

fested of late, appears, in this controversy, unchecked and as tumultuous as in his earlier years.

DARWIN'S LIFE AND LETTERS—II.

Life and Letters of Charles Darwin. With an autobiographic chapter by Francis Darwin. London: John Murray. 3 vols. New York: D. Appleton & Co. 2 vols.

The American edition of the 'Life and Letters of Charles Darwin' is in two volumes; the English edition, from which we cite, is in three. A French and a German translation appear simultaneously. The editorial labor of love and filial duty is well done. The letters, partly arranged according to topics, so far as regards certain lines of investigation and publication, are left to tell their own story, with some few explanatory paragraphs and terse biographical foot-notes upon persons mentioned or who take part in the correspondence, supplying just the information which general readers would desire and might not otherwise readily obtain. One might say that more letters are printed than is needful for the complete exposition of the writer's work, life, and character; but perhaps none is superfluous, and there is not a tedious one. They were written with absolute abandon, without the slightest notion that any one would ever gather and print them, nor even think it worth while to preserve them. They bubble over with *bonhomie*, and have all the life and naturalness of unrestrained conversation. Hence their charm and their value.

The letters in the latter half of the first volume come down to the spring of 1854, to the close of Darwin's work on the *Cirripedia*. In the autumn of that year he writes that he has "been frittering away the time for several weeks in a wearisome manner, partly idleness and odds and ends, and sending ten thousand barnacles out of the house and all over the world," but that he shall now in a day or two begin to look over his old notes on species. This subject was ever in his mind throughout his prolonged study of *Cirripedes*, in the midst of which he replied to a near friend, who had asked what "ornamental poultry had to do with barnacles," "Do not flatter yourself that I shall not live to finish the barnacles, and then make a fool of myself on the subject of species, under which head ornamental poultry are very interesting."

The second volume is specially devoted to his work on the 'Origin of Species' and to the correspondence of the period, from 1843 to 1862. It has a preliminary chapter by the editor on the foundations of the theory, with an account of the early sketch written in 1844. There is, moreover, a chapter by Prof. Huxley on the reception of the book—an historical and critical essay, very interesting and very characteristic, very provocative of citation, only one would not know how and when to stop. Excellent and true is his statement of the condition of mind of the leading philosophical naturalists when "the publication of the Darwin and Wallace papers in 1858, and still more of the 'Origin' in 1859, had the effect upon them of the flash of light which, to a man who has lost himself in a dark night, suddenly reveals a road which, whether it takes him straight home or not, certainly goes his way." Again:

"My reflection, when I first made myself master of the central idea of the 'Origin,' was, How very stupid not to have thought of that. With any and every critical doubt which my sceptical ingenuity could suggest, the Darwinian hypothesis remained incomparably more probable than the creation hypothesis. The only rational course for those who had no other object than the attainment of truth was to accept Darwinianism as a

working hypothesis, and see what could be made of it. Either it would prove its capacity to elucidate the facts of organic life, or it would break down under the strain. This was surely the dictate of common sense; and, for once, common sense carried the day. The result has been that complete *volte-face* of the whole scientific world which must seem so surprising to the present generation."

Huxley takes the present occasion to reaffirm his early declaration that "perhaps the most remarkable service to the philosophy of Biology rendered by Mr. Darwin is the reconciliation of Teleology and Morphology, and the explanation of the facts of both"; that "the teleological and the mechanical views of nature are not, necessarily, mutually exclusive." He now adds:

"The acute champion of Teleology, Paley, saw no difficulty in admitting that the 'production of things' may be the result of trains of mechanical dispositions fixed beforehand by intelligent appointment, and kept in action by a power at the centre. That is to say, he proleptically accepted the modern doctrine of Evolution; and his successors might do well to follow their leader, or at any rate to attend to his weighty reasonings, before rushing into an antagonism which has no reasonable foundation."

"Not a solitary problem presents itself to the philosophical theist, at the present day, which has not existed from the time that philosophers began to think out the logical grounds and the logical consequences of theism. All the real or imaginary perplexities which flow from the conception of the universe as a determinate mechanism, are equally involved in the assumption of an Eternal, Omnipotent and Omniscient Deity. The theological equivalent of the scientific conception of order is Providence; and the doctrine of determinism follows as surely from the attributes of foreknowledge assumed by the theologian, as from the universality of natural causation assumed by the man of science."

Nevertheless, the "outpouring of angry nonsense" to which Darwin's work gave rise "is sad to think upon," and equally so the cooler misconceptions of many who, with opposing prejudices, either deprecated or welcomed the new views. Darwin's own noble bearing is seen in his letters through this trying period, which give great interest to the second volume. His sensitive nature is seen to respond joyfully to praise, and hardly less so to all just criticism, while unfair or contumelious criticism does not disturb his equanimity or provoke a censorious remark.

The third volume takes up his work in the year 1863, when he was engaged upon the 'Variation of Animals and Plants under Domestication,' to be followed by the 'Descent of Man' and 'Expression of the Emotions,' and by the various biological investigations, chiefly upon plants, which most pleasantly occupied the later years of his life. It was a great satisfaction to his family and friends that his health improved during the last ten years, so that he could work more steadily and, if not enjoyably, yet with less distress and discomfort. Naturally there was a certain loss of physical vigor as the end drew near. His letters to his friends perhaps grow less vivacious, but not less interesting. He writes in the last year: "I have not the heart or strength to begin any investigation lasting years, which is the only thing I enjoy, and I have no little jobs which I can do." The close came on the 19th of April, 1882. The editor concludes the record of his father's life with a note which the latter added to his autobiography two years before:

"As for myself, I believe that I have acted rightly in steadily following and devoting my life to science. I feel no remorse from having committed any great sin, but have often and often regretted that I have not done more direct good to my fellow-creatures."

