suggest a remedy, and the means of effecting that first object of education, the formation of a healthy and virtuous people.

"It seems scarcely credible that in an age which, compared with feudal days, appears civilized, thousands of children are every year born only to be the prey and victims of disease, of early death or of public punishment; their parents not able to support the life they have created, and the wretched progeny being consigned, one may almost say, before birth, to fill the hospitals and jails; to be swept away by diseases from which all the comfortable classes are comparatively protected, or to linger out a wretched age in the poorhouse. There is no physiologist who, contemplating these things, can complacently conclude, that it is not possible to do something better for the health and life of every child that is born into the world.

"I anxiously wish to avoid being betrayed into exaggeration on these points; and I would say, generally, that there are not many occupations which would be in themselves unwholesome, if it were not for the number of hours in which it is requisite for those to be employed who live by the labour of their hands, or even by the exercise of their minds, in business. The merchant's deak, the professional man's study, the author's library, the artist's studio, the manufactory, the shop, possess nothing deadly to mankind, if human beings are not too long in them at one time; or too laboriously exercised whilst there. or not exposed to fatigue at too early an age. It seems a sad result for an honest and industrious house-painter, that his bands and feet should become paralyzed, and that he should be liable to attacks of excruciating pain and delirium. It would seem cruel to consign a youth to such a business, but with care and cleanliness these results are, generally speaking, avoidable; and if time be allowed in which good air may be breathed; the working clothes laid aside; they may be altogether escaped. Scarcely any of the evils arising from trades and

occupations are unavoidable in themselves. The circumstance, therefore, that constitutes the hardness of life of the working classes, is not so much the nature of their work; for in this, and the muscular or mental exertion required for it, there is actual benefit to the health, and pleasure to the sensations, and recreation to the mind; but it is the absorption of life itself into labour, so that the body and the mind are no longer educated, no longer heeded, when life's toil has fairly begun, and the health of both must be sacrificed, and men must die to live."

"It would occupy too much time to take even the most passing view of the poor of large cities not employed in manufactures. Dr. Bateman, who wrote so much and so well on the diseases of London, tells us, what we may well believe, that in hot weather their houses are so heated and ill-ventilated, as to produce a state of faintness, depression of spirits, languor, pains in the back and limbs resembling those from fatigue, a fluttering in the region of the stomach, vertigo, tremors, cold perspirations, and various symptoms of indigestion; with a feeble pulse. Impure air, fatigue and anxiety, contribute, he says, to produce these effects; which they chiefly do in woman. How these must influence the temper, affections, and habits, and how interfere with the proper care of their children's bodies and minds, I am sure you will readily imagine.

"Visit the same poor people in winter; you will find every cranny closed, and fever carrying off its victims in great numbers.

"Often, very often doubtless, moral evils flow from hence to the better quarters of the town, and poison the peace of happy families: often, very often, the infection of fevers there cherished, floats over the luxurious parts of the capital, and awakens the great and wealthy to the sense of the common lot of humanity.

"Nor can we from these evils ever be free until all receive the benefits of physical, and moral, and mental education, which they cannot do so long as they are steeped to the lips in poverty.

"You must give them—the poor citizen—the manufacturer—the agriculturist—leisure for instruction, and comforts which will prevent their being reckless; and then—fear not that they will refuse to be comfortable. Then they will become provident, careful of their health, prudent as to marriages, temperate, content—in short, reflecting creatures, exercising that now dormant brain, that capability and god-like reason, which their good Creator gave them, not to rust in them unused."

"From the observations I have made, you will gather that I do not believe the world to be so constituted that a large portion of mankind must, from the very necessity of nature, be consigned to constant poverty, ignorance, suffering, disease, vice, and premature death.

"I even confess, that I am shocked when I hear the sacred writings quoted with comfortable satisfaction over 'good men's feasts,' as affording assurance that there must ever be 'hewers of wood and drawers of water; for without at all denying the necessity of these services, I have never found any reason to believe that hewers of wood and drawers of water must, as a matter of course, be starved, and sickly, and vicious, and limited in this life to half of the allotted years of men. I fear we dishonour the Great unseen Father of all his creatures by suppositions of this kind; and wrest the words of Scriptures to some purposes which He is far from approving.

"Valueless, indeed, in my opinion, would all our own advantages be, if we could still cherish the selfish belief that for us and for our children alone such gracious advantages were conferred.

"There is nothing in the structure and capacities of any portion of mankind to sustain the notion that the same Deity who endowed them with feelings, affectious, appetites, sensations, and intellect :-- the same Being who accorded to rich and poor alike the gifts of light and air, has still ordained, that to any one class, and for ever, are to be denied the power to enjoy, not mere physical life alone, exempt from many miseries now incidental to their share of it, but also those pleasures of contemplation and reflection, those upliftings of the mind to Him. and all that intellectual and spiritual life, which alone gives mere physical life any solid value to us. Feeling, that for us the delights of existence are increased a thousand-fold by the possession of health and by opportunities of instruction, whereby are developed countless sources of pure and elevated enjoyment, we must not-we cannot—ungratefully turn round and say that, except for a small number, the blessings of good air, good food and clothing, immunity from epidemic diseases, leisure and freedom of heart, healthy and peaceful old age, and a disposition to seek after immortal good, are for ever and absolutely denied."

As a sample of our large towns sprung up during the last half century, we give that of Glasgow:—

"The city of Glasgow exhibits so extraordinary an example, during the last fifty years, of the progress of population, opulence, and all the external symptoms of prosperity, and at the same time of the utter inadequacy of all these resources to keep pace either with the moral or spiritual wants of the people, or provide adequate funds for the alleviation of their distresses, that it it deserving of particular consideration.

"It appears from Dr. Acland's admirable Statistics of Glasgow, that Population, Custom-House Duties, Harbour-Dues, and Post-Office Revenue of the City, have stood, in the undermentioned years, as follows:—

Years.	Population.	Custom House Duties.	Harbour Dues.	Post-Office.
1770	31,000		£149 0 10	£33,771
1801	83,769	£3,124 in 1812	3,319 16 1	23,328
1831	202,426	72,053 17 4	20,296 18 5	35,642
1839	290,000	468,974 12 2	45,287 16 10	47,527

"This prodigious increase is probably unprecedented in any other country in Europe during the same or perhaps any other period, and a parallel to it is only to be found in the transatlantic provinces. It is a fact well worthy of observation, that the progress of population in New York from 1820 to 1830, was as nearly as possible the same as that of Glasgow from 1830 to 1840; both cities at the commencement of the respective periods having 200,000 inhabitants, and having increased to 290,000 at their close. (Chevalier's America.) Here then, if anywhere, was to be found an example where, in consequence of the prodigious and unprecedented prosperity of the place, ample scope was afforded for the voluntary system, whether in religious instruction or temporal relief. And that the merchants of Glasgow are at least equal to any in Europe, in the benevolence and liberality with which, on all important occasions, they come forward for the relief of the distress by which they are surrounded, or for any purpose of public charity or munificence, is amply proved by the following list of subscriptions made by them annually, or for the last seven years :-

For Church Extension	•••	•••	•••	£42,300
House of Refuge for young Criminals	•••	•••	•••	14,800
Female House of Refuge	•••	•••	•••	4,800
Normal School	•••	•••	•••	4,900
Infirmary, annually, £4,500 in seven year	8	•••	•••	31,500
Wellington Testimonial	•••	•••	•••	9,500
Relief of Poor in 1837	•••	•••	•••	7,000
In seven years .	•••	•••	,£	114,800

"Nevertheless, so far are these splendid subscriptions from being able to keep pace with the progress of destitution and suffering in Glasgow, that, as already mentioned, there are no less than 80,000 persons for whom there is no accommodation whatever for attending any place of religious worship, of whatever persuasion, in the city and suburbs. About £20,000 a-year are levied for the support of the poor in the city and suburbs, in addition to innumerable private charities. and much individual beneficence. Yet in spite of all this munificence the following is the account given of the state of the most destitute part of the community, by two most competent observers, whose valuable works, well known to the public, have gained for them both an extensive and well-earned reputation. 'Glasgow exhibits,' says the able and indefatigable Dr. Cowan, 'a frightful state of mortality, unequalled, perhaps, in any city in Britain. The prevalence of fever presents obstacles to the promotion of social improvement among the lower classes, and is productive of an amount of human misery credible only to those who have witnessed it. (Cowan's Vital Statistics of Glasgow, p. 14.) The extraordinary progress of mortality which has, as already shown, declined from 1 in 41 in 1823, to 1 in 24 in

1837, while the annual average mortality of London is about 1 in 36. and over all England 1 in 51, affords too melancholy a confirmation of this observation. And the following is the account given of the Glasgow poor by a very intelligent observer. Mr. Symonds, the Government Commissioner for examining into the condition of the hand-loom weavers :- The wynds in Glasgow comprise a fluctuating population of from 15,000 to 30,000 persons. This quarter consists of a labyrinth of lanes, out of which numberless entrances lead into small square courts, each with a dunghill recking in the centre. Revolting as was the outward appearance of these places. I was little prepared for the filth and destitution within. In some of these lodging-rooms, (visited at night.) we found a whole lair of human beings littered along the floor, sometimes fifteen or twenty, some clothed and some naked: men, women, and children, huddled promiscuously together. bed consisted of a layer of musty straw intermixed with rags. was generally little or no furniture in these places; the sole article of comfort was a fire. Thisving and prostitution constitute the main sources of the revenue of this population. No pains seem to be taken to purge this Augean pandemonium; this nucleus of crime, filth, and pestilence, existing in the centre of the second city of the empire. These wynds constitute the St. Giles of Glasgow: but I owe an apology to the metropolitan pandemonium for the comparison. A very extensive inspection of the lowest districts of other places, both here and on the Continent, never presented anything one-half so bad, either in intensity of pestilence, physical and moral, or in extent proportioned to the population.'-Arts and Artizans at Home and Abroad, p. 116."*

"Of all the effects which the progress of civilization produces, there is none so deplorable as the degradation of the human character which arises from the habits of the manufacturing classes. The assemblage of large bodies of men in one place; the close confinement to which they are subjected; the promiscuous intercourse of the sexes at an early period of life; and the debasement of intellect which arises from uniformity of occupation, all conspire to degrade and corrupt mankind. Persons unacquainted with the manners of the lower orders in the great manufacturing cities of Britain, can form no adequate conception of the habits which prevail among them. In Glasgow, at this moment, (1840.) there are 3,000 public-houses among 290,000 persons included in 58,000 families; being nearly one public-house for every 20 families. The number of inhabited houses is about 30,000, so that every tenth house is appropriated to the sale of spirits: a proportion unexampled. it is believed, in any other city of the globe. This number has risen from 1,600 since the year 1821, though not more than 140,000 souls have been, during the same period, added to the population. Seasons of adversity lead to no improvement in the habits of these workmen:

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^{*} Sir Archibald Alison's Principles of Population, vol. 2, p. 87.

the recurrence of prosperity brings with it the usual attendants of profligacy and intemperance. Ten or twenty thousand (?) workmen are more or less intoxicated every Saturday, and for the most of Sunday; every farthing which can be spared is too often converted into ardent spirits. The same individuals who, a year before, were reduced to pawn their last shreds of furniture to procure subsistence, recklessly throw away the surplus earnings of more prosperous times in the lowest debauchery. The warnings of religion, the dictates of prudence, the means of instruction, the lessons of adversity, are alike overwhelmed by the passion for momentary gratification. It seems the peculiar effect of such debasing employments, to render the condition of men precarious at the same time that it makes their habits irregular: to subject them at once to the most trying fluctuations of condition, and the most fatal improvidence of character.

"The prevalance of such habits is in the highest degree dangerous to the increase of mankind. Nothing more ruinous to public welfare can be imagined than the existence of a large body of men in the State, whose employment is uncertain, while their passions are uncontrolled: whose increase, like that of the lower animals, is wholly uninfluenced by the dictates of reason, and who are steady in nothing but the indulgence of desire. Experience has proved accordingly, that the proportion of marriages in these classes is much greater than in the agricultural districts; and the increase of population is still more rapid, as the dissolution of manners has multiplied to an incredible degree the number of bastards."—Ibid, vol. 1, p. 190.

"It has been the well-known policy of Great Britain for the last century and a-half to encourage, by every means in its power, the manufacturing industry of its people, and this policy ably and steadily pursued, and accompanied with the advantages of our cool, insular situation, and free constitution, have produced the immense results over which, in one view, we have reason to exult, and in another to lament. It is utterly impossible that this unparalleled growth of our manufacturing industry can co-exist with the firm foundation of public prosperity. Its obvious tendency is to create immense wealth in one part of the population, and increased numbers in another; to coin gold for the master manufacturer, and multiply children in his cotton mills; to exhibit a flattering increase in the exports and imports of the empire, and an augmentation as appalling in its paupers, its depravity, and its crimes."—Ibid, p. 519.

But from a report issued by Dr. John Strang, City Chamberlain, on "The Vital and Economic Conditions of Glasgow," it appears that Glasgow, like most other places, is improving. He estimates the population in 1856 at 380,000; in 1851,

according to the Census, it was 329,096. In 1856, the

Births were 15,447; 1 in 24.6, or 4 per cent.

Deaths, ... 10,297; 1 in 36.9, or 2.7 ,

Marriages ... 3,517, or 1 in 109.3.

Compared, he says, with the last year's births, deaths, and marriages, we find the result to be favourable to the progress, health, and well-being of the City:—the births in 1855 being 1 in 27.1; the deaths 1 in 34.3; and the marriages 1 in 119.5. Of the 10,280 deaths, 5,443, or 52.9 per cent. were under 5 years. It is worthy of notice that while the deaths in High Church District were 1 in 28.5; in Blytheswood, they were only 1 in 59.3. The High Church includes the Infirmary, but it is said this by no means accounts for the great difference.

The number of persons buried at the public expense within the boundary during the year 1853-4 were 1,512; in 1854-5, 904; in 1855-6, only 655. Thus we have a great increase in births and marriages, and a marked decrease in deaths, coupled with a striking diminution in pauper-burials.

The Police cases were diminished in the course of 3 years—of males, to the extent of 4,380; and of females, 1,345, not-withstanding a greatly-increased population.

The condition of the people in other countries varies considerably from our own as their industrial system differs. It approaches neither extreme of either comparative wealth or poverty. It is much more equitable and much less stirring. The changes of condition are less fluctuating: there is little change from father to son; consequently, although there is less material comfort than in England, there is more forethought and providence. In Norway and Sweden, the peasantry live a great deal in the families of their employers, and cannot and do not marry until a house falls to them in the course of nature through the death of the previous occupier. In Germany, people are prevented from marrying early by the necessity of serving for three years as soldiers, and in many States by law, until the parties wishing to marry can show a reasonable expectation of the means of subsistence for their offspring.

Von W. H. Reihl tells us that many vicissitudes have lately changed the dull current of German peasant life, and that "many disintegrating forces have been at work on the peasant character, and degeneration is unhappily going on at a greater pace than development. In the wine districts especially, the inability of the small proprietor to bear up under the vicissitudes of the market, or to insure a high quality of wine by running the risks of a late vintage, and the competition of beer and cider with the inferior wines, have tended to introduce that uncertainty of gain which, with the peasant, is the inevitable cause of demoralization." With the German peasant he says, "Custom holds the place of sentiment, of theory, and in many cases of affection." But he says, "The more deeply we penetrate into the knowledge of society in its details, the more thoroughly shall we be convinced that a universal social polity has no validity except on paper, and can never be carried into successful practice. The conditions of German society are altogether different from those of French. of English, or of Italian society, and we cannot apply the same social theory to these nations indiscriminately."

In France, Mill tells us the peasant proprietors, of which, including their families, there are some 21 millions, know exactly what inheritance they have to leave their children; "the peasant knows that the law will divide it equally among them; he sees the limit beyond which this division would make them descend from the rank which he has himself filled, and a just family pride, common to the peasant and to the nobleman, makes him abstain from summoning into life children for whom he cannot properly provide. If more are born, at least they do not marry, as they agree among themselves which of several brothers shall perpetuate the family."

In Switzerland, a similar prudential check prevails.

The working classes in America are generally very well off, as unskilled labour is much in demand, and, therefore, highly paid; but there is a great mass of squalid poverty in New York and other large cities of the Union, and the best of our

working men and cleverest operatives who go out there often return. It is not the rate of wages, but what can be purchased with them, that is the criterion of well-being.

Of the mere material condition of the poor of other countries, however, Sir A. Alison says—

"It has been observed that the paupers of England are better fed than the labouring poor of the Continental States; it may be safely affirmed that, in every gradation of rank above the workhouse, the difference is still more remarkable. Mr. Young observes that 'the labouring classes in France are 76 per cent. worse clothed, fed, and lodged, than their brethren in this country; and it is a remarkable fact, that, with the increase of agricultural wealth in the former country since the Revolution, a corresponding change in the diet of the peasantry has taken place. Notwithstanding this change, however, it is calculated by the latest political writer in the two countries, that the quantity of butcher-meat, butter, and cheese consumed in Britain is 50 per cent. greater than in France. A comparison of the food of the poorer classes in Poland, where the peasantry live entirely on inferior grain, while their splendid harvests of wheat are transported untouched to the London market, with that which is consumed by the same classes in Sweden and Switzerland, where ages of comparative freedom have diffused opulence through the rural population; or of that daily in use among the Irish poor, with that which for ages has subsisted among the opulent yeomanry of England, is sufficient to demonstrate the truth of these observations."

"'Traversing the country South of Moscow,' says Clarke, 'it'is as the garden of Eden, a fine soil, covered with corn, and apparently smiling in plenty. Enter the cottage of the labourer, and you find him, though surrounded with these riches, often in want of the necessaries of life. Extensive pastures often furnish no milk to him; in autumn the harvest affords no bread to his children; every road is covered with caravans bringing the produce of the soil to the lords of Petersburgh and Moscow, while the cultivators who raised it are in want of the necessaries of life.'"

"In the rich and fertile plain of Lombardy, where three crops annually repay the labour of the husbandman, and the means of perpetual irrigation are afforded by the streams that descend from the adjoining mountains, want and indigence generally prevail among the peasantry. Inhabiting a country which abounds in wine, it is seldom they drink anything but water; their clothing is scanty and wretched; their dwellings destitute of all the comforts of life. On the public roads, in the villages, in the cities, the traveller is assailed by multitudes of beggars, whose squalid looks and urgent importunity attest but too strongly the abject distress to which they are reduced. On the

mountains, as on the plains, he perceives the traces of a numerous population, and the benignity of the climate clothes the wooded alopes with innumerable villages, whose white walls and elegant spires give a peculiar charm to Italian landscape; but within their walls he finds the well-known features of public misery, and the voice of distress supplicating for relief, in scenes which, at a distance, appear only to teem with human happiness."

"Provisious are incomparably cheaper in Poland and in Russia than in this country; but are the Polish or Russian peasants half as comfortably fed, lodged, or clothed, as the corresponding classes in this country? Every one knows that, so far from being so, or obtaining any benefit whatever from the cheap price of provisions in their own country, they are in truth the most miserable labourers in Europe, and feed upon scanty meals of rye bread, in the midst of the splendid wheat crops, which they raise for the more opulent consumers in this country. In the Southern provinces of Russia, wheat is often only ten shillings a-quarter, from the total want of any market. But what is the consequence? Why, that wages are so low that the Cossack horseman gets only eight shillings and sixpence a-year of pay from Government. Wheat and provisions of all sorts are much cheaper in Ireland than in Great Britain; but nevertheless, the Irish labourers do not enjoy one-half of the comforts or necessaries of life which fall to the lot of their brethren on this side of the Channel."

"The mere necessaries of life are sold almost for nothing in Hindostan and China; but, so far from obtaining any benefit from that low rate of prices, the labouring classes are so poor as to taste hardly anything but rice and water; and wages are so low, seldom exceeding two-pence a-day, that every sepoy, foot-soldier, and horse-man has two, and every native, three, attendants to wait upon his person."

* Alison, vol. 1, pp. 202, 200, 435,454; vol. 2, 419, 420.

CHAPTER IL

WAGES, AND THE LAWS WHICH REGULATE THEM; AND THE CAUSES OF THE POVERTY OF THE WORKING CLASSES.

Thus we see that the majority of the people in all countries, with differences dependent upon local situation, government, laws, and institutions, is everywhere the same—they are everywhere poor, ignorant, and overworked; although a great improvement has taken place in their condition during the last quarter of a century.

We have seen that in this country the working man gives for the use of land, machinery, capital, for superintendence and liberty to work, for distribution and protection, eight hours' labour out of every twelve.

Society, at least in this country, is divided into Capitalist and Labourer-into those who possess everything, and into those who possess, comparatively, nothing. When the poor man comes into the world, he finds it already occupied; every part of it, except uncultivated regions inaccessible to him, is already appropriated. All the means by which labour is made available to production are private property, and all that is left to him is the strength of his body, the use of his limbs. labour, therefore, is all that he has to exchange for the means of subsistence, for lodging, food, and clothing; what he shall receive for it, will depend upon the bargain he shall be able to make with those who possess the means of setting him to work. This bargain will be more or less in his favour as his labour may be more or less wanted. But should the capitalist have no need of labour, should he already have as many things as he wants, or as many for the time as he can profitably dispose

of, he who has only labour to give in exchange for food, must starve, or depend upon charity for support, although, if set to work, he could produce many times as much as he can consume.

No one would cultivate a field if another might reap what he had sown, and the fruits of the earth would scarcely be allowed to come to maturity, if no one were interested in preserving them to their full time.

Man has to earn his bread by the sweat of his brow, and labour is in all cases necessary to production. Without the labour of cultivation, the earth would support very few inhabitants. However abundant the raw materials for clothing and lodging, labour must fit them for the purposes required. There must also be capital, land, houses, implements, and machinery, to make this labour available to further production. There must also be an accumulation of capital, that is, more than enough to meet the wants of existing individuals; for the rising generation, the young unable to produce for their own support, must be provided for.

The object of the institution of the present law of property was, therefore, to provide for this accumulation, and it is a very clumsy instrument for this purpose, and, as we have seen, a very unequal division of the produce of labour takes place under it.

Now what is the law by which this division takes place? The Political Economists tell us. Mr. James Mill says—

"In the greater number of cases, especially in the more improved stages of society, the labourer is one person, the owner of the capital another. The labourer has neither raw material nor tools. These requisites are provided for him by the capitalist. For making this provision the capitalist of course expects a reward. As the commodity, which was produced by the shoemaker, when the capital was his own, belonged wholly to himself, and constituted the whole of his reward, both as labourer and capitalist, so, in this case, the commodity belongs to the labourer and capitalist together. When prepared, the commodity, or the value of it, is to be shared between them. The reward to both must be derived from the commodity, and the reward of both makes up the whole of the commodity. Instead, however, of waiting till the

commodity is produced, and abiding all the delay and uncertainties of the market in which the value of it is realized, it has been found to suit much better the convenience of the labourers to receive their share in advance. The shape under which it has been most convenient for all parties that they should receive it, is that of wages. When that share of the commodity which belongs to the labourer has been all received in the shape of wages, the commodity itself belongs to the capitalist, he having in reality, bought the share of the labourer and paid for it in advance."

This at once shows very plainly the source of the power of the capitalist; for why does it suit the convenience of the labourer to receive his share in advance? Simply because having nothing but the fruits of his labour to live upon, he must starve if he does not, and like Esau, rather than starve, he sells his birthright for a mess of pottage.

But what determines the share of the labourer, that is, the wages he shall receive? The demand for labour, and the supply—that is, the work to be done, and the number of hands to do it.

"Let us begin by supposing," says Mill, "that there is a certain number of capitalists, with a certain quantity of food, raw material, and instruments, or machinery; that there is also a certain number of labourers: and that the proportion in which the commodities produced are divided between them, has fixed itself at some particular point.

"Let us next suppose, that the labourers have increased in number one-half, without any increase in the quantity of capital. There is the same quantity of the requisites for the employment of labour; that is of food, tools, and materials, as there was before; but for every 100 labourers, there are now 150. There will be 50 men, therefore, in danger of being left out of employment. To prevent their being left out of employment they have but one resource; they must endeavour to supplant those who have forestalled the employment; that is, they must offer to work for a smaller reward—wages, therefore, decline.

"If we suppose, on the other hand, that the quantity of capital has increased while the number of labourers remains the same, the effect will be reversed. The capitalists have a greater quantity than before of the means of employment; of capital, in short; from which they wish to derive advantage. To derive this advantage, they must have more labourers. To obtain them, they have but one resource, to offer higher wages. But the masters by whom the labourers are now employed are in the same predicament, and will of course offer higher

to induce them to remain. This competition is unavoidable, and the necessary effect of it is a rise of wages."

"From this law, clearly understood, it is easy to trace the circumstances which, in any country, determine the condition of the great body of the people. If that condition is easy and comfortable, all that is necessary to keep it so is to make capital increase as fast as population; or on the other hand, to prevent population from increasing faster than capital. If that condition is not easy and comfortable, it can only be made so by one of two methods; either by quickening the rate at which capital increases, or retarding the rate at which population increases; augmenting, in short, the ratio which the means of employing the people bear to the number of people.

"If it were the natural tendency of capital to increase faster than population, there would be no difficulty in preserving a prosperous condition of the people. If, on the other hand, it were the natural tendency of population to increase faster than capital, the difficulty would be very great; there would be a perpetual tendency in wages to fall; the progressive fall of wages would produce a greater and a greater degree of poverty among the people, attended with its inevitable consequences, misery and vice. As poverty and its consequent misery increased, mortality would also increase. Of a numerous family born, a certain number only, from want of the means of well-being, would be reared. By whatever the proportion the population tended to increase faster than capital, such a proportion of those that were born would die: the ratio of increase in capital and population would then remain the same, and the fall of wages would proceed no farther.

"That population has a tendency to increase faster than, in most cases, capital has actually increased, is proved, incontestably, by the condition of the people in most parts of the globe. In almost all countries, the condition of the great body of the people is poor and miserable. This would have been impossible if capital had increased faster than population. In that case wages must have risen; and high wages would have placed the labourer above the miseries of want.

"This general misery of mankind is a fact, which can be accounted for, upon one only of two suppositions: either that there is a natural tendency in population to increase faster than capital, or that capital has, by some means, been prevented from increasing so fast as it has a tendency to increase. This, therefore, is an inquiry of the highest importance."—Mill, p. 43.

The natural rate of increase in a population is about 3 per cent., at which rate it is doubled in 24 years. The actual increase in our population has been 1.329 per cent. annually for the 50 years 1801-1851, and it has doubled in 52 years. The question is, has capital increased as fast? The value of

real property assessed to the property and income tax for Great Britain was, in 1851, £105,524,491; in 1814-15 it was £60,138,323; so that it has at least doubled in 50 years, the same time that population has,—for personal property has increased in about the same proportion or perhaps a little faster than real. At 3 per cent. per annum, compound interest, the value of capital is doubled in 24 years, so that while 100 people have become 200 in 53 years, £100 invested and allowed to accumulate at 3 per cent. would become £479. "If we take this indication," says the report of the Census Commissioners, as quoted by Mr. Yeats, "the means of subsistence have increased faster than the numbers of the population." We cannot say that we see what indication this furnishes, as it gives no data as to how much of the capital of the country was allowed to accumulate or how much was consumed; it only tells how much it would be if allowed to accumulate. The increase of capital depends upon what is saved, and it is scarcely likely that 3 per cent, of the whole income of the country would be saved; about half that seems to accord with actual fact. But population has not increased at half the rate it has a natural tendency to do, and it has probably therefore been kept down by its pressure on the means of subsistence. That capital has increased as fast as population has actually increased, is no proof to the contrary. Political economists are probably right, then, when they say that the cause of the poverty of the working classes and the general misery consequent upon such poverty is owing to "the natural tendency in population to increase faster than capital." and which natural tendency therefore requires to be checked and to be brought, like all our other natural propensities. within the bounds of reason; but "that capital has, by some means, been prevented from increasing so fast as it has a tendency to increase" is also true, and the impediments to this increase require to be removed.

But there is a third cause of the poverty of the Working Classes to which at present little attention has been drawn by Political Economists or by any class of Reformers,--we mean the unequal division of the produce of labour between the Capitalist and the Labourer; the working man getting only one-third of the joint produce. As we have previously shown. for the use of land, machinery, capital, distribution, and for government protection, he gives eight hours' labour out of every twelve. As Mill says, "The labourer has neither raw These requisites are provided for him by material nor tools. the capitalist. For making this provision the capitalist of course expects a reward." Of course he does, but what reward? "When prepared," says Mill, "the commodity, or the value of it, is to be shared between them." True, but in what proportion? He does not tell us; he only says, "It has been found to suit much better the convenience of the labourers to receive their share in advance," and also "the shape under which it has been most convenient for all parties, that they should receive it, is that of wages," and that when such wages are paid, the capitalist "has bought the share of the labourer and paid for it in advance." But has he paid a just price for the labourer's share? That is the question that is now beginning to be asked. No doubt this arrangement is found to suit the convenience of the capitalist, but why has it been found to suit also the convenience of the labourer? Because he cannot wait till the "joint property" is realised. and he is obliged therefore to take whatever the capitalist, who can wait, chooses to offer, and if he did not-so plentiful ordinarily is the supply of labour-another would. The whole of the annual income of the kingdom is the produce of labour, for a money income is of course only valuable as it can be turned into produce, and the labourers are six times as numerous as the capitalists, and yet at present it "suits the convenience" of the labourers to take only one-third of such annual income. Surely there is a wide margin here for the improvement of the condition of the working men when it may suit their convenience to take a little more.

The consequence of this mode of distribution is that the

working classes are always kept so near the borders of poverty that causes are constantly arising to push them over, and we have seen the evils to which this poverty gives rise; and on the other side we have all the luxury, the folly and extravagance and waste which enormous wealth produces in the classes above them.

There are two ways by which it is thought a more just division of the produce of labour may be brought about. The one recommended by the Political Economists is, so to raise the condition of the operatives that they may feel all the advantages of their improved condition and resolve to maintain it by provident marriages and providence in all other departments. By thus checking the increase of their own numbers, labour will become scarce, and they can make better terms, if not their own terms, with the capitalist. plan is not at present popular with the workmen. The other plan is that the working classes should possess themselves of land, capital, and machinery, either by clubbing their joint means or borrowing at interest, and then dividing the joint produce of their labour either equally or in proportion to capability and earnings. This last plan is the much-dreaded Communism and Socialism, and it has attained a firm footing in the imagination of the operatives both here and abroad. might be thought that there was a third course—an appeal to the justice of the employers of labour themselves; but there is little hope in this direction. Employers look upon the present order of things as the natural and proper order of Providence, and if the case is put to the consciences of any of them they talk of the competition to which they themselves are subjected, the severity of their head work, their risks and additional anxiety, &c., &c.* Besides, there is much truth

* As an illustration of the effects of a rise in wages, we may mention that a halfpenny a-yard upon a ribbon is 1s. 6d. per piece, and as a weaver makes about 10 pieces a-week of broad ribbon, if this halfpenny a-yard were added to his wages, it would be 15s. per week—about double his present income. This would soon be again given to the public by the large looms which are now being introduced, and which will enable a workman to make 15 pieces where before he made 10.

in what they say, that if the working classes at present had all their earnings,—and they worked half the time and had double pay,—they would be spent in idleness and dissipation. So far as this is true it shows that, besides the root of the evil, the soil in which the root is placed is of equal consequence, and that the working classes must work out their own salvation, and in the process they will be fitted for maintaining any more elevated position to which they may attain. We shall now proceed to consider such other measures for the amelioration of the condition of the people as have been proposed, and which are more popular, as well as to examine these more in detail.

