

Erbirites.

Vaccination and the Vaccination Laws; A Practical Course, and a Class-Training, by the Rev. WILLIAM HENRY BURNETT, a Clergyman of the Church of England, who gave evidence last year before the Select Committee of the House of Commons on Vaccination. Manchester: Printed by W. Talley, 7, Spring Gardens.

Speech of Mr. Jacob Bright, M.P. in the debate on the Contagious Diseases Act (House of Commons, Monday, July 23rd, 1871).—Speech of Mr. MURPHY in the same debate.

These pamphlets have reference to questions of most momentous character, whether considered in their social or scientific aspects. The latter of these being more within our province than the former is the man we shall mean to be as doing limit our notice to the practical questions of efficacy or non-efficacy of the Vaccination Acts and Contagious Diseases Acts as systems for preventing the spread of fearful diseases of both sexes universally. In these days of scepticism, all but ourselves, we ought not to be surprised to find a large number of persons who deny that any practical benefit results from the adoption of these systems, steadily maintaining that they are not only useless for affording their professed objects, but that they introduce a "venom" which is worse than the disease. Religious, moral, and scientific objections are having urged against these systems, but we shall not attempt to confute; we hold that if proved to be efficacious as preventives of the public health we legislators must perform our duty as of high practical importance to the interests of the community, regardless of any transcendental notions of morality or sentimentality.

As regards Mr. Herbert's pamphlet on vaccination we must admit that he makes out a strong case; and yet we do not think it conclusive, for his principal practical point, the non-success of vaccination in a number of instances, does not rest on indisputable or just equivalent facts; for such non-success is not acknowledged as ordinarily successful plans of curing other diseases are often applied with such ill-success that the patient dies in consequence of the disease instead of being cured.

But the anti-vaccine objection that the introduction of the vaccine lymph into the system is often the means of introducing foreign diseases into the system of the person vaccinated is a very important practical question; though to our mind this merely touches that great case and pains ought to be taken to remove perfectly pure lymph.

Mr. Jacob Bright and Mr. Murphy in their opposition to the Contagious Diseases Act do not much rely on the practical utility of the Act, for they employ nearly all their power on the sentimental objections to its operation, the strong they base on being the lowering effect on female modesty which they say results from the statutory system of compulsory medical examination and treatment; and in order to make out a good case they dilate on instances where the Act has been shamefully abused by being applied by stupid policemen to women who were out of the uniformity of dress. Doubtless the evil lies in the system is that it has to be carried out by common policemen, and is, perhaps, not sufficiently guarded against abuse; but as it seems to be generally well-accepted that the duty of the policeman is not so much to guard against murder, robbery, and assault, in which he continually prevails his inefficiency, as to look after our decency, decorous demeanour, and propriety of language, the conclusion seems to be that the remedy here lies in elevating the character of the official so that he may be fully competent to perform his work without blundering or making offences—that is, if the country will pay the wages of such high-class men as our police-constables would

then be. And if really so great an injury be worked as is alleged, it looks very much like a charge against the medical profession, because it is clear that in this matter they ought to "do their spivving gently," since it is evident the proceedings must necessarily be efficient. The whole is, I think, however, to much amplified, for, what Englishwoman are content to be attended in childbirth by male accoucheurs, and are ever ready voluntarily to submit to medical examination by male doctors, it cannot be anything more than a mere limited abatement of modesty on the part of women who do not mind violating chastity to elude a dangerous proceeding into a slunk to their delivery of foetus. One portion of Mr. Jacob Bright's speech is very remarkable, he makes it appear that he regards with great contempt those women who only give vent to the occasional gratification of their passions, "entertaining, we assume, the idea that it is only the too frequent repetition of such gratifications that is the injury, and that these occasional wrong-doers are not likely to be diseased, though there is really no sound reason for this view of the matter. If the class of diseases which this Act deals with could be confined to the persons who originate them, then Government interference would be unjustifiable; but as they are in fact frequently communicated to innocent objects, and transmitted to equally innocent persons, and are a source in the bones of the nation, measures for preventing the spread of them are more than justified solely of sentimentality and fanciful injury to modesty.

