

THE EXPRESSION OF THE EMOTIONS IN MAN AND ANIMALS.

(2.) **I**T is certainly refreshing to receive from Mr. Darwin a popular and interesting work, not formally at least directed to the support of any dangerous theory. Even in his own view the result of his studies confirms only "to a certain limited extent the conclusion that man is derived from some lower animal form," though, "as far as his judgment serves, such confirmation is hardly needed," which is no doubt very fortunate, both in relieving the writer from disappointment, and in allowing his readers to enjoy with very little disturbance the descriptions of a most interesting subject by so careful an observer.

The explanation of the external phenomena exhibited in the bodies of men under the influence of the various physical or mental emotions has been often treated before the time of our author. Yet, as he intimates, all previous writers were labouring under the strange delusion that man had been formed by an intelligent Maker, who had given him of set purpose the means of displaying his emotions. By such a theory, he tells us contemptuously, "anything and everything can be equally well explained," and rather than commit himself to so antiquated a notion he is content to leave very many points in his theory of expression as quite inexplicable. Verily, as we read in Scripture, "Men have loved darkness more than the light."

Such a principle, however, is of too negative a character to make the work dangerous. It might not even be noticed by one who passed lightly over the introduction. And in this we perceive the prudence of the author. For taken in connection with his other works, there can be no doubt as to the part in his scheme of philosophy which the present volume was destined to perform. Had he found his subject more tractable, had he been able to account on atheistic theories for the means given to us of expressing our emotions, we should have heard much more of the antiquated fallacies of the Bridgewater treatises, which professed to find proof of the existence of a Creator even in a single member of the human body. As it is, the work is put forward, we suspect, only tentatively, as he has admitted was the case with his "Origin of Species," to be taken according to the

pleasure of the reader, either as a merely interesting study of Natural History, or as a contribution to the progress of Atheism, and an instalment towards a refutation of the Theist's argument from design. Men of a logical turn, who have no fancy for arguments which "go to prove," but yet fall lamentably short of a particular conclusion, will however be more likely to see in such a failure a confirmation of the doctrine which was proposed for attack. But neither is our author more fortunate in supporting the theory of man's animal origin. At the utmost it may be said that he has sufficiently proved the existence of such an analogy between the animal movements of man and the lower creation, as would naturally be expected by those who attribute the origin of both to the intelligence of one and the same Creator. On the contrary, as to the movements which indicate emotions connected with the moral sense, which marks the essential difference between men and brutes, we are surprised to find how readily he admits such actions to be purely human, and not common to ourselves and "our early progenitors." Thus grief and anxiety, as distinguished from the mere perception of pain or inconvenience, are manifestly closely connected with the possession of the moral sense, but our author sums up, "the expression of grief and anxiety is eminently human" (p. 363). And again, it is only in man that Mr. Darwin can find a trace of the repression of rage or anger to which the brutes must of necessity give full vent. Nay more, the brutes are for the most part even physically incapable of displaying purely human emotions. Thus it is only the human form of the circulatory and respiratory organs, and the muscles surrounding the eyes, which render possible those highly expressive movements of the features which accompany screaming and crying, and indicate something more than the mere pressure of pain common to men and brutes. And, as we are told,—

A very slight change in the course of the arteries and veins which run to the head would probably have prevented the blood from accumulating in our eye-balls during violent expiration; for this occurs in extremely few quadrupeds. In this case we should not have displayed some of our most characteristic expressions. (P. 365.)

It would be natural also to conclude that we should not, in that case, have experienced the emotions requiring such expressions, but however that may be, the foregoing passage deserves considerable attention in view of the arguments drawn by Huxley for the simious origin of mankind from close physical resemblances, as showing what a very slight physical difference is sufficient to constitute a vast general discrepancy. How much more then may be supposed to depend on the much larger difference between the shape of the skull in man and the ape, seeing that intelligence is so closely connected with the size of the brain.

Again, we must notice what seems to us a very important admission on the part of Mr. Darwin, and likely, when investigated thoroughly, to present insuperable difficulties in the way of the theory of natural selection. This is the conclusion to which his present studies have led him that all mankind were originally descended from a single parent-stock. For considering the very slow operation of natural selection, the difference between a European and a Hotentot ought to have been as great in pre-historic times as at present. But in those days when the earth was not fully peopled there could have been no "struggle for existence," which is the most essential requirement for the process of natural selection, and failing that, no such process would have been possible.

To pass now from these general considerations to the method employed by our author in the present volume, we find him laying down three principles on which to determine any difficulties. First, we have "the principle of servicable associated habits," which means that whereas certain actions are either servicable to our present constitution, or may be presumed to have been so to our ancestors the apes, whenever the same state of mind, which originally gave rise to them, has been induced in us, however feebly, there is a tendency within us to repeat those actions through force of inherited habit. Secondly, "the principle of Antithesis," which is nothing but the dangerous and doubtful axiom that contrary causes produce always contrary effects. Thirdly, "the principle of the direct action of the nervous system," which relates to what has been called "reflex action," where our nerve-force operates instantaneously without the influence of the will.