CHAPTER III.

ON THE MEASURES PROPOSED FOR THE AMELIORATION OF THE CONDITION OF THE PEOPLE.

WE cannot now complain that the interests and condition of the people are neglected; but an immense amount of philanthropy is thrown away from being misdirected. The evils we have pointed out are now forcing themselves into general recognition, and all parties have their pet schemes for their amelioration, in Political or Social Reforms, in Emigration, Education, and Religion.

The people have lost their faith in Reformed Politics. Parliaments, and there is a very general feeling that Government can do little more than it has done, and that the people must take their affairs into their own hands. They see that in all countries the condition of the great body of the people—of the working classes, -is, with slight differences, the same. all, the wages of labour are—relatively to what each produces. and to what such wages will purchase, -equally low: and yet some of the countries to which we have before alluded possess all for which politicians of the Liberal school are contending. If wages are higher in America than in the old world, it is owing, not to their liberal institutions, or to anything in which their Government may differ from ours, but to the scarcity of labour in proportion to the vast tracts of half-cultivated and uncultivated land. But the lower wages in England will purchase there more of all that is best worth living for than the higher wages of America will in that country. Our political agitators and first-class workmen are quite aware of this, and refuse to go.

CHARTISM. Consequently, we hear very little now of the Charter. The late Union, however, of the working men for the purpose of obtaining what is called the Charter, the chief object of which is an extended suffrage, demonstrated how utterly incapable this class was of undertaking the management of its own affairs. Whatever may be the opinion with respect to the desirableness of placing political power in the hands of the majority, it cannot be doubted, that in the hands of a majority such as our working classes in their present condition constitute, it would tend more to their injury than Whatever exception may be made in favour of some benefit. few amongst them who have far outstripped their brethren in reason and intelligence, it may be asserted that, as a class, they have no knowledge of the foundations upon which society is built; of the steps by which we have arrived at our present stage in civilization; of the original necessity to the advancement of the race, of that which now strikes them as a glaring abuse; of the mutual sacrifice of our natural liberty which is hourly called for, to ensure to us the advantages of living in society at all. They have no knowledge of the causes of the evils that oppress them, and where, therefore, the remedy should be sought. Scarcely any two among them agree as to what should be done, had they the necessary power. It is quite impossible, as society is now constituted, that they, with their limited means of acquiring information, and the incessant toil to which they are subjected, can acquire sufficient knowledge for their own governance, or perhaps even to choose those who are qualified. Legislation requires more knowledge than any other profession. A legislator ought to be intimately acquainted with the constitution of human nature; the constitution of society; the history of civilization; with the particular character of the people, and of the institutions of the country for which he would legislate. This is a knowledge to be acquired only by long and arduous study, the time for which is denied to the multitude. Universal suffrage, including all that can make that suffrage available, will be excellent and necessary, when the people know how to use it; but a great improvement in their physical condition must take place before this can be the case. Changes brought about by the representatives of the people in ignorance of the causes of oppression, would only make things worse, by affecting the order, tranquillity, and security necessary to the spread of knowledge, and to the improvement which can be based only upon such knowledge.*

A judicious extension of the suffrage is certainly called for, and would make the legislating class more dependent upon the people and therefore more solicitous to educate them and to attend to their interests; but this extension ought by no means to be overwhelming in its influence, swamping all other classes in mere numbers, or ignorance and prejudice would rule instead of knowledge.

Is not this, therefore, evidence of some fallacy in the views of this party, if indeed the object of their measures be to raise the condition of the people? In questioning, however, whether the measures of what is called a liberal and enlightened policy do often or always conduce to this end, and in endeavouring to show their exact bearing upon the condition of the people, we would not wish to appear to condemn such measures, or to represent them as containing no good. It is impossible not to be aware of, and to appreciate, the benefits that have been and will be conferred by them upon all posses-

"The most common error in the present day consists in supposing that the people in general are to be influenced, even in regard to contemporaneous events, by their reason; whereas they are entirely governed in their opinions on such topics, by their interests, their prejudices, or their passions. The Girondists, in the Legislative Assembly of France, confidently expected that by the force of their arguments, they would soon bear down the efforts of the Jacobins; but events soon proved that where popular passions are roused, the force of demonstration itself is speedily destroyed by the contests of faction. This consideration furnishes an unanswerable argument against the extension to be illustrated by argument; experience everywhere demonstrates its truth; and mankind will in the end be generally convinced, that to subject the Legislature to the direct influence of the multitude, is to subject them in periods of tranquillity to the contentions of interest, and in moments of agitation to the storms of passion."—Alison, vol. 2, p. 286.



sing property; it is obvious also that increased production must reflectively, and in a minor degree, benefit those who have no property, but who live by the wages of labour; and that it will raise many of the latter class into the former; but that such policy will not materially ameliorate the condition of the majority, may, we think, be demonstrated.

First among the remedies of this class to which the people are taught to look for relief, is the lessening of Taxation, Cheap Government, and the taking off the duties on everything that the working man finds necessary for the support of his family. The national debt and our heavy taxation, it is said, press down our people into the dust. But in those countries where there is no national debt, and where taxation is light, is the condition of the people better? It appears a hard thing that the working man should have to pay 3s. 6d. of every pound that he earns, in direct or indirect taxation, and out of an income of £50, to pay £8 towards the government of his country, and the interest of its national debt. And yet, supposing the same rate of taxation to affect the capitalist, and that his income is £1,000 a-year, he pays only £166, leaving in the one instance £42 a-year, and in the other £834; thus reducing one party to the point of starvation, and leaving the other with every means of luxury. But were the working classes relieved from all taxation, and were those who are so much better able to bear the burden made so to do, how would it affect the former? At first, and for some time, the operative would find that his pound per week would go much farther in supplying his wants; it would not only yield necessaries, but comforts. But soon the inevitable fluctuations in trade, a lessened demand for labour, or the increase of his own numbers, would throw him out of employment; and in order to obtain his share of the work that remained, he would offer his labour for less and less remuneration, until within a short period his wages would again be reduced to the lower rate, as we find to be the case in other countries where the necessaries of life are cheap. "The money rate of

wages, wholly independent of the price of provisions from year to year, is entirely regulated by it, other things being equal, from ten years to ten years."*

One advantage he would derive—but that would also be fleeting, although, perhaps, not equally so—the demand for his labour would be more steady in consequence of additional markets abroad being opened to his employer. This, however, in many cases, would throw people out of employment elsewhere, or if their wages admitted of any reduction, would grind them down to meet this additional competition.

Under the present system the working classes are merely the instruments of production, and to relieve them of taxation would have exactly the same effect upon production as improvements in machinery; as they would be able to live for less, they would be enabled to produce for less. This would lead to increased demand, depending, of course, upon the cheapness of the produce. No increase, therefore, of wages would take place, but a great increase of population, similar to that which has taken place in Manchester, Glasgow, Leeds, and other large towns, where improvements in machinery, and our consequent power of producing cheaply, have enabled us to command extensive markets. But in a short time population would be upon a par with this increased demand, and foreign competition, over-speculation, fluctuating currencies, and all the various causes that disturb our commercial atmosphere, would again throw the people out of employment, and produce the results for which we now seek a remedy.

The great political questions of the day are questions concerning more or less representation—more or less taxation—whether this or that section of the aristocracy shall have power and patronage; but they are not questions that tend ultimately to raise the condition of the people; the utmost that we can expect from the satisfactory solution of them is, that by enabling us to produce more cheaply, increased demand may give employment to the working classes for a time, when other-

^{*} Alison, vol. 2, p. 418.

wise there would be none, and thus afford leisure to introduce gradually and securely other measures which can alone be effectual to the desired end.

THE FUNCTIONS OF GOVERNMENT. There is much discussion in the present day regarding the proper sphere of Government, and there are those who seek to confine its functions simply to the protection of life, limb, and property. They would have the people govern themselves in their municipalities. as they did in olden times, and they live in great dread of the foreign system of centralization and government by Bureaucracy and Functionaryism. But surely we are as much self-governed in this country by the Central Government as we should be by our local Municipal Council; and the same people who elect the Municipal Representative, elect the Parliamentary one: and no abuse now escapes the eyes of party or the press. foreign system no doubt is wrong, and it would be better that men should govern themselves badly, than have everything done for them, as it is on the Continent. In America, we have the opposite extreme, and the lower minds rule and give the tone to society. But it would be impossible to introduce the Continental system into this country; our circumstances are so widely different. There is no attempt here to take the government of the people out of their own hands, only to systematize and direct it, and to lay down principles based upon science and a large experience, which they are invited. not forced, to carry out. Perhaps the last place in which reforms are likely to emanate, are the localities in which they are most needed; the people are born in and are used to their condition, and like grubs see little beyond the leaf on which they feed, and rarely dream of the "butterfly" life to come. Government, aided by the first talent, should inspect, inquire, and lay down principles; it should be the head, the localities the hands—the head should think and originate, the hands should administer, and, in this sense, where the Government is elected by and under the control of the people's Representa-

tives, Centralization seems to be a thing much needed in this country; for we want knowledge, order, system, science, as opposed to prejudice, ignorance, and short-sighted selfishness and jobbery. We have no fear for the liberties of the Anglo-Saxon race; we fear more lest the liberty of every man, as in Those who advocate fall-America, should run to excess. ing back upon our ancient Municipal liberties seem to forget that the Railway, Steam, and the Electric Telegraph have made the nation what the Municipality used to be, and the civilised world what the nation used to be. Whatever tendency there may be towards Co-operative industry, the tendency of the age is towards the Individuality of the Individual, and the disintegration of the old forms of society; and where this has been completely attained, and each atom (or person) in society has been relieved from its former attractions and repulsions, it will again form new combinations—it will crystalize in new and more healthful shapes. Voluntaryism is no doubt the right principle. A MAN should be allowed to do as he pleases consistently with the same liberty to others, but it is the duty of Government to see that there are no impediments in the way of his becoming a man. The protection of children and young persons, therefore, properly belongs to Government, and it ought to be held responsible for the public health and education. and whatever else is required to develope its subjects into healthy bodily and mental manhood. To Government also belongs the protection of animals and lunatics. In the recognised departments of Government, in the protection of life and property, much requires to be done. Our Laws want simplifying, codifying, and amending, and if that were properly done, half the lawyers' offices in the kingdom might be shut up. The lawyers have proverbially been the conservators of "old and barbarous usages," but this "vested interest" must be relinquished.

FREE TRADE. The one thing with which Government has certainly no right to interfere, and with which it can only

interfere injuriously, is the freedom of trade. To make at home what we can buy cheaper abroad is a waste of labour, and to be obliged by law to buy the dearer article is an injustice. All monopolies, bounties, and prohibitions, therefore, should be abolished, and trade allowed to flow into its natural channels; each country furnishing that for which nature has best qualified it, and which costs, therefore, the least labour to produce. We should not be obliged to grow wheat upon land unfitted for it, any more than we should attempt to grow grapes and oranges in our Northern latitudes.

We must bear in mind, however, that the principal economic advantages to be derived from free trade are increased cheapness and increased demand from extended markets. Now Manchester possessed all the advantages in this respect that free trade could possibly give to any town or country. provements in machinery by Watt and Arkwright, and peculiar advantages of situation, opened to it the markets of almost the whole world. It was enabled to import its raw material from India, to manufacture it, to send it back again, and vet undersell the Indian who works for twopence per day, in his own market. In this department of cotton-spinning, the improvements in machinery enabled one man to do the work that it required 200 men to do before; and here one would think that if the extra produce were divided fairly between the capitalist, or owner of the machine, and the operative, there was plenty of room for the improvement of his condition. But did it increase his leisure? No. Were his wages increased for doing 200 times more than he did before? But very little: for the competition for employment of those who were at first thrown out of work by the extra productiveness of the machine, obliged him to work the same number of hours, and to be satisfied with nearly the same rate of wages as before. Where then was the advantage? The extra number of pieces produced went to the warehouse of the capitalist, and by reducing them in price, he forced them over all the markets of the world. The reduced price occasioned a greatly increased demand; capital flowed in that direction; manufacturers and merchants multiplied and grew rich; and the number of hands employed, instead of being ultimately decreased, was increased until it reached the number of about 1,200,000,* with whose condition Parliamentary enquiries have made us but too well acquainted.

The greatest advocates for freedom of trade can scarcely expect that it can do more for the country at large, than improvements in machinery and other peculiar local advantages have already done for Manchester, Leeds, Glasgow, and some other of our large manufacturing towns, and hitherto it has only had the effect of increasing the numbers of the people, without much improving their moral state; they have not maintained their advanced position—they have only peopled up to it. But the economical advantages of free trade are daily becoming greater, and year by year a large number of the operative class either become masters or are otherwise permanently raised in the scale of society. Free commerce, and increased facilities of transport on the iron way, now put the whole world under requisition for the house, clothing, and food of all classes—even the poorest. It is true that with it comes "unlimited competition," but with that also comes increased cheapness, so that the same money rate of wages goes much farther. The great drawback is, that one country may become dependent upon another for the raw material, upon the making up of which its very bread depends. As long as the highways of the world or its productive power are liable to be stopped by passion or prejudice or misrule, this will always be a difficulty. The cotton famine, consequent on the American war, t has left

^{*} M'Culloch, vol. 1, p. 658.

[†] The Times, writing on this subject, says—"The world is now in the most critical of conditions—one which, if it were likely to be long-lived, might inspire serious fears for the welfare of a large part of the human race. We are all commercially united, but we are politically severed, and even opposed. The old national traditions, national animosities, and national mode of settling disputes by war remain, and are consecrated by an international law framed inevitably by the jurists of the most pugnacious States of the world. The consequence is that millions in each of the industrial countries in Europe

whole districts in this country and on the Continent without the means of subsistence. But relations based on slavery could not be expected to be permanent. Whole districts also, by present arrangements, are made dependent upon the caprices of fashion, the effects of which no prudence or forethought can obviate. But notwithstanding those drawbacks, the world gains greatly by freedom of trade, and the moral advantages derived from

are always in danger of ruin from the acts of other populations over which they have no control. Two obscure Powers may by a war between themselves shut up a passage which is necessary to an important branch of the world's traffic, and, as in the case of the Northern and Southern States of America, the staple on which a whole population depends for subsistence may be shut up or driven out of cultivation by a war against which no 'foreign nation,' as we who buy all the cotton are called, has a right even to protest.

"It is to be hoped that the mighty evils which one war spreads over the earth will tend to the discouragement of strife by uniting the nations in reprobation of it, and that when the calamities cease to be local there will be an effort to avoid them altogether. But for the present we are suffering from the state of transition. The right of each community to do as it pleases, and enforce on the world acquiescence in its feuds with its neighbours or among its own citizens, has descended into an age which doubts the justice of the claim, but does not see how it can be denied. This restless and painful inactivity is just now weighing on the British people. The greatest industry that the world has ever seen is paralyzed and almost dead. The intelligent and, for the most part, independent and high-spirited artisans of Lancashire and Glasgow are sinking daily into the gulf of hopeless poverty. The distress is so general that there is not, as in most times, a family which has a little by the side of every family that has nothing. The proverbial kindness of the poor to each other can do but little when all are in want, or know that the dreadful time is coming with rapid steps. Let any one who wishes to learn the state of the country consequent on the American War take the Return of Pauperiem which has just been made to the House of Commons.

"But it would be a mistake to suppose either that the loss to the nation is confined to the cost of keeping these poor people in the workhouse or of distributing bread and soup among them at its doors. The pauperixing of so large a mass of people is a social evil which will not be obliterated when they again get wages enough to buy themselves meat and drink. * * To our mind the most unhappy part of the present calamity is the deterioration of character which is caused among the better classes of workpeople by sudden and complete poverty. When the workman whose pleasure it has been for years to bring together little conveniences and ornaments in his home, when piece by piece to the pawnbroker's, until there remains nothing but to eat the dole of bread and soup amid the squalour of a desolated dwelling, then we feel that something more than the cost of maintenance is paid by the nation, and that an element of public morality is inevitably destroyed."

it are greater still, for as even the despotic monarch Henry VIII. could not go to war with Holland because in his time it was our best customer; so all the nations of the earth must ultimately, by free trade, have their interests so intimately blended that they cannot go to war without starving each other. War must thus become more and more impossible. So also many things must become possibilities in the way of Universal Brotherhood and moral relationship: "Mountains intervened will no longer make enemies of nations, which like kindred drops will mingle into one."

TRADE UNIONS. These associations are benefit societies, to give assistance in cases of sickness and death; they have also for their object the protection of labour generally, and it is in this character that they are best known to the world, and in which they have earned rather an unenviable notoriety. The object of Free Trade is to cheapen commodities, by allowing everything to be produced where from natural or adventitious advantages it can be produced best and with the least labour; also by putting the workman in competition with the whole world it cheapens labour,—the workman's only commodity, for a workman lives as much by the sale of his labour as the manufacturer by the sale of his goods. Trade Unions are intended to counteract the tendency of this unlimited competition to the undue cheapening of labour. Workmen justly

"Finally, commerce first taught nations to see with good will the wealth and prosperity of one another. Before, the patriot wished all countries weak, poor, and ill-governed, but his own: he now sees in their wealth and progress a direct source of wealth and progress to his own country. It was in vain to inculcate feelings of brotherhood among mankind by moral influences alone, unless a sense of community of interest could also be established; and that sense we owe to commerce. It is commerce which is rapidly rendering war obsolete, by strengthening and multiplying the personal interests which are in natural opposition to it. And since war is now almost the only event, not highly improbable, which could throw back for any length of time the progress of human improvement, it may be said without exaggeration that the great extent and rapid increase of international trade, in being the principal guarantee of the peace of the world, is the great permanent security for the uninterrupted progress of the ideas, the institutions, and the character of the human race."—J. S. Mill, vol. 2, p. 122.



say that the individual workman is at disadvantage with the capitalist, who can always in any trade dispute starve him into compliance with his demands, but united the masters do not always find so easy a victory. In this country "Strikes" have been too frequently the rough way in which it has been attempted to settle these disputes. These Strikes ordinarily involve great pecuniary loss to all parties concerned. is generally about an equal amount of exaggeration and false statement on both sides; still the workmen have more frequently been wrong; but on his side it must also be allowed that it as frequently happens that he has been driven to this expedient as a last and only resource by the overbearing conduct or want of sympathy on the part of employers. economical aspect of Strikes, and their mere pecuniary loss, is not conclusive against them, as we all value, and ought to value, "the right" above any sacrifice. The question is how to find out the right, and the tone and mental and moral atmosphere of Strikes are almost the last medium in which to look for it. The master falls back upon his might and dignity. and the men too frequently upon violence. Under these circumstances it is of little use quoting general maxims, as to how the rate of wages always depends upon supply and demand, and demand upon Capital, which the Strike is wasting, These things are not listened to; the men want the particular application of these principles to the case in dispute. and they want still more—the tone of mind or state of feeling that shall be able to judge such an exposition dispassionately. In the disagreements that so often arise, the discussions of the separate, but really mutual interests of master and men, go on separately, and an antagonistic position is assumed on both sides, which a little friendly discussion together would often The masters do not like a demand; the men like to be consulted; and a face-to-face interchange of opinion would nip many a disagreement in the bud, which would otherwise develop into serious feuds and ultimate Strikes. way in which this desirable intercourse could take place would

probably be through what are called Councils of Conciliation and Arbitration. Such Local Councils of Trade (called Conseils des Prud'hommes) have existed in France since 1806, and from the mode in which they have worked, they are now among the most popular institutions of the country, and few institutions have in reality greater claims to regard. They were established by Buonaparte, and were charged with the discussion and settlement of all questions connected with the manufacturing interests of the country, and they exist at this time in all the great manufacturing towns. In 1861 there were 156 trades under their jurisdiction.*

* At Lyons, in the silk trade, the Council is composed of nine master manufacturers and eight weavers.

The decisions of this body are enforced by law.

There is no appeal for any sum under 100f. or £4; above that sum there is an appeal to the Tribunal of Commerce.

All questions between masters and men are settled by the members of this Council.

Their primary business is conciliation,—the second, arbitration.

They always examine the parties themselves, and they have the power of summoning witnesses and compelling attendance.

They have no power over wages, except in cases of dispute. They have also the power to preserve the copyright in patterns.

The number of members is not fixed, but varies according to the size of the town.

The President is chosen by a simple majority; is their organ and chief; takes the votes, expresses the will, and signs all the documents in the name of the Council. A Vice-President is also elected, and a Secretary; the latter not necessarily from amongst themselves.

The Secretary has to keep a register of the deliberations, acts, and judgments of the Council, take care of all the papers deposited with it, make out its warrants and orders, and attend to all those duties which naturally belong to his office.

The Council is renewed from time to time by members going out in rotation, who are always eligible for re-election.

The Secretary is a paid officer.

The Council appoints a Sub-Committee of two members, a manufacturer and weaver. Their function is to reconcile parties applying to them; if unsuccessful, they are sent to the general sitting, which is held once a-week at least, and requires to be composed of at least two-thirds of the members of the Council. All decisions are by simple votes of the majority present.

A manufacturer desiring to secure a pattern or design, must put it, folded in an envelope, sealed with his seal, into the hands of the Secretary. In case of dispute, the Council shall break the seal and give a certificate of priority of Legislation has also been attempted on this subject in this country. So long ago as 1824 an Act was passed enabling Justices of the Peace, on the application of employers and workmen who had differences on various matters, such as, amount of wages due, measurement of work, &c., to appoint arbitrators to hear and determine the questions; the awards of these referees to be final, and to be enforced by Magistrates' warrants; but owing to the necessity of commencing this arbitration by appearing before a Magistrate, which, in the minds of the men, is associated with criminal procedure, this mode of determining disputes has been very little resorted to.

Mr. Mackinnon's Bill of last Session proposed, that workmen and employers in a trade in any town, county, or district, should be authorised to petition the Secretary of State for a license to elect a Council of Conciliation and Arbitration, the granting of which was to be in the Minister's discretion. The license being granted, the petitioners were to be authorised to elect a Council, to consist of from two to three masters and an

date. When a pattern is brought to the Council, the owner states the time for which he wishes to secure it, and he pays 9d, 2s. 6d., 4s., or 8s. for the deposit, according as he may wish to have the exclusive use of the pattern for one, three, five years, or in perpetuity. If for a limited period, at the expiration the sample is sent to the nearest collection of objects connected with art and manufactures.

Should any party appearing before the private or general meeting of the Council, indulge in the repetition of insulting or abusive language, after having been seriously admonished, he may be fined, or imprisoned not more than three days, and the judgment publicly notified at his expense.

If a party who is cited refuse to appear before the private Committee of the Council for reconciliation, he shall be cited to appear before the next general meeting of the Council, when the affair shall be decided in an open sitting. Should he not then appear, judgment goes by default.

Each party challenging a Prud'homme, has to do it in writing, stating his reasons, and a copy is sent immediately to the member in question.

In two days the member has to signify in writing upon the challenge, whether he acquiesces or not; if not, he assigns his reasons, which are then sent to the Chamber of Commerce, which decides the case within eight days without calling the parties before them.

Such is a brief account of an institution which our neighbours, both in France and Belgium, have found to act so well among them that strikes are altogether unknown; and the question is, how far it is applicable to the genius and taste of this country?

equal number of workmen. The Council to appoint a Chairman, Clerk, &c., and to continue in office until the first of November following its appointment, when a fresh election was to take place, every employer or workman in the district, who has resided there for six months, and been in the trade for seven years, to be entitled to vote. The Council to be empowered to hear and decide in the same class of disputes as at present between employer and men, and also, if it think proper, to appoint arbitrators for that purpose.

Mr. Mackinnon's Bill was referred to a Select Committee to take into consideration the best means of settling disputes between masters and operatives: that Committee had power to send for persons, papers, and records; and on May 15th, 1860, they reported as follows:—

"From the evidence taken before them, in which both masters and operatives were examined, and also after referring to the evidence taken before the Committee appointed in 1856, your Committee have come to the unanimous opinion that the voluntary formation of equitable Councils of Conciliation would tend to promote a more friendly understanding between the employers and employed, to soften any irritation that might arise, and in most cases to prevent the growth of such a spirit of antagonism as too often leads to a strike.

"Your Committee concur in the opinion expressed in the Report of 1856, that, 'From the evidence before them, they cannot but arrive at the conclusion that the formation of Courts of Conciliation in the country, more especially in the manufacturing, commercial, and mining districts, would be beneficial; that by these means both the masters and operatives would be enabled, each from their own class or calling, to appoint referees, an equal number by each party, having the power to elect a Chairman.'

"Your Committee have considered the Bill which has been referred to them by the House, and are unanimously of opinion that if the Bill, with certain alterations which they have suggested, passes into a law, it will promote the welfare and

good understanding between masters and operatives, and be advantageous to the country.

"Your Committee, in conclusion, add, that there is nothing in the Bill that gives power to any Council to regulate the rate of wages in any prospective manner whatever."

The constitution of such Courts seems to be the great difficulty, if we may judge from the Parliamentary discussions; particularly as to the mode in which their decisions shall be enforced. But would it not be better at first that there should be nothing *compulsory* about them, but all perfectly voluntary, and the decisions left to be enforced by the public opinion of the district?*

Judging from their primary results, Strikes have almost always injured the workmen; but as they have inflicted equal iniury on masters, the fear of them has doubtless had the effect of keeping up the rate of wages. Still it is to be regretted that they should ever be resorted to, and if Trade Unions were properly conducted perliaps they never need be. Trade Unions might instil thrift and prudence into the workmen, assist them and their families in cases of sickness and death, teach cooperation and thoughtfulness for others, and, as Associations for the Protection of Labour, there is certainly much that may and must be done by them. They might ascertain the peculiar circumstances and conditions of labour in all parts of the world. and help to distribute it so as to equalise supply and demand, and thus make strikes impossible, because so evidently use-Such Associations must educate themselves by the repeated consequences of these failures, and when properly informed there is much to be done. Certainly steam and machinery were intended to do the work of the world, to

* Dr. John Watts proposes "That such a Court should be honorary, each party in the dispute naming an equal number of Jurymen, the County Court Judge for the district being appointed umpire, and from this Court he thinks it would be desirable to exclude lawyers. The parties would be equally balanced, the umpire would be perfectly disinterested, and legal expenses would be avoided. I am advised, he says, that this plan would not be objected to by working men if power were given to carry a case to an adjoining district to avoid a prejudiced umpire."—Essay on Strikes.



shorten the hours of labour, and thus to release the higher attributes of the soul. At present labour is as incessant as ever and more wearing, and although it has greatly increased the produce of the earth, this produce has been so unequally divided, that it is really doubtful whether it has not damaged rather than benefitted all parties concerned.

LAND ALLOTMENTS, AND THE UNION OF AGRICULTURE AND MANUFACTURES. The great evil of the manufacturing system is to create a large population solely dependent upon the wages of labour, and liable to all the vicissitudes which the fluctuating demand for that labour entails. This is not a state of things for a great nation to rest contented with. With all the enormous tax-paving power of Great Britain, capital, and manufacturing supremacy, she might well afford to exchange her social position for that of countries which she now looks down upon. "If," says Laing, "instead of 800,000 or a million of persons employed in manufacturing for the foreign market, we had eight millions depending upon a demand which every petty political misunderstanding among the European powers might obstruct, would this be, morally or politically, an advantageous position? Would it be wise policy to call into existence a labouring population equal to that now supported by the consumption of their labour in the home market, to be depending entirely upon the still more precarious foreign market?" Mr. Alison says "that it is utterly impossible that this unparalleled growth of our manufacturing industry can co-exist with the firm foundation of public prosperity." Now what is the condition of our neighbours; -I do not mean of America, which is a young State-but of our Continental neighbours, who are at about the same period of growth as ourselves? The survey may perhaps furnish a lesson. "The whole number of proprietors who live on the fruits of the soil in Great Britain and Ireland at this moment, notwithstanding the prodigious increase of wealth, probably does not amount to 300,000; while above 3,000,000 heads of families, or 15,000,000 of persons

dependent on their labour, subsist on wages alone,"* while the composition of the French population is as follows:—

"Agricultural proprietors and their families					13,059,000
Proprietors	not agric	ultural a	nd their	fami-	
lies	• • •				710,000
Proprietors	partly liv	ing on wa	ages, and	l their	·
families	•••	• • •	• • •		710,000
	Total pro	prietors	• • •	• • •	14,479,000
Agricultural labourers living on wages, and					
their families					4,941,000
Industrial	labourers	living o	n wages	s, and	
their fan	nilies	•••	• • •	• • •	9,579,000
					14,520,000

"In other words, the class of proprietors in France is more numerous than that which subsists on wages; while in England it is only a sixtieth part of their amount."

Mr. Alison, although, with many other eminent Political Economists, prognosticating ultimate evil from such a state of things in France, yet remarks, "It is impossible to travel through Switzerland, Tyrol, Norway, Sweden, Biscay, and other parts of Europe, where the peasantry are proprietors of the land they cultivate, without being convinced of the great effect of such a state of things in ameliorating the condition of the lower orders, and promoting the development of those habits of comfort and artificial wants which form the true regulator of the principle of increase. The aspect of France since the Revolution, when compared with what it was before that event, abundantly proves that its labouring poor have experienced the benefit of this change, and that if it had not been brought about by injustice, its fruits would have been highly beneficial."‡

^{*} Alison's History of Europe, vol. 1, p. 57. † Alison on Population, vol. 2, p. 48. ‡ Alison's History of Europe, vol. 1, p. 842.