The Suppression of the Emotions in Man and Animals. By CHARLES DARWIN, M.A., F.R.S., &c., with photographs and other illustrations. London: John Murray, Albemarle Street, 1872.

ANATOMY this is a philosophical work of the highest order, such as might be expected to proceed from the pen of this eminent naturalist. It is necessarily a pleasant readable book, to say the least, quite as interesting as any three volumes ever read, and without the more instructive. Throughout the pages references are continually made to the habits and actions of cats, dogs, and other animals, such as all of us have many opportunities of testing by our own observation.

The philosophical rationale of the book will be best understood by the quotation of the opening portion of chapter I.—

The three principles which appear to me to account for most of the expression and gesture involuntarily used by man and the lower animals under the influence of various accidental sensations.—Mr. Herbert Spencer ("Essays," Second Series, 1862, p. 136) has drawn a clear distinction between emotions and sensations, the latter being "generated in our corporeal framework." He classes as feelings both emotions and sensations. I agreed, however, at these three principles only of the class of my observations. They will be discussed in the present and two following chapters in a general manner. Facts observed both with man and the lower animals will have to be made use of; but the latter facts are preferable, as less likely to distort. As to the fourth and fifth chapters I will describe the special expressions of some of the lower animals; and in the succeeding chapters those of man. Everyone will thus be able to judge for himself how far my three principles throw light on the theory of the subject. It appears to me that as many expressions are thus explained in a fairly satisfactory manner, that probably all will hereafter be found to come under the same or closely analogous heads. I need hardly promise that movements and changes of any part of the body—such as the wagging of a dog's tail, the drawing back of a horse's ears, the shrugging of a man's shoulders, or the dilatation of the capillary vessels of the skin—may all equally well serve for follows.—

1. The principle of servilelike associated

habits.—Certain complex actions are of almost or indirect service under certain states of the mind, in order to relieve or gratify certain sensations, desires, &c.; and whenever the same state of mind is induced, however feebly, there is a tendency through the force of habit and association for the same movements to be performed, though they may not then be of the least use. Some actions continually associated through habit with certain states of the mind may be partially repressed through the will, and in such cases the muscles which are lead under the separate control of the will are the most likely still to act, causing movements which we recognize as expressive. It is certain other cases the flexion of one individual movement requires other slight movements; and these are likewise expressive.

2. The principle of antithesis.—Certain states of the mind lead to certain habitual actions, which are of service, as under our first principle. Now, when a directly opposite state of mind is induced, there is a strong and involuntary tendency to the performance of movements of a directly opposite nature, though these are of no use; and such movements are in some cases highly expressive.

3. The principle of actions due to the constitution of the nervous system, independently from the state of the will, and independently to a certain extent of habit.—When the stimulus is strongly excited, nerve-force is generated in excess, and is transmitted in certain definite directions, depending on the connection of the nerve-cells, and partly on habit; or the supply of nerve-force may, as it appears, be interrupted. Effects are then produced which we recognize as expressive. This third principle may, for the sake of brevity, be called that of the direct action of the nervous system.

These principles Mr. Darwin supports by numerous references to the habitual practices of the lower animals and of man.

