



made his children look up at a bright sky, and he himself was an earnest theologian in his own way.

There was an evident struggle between the bodily wants of the forehead and the cerebral impulses which seem to lower the oppositional character of the eyelids. Under the bright light there was a tendency along the eyes, which was counteracted by the effort to see. Mr. Darwin then observed a similar struggle in children when they are understanding solids or perceiving a crying fit from coming on or to stop crying. There, then, he perceived that the eye is the organ which the mind part of the brain controls, and the mind would the eye control in opposition to each other under the influence of grief. We have all of us, on occasions, repeatedly contracted the lower lid of an eye in order to protect our eyes when we are weeping. This is done in order to prevent the tears from being more or less driven into the eyes, and though, with restraining tears, we seldom prevent the entrance of weeping, we seldom, from long habit, allow prevent a slight contraction of the lids. The contraction of the lids is the result of the object diverting up of the eyebrows, the puckering of their lower ends, and the formation of rectangular furrows on the middle of the forehead. In children—

"In all cases of weeping, whether great or small, the forehead is bent downwards, and the lower lid is raised to certain extent to protect, as it were, the eye from the point of weeping up; but the order is, by the numerous power of the will, are able partially to overcome, although it is not possible completely so, as the amount of contraction is constant. It is impossible not to admit the usefulness of this contraction, and yet it is difficult to see entered with the mind. Mr. Darwin may have observed with accuracy the muscular relations between the several conditions, but that the mind, as he thinks, more or less indicates relations than he shows between the motion of grief and the impulse communicated to the muscles. It is not easy to believe that a weeping mother has no other direct impulse on the face than to contract a reflexly associated muscle. It would seem, too, that, if Mr. Darwin's explanation is correct, the peculiar form of grief ought to be specially associated with an effort to restrain the expression of the emotion, whereas we should think it was more especially when we are in a condition of grief that we should see a contraction of the will. Mr. Darwin seems to us to have proved too much. He has deduced himself from taking any account of the efforts which our mind think would be professed by the various contractions of the face, and making a strong opinion, if not a conclusion, that the mind works without at all, it certainly leaves without any such theory or hypothesis relation between mind and feeling and a sense of satisfaction and pleasure over

the above and eyes. Mr. Darwin's observations are not by us meant to be applied from contributing towards the complete explanation of which we are to reach, but we cannot believe his hypothesis to be complete in itself, and we can only express our opinion of this in simple terms. In our opinion, the mind works without at all, it certainly leaves without any such theory or hypothesis relation between mind and feeling and a sense of satisfaction and pleasure over

the above and eyes. Mr. Darwin's observations are not by us meant to be applied from contributing towards the complete explanation of which we are to reach, but we cannot believe his hypothesis to be complete in itself, and we can only express our opinion of this in simple terms. In our opinion, the mind works without at all, it certainly leaves without any such theory or hypothesis relation between mind and feeling and a sense of satisfaction and pleasure over

the above and eyes. Mr. Darwin's observations are not by us meant to be applied from contributing towards the complete explanation of which we are to reach, but we cannot believe his hypothesis to be complete in itself, and we can only express our opinion of this in simple terms. In our opinion, the mind works without at all, it certainly leaves without any such theory or hypothesis relation between mind and feeling and a sense of satisfaction and pleasure over

the above and eyes. Mr. Darwin's observations are not by us meant to be applied from contributing towards the complete explanation of which we are to reach, but we cannot believe his hypothesis to be complete in itself, and we can only express our opinion of this in simple terms. In our opinion, the mind works without at all, it certainly leaves without any such theory or hypothesis relation between mind and feeling and a sense of satisfaction and pleasure over

the above and eyes. Mr. Darwin's observations are not by us meant to be applied from contributing towards the complete explanation of which we are to reach, but we cannot believe his hypothesis to be complete in itself, and we can only express our opinion of this in simple terms. In our opinion, the mind works without at all, it certainly leaves without any such theory or hypothesis relation between mind and feeling and a sense of satisfaction and pleasure over

the above and eyes. Mr. Darwin's observations are not by us meant to be applied from contributing towards the complete explanation of which we are to reach, but we cannot believe his hypothesis to be complete in itself, and we can only express our opinion of this in simple terms. In our opinion, the mind works without at all, it certainly leaves without any such theory or hypothesis relation between mind and feeling and a sense of satisfaction and pleasure over