Mr. Laing, in speaking of the opinions of Political Economists upon the social condition of France, says, "They set out in their speculations, with a false axiom. They admit that a certainty of subsistence-food, fuel, clothing, and lodging, being all comprehended under this term, subsistence—is the first and greatest good in the physical condition of an individual or of a society; and they assume it as an axiom, that those parts of a social body, those individuals or classes, who are employed in producing articles of general use or desire among men,—to put the case in the strongest light, say blacksmiths, tailors, shoemakers, and such classes as produce articles which every individual in the community requires and uses, -are as near to this first and greatest good of a certain subsistence by their work, as those immediately employed in its production by husbandry. Now this may be true, where husbandry is a manufacture, as with us in Britain, for producing by hired labourers the greatest quantity possible of grain, meat, and other products out of the soil, to be exchanged against the products of other branches of industry:—it may be true that the hired labourers of the manufacturer of corn from land are no nearer to a certainty of subsistence than the hired labourers of the manufacturer of cloth or leather. But it is not true, where husbandry is followed as in France, and in the countries divided among a small proprietary, for the sake of subsisting the husbandman himself, the actual labourer on the land, as its first object; and where the exchanging its products for other articles even of general use and necessity, is but a secondary object. A man will not give up his needful food, fuel, clothing, or lodging, to gratify even his real and most pressing wants of iron-work, leather-work, or cloth-work. His surplus only will be applied to acquiring those secondary necessaries of life: and those who live by making them are, consequently, far from being so near to that first good in social condition, a certain subsistence, as he is. But if two-thirds of the population of a country be in the situation of this individual, who has his certain subsistence out of his own surplus for his

own needful food, fuel, clothing, and lodging, I take that to be a good state of society, a better arrangement of the social structure, than where needful subsistence is not certain to the great majority of its numbers. It carries, moreover, within itself. a check upon over-population and the consequent deterioration of the social condition, and which is totally wanting in the other social system. In even the most useful and necessary arts and manufactures, the demand for labourers is not a seen, known, steady, and appreciable demand; but it is so in husbandry under this social construction. The labour to be done, the subsistence that labour will produce out of his portion of land, are seen and known elements in a man's calculation upon his means of subsistence. Can his square of land, or can it not, subsist a family? Can he marry or not? are questions which every man can answer without delay, doubt, or speculation. It is the depending on chance, where judgment has nothing clearly set before it, that causes reckless, improvident marriages in the lower, as in the higher classes, and produces among us the evils of over-population; and chance necessarily enters into every man's calculations, when certainty is removed altogether, as it is where certain subsistence is, by our distribution of property, the lot of but a small portion, instead of about two-thirds of the people."*

"The German League comprehends above twenty-six millions of people; and if we only look at the numbers and at the extent and fertility of the soil they occupy, they should be buyers in their home market of manufacturing industry, one would suppose, as extensively at least as our British twenty-four millions. But here we see the immense difference produced by a different social economy. These twenty-six millions consume less of each other's industry, employ less, buy less, sell less, than four millions of our population. In our social system every man buys all he uses, and sells all he pro-

^{*} Confirmatory of Mr. Laing's opinion with respect to such a state of things furnishing a check upon population, is Dupin's statement, "that the population of Prussia is now doubling itself in 26 years, Britain in 42, Austria in 69, Russia in 66, France in 105 years."

duces: there is a perpetual exchange of industry for industry. A home-spun and home-woven shirt, jacket, and trowsers. would certainly not be found with us upon the body of one labouring man in forty thousand. All he wears, all he eats. all he drinks. must be produced for him by the industry of others, and bought by the price of his own industry. The very bread of our labourers in husbandry is often bought at the manufacturer's shop. In Germany the economy of society is directly the reverse: not one labouring man, farmer, or tradesman pretty high up even in the middle class of the small towns. uses in clothing, food, furniture, what is not produced at home by his own family. In the centre even of German manufacturing industry in the provinces on the Rhine, you will not see among twenty labouring people the value of twenty shillings altogether in clothing articles not produced at home by the application of their own time, labour, and industry. They are not badly clothed, but on the contrary, as well, if not better, than our own labourers-in very good shirts, good jackets, trowsers, stockings, shoes, and caps; but all home-made, or at the utmost, village-made - not made by a class of manufacturers doing no other work, and bought with the wearer's money. These are not consumers for whose demands the operative labours, and the master manufacturer and mechanician invent. calculate, and combine. Tobacco, coffee, sugar, wine and spirits, cotton yarns for home weaving, and dve-stuffs for home-made cloth, take a large proportion of what these twenty-six millions of people have to expend in foreign It is little, comparatively, they have to expend, because much of their time and labour is applied to the direct production and manufacturing of what they use; much, a great deal more than with us, goes in eating, drinking, social enjoyment, and in fuel preparing, and such small household work in which there are no earnings or reproduction; and above all, much of the workman's means of earning, much of his time, labour, and productiveness, is taken by the Government, in the shape of military and other duties, from the work-

ing man. The small proprietors occupying and living upon the land have no surplus earnings to lay out in products of manufacturing industry. Having the rude necessaries of life very much within themselves, they are not forced into the market by any necessity; and being bred in the rough simplicity of the common soldier's life at the age when a man's tastes and habits are forming, they have no very refined indulgences or tastes to gratify, no habits or usages of a mode of living requiring the aid of much manufacturing industry. It is more difficult, perhaps, to bring a nation to consume, than to produce."* And again, "On the Continent every family, even in towns not inconsiderable, manufactures for itself,-buys little or nothing, compared with families of the same class in England. The Metayer family has its own raw material of clothing, viz., flax, hemp, wool, hides, raised by itself; has house-room and time-idle time in winter-to work them up, not indeed into very fine, but into very wearable stuff, by their own and their domestics' work; and no amount of capital thrown into their hands as the price of their corn could change those habits of a population which are almost produced by, or at least very closely connected with, their climate, husbandry. mode of existence, and whole social economy. The whole agricultural population, if not manufacturing in some way,spinning, weaving, making household goods, working in iron, wood, or cloth, for their own use, during the winter months, would be totally idle all the winter half-year. It is a saving of time with us to buy all,—make nothing at home. It would be a waste of time on the Continent not to make at home all that can be made."† Such, with differences rather in their favour, is also the social condition of Norway, Sweden, Switzerland, Tuscany, Venice, and something approaching this was the condition once in England, but it has been exchanged for the superior benefits, as some think, of the manufacturing system. Laing says, "In England, in the time of Queen Elizabeth, as now in Germany, every family in the middle or lower

^{*} Notes of a Traveller, p. 142. † Ibid, p. 286.

classes was employed in spinning, weaving, manufacturing for itself, baking, brewing, pickling, preserving, for its own consumption. It has taken three centuries to bring the British population to that social economy in which every man exchanges industry for industry, and a vast home market exists for all production. It may be doubted, however much England has gained in national or individual wealth, whether her population has gained in well-being and social happiness by the change. Her operative manufacturing population called into existence by it, although only one-fifth of the numbers are supposed to be employed in supplying the foreign market, are plunged sufficiently often into the greatest distress, by the ordinary vicissitudes of the home market, to make reflecting men pause, and ask if this be prosperity? If national wealth, or the power of a State in its financial means; if the individual enjoyment of the luxuries and gratifications which this wealth bestows on one rich class, be worth the amount of human misery and vice accompanying it?"

We need not, however, go back to Elizabeth's time; the great changes that have taken place in our system have mostly occurred since 1790. At that time manufactures were chiefly confined to the home market: the labouring population derived their principal subsistence from the soil, by their own labour applied to it. Spinning-wheels and hand-looms were in every cottage, and their cloths, sheets, linen, were ordinarily of their own manufacture. Mr. M'Culloch and other writers represent the working classes as being the principal gainers by the improvements in manufacturing that have since taken place; but they appear to have lost in one direction almost as much as they have gained in another, and we regard the operative abroad as in a sounder and safer social position than our own. Both conditions, however, have their advantages. Infant Schools and National Schools, and Mechanics' Institutions; we have a penny-post, newspapers, and facilities for travelling; singing and literature for the million, and many of our operatives are, in consequence, highly intelligent.

are, also, well lodged and well clothed; for a week's wages of an industrious family in good times, will furnish as much clothing as a whole winter's home-manufacture in 1760. on the other hand, they are crowded together in large cities, and kept for many hours a day at a dull, monotonous employment; and the effects of such confinement, the want of proper house-room, and the employment of women and children, are felt in the degradation of both their physical and moral condition. The joint effect of the want of country air and exercise and of solid food, is the predominance of the nervous system at the expense of the muscular energies, which begets mental disorder and the necessity for constant excitement, found generally at the gin and beer shops, and leading, with the precarious nature of their employment, to the improvidence which characterises so many of the class. This degeneration of the great body of our manufacturing operatives has now proceeded very far, and for that, among other things, we must seek a remedy. The foreign operative, although inferior in position to our English workman in many respects, has this advantage over him, that he is not solely dependent upon the sale his of labour for a livelihood, but has the means of using his labour to furnish himself with everything necessary to his physical well-being. His labour will always supply him with the necessaries of life, often with its comforts, and even a surplus to exchange for foreign luxuries. There is no doubt that he is in want of many things which our operatives possess, but he is not subject to the same fluctuations of income, and can therefore calculate better his own resources, and there is little question but that upon the whole he is a more contented and happy being. The result of the circumstances in which he is placed, upon his constitution, is just the reverse of the case with our operative, viz., physical predominance over the mental constitution. Now if we could unite the two states or conditions, one would so correct the other, that we should have all the advantages of both without the evils which each engenders separately. Our labourers and artizans have been divorced

from the soil and made solely dependent upon the sale of their labour, the demand for which is dependent upon fluctuating causes, and will therefore frequently not furnish them with the necessaries of life. So far let us return to the old system, as to put them back upon the land. Let us endeavour to unite the advantages which the rapid progress of civilization and improved machinery have already brought to the operative. with the advantages of country residence and the health of mind and body derivable from agricultural labour. Machinery is daily displacing the adult operative, and his labour will soon be too expensive a material to work into manufactures: let him therefore, be employed in the garden cultivation of the land to supply his family with the necessaries of life, and let only his own surplus time and that of his family be employed in watching power-looms to furnish comforts and luxuries. Agriculture and manufactures never ought to have been di-Employment solely in the one department, injures the mind: in the other the body. There is not now, if there ever has been, the necessity for it. Machinery has been invented, and can be invented, to do all for which skilled labour is required. When a nation becomes a nation of manufacturers and dependent upon other nations for its agricultural produce, it gives up more than it can ever receive in return. viz., the health and strength of body acquired from out-door labour. If the people of the Continental States, during the six months they are obliged to work in-doors, were to abandon their primitive mode of manufacturing, and by the aid of a factory in each district, were to make use of steam and our improved machinery, might not their condition be prosperous in the extreme? For, the same amount of labour they now employ might produce a large surplus to exchange for every foreign article required; whereas, almost all that they can now purchase after supplying themselves with the needful allowance of their own manufactures, is tobacco, tea, coffee, and sugar. If our own population, now dependent upon wages alone, could be supplied with allotments of land, either by purchase or upon

lease, so that by a spade cultivation their labour should always furnish the first necessaries of life, they would then have something to fall back upon during the fluctuations to which trade is, and always must be, liable. Secure of the means of supporting life, and of making it not only endurable but pleasant, they would have less to fear from the freaks of fashion, from the closing of this or that market, from this monetary crisis, or that war. In order to make the great extension of our foreign trade, implied in the Free Trade principles, safe, and to the ultimate interest of the majority, all—whether by this means or any other that can be suggested—should be made independent of foreign markets, so far as the first necessaries of life are concerned.*

To the thorough Free Trader this may appear to be a retrograde movement and perfectly chimerical. To carry it out immediately, to the extent contemplated, may be impossible and undesirable, and we would wish rather to point to it as an

* The Times, July 31, 1862, writing on the debate in the Commons on the Lancashire distress, save :- "Let us not deceive ourselves by talking of the Cotton Famine and the Civil War in America. What we now behold we have several times seen before, and shall see again. The more numerous the people engaged in the cotton manufacture, the better the machinery, the greater the enterprise, the more overflowing the prosperity under favourable circumstances, the greater will be the reaction certain to follow soon or late. Nor is there any surety that the next season of agricultural distress, whatever the time, the cause, or the name, will be one whit less serious, shorter, or less extensive than what we now witness. It is time, therefore, to consider what remedies are to be applied to a recurrent calamity beyond the resources and the arrangements of our Poor Laws. It is the case of an employment fluctuating between very great prosperity and equal collapse, between enormous profits and enormous losses, between wages at least twice the agricultural scale and no employment at all. The object is to make the good years help the bad years, and it is far better the good years should do this by anticipation than by making up arrears, inasmuch as savings are better than debts. From all accounts, the Lancashire operatives have been provident, but not provident enough for a calamity beyond their expectation. But it is the aggregate industry that must be made to insure itself against such reverses. How is that to be done? The problem has hardly been touched in the debate, which has run on the Cotton Famine; but it is one which we shall undoubtedly have to meet."

object towards which our policy should be directed for the To the master manufacturer, who wishes always to keep the supply of labour above the demand, and by that means to keep the operatives wholly dependent on him-greater slaves to the necessity of living than any we have lately emancipated in the West Indies—the plan may appear objectionable altogether, as interfering with the supply of labour, and consequently with our manufacturing supremacy. We do not anticipate," however, that the effect would be to raise the price of labour; because, having other means of subsistence, the operative could afford to sell his manufacturing skill for less. But even should the objection be admissible, we think with Mr. Laing, that "there may be a greater national good than the cheapness, excellence, and extension of a manufacture. wealth of a nation, that is, of its State or Government, may depend much upon productive labour well applied, and upon great accumulations of manufacturing capital to apply it; the happy condition and well-being of a people seem to depend more on the wide distribution of employment over the face of a country by small but numerous masses of capital."*

Let our steam factories be uniformly built in the open country, as is now very generally done in Lancashire, and let cottages for the artizans be also built in an airy situation, around the factory, with land attached to each. Most of the evils attendant upon the extension of the factory system might thus be avoided, and a high state of external prosperity and internal order, intelligence, and morality be introduced. Employment would thus be found for the male adults, forty or fifty thousand of whom, trained from early childhood to factory labour, are yearly turned adrift, and whom machinery every day tends more and more to supplant. Let this employment be principally upon the land, and the father of his family may still be its head, and enabled to supply its members with the necessaries and comforts of life, without its being essential to their subsistence or England's supremacy that his daughters

^{*} Residence in Norway, p. 299.

under 18 and young children should work ten and a-half hours per day at the mill. We may then perhaps discover that our national existence does not depend upon our selling manufactured cotton at a farthing per ell cheaper than any other people. As Carlyle says, "a most narrow stand for a free nation to base itself on-a stand which, with all the corn-law abrogations conceivable, I do not think will be capable of enduring." The factories at Lowell, in the State of Massachusetts, United States, are worked principally by the daughters of farmers in the surrounding States, of the age of from 17 to 24, and they exhibit a high state of prosperity, morality, and intelligence. Our own Greggs, Strutts, and Ashworths, have also set a noble example of what may be done towards improving the condition of the factory operatives under their charge. In the ameliorated condition of their workpeople the manufacturers will find their own interest, and they will never have reason to regret any degree of pains and attention directed towards the increase of their physical comforts and the improvement of their minds. The strength and welfare of a State is best based upon a contented and happy peasantry; the condition of our own labouring classes would indicate that, notwithstanding our apparent prosperity, we have still much to fear. We have made mention chiefly of the manufacturing poor, not because we are unaware that the condition of the agricultural poor is even less prosperous, but because we consider that our proposed remedy is equally applicable to the amelioration of the condition of all who are dependent upon wages. Instead of the children of the agricultural labourer going into the town to be exposed to all its moral and physical deteriorations, the factory, or the steam power to each dwelling, might be brought to them. It is quite true that more perfect freedom of trade, and increased facilities of intercourse between nations, render the fluctuations in trade less and less frequent; still employment upon the land-the Union of Agriculture and Manufactures, is not the less desirable. Most of the physical and moral diseases, induced by a perverted

civilization among our factory population in the large towns, are consequent upon their divorce from the land, and the best remedy, if not the only one, will be found in the return to it, either at home or by emigration to our colonies.

Sir A. Alison says, "As the division of land is thus the great step in the progress of improvement, so its distribution among the lower orders, in civilized society, is essential to maintain that elevation of mind which the separation of employments has a tendency to depress. It is too frequently the melancholy effect of the division of labour, which takes place in the progress of opulence, to degrade the individual character among the poor; to reduce men to mere machines, and prevent the development of those powers and faculties which, in earlier times, are called forth by the difficulties and dangers with which men are then compelled to struggle. It is hence that the wise and the good have been so often led to deplore the degrading effect of national civilization: that the vast fabric of society has been regarded as concealing only the weakness and debasement of the great body by whom it has been erected; and that the eye of the philanthropist turns from the view of national grandeur and private degradation, to scenes where a nobler spirit is nursed, amid the freedom of the desert or the solitude of the forest,"

"Manufacturing employment, however, is not in itself fatal to habits of frugality; on the contrary, it tends to encourage them where it is combined with separate dwellings and rural residence. There is not in the world a more industrious and frugal set of men than the watchmakers of Jura, the straw manufacturers of the Val d'Arno, the chintz workmen of Soleure, or the clothiers of Cumberland and the West of Yorkshire. The savings of these laborious men are all realized for the benefit of their families, and produce those beautiful little properties which gratify the traveller in those delightful regions. On the other hand, there is not to be found among civilized nations, a more dissolute, improvident, or reckless race than the silkweavers of Lyons or Spitalfields, the cotton

manufacturers of Rouen or Manchester, or the muslin operatives of Glasgow and Paisley. How great soever their earnings may be, they are for the most part wasted in the lowest licentiousness; the recurrence of seasons of distress has no effect in inducing habits of economy; the revival of prosperity only increases the oceans of spirits which are swallowed; the return of depression sends their furniture to the pawnbrokers, their families to the workhouse. It is the extension of machinery, the accumulation of men together, which produce these fatal effects. The man who could discover a mode of combining manufacturing skill with isolated labour and country residence, would do a greater service to humanity than the whole race of philosophers."—Alison, vol. 2, pp. 8 and 155.*

* The last testimony we have confirms the view here taken by Mr. Laing and Sir A. Alison. Vacuus Viator, writing to the Spectator, Nov. 8, 1862, says, "It is a blessing to find that a journey right across Europe only confirms one in one's love for Old England. I can safely say that I would sooner be a London mechanic than a grandee of any Continental nation. At the same time, there is no denying that England presents a sad contrast in some matters, and those most vital ones, to almost every other country. Nowhere else in Europe are the extremes of wealth and poverty so fearfully apparent. In my four miles daily walk in London, I see more of the agony of the struggle for mere life-more men, women, and children walking about with the signs of physical misery in their faces, their limbs, their clothing, than in any country I have passed through, not excepting Turkey. I can name a dozen villages within fifty miles of London, most of them the property of great Lords and Commoners, in which almost every labourer's cottage is far less fit to be the home of men and women than any way-side hovel which I saw between Calais and Constantinople, with the one single exception of the Tartars' huts near Chernavoda. For a certain time the hardest working people of the world, our poor, may go on bearing upon their shoulders this huge superstructure of wealth and luxury in which we live, without better food, clothes, or houses than we find for them now. But some day or other short food, over-work, and over-crowding, must do their work, and it will be too late then to plead that the poor always got all they had a right to get in the labour market, that it was impossible to hinder the higgling of the market from going against them. The fact is, that it would well pay us as a commercial speculation, and having regard to the future. to manage somehow or another that the producers and upholders of our England-with its curious superstructure of the richest middle-class and aristocracy in the world, monster exhibitions, the turf, game preserves, and the rest of it-should get such food and lodging as will, at any rate, keep their bodies in thorough good working condition."

The Free Trade principle, "that we should never produce in one country what can be produced at less cost of labour in another." should be received as admitting of many exceptions, because where labour would probably be to spare, such occupations would be chosen as were most conducive to health and happiness rather than always those that the circumstances of the country rendered most productive. At present production is considered only, without reference to health, and the produce of one hour's labour in our manufactories is exchanged for the produce of one hour's labour upon land abroad; such land being twice as productive as our own, one hour's labour on manufactures here produces by the exchange double the quantity of corn that could be produced by the same labour upon our own soil. But may not the question fairly be asked. whether two hours' labour upon land be not more to the interest of the labourer, if he had his due share of the produce. and all other influences being taken into consideration, than one in a factory? That system must be bad which takes no account of the health of body or mind in the saving of labour.

"A time there was, ere England's griefs began,
When every rood of ground maintain'd its man;"
and to this state we should return, with the differences indicated.

Colonization and Emigration. That population hitherto has pressed upon the means of subsistence,—that mankind, governed more by brute instinct than by reason, have not limited their numbers within the means provided for their support, is well for the world at large, as it has driven numbers from their native hearths and the comforts of home and civilization, to fight with and subdue nature to their use in new and untrodden regions of the earth. It has been found that disease and crime increase in proportion to the number of the people on a square mile, and more than proportionately to the increase of numbers, and as the only way to raise wages is to make labour scarce, it is most desirable that the road to our colonies should be made as short and as easy of access as

possible. That wages are high in America is not owing to its democratic institutions, but that its surplus population is drafted off to the prairies of the far West. We ought to have our far West to thin the population of our densely crowded cities, and to transport our underpaid mechanics and agricultural labourers to new countries where their labour is the thing most wanted; to rescue the former from all the temptations to which a large city subjects them, and to transport both to new regions where their labour shall produce for them at least every The evils generated in the hotbed of necessary of life. civilization are best cured by labour on land and in a new country, and Government should see that Australia and New Zealand and Canada and our other colonies, by a wellorganised system of emigration, are put within the reach of our working classes. Since the potato failed in Ireland, emigration has been very rapid, not only from that country, but from England and Scotland, and it has done much to raise the condition of the operatives who remained at home. Colonies should be systematically fed from our Reformatories, both for children and adults: the old country is no abiding place for the criminal class; society has little faith in their amendment, and will not receive them, and they are cast out too often with no means of support but by returning to their old vicious courses.

EDUCATION. The most important of all measures for the improvement of the condition of the people is the improvement of the people themselves through the means of education, and this we are glad to find is now very generally recognized, but while our religious guides have been trying to agree as to what religion shall be taught in the common schools and how it shall be taught, anything deserving the name of education has become almost an impossibility for the mass of the people. If on the great expansion of our national industry by steam all children had been obliged by law under a national system of education to go to school till the age of 12 or 14, then educa-

tion of some kind would have been possible to all, and the rate of wages would have adapted itself to the consequent lessened supply of labour; but now the children have been absorbed into the industrial employments of the country, and wages have fallen so low that parents cannot do without their earnings, and children are therefore kept from the schools. But this is not the worst: the mothers as well as the children have been set to work, and the effect of the ignorance and neglect, consequent upon the mother's divorcement from domestic duties, is that more than 50 per cent. of the mortality in all great towns is of children under five years of age. For every such death there are at least 28 cases of sickness, and education in after life can do little towards counteracting the effects of influences so weakening and deteriorating to the whole constitution. have thus in a large proportion of the rising generation a stunted growth, a nervously predominant bodily system, an ill-balanced mind, and a perpetual craving for unnatural and unwholesome stimulants.

But our semi-voluntary and wretchedly-defective no-system of education does not reach low enough down in the scale of society to affect in the least the classes who most require it. passes over almost all who are without the pale and influence of some religious organization. To remedy this defect Ragged Schools and Reformatories for juvenile delinquents have been lately established, and an Act has been passed by which young vagabonds with no ostensible means of occupation can be seized and forcibly committed to some school. But this Act, I fear, is likely to remain a mere dead letter for some time to come. The Annual Report of the Committee of the Privy Council on Education has been issued, June, 1862. It details their proceedings during the past year, and shows that the number of schools, or departments of schools, under separate teachers, which were inspected, had been increased by 497, the number of children by 65,758, of pupil teachers by 742, of certificated teachers by 987; of students in training for teachers, 43; and that new school accommodation was created for 47,103 children.

The sixty Inspectors visited 10,900 daily schools, or departments of schools, and found present in them 1,028,690 children (five boys to four girls), 8,069 certificated teachers, and 15,498 apprentices. The Inspectors also visited 39 Training Colleges for teachers, occupied by 2,869 students, and examined these and 2,782 candidates; besides visiting 422 schools for pauper children, containing about 30,000 inmates, and 58 ragged or industrial schools, containing 4,411 inmates. The Privy Council Committee notice that while making a certificated teacher a condition of annual grants, they have provided for the granting of certificates to younger and humbler classes of candidates for service in small schools, and that they are now engaged in revising the subjects wherein teachers are required to be examined. A hope is expressed that by the encouragement given to the instruction of infants as a foundation, and to the instruction of evening scholars as a continuance of the elementary day school, a road has been marked out for the solid and suitable education of the classes who support themselves in independence by manual labour. As for the education of the pauper and criminal classes, they are now dealt with by the Legislature as separate parts of the question, and with, by way of supplement, the missionary action of Sunday Schools and Ragged Schools, the Council entertain a confident hope that no part of the great field of education for the poor remains unknown or uncared for; and that in the midst of many difficulties, and more differences, progress is being everywhere made.

Notwithstanding, our educational establishments are deficient in the quantity, and still more so in the quality of instruction supplied. With most who use the term, education means intellectual instruction, but it has been previously defined to be the "improving and perfecting of every bodily and mental faculty." "It is," says Mackintosh, "a wise disposal of all the circumstances which influence character, and of the means of producing those habitual dispositions which ensure well doing." And the spread of education among the working classes in either of

the above senses, is at present utterly impossible. If both strength and leisure were permitted them for mental improvement-if our Infant, National, and British Schools, and Mechanics' Institutions were filled, it would not be there that the poor would receive their education. It would be the circumstances by which they were surrounded at home that would form their minds and characters. Had they leisure to acquire a perfect knowledge of all the sets of laws,—physical, organic, and moral, on which well-being is dependent, it would be quite out of their power to obey them. A sound mind can only be based upon a sound body; for which latter we are to a certain extent dependent upon our parents, and the circumstances in which they were placed previously to our birth. These circumstances are decidedly unfavourable, and, as we have seen, in many cases, they cause a deterioration of both bodily and mental faculties greater than any after educational training can remedy. They are too often ill-fed, over-worked, badly lodged and clothed; the exercise of their bodily and mental powers is partial and irregular, and they are subjected to numerous sources of disease consequent upon their particular employments; these are evils that act upon the constitution of their children before they are born, and must be removed before they can be educated. "It is a very important physical fact," says Dr. Conolly, "deeply connected with the improvement of nations and the progress of civilization, that the human frame and human brain obey certain physical laws, in consequence of which many qualities are inherited, and communities perfected and deteriorated in the course of successive generations to an indefinite extent,-deteriorated to almost inactivity bordering upon fatuity of mind; and on the other hand improved, how far it would be presumptuous to say; but certainly beyond any limit yet attained." And again, in speaking of St. Giles and similar haunts in London, and other crowded cities, he says, "In these cases, it is not defective education, but I feel assured from observation that the frame is modified, the organization affected by long-established ancestral errors, the results of which upon the human frame are an incapacity to preserve its intellectual and moral beauty, any more than its physical beauty, which is so defaced that the figure and countenance reveal a whole life of wretchedness and foul thoughts, and often of crime."

These circumstances, we trust, are now exceptional. But to spread anything really deserving the name of education amongst the adult working classes is, to a great extent, impracticable. It is quite impossible that the nervous energy which each brain generates or supplies can be devoted to mental, when it has already been spent in physical effort. It is impossible, after a day's hard toil, that there can be much disposition to study. A stimulant for the exhausted faculties, found generally in physical excitement, seems to be the thing required and sought for by most. It is owing to this that our Mechanics' Institutions scarcely deserve the name, and that amongst the members are seldom numbered 20 per cent. of the working classes, and not perhaps more than 1 per cent. of all the working men in the several towns in which they are established.

But although we have no National System, the electric telegraph, the cheap railway train, the penny newspaper, the Parliamentary debates are our great schoolmasters, and our workshops our schools of industry, and education of some kind -though not the kind that is desirable-not the kind that is safe-is advancing rapidly amongst the people. It is education of the intellect alone; there are few now who cannot read and write; but physical and moral education, so much more difficult to instil and to imbibe, is almost entirely wanting. In the growth of the individual mind the intellect advances before the moral powers, for it is necessary to know what is right before we can practise it; and this precedence of the intellect is perhaps a necessary stage in the advance of the race; but there are circumstances that make this stage of our progress, in this country, and perhaps in all old countries, particularly dangerous. "The tend-

ency," says Mr. Alison, "of the present state of society is everywhere towards great cities, huge properties, corrupted manners, dense masses of the poor, selfish habits in the rich, and universal thirst for pleasure."* In such a state of things the "little knowledge" which the poet so truly describes as a "dangerous thing," and which is all that the majority of the working classes have leisure to acquire, is little better, and more dangerous to society, than no education at all. It is sufficient to show them the advantages which the possession of capital gives to its possessor over those who live by the wages of labour: to show them the evils attendant on the present law of property, without showing them that all civilisation has been based upon that law, and that without security there could be no property at all. It is sufficient to give them ideas above their station and a desire for wealth without showing them that the possession of wealth, without the habits acquired in its accumulation, or still higher moral and intellectual aspirations, would be worse than their previous poverty. In fact, the knowledge that they can acquire, (of course there are many exceptions.) is of that superficial kind which tends only to give them exalted ideas of their own judgment, to make them intolerant, bigoted, dogmatical; the prey of every species of empiricism, and of every designing demagogue who has a free flow of language, and sense and skill sufficient to flatter their prevailing passions and prejudices. Yet is there no road open to us but onwards; we must make the education of the people as complete as circumstances will admit; and we trust that this country may be saved the experience that a mass of ill-digested information is worse than ignorance.†

* Vol. 2, p. 282.



[†] In the education of Workhouse children or of children in Reformatories we must not forget that we have a different material to deal with than that existing in other schools. They will generally be found deteriorated through several generations in both mind and body, and they will require proportionably better and often more expensive treatment than the children of the better class. In some, bodily weakness and disease will predominate, with the mind sluggish and almost obliterated; in others, undue activity of

The dangers which arise from merely intellectual education, have been fully appreciated, if not exaggerated, by a large class in this country who are aware that the "schoolmaster is abroad," and that it is now useless to attempt to confine him at home; they therefore endeavour to obviate the mischief that arises from partial instruction, from the mere training of the intellect, by joining it with religious instruction. They justly think that a knowledge of rights should be accompanied by a knowledge of duties, and as they have no idea of morality separate from religion, they imagine that such instruction can only be imparted by religious establishments. If the science of morality were in a more perfect state and more cultivated, the distinction between morality and religion would probably be acknowledged; Religion being the perception of the relation in which we stand to our Creator: Morality having reference to the duties we owe to our fellow-creatures. imperfect as the science of Morality is at the present day, Religion is so much more clogged with error and absurdity as to render the union of the two, which would naturally be so harmonious-so salutary, productive of confusion and even mischief. And yet the Christianity of our generation, mixed as it is with the barbarous dogmas of a young and uncivilized age, still contains the beautiful embodiment of the Moral Law,

the nervous system will prevail, according to the babite of the parents, as they may have been starved, or given to drink, or brought up in factories, or belong to the predatory classes. Each case will require to be treated on its own merits, as we would mend or improve a broken or defective piece of machinery. Certain effects have to be produced, and anything short of the requisite causes must be a failure, and it will be absurd therefore to lay that failure on the children, or to talk of their deserts. Success may be costly, but failure is more so, as it is throwing funds away. But it is said, will not all this care, -for such children will require better food, better everything, to bring them up to the normal standard-be a premium to improvidence in the class above? The class above may and must be educated to value character and independence above all such advantages at the State or parish cost; but should this not be possible in all cases, still any treatment short of what is required for a cure is comparatively useless, and the risk must be run, and any ill effects in that direction met and obviated as far as possible.

"Thou shalt love thy neighbour as thyself." and so long as men insist upon having the knowledge of their social duties conveyed to them in so cumbrous and unsightly a vehicle, our religious teachers must continue to be almost the only teachers of morals, and they are right who insist so strengously upon the union of Religious with Secular instruction. While, however, we thankfully take the good that is granted us, it must be matter of great regret that the zeal which is so abundantly manifested at the present day in the cause of religion, is not more a zeal according to knowledge. The evils that surround us, our hardships and privations, our toils and misfortunes, our bodily sufferings, our mental anguish, are not regarded as consequences resulting from causes over which we have any control, but as part, a necessary part, of the ordinances by which the world is governed; not as warnings that we have broken those laws upon which our welfare is dependent here, but as trials sent to prepare us for a state of happiness hereafter. long as this view prevails, there will be no seeking for the causes of misery in the circumstances that surround us. in the imperfections of our own institutions; and without a due appreciation of the cause, we cannot control the effect. same causes that prevent the extension of general enlightenment amongst the people, prevent the extension of a pure religion. True religion, the love of the Invisible Source of all that is good and beautiful, springing from the love of the goodness and beauty that is visible; which spends not itself in idle admiration and adulation, but perpetually gains strength by efforts to make this earth still more good-still more beautiful -can scarcely co-exist with the ignorance in which the multitudes are imprisoned. Superstition may grow and ripen, for ignorance is the soil in which it best flourishes: we may implant a slavish fear of Hell or a selfish hope of Heaven, but not the love of right for its own sake. We may pray for the coming of the Kingdom of God, as well as for our daily bread, but both are equally dependent upon our own effort, upon the use of natural means; and we can no more plant true religion

in a soil that has not been prepared for it, than we can gather grapes of thorns, or figs of thistles, or reap where we have not sown. The erroneous notions concerning the freedom of the will; the idea that man is able to act contrary to the laws of his being, and the influence of surrounding circumstances, have helped to retard this moral reformation. It is much easier for a Minister to rest satisfied with the conclusion that the members of his flock are all free agents, and that their condemnation must consequently be upon their own heads, than to examine into the causes of their irreligion or unbelief, and to take the proper means to prevent its occurrence. But this would give much trouble to the Pastor; -and moreover, in such a mode of procedure, "faith," i.e. the belief that effects may be wrought without cause or means-would be left out; so it is easier to leave the flock to God's free grace and their own free will. But when the causes of vice and irreligion are better understood, it will be seen who were the hirelings and who the true shepherds. The failure of the vast efforts that have been and are being made for the spread of religion-for a failure it must be pronounced when the effects produced are compared with the enormous machinery in operation-can be accounted for only on the supposition that these efforts have not been made in accordance with the laws of God, as revealed in the established connexion between cause and effect.