With regard to the first of the principles above stated there is little said that is especially noteworthy, probably in consequence of its almost self-evident character; but as regards the second principle Mr. Darwin gives many instances in support of his theory, amongst others this one:—

I will here give one other instance of antithesis in expression. I formerly possessed a large dog, who, like every other dog, was much pleased to go out walking. He showed his pleasure by trotting joyfully before me with high step, head much raised, and body well up. When I was alone he would not trot, but he would come a path branches off to the right, leading to the bathroom, which I used often to visit for a few moments, to look at my experimental plants. This was always a great disappointment to the dog, as he did not know whether I should continue my walk; and the instantaneous and complete change of expression which came over him as soon as my body swerved in the least towards the path (and I sometimes tried this as an experiment) was laughable. His look of dejection was known to every member of the family, and was called his *bad-joke face*. This occurred in the best of drooping mood, the whole body sagging, the ears and remaining motionless; the ears and tail falling suddenly down, but the tail was by no means wagged. With the falling of the ears and of his great shape the eyes became much changed in appearance, and I fancied that they looked less bright. His aspect was that of pitious, hopeless dejection; and it was, as I have said, laughable, as the cause was so slight. Every detail in his attitude was in complete opposition to his former joyful yet dignified bearing, and may be explained, as it appears to me, in no other way except through the principle of antithesis. Had not the change been so instantaneous, I should have attributed it to his lowered spirit affecting, as in the case of man, the nervous system and circulation, and consequently the tone of his whole muscular frame; and this may have been in part the case.

As to the origin of these antithetical signs, Mr. Darwin remarks:—

Many signs, moreover, which plainly stand in opposition to each other, appear to have had on both sides a significant origin. This seems to hold good with the signs used by the deaf and dumb for light and darkness, for strength and weakness, &c. In a future chapter I shall endeavor to show that the opposite gestures of affection and repugnance—namely, vertically nodding and laterally shaking the head—have both probably had a similar origin. The waving of the hand from right to left, which is used as a negative by some languages, may have been invented in imitation of shaking the head; but whether the opposite movement of waving the hand in a straight line from the face, which is used in affection, has arisen through antithesis or in some quite distinct manner is doubtful.

As to the third principle referred to—namely, certain actions which we recognize as expressive of certain states of the mind—they are, says Mr. Darwin, the direct result of the condition of the nervous system, and have been derived from the first indications of the will, under a large extent of habit. When the nervous system is strongly excited, nerve-force is generated in excess, and is transmitted in certain directions, dependent on the connection of the nerve-cells, and, as far as the muscular system is concerned, on the nature of the movements which have been habitually practiced. Or the supply of nerve-force may, as it appears, be interrupted. Of course every movement which we make is determined by the constitution of the nervous system, but actions performed in obedience to the will, or through habit, or through the principle of association, are as far as possible excluded. The ground on which is very obscure, but, from its importance, must be discussed at some little length; and it is always advisable to perceive clearly our ignorance.

The most striking case, though a rare and abnormal one, which can be adduced of the direct influence of the nervous system when strongly affected on the body, is the loss of colour in the hair, which has continually been observed after extreme terror or grief. The anæsthetic influence has been recorded in the case of a man brought out of the execution in India, in which the change of colour was so rapid that it was perceptible to the eye.

Another good case is that of the trembling of the muscles, which is common to men as to many, or most, of the lower animals. Trembling is of an erratic, often of a much descriptive, and cannot have been at first acquired through the will, and thus rendered habitual in association with any emotion. I am assured by an eminent authority that young children do not tremble, but go into convulsions, under the circumstances which would induce excessive trembling in adults. Trembling is excited in different individuals in very different degrees and by the most diversified causes—by cold in the surface before feverishness, through the temperature of the body in heat, above the normal standard, in blood-poisoning, Colic, cholera, and other diseases; by general failure of power in old age; by exhaustion after excessive fatigue; locally from nerve injuries, such as burns; and, in an especial manner, by the passage of a substance. Of all emotions, fear notoriously is the most apt to induce trembling; but so do occasionally great anger and joy. I remember once seeing a boy who had just shot his first snipe on the wing, and his hands trembled to such a degree from delight that he could not for some time reload his gun; and I have heard of an exactly similar case with an Australian savage to whom a gun had been sent. Fine music, from the organ, sometimes, causes a shiver to run down the backs of some persons. There seems to be very little in common in the above several physical causes and emotions to account for trembling; and Mr. J. Paget, to whom I am indebted for several of the above statements, informs me that the subject is a very obscure one. As trembling is sometimes caused by rage, long before exhaustion can have set in, and as it sometimes accompanies great joy, it would

appear that any strong excitement of the nervous system interrupts the steady flow of nerve-force to the muscles.