which must be affected, and the wish to restrain blushing, by leading to self-attention, actually increases the tendency. The young blush more freely than the old, but not during infancy. In most cases the face, ears, and neck are the sole parts which redden; but a blush sometimes extends over the upper part of the chest, and even over the greater part of the body when attention has been drawn to those parts. There is reason to believe that the habitual exposure of the face has induced in the small arteries a greater readiness in contracting and dilating; but as the hands rarely blush this cannot be a sufficient explanation of the fact of blushing being mainly confined to the face. It is common to meet, probably to all, the roose of man. The skin of negroes becomes darker, and white scars on their faces are reddened. After an interesting discussion of the various occasions of blushing, Mr. Darwin concludes that, whether due to shyness, to shame for a real crime, to shame from a breach of the laws of etiquette, to modesty from humility, or to modesty from an indelicacy, it depends in all cases on the same principle, "the principle being a sensitive regard for the opinion, more particularly for the depreciation of others, primarily in relation to our personal appearance, especially of our faces; and secondarily, through the force of association and habit, in relation to the opinion of others on our conduct." Now Mr. Darwin suggests that attention closely directed to any part of the body tends to interfere with the ordinary and tonic obstruction of the small arteries of that part. These vessels, in consequence, become at such times more or less relaxed, and are instantly filled with arterial blood. This tendency will have been strengthened if frequent attention has been paid during many generations to the same part, owing to the force of habit and inheritance. Mr. Darwin gives a considerable body of details to show that mental attention possesses this power of influencing the capillary circulation, and his instances leave little doubt of the possibility of its producing, such an effect as blushing. The hypothesis appears extremely probable; and we can only wonder that Mr. Darwin should not have inquired whether some equally direct relation between the brain and the body might not afford an explanation of other expressions he discusses. Intense blushing is, he says, accompanied with seas, and often great confusion of mind, and he attributes this to "the intimate sympathy which exists between the capillary circulation of the surface of the head and of the brain." It is very unlikely that this intimate sympathy between the brain and the head affects nothing but the capillary circulation, or that it is only brought into play by conscious self-attention. If modesty can by this influence cause a blush, why should not grief, by a similar influence, provoke a frown of distress? The question arises, in short, whether this principle of "the direct action of the Nervous System on the body" might not be much further applied than Mr. Darwin has carried it, especially if we regard what was paid to any distinction there may be in the specific action of different emotions on the brain.

These examples will afford a fair specimen of Mr. Darwin's investigations, and their value is unquestionable. But we cannot part from the book without expressing our surprise at the failure it often displays to look beyond the mere surface of nature, and its frequent lack of philosophical caution in its inferences. Sometimes, indeed, Mr. Darwin seems to display a kind of incapacity for any but the most mechanical observation. We can only call it astounding, for instance, to find him saying that "although the emotion of love—for instance, that of a mother for her infant—is one of the strongest of which the mind is capable, it can hardly be said to have any proper or peculiar means of expression." All he can say is that "no doubt, as affection is a pleasurable sensation, it generally causes a gentle smile and some brightening of the eyes. A strong desire to touch the beloved person is generally felt, and love is expressed by this means more plainly than by any other." Yet the deep, pearly, and gentle feeling which breathes in the face of Raphael's Madonna must be familiar to every one; and poets have been all mistaken if the love of man and woman has no subtle language of its own. Whoever can recall all the varied and exquisite language of this passion will feel some revelation at Mr. Darwin's reduction of the whole to the "principle of pleasure derived from contact in association with love"—like the fondness of dogs and cats for rubbing against their masters and mistresses. But what is to be expected from a philosopher who also says that "music has a wonderful power of recalling, in a vague and indefinite manner, those strong emotions which were felt during long-past ages, when, as is probable, our early progenitors courted each other by the aid of vocal love?" We may trust musicians to appreciate the suggestion that "the thrill or slight shiver which runs down the backbone and limb of many persons when they are powerfully affected by music" is nothing but the relic of sensations once experienced by an enormous monkey at the call of his mate. This mode of discussing the subtle emotions of the mind and body is as unphilosophical as it is repugnant to natural feeling. It is incessantly forgotten in the speculations of modern philosophers that a combination of common things in a certain order and proportion may be something entirely different from the things themselves, and may possess qualities utterly different in kind from any other combination. Now that the human frame exists, whatever may be the truth of Mr. Darwin's theories respecting the mode of its development, to assume that it is exquisitely refined influences of music are essential in kind with the ancestor