Darwin's letters, which form the staple of these volumes, are mainly selected from those written to personal friends; perhaps a full half

of them are to Sir Joseph Hooker, and an almost equal proportion was to Lyell, while he lived. There are not very many letters from his correspondents; indeed, more of them would have been desirable; but we understand that, except in late years, Darwin from time to time destroyed most old correspondence. It is well that his friends acted differently. Almost all the letters are on scientific subjects or have a scientific substratum, and were written to elicit some information, or to return effusive thanks for the same. But incidentally they reflect the writer's sentiments upon various topics of the day, and are thoroughly illustrative of character. Of family letters there are hardly any. Here is an idyllic bit of one of them, written to Mrs. Darwin when, after working too hard upon the 'Origin of Species' book, he was obliged to go down for a while, in the spring of 1858, to a water-cure:

"The weather is quite delicious. Yesterday, after writing to you, I strolled a little beyond the glade for an hour and a half, and enjoyed myself—the fresh yet dark green of the grand Scotch firs, the brown of the catkins of the old birches, with their white stems, and a fringe of distant green from the larches, made an excessively pretty view. At last I fell fast asleep on the grass, and awoke with a chorus of birds singing around me, and squirrels running up the trees, and some woodpeckers laughing, and it was as pleasant and rural a scene as ever I saw, and I did not care one penny how any of the beasts or birds had been formed" (ii, p. 114).

Readers cannot all be naturalists, nor care very much how the birds and beasts may have been formed; they may care more for Darwin's sentiments regarding human interests. His horror of cruelty to animals, his remonstrance against needless or merely curious vivisection, and his abomination of slavery, even in its least repulsive forms, are well known, and are here and there exemplified in these volumes. Most readers may recall his description of the Fuegians in his 'Journal of Researches,' and his mention of them in the first volume of these letters is equally unhopeful. In 1870, at the close of a friendly letter to his shipmate, Admiral Sullivan, who was a lieutenant on board the *Beagle*, he writes:

"I had never heard a word about the success of the Tierra del Fuego Mission. It is most wonderful, and shames me, as I always prophesied utter failure. It is a grand success. I shall feel proud if your committee think fit to elect me an honorary member of your society."

The following statement by Admiral Sullivan was printed in 1885, namely that—

"Mr. Darwin had often expressed to me his conviction that it was utterly useless to send missionaries to such a set of savages as the Fuegians, probably the very lowest of the human race. I had always replied that I did not believe any human beings existed so low to comprehend the simple message of the Gospel of Christ. After many years, I think about 1867, but I cannot find the letter, he wrote to me that the recent accounts of the mission proved to him that he had been wrong and I right in our estimates of the native character and the possibility of doing them good through missionaries; and he requested me to forward to the Society an enclosed check for five pounds, as a testimony of the interest he took in their good work. On June 6, 1874, he wrote: 'I am very glad to hear so good an account of the Fuegians, and it is wonderful.' On June 10, 1879: 'The progress of the Fuegians is wonderful, and had it not occurred, would have been to me quite incredible.' On January 3, 1880: 'Your extracts [from a journal] about the Fuegians are extremely curious, and have interested me much. I have often said that the progress of Japan was the greatest wonder in the world, but I declare that the progress of Fuegia is almost equally wonderful.' On March 20th, 1881: 'The account of the Fuegians interested not only me, but all my family. It is truly wonderful what you have heard from Mr. Bridges about their honesty and their language. I certainly should have predicted that not all the mission-

aries in the world could have done what has been done.' On December 1st, 1881, sending me his annual subscription to the Orphanage at the Mission Station, he wrote: 'Judging from the *Missionary Journal*, the mission in Tierra del Fuego seems going on quite wonderfully well.'

In our war for the Union, Darwin was much stirred by conflicting emotions. To an American correspondent he wrote, in June, 1861: "North America does not do England justice. I have not seen or heard of a soul who is not with the North. Some few, and I am one of them, even wish to God, though at the loss of millions of lives, the North would proclaim a crusade against slavery. . . . Massachusetts seems to show noble enthusiasm." A few months after came the Mason-Slidell imbroglio, and he writes:

"What a thing it is that, when you receive this, we may be at war, and we two be bound as good patriots to hate each other, though I shall find this hating you very hard work. How curious it is to see two countries, just like two angry and silly men, taking so opposite a view of the same transaction! I fear there is no shadow of doubt we shall fight if the two Southern rogues are not given up. And what a wretched thing it will be if we fight on the side of slavery. No doubt it will be said that we fight to get cotton; but I fully believe that this has not entered into the motive in the least. Well, thank Heaven, we private individuals have nothing to do with so awful a responsibility. Again, how curious it is that you seem to think that you can conquer the South; and I never meet a soul, even those who would most wish it, who thinks it possible—that is, to conquer and retain it. I do not suppose the mass of people in your country will believe it, but I feel sure if we do go to war it will be with the utmost reluctance by all classes, Ministers of Government and all. Time will show, and it is no use writing or thinking about it.

"With respect to Design, I feel more inclined to show a white flag than to fire my usual long-range shot. I like to try and ask you a puzzling question, but when you return the compliment I have great doubts whether it is a fair way of arguing."

It was in January, 1862, while