The manner in which the operations of the alimentary canal and of certain glands—the liver, kidneys, or mammae—are affected by strong emotions is another excellent instance of the direct action of the emotions on these organs, independently of the will or of any ascertainable associated habit. There is the greatest difference in different persons in the way in which they are affected, and in the degree of their affection.

The heart, which goes on unintermittently beating night and day in an unmodified manner, is extremely sensitive to external stimulants. The great physiologist, Claude Bernard, has shown how the beat of the heart of a mammal nerve reacts on the heart, even when a nerve is touched so slightly that it can scarcely be felt by the animal under experiment. Hence when the mind is strongly excited, we might expect that it would indirectly affect, in a direct manner, the heart; and this is universally acknowledged and held to be the case. Claude Bernard also repeatedly insists, and this deserves especial notice, that when the heart is affected it reacts on the brain; and the state of the brain again reacts through the pneumo-gastric nerve on the heart; so that under any treatment there will be much mutual action and reaction between these the two most important organs of the body.

The non-motor system, which regulates the diameter of the small arteries, is directly acted on by the emotions, as we see when a man blanches from shame; but in this latter case we should transmit of nerve-force to the vessels of the face, as, I think, is partly explained in a certain manner through habit. We shall also be able to throw some light, though very little, on the involuntary erection of the hair under the emotions of terror and rage. The erection of hairs depends, no doubt, on the contraction of certain muscles, but here again we can trace some few of the steps by which the flow of nerve-force through the requisite channels has become habitual under certain emotions.

A brief consideration of the outward signs of some of the stronger emotions and emotions will best serve to show us, although vaguely, what I mean by a manner the principle under consideration of the direct action of the excited nervous system on the body is combined with the principle of habitually associated, servile-like emotions.

When animals suffer from an agony of pain they generally writhe about with frightful contortions; and those which habitually use their voices utter pining cries or groans. Almost every muscle of the body is brought into strong action. With man the mouth may be dimly compressed, or more commonly the lips are retracted, with the teeth clenched or ground together. There is said to be a grinding of teeth in hell, and I have given you the grinding of the molar teeth of a dog which was suffering acutely from a few blows on the head. The description of the phenomena in the Ecological Institute, when she produced her young, suffered greatly the incessantly walked about, or rolled on her side, opening and closing her jaws, and clattering her teeth together. With man the eyes stare widely as in terrified astonishment, or the brows are heavily contracted. Perspiration bathes the body, and drops trickle down the face. The circulation and respiration are much affected. Hence the vessels are generally dilated and often constricted; or the blood may be held until the blood stagnates in the capillaries. If the agony be severe and prolonged, there is often a change; utter prostration follows, with fainting or convulsions.

A sensitive nerve when irritated transmits some influence to the nerve-cell, whence it proceeds; and this transmits its influence, first to the corresponding nerve-cell on the opposite side of the body, and then proceeds and downwards along the cerebro-spinal column to other nerve-cells, to a greater or

less extent, according to the strength of the excitement; so that, ultimately, the whole nervous system may be affected. This involuntary transmission of nerve-force may or may not be accompanied by consciousness. Why the initiation of a nerve-cell should generate or liberate nerve-force is not known; but that this is the case seems to be the condition arrived at by all the greatest physiologists, such as Müller, Fickler, Bernard, &c. As Mr. Herbert Spencer remarks, it may be received as an "empiric truth that at any moment the existing quantity of liberated nerve-force, which in an inextinguishable way produces in us the state we call feeling, may expand itself in some direction—most generally an equivalent manifestation of force generative of voluntary manifestations of force—where"; so that when the cerebro-spinal system is highly excited and nerve-force is liberated in excess it may be expended in intense sensations, active thought, violent movements, or increased activity of the glands. Mr. Spencer further maintains that an "overflow of nerve-force, undirected by any motive, will necessarily take the most habitual course; and, if there do not suffice, will next overflow into the less habitual ones." Consequently the facial and vocal nerve-cases, which are the most used, will be apt to be first brought into action. Thus those of the upper extremities, next those of the lower, and finally those of the whole body.

