

## REVIEWS.

### THE DESCENT OF MAN.\*

IT may be necessary at the outset to state that, in postponing our notice of the present work to this number of the REVIEW, we had fancied that the work was of far greater importance than it is. For great as the labour may have been on the part of the author, of collecting and putting together so vast an accumulation of facts, we should not be just to our readers did we not confess that the volumes are in no respect to be compared with either of Mr. Darwin's previous books. In point of fact, we might readily have noticed this work in our previous issue, had we not thought that it was something like its predecessors, and on that account determined to deal with it slowly, and at our leisure. It must not, however, be imagined that the work is not in every way worthy of the author, for it is a most important treatise, and is full to overflowing with facts which, less or more, help to prove the author's case.

What we mean is, that as regards the descent of man the volumes somehow or other contain less than we had expected of them, and, as regards the arguments they set forth, the author's case seems to us but little stronger, if anything, than before. The reader must not assume from this that we hold Mr. Darwin's theory to be in error. Far from this; for we are convinced that his views, taken altogether, are strictly and rigidly true. We are as satisfied that man came from some species of monkey, rather than from a heap of unorganised dust, as it is possible for us to be. That which we assert is, that Mr. Darwin's book is not so convincing to the general reader of the force of this idea, as we had imagined it would be. It is full of details which the naturalist can value, and can see how every one of them convinces him more and more of the origin of species by natural selection, rather than by any other means. But to the general reader it is a heavy book, without sufficient thread of continuity to give it adequate effect in his mind.

And yet it must be admitted that it contains nearly all the evidence upon the subject, and in some cases put in a very strong manner indeed. But for all that, we fear that the volumes will fail to convince those who are worth convincing as to the origin of man. Yet how little is on the other side, absolutely nothing in the form of legitimate reasoning; and still the

---

\* "The Descent of Man, and Selection in Relation to Sex." By Charles Darwin, M.A., F.R.S. 2 volumes. London: John Murray, 1871.

Darwinian opponents call upon the author almost to show them, by ocular demonstration, the truth of his views. Of course such a demonstration would be absolutely impossible, for those changes which Mr. Darwin supposes to take place have occupied millions of years in their performance, step by step. It is remarkable that of the various opponents which Mr. Darwin has raised up to his views, most of them consider that the shaping of an implement for use is not only peculiar to man, but must be so. And, after all, is there not much truth in Sir John Lubbock's suggestion, that when primeval man first used flint stones for any purpose, he would have accidentally splintered them, and would then have used their sharp fragments. "From this step it would be a small one to intentionally break the flints, and not a very wide step to rudely fashion them. This latter advance, however, may have taken long ages, if we may judge by the immense interval of time which elapsed before the men of the neolithic period took to grinding and polishing their stone tools. In breaking the flints, as Sir J. Lubbock likewise remarks, sparks would have been emitted, and in grinding them heat would have been evolved; thus the two usual methods of obtaining fire may have originated." Surely this is nothing but probability, and no sane person can object to reasoning conducted on so fair a scale. It is not too much intelligence to expect from anything superior to a modern ape or baboon. Even animals lower in the scale possess very nearly power enough for this. "No one," says Mr. Darwin, "supposes that one of the lower animals reflects whence he comes or whither he goes—what is death or what is life, and so forth. But can we feel sure that an old dog, with an excellent memory and some power of imagination, as shown by his dreams, never reflects on his past pleasures in the chase? and this would be a form of self-consciousness. On the other hand, as Büchner has remarked, how little can the hard-worked wife of a degraded Australian savage, who uses hardly any abstract words, and cannot count above four, exert her self-consciousness, or reflect on the nature of her own existence." Really these observations are very true; they lead us to make comparisons between the highest civilised man and the lowest savage, and to confess that the gap intellectually, if not structurally, is very great indeed.

Mr. Darwin attempts to trace the backward career of man; and although he does not bring forward a massive case in its favour, he urges some evidence that is of a serious nature. He says that the most ancient progenitors in the kingdom of the Vertebrata, at which we are able to obtain an obscure glance, apparently consisted of a group of marine animals resembling the larva of existing Ascidiæ. These animals probably gave rise to a group of fishes, as truly organised as the Lancelet; and from these the Ganoids and other fishes like the *Lepidosiren* must have been developed. From such fish Mr. Darwin thinks a very small advance would carry us on to the amphibians. Birds and reptiles, he has shown, were once intimately connected together, and the Monotremata now in a slight degree connect mammals with reptiles. But no one can at present say by what line of descent the three higher and related classes—namely, mammals, birds, and reptiles—were derived from either of the two lower vertebral classes, namely amphibians and fishes. In the classes of mammals the steps are not difficult to conceive which led from the ancient Monotremata to the

ancient Marsupials, and from these to the early progenitors of the placental mammals. "We may thus ascend to the Lemuridæ; and the interval is not wide from these to the Simiadæ. The Simiadæ then branched off into two great stems, the New World and the Old World monkeys; and from the latter, at a remote period, Man, the wonder and glory of the universe, proceeded."

Of the manner in which Mr. Darwin supports the argument which is stated as above, the reader must judge for himself. All that can be urged in its support is brought forward, and that only as Mr. Darwin can adduce it. But the evidence is not absolutely a great deal, though relatively it is overpoweringly strong, and so we leave it to those who will take up the volumes for themselves.

Of the difficulties of the argument none are more familiar to anyone than Mr. Darwin, as the following passage, in which the principal difficulty is fully admitted, will amply show:—"If, however, we look to the races of man, as distributed over the world, we must infer that their characteristic differences *cannot* be accounted for by the direct action of different conditions of life, even after exposure to them for an enormous period of time. The Esquimaux live exclusively on animal food; they are clothed in thick fur, and are exposed to intense cold and to prolonged darkness; yet they do not differ in any extreme degree from the inhabitants of Southern China, who live entirely on vegetable food, and are exposed, almost naked, to a hot glaring climate. The unclothed Fuegians live on the marine productions of their inhospitable shores; the Botocudos of Brazil wander about the hot forests of the interior, and live chiefly on vegetable productions; yet these tribes resemble each other so closely, that the Fuegians on board the *Beagle* were mistaken by some Brazilians for Botocudos. The Botocudos again, as well as the other inhabitants of tropical America, are wholly different from the Negroes who inhabit the opposite shores of the Atlantic, are exposed to a nearly similar climate, and follow nearly the same habits of life."

Thus we see with what fairness and honesty Mr. Darwin tells of the facts against himself as well as in his favour. Of the contents of his volumes we can only say that they are extremely interesting, and they all go toward his theory of man's origin. But he has not got a clear case, though all the testimony is with him and none on the other side; it is misty and complicated, and we do not think that the mass of naturalists will accept some of the conclusions which we have extracted. What they will say will probably be this: "You are right as to your theory of man's origin; he undoubtedly has come from the monkey class, but we cannot accept your transition line as perfect, and we somewhat regret that you have drawn it so far at present."

---