In his appreciation of these principles Mr. Darwin pursues the system which he found useful when writing his *Descent of Man*. The theory of natural selection having come in for some very rough treatment, and being in fact reduced to the barest shadow of its former self, he was fain to bring in another principle, that of sexual selection, and to prop up his arguments by employing one or the other, according as it suited him. Not to be behindhand on this occasion, he has provided himself beforehand with three principles, which he supplements occasionally by reference to the theory of natural selection, and the wonder is that he should still be obliged to confess that so many points remain inexplicable. (P. 82.) In his mode of argument he reminds us much more of a conjuror, who has three different ways of performing any trick he may undertake and selects at the time the one best suited to his circumstances, than of a man of science who proceeds on his investigations armed with three tests, each of which he applies in turn to the subject before him. Nay, if his principles fail him, he does not disdain to fall back

upon popular notions, forgetting for the time their incompatibility with his theories. Thus we are told:—

The cause of perspiration bursting forth in these cases is quite obscure; but it is thought by some physiologists to be connected with the failing power of the capillary circulation, and we know that the vaso-motor system, which regulates the capillary circulation, is much influenced by the mind. (P. 73.)

The mind! We thought man was only a development of an Ascidian, which has no mind. If man has a mind, pray let us know at what stage of the process natural selection succeeded in developing it. There is no thought without phosphorus, you know, so it will be very easy to ascertain at all events which of the connecting links between us and the Ascidians first began to assimilate phosphorus, and perhaps you may find there the beginning of consciousness!

We have already alluded to the unsatisfactory nature of the second principle, which is easily shown by experience; for men weep for joy as well as for grief, and it is often impossible to distinguish a smile of assent from one of amusement caused by a perception of absurdity. But it is perhaps a graver charge against Mr. Darwin that he has omitted a principle which should naturally have been included, and has often founded his arguments on this omission. We mean the principle of imitation, by which man, in order to express his meaning more clearly, would naturally copy in some cases the gestures of the lower animals. To this principle we should prefer to attribute the raising of the corner of the lip, so as to show the eye-tooth, which accompanies a sneer, rather than, with our author, to the effects of a former habit of uncovering the eye-tooth in preparation for a bite. Moreover, throughout the volume, it is very remarkable that both with regard to men and animals, Mr. Darwin is totally oblivious that even where no intention of action has been formed, it is only most natural that those who are under the influence of an emotion tending to action should place themselves in a state of preparation for such action. We should be inclined to suggest this, not as a fifth, but as the first and most important principle of the whole matter. Why Mr. Darwin should have omitted it, we cannot even imagine.

Space will not permit us now to give examples of the manner in which our author has explained his theories of the emotions, but in no case could we have done so satisfactorily, on account of the fulness with which they have been treated. To be properly understood they require also the assistance of the photographs with which the work is liberally supplied.

THE HISTORY OF SICILY TO THE ATHENIAN WAR.

(3) THERE are few countries occupying a central position in the civilized world the early traces of whose history are so difficult to recall as those of Sicily. The accounts given of the island and of its rulers during the palmy days of Greek literature are very fragmentary, and scattered through the writings of various authors. Without an extensive knowledge of these writers Mr. Lloyd could not have undertaken his task, but while we give him credit for diligent research and accurate narration, we cannot but regret that he should have published a history such as that now before us without more copious references and a complete index. The period over which his annals principally range is that between the years 498 B.C. to 432 B.C.—a period marked by the defeat of the Persians at Marathon, the invasion of Greece by Xerxes, the battles of Thermopylæ, Salamis, Plataea, Mycale, and Eurymedon, and the tyranny of Athens over the rest of Greece. But with these stirring events Mr. Lloyd is only partially concerned. After describing the site and geography of Sicily, and discussing the Homeric notices of the island, he dwells on its primitive population and the migration of Greeks to its picturesque and fertile coasts. He then launches into the history of Hippocrates, Gelon, Theron, Aristodemus, and Hiero, tyrants or rulers of Sicily, and after a few chapters on the subversion of the tyrannies, the politics, fine arts, and philosophy of the country, comes down to what occupies half the volume, and will be to many the most interesting portion, namely the notices of Sicilian history to be collected from the Odes of Pindar.

Many of the victors in the Olympian and other games celebrated by that poet were of Sicilian extraction, and it was always his aim to enhance the glory of the hero whom he sung by calling to mind his noble descent and the illustrious deeds of his ancestors. These digressions, if such they can be called, often led him into historical or legendary matter affording the widest scope for his daring genius. One of the many charms of his compositions, which are perfect in their kind, is the variety of the themes he handles, though always starting from the same point—a victory gained in the chariot-races, horse-races, foot-races, mule-cars, pugilism or the like. Ever and anon he gives utterance to terse and profound reflections, which became proverbs in the mouths of men, like the household words of our own Shakespeare. Now it happens that 16 out of Pindar's 45 odes refer to Sicilian athletes, and in the course of these 16 odes many points in the history of Sicily, as well as in its legendary lore, are illustrated by the master of lyric poetry. Mr. Lloyd has wisely taken advantage of this circumstance to throw light on his history and at the same time to supply historical comment on the poems in question. The Pindaric Odes are generally considered among the most difficult of the remains of Greek literature, but they are so only because the allusions in