These views Mr. Darwin proceeds to elucidate in a way that may be fairly termed surprising, making repeated references to the various photographic illustrations of the work, the portions of which following the part from which we have quoted having reference to the means of expression in animals—the special expressions of animals and of man, the look attending with contending emotions, and a summary, from which we extract the following:

The movements of expression in the face and body, whatever their origin may have been, are in themselves of more importance for our welfare. They serve as the first means of communication between the mother and her infant; the smile approved, and the encouragement her child on the right path, or browns disapproved. We readily perceive sympathy in others by their expressions; our sufferings are thus mitigated and our pleasures increased, and mutual good feeling is thus strengthened. The movements of expression give vividness and energy to our spoken words. They reveal the thoughts and intentions of others, and truly they do much, which may be imagined. Whatever amount of truth the so-called science of physiognomy may contain appears to depend, as I shall long ago remarked, on different persons bringing into frequent use different facial muscles, according to their dispositions; the development of these muscles being perhaps thus hastened, and the lines or furrows on the face, due to their habitual contraction, being thus rendered deeper and more conspicuous. The free expression by outward signs of a emotion intensifies it. On the other hand, the repression, as far as this is possible, of all outward signs of intense emotion. He who gives signs of violent anger will increase his rage; he who does not control the signs of his joy will experience fear in a greater degree; and he who remains passive when over-relied with grief loses the best chance of recovering serenity of mind. These results follow partly from the intimate relation which exists between almost all the emotions and their outward manifestations, and partly from the direct influence of exertion on the heart, and consequently on the brain. Even the simulation of an emotion tends to excite it in our minds. Shakespeare, who from his wonderful knowledge of the human mind ought to be an excellent judge, says—

"It is not necessary that this play be long. But in a fiction, in a fable, or in a story, could have his end as in the story cannot. That, from his writing, all his things would, there is his eye, devotion to a page. In looking, and in writing, and in writing, 'With force to his mind?' And, all of writing."

" We have seen that the study of the theory of expression conforms to a certain limited extent that man is derived from some lower animal form." To this statement of Mr. Darwin's we dissent; for, as far as we can discover, all that is common to man and to the lower animals as regards expression (except in some very slight degree in apes) is that both man and the other animals make signs and gestures and other sounds to express their emotions; but each uses signs, gestures, and sounds which are markedly different and distinctive. Mr. Darwin further remarks: " This supports the belief of the specific or sub-specific unity of the several races; but, so far as my judgment serves, such confirmation was hardly needed. We have also seen that expression in itself—or the language of the emotions, as it has sometimes been called—is certainly of importance to the welfare of mankind. To understand, as far as is possible, the source or origin of the various expressions which may be loosely seen on the faces of the man around us, but to mention our domesticated animals, and to possess much interest in them. From these several causes we may conclude that the philosophy of our subject has well deserved the attention which it has already received from several excellent observers, and that it deserves yet further attention, especially from any able physiologist.

Elementary Treatise on Natural Philosophy.—By A. FRYER DUNSTON, F.R.S.E., and edited, with extensive additions, by J. D. EVERETT, M.A., D.C.L., F.R.S.E., Professor of Natural Philosophy in the Queen's College, Belfast, in four parts. Part IV.: Sound and Light. Illustrated by 187 engravings on wood, and one coloured plate. London: H. Kegan and Sons, Paternoster Buildings, E.C. 4, 1871.