We are told by Thomas Carlyle, that "the old Pope of Rome, finding it laborious to kneel so long while they cart him through the streets to bless the people on Corpus-Christi Day, complains of rheumatism; whereupon his Cardinals consult;—construct him, after some study, a stuffed cloaked figure, of iron and wood, with wool or baked hair; and place it in a kneeling posture. Stuffed figure, or rump of a figure; to this stuffed rump, he, sitting at his ease on a lower level, joins, by the aid of cloaks and drapery, his living head and outspread hands: the rump with its cloaks kneels, the Pope looks, and holds his hands spread; and so the two in concert bless the Roman population on Corpus-Christi Day, as well as they can."

Protestants have also their stuffed behinds as well as Papists, and religion with them has become a series of forms and ceremonies and customs, in one-half of which there is no real Its teaching both in pulpit and school, is that of a byegone and obsolete age, consisting for the most part of vague platitudes and inapplicable generalities, and yet all other is required to give place to it, -for there are to be no schools from which this kind of religious teaching is excluded. society is beginning to perceive that the old-fashioned system of teaching and preaching is out of date and unsuited to the times in which we live. We do not want a string of impracticable generalities; we require something more definite. The Bible may supply the spirit and general maxims, but the knowledge requisite to put them in practice it is not intended to supply. It is no more intended to supply us with certain knowledge on Physiology, Psychology, and the Science of Morality, than it is on the Sciences of Physics or Chemistry. And yet we require this certain knowledge—we require to be able to trace cause and effect in all departments, in mind as well as matter. For instance the Cholera, if it is a judgment at all, is a judgment against uncleanliness and those physical causes which deteriorate the health and lower the capabilities of enjoyment of a whole population; and yet people are still told from the pulpit that it is a judgment against the Maynooth grant, or for particular sins such as Rush's murder, &c., with which it has no possible relationship of cause and effect. Society, we say, is beginning to take a different view of this question. What said the first person in the realm next the throne? Prince Albert said-"Man is approaching a more complete fulfilment of that great and sacred mission which he has to perform in this world. His reason being created after the image of God, he has to use it to discover the laws by which the Almighty governs his creation; and, by making these laws a standard of action, to conquer nature to his usehimself a Divine instrument." The next highest personage, our Prime Minister, Lord Palmerston, in his letter to the

Presbytery of Edinburgh, October, 1853, says, "The Maker of the universe has established certain laws of nature for the planet in which we live, and the weal or woe of mankind depends upon the observance or neglect of those laws." But unfortunately the religion of the country does not recognise these laws, and they are thought to pervade the department of Physics only, and to have nothing to do with mind and morals, and consequently we have good men declaring that religion is independent of the secular knowledge which teaches what these laws are. The unfortunate result of all this is, that the consequences of our actions, instead of being minutely traced out here and shown to be unvarying and unavoidable, are deferred in their rewards and punishments to another world and state of being, and are regarded as problematical and most uncertain. A general practical scepticism is the consequence for too many; believing that future rewards and punishments are mere school-boy bugbears, people come to consider the laws by which the world is governed, upon which their weal or woe depends, as deserving of only equal attention. "For the faith in an Invisible, Unnameable, Godlike, present everywhere in all that we see, and work, and suffer," as Carlyle says, "is the essence of all faith whatsoever; and that once denied, or still worse, asserted with lips only, and out of bound prayer-books only, and what other thing remains believable?" On the contrary, it might be clearly shown and proved that there was no bad action, or even evil thought, but had its evil consequences here—that it is impossible to infringe any moral law without inducing suffering; and in the best

^{*} At the present time (Nov., 1862.) Slavery, the greatest blot on modern civil zation; cursing all connected with it—the master, the slave, and the mean white or independent labourer; opposed to every moral law, has caused at last, as might have been expected, a difference between North and South America. England has been the principal supporter of this alavery in its demand for cotton, and suffers in consequence, but there seems to be no suspicion, and no one hints from the pulpit, that this suffering is in any way connected with the direct breach of God's laws. The universal prayer, loudest among the High Church and Tory Party, is for peace, that we may again fatten upon alave-grown cotton.

Secular Schools the elements of physical, physiological, and moral science, and social economy, are taught, and their connection with our well-being logically and lucidly demonstrated. God commands nothing that is not for the good of His creatures, and His laws need not be based upon authority alone, but it may be shown why He has given them; and this mode of instruction has a very different effect to mere creeds and catechisms taught by rote.

That which separates happiness here from happiness hereafter, as if they were inconsistent with each other, is a great and pernicious error. It is only by obedience to all the laws of God that happiness can be obtained here, and any other preparation for a future state of happiness besides such obedience, is inconceivable. And yet, does there arise a philanthropist who studies the laws of his Creator, and teaches mankind that happiness is to be sought by obedience to these laws, is he not decried by the priesthood as not of them, or of their creedas a pernicious misleader, who offers happiness to men at the expense of their eternal salvation; temporal gifts for their everlasting interests? It is, unhappily, too much the policy of the priesthood to separate religion from temporal interests, to disconnect it altogether from worldly prosperity and happiness, and in place of the good things which God has given so plenteously, and which He intends equally for all His children, to allow liberally to the poor "post obit bills on Heaven," as a compensation for what has been taken from them here.

Zeal in the cause of the religion of the country is perhaps a characteristic of the age, and if it were founded more upon knowledge, and were purified from motives that are secular, and often selfish, it might have a most beneficial and humanizing effect upon our manners and institutions. But while the so-called orthodox religion is supported by one class, because "the Deity is in some inexplicable manner supposed to be of the government party,"—Church and State always going together—it is supported by another class, equally numerous, out of deference to public opinion. There is, undoubtedly, one

portion of the religious world, whose zeal in the cause may be traced to a sincere anxiety for the eternal interests of themselves and their fellow-creatures; and this class, although comparatively a small one, contains many of the excellent of the earth, who have sought a resting-place for the highest, and purest, and most ennobling of the feelings peculiar to man, and—finding none in the impenetrable selfishness of the world—have flown to the beautiful precepts of pure Christianity. But these have erred in forgetting, or in too much neglecting, the book of God's works, and in not using it as the interpreter and test of all other books that have been handed down to us for our instruction and guidance.

A far more numerous class than this is one with which the forms and ceremonies of religion constitute the code of morality. The individuals composing this class are regular attendants at the parish church, or meeting-house, to which they have been accustomed from childhood; they annually give their guinea at the charity sermon, for the education and clothing of pauper children; and if called upon, subscribe handsomely to the Bible Society, or to the Missionary Society, or towards building a Christian Church for converted Jews at Jerusalem.

And yet to those who have faith in the power of truth, there is always the cheering hope that even with respect to religion, it will prevail at last. For instance, it will be found that the interposition of a particular providence is incompatible with the exercise and use of reason; that God's only mode of helping us, is by giving us powers by which we are enabled to make use of those causes which He has appointed to produce the effect we desiderate. That original sin is only the necessary consequence of the unavoidable limitation of our intellectual being. That accountability, in the sense in which the term is commonly used by religionists, does not exist; that punishment is always intended for the reformation and good of the offender, and that therefore forgiveness of sins would be an injury. That nothing is to be left

to man's free will, because his character depends upon his original constitution and the circumstances in which he is placed. That his faith, therefore, can only depend upon evidence, and his morality, religion, and intelligence, upon the influences calculated to make him moral, religious, and intelligent.

It is not, therefore, to the present religious world or its teachings that we can ultimately look for the amelioration of the condition of society, for it holds that the evils under which we suffer are not remediable, but are a necessary part of man's worldly estate—a doctrine which acts as an effectual drag upon the progress of improvement, by inducing men to suppose any great forward movement to be impossible, and exalted views of man's future condition here, utopian. Yet, however inefficient our various religious establishments are, compared to what they might be with their machinery and enormous resources—in the present wretched state of society, in which the degrading pursuit of individual gain, the competition for individual advantage, form the business of life, they are the only establishments that we have for the calling forth and exercising of man's best and highest feelings, and in which the precepts of Him who said, "Woe unto them that are rich," are read, if not heeded. Moral training for the people there would be none without them.

We find no fault, therefore, with the temples that everywhere cover the land; and we would lend no helping hand to pull them down; but as soon as may be we would have the money changers and the spirit of Mammon driven thence—we would have them converted into the temples of God, where His laws should be taught, and the people instructed to follow His will on earth, as it is in Heaven. The physical, the organic, and the moral laws are the Laws of God, and the petition, "Deliver us from evil," is useless so long as we disobey them in wilfulness or ignorance. Places of assembly for the people we must have, because "the people" must always be led, and

where else are they to look for those appointed by God for leaders, by a greater endowment than the average of mental and moral qualities—where else can the right road be so well pointed out to them, or the feeling generated that is to carry them on that road rejoicing? But places for public worship there can properly be none; and in nothing did the Great Teacher prove His wisdom and deep insight into the nature of the human heart, more than by the veto which He virtually put upon "standing up in the synagogue to pray," and by the sanction which He gave exclusively to the prayer that is uttered to the Father in secret, when the door is closed against all human intrusion. And we find that though He taught in the synagogue, He prayed on the lonely mountain side, or in the desert place apart.*

* The words or example of Jesus of Nazareth must, however, have little weight with those who take His own simple and beautiful prayer—which He bequeathed to His disciples lest they should fall into the practice of "much speaking" and "vain repetition"—and repeat it four, and frequently five times in the space of an hour and a half every Sunday morning, and twice or thrice in the evening.

The practice of public worship has now perhaps reached its acme of abuse. Although there may be a few who frequent the consecrated edifice because they feel it to be right, and who succeed in summoning the spirit of devotion, even amidst the accessories of a pompous priest and a gazing, listless multitude, there cannot be a doubt that, with the exception of those who "go to Church" from mere habit, the principal motive for the regular attendance of the majority, is "that they may be seen of men." The opulent man fears the tacit wonder and reproach of his neighbours if he neglect the "decencies" of religion. The tradesman fears to lose his customers, or the patronage of the Clergyman, if he pay no regard to established observances; the poor man likes to show how respectable an appearance he with his wife and children can make once a week; but it is probable that if a Church were so contrived that all the members of the congregation were invisible to each other, and so that no eye could mark the entrance or exit of any one, the Clergyman would not seldom find himself in Dean Swift's predicament—preaching to himself and "dearly beloved Roger."

But to go and "pray in the synagogue," "that they may be seen of men," is not only the unacknowledged practice of the many, but in a few instances fashion has sanctioned it into a most legitimate and expedient custom. The bride, when she takes her place in the pew by the side of her newly-made husband, does so for the express purpose of being "seen," for this "being seen at Church" is the important prelude to a series of calls and visits; and if the appointments of the drawing-room in which she is to sit to receive her guests are not in due order, or the becoming morning dress in which she is to

And is it not in solitude, in the temple that He Himself has created, that the heart is most drawn towards the Eternal, and the conviction forced upon us that if we would serve Him, it

perform this ceremony is not yet completed by themantua-maker, she hesitates not to put off her appearance at Church till another Sunday, justly thinking that her weekly homage will not, for once, be much missed in Heaven. In the sadly-different case where a train of bereaved ones fill a pew with the lugubrious signs and apparel of mourning, it is still "to be seen of men" that they are there; for their aching hearts tell them too plainly that were it not a duty that they owe to custom, this making of their sorrow public is not indeed the way to assuage grief.

All this would be very well-it would be very well for the rich and poor to meet together once a week in a place of public instruction; it would be well for fellow-citizens to have such opportunities of friendly though silent intercourse, of forming the bond of union which the being members of one Church always creates; it would be well for the working man to have this inducement to emulate his more comfortable neighbours in the cleanliness and respectability of his attire; for the newlymarried couple, if so it please them, thus publicly to introduce themselves to their friends, and pledge themselves to society as its new member; and even for mourners to show openly to the world their sense of bereavement, if in so doing they find peace and satisfaction, and are not compelled to it against their natural feelings by the idea of its being a religious duty :-- all this would be very well, if our Churches were places where duties were taught and consolation administered, the mind instructed, and the heart made better—but it is far, far from well in what are called Houses of Prayer. It is not well that at such times when it is pretended, and believed, that man is ushered into the more immediate presence of the Great First Cause, for the purpose of holding actual communion with the tremendous Power of the Universe, external circumstances should be so arranged that it is scarcely possible for the mind to free itself from thoughts, that if not absolutely frivolous and trifling, are exclusively of the earth, earthly. This constant triumph of the animal nature over the high aspirations of religion can have but one tendency, viz., to deaden the heart against the influences of devotion. to produce hypocrisy and lip-service, and in some minds to generate Atheism of the worst species; for the practical Atheism of the unreflecting Churchgoer is far more destructive to all that is good in man, than the philosophic non-belief in any personal Deity, which may spring up in the mind of a Hume or Spinoza. No, let the principle of devotion be suggested to every heart, as well by the discourses of good and wise men in temples made with hands, as by Nature's teachings under the high-arched roof of Heaven; but let not its accents be periodically forced from lips as cold as the stones that echo back the heartless murmur, and the Most High be perpetually mocked that man may be occasionally edified.

can only be by love and sympathy towards all creation, and in active efforts to promote the happiness of all made capable of enjoyment?*

" "What is called Christian, but should rather be termed theological, morality, was not the work of Christ or the Apoetles, but is of much later origin, having been gradually built up by the Catholic Church of the first five centuries, and though not implicitly adopted by moderns and Protestants, has been much less modified by them than might have been expected. * * * Christian morality (so called) has all the characters of a re-action; it is, in great part, a protest against Paganism. Its ideal is negative rather than positive; passive rather than active; Innocence rather than Nobleness; Abstinence from Evil rather than energetic Pursuit of Good: in its precepts (as has been well said) 'thou shalt not' predominates unduly over 'thou shalt.' In its horror of sensuality, it made an idol of asceticism, which has been gradually compromised away into one of legality. It holds out the hope of heaven and the threat of hell, as the appointed and appropriate motives to a virtuous life: in this falling far below the best of the ancients, and doing what lies in it to give to human morality an essentially selfish character, by disconnecting each man's feelings of duty from the interests of his fellow-creatures, except so far as a self-interested inducement is offered to him for consulting them. It is essentially a doctrine of passive obedience; it inculcates submission to all authorities found established; who indeed are not to be actively obeyed when they command what religion forbids, but who are not to be resisted, far less rebelled against, for any amount of wrong to ourselves. And while, in the morality of the best Pagan nations, duty to the State holds even a disproportionate place, infringing on the just liberty of the individual; in purely Christian ethics, that grand department of duty is scarcely noticed or acknowledged. It is in the Koran, not the New Testament, that we read the maxim: 'A ruler who appoints any man to an office, when there is in his dominions another man better qualified for it, sins against God and sgainst the State." What little recognition the idea of obligation to the public obtains in modern morality, is derived from Greek and Roman sources, not from Christian; as, even in the morality of private life, whatever exists of magnanimity, highmindeduess, personal dignity, even the sense of honour, is derived from the purely human, not the religious part of our education, and never could have grown out of a standard of ethics in which the only worth, professedly recognised, is that of obedience." * * * much fear that by attempting to form the mind and feelings on an exclusively religious type, and discarding those secular standards (as for want of a better name they may be called) which heretofore co-existed with and supplemented the Christian ethics, receiving some of its spirit, and infusing into it some of theirs, there will result, and is even now resulting, a low, abject, servile type of character, which, submit itself as it may to what it deems the Supreme Will, is incapable of rising to or sympathizing in the conception of Supreme Goodness. I believe that other ethics than any which can be evolved from exclusively Christian sources, must exist side by side with Christian ethics to produce the moral regeneration of mankind. * * * * If Christians would teach infidels to be just to Christianity, they should themselves be just

After enumerating these different remedies for existing social evils, and plans for improvement proposed by various parties who admit and deplore their existence, we must not omit to mention another numerous and powerful party, who, being in possession of all the comforts and advantages of civilization, desire no change. The present system works well for them, and they fear its subversion. The great inequalities of condition, consequent upon the present arrangements for the production and distribution of wealth, they profess to believe to be necessary and established by the Deity. Kings, Lords, and Commons-masters and workmen-rich and poor -they hold to be natural grades, and not to depend upon the will of society. Those who reason amongst this class draw their arguments from the page of history: such has man ever been and such he must ever be. The progressive character of man's nature is omitted in the estimate. They point to all the necessary evil that has attended all great changes and revolutions, and to the failure of so many of the schemes for the amelioration of the condition of mankind. As in all changes, however great may be the ultimate advantage, some must suffer, these sufferers are the only objects of their regard. The agonies of the few who fell in the breaking down of the old and rotten institutions of France in 1789, strike them with horror, but the sufferings of the millions slain in support of the present system are not thought worthy of notice. The blood of a few thousands of the privileged they esteem more worth than an ocean from plebeian veins shed on the field of battle.* They delight to picture the anarchy, disorder, and disorganization that would arise from the predominance of an ignorant democracy—for a democracy otherwise than ignorant is to them an anomaly. Believing that the world must always

to infidelity. It can do truth no service to blink the fact, known to all who have the most ordinary acquaintance with literary history, that a large portion of the noblest and most valuable moral teaching has been the work, not only of men who did not know, but of men who knew and rejected, the Christian faith."—J. S. Mill, on Liberty, pp. 88, 89, 90, 91, 92, and 93.

^{*} See Carlyle's French Revolution, vol. 8, p. 65.

be divided into castes, and that "the poor, (signifying miserable, half-starved beings,) we must always have with us," they are unfriendly to any education for the people. excepting that State religious education which teaches them to look to another world for comfort and not to this: which carefully instils into them the belief that the present division of society into those that rule and those that serve, is appointed of God, not of man, and that therefore the principal duty of the people is to "Honour and obey the King, and all that are put in authority under him." "To submit themselves to all their governors, teachers, spiritual pastors and masters," "To order themselves lowly and reverently to all their betters." "Not to covet or desire other men's goods; but to learn and labour truly to get their own living, and to do their duty in that state of life into which it has pleased God to call them." They remember that the Founder of Christianity sanctioned the payment of tribute to Cæsar, but they forget that after describing how "the Princes of the Gentiles exercise dominion over them, and they that are great exercise authority upon them," he added, "But it shall not be so among you, but whosoever will be great among you, let him be your minister. And whosoever would be chief among you, let him be your servant," They are the active supporters of charities, for they hold that one great use of the poor is that the rich may have objects to exercise their Christian benevolence upon. These charities. however, are seldom such as help the poor to help themselves. but such as mark the dependence of the poor upon the rich. and care is taken that the badge of servitude shall not be omitted.

It may sound paradoxical, but nevertheless it may be seriously doubted whether the philanthropy of the present day does not do more harm than good; certainly eleemosynary charity is more a curse than a blessing. The demoralising and pauperising influence of such endowments in our great towns, where, besides large "gifts," the poor are brought into the world and educated and doctored by charity, has long been

well known, and our Charity Commissioners have hitherto vainly tried to divert their course in a direction that should "help the poor to help themselves;" but the conservative spirit, and the spirit of patronage, and the ignorance and prejudice of the recipients, have been too strong for them. Selfreliance and self-dependence, based upon prudent foresight, are the virtues on which most others are built in the poor, and these charities, by introducing an element of chance and servility, destroy them at the root. Providence, to the extent to which it is necessary amongst the poor, is a very difficult virtue to practise, and they will not use the self-denial necessary if they think the fruits of providence are to be had without. When once a man begins to trust to other than his own efforts, he invariably begins to go down in the world; such reliance would have this effect even if he succeeded in obtaining the charity or "gifts" he sought, but three at least out of four who seek and rely upon them are disappointed. In fact, to offer premiums to improvidence and to weaken the natural supports to self-reliance and self-dependence is false charity; and indeed we may say of misguided philanthropy generally, that the only and "ultimate result of shielding men from the effects of folly, is to fill the world with fools."

The spirit of Conservatism, like every other human manifestation, is of complex origin—the offspring of men's better nature, as well as of their narrowness and weakness. It may have a great tap-root of selfishness, but there are a thousand fibres by which it attaches itself to the most noble and refined sentiments. Our poetry, our affections, our religion, are so associated with existing forms, that we suppose them to inhere in those forms, instead of being, as they really are, the rainbow hues of that ever living universal light, which will clothe the new no less than the old with beauty.

There are many of this party, as of all parties, who conscientiously oppose change from the fear of its leading to greater evils than those under which the nation at present suffers; but it is to be feared that the majority of them are



wilfully ignorant of the real condition of the great body of the people, and that their opposition to change is dictated by the instinctive selfishness that fears to lose any of the distinguishing advantages which belong to their peculiar caste. It is not to this party, therefore, that we can look for any great improvement in the condition of the working classes.

It is but justice, however, to say, that if the working classes must always remain working classes; if the increase of their numbers, and their own ignorance and improvidence must always keep them poor and condemned to labour incessant. then the policy of the Conservative party is the right onethere is more to be feared than hoped from change. people, as long as they remain ignorant, ought not to be entrusted with power, as it must under such circumstances be subversive of order. To educate them would be wrong without an addition to their physical comforts, for it would render their lot even more unbearable. It has been said, and with truth, that education hitherto has only tended to make the poor dissatisfied: and such might have been expected to be the effect of giving moral and intellectual wants without the means of gratifying them. An ass, while he is an ass, does his work contentedly; but could you change his nature by enlightening him, be would require a more just portion of the fruits of his labour than the road-side thistle. So, if the condition of the mass of the people does not admit of physical improvement, it is better, if it be possible, to keep them in a state of ignorance. utter, blind, gross ignorance—for knowledge can only serve to show them a state of happiness and comfort in which they must never share. If this be not possible—which this party begins to suspect—then are they still politic in striving to give to increased knowledge the consolation of believing that what they do not receive here will be made up to them hereafter.

CO-OPERATION. It would appear from the statistics given in the First Section of this Part 3rd that one-seventh or about three millions of the population of Great Britain possess two-thirds of the Annual Income, one-third only going to the

remaining six-sevenths or 18 millions. It is evident, if this is so, that Capital must not only be very plentiful, but that it must possess considerable advantages over Labour. Now I am quite aware of, and fully appreciate, all the advantages of capital, as explained by the Economists; its tendency to fly away if not well treated, and how much more easily it takes wing than labour can do. I also fully appreciate a wise and energetic superintendence and direction of capital, and I know that accumulations will not be made, and capital will not increase rapidly unless there All this is most eloquently and be sufficient inducement. lucidly explained by Messrs. Newman, M'Culloch, and others. Still I am of opinion that, if one-seventh of the population take two-thirds of the "joint produce," it is a little more than can be said justly to belong to them; and that whenever it may "suit the convenience" of the workmen to take a little more of that which they are at least equally instrumental in producing, there is a wide margin left for the improvement of their condition.

As we have said, there are two ways by which a more just and equal division of the produce of labour may be brought about. The one recommended by the Political Economists is, so to raise the condition of the operatives that they may feel all the advantages of their improved condition, and resolve to maintain it by provident marriages and providence in all other departments. By thus checking the increase of their own numbers, labour will become scarce, and they can make better terms, if not their own terms, with the capitalist. This plan is not at present popular with the workmen.

The second plan is, that the working classes should possess themselves of capital, either by clubbing their joint means, or renting, and borrowing at interest, and then dividing the joint produce, either equally or in proportion to capability and earnings.

These plans may be said to represent the objective and subjective, that is, what a man can do for himself, and what can

be done for him by external circumstances. The feeling of society is now divided between these two theories; the few being of opinion that a man can only help himself, and that very little can be done for him-in fact, that everything must come from within, whilst the many are of opinion that a great deal depends upon circumstances and upon the organization of These are probably but different points of view of the same question—the different sides of the same shield—and both parties are right and both wrong; that "action and reaction are equal and contrary," applies as much to the moral world as to matter; and the two states, the internal and external, act and re-act equally upon each other. The last twenty years have witnessed a great change for the better in the condition of the working classes. A nearer approach to free trade, and an extensive emigration, have kept them well employed, and, in some instances, made labour scarce. Many have raised themselves to the condition of masters and capitalists, and great savings have been made and invested in Building, Freehold Land, and other Societies. During the last fifteen years, there is a general air of increased comfort in lodging, clothing, and food, and this improved condition in very many cases, is likely to be maintained. On the other hand, many attempts at Cooperation, and efforts by the working classes to become their Mr. Robert Owen's "New Moral own masters, have failed. Worlds," both in America and England, the Leeds Redemption Society, and other experiments in Communism, have all failed. Whenever there has been a sufficient tie, either of Religion or Fanaticism, to keep men together, such Societies have always been an economical success; but among the working classes at present there is no tie,—there is no principle strong enough to overcome the individualism, the selfishness, and ignorance, that pretty universally prevail. When the moral nature, which is at present all but rudimentary, shall be fully developed,—when a man's desire to do right is as strong as his propensities now are,-when he is as much pinched by his conscience if he neglects to do right, as he now

is by his stomach if he neglects to work for his living, some form of such Societies may become possible: but not before. The working classes have attempted various other minor forms of Co-operation. Tailors and other trades have combined to work for themselves, and divide the profits between them. Others have associated to supply themselves with the necessaries of life at first-hand, and have become their own millers, grocers, provision and coal dealers, and in these more limited directions they have been more successful. The Co-operative stores at Rochdale,—where I understand there is a large-headed and large-hearted manager, who gives, almost gratuitously, the whole of his time to the Society,—have been a great success; also there has been success at Leeds and other places.

Referring to the success of Co-operative Societies, Lord Brougham is reported by the Athenaum to have said in his opening address to the National Association for the Promotion of Social Science, 1862-" Enjoying the great advantage of Mr. William Cooper's assistance (Secretary of the parent Society at Rochdale), I am enabled to state that there are now above 500 of those admirable institutions in the island; and their importance may be estimated by this, that 273 of them have 69,000 members, a capital of two and a-half millions, and their sales for the last quarter were upwards of £560,000. Co-operation is becoming a power in the State, and strenuous endeavours are making to mould the laws regulating those institutions into the best form for securing their permanence, and adaptation to their objects. The subject of co-operation is the more important, because it is comparatively in its infancy. It may perfectly well embrace branches of industry beyond those to which it is now confined, nor is there any reason why country labour, as well as town, should not come within its scope."

The Co-operator for June, 1862, gives a list only of 250 Societies, representing about 60,000 members, half a million capital, and a trade during the past year of two millions; and this is probably more correct than the statistics furnished to Lord Brougham.

The principle at present, probably, most likely to succeed in giving the workman a more just share of the joint produce, is to give him a share of the profits in the establishment in which he works. This is successfully practised in many trades in Paris.* Under this system he is paid his wages as usual: is not allowed to interfere in the management; and the additional profits he receives are a premium upon his good behaviour and additional skill. Mr. John Stuart Mill, writing on the "Probable Future of the Labouring Classes," says, "Confining ourselves to economical considerations, and notwithstanding the effect which improved intelligence in the working classes, together with just laws, may have in altering the distribution of produce to their advantage, I cannot think it probable that they will be permanently contented with the condition of labouring for wages as their ultimate state. To work at the bidding and for the profit of another, without any interest in the work,—the price of their labour being adjusted

* An alteration, however, of the law of partnership would first be required here to enable an employer to make his workpeople partners in profit, without giving them the power to interfere in the management, or to involve him in debt or difficulty. The late Act 25 and 26 Vict., c. 87, (passed on the 7th August, 1862.) has repealed from that day all the previous Acts relating to Co-operative Societies, and alters very materially the law affecting them and their members, and more especially the personal liability of the latter. On obtaining a certificate of registration from the Registrar of Friendly Societies, the Society becomes a body corporate, with limited liability; and no member can be sued individually for the debts contracted by or on behalf of the general body. In a Society registered under this Act, no member can be liable in any event for more than the full amount remaining unpaid of his shares.

The matters for which the Act obliges every Society to make provision are contained in a set of rules, which have been prepared by Mr. Tidd Pratt, the Registrar, and should be inserted at the beginning of each set of existing rules. There is no expense in obtaining the certificate of registration, and a form of the rules required to be inserted may be obtained, free of expense, on application to the Registrar, 28, Abingdon-street, Westminster.

The rules referred to regulate the title of Societies, the admission of members, the mode of holding and voting at meetings of shareholders, the making and altering of rules, the registration, transfer, and withdrawal of members, the audit of accounts, the investment of capital, the management of affairs generally, and—what may prove to be very useful—the settlement of disputes.

by hostile competition, one side demanding as much and the other paying as little as possible,—is not, even when wages are high, a satisfactory state to human beings of educated intelligence, who have ceased to think themselves naturally inferior to those whom they serve.

"The problem is, to obtain the efficiency and economy of production on a large scale, without dividing the producers into two parties with hostile interests, employers and employed, the many who do the work being mere servants under the command of one who supplies the funds, and having no interest of their own in the enterprise, except to fulfil their contract and earn their wages."

"It is this feeling," he says, "almost as much as despair of the improvement of the condition of the labouring masses by other means, which has caused so great a multiplication of projects for the 'organization of industry,' by the extension and development of the Co-operative Joint-Stock principle: some of the more conspicuous of which have been described and characterised in an early chapter of this work. desirable that all these schemes should have opportunity and encouragement to test their capabilities by actual experiment. There are, in almost all of them, many features in themselves well worthy of submitting to that test; while, on the other hand, the exaggerated expectations entertained by large and growing multitudes in all the principal nations of the world, concerning what it is possible, in the present state of human improvement, to effect by such means, have no chance of being corrected except by a fair trial in practice. The French Revolution of February, 1848, at first seemed to have opened a fair field for the trial of such experiments, on a perfectly safe scale, and with every advantage that could be derived from the countenance of a Government which sincerely desired their success. It is much to be regretted that these prospects have been frustrated, and that the reaction of the middle-class against anti-property doctrines has engendered for the present an unreasoning and undiscriminating antipathy to all ideas, how-

ever harmless or however just, which have the smallest savour of Socialism. This is a disposition of mind of which the influential classes, both in France and elsewhere, will find it necessary to divest themselves. Socialism has now become irrevocably one of the leading elements in European politics. The questions raised by it will not be set at rest by the mere refusal to listen to it; but only by a more and more complete realisation of the ends which Socialism aims at, not neglecting its means so far as they can be employed with advantage. the particular point specially considered in the present chapter, these means have been, to a certain extent, put in practice in several departments of existing industry; by arrangements giving to every one who contributes to the work, whether by labour or by pecuniary resources, a partner's interest in it, proportionally to the value of his contribution. It is already a common practice to remunerate those in whom peculiar trust is reposed by means of a per centage on the profits; and cases exist in which the principle is, with the most excellent success, carried down to the class of mere manual labourers."