of wild beasts, is the very height of theorizing. There is more truth, even if there be some enthusiasm, in a beautiful passage to one of Dr. Newman's University sermons, in which he contrasts the simplicity of a musician's machinery with the marvellous world of emotion he creates, and asks whether such magic sounds are not the echoes of some higher sphere, and of more than material harmonies. "Can it be," he exclaims, "that those mysterious stirrings of heart and even emotions, and strange yearnings after we know not whence, should be wrought in us by what is unessential, and comes and goes, and begins and ends in itself? It is not so; it cannot be. No; they are the outpourings of eternal harmony in the medium of created sound; they are echoes from our Home; they are the voice of Angels, or the Magnificat of Saints, or the living laws of Divine Governance, or the Divine Attributes; something are they, besides themselves, which we cannot compass, which we cannot utter, though mortal man and he, perhaps, not otherwise distinguished above his fellow-creatures the gift of singing them." In speculating on man's material origin natural philosophers seem to be in sight of the complexity of his being as if it were simple. We must needs, however, enter our remonstrance against the unqualified manner in which Mr. Darwin assumes the truth of his hypothesis respecting the origin of man, and the freedom with which he employs it as a legitimate basis of reasoning. He says, indeed, at the close of the book that the study of *Expression* "confirms to a certain limited extent the conclusion that man is derived from some lower form, and supports the belief of the specific or subspecific unity of the several races," though in his judgment "such confirmation was hardly needed." For our part we are rather surprised at the small amount of apt analogies he has shown between the expressions of man and of animals. Nobody doubts that the natures of the two are more or less analogous, and consequently in any theory of *Expression* we should expect to find certain principles of interpretation applicable to both. But with the exception, perhaps, of defiant snoring, which is obligatory like the snarl of a dog, none of the expressions for the causes seem to suggest a development from those of the lower animals. A ferret snarls, in which the upper lip is retracted and the canine teeth exposed on one side alone, Mr. Darwin ventures to say, "resembles man's animal descent;" but when he adds, as a reason, that "no one, upon rolling on the ground in a deadly grapple, with no enemy, would try to use his canine teeth more than his other teeth," he seems to cut away his own ground. The canine teeth, as the sharpest and strongest, are surely those which would naturally be used for such a purpose, and if this expression be really a relic of primate ferocity, it may as easily have been inherited from savage men as from dogs and monkeys. But assumptions of this kind are inadmissible in a man truly conversant of the truth of his hypothesis. It is not equally admissible to address mere speculations respecting our unknown ancestors as affording a scientific explanation of perplexing facts in ourselves. "Our early progenitors" become in this book quite troublesome by the frequency of their intrusions. It may be a curious, "though, perhaps, an idle speculation," as Mr. Darwin admits, "how early in the long line of our progenitors the various expressive movements now exhibited by man were successively acquired." He furnishes us, however, with a minute sketch of the gradual advance of "our early progenitors" in laughing, weeping, frowning, and posturing; though he is not always so sure ground as when he says that "our early progenitors, when indignant or moderately angry, would not have held their hands erect, opened their chests, squared their shoulders, and combed their hair, until they had acquired the ordinary carriage and upright attitude of man, and had learnt to fight with their fists and clubs." But our early progenitors would at least be careless if kept in those vague regions of speculation. It is otherwise when they are actually brought forward, on the strength of mere hypothesis, to explain present phenomena. Mr. Darwin, for instance, thinks it difficult to account for the fact that vomiting should be induced in some persons by the mere idea of having partaken of unusual food, though there is nothing in such food to cause the stomach to reject it. "Therefore," he says, "the suspicion arises that our progenitors must formerly have had the power of voluntarily rejecting food which disagreed with them." This is certainly "the use of the imagination in science," and whenever Mr. Darwin is in a great difficulty he brings in an early progenitor to fit the slot. The suppositions of his Professeur system were a useless nuisance compared with this device; and Mr. Darwin's own remark with respect to another method of philosophizing applies, in this instance, to his own, that, "by this doctrine, anything and everything may be equally well explained."