This present is the concluding part of this very valuable work, and we find it quite equal in its high-class character, consistent, yet simple style of description, and illustrative engravings, to any of the former parts. It may be said that this work of Dunstons, in the days it is presented to us by Professor Everett, is a complete compendium of science, so explanatory and well illustrated that any person of ordinary education can by studying its pages make himself acquainted with all the material points of the varied branches of natural philosophy. This is saying a great deal, but we consider we are fully justified in saying it.

Carr's Patent Disintegrating Flour Mill.—Carr's Patent Process of Flour Making on a Novel System or Mode of Manufacturing. British: J. Carr, Richmond, Kent, Manufacturer; Edinburgh: J. & J. Cunningham, 102, West Bow.

Carr's Disintegrators did fair, as it appears, to replace the old millstones used in the manufacture of flour, and revolutionize one of our most important industries, perhaps the most important of all. Hence the statements in this pamphlet are worthy of most serious attention, and therefore we take much pleasure in introducing Mr. Carr to our readers, and will let him tell his own tale.

" By this new system," he says, " material of an uniform and fibrous nature, of adequate specific gravity, is without grinding, compression, or friction, shattered into powder by percussion in mild air; the said percussion being derived from the retortated flow of numerous, continuous acting, unswerving levers, steadily rotating in alternately reversed directions with extreme rapidity, and successively doubling in and by each individual particle, which consequently it is being disintegrated with progressively increasing centrifugal force, and broken in the slightest form consistent with everything but that of each whirling-lever encountering and shattering it by collision in mid-air. Thus, the gravity and impetus of the material operated on serves as the sole stimulus to the machine, in contradistinction to the system hitherto invariably

permeated, of reducing all materials between two working surfaces, one of which surfaces supports them and acts as an abutment to the other while operating on the said intervening materials. All mills in the world of every description and for all purposes are, without a single exception, based on one or the other of the above two distinct systems. For minute operations, or for the division of extremely light materials, as for such as rice and sugar, it is an absolutely impossible matter to get the old system most skillfully proved; but for the wholesale reduction of an immense variety of other articles to a fine granular powder, the new one is now universally admitted to be incomparably the best.

" It has been found pre-eminently successful when so operating on either hard or pasty materials of considerable specific gravity, such as iron, minerals, clays, and manures, for which it was originally intended, yet through so far as the invention had been hitherto developed, its machine could be constructed to roughly pulverize very readily the millstones themselves, or any of the numerous articles, and such as iron (cast) pieces to those enumerated in my previous patents and those announced in all these machines, though made of various descriptions, Europe and America, were hitherto utterly incapable of being totally incapable of reducing in fine flour so light a material as wheat. Happily, however, the novel combination of principle, mode of action, and system of disintegrating matter, which I had discovered and incorporated in my invention of the original disintegrator, are of so essentially valuable and extensive a nature as to have recently enabled me to extend their original sphere of usefulness, and to adapt and apply them, without any parallel complications, to the purpose of a flour-mill, a matter of incalculably more importance and value than those for which it had been originally designed, patented, and used. One aim of a peculiarly special and exceptional character, not merely from the vast quantity of material hitherto operated on, in the nature and required treatment of the said material such as wheat, in which one aim has been to be finely prepared and the other (the bran) as little as possible, but more especially so when the said article is considered conjointly with the peculiar mode of action of this unique mill. For, as above stated, it is entirely destitute in itself of anything to serve as an abutment, which is invariably provided in every other kind of mill, and is therefore wholly dependent, as above said, for that indispensable element whereby since it can operate at all, on the gravity and impetus of the material itself that it pulverizes, the said material for the time being constituting as it were a vital portion of the machine itself and an outgrowth in effecting its own disintegration. It appeared therefore to all familiar with the all-around character of this machine already known to its principle, as being almost universally defined and described, as well as applied and subsequently by others, and myself, and also to the experience derived from the daily working for many years of hundreds of the original disintegrators, for it to be imagined for a moment that wheat, with its low specific gravity, softness of its particles, and the tough and fibrous nature of the outer covering, the bran, would by its mere so drastic violent outward resistance to the levers to enable them to reduce it into flour while it was unsupported and flying freely through the air. It, however, by any device such a thing were ever devised at all, it was considered impractical in the extreme to imagine that flour so produced would be fit for anything but the coarsest brown flour, owing to the fine pulverizing of the bran, which it was extremely proposed would in such case be inevitable. My proposed plan of construction to construct a flour-mill on the basis of my disintegrator was notified as a halcyon scheme, in the scientific journal of America and regarded as wholly unpracticable by all who heard of my intentions here.