"The value of this 'organization of industry' for healing the widening and embittering feud between the class of labourers and the class of capitalists, must, I think, impress itself by degrees on all who habitually reflect on the condition and tendencies of modern society. I cannot conceive how any such person can persuade himself that the majority of the community will for ever, or even for much longer, consent to hew wood and draw water all their lives in the service and for the benefit of others; or can doubt, that they will be less and less willing to co-operate as subordinate agents in any work, when they have an interest in the result, and that it will be more and more difficult to obtain the best workpeople, or the best services of any workpeople, except on conditions similar in principle to those of Leclaire (who gives in Paris a share of the profits.) Although, therefore, arrangements of this sort are now in their infancy, their multiplication and growth, when once they enter into the general domain of popular discussion, are among the things which may most confidently be expected."

Of course Mill is here alluding only to what is possible in the future for the labouring classes; all who know the present low moral and intellectual condition of the great majority must know that any change of the sort contemplated is impossible at present, unless in exceptional cases. "To that complexion they may come at last," but it must be through years of discipline. Mill most truly says "no remedies for low wages have the smallest chance of being efficacious, which do not operate on and through the minds and habits of the people. While these are unaffected, any contrivance, even if successful, for temporarily improving the condition of the poor, would only let slip the reins by which population was previously curbed."*

During the last twenty years I have witnessed great improvements in the condition of the working classes; and although I have lost all faith in any single remedy for all their ills, I have an increasing conviction that no effort is thrown away, but that all measures for their improvement are working together for their good; gradually and slowly bringing about a time in which all may enjoy what hitherto has been the privilege of the favoured few. I say slowly, because conduct depends more upon individual organization than upon opinions, however enlightened, and the organizations have yet to be grown.

* I have worked with the working classes at all measures for improving their condition for a quarter of a century, but have never yet found them capable of conducting their own affairs. If their affairs were of a trading kind, they were jealous and niggardly of the pay of those who were principally instrumental in making them succeed, and what was ordered by a Committee one week or month was too frequently undone the next. There was no permanency or persistency. If their affairs were of other kinds, they fell out among themselves, and could not long be kept together. The worst feature of ignorance is intolerance, and the worst of the working classes is that they cannot agree to differ. They are for the utmost freedom of thought and liberty of opinion, but denounce as knave or fool every one who does not think as they think. They are too generally suspicious of each others' motives, and find it very difficult to rise to the comprehension of a disjuterested feeling. I have heard a philanthropist defined as a person who acts from no motives at all. I have heard the most damning denunciations of government pay and patronage,- of aristocrate helping themselves and their relations out of the public purse; but I have known the same persons order a larger quantity of tea and sugar for a tea-drinking than could possibly be used, that they might divide it among themselves at half-price afterwards. Of course there are many and glorious exceptions.

In a paper read at the Social Science Association, 1862, by Mr. X X



J. G. Holyoake, on "Certain Moral Errors which Endanger the Permanence of Co-operation," he says—

"The moral obstacles which constantly frustrate Co-operative success, and dissipate it when it has been achieved, are these—1st. The difficulty of acting with and tolerating people you don't like, and trusting those in whom you have no confidence. 2nd. The difficulty of creating personal authority and prohibiting offensive imputations. 3rd. The difficulty of viewing with satisfaction, and personally promoting the growing prosperity and influence of those whom you know to be

unworthy, and rather detest.

"We have not got so far yet as to recognise the right of others to differ from us in conduct and opinion. We have not even got so far as to tolerate the habits and manners of others distasteful to us. The great principle of all social liberty laid down by Mr. J. S. Mill, that we should admit the right of all conduct which does not concern us, nor harm us, is nowhere understood among the populace; and to all people who do not understand it, association is always precarious and often absolutely repulsive. To learn to tolerate all people necessary to a Society is a thing never thought of, and no Society is sure of standing until this lesson is well learnt. On all these points the poor are much more intolerant than the rich, because ignorance has less sense and less forbearance. An indignant wife will abstract her active husband and family from a Society, and distil animosity through all her kindred and neighbourhood, because she won't sit down with a woman the colour of whose cap ribbons she does not like. The rich better understand social consequences, and they know what the poor do not-that if you make up your mind to join an Association, you do it because you know what the object is and approve it, and because you mean to count and keep all personal questions subordinate to that. In an Association of gentlemen if a servant is suspected of dishonesty, checks are devised to test him-or in due course he is quietly superseded. But in a workingclass Association a suspected servant is denounced on suspicion, and in every house in the village or workshop in a town he hears himself spoken of as a thief before a single defalcation is proved against him. places a storekeeper dare not look well-fed, or he is suspected of eating up the provisions himself-if he grows fat he would be condemned at once; if his wife, whose frugality and good management entitle her to a new gown, appears in one, it would be a proof positive of Cooperative larceny; if the storekeeper put on a better coat than the members were, it would cost him his character. There is nothing more icalous than poverty, nor meaner than ignorance. Thus, many a store has been broken up by self-sown distrust, and honest, experienced servants driven in disgust into the more merciful service of shopkeepers.

"But worse than this evil of suspicion is the evil of imputation. In the House of Commons every gentleman bows to the authority of Mr. Speaker,' who exercises a prohibitory power over an imputation

of dishonesty, falsehood, and disloyalty. Among working men, except in a few great and well-governed stores, no disciplined good sense of this kind prevails. The President has no rules of speech to enforce; he may not understand them; his authority is not defined, nor often respected when invoked.

"A group of mechanics founding a Co-operative Store or conducting a Co-operative Manufacturing Society is a focus of all the good intention which sweetens the world, and of all the folly which disgraces it, and the passion which on a larger scale devastates it. The selfish, the base, the morally indolent, and the mean are there, as well as the generous, the self-denying, and the good. But the worthless can be governed and guided, if the sensible and active have good-temper and discipline of speech.

"Perhaps the most fatal thing about a Society is an honest cantankerous man. Because a thing is in his opinion true, it ought to be He does not know that before a thing is fit to be spoken, it must have two marks about it. It must be relevant and useful. He does not know that well-meaning men who ignore this fact often do more harm than bad men. No Society can be carried on where any irrelevancies which are true may be introduced, and motives may be discussed. moment an imputation is made ill-feeling begins, and the wisdom or error of any step is at once lost sight of. The moment personalities are permitted, the tongue of every fool is loosened, and floods of resentment and rancour drown all harmony and arrest all concert. are explosive—they go off like Armstrong guns, blowing up character, interest, and friends. Epithets affect the blood of some men like poison, and they are never the same persons afterwards. I have never been called in to act as arbitrator in a Co-operative Society, but passion and an imputation have been at the bottom of the grievance or the ruin. An experienced Bishop has said that 'Temper is nineteenths of Christianity.' There are times when it appears to be the whole of Cooperation.

"The only rule that can avert disunion is for members to make it their chief maxim to reason but not to quarrel, to differ but never disagree, to regard each person as speaking the truth as he understands it, as meaning the truth but missing it, as intending the common good but mistaking the means of securing it. Each member must restrict himself to showing what he takes to be the truth and the means he conceives would best promote the joint interest of the Society, and stopping when he has done this.

"But more fruitful in mischief and more difficult to extirpate than imputation is the disinclination men have to aid the aggrandisement of people whom they know to be unworthy and rather detest. In competitive life, if disagreeable people succeed you don't so much care, you cannot help it; they have done it in spite of you. But in a Co-operative Society you can help it, and an active, indis-

pensable man, may often frustrate the prosperity of all by with-drawing. Why should he not? In Co-operative Societies the constitution is democratic. After a store or manufacturing Society has been in existence for ten or fifteen years, and self-denial, good sense, and hard labour have made it prosperous, a crowd of people, selfish and ignorant, may rush in, intent only on the gain they may get, caring nothing and knowing nothing of the true spirit and purpose of Co-operation. They have the same power of control as the founders; and a few empty-headed, blatant, imputative men, will have more weight with the new members, than the quiet, modest, worthy pioneers, to whom everything is owing, and who are ousted from office with indignity, and their advice disregarded.

"In the days of the early struggle, when the sanguine are hoping, and the energetic are working, and the disinterested are making sacrifices, there is peace and unity—there is nothing to covet, nobody to envy. The selfish, who take care to risk nothing, are silent in self-protection, and the cowards stand out of the way to see what will come of it. But as soon as the sunshine of success warms up the scheme, the envies and jealousies crawl out like parasites, and, in some places, where human nature is worse than in others, they overrun everything, and make the Society morally uninhabitable. No vigilance can anticipate them, no Twelvetrees can arrest them.

"Among the higher class of masters any responsible servant is adequately provided for; they give a salary which secures the whole of his interest and powers, and they commonly tolerate his prosperity so long as they are well served. The working class rarely do this. They are rather apt to fix all salaries at the workshop rate, and begrudge every sixpence over that. For a man's brains, devotion, interest, and experience they award nothing willingly, and make it so humiliating to receive anything extra, that he who does so is eventually glad to accept competitive employment, unless his devotion is impassible and stronger than pride, independence, and self-respect. It is no man's interest to hold any office in any Co-operative Society. On the contrary, it is his interest not to hold it. He escapes labour, anxiety, suspicion, and outrace by not doing it. The rheumatic discontent which finds fault, the blatancy which disclaims, the supineness which does nothing, and the selfishness which covets all, is as it is everywhere, the most secure, safe. and popular. And this experience it is which has already produced disasters and fatal re-action in the Co-operative ranks. Astute men. seeing small chance given them on account of special service and talent. project or pervert new Societies into Joint-Stock Companies, in which a portion monopolise the profits of all. The reason why many Societies already affected by this moral disease of the heart do not collapse is owing to certain brave and disinterested men, who founded them, taking such pride in the honour of their order that they stand by their Societies on this account, until that stage shall be reached, which let us hope has

commenced now—when the moral disqualifications of co-operators shall receive as much attention as has been so successfully given to their financial errors. Any one acquainted with the leaders of the chief working class movements in this country for twenty years past will bear me out in the assertion that the best men, whose capacity was greatest and whose pride and self-respect were strongest, have been driven out of the ranks by the social errors I have described. Had it not been so, the working classes would not now be, as they yet are, the Pariahs of the State, whom everybody compliments, but no Statesman trusts, and the Constitution, by common consent in the House of Commons, ignores."

CHAPTER IV.

THE SOCIALIST UTOPIA.

We have hitherto spoken of Society as it now exists, and have considered how its shortcomings may be best remedied, but there are those who consider that its evils cannot be remedied—can at the best be only palliated, as they are inherent in the system itself. The assailants of the present form and constitution of Society, based upon the law of individual property, have been called Socialists or Communists.

We have all been brought up under the present system, and are accustomed to all its abuses and to all the restraints it imposes upon us, as the bird to the cage in which it was born, and our aspirations after greater freedom are as little understood by us as by the poor prisoned bird.

Mr. M'Culloch may be said fairly to represent the school who support the present system; in favour of it he says—

"We incline to think that the great inequality of fortune that has always prevailed in this country has powerfully contributed to excite a spirit of invention and industry among the less opulent classes. It is not always because a man is absolutely poor that he is perseveringly industrious and economical: he may have already amassed considerable wealth, but he continues with unabated energy to avail himself of every means by which he may hope to add to his fortune, that he may place himself on a level with the great landed proprietors and those who give the tone to society in all that regards expense. No successful manufacturer or merchant ever considers that he has enough till he be able to live in something like the same style as the most opulent persons. Those immediately below the highest become, as it were, a standard to which the class next to them endeavour to elevate themselves; the impulse extending in this way, to the very lowest classes, individuals belonging to which are always raising themselves by industry, address, and good fortune, to the highest places in society. Had there been less inequality of fortune amongst us, there would have been less emulation, and industry would not have been so successfully prosecuted. It is true that the desire to emulate the great and affluent, by embarking in a

lavish course of expenditure, is often prematurely indulged in, and carried to a culpable excess; but the evils thence arising make but a trifling deduction from the beneficial influence of that powerful stimulus which it gives to the inventive faculties, and to that desire to improve our condition and to mount in the scale of society, which is the source of all that is great and elevated. Hence we should disapprove of any system which, like that of the law of equal inheritance established in France, had any tendency artificially to equalize fortunes. To the absence of any such law, and the prevalence of customs of a totally different character, we are inclined to attribute a considerable portion of our superior wealth and industry."

"We are also disposed to believe, how paradoxical soever such a notion may appear, that the taxation to which we have been subjected has, hitherto at least, been favourable to the progress of industry. It is not enough that a man has the means of rising in the world within his command; he must be placed in such a situation that unless he avail himself of them and put forth all his energies, he will be cast down to a lower station. Now this is what our taxation has effected: to the desire of rising in the world, implanted in the breast of every man, it superadded the fear of being thrown down to a lower place in society; and the two principles combined, produced results that could not have been produced by either separately. Had taxation been carried beyond due bounds, it would not have had this effect. though considerable, its increase was not such as to make the contributors despair of being able to meet the sacrifices it imposed, by increased skill and economy; and the efforts they made in this view were far more than sufficient for their object, and consequently occasioned a large addition to the public industry and wealth that would not otherwise have existed."-M'Culloch, vol. 1, p. 615.

On the other hand, Mr. Combe is not quite so satisfied: he says:—

"In Britain, that individual is fitted to be most successful in the career of wealth and its attendant advantages, who possesses vigorous health, industrious habits, great selfishness, a powerful intellect, and just so much of the moral feelings as to serve for the profitable direction of his animal powers. This combination of endowments would render self-aggrandizement and worldly-minded prudence the leading motives of his actions; would furnish intellect sufficient to give them effect, and morality adequate to restrain them from abuses, or from defeating their own gratification. A person so constituted would feel his faculties to be in harmony with his external condition; he has no lofty aspirations after either goodness or enjoyment which he cannot realize; he is pleased to dedicate his undivided energies to the active business of life, and he is generally successful. He acquires wealth and distinction, stands high in the estimation of society, transmits

comfort and abundance to his family, and dies in a good old age."—Combe's Moral Philosophy, p. 205.

"The tendency of the system is to throw an accumulating burden of mere labour on the industrious classes. I am told that in some of the great machine manufactories in the West of Scotland, men labour for sixteen hours a-day, stimulated by additions to their wages in proportion to the quantity of work which they produce. Masters who mush trade on a great scale, exact the most energetic and long-continued exertion from all the artizans whom they employ. In such circumstances. man becomes at once a mere labouring animal. Excessive muscular exertion drains off the nervous energy from the brain; and when labour ceases sleep ensues, unless the artificial stimulus of intoxicating liquors be applied to rouse the dormant mental organs and confer a temporary enjoyment, which, in such instances, is very generally the case. To call a man, who passes his life in such a routine of occupation,—eating, sleeping, labouring, and drinking,—a Christian, an immortal being, preparing by his exertions here, for an eternity hereafter, to be passed in the society of pure, intelligent, and blessed spirits, -is a complete mockery. He is preparing for himself a premature grave, in which he shall be laid exhausted with toil, and benumbed in all the higher attributes of his nature, more like a jaded and maltreated horse, than a human being. Yet this system pervades every department of practical life in these islands. If a farm be advertised to be let, tenants compete with each other in bidding high rents, which, when carried to excess. can be paid only by their converting themselves and their servants into labouring animals, bestowing on the land the last effort of their strength and skill, and resting satisfied with the least possible enjoyment from it in return.

"By the competition of individual interests, directed to the acquisition of property and the attainment of distinction, the practical members of society are not only powerfully stimulated to exertion, but actually forced to submit to a most jading, laborious, and endless course of toil; in which neither time, opportunity, nor inclination, is left for the cultivation and enjoyment of the higher powers of the mind. The whole order and institutions of society are framed in harmony with this The law prohibits men from using force and fraud in order to acquire property, but sets no limit to their employment of all other means. Our education and mode of transacting mercantile business, support the same system of selfishness. It is an approved maxim, that secresy is the soul of trade, and each manufacturer and merchant pursues his separate speculation secretly, so that his rivals may know as little as possible of the kind and quantity of goods which he is manufacturing, of the sources whence he draws his materials, or the channels by which he disposes of his produce. The direct advantage of this system is, that it confers a superiority on the man of acute and extensive observation and profound sagacity. He contrives to

penetrate many of the secrets which are attempted, though not very successfully, to be kept; and he directs his own trade and manufacture, not always according to the current in which his neighbours are floating, but rather according to the results which he foresees will take place from the course which they are following; and then the days of their adversity become those of his prosperity. The general effect of the system, however, is that each trader stretches his capital, his credit, his skill, and his industry, to produce the utmost possible quantity of goods, under the idea that the more he manufactures and sells, the more profit he will reap. But as all his neighbours are animated by the same spirit, they manufacture as much as possible also; and none of them know certainly how much the other traders in their own line are producing, or how much of the commodity in which they deal, the public will really want, pay for, and consume, within any specific time. The consequence is, that a superfluity of goods is produced, the market is glutted, prices fall ruinously low, and all the manufacturers who have proceeded on credit, or who have limited capitals, become bankrupt, and the effects of their rash speculations fall on their creditors. They are, however, excluded from trade for a season.—the other manufacturers restrict their operatious.—the operatives are thrown idle, or their wages are greatly reduced: the surplus commodities are at length consumed, demand revives, prices rise, and the same rush towards production again takes place; and thus in all trades the pendulum oscillates, generation after generation, first towards prosperity, then to the equal balance, then towards adversity, -back again to equality, and once more rises to prosperity.

"The ordinary observer perceives in this system what he considers to be the natural, the healthy, and the inevitable play of the constituent elements of human nature. He discovers many advantages attending it, and some evils; but these he regards as inseparable from all that belongs to mortal man. The competition of individual interests, for example, he assures us, keeps the human energies alive, and stimulates all to the highest exercise of the bodily and mental powers; and the result is, that abundance of every article that man needs is poured into the general treasury of civilised life, even to superfluity. We are all interested, he continues, in cheap productions, and although we apparently suffer by an excessive reduction in the prices of our own commodities, the evil is transitory, and the ultimate effect is unmixed good, for all our neighbours are running the same career of over production with ourselves. While we are reducing our shoes to a ruinously low price, the stocking maker is doing the same with his stockings, and the hat maker with his hats; and after we all shall have exchanged article for article, we shall still obtain as many pairs of stockings, and as many hats, for any given quantity of shoes, as ever; so that the real effect of competition is to render the nation richer, to enable it to maintain more inhabitants, or to provide for those it possesses more abundantly, without rendering any individuals poorer. The evils attending the rise and fall of fortune, or the heart-breaking scenes of bankruptcy, and the occasional degradation of one family and elevation of another, they regard as storms in the moral, corresponding to those in the physical world, which, although inconvenient to the individuals whom they overtake, are on the whole, beneficial, by stirring and purifying the atmosphere; and, regarding this life as a mere pilgrimage to a better, they view these incidental misfortunes as means of preparation for a higher sphere.

"This representation has so much of actual truth in it, and such an infinite plausibility, that it is almost adventurous in me to question its soundness; yet I am forced to do so, or to give up my best and brightest hopes of human nature and its destinies. In making these remarks, I blame no individuals. It is the system which I condemn. Individuals are as much controlled by the social system in which they live, as a raft is by the current in which it floats."—Ibid, p. 216.

It is true that society, as at present constituted, is a mere chaos of conflicting interests, born of chance and of selfish instinct, over the surface of which the spirit of reason, directing and arranging each part for the production of the greatest happiness, has never moved. That society should be founded upon laws by which all might live together in the most happy manner possible, has yet to be acknowledged. On the contrary, it has been left to form itself; part has been added to part, as time and circumstances, the increase of mankind, and the formation of section after section, have called for it, -each portion fashioned after the individual interests of class, without any reference to the good of the whole. It has been said, and truly, that "our laws and institutions are not the product of wisdom and virtue, but of modern corruption grafted upon ancient barbarism."* Thus it is we find "all mankind heaped and huddled together, with nothing but a little carpentry or masonry between them; crammed in like salt fish in their barrel; -- or weltering (shall I say?) like an Egyptian pitcher of tamed vipers, each striving to get its head above the rest."† The immutable and resistless laws of nature have, however, been doing their work, and through the all-powerful influences of pleasure and pain, have been pushing man forward in the



^{*} Westminster Review, No. 61.

⁺ Sartor Resartus.

march of improvement, and like the forces which, in the course of many ages, laid stratum upon stratum and prepared the way for sensitive existence upon the earth, have gradually been preparing for the existence of man, not merely as a selfish animal, but in all the capacities of his physical, moral, and intellectual being.

If we trace back the progress of the development of man's resources, we find the foundation of the present social institutions laid at a time when, to prevent him preying upon his fellow like wild beasts upon each other, rights of property were established and maintained by the strong arm of force alone. The greatest want, and therefore the greatest blessing, was security of life and limb; and the institution that could best afford it, was the most desirable. Here then was the foundation of an aristocracy. The leaders chosen to head the different associations of men for their common protection, maintained a kind of security, and "the strong man" was in proportion respected. Kings were at first only the chosen leaders of armies; valour and military skill were the virtues most in request; protection became a profession, and a soldier as the representative of that profession, the most honoured.*

But the power thus necessarily entrusted to an individual, was soon abused, assumed as a right derived from God only, and not from the people, and ultimately became irresponsible. A profession of arms having been established with leaders whose interests were at variance with those of the people, constant wars were necessary to find occupation for such a profession, to promote the individual aggrandizement of the leaders, and maintain the influence they had usurped; and their real motives were concealed under the high-sounding names of Glory, Patriotism, and National Honour.



^{* &}quot;All high titles come hitherto from fighting. Your Herzog (Duke, Dux,) is leader of armies; your Earl (Jarl) is strong man; Marshal, cavalry horseshoer. A Millenium, or reign of Peace and Wisdom, having been prophesied, and becoming daily more and more indubitable, may it not be apprehended that such Fighting titles will cease to be palatable, and new and higher need to be devised?"—Sartor, p. 256.

The power thus yielded by the people to ensure personal security when no better means could be devised, has never yet been recovered. Magna Chartas, Cromwellian Revolutions, Parliamentary Reforms, mark the progress which has been made towards it, and the barriers to liberty that have been removed. The problem to be solved is, how to make perfect liberty compatible with security to life and limb, and the fruits of industry.

In the first stage of society physical prowess was alone regarded; but no sooner were the wild barbarous hordes that founded the present nations of Europe settled down into some quiet, than the influence of mind began to be felt, and then arose the power of the priesthood—a power sufficient, in some measure, to control the license of the feudal lords, and to weaken the arm of violence and blood, which was constantly uplifted in their mutual aggressions, or attacks upon the liberty of neighbouring States.

Oral teaching was then all-important, for when there were few books, and fewer still who could read, it was almost the only means of imparting instruction. The sole possessors and interpreters of the book which was supposed to contain the Revelation of God's Word, claimed and received universal dominion over the multitudes who knew no other source of light and truth; but now that we are furnished with a more ample revelation of His laws unfolded by the experience of ages, and the written means of communicating it to the hearts of all, oral instruction is no longer the only method of making known the law of the Lord, and the more extended knowledge of His will, as revealed in His works.

As other wants of society took shape and form, the class through whom such wants found the means of gratification arose in importance. With personal security and comparative security to property, trade and commerce began to flourish; and however much the pursuits connected with them were at first despised, as the dependence of society upon them for foreign productions, and even the comforts of life, became

recognised, they were first tolerated, and then protected, until an aristocracy of wealth has gradually arisen, which treads closely upon the heels of the aristocracy of birth.

When trade and commerce flourished, and the right of the strongest was no longer admitted, the laws of property became necessarily more complicated; hence a class was called forth for the expounding of those laws, and their administrators rose in proportional importance. On the complexity of the laws depended the necessity for Lawyers,—make the laws plain, their occupation is gone. Consequently the simplest question, in their hands, assumes an intricacy which the strongest uninitiated intellect cannot unravel; and the plainest, most intelligible language of common sense and justice, soon becomes that of an unknown tongue to the people. With truth did Voltaire designate the body of lawyers as "the conservators of ancient barbarous usages."

Thus it appears the right of each class of society to the distinction it claims was based upon utility; but the world is changed, and society pays homage to the shadows of things that were. As each of these leading divisions became necessary to the good of society, its pre-eminence has been acknowledged; and although the wants that gave rise to it may be now reduced in importance, it still maintains its rank in the social scale. With security and peace, the power of man over the earth and its produce has increased, until money, the representative of this produce, has become almost omnipotent. "and whose has sixpence is sovereign, (to the length of sixpence,) over all men; commands cooks to feed him, philosophers to teach him, kings to mount guard over him,-to the length of sixpence." Money, therefore, is the universal want, and respect in proportion is paid to those who have itwith it man is everything, and without it he is nothing.

The Military and fighting age has passed, and protection to property being secured, a Commercial age has commenced. Kings, no longer wanted as military leaders, their power is fast passing over to our commercial leaders. A Constitutional

Sovereign has become a mere abstraction—the embodiment and representative of all the power and dignity of the state; and the Rothschilds and great moneyed men possess the real power in the civilized world.

One class only has not hitherto been duly acknowledgedthe working class; but the signs of the times indicate the approach of a period when it must and will be recognized. "There is, however, something greater in the age than its greatest men; it is the appearance of a new power in the world, the appearance of a multitude of men on that stage, where as yet the few have acted their parts alone."* Money, the representative of all the produce which flows from the labour of the multitude, has been the means of defrauding them of the rights resulting from their real weight and importance; by the help of money the truth has been concealed that everything which gives support, accommodation, and luxury to life, comes through the medium of labour, and the tribute due to the labourers in return has been paid to the god of these latter days-Mammon. They will discover this. Mammon will be undeified and dethroned, the working classes in working for others will also work for themselves, and their claims will be then acknowledged. Yes, "he who first shortened the labour of copyists by device of moveable types, was disbanding hired armies, and cashiering most kings and senates, and erecting a whole new democratic world: he had invented the art of printing."† By its means the people will ultimately become wise enough to take their own concerns into their own keeping, to govern and protect themselves; and present not past utility will be the only acknowledged title to distinction.

The Socialists say that to base society on competition—on individual conflicting interests and opposing objects, was a great mistake; that it ought to be based on Community of interest and Unity of purpose, and that property, therefore, should not belong to individuals, but should be held in trust by society for the benefit of all.

^{*} Dr. Channing's "Present Age." . + Carlyle.

They say it has been well ascertained that each healthy adult individual can produce considerably more than he can consume, if his labour be profitably directed. "Taking the best data that can be had, it appears that the labour of 19 families is required to produce annually 1,160 quarters of all kinds of grain, being at the rate of 61 quarters by each family."* According to this estimate the labour of one family would support about 15, and these 15 families, therefore, might be spared for manufactures. The productive powers of machinery in manufactures are scarcely calculable; in the cotton manufactory, already, one man by this power performs the work of two or three hundred, and the whole mechanical power of the country is estimated at that of 400, according to some of 600, millions of men. This power it is said properly economised, and the produce of it properly distributed, is sufficient to supply all the wants of society. This idea of community of property and interests is not altogether new. To what extent it has been carried out in practice at different periods of the world's history I considered in the Appendix to the 1st Edition of this work. To such a system have the hopes of mankind, during all ages, with more or less distinctness been directed. Sometimes the happy community was to dwell in a millennium of this earth, sometimes in a fellowship of the saints in heaven—the poet dreamed of it in the golden age—the philosopher in his Republic, -his Atlantis, his Utopia. Amidst all the draperies of fancy and fable which have clothed the vision, it still stands forth, a living form-a type of the future brotherhood of man.

The change contemplated it is said would render it unnecessary for the workman to sell his share of what his labour produces for less than it is worth; it would give capital the most profitable direction towards further production, and cause machinery to work for the labourer, never against him.

These objects could only be effected by the re-union of capital and labour—by the labourer himself becoming a capi-

^{*} Porter, vol. 1, p. 59.

talist, and the owner of the machinery with which he produces. It is proposed, therefore, that the working men should be encouraged and assisted to unite together in associations or communities, upon the principle of Joint-stock Companies, in such numbers as convenience may dictate, for the production and equal distribution of all the necessaries and comforts of life.

The capital of these associations would consist of sums contributed by each member, the produce of his own savings, or furnished by capitalists, who, from motives of benevolence or interest, should lend their aid to the undertaking. This joint capital would be laid out in the purchase of land, the building of houses and manufactories, and the furnishing of agricultural stock, machinery, and raw material. Or, all this might be done by a company of capitalists, and then let to the members of the association, at such a rental as should pay the interest and profit on the capital, allowing them the right of future purchase.

All trades and professions that had for their object the supply of the necessaries and most essential comforts of life, would be comprised within the community, so that all of which the particular locality would admit, would be produced upon the spot. A staple manufactory would also be established in each, the produce of which would be sold to furnish the means of procuring such articles of foreign growth as are indispensable to comfort.

A Governor or Board of Directors would require to be chosen by the members themselves, whose office it would be to provide that each should be employed in that occupation for which nature or education had best fitted him. The joint produce, or, at least, the greater part of it, would be common property, and used by the Directors to furnish to all the largest amount of comfort and enjoyment to which it could be adequate, allowing luxuries to none until necessaries were afforded to all. The co-operation required would be voluntary; the right to private property being given up to the community by

the individual himself, in consideration of receiving a greater advantage in return than he could gain by any other investment. It is no part of the proposed plan to interfere with either the rights or security of the property of others as now established.

I shall state what has been said for the proposed Social change, and also what has been said against it. First, then, as to the economy of such an arrangement. We know that the members of a large family, whose funds would not allow of their keeping separate establishments, will find their incomes, when united, amply sufficient to maintain them in one; and it is accordingly inferred that by means of combination the artizan's pound a-week might be made to furnish him with comforts that would otherwise require many pounds to purchase, and that for the small and ill-built house, might be substituted large and commodious apartments. The household arrangements would be those of a large family, whose members would be equally furnished with comforts in proportion to the amount of the common fund. The great amount of labour now wasted in individual establishments would thus be placed at liberty. In the department of cookery, for instance, there is no doubt that labour and expense would be much economized if the food of a multitude of persons could be prepared at one fire, and by means of the same apparatus: and it is well known that the fires which are necessary to warm one large house, might, by proper management, be made to warm those of a whole community. The same principle would hold good with most of the other items of domestic economy. But although kitchens, dining-rooms, drawing-rooms, reading-rooms, lecture-rooms, gardens, would be in common for all who chose to make use of them, upon the plan of clubs in London and elsewhere, solitude need not be denied to the lovers of solitude; on the contrary, to each might be secured private apartments, and, with the means of perfect seclusion, all the advantages that solitary individual arrangements could possibly furnish.

Another great saving would arise from the conversion of unproductive labourers into producers. We have seen how very large a portion of the products of labour, under the present system, go to the non-producer in the shape of profits to the retail traders, manufacturers, merchants, land-owners, and land-occupiers: almost all of which would be saved under the proposed arrangements. The division into masters and workmen, manufacturers and operatives, would no longer exist; and as a single store of the requisite articles of consumption would perhaps be sufficient for a whole society, the profits of retailers would not only be saved, but the retailers themselves would be employed in production; and as the persons engaged in that department of industry constitute a fourth of the whole population, an immense mass of labour would thus be liberated; -liberated, too, from an employment as degrading under the present system as it would be unnecessary under the other.

One of the great advantages of the plan proposed would be, that all the labour that could be set free, would be so much gain to the whole community; since, as all in the capacity of joint proprietors would receive a just proportion of the produce, any improvement in machinery which would enable them to do ten or twenty times the work in a given time, would be a common benefit; when the stores were full, they might cease to labour without being starved.

By this means the use of machinery would become at once a direct blessing to mankind. The enormous power generated by steam machinery during the last forty years, if it has cheapened produce, has rather tended to increase manual labour, than to furnish leisure for the development of the moral and intellectual powers of the labourer. Let machinery receive its proper direction, and it will be found that manufactured produce is limited only by the will of man, and by the capability of earth to supply raw material: machinery being a servant that never tires, that consumes but little, and whose powers may be multiplied almost to infinity.



The fruits of machinery are now wasted in an unproductive foreign commerce of luxuries, and in setting the people to work upon useless, worse than useless employments, while hundreds of thousands want the comforts of life at home. It must never be forgotten that "labour was the first price, the original purchase-money that was paid for all things. It was not, and is not, by gold or by silver, but by labour that all the wealth of the world was originally produced." No factitious or artificial want can be indulged without causing extra labour to some member of the community; we can make use of nothing that has not cost labour in its production; and that this labour is necessary to the support of the workman, and is therefore thought a blessing, is the pernicious consequence of the present law of distribution.

A state of society such as we are contemplating of cooperation for mutual interests, where all should be proprietors, and where all should share the labour required for everything produced, would in all probability soon change all this, and introduce a new standard of wants. At least onethird of the labour employed in Britain is wasted in supplying artificial and factitious desires; but the vanity of the absurd distinctions which now characterise society, would soon be seen and felt, when it was found that to furnish them required the extra two or three hours' labour per day of each member of the society. Neither, for the same reason, would idle servants or useless horses be maintained. The standard of utility would supplant that of caprice and fashion; and as useless articles of luxury and vanity would no longer be an indication of the extent of private property, or marks of superiority, being possessed by all if by any, they would no longer be desired, and distinction would be sought where alone it ought ever to be found, in useful and ennobling qualities. Food, lodging, and clothing, with everything that tended to produce sound health, would first be secured as the necessary foundations of all happiness, and until these were obtained for all, luxuries would be permitted to none. All artificial wants would give place to real ones, and those the most essential and the least costly would be first attended to; and although foreign markets might still be desirable for the sale of home manufactures and the supply of foreign produce, yet as everything indispensable to life and comfort would be furnished to all without aid from abroad, men would be virtually independent of all such markets, if deprived by any unforeseen circumstances of them. It is as injurious to the interests of a town like Manchester to cut off its supply of cotton from abroad, or its markets for the sale of such cotton when manufactured, as to deprive it directly of its supply of corn, either by home scarcity or foreign enmity.

When all possible physical wants, comforts, and conveniences had been supplied, when all the high and ennobling pleasures derivable from our moral and intellectual nature had been provided for, then, and then only, the labour of society, if it were to spare, might be employed in the acquisition of comparatively modern luxuries and ornaments.

The means of gratifying the wants of that part of his nature, which peculiarly distinguishes man, are to be acquired at little expense of labour either to himself or others. On every page of the book of nature the progress of science has written something deserving his attention, and the beauties and wonders which she opens to his view may well compensate for the childish and costly pursuits that now occupy him. A flower may come to be esteemed more highly than a diamond, and a more becoming ornament than pearls; since these latter, however beautiful, cost more labour than society will be willing to bestow in exchange for them.

If we, therefore, calculate the saving of labour that would be effected by the introduction of such a system of society, from all the above-mentioned sources, it will be found to be of immense amount, and sufficient, properly employed, to furnish not only necessary comforts to the working classes, but ample time for intellectual and moral enjoyment. There would be the saving from all household arrangements being in common, instead of individual family establishments; of the profits of manufacturers, merchants, and retailers, and of the enormous expense to which it is now the fashion to go in retailing; of much of the carriage and expense of conveyance of goods, as more things would be produced and consumed on the spot; of the maintenance of the unemployed and half-employed labourers who are without work from the various causes that so frequently disturb our artificial system; and lastly, and above all, from the release of the labour that is now uselessly and perniciously engaged in gratifying the artificial wants of the rich, and the employment of that labour for the good of the whole community.

So far, then, for the economical arrangements, for the saving of labour. With respect to the *direct* production of wealth: the universal diffusion of the appropriate knowledge, and the absence of all selfish impediments, with unity of purpose in production, might equal, if not exceed, the present results of competition.

Again. Would Socialism afford equal facilities for obedience to the Physical, Organic, and Moral Laws?

A community such as we are contemplating must be regarded as one large family, each member being dependent upon the labour, and, therefore, the health and strength of all: the strongest possible inducement is thus held out for the making of all its arrangements in harmony with those laws upon which health and strength of body are dependent; and for the adoption of all plans by which labour may be shortened. The medical functionaries of such an establishment would have an interest in keeping every one in good health, not, as now, depending upon the want of health of the community for subsistence; they would be anxious to make known, and to teach every one to avoid all causes of ill health; and to this end every one would be made intimately acquainted with the structure and functions of his own body, and the relation of everything around him to his well-being. The best arrangements for the preservation of health, which the knowledge yet acquired could suggest, would be adopted in all buildings,

sitting and sleeping rooms, factories, workshops, &c. The greatest attention would be paid to warming, ventilation, and cleanliness; to clothing, diet, and all circumstances upon which physical welfare depends; for the illness of a member would be the loss of his share of labour to the community. Among parties co-operating for mutual interest, this care would be possible; in choosing their site for building, they would determine upon a healthy and convenient spot. How little care is now taken of the health and comfort of the poor in this respect! In passing through the country, it must strike all who observe how little mutual accommodation, how little regard to others' interests is shown in every pile of building that meets the eye. The situation of each is dictated by individual caprice, with no regard to the laws of health; and we are irresistibly compelled to wonder at the Power which could make a piece of mechanism so delicate as that of man, capable of withstanding, in any degree, so many deleterious influences. In manufacturing cities, the dwellings of the poor are still worse-crowded together in courts and alleys, the sitting room and sleeping room frequently the same -small, dirty, unventilated, ill-constructed, and ill-drained, can we wonder that health is not often found there? A complete change would be effected as regards these evils, since agriculture would be made in all cases the basis of the prosperity of the members. All males would be employed, at least part of their time, upon the land in producing at home whatever the soil and climate would permit. The advantages of country and town residence would thus be gained, and, without losing those that are derived from the division of labour, agricultural and manufacturing labour would be united. No man would be kept for ten or twelve hours together in one dull. monotonous, soul-destroying employment, but labour would be so blended as to ensure the largest return of health and happiness.

We now find a great disregard of the organic laws among the poor, both from ignorance, and from an utter inability, in those who have more knowledge, to help themselves; and who, now, has any interest in altering the state of things? All are disunited, isolated, individualized, competing with each other; not as members of one family, working—pulling—together. The slaveowner has an interest in the health and physical well-being of his slaves, the capitalist has the same in that of his horses and dogs; but if his workman dies it makes little difference, since his place is soon supplied in the labour-market. But under a system in which all were made to feel immediately and directly the suffering of any individual member, everything that tends to improve the race,—to increase its health, and strength, and beauty,—to perfect the bodily and mental faculties, would be the subject of inquiry and deep interest.

The laws of the hereditary descent of the qualities of body and mind have, up to the present time, been deemed worthy of application only to the brute creation—to horses, dogs, and cattle: vet if we would regulate the influences upon which the possession of "a sound mind in a sound body" depends, we must begin before birth. In health alone is comprehended the "possibility of every exertion we wish to make-every virtue to which we aspire—every happiness we would possess;" and yet no care is taken by parents to fulfil those conditions which are essential to a perfectly healthy constitution, and the seeds of disease, mental and bodily, are born with most of us. license of a Clergyman or of a Registrar is deemed an allsufficient warrant for handing down to posterity every disease of body, and weakness of mind. The character of man, and the happiness dependent upon it, result from the original constitution derived from his parents, and the circumstances in which he is placed; but no after-circumstances can overcome the effects of an originally defective constitution. An American writer says, "The disregard and ignorance of the laws of human organization manifested in the transmission of disease to posterity, deserve the severest censure. While parents will spare neither labour and toil of body, nor care and anxiety of mind, to accumulate and bequeath princely fortunes to their

children, they little think, perchance, of the germs of disease entailed upon them. * * May the day be not far distant when a sound and vigorous constitution shall be esteemed the richest legacy that ancestors can bequeath to their posterity."* In the transmission of consumption and madness, the law is acknowledged, but little regarded; passion, and interested worldly motives, are sufficient to throw into the shade all moral considerations of the consequences to others. Not only in these more striking instances do we behold the truth exemplified, but in large classes everywhere around us, whose physical condition, every physiologist will acknowledge, is far below what it might have been if this law had been obeyed. "Wherever we turn our eyes on the crowd of life," says a writer of large experience, "we see human beings falling a sacrifice from their early years, all through their career up to old age, to causes of premature death which seem to be unavoidable; and a truly natural decay is a rare occurrence."

Mind, too, dependent upon organization, owes its health and vigour and capacity, or its weakness and inefficiency, to parents, and the laws regulating the transmission of mental qualities are deserving of the most careful attention as intimately connected with our highest happiness. Let but the same care be given to man which is now bestowed upon the brute creation, and a constitution approaching more and more to perfection, might be imparted to each successive generation. In a state in which it would be for the interest comfort and happiness of all, that each member should possess an originally sound and vigorous constitution, no pains would be thought too great to ensure it. The voice of public opinion would be loud against all unions that had an opposite tendency. Marriages would be dictated by different and higher motives than those which now cause the union of the majority of man-Worldly circumstances, which, from the highest to the lowest, are too frequently the motives to such connexions,

[•] American Phrenological Journal, No. 3.

rather than suitable mental and bodily qualifications, could have no influence in a state of society where all would be equal, and no motives but mutual affection could have place.

The present system of competition is founded upon the predominance of the selfish and animal principles of our nature; each is left to take care of himself, and if he cannot do that the world has no place for him. There is no cooperation for the good of all; each class, each family, each individual, has interests at variance with those of his neighbours. The lawyer has an interest in the promotion of civil strife; the medical practitioner in the increase of disease; the clergyman, the soldier, the placeman, desire the death of their superiors, that they may obtain preferment,—the young that of the old, that they may inherit their riches, their honours. Capitalist competes with capitalist, workman with workman, retailer with retailer; and in this contest, not for happiness but for support, and for the means of rising each above his neighbour, every sound moral feeling is vitiated, every dissocial impulse called into habitual activity, and multitudes driven to madness and despair, sink in the worldly strife.

The right of the strongest, in body, to deprive his neighbour of his share of the common bounties of Providence is no longer acknowledged, but the right of the strongest in mind is still maintained; the weak, for no fault but that he is weak, is trampled into the earth, and deprived of his share of the common stock in the general scramble. In the present competition for wealth, not only can the rich oppress the poor, but the strong-minded can legally take the portion of his weaker brother. Men, it is true, do not, like the beasts of the desert, devour one another; but they do that which is worse—they devour each other's substance, and leave famine and misery to finish the work.

In a state of society like this, say the advocates of "The New Moral World," the law of universal brotherhood is inoperative, the moral law is impracticable, and man might as well make all his physical arrangements at variance with the law of

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gravitation, as expect to find happiness with all his institutions so opposed to the moral law. But society based upon the principle they propose reconciles all conflicting forces and unites the interests of all. The members would be as one family, each bringing what he possessed to the common stock for the general good; each employing the talents with which Nature had endowed him, not for his own personal advancement, but for the good of all. Are any strong in mind or body, they owe it to God and not to themselves; for so far as merit is concerned, the doctrine of necessity shows us all to be equal; they will therefore share their strength with the weak. God has said, "Thou shalt love thy neighbour as thyself;" and if He has given to one advantages more than to his fellows, it was that he might be the instrument of communicating them, and he will look for a higher reward than that which society now offers to him-individual advancement -in the reflection of the happiness which his extra endowments enable him to confer upon others. All, then, would be employed according to the talents, physical, moral, or intellectual, with which nature and education had furnished them, and all would share alike the fruits of such labour; the weak would be assisted by the strong, the sick by the healthy, the old by the young. The idle could not continue idle where all others were industrious, nor the vicious continue vicious in an atmosphere of morality. Offences against property must cease when all were joint proprietors, and "envy, hatred, malice, and all uncharitableness," would disappear with this strife of competition for individual advancement and enrichment.

Here, they say, would be "a wise disposal of all the circumstances that influence character, and of the means of producing those habitual dispositions which ensure well-doing." Every bodily and mental faculty would receive proper direction and exercise, and all that knowledge and attention could do, would be done to bring such faculties to perfection. The young would early be taught the principles upon which the good of the community depends, and all instruction would be made to

bear upon this, the most essential point; above all, they would be taught that they were children of the community, that they were all one family, and that the duty of love is to all, not merely to those who are parents, or brothers and sisters, by blood, and consequently that all their bodily and mental endowments were due to the service of all. Virtuous dispositions, habits, and feelings, would be the first developed, and consequently the intellectual and moral faculties would almost naturally take their rightful ascendance over the lower feelings, and the happiness of the individual would result from well-directed efforts for the general good.

That this should be the case now, it is said, is impossible, unless the laws of nature should be reversed and the same causes produce different effects. The strength and activity of a feeling is in proportion to the exercise it receives. The selfish feelings are now most exercised, because each individual is obliged to take care of himself; therefore they are too often predominant. The law of love may be preached, and the innate depravity of human nature pointed to as the cause of the inefficiency of such preaching; but Mr. Combe observes truly, that "if a constant struggle for supremacy in wealth and station be unavoidable among men, it is clearly impossible for us to obey such precepts, which must therefore be as little adapted to our nature and condition, as the command to love and protect poultry, but never to eat them, would be to that of the fox."*

Such then is said to be the Social Reform needed, such the means by which the Socialists propose to bring about the amelioration of the condition of the people. This alone, they say, strikes at the root of all the evils that now beset us—poverty, ignorance, crime, the toiling anxiety of the millions; and that if we examine the registers of crime, we shall find that the causes of most of the offences committed against property are poverty and ignorance. The offences that are not punishable by the criminal code—ill-will, suspicion, jealousy, mis-

^{*} Moral Philosophy.

trust, unfairness, covetousness, are no less the produce of competition for individual advantages.

The way in which people will permanently act depends more upon their organizations, than upon either their opinions or the circumstances in which they are placed, and the state of society we have been contemplating would depend, therefore, for its success upon a predominance of the unselfish feelings. If even in a majority of the members of such a society the unselfish feelings were naturally in the ascendant, it might succeed; if otherwise, in our opinion, it must fail. But we shall consider the objections that have been made to Socialism more in detail.

Perhaps the objection that has most weight with those who have given most attention to the subject is founded upon that axiom of the political economists before alluded to, that "capital has a less tendency to increase than population; and that forcible means employed to make capital increase faster than its natural tendency, would not produce desirable effects." If all were placed in a state of physical comfort, if the natural checks upon population, of want, misery, ignorance, and crime, were withdrawn, numbers, it is imagined, would soon overflow beyond all power of capital to provide for them. founded upon the supposition, that land would give less and less return to the labour and capital bestowed upon it, that it would ultimately be impoverished, and, that therefore the much-increased population would necessarily be reduced to great poverty and distress, and ultimately starve. The hypothesis of Mr. Malthus is, that population has a tendency to increase in geometrical progression, while subsistence can only be made to increase in arithmetical progression; but Mr. Alison, in his work on Population, says, "there is no instance in the history of the world of a country being peopled to its utmost limits, or of the multiplication of the species being checked by the impossibility of extracting an increased produce from the soil;" and that "the true question on which mankind is really interested is very different: that the main point in civilized

society is not what are the productive powers of nature in the soil, but what are the means that the human race have "for getting at these powers, and rendering them available for general happiness."* The Earl of Lauderdale calculated that a farm containing 504 statute acres would, under proper management, produce sufficient food for the maintenance of 1,977 people; and, consequently, that 9,000,000 of people would require only 2,412,746 acres for their support. In that case England would support 180,000,000 of souls. annually under cultivation for wheat in England and Wales is but 3,800,000 acres,† and yet this, in years of ordinary plenty, supplies the whole population of Great Britain. In six bushels of wheat there are 280lbs. of fine flour, without including the coarser sort, bran and waste; this is equal to 373 lbs. per quarter. Every 14lbs. of flour make 18 lbs. of bread. The average produce of wheat, as given by M'Culloch, is 31 quarters per acre, which would give 1,556 lbs. of bread per acre. This would allow 1 lb. per day to 41 persons throughout the year. If a third of the land in Great Britain were under cultivation annually for wheat, although this is perhaps more than is possible, it would allow 1 lb. of bread daily to three times the present population. But some land will produce six quarters per acre; and by an improved system of cultivation, most land might be made equally productive, and this again would nearly double the population that could be supported.

Still, Mr. Mill truly says, "If all the instruments of production were held in joint property by the whole people, and the produce divided with perfect equality among them, and if in a society thus constituted, industry were as energetic and the produce as ample as at present, there would be enough to make all the existing population extremely comfortable; but when that population had doubled itself, as, with the existing habits of the people, under such an encouragement, it undoubtedly would, in little more than twenty years, what would



^{*} Alison, vol. 2, p. 473; vol. 1, p. 77. + See M'Culloch.

then be their condition? Unless the arts of production were in the same time improved in so unexampled a degree as to double the productive power of labour—the inferior soils which must be resorted to, and the more laborious and scantily remunerative cultivation which must be employed on the superior soils, to procure food for so much larger a population, would, by an insuperable necessity, render every individual in the community poorer than before. If the population continued to increase at the same rate, a time would soon arrive when no one would have more than mere necessaries. and, soon after, a time when no one would have a sufficiency of those, and the further increase of population would be arrested by death." That is, it would be arrested by death if the natural tendency of the population to increase, if "the existing habits of the people," were to continue, but would it be so? Would an educated and enlightened population, such as the new system would produce, who had tasted the sweets of plenty, and all the refined advantages which such plenty could bestow, allow of increase to its numbers beyond the point at which such a state could be maintained? Would all other advantages be sacrificed to that of increase without restriction? Among men alone, and men of cultivated moral and reasoning powers, is the increase of population not to be limited to the means of support? If we were to permit the brute creation under our charge to multiply past our means of keeping them. so that they should perish for want, would not the immorality of it be sufficiently glaring?

The Shaker communities, under the influence of superstition alone, and not of reason, adopt the children of others, and have none of their own; and under a system of community of interests public opinion, on this question of the rate of desirable increase, would soon become omnipotent. Now, as Mill says, "one of the most binding of all obligations, that of not bringing children into the world unless they can be maintained in comforts, and brought up with a likelihood of its continuance, is both disregarded in practice, and made light of in theory in a manner disgraceful to human intelligence."

But it is said community of property would destroy, or at least weaken, the motives to exertion, and consequently impede the progress of improvement: without individual reward there would be no individual efforts; unless each could appropriate to himself the fruits of his labour, he would not labour.

It is replied, it is very true that men would not labour unless they could enjoy the fruits of their labour, if they were not compelled, as at present, by dire necessity and the fear of starvation; but a community of interests does not suppose an annihilation of interests; on the contrary, it proposes that each shall receive the full reward of his labour, and if he shall find that by allowing it to form part of the common stock, all the advantages to be derived from that produce will be greatly increased, he will be most willing that it should be so. The real reward of labour is not individual property, but the comforts, conveniences, and enjoyments which that property will furnish. If men will labour incessantly for the few necessaries that labour will now procure, would there not be an extra motive to exertion when they found that they were working to enrich, not a master, but themselves; that every effort added something to their capital, and produced an adequate reward?

It is found that in those countries where, from advantages of climate or other causes, the necessaries of life are easily attainable, lodging and clothing of the slightest kind being sufficient, and simple vegetable food being produced without much labour, that the people advance but very slowly in civilization, and rise but little above the mere animal state. "Necessity is the mother of invention;" and in the early stages of society, whether exhibited in the past or present history of the world, when the physical wants of man were gratified, there was nothing left to set him in motion, to ensure healthy activity of mind and body.

This it is admitted is quite true, and until moral and intellectual tastes have been developed it is not desirable that

the physical requirements of man should be too easily supplied; additional leisure would be wasted in mere animal pursuits and pleasures. If the majority of the working class were at present suddenly relieved from half their labour,—if their wages were at once to be doubled, it is to be feared it would be greatly to their own injury and to that of so iety; for they have as yet no tastes upon which such time and money could be harmlessly expended. Ill-educated as they now are, the strong bond of physical necessity seems still to be required, to keep all in their places and to maintain the order and peace of society. A modification of the community principle, such as we have already considered, would give time for the exercise of all their faculties, and only remove the physical necessity to labour, so far as higher motives to exertion and more refined tastes should render it desirable.

The present motives to exertion are, on the part of the majority, physical want; on that of the minority, for the most part, individual advancement and personal distinction (including a man's family always in the sphere of self;) it must be granted, therefore, that the change proposed would weaken and ultimately destroy such motives to exertion; but as it would replace them with higher motives, equally strong, it would not impede, but accelerate the progress of improvement. Such motives, however, would probably not induce to the production of all the luxuries which to the higher orders may now seem indispensable; but luxurious indulgences are opposed to the highest virtue: a habit of self-denial in little things is necessary to keep the mind in the most healthy state? "A scrip with fruits and herbs supplied, and water from the spring," may be rather too poetical a limitation of our physical wants, but it may possibly be found that the standard of physical indulgence is now placed too high to coincide with that of the greatest happiness.

But it may be asked, would there be sufficient inducement to perform all the disagreeable offices and duties which society now requires to be fulfilled, since in a state in which all were equal, no one could expect another to do that which he was unwilling to do himself? At present there is no office, however laborious and disagreeable, which, if a mere living is to be gained by it, numberless applicants are not anxious to undertake. The present system seems as much opposed to a vacuum in the labour-market as nature was thought to be to one in the physical world. The necessity that so large a portion of the population is under to find employment, even to live, fills up every channel for labour with the divisibility of a fluid, and force of a hydraulic press, developing every latent power, energy, and resource of man's nature. He labours in the dark mine, and in the sulphurous breath of the fiery furnace, -he works with the fine thread of silk, emulating the spider in the nicety of her touch,—he searches the deep, and exposes himself to every variety of temperature in the frigid and torrid zones,—he braves all the dangers of tempests by sea, and of perils by land,—in fact, bond slaves, or slaves of necessity, society has always required for it "hewers of wood and drawers of water," and can their place be supplied in a society where all are free? When the object is to save labour, not to create it, much that is now done by hand will be executed by machinery. There are very few useful occupations degrading in themselves, or in which some superior minds have not been at some time or other engaged, or in which any person could reasonably object to be employed for a short period of the day or of life; but if any such there were, and necessary to the well-being of the community, its master minds would be turned towards inventions and expedients for shortening such labour, or for making the steam-engine take the place of man.

The advocates of the change of system say that the end proposed by the present system is *production*, without reference to either the good of the producers, or to that distribution of the produce which shall create the greatest sum of enjoyment. The "superior wealth" of such a state, they say, is the superior wealth of a few, realised at the expense of the superior industry, which means the *over work* of the many. "Efforts

to place ourselves on a level with the great landed proprietors, and those who give the tone to society in all that regards expense," "the desire to improve our condition and mount in the scale of society," by the acquisition of wealth, is supposed to be the source of all that is great and elevated!

But can a sufficiently strong motive for exertion be found, when this of personal distinction from individual property is annihilated? When all are equal with respect to property, what then shall raise one man above another-how shall he distinguish himself? It is replied that mental and moral excellence will alone open the path to eminence. The desire of distinction, one of the strongest feelings of our nature, will no longer be associated with pride of caste, of family, of wealth, of establishment, of equipage, or of personal decoration, but it will take the direction of the higher sentiments, of the moral and intellectual faculties; each will endeavour to excel in what is intrinsically good, in everything that can add to the happiness of all; and he who is most forward in the march of improvement will reap the meed of honour. It is impossible, it is said, sufficiently to appreciate the effects of such a change; if our present position in civilization is the result of a limited education upon the minds of a few, what would be the effect produced if all should receive the best possible education, and all talent be turned towards the advancement of the general welfare?* Each would receive his reward—the only reward the great and good ever covet,-in the consciousness of the happiness he would be the means of bestowing on all around, and in the

[&]quot;" More discoveries (says Dr. M'Culloch, speaking of Mechanics' Institutions,) will be made, according to the degree in which more individuals are placed in a situation to make them. And it is neither impossible nor at all improbable that the lustre that now attaches to the name of Arkwright and Watt, may be dimmed, though it can never be wholly effaced, by the more numerous and perhaps more important discoveries, that will at no distant period be made by those who have passed from the cradle to the tomb, in the same obscure and beaten track that had been trodden by their unambitious ancestors, had not the education now so generally diffused, served to elicit and ripen the seeds of genius, implanted in them for the general advantage of mankind."—Dr. Cooper's Political Economy, p. 299.

respect and distinction that must always follow when every one is valued in proportion to the happiness he communicates.

The reason why the discoverers of new truths—they who by their writings and inventions have shown themselves in advance of their kind, so seldom meet with a due appreciation until such appreciation comes too late to be of service to them, and why their reward is confined to their own breasts, in philanthropic feeling and consciousness of successful talent, is, that individual interests are everywhere mixed up with prevailing errors, and are concerned in maintaining them. There is no error however great, no abuse however monstrous, but the interests of some are involved in it, and in the selfish clamour of these against all improvement we find the cause of the so frequent ill-requital of talent. But when all interests are one, when all know that suffering proceeds principally from error, truth will be loved for its own sake, and the elicitation of a new truth will be an indisputable claim to distinction. When the advantage of no party is connected with error, when it is not how a question affects the interests of the Church, or of the Law, or of the Medical Profession, or of the Government, or of the Aristocracy, or of any of the other separate and frequently conflicting interests into which society is now divided, but how it affects the interests of all,—then alone will truth be fairly discussed.

There are few questions bearing directly upon the welfare of man that may not be subjected to the test of experiment,—a truth which, although acknowledged in physical, has still to be recognised in moral science. Morality is, however, a no less inductive science than Chemistry or Medicine, and when taken from the guardianship of a class who have reduced its most important precepts to their own low standard, it will assume all the importance of a regular science, the inductions of which may, as in all other cases, be subjected to the test of experience. Morality we have defined to be the science which teaches men to live together in the most happy manner possible; but mankind are still undecided, except on a few obvious

points, as to its leading axioms. They agree that they should do no murder, that they should not steal, nor bear false witness, nor break through a few other positive precepts; but upon most of the questions bearing upon the happiness of man, their opinions differ, being borrowed generally from those of the class or caste in which they have been educated, and partaking of all the various degrees of latitude from the Quaker's to the soldier's, from those of the Radical to those of the ultra Tory. If freed from the trammels of interested motives, these questions could all soon be decided by experience, as questions of family economy are now decided.

It has also been objected to communities of united interests that they would tend to engender too great an uniformity of character, thus doing away with the variety on which happiness so much depends. Uniformity in all good feelings might be the result of such associations, but the difference in intellectual faculties would be as the vast variety of directions to which they would be turned. Character depends upon organization as well as upon surrounding circumstances, and the organization of an individual depends very much upon the predominant faculties (predominant in activity) of the parents; and the faculties that should predominate in activity in the parents would depend upon their leading pursuits. All the differences in character, therefore, that could be desirable would exist, for each mind would take a peculiar bent from its own peculiar combination of intellectual powers and the different pursuits to which this would lead.

Such is a brief sketch of the principles upon which Socialism is founded.

Is the change in the constitution of society, which is thus contemplated, to be considered as anything but the dream of philanthropy,—is it, or any part of it, really practicable? Experience has shown us that all great revolutions, to be permanent and efficacious, must be the produce of time; they cannot be brought about suddenly; for as the body changes its parts gradually, in the process of waste and reproduction,

so also the mind requires to undergo a similarly gradual process in any great alteration of feeling and opinion. Use and education have made the present form of society so familiar that we are even unconscious of the restraints to which it subjects us; we are familiarized to our bonds until we fancy ourselves at perfect liberty, and have not even a wish to be released. every restraint imposed by a new social state would be galling because not customary, and we should appear to lose liberty when even we were gaining it. The greater part of the actions of even the most intelligent are automatic, and the number of these increase with the diminution of intelligence, so that the most necessary thing for those classes who have at present the least cultivation of intellect is an established and authorized form of proceeding. It is impossible to go into the world and see the ignorance and physical destitution of the mass, the gross selfishness of the middle and upper classes, without receiving the conviction that a complete social change, such as we have sketched, is, in the present state of feeling, quite impossible. The minds of the existing generation are formed upon an entirely different model to that which will be required for society upon the new principle. Whether we go into town or country, we must be struck with the fact that there is scarcely a single person with whom we meet who would be a fit member. Individual efforts to procure wealth and aggrandizement are reckoned among the first virtues, and the man who can accumulate the largest amount of the blessings intended for all is most respected by mankind.

Consequently all attempts to bring the principles of Socialism into practice have hitherto failed. The fear of want or actual hunger now keeps every one moving and in their place, and the sense of duty is not yet strong enough to insist upon obedience as those feelings do. As we said before, when the moral nature shall be fully developed,—when a man's desire to do right is as strong as his propensities now are,—when he is as much pinched by his conscience if he neglects to do right, as he now is by his stomach if he neglects to work for his living, Socialism may become possible: but not before.*

The system we have been examining contemplates community of property, with an equal division of the produce of labour, and which originated in and is confined to England; but there are many forms of Communism which do not go this length, and are therefore more in harmony with the present feeling of society. In France, after the failure of the fanatical attempts of Babeuf, which formed the first phase of French Communism, the question of a re-organization of society in favour of the industrial classes, was first revived, in a more sober and philosophic spirit, by St. Simon. The first work of his which drew any attention was published in 1814; but, though he won many young and ardent disciples, some of whom have since distinguished themselves among the first writers and thinkers of the age, his doctrines made little impression on the general mind, up to the time of his death, in 1825. The leading tenets of St. Simon, as taught by himself, and expounded by his able and conscientious follower Bazard, were briefly these: - In a rightly-constituted state of society, the interests of the industrial class, the workers, who are the true vital system of the social body, must take the highest rank. To this end a new regulating principle must be applied to industrial occupations; individual interest must no longer be the sole arbitrator between production and consumption. Industry must be organized, so as to secure to talent, skill, and labour the right application and their just reward. This task must be consigned to the State or Government, which is to be regarded as the presiding intellect of the social body. The Government is to assume the form of a system of Banks, which are to spread their ramifications over the whole country.



^{*} I must confess that the great objection to Socialism, if not the insuperable one, appears to me to be the sacrifice of individual liberty which it would seem to entail. No one likes to feel that he cannot on all occasions do as he pleases, or likes to give another the right to find fault with him. This objection may not apply with equal force to the great majority who now have a master, or, still worse, who are slaves to the mere necessities of living.

Banks are to be the depository of the entire productive fund. which is to be distributed in accordance with the fundamental maxim of St. Simon's theory:-"To each according to his capacity, to every capacity according to its work." Privileged idleness must no longer be tolerated; the vicious son is not to inherit the gains of the laborious father; no votaries of luxury must be allowed to divert industry from its true office-that of administering to the wants of the many. General education on scientific principles, by which the true capabilities of each may be elicited, is at once the essential condition to the full development of this new social state, and one of its most important elements. St. Simon held that his views derived their highest sanction from Christianity, which, in the command, "Love as brethren," implies the principle of social equality, and binds us to use the most earnest care for the welfare of the poorest and most numerous class.

Another modification of Communism, cotemporary in its promulgation with that of St. Simon, is the system of Charles Fourier. Impressed with the conviction that under the present system of family isolation and competition, the bulk of mankind must inevitably be condemned to moral debasement and physical privation, Fourier devoted his genius and enthusiasm to the discovery of a scheme of association which, by its organization of labour, should at once increase and economise produce, and secure to each member of the community the thorough development and gratification of his faculties. proposed that by a voluntary contribution of capital, Phalanstères, or symmetrical structures, should be erected, containing private dwellings and public Institutions for a Phalange, or associated community, consisting of sixteen or eighteen hundred To each Phalaustère he proposed to assign about nine square miles of land, to be cultivated for the common good. The industrial occupations of the Phalange are to be divided into series of classes, as household, culture, fabrication, science, the fine arts, &c., and these classes are again and again subdivided, until we come to the special varieties of labour, which

are performed by groups of seven to nine members. means every variety of taste and character will find satisfaction and suitable employment, since each member may range himself by turns in a number of groups and series, and so obtain an alternation of labour. Thus every faculty will be developed and applied, while bodily health and mental elasticity will be preserved. Education is to be given to every child in the community in accordance with this plan of varied exercise and development. The right of property in the land is to consist in transmissible and heritable shares, and every member of the Phalange will remain personal possessor of the capital which he has deposited or earned, his share in consumption being determined by his contribution of capital, labour, and talent. Thus Fourier regarded inequalities of possession and rank as a necessary element in his new form of society. His system, therefore, does not contemplate the abolition of private property; but takes into consideration, in the distribution of the produce, capital as well as labour. When his system of association should be established, he conceived that there would be an exchange of productions between the various communities, and that works of common interest, such as roads, mining operations, &c., would be effected by their combined effort. Fourier, like St. Simon, won some distinguished disciples, who have been more successful than their master in adapting his ideas to the reception of the many. Through their efforts, his system has taken a new and more practical form, and has been widely disseminated by numerous Societies and an extensive literature, consisting both of independent works and periodicals.

To those who have carefully considered what may be done by order and combination, the whole world of work seems at present an enormous chaos of powers working blindly on, undirected to any general object by unity of purpose,—a mighty lottery-wheel which casts up wealth for the few, without greatly benefitting the million. "All human interests," says Carlyle, "combined human endeavours, and social growths in this world, have at a certain stage of their development, required organizing; and work, the grandest of human interests, does now require it."*

It is easy to find practical illustrations of what is meant by organization of industry. The Post-Office is a familiar instance. By means of such an organization we can send a steam carriage with a letter to any part of the kingdom, and a penny really pays the cost and leaves a profit. Here the clear gain effected by organization is the difference between the penny and its profit and what it would cost an individual to send a letter himself by his own conveyance. Railways afford another powerful illustration of the advantages of industrial organization. By the present uniform system of arrangement, a person can go from London to Edinburgh in about ten hours. -a vast saving of time compared to a system of steam travelling in which every person had to lay down the rails over his own land, according to his own ideas, causing an infinity of gauges and stoppages; and yet the saving effected by order, arrangement, and organization in the Post-Office and in Railways, is probably not greater than would be effected by introducing order and organization into our present individual and disjointed efforts for the increase and distribution of wealth in all departments of industry upon our present system of laissez faire. The Post-Office and Railways keep comfortably all parties employed in and on them, and leave a large profit. Clubs at the West-end of London are a result of organization of industry, by means of which gentlemen of refined tastes get palace accommodation, a splendid library, excellent attendance. the best wines, the simplest and most recherché fare at a third of the charges of the ordinary hotels. The model lodging-house is another instance of the advantages to be derived from the organization of labour. Large and airy rooms, baths, easy and economical methods of cleaning, washing, and cooking, are provided for the use of the poor, at a less cost than the miserable and ill-ventilated rooms in the back alleys of London. The large factories, warehouses, and trading emporiums of

^{*} Past and Present, p. 368.

England are all evidences of what can be effected by a combination of industrial operations. In fact, the chaos of work is of itself gradually crystallizing throughout the empire, and the process only requires to be carried a few steps further to reach the working man.

Thomas Carlyle, our great philosopher, says, "This that they call 'Organization of Labour,' is, if well understood, the problem of the whole future, for all who would in future pretend to govern men;" and the 19th century may see a considerable advance in this direction. It is much easier to form theories than to work them out in practice. Making the best of the present system of separate individual interests, we may see in healthy country districts squares of 300 or 400 houses, with as much land attached to each house as each man could cultivate, with a steam engine in the centre of each square, with power conveyed to each house to do all hard and dirty work, or to work the loom or other machinery upon which the women and children might wait: or looking into the far future we may see the system of society changed to one of community of property and interest, of which our present country gentleman's

* While this was passing through the press, the following interesting letter appeared in the Times: - "Assington Hall, Suffolk, December 19, 1862. Sir,-The interesting article from your 'Own Reporter,' dated Rochdale, respecting Co-operative Societies, induces me to trouble you with a few lines on the same subject. About 30 years ago, upon a small farm in Suffolk becoming vacant, I called together 20 labourers and offered to lend them capital without interest if they would undertake to farm it, subject to my rules and regulations. They gladly availed themselves of my offer. In the course of 10 years they paid me back my capital, so that I was induced to let another farm of 150 acres to 30 men upon the same terms. These have also nearly paid back the capital lent to them, and, instead of eating dry bread, as I regret to say many of the agricultural labourers are now doing, each man has his bacon, and numberless comforts that he never possessed before; thus the Rates are reduced, as these 50 families are no longer burdensome. The farmers are sure to meet with honest men, as conviction of crime would debar them of their share, and the men themselves have become much more intelligent, and present happy, cheerful countenances. If every country gentleman would follow my example, distress among the agricultural poor would not be known. I merely add that I have no land so well farmed. I shall be happy to send you my plan, rules, and regulations, if required.

"I am, Sir, your obedient servant, JOHN GURDON."

seat should furnish the model. We may imagine a large house, on a sufficiently large estate, where each family had their separate rooms and common rooms for sitting and meals, and where, instead of the exercise and labour required for health being taken, as it now is, in hunting and shooting, it might be employed in the labour of the farm, and where the women, instead of riding, gossiping, and dressing, might have their mornings usefully employed also; and where the labour of all properly directed, should furnish everything that the highest happiness requires and where the community of interest should develop all the best feelings, and make a really united family.

What form society may ultimately take it is impossible to say: one thing only is evident, that the morals and intelligence of the working classes is at present unequal to any but the lowest form of Co-operation. When their character shall be raised,—when they have felt the advantages of comfort and civilization, and have determined to maintain that state by keeping their numbers within what will make it possible, much more may be got from the present form of society than has yet been attained, for Mr. Mill truly says "the principle of private property has never yet had a fair trial in any country; and less so, perhaps, in this country than in any other." He also says "property has been made of things which never ought to be property, and absolute property where only a qualified property ought to exist." Probably that form will be ultimately preferred which gives the greatest amount of individual liberty. At present, the great majority of mankind are slaves to work and to the necessity of living; their liberty is bounded by their wants and narrow means, and at no time perhaps can they properly be said to be their own masters; and if, under a Co-operative system, they gave up their liberty for half the day, so that they might call the other half their own, they would be great gainers in that respect. On the present system, "whose has sixpence, is sovereign (to the length of sixpence) over all men;" and, as Dr. Arnott truly says, "each individual of the civilised millions dwelling on the earth, (by the appliances

of Trade and Commerce, Art and Science,) may have nearly the same enjoyments as if he were the single lord of all." All this is possible in this "old immoral world" for individuals, and the mental qualifications that would make Socialism practicable, would give to all what is now the privilege only of the few. Still Socialism appeals more directly to all our higher feelings, and may perhaps be the last form that society will take when the perfectability of man shall have reached a higher range on this earth; and as regards the guarantees for liberty, that is the fullest liberty which is exercised according to known and recognised laws. The nearer we attain to perfect goodness and intelligence, the less choice have we, as there is ordinarily but one right path.

But that we should be able absolutely to determine the best form of society is of less consequence, inasmuch as the growth of the world seems to have been little influenced by theories. If some wise Ichthyosauri had clearly foreseen our present state. we must still probably have approached it by the intervening hundred hundred centuries. It is not any grand and logical theory that has made mankind what they are, but the hundred million little causes or antecedents of which probably they have been altogether unconscious. Many old forms which have trammeled the progress of the race are now breaking up; we have attained to security of life and limb and to the perfection of mere animal life, and society seems now working towards the complete "Individuality of the Individual;" and when each atom of mankind has liberty to move equally in every direction. Society will crystalize into new forms more in accordance with man's higher and superior and essentially human nature. What we have now to do then, is, not to neglect any means which are offered to us for developing and perfecting the individual; among which means Temperance and Education must stand first.

SUMMARY AND CONCLUSION.

"Nothing comes to pass without a cause. What is self-existent, must be from Eternity, and must be unchangeable; but as to all things that begin to be, they are not self-existent, and therefore must have some foundation of their existence without themselves."—Jonathan Edwards.

"In no mind is there an absolute or free volition; but it is determined to choose this or that by a cause, which likewise has been fixed by another, and this again by a third, and so on for ever."—Spinoza.

"Every action or phenomenon, so far as it produces an event, is itself an event or occurrence which pre-supposes another state wherein the cause is to be met with; and thus everything that happens is but a continuation of the series, and no beginning which occurs of itself is possible: consequently, all the actions of the natural causes in the succession are themselves again effects."—Kant.

"Everything that exists depends upon the past, prepares the future, and is related to the whole."—Oersted.

"The conviction that phenomena have invariable laws, and follow with regularity certain antecedent phenomena, was only acquired gradually, and extended itself as knowledge advanced, from one order of phenomena to another, beginning with those whose laws were most accessible to observation. This progress has not yet attained its ultimate point; there being still one class of phenomena (human volitions) the subjection of which to invariable laws is not yet universally recognized.

* * * At length we are fully warranted in considering that law, as applied to all phenomena within the range of human observation, stands on an equal footing in respect to evidence with the axioms of geometry itself."—J. S. Mill.

"Various classes of facts unite to prove that the law of metaniorphosis, which holds among the physical forces, holds equally between them and the mental forces. Those modes of the Unknowable which we call motion, heat, light, chemical affinity, &c., are alike transformable into each other, and into those modes of the Unknowable which we distinguish as sensation, emotion, thought, these, in their turns, being directly or indirectly re-transformable into the original shapes. That no idea or feeling arises, save as a result of some physical force expended in producing it, is fast becoming a commonplace of science; and whoever duly weighs the evidence will see, that nothing but an overwhelming bias in favour of a pre-conceived theory, can explain its non-acceptance. The universal truth above illustrated under its various aspects, is a necessary corollary from the persistence of force. Setting out with the proposition that force can neither come into existence nor cease to exist, the several foregoing general conclusions inevitably follow. Each manifestation of force can be interpreted only as the effect of some antecedent force: no matter whether it be an inorganic action, an animal movement, a thought, or a feeling. Either this must be conceded or else it must be asserted that our successive states of consciousness are self-created. Either mental energies, as well as bodily ones, are quantitatively correlated to certain energies expended in their production, and to certain other energies which they initiate; or else nothing must become something and something must become nothing."-Herbert Spencer.

"Now, the most general force of this kind is the force of gravity or attraction, and its correlate, repulsion. Motion is the result of the reciprocal action of these forces. The derivative physical forces are those termed the imponderables—namely, heat, light, magnetism, chemical affinity, in an evolving scale of progress. Derivative again from these are the vital forces, which finally culminate in the vis nervosa and Mind.

The life of a man is therefore like a stream of events or changes in linked sequence,

flowing on as necessarily as the waters of Niagara. It is true that, in common language, the will is spoken of as the first cause of conscious thoughts and acts, but no act of will (that is, of mental energising) can occur without its necessary co-existents and antecedents—that is, its causes; and such as these are, so will the act of will be. There is, in fact, no more a spontaneous act of will than there is spontaneous generation. Strictly, such an act is a creation, and belongs only to creative power. (An "independent will," or one not governed by motives, or resulting from the lost dictates of the understanding, is in fact an absurdity.) And this general truth points to another-viz., that the causes of every present state of consciousness of organisms extend far back into time. Tracing the life of any organism whatever, we find that the necessary antecedent to its existence in time and space is the existence of another organism in time and space."—Dr. Laycock.

"Rejecting, then, the metaphysical dogma of free will, and the theological dogma of predestined events, we are driven to the conclusion that the actions of men, being determined solely by their antecedents, must have a character of uniformity, that is to say, must, under precisely the same circumstances, always issue in precisely the same results. And as all antecedents are either in the mind or out of it, we clearly see that all the variations in the results,—in other words, all the changes of which history is full,—all the vicissitudes of the human race,—their progress or their decay, their happiness or their misery, must be the fruit of a double action; an action of external phenomena on the mind, and another action of the mind upon the phenomena."—H. T. Buckle.

"Every change, however slight, and every movement, however minute, and every event that comes to pass, are fore-ordained and regulated by the Almighty." * * " "When we view the world as one universal effect, we are at once led to the contemplation of a Universal Divine Agency. Does not the Infinite act on every atom? * * God never dele-

gates His power: He cannot transfer divinity to a substance: there is no power therefore separated from Himself."—Rev. J. White Mailler, M.A.

"In Him we live and move and have our being." "It is God that worketh in us to will and to do of His good pleasure."

—St. Paul.

The freedom of will, and of action, therefore, with which we suppose ourselves to be endowed, is a delusion. For ages men believed the sun to go round the earth, because it seemed to do so. A similar delusion is at the base of our Ethical system, because we seem free. Whence, then, the source of the delusion? Our apparent freedom consists in the absence of all physical restraint, and, in our power therefore to do as we please; but what we please to do depends upon our mental constitution and the circumstances in which we are placed; or, as Buckle says, upon "an action of external phenomena on the mind, and another action of the mind upon the phenomena." The forces of nature which culminate in mind, re-act on nature, as an intelligent power, and thus the

* It is said "we feel we may do a thing or leave it undone;" but is this so? Does any good man feel that he may lie or commit robbery or murder, or leave it undone? Dr. Neil Arnott says, "no one doubts that a person sitting near an open barrel of gunpowder, and who sees a thoughtless child, with a burning stick in his hand, running towards it, could, if he so willed, continue sitting, although sure to be blown into the air the next moment." True, if he so willed! but where is the person who could so will? Who feels that in this case he has power "to do a thing or leave it undone?" Certainly no person of sound mind; for, as Dr. Arnott says, "if he be of sound mind, his love of life will induce him to dart forward instantly to arrest the child, and so to avert the threatened catastrophe." And this Dr. Arnott gives as an illustration of "freedom of will," which he says closer examination has taught him to reconcile with "the fixed laws of mental action." It is evident that he means that the person was not obliged by any physical force to get off the barrel; but the mental force made it "necessary" if the physical did not. Of course, it is possible that a person should continue to sit on an exploding barrel. as Regulus returned to his barrel of spikes; but this would be in obedience to a higher feeling or mental law than the "mere love of life." It is true that there are few who feel they have this liberty or "freedom of will," but no doubt the Phrenologist could point them out, and could point to the law under which they act, and moved by such law of their nature, they have no more choice "to do the thing or leave it undone," than a good man has to lie, steal, or commit murder.



hand of necessity is hidden, but it is not the less there, acting with undeviating regularity and resistless force. It is true that the "liberty" seems infinite, and action inexhaustibly various; yet the limitation is complete, and the almighty controlling power ever present, although unseen and unnoticed, and pressing with the lightness of a feather.

Nothing, then, under the circumstances, could have happened but that which did happen; and the actions of men, under precisely the same circumstances, must always issue in precisely the same results. We may dismiss then the past, with all its vain regrets, and we must learn to judge of our position by what it really is and may be, and not by what we vainly suppose it might have been; for nothing is more certain than that we could not have acted differently in any act of our lives, with the state of mind and circumstances then existing. Half the misery in life arises from not seeing and knowing this, and from the feeling that we could have done otherwise, might have done otherwise, and ought to have done otherwise; and half the crime results from the feeling of revenge, based on the same error.

"Let the dead past then bury its dead," for the past could not have been different, and comes not back again; the present, the future, only are in our power; for the experience of the past—the consequences of our actions,—alters both the mind and circumstances, and makes a different result possible.

For "if such co-existences and sequences as those of Biology and Sociology are not yet reduced to law, the presumption is, not that they are irreducible to law, but that their laws elude our present means of analysis." "The actions of men have the same uniformity of connection which physical events have; and the law or laws of these uniformities can be inductively ascertained in the same way as the laws of the material world."

Hence the doctrine of Philosophical Necessity, or the Law of Consequences, becomes of the highest importance,—teaching

^{*} Herbert Spencer. † H. T. Buckle.

as it does, that for every consequence, or effect, there is an antecedent cause, which is always equal, under like circumstances, to produce the same effect, and can produce no other;—thus making us, as we attain the knowledge of such causes, masters over our own condition for good or ill.

The various superstitions fostered in the minds of the ignorant, in all ages and countries, have taken their rise in the misunderstanding of this law. Spiritual agents of every imaginable kind, Gods of the Woods and Streams, of Earth and Air, Genii, Fairies, Angels, Devils, Immaterial Souls, have all been brought forward to account for effects whose causes lay remote from ordinary sight; while each of these agents has been gifted with a free-will, or power of acting, or not, under similar circumstances; so that the uniformity of the laws of nature has been lost sight of, or has been unknown. uncivilized nations, and even such as have attained considerable knowledge, refer all natural effects inexplicable to themselves, to the power of spirits or demons. No rational means are therefore taken to secure the blessings, or avert the ills, which come and go at the caprice of these mysterious powers; but charms and offerings, sacrifices and prayers, are used to appease their wrath, or propitiate their favour.

Good and evil have been represented as depending upon the influence of the Stars, of Fate, of Original Sin – upon the conflicting power of Satan with that of the Spirit of God—rather than as the natural and necessary consequences of our own conduct. It has been overlooked that our Creator, in giving us Reason, or a capability of foreseeing consequences, has given us power over both good and evil, and that such a gift would have been rendered comparatively useless, if not fatal, if He had permitted the established course of nature—upon which the exercise of reason is dependent—to be interfered with by influences obeying no fixed law, or none, at least, upon which man could calculate.

Since about the year 1700 no one has been burnt for witch-craft in our enlightened country; but the Devil, according to

the most favoured creed, is still supposed to be powerful among us. The true character of evil is disguised, and in our popular religious instruction natural effects are attributed to anything but their real and efficient causes. Our moral and religious teachings are still largely mixed with the superstitions of the dark ages, instead of having for their object to make known the "Law of the Lord"—the Physical, the Organic, the Moral Law—with the natural pains and pleasures connected with it. May we not hope, however, that the time approaches when God shall be known in His works, and a Spirit of Evil no longer be supposed to divide the sovereignty of the earth with Him; when Chance, already dismissed from the physical, shall be banished from the moral world; when especial influences, no longer expected in the one, will not be looked for in the other?

Herein consists the difference between "Necessity" and Fatalism. The fatalist believes that everything is written in the book of fate, and must happen as there written, and it is useless therefore taking any steps to avoid it; thus paralysing all effort; on the other hand, the necessarian believes that for every effect there is a cause, which is equal at all times to produce the result desiderated, and that, therefore, the knowledge and use of these causes put fate in his own hands. It is true that what is written in the book of fate must come to pass; since that is no more than saying that what will happen will happen; but if we were permitted to read this book, we should find that the difference of faith in the fatalist and necessarian was itself the efficient cause of an entirely different fate to each believer.

Again. The necessarian must still use motives; and as in practice therefore, it is said, he must praise and blame and love and hate as others do, it is the same thing as if he continued to believe in free will. It is true he must still use motives, but he knows that if he does not use efficient ones, he cannot succeed; whereas the believer in free will thinks it always a chance whether he shall succeed or not, and if he

blames any one, it is generally any one but himself, to whom the fault properly belongs.

Responsibility can have no reference to the past, which could not have been otherwise, and cannot be recalled; it consists only in the natural and necessary consequences of our actions. These consequences are the same, and the responsibility is the same, therefore, whether a man is a free agent or not. The consequences, that is, the pain or the punishment is the same, whether we are pushed into the fire, fall in, or put ourselves in voluntarily, the object of the suffering being our own good—to keep us from being burnt.

Punishment, therefore, must be regarded only as the means to an end, and, except for our good, is unjust and unnecessary. "The ordinary events of History, instead of being causes, are merely the occasions on which the real causes act." (Buckle, p. 753.) And Quetelet thus truly says, "Society prepares crime, and the guilty are only the instruments by which it is executed." Retributive justice, therefore, as it has been wrongly called, is simply revenge, and as an element in our penal codes has always done more harm than good, as the action of our revised codes, from which it is omitted, abundantly testifies.

Sin is based upon the erroneous supposition that we could have acted otherwise than we did; and since all punishment is for our good, forgiveness of sins would be an injury.

Evil is the natural and necessary limitation of our faculties, and our consequent liability to error; and pain, which we call evil, is its corrective. It is our Guardian and Guide, our Schoolmaster, our Stimulus to Action and to all those efforts by which the strong and good are preserved and the weak and bad destroyed, and by which the world goes ever on to better and better.

The springs,—the hidden springs, we may say,—of all our actions are pain and pleasure.

"Most strong sensations awaken feelings either of pleasure or pain. To obtain the first of these, and to avoid the second,

is the aim of the whole human conduct. The idea of a pleasure that may be obtained is accompanied by a feeling called desire, and the idea of a pain which may come produces a feeling called aversion. Different degrees of these feelings are named affections, emotions, passions. They excite voluntary muscular actions to bring about the desired results."*

"No man ever had, can, or could have a motive differing from the pursuit of pleasure or the avoidance of pain."† This is ordinarily hidden from us, because these pleasures and pains take high sounding names, such as honour, love, fame, magnanimity, friendship, ambition, glory, purity, righteousness, piety, envy, hatred, malice, &c. These feelings are classified, and are right or wrong, virtuous or vicious, according as they tend to one state or the other, that is, of pleasure or pain, happiness or misery; happiness being the aggregate of pleasurable sensations, misery the aggregate of painful ones. The much exalted "Blessedness" is a sort of sublimated female happiness.

"The first law of nature is to seek our own happiness,"‡ and as morality is the shortest and most direct way to it, being in fact "The Science which teaches men to live together in the most happy manner possible," || there is no fear for its interests; all that is required is that the road should be made sufficiently clear and the obstructions removed. But "freedom" is said to be essential to morality. If, however, morality is the science of man's well being, and a man necessarily seeks his well being, that certainly must tend more directly to the practice of morality, than if he were "free" to reject that cause.

All experience, it is said, proves man to be a free agent, which means simply that he has the power to do as he pleases. But his actions, or what he pleases to do, result from his natural character and the circumstances in which he is placed. It is clear, then, that what we have to do is to improve the character, and to make a wise disposal of all the circumstances

^{*} Dr. Neil Arnott. + Jeremy Bentham. | Bentham. | Helvetius.

that influence it. Locke says, "As far as man has power to think or not to think, to move or not to move, according to the preferences or direction of his own mind, so far is a man free." This is quite true: the only "freedom" we have is limited to action in accordance with our natural powers and capacities. What we have to do then is fully to develop these powers and capacities, and to remove all impediments, external and internal, to their free and complete action. There must be no external compulsion from physical impediment, or internal compulsion from defect in the mind itself—no obstacle to the full exercise of our natural powers both of body and mind. Education in its full meaning is the developing and perfecting of all these powers.

We in England have not much to complain of in the way of external compulsion, and to this fact there is not only our own testimony. M. Scherer lately (May, 1862) observed in the Temps:--" England is the classic land of liberty; and for this reason it is a holy land—a land which more than one exile has turned to with gratitude. We do not now speak of political institutions, but of civil liberty, of the respect for the rights of all, of independence of exertion, of the space left open for individual action, of the mildness of the laws, of the fewness of regulations. Elsewhere, regulations are the rule; elsewhere liberty exists only where it is expressly stipulated; but in England it is liberty which is everywhere, and always supposed. Elsewhere, civil life is encircled by a network, invisible but inextricable, of restrictions; but in England every man speaks, teaches, prints, meets, associates, builds, travels, exercises his calling in industry and commerce, fills the professions, carries out all his designs, without hinderance from anything whatever but the equal right of his neighbour."

J. S. Mill, in his work on Liberty, justly contends that "one very simple principle is entitled to govern absolutely the dealings of society with the individual, in the way of compulsion or control, whether the means used be physical force

in the form of legal penalties, or the moral coercion of public opinion. That principle is, that the sole end for which mankind are warranted, individually or collectively, in interfering with the liberty of action of any of their number, is self-protection. That the only purpose for which power can be rightfully exercised over any member of a civilized community, against his will, is to prevent harm to others. His own good, either physical and moral, is not a sufficient warrant." We have nearly arrived at this in England.

As to our mental freedom, that is another thing: very little has yet been done towards perfecting our natural powers, or bringing them into harmonious action. Our natural powers, both bodily and mental, we derive from our parents; much therefore depends upon race, upon breeding. Now the art of breeding has been carried of late years to a most extraordinary perfection among animals. The most exquisite hot-house plant does not more surpass its original weed than some animals now surpass their ancestors in symmetry and grace. Short of turning one species into another, the breeder can do anything with his material. The scientific application of physiological principles has revolutionized the whole system. But at present this has been confined to the brute creation; all attention to natural law has been ignored in the breeding of the human being; and yet more depends upon the original constitution than upon the training or education afterwards. Mental power and capacity depend upon the nervous system, and very little more than the direction of that power and capacity upon education; and the perfection of brain and nervous systems. and even mental aptitudes are transmitted from parent to offspring, and are dependent upon the physiological principles that have revolutioned our Cattle Shows. No education or training will turn a bull-dog into a pointer, yet the human educator expects to work quite as great changes in human From systematically ignoring the laws of cerebral physiology, both the educating and breeding of human beings are the merest chance and empiricism, and our liberty is

thereby as much limited in some directions as that of the lame to run or the blind to see.

The first thing then to aim at is a healthy and well-developed body and brain; and next, to see that the force generated by the healthy activity of the bodily functions shall be applied to the purposes intended, and properly distributed, in due proportion, according to the offices to be performed. This balance between muscular, vital, and nervous power—between bodily labour and head work, has never yet been attained, if it has ever been attempted. This has been mainly owing to ignorance of the fact that vital forces are the correlate of physical forces, and mental of vital, and that "from given amounts of such forces neither more nor less of such physical and psychical changes can result."

We seldom, therefore, attain the mens sana in corpore sano; either the body or mind is stunted and imperfectly developed. Below a certain temperature the tadpole grows, but does not develop into the frog; so some human beings, from want of the due balance of force, remain great tadpoles all their lives, while the hot-bed of civilization precociously transforms others into the smallest possible frogs. Herbert Spencer, in his admirable chapter on Physical Education, says, "It is a physiological law, first pointed out by M. Isidore St. Hilaire, and to which attention has been drawn by Mr. Lewes in his essay on Dwarfs and Giants, that there is an antagonism between growth and development. By growth, as used in this antithetical sense, is to be understood increase of size; by development, increase of structure. And the law is, that great activity in either of these processes involves retardation or arrest of the other. A familiar example is furnished by the cases of the caterpillar and the chrysalis. In the caterpillar there is extremely rapid augmentation of bulk; but the structure is scarcely at all more complex when the caterpillar is fullgrown than when it is small. In the chrysalis the bulk does not increase; on the contrary, weight is lost during this stage of the creature's life; but the elaboration of a more complex

structure goes on with great activity. The antagonism, here so clear, is less traceable in higher creatures, because the two processes are carried on together. But we see it pretty well illustrated among ourselves when we contrast the sexes. A girl develops in body and mind rapidly, and ceases to grow comparatively early. A boy's bodily and mental development is slower, and his growth greater. At the age when the one is mature, finished, and having all faculties in full play, the other, whose vital energies have been more directed towards increase of size, is relatively incomplete in structure; and shows it in a comparative awkwardness, bodily and mental. Now this law is true of each separate part of the organism, as well as of the whole. The abnormally rapid advance of any organ in respect of structure, involves premature arrest of its growth; and this happens with the organ of the mind as certainly as with any other organ. The brain, which during early years is relatively large in mass but imperfect in structure. will, if required to perform its functions with undue activity, undergo a structural advance greater than is appropriate to its age: but the ultimate effect will be a falling short of the size and power that would else have been attained. And this is a part-cause-probably the chief cause-why precocious children, and youths who up to a certain time were carrying all before them, so often stop short and disappoint the high hopes of their parents." Properly speaking, there is no antagonism between growth and development when the animal force is duly distributed; it is only when the balance is disturbed, and one is carried on at the expense of the other. If any passionamativeness especially, that being the greatest consumer of force of all,—is precociously developed, and indulged, it is at the expense of the growth of the body. Early precocity is the use of mental force at the expense of the vital, and unless the balance is restored, the children cursed with it seldom live. On the other hand, agricultural labourers, and the nomad population generally, have vital power at the expense of the mental; consequently any injury to the bodily system is more

easily repaired, but the mind is sluggish, and the feelings dull, and the sense of pleasure and pain is less keen, and approaches nearer to that of the brute creation.

In our Educational systems due regard must be had to the requirements of growth, development, and training, and great care must be taken to preserve the balance of power, so that one shall never be allowed to go on at the expense of the other. During rapid fits of growth, there is both bodily and mental prostration, and neither can be forced without injury to the whole system: there is but a limited supply of vital energy, and if the demands are great in one direction, a reduction must be made in some other. The intellectual forcing systems of our Schools, where mental effort alone is looked for and appreciated, are altogether at variance with these principles, and the consequences are lamentable in the extreme, although unobserved or misunderstood from ignorance of the law we are explaining, and of the principle that education is the drawing out—the developing, strengthening, and perfecting of all our natural powers, and not a mere strain upon the memory and intellectual faculties, at the expense of the others.

When growth and development are finished, the same fatal error attends the distribution of force in after life, and parts of the mind are exercised at the expense of the others, until many of our highest and most delicate faculties die for want of sustenance, and we have only a crippled and imperfect human being.

"You dwarf the remaining faculties, when you develop one to abnormal size and strength. Thus have men been great preachers, but uncommonly neglectful parents. Thus have men been great Statesmen, but omitted to pay their tradesmen's bills. Thus men have been great moral and social reformers, whose own lives stood much in need of moral and social reformation. I should judge, from a portrait I have seen of Mr. Thomas Sayers, the champion of England, that this eminent individual has attended to his physical to the neglect of his intellectual development. His face appears deficient in intelligence, though his body seemed abundant in muscle. And possibly it is better to seek to develop the entire nature—intellectual, moral, and physical—than to push one part of it into a prominence that stunts and kills the rest. It is better to be a complete man, than to be essentially a poet, a statesman, a prize fighter. Such an inordinate growth in a single direction, is truly morbid.

We have already explained at length the nature of our faculties: we shall now show how they are misused and misdirected.

First. With respect to Woman and the still much-disputed point of her greater or less superiority to man. Probably each is superior to the other in the position nature has assigned them; the difficulty has been to find that position, and for each to be satisfied with it. A man's brain weighs on an average 3lbs. 8oz.: a woman's only 2lbs. 11oz.; and, as power is in proportion to the size of the organ, that settles the question as to the relative strength of mind; but woman's brain, if it has less power, has generally more sensibility and delicacy of perception. and is calculated to do some things better than a man's. With respect to her place and position in the world, much has been said of late days about the "independence of woman." and so far as the law has aided to consign her over to man as his property, too much cannot be said about her emancipation: but in fact neither man nor woman was intended to be independent. Woman, like the ivy, is supported by the stronger trunk of the man, and if when such support fails her she sometimes shoots up into an independent tree, she more frequently. like the ivy, crawls along the ground. Man on the other hand requires softening and refining by the woman. Bachelors and spinsters are not complete in themselves; man is not made by a given number of legs, arms, and other parts, but by the mind: now one-third of the mental faculties lie unused and undeveloped in the single man, and this observation applies

It reminds one of the geese whose livers go to form that regal dainty, the pati de foie gras. By subjecting a goose to a certain manner of life, you dwarf its legs, wings, and general muscular development; but you make its liver grow as large as itself. I have known human beings who practised on their mental powers a precisely analogous discipline. The power of calculating in figures, of writing poetry, of chess-playing, of preaching sermons was tremendous; but all their other faculties were like the legs and wings of the fattening goose."—A Modern Writer, name forgotten.



^{*} The following remarks on Woman's place and work, with but little alteration, formed part of a paper read at the first meeting of the Social Science Association, October, 1857.

with still greater force to single women. It requires, then, one man and one woman to constitute one human being; and together as much as possible let them do the work of the world between them. Let the business of the world be equally divided, but each keep in their own department; each is highest, best, strongest, and first there. Let both take their own road, but let not these roads be competing lines. Women should have work, but not in competition with men. From her peculiar organization, she has her sphere; let her work be found in it. If she feed us, clothe us, bring us into the world, educate us, nurse us, and make a home what it ought to be, this is her work; and if it be done properly, surely she will have enough to do-it is at least one-half the business of life. But at present it is not done. If she will do this well,—men being exonerated from taking their turn at child-bearing,-she may well be released from all harder work, whether of mind or body. Let us consider each of these points. By feeding us is not meant earning our bread, but cooking it. ever it may suit transcendental young ladies to say, gastronomy is of far more importance to us than astronomy; and whatever truth may be found in astrology, the stars have less influence upon us than our daily pudding. Cooking is a science, and ought to be treated as such—as much so as chemistry. It has been said that if a man drinks beer he thinks beer; and whether this be true or not, we do know that different meats and drinks affect the mind as well as the body differently, and we ought to be fed according to the requirements of our systems. We change not with "the breezy call of incense breathing morn," or "still evening" and "twilight grey," so much as with our dietary and the state of our digestions, and moral conduct at present has more to do with eating and drinking than with principle; for as Dr. Reid says, "He whose disposition to goodness can resist the influence of dyspepsia, and whose career of philanthropy is not liable to be checked by an obstruction in the hepatic organs, may boast of much deeper and firmer virtue than falls to the ordinary lot of human nature." We have much fallen away since the days of our great-grandmothers, who considered attention to these things among their daily duties; but now a woman of the lower class has no knowledge to guide either her choice of food, or economy in preparing it, and women of the upper class consider such knowledge beneath them. There is not a single change which takes place in the preparation of our food, the rationale of which is understood; and cooking, the most important of all departments of science, is a series of Mrs. Kitchener's and Mrs. Glasse's old woman's tales, and the purest empiricism. Here, then, is a department of science, at present almost untrodden, open to women. I do not mean to say that they must all turn cooks, but all ought to understand the Chemistry of Food and the Science of Gastronomy and good digestion.

Again, the departments of nursing and early education belong alone to women, and these cannot go on properly with any employment away from home. Probably the "Mens sans in corpore sano" depends more upon the first year's nursing than upon all the other years put together. Whatever the lowly may think who go out to work, or the high who transfer the office to asses or other wet nurses, it is an office that cannot be performed by deputy. The mother only can properly nurse her own child, and her arms alone can furnish the cradle it requires. The same may be said of the earliest years of childhood. Women know how "to rear up children," but so far only as instinct and tradition teach them, and all science were useless without such instinct; but they know nothing of all the "wondrous powers that lie folded up" in the little being they have brought into the world—the unfolding and developing of which depend principally upon themselves. What do women know of Physiology and Psychology, and the proper use, and therefore the abuse, of each bodily and mental faculty; of the education of the body and the education of the feelings which especially belong to their department?

It is woman also that must furnish nurses for the sick.

But this also ought to be a scientific profession, and it is time the race of Mrs. Gamps were only fossil specimens. Here a medical education to enable the nurse the better to aid nature and the doctor would be very useful, and some kind of medical degree might attend it, without assuming the masculine M.D., and such qualified practitioners might perhaps better "minister to the necessities of delicate young womanhood" than the other sex. Nursing is peculiarly a woman's element, and in the arrest of disease as much perhaps depends upon good nursing as upon the physician.

"Doctoring is one of the 'rights of women,' which albeit theoretically denied is practically conceded so universally that it is probable that all the M.D.'s in England, with the apothecaries to boot, do not order more drugs than are yearly 'exhibited' by their unlicensed female domestic rivals. It is not a question whether such a state of things be desirable; it exists, and no legislation can alter it. The two differences between the authorised doctors and unauthorised doctoresses are simply these—that the first are paid and the second unpaid for their services, and the first have some scientific knowledge and the second none at all. "As we have said, men and women will go continually to women for medical advice in all those thousand contingencies and minor maladies out of which three-fourths of the mortal diseases of humanity arise. There is no use scolding, and saying they ought to go to the apothecary or the M.D. will not do so, least of all will delicate women do so when it is possible to avoid it. The only question is, whether the advice which in any case they will get from a woman will be good advice or bad advice—advice founded on some scientific knowledge, or advice derived from the wildest empiricism and crassest ignorance."*

Women should clothe us, or at least their own sex and children. Women are no longer spinsters, not even the

^{* &}quot;What shall we do with our Old Maids?" by Miss F. P. Cobbe. Fraser, November. 1862.

unmarried. The time was when the spinning and weaving of sheets, shirts, and broad cloth were done at home; but now this is done by the steam-engine. A man by the aid of steam and machinery can do 200 times the work his wife formerly did; and surely the amount of increased production ought to have enabled him to keep his wife and children without their being obliged to add to the weekly income; and so it undoubtedly would have done if a National System had obliged the father to send his children to School till the time the boys should be apprenticed to skilled labour, and the girls consigned to the mother's care to be instructed in woman's work.* The wife would thus have found quite enough to do without working at a trade. But our industrial system has now absorbed a large portion of both wife and children, and to retrace our steps will be very difficult. But if machinery now does the spinning and sewing, it was thus intended to release women to some higher occupation. Let them, then, spin the clothing for the mind. To the man belongs strength—to the woman delicacy of perception and sensitiveness: her spring of mind is more highly tempered, and vibrates to the slightest touch and to the music of the spheres. Her instincts may be trusted—her reason not. The most beautiful thing in creation herself, it is her place to beautify all around—to add the ideal to the real. To her, then, particularly belongs the Art of Living.

The Art of Living is the most important department in life, and it is the least understood. To the strength of man belongs Production—the transforming the rough and raw material into all the world requires. To the woman belongs the ordering and administering of these things, so as to produce the greatest economy and the largest amount of enjoyment at home. If the wife of a poor man understood this, it would save him much more than he now gets by her earnings either away from home or at home. At present she does not know how to buy food economically, or to cook it, or to cut out clothes, or to nurse

^{*} Women cannot be brought up to trades, where highly skilled labour is required, without a long apprenticeship, and surely this would be lost labour in at least three cases out of four.

and attend to children's complaints, or to do anything else that shows she understands the art of living happily and economically. In the higher classes, if this were understood, it would banish at once the present expensive style of living that is the curse of English society, and all the snobbery that belongs to it; and instead of a heavy, dead, cumbrous, enervating, stifling luxury, we should have beauty and grace, and poetry and the fine arts, and whatever should bring vividly before the mind all that was best worth remembering in the past, or looking forward to in the future. When women understand the art of living, she will be able to make a heaven of home upon a third of what it now requires to support our present costly conventionalism. In thus advocating the domestic employment of women, we by no means advocate their dependence upon men; what we contend for is, mutual dependence. To the women we give the highest department of all,—the Art of Living-of making life happy; and to her also will generally belong the next highest, the cultivation in man of the spiritual and the sesthetic. The man is too much occupied with the real to have time for the ideal, except through and by the aid of his other half-the woman.

Surely, then, there is enough for women to do to make her properly independent in these departments, if the work is to be done well, without her appearance on the stock-exchange, or in the farmers' market, or in the merchants' desk, or in the factory, or in competition with our parsons, lawyers, or physicians. Here is half the work of the world, if it were well done; but it has never been well done. Women are not educated to work well, and too many think it a degrading occupation to work at all, at least at any useful occupation. Mrs. Bodichon in her excellent pamphlet on "Woman and Work," very truly says, "People are grasping after some grandiose task, something 'worthy' of their powers, when the only proof of capacity they give is to do small things badly."

But women, we are told, want work, and 6d. and 1s. a-day at shirt-making and slops is but poor pay; but all unskilled

labour is badly paid, and an agricultural labourer gets little more. Let them qualify themselves to do their own work in the way it ought to be done, and the supply, as the Economists tell us, will beget the demand.

But the law, we are told, "has tied the hands" of onehalf of mankind, and condemned the larger number of women to "inactivity and frivolity." We suspect there is consideraable exaggeration here; but if there are such unjust laws, they should be repealed, and women be placed before the law upon a perfect equality with men. Nature has legislated upon this subject, and so distinctly that man may save himself the trouble. A woman's proper work can be found only at home. Napoleon said long since, "That the old systems of instruction are worth nothing," and he asked what was wanting that the youths of France be well educated, and Madame Campon replied "Mothers;" but mothers have not been supplied, for where are women qualified to bring up their own children properly, and able in the other departments we have mentioned, to make a home what it ought to be? If a man's wife goes out to work, he has no home; the house is dirty, the children uncared for, there is no cookery, no comfort, and the publichouse parlour is the working man's home. The factory system, and the way in which women are employed in England, make a home impossible, and with it goes every social and moral tie, and society falls to pieces. The only thing that enables a working man to rise, and the foundation therefore of all his other virtues, is providence, and it is in a home that this must have its source; it is there it first rises—that is the centre of all his thrift, around which everything accumulates. But many women, we are told, have no homes, and we are also informed (I do not know on what authority) that 43 per cent of women in England and Wales at the age of 20 and upwards, are unmarried. This is a large number, but many of the unmarried possess peculiarities, natural or acquired, that it is undesirable to transmit to posterity. If those who have no homes would qualify themselves professionally to help those that

have, there would be no fear that their qualifications would remain idle, be unappreciated, or badly paid. Let them improve the quality of what they have to offer, and its importance will be recognised, and it will be more in demand. This is the way to make them really "independent," to make them of more importance, and thus ensure to them more respect and better treatment. But by bringing their labour into competition with men in the already over-stocked labour market. they drag the married women and children in also. Instead of trying to introduce more women into trades and manufactures, our efforts ought, I think, to be directed towards extricating those who have already got themselves involved, not only without any real increase of wages or other measurable advantage to themselves, but to their positive injury; for, as John Stuart Mill truly says :- " Ceteris paribus, those trades are by far the worst paid in which the wife and children of the artizan aid the work. The income which the habits of the class demand, and down to which they are almost sure to multiply. is made up, in those trades, by the earnings of the whole family, while in others the same income must be obtained by the labour of the man alone. It is even probable that the collective earnings will amount to a smaller sum than those of the man alone in other trades; because the prudential restraint on marriage is unusually weak when the only consequence immediately felt is an improvement of circumstances, the joint earnings of the two going further in their domestic economy after marriage than before."

With half the work, then, that peculiarly belongs to women, from constitution and circumstances, undone, and the other half badly done, employment in trades, and manufactures, and in professions, as is the present custom in France, would be a step backwards in civilization, not forwards.

Man has no more at present found his place and position in the world than woman; and the civilization of the present day, after all, is but a civilized barbarism. According to Carlyle, "If you want to make sudden fortunes in it, and achieve the temporary hallelujah of flunkeys for yourself, denouncing the perennial esteem of wise men; if you can believe that the chief end of man is to collect about him a bigger heap of gold than ever before, in a shorter time than ever before, you will find it a most handy and every way furthersome blessed and felicitous world. But for any other human aim, I think you will find it not furthersome. If you in any way ask practically, How a noble life is to be led in it? You will be lucky if you get any creditable answer, or find any made road whatever. Alas, it is even so. Your heart's question, if it be of that sort, most things and persons will answer with a Nonsense! Noble life is in Drury-lane, and wears yellow boots. You fool, compose yourself to your pudding!"

Again. J. S. Mill says, "That entire unfixedness in the social position of individuals—that treading upon the heels of one another—that habitual dissatisfaction of each with the position he occupies, and eager desire to push himself into the next above it-has not this become, and is it not becoming more and more, an English characteristic? In England, as well as in America, it appears to foreigners, and even to Englishmen recently returned from a foreign country, as if everybody had but one wish-to improve his condition, never to enjoy it, as if no Englishman cared to cultivate either the pleasures or the virtues corresponding to his station in society, but solely to get out of it as quickly as possible; or if that cannot be done, and until it is done, to seem to have got out The hypocrisy of luxury, as M. de Tocqueville calls the maintaining an appearance beyond one's real expenditure, he considers as a democratic peculiarity. It is surely an English one."

Man's great aim should be, the predominance and habitual activity of those feelings that peculiarly distinguish him as man; instead of which he seeks Wealth, and with it Power and Distinction, and we have occasional glimpses only of higher feelings and motives. A savage King visited a discovery ship

in stark-naked majesty, with an old navy cocked hat on his head, and a pair of tarnished epaulettes on his bare shoulders, the gift of some previous European visitors. All the world is now seeking distinction in the same way, only with *more* of the same things—fine clothes, a large house, many servants, painted carriages, rich carpets, easy chairs, soft beds, rich wines, costly banquets. Suppose even that we reach perfection in this laudable "end and aim" of our existence, where shall we ultimately arrive? We might rival George the IV. perhaps, who was the most perfect gentleman in Europe, as far as such things could make him!*

According to Emerson, "We thus spend our incomes, for paint and paper, and not for the things of a man. Our expense is almost all for conformity. It is for cake that we run in debt; 'tis not the intellect, not the heart, not beauty, not worship, that costs so much. Why needs any man be rich? Why must he have horses, and fine garments, and handsome apartments, and access to great houses and places of amusement? Only for want of thought. Once waken in him a divine thought, and he flees into a solitary garden or garret to enjoy it, and is richer with that dream than the fee of a country would make him." "It is true," he says, "we dare not trust our wit for making our house pleasant to our friends, and so, we buy ice-creams." And again, "Parched corn eaten today that I may have roast fowl to my dinner on Sunday, is a baseness; but parched corn and a house with one apartment. that I may be free of all perturbations of mind, that I may be serene and docile to what God shall speak, and girt and ready for the lowest mission of knowledge or good will, is frugality for gods and heroes." True freedom requires that we should be unshackled in our bodily powers, in our affections, in our



^{* &}quot;But this George what was he? I look through all his life, and recognize but a bow and a grin. I try and take him to pieces, and find silk stockings, padding, stays, a cost with frogs and fur collar, a star and blue ribbon, a pocket-handkerchief prodigiously scented, one of Truefitt's best nutty-brown wigs recking with oil, a set of teeth, and a huge black stock, under-waistcoats, and then more under-waistcoats, and then mothing."—Thackeray.

understanding, in our reason and will, that the highest powers and influences of our nature may have full play; and depend upon it we are in the wrong path for this, and we have become slaves to the very worst kind of "necessity,"—to the hardest of all task-masters—conventionalism. Like Gulliver, the Lilliputians have tied us down with innumerable small strings, and if we make any effort to free ourselves, they let fly a perfect shower of their tiny arrows upon us.

What we have to seek is not wealth, and the bondage it confers, but the True, the Good, and the Beautiful. The present slaving after wealth is but selling our souls to the devil for what is falsely considered worldly prosperity. "All these things will I give you, if you will fall down and worship me," and how many unconsciously do so, as every high and noble and true human feeling is gradually obliterated in the all-engrossing and all-absorbing pursuit! Truly "how hardly shall they that have riches enter into the kingdom of heaven." As Mill tells us, "Capacity for the nobler feelings is in most natures a very tender plant, easily killed, not only by hostile influences, but by mere want of sustenance." Exclusive attention to business or money-making, or to any passion or sensual pursuit, absorbs all the nervous "force;" and it is difficult, if not impossible, to revive the æsthetic and more refined susceptibilities, when this has been long continued. Considering the sustained attention that the daily calling requires in the great majority, to maintain the due balance is almost impossible; still a complete character developed on all sides is what we have to aim at. The too great predominance of the æsthetic would unfit us for the commoner and coarser duties of life: and yet constant activity,-steady, habitual, persevering occupation in the path of duty,* is the secret of

*"We are made up of activities nine parts and passivities one—being capable of only one part in pleasure to nine parts in duty; and unless we prey upon something external, internal cravings will prey upon us. In other words, the satisfaction of active and benevolent exertions is almost inexhaustible; whereas pleasures cloy, and by repetition souring, turn to pain. Labour is the doom of all. You may avoid the manual, but you increase the mental. You may avoid the burden of the shoulders, but you increase the burden of the heart and spirits."—" Elkerton Rectory," by the Rev. James Pycroft, ρ 415.



happiness. We all desire success, and that is dependent upon strenuous effort, and effort upon mental training. No kind of excellence is easy of attainment. Then

"Into life's goblet freely press,
The leaves that give it bitterness;"

and let us not forget in this conduct of ourselves, that "There are no birds in last year's nests." We have our Spring, Summer, Autumn, and Winter, and when we have arrived at the Autumn or Winter of life, we cannot go back to Spring or Summer, as too many fondly hope to do who spend all their early life in making a fortune; putting off the enjoyment of it till their old age. They find too late that the tastes and pursuits that belonged to their youth cannot be renewed.

The faculties have each a distinct and diverse action upon the body and health. The predominant action of the moral and æsthetic feelings produces an internal sunshine which adverse circumstances can scarcely cloud:—

"What nothing earthly gives, or can destroy,
The soul's calm sunshine and the heartfelt joy,"

is the immediate result. It:-

"Lays the rough path of peevish nature even; And opens in each heart a little heav'n."

As our feelings increase in strength with exercise, this state ought to become habitual as we grow in years, replacing the more active pleasures of youth. On the other hand, the objects of the propensities fail as we grow older, and if we have trusted to them, we have the full sense that "all is vanity and vexation of spirit." The abuse of the propensities, or these feelings in excess, constitute envy, hatred, malice, jealousy, anger, fear; and all act injuriously on the bodily system. Pale with fear, sick with love, bowels of compassion, &c., are no metaphors, but indicate the different ways in which the body is affected. It is better not to "bottle up" such feelings, but to let them off as harmlessly as possible; as the Apostle says, "Be ye angry, but sin not." We should discharge our anger and grief in talk or muscular exercise, or else

they cloud the mind, and keep out mental sunshine for hours. As Jean Paul Richter says, "for a little indignation, 'The devil!' or 'All the devils!' is sufficient; but for the splenetic fever of anger, I would prescribe, 'Satan and his hellish grandmother!' and go on increasing the power of the remedy by the addition of a little 'thunder' and 'blasting,' since the healing power of the electric fluid is so well known."

Each feeling or set of feelings has its natural term of greatest activity.—the propensities in early life, the sentiments at its close. Thus it has been beautifully said, "Love is the shadow of the morning, which decreases as the day advances: friendship on the contrary, is the shadow of the evening, which strengthens with the setting sun of life." With respect to the sentiment of love which moralists so much exalt, to the exclusion almost of all others, we must not forget that we are as much called upon to hate the evil as to love the good, and that probably the former feeling played the more useful part in the earlier ages of the world; again, also, we must not forget that love, hate, faith, belief, are no more voluntary than the toothache is; they are not therefore the proper subjects of command. We cannot love that which appears hateful, or hate that which appears loveable, or believe that which appears incredible. We are commanded to love God and our neighbour, but we cannot love God if his character is drawn only to excite fear, nor our neighbour from a sense of duty. He must be loveable if we are to love him. Consequently, as Mr. H. J. Slack says, "A mere revulsion from that which is wrong would never make a fine people; and the scarecrow method of frightening folks from sin is in every way below the natural method of making them love goodness and virtue."*

Happiness is about equally dependent upon our own selves and external circumstances, and attends the legitimate exercise of every mental function, both in rich and poor. Our true interest then is to maintain the due balance between them, and to keep all our faculties in exercise with as little labour and



[&]quot; Philosophy of Progress in Human Affairs." p. 197.

trouble as possible. If we duly cultivate the subjective elements of our nature, we may well do without the costly objective, for our surroundings are felt according to the qualities which we, not they, possess, and the most essential elements of happiness, like air and water and sunshine, are God's free gifts.* We may be satisfied with less than "society" at present considers a respectable position: we could do even without "society" itself by the aid of daily intercourse in our libraries with the great and good of all past ages. We must learn to look up to worth rather than to wealth, and to choose our acquaintance and friends from their talent and refinement and sympathy with our higher qualities, and not for their mere social status. In fact, we must emancipate ourselves from the slavery of conventionalism, and we may then begin to live a really honest life, in harmony with the circumstances requisite for the development and exercise of our best feelings.

• "There was, and we believe still is, in the Massachusetts Institution for the blind, an inmate, Laura Bridgeman, who has been blind, deaf, and dumb, since she was about a year old. Her only knowledge from without must accordingly have been communicated through the sense of touch and taste. Our information as to her natural condition is defective; but after some years' training she is delineated as 'much improved in personal appearance as well as in intellect: her countenance beams with intelligence, she is always active at study, work, or play, she never repines, and most of her time is gay and frolicsome. She is now very expert with her needle, she knits very easily, and can make twine bags, and various fancy articles very prettily. She is very docile, has a quick sense of propriety, dresses herself with great neatness, and is always correct in her deportment. She can speak by means of the manual alphabet with great facility and rapidity; her vocabulary comprehends the names of all common objects; she uses adjectives expressive of positive qualities, such as hard, soft, sweet, sour; verbs expressive of action. such as give, take, ride, run, in the present, past, and future tenses. connects adjectives and nouns to express their qualities; she introduces verbs into sentences and connects them by conjunctions, &c.' In short, it would be difficult to find a child in possession of all her senses and the advantages that wealth and parental love can bestow, who is more contented and cheerful, or to whom existence seems a greater blessing than it does to this bereaved creature, for whom the sun has no light, the air no sound, and the flowers no colour nor smell."-Psychological Journal, Jan., 1863, p. 70. This case admirably illustrates how much depends upon ourselves, and how little upon the objects of sense. It also furnishes an excellent lesson upon the innate nature of the mental faculties, and how little is required to bring them into healthy and joyous activity.

alone is true freedom, this alone will give us power "to think or not to think, to move or not to move, according to the preference or direction of our own mind:" and as mind is manifested only under certain conditions of body, we must secure as much as may be the perfection of the instrument, and keep it tuned in harmony to itself and all things around us; we must keep it out of the sphere of little troubles, and engaged as much as possible on great, or at least, unselfish objects,—if only in the search for one single truth, and in making it a little more bright for the world's cognizance—so that not a string shall jar discordantly, and then—

"The meanest floweret of the vale,
The simplest note that swells the gale,
The common sun, the air, the skies,
To us are opening Paradise."

We must not conclude without considering what bearing the principles we have laid down and applied to our knowledge of man, have also on our knowledge of God—to Deism or Theism. It is impossible to accept contradictions, such as the doctrines of Necessity and Free-will, or the doctrine that God is all in all, and man and nature something besides. Neither is it necessary that such contradictions should be held, except to retain ancient superstitions in Ethics and Theology, which fall to the ground immediately we dare to be true to ourselves and to the supreme reason given us for our guidance. We have previously seen, then, that

"Nothing comes to pass without a cause. What is self-existent, must be from Eternity, and must be unchangeable; but as to all things that begin to be, they are not self-existent, and therefore must have some foundation of their existence without themselves."

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"Force can neither come into existence nor cease to exist. Each manifestation of force can be interpreted only as the effect of some antecedent force; no matter whether it be an inorganic action, or animal movement, a thought, or a feeling. Either this must be conceded, or else it must be asserted that our successive states of consciousness are self-created."

"When we view the world as one universal effect, we are at once led to the contemplation of a Universal Divine Agency. Does not the Infinite act on every atom? * * God never delegates His power: He cannot transfer divinity to a substance: there is no power therefore separated from Himself."

The Great First Cause must, therefore, be equally the Great Last Cause of all things—the only real and efficient power in the universe. To be logically consistent, we must come to the conviction that God does everything or nothing. There is no such thing as Nature and God—all is God. Individuality, or anything separate from Him, is a mode of thought, and has no real existence; and this conclusion that man is nothing—God is all, is no new doctrine, only it has never been logically and consistently carried out.

"Those modes of the Unknowable which we call motion, heat, light, chemical affinity, &c., are alike transformable into each other, and into those modes of the Unknowable which we distinguish as sensation, emotion, thought; these, in their turns, being directly or indirectly re-transformable into the original shapes." And "these as they change, are but the varied God."

"All these effects, which we commonly say are the effects of the natural powers of matter and laws of motion, of gravitation, attraction, and the like, are indeed (if we speak strictly and properly,) the effects of God acting upon matter continually and every moment."*

"He is the universal Being, of which all things are the manifestations. Every thing is a mode of God's attribute of extension; every thought, wish, or feeling, is a mode of His

^{*} Dr. Samuel Clarke's Works, vol. 2, p. 698, folio.

attribute of Thought." The whole sensitive existence is but "the innumerable individual eyes with which the Infinite World Spirit beholds Himself." In the constancy of what we call the laws of nature, we satisfy ourselves with second causes, and cease to recognize their all-sustaining source. What we call the qualities or properties of matter, are mere force or power. and the existence of matter itself is assumed on the supposition that there must be something to which those qualities pertain or belong: but we may do without this assumption altogether. if the above view be correct, for the qualities are qualities not of matter, but of God. What we call "ultimate atoms," and their extraordinary tendencies, may as well be mere laws of force as of matter. There cannot be God and matter, for that which is Infinite can have no limitation:—we cannot bound or limit the infinite by anything without or beyond itself: God must be all in all. No doubt we shall be accused in this work of materialistic tendencies, and yet we find no room for matter at all: its existence is a mere hypothesis which we can do as well without, as it is not at all a necessary link in the chain of sequences. We find only force or power, and that not separate from its source, or from God. The only reality we find underlying all things, is the Great Unknown.

"There lives and works
A soul in all things, and that soul is God."—Cowper.

We have seen that the world is created within our own minds. The starry heavens, the blue canopy, the boundless ocean, the beauties of sunshine and of the green earth, are the result of some unknown cause without us, which we call matter, but it is thus that God mirrors Himself within us—a much more perfect representation than any man creates after his own image.

We thus regard the universe as the "manifestation of some transcendent life, to which our separate individual life is related;" and that as with it we have been from Eternity, to Eternity we must remain. From God we came, and when the prism of our present individuality is broken, to God we

must return. Our senses give us but a glimpse of that "vast chain of being! which with God began." Philosophers tell us that in what appears solid, inert matter to us, the ultimate atoms are separate from each other, and revolve in constant motion round a centre, like our solar system, and it was Sir Isaac Newton's opinion that that solar universe might present, to some sense, an appearance like that which solids present to us, for that the distances of the stars from each other are probably not greater in proportion than the atoms of what we call solid matter. As far as we can trace it, the same law, the same force, pervades the whole. The universe is one: from an atom to a world,—from the animalcule, of which 500 millions are contained in a single drop of water, to the "sensitive" of Reichenbach, upon whom separate stars exercised a distinctly different influence.

"To Him no high, no low, no great, no small."

The differences that we make in that respect are purely subjective, the result entirely of our own form of intelligence. It is true we have nothing before us but individual phenomena; "but examine all these individual phenomena, and you will find that each one exists only as a part of some whole; you will find that the whole is as necessary to the parts, as the parts to the whole; and it is this unity that brings us to the great truth,—that a Divine Idea lies at the origin of all things."*

"The true doctrine of Omnipresence is," as Emerson says, "that God re-appears in all His parts in every moss and cobweb: thus the universe is alive. Everything in nature contains all the powers of nature." All the phenomena of the universe have also their counterpart in man's organization. As the ancients held, "he is microcosmos, an abstract or model of the world." We have the most varied mechanical, and the most delicate chemical action, incessant circulating fluids, life, sense, and feeling; and thought governing the whole, like the Great Soul of Nature. Thus did God make man in His own

* Thorndale, p. 416.

image, for it is as impossible to disconnect God from the material living universe, as it is to disconnect the soul from the material living body. All we see is but the vesture of God, and what we call laws of Nature are attributes of Deity.

And now it may be asked, are we to rest here? What of Religion? And it would appear that the principles laid down do not tend to separate us from Him, but rather to bring Him nearer to us; for "we are indeed the offspring of God,"—direct and immediate, and inseparable from Him. "In Him only do we live, and move, and have our being," and "we feel within ourselves His energy divine." We cannot speak too modestly where—the order of nature being all we can know we must feel at every step beyond our depth, and where the most we can say is that this or that view appears to us the more It is true we have little sympathy with that phase probable. of Christianity which expresses itself in the cry of "Save your souls; each man his own dirty soul for himself," which Kingsley says is the cry of modern Christendom; or with the childish anthropomorphite view by which man creates God, instead of God man-making a sort of Jupiter Tonans in human lineaments, and invested with human passions; but we feel ourselves a part

> "Of that stupendous whole, Whose body nature is, and God the Soul."

But where so great a mystery remains still unveiled, we feel that the Poets are the best theologians, and best express our creed. Accordingly we say with them:—

"I cannot go
Where universal love not smiles around,—
Sustaining all yon orbs, and all their suns;
From seeming evil still educing good,
And better thence again, and better still,
In infinite progression."—Thomson.

"What prodigies can power divine perform,
More grand than it produces every year,
And all in sight of inattentive man?
Familiar with the effect, we slight the cause;

And in the constancy of nature's course, And regular return of genial months, And renovation of a faded world. See nought to wonder at. All we behold is miracle; but, seen So duly, all is miracle in vain. * * From dearth to plenty, and from death to life, Is Nature's progress when she lectures man In heavenly truth; evincing, as she makes The grand transition, that there lives and works A soul in all things, and that soul is God. The beauties of the wilderness are His That make so gay the solitary place Where no eye sees them. And the fairer forms, That cultivation glories in, are His. He sets the bright procession on its way, And marshals all the order of the year; He marks the bounds which Winter may not pass. And blunts his pointed fury; in its case, Russet and rude, folds up the tender germ. Uninjured, with inimitable art; And ere one flowery season fades and dies, Designs the blooming wonders of the next." COWPER-Task: 6th Book.

"Cease, then, nor order, imperfection name:
Our proper bliss depends on what we blame.
SUBMIT.—In this or any other sphere,
Secure to be as blest as thou canst bear:
SAFE in the hand of one disposing Pow'r,
Or in the natal, or the mortal hour.
All nature is but art, unknown to thee;
All chance, direction, which thou canst not see;
All discord, harmony, not understood;
All partial evil, universal good."—Pope.

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