" In fact it was one of those prospective projects the entire success of which in practice may be as possibly be proved or demonstrated from theory; and in the absence of all tangible evidence or precedents but such as appear abroad, the public instinctively regard all such untried propositions, involving sweeping innovations on long established usage, as chimerical fancies, while they are necessarily more or less hypothetical even to their projectors themselves having no actual experience as real inventors would they have assumed. The fact, however, that by the least of practical operation their entire success has been thereby proved to be an accomplished fact and an established reality, superior to all preceding contrivances for kindred purposes, and of substantial benefit to the community at large. Now, happily in this case all these requisite levels of height have now satisfactorily been accomplished, in which practice has more than realized the dubious hopes of theory, and the ever removed obstacles hitherto thought insurmountable. The grand result of which has been no less matter than the metamorphosing of my granulating iron, mineral, clay, and manure mill into a novel flour mill, of such marvellous efficiency as to greatly surpass in quality and yield all other flour-mills in existence, and to work a pair of millstones with an ability it simultaneously introduces an entire new system of flour-making of unparalleled efficiency."

The Civil Service Arithmetic.—By R. JOHNSON, Author of "The Competitive Geography." An New Edition, with examination papers given at the open competitions, &c., &c. London: Longmans, Green, and Co. 1871.

We welcome with pleasure this new edition of a thoroughly practical work, which is worthy of our hearty commendation.

Hints and Facts on the Origin, Condition, and Dyeing of Wax.—By FRED MARR, D.D. Second Edition. Revised and improved by the Author. Broom, Carter, and Co., Paternoster Street and Paternoster Row.

On Waxing, their Origin and Dyeing.—By an M.P. of Balliol College, Oxford. London: Longmans, Green, and Co. 1871.

We are pleased to find that Dr. Mallie's very commendable work, reviewed in our April number, has reached a second edition, and that the Doctor has been induced to revise and improve his book. But that there was much need for any revision or improvement, for the professed object of the work being to proffer hints and facts for attentive consideration, and not to present the public with an exhaustive treatise, the work as it originally stood was, as we humbly stated, a good fulfilment of that task.

The new edition of this work is the more welcome to us just now because, from its being designed to support the orthodox view of the question, it enables us to have before us at the same time the pro and the con, since the work by the M.A. of Balliol is by no means of vitriolic character; as, while Dr. Mallie's hints and facts tend to support the more principal propositions that it is "an intelligent fact being, the relations and value of everything," who is dissatisfied from the material nature, and that there is a material and revelation given to mankind by their Creator, the M.A. of Balliol desires to disprove the truth of these propositions in a book which we are bound to say is no mere skin-deep assertion and learned research, such as might be expected from an Oxonian of high standing.

The work is, however, little to our taste, as it deals not so much with scientific facts as with all world literature and all world traditions. In tone and avowal it is antagonistic to the Bible as an authoritative revelation from God—say more, the sentiments and views likely to be gathered up from the perusal of its pages are that the God of the Scriptures is a spiritual Being, and that universal Nature is the only God, as will be seen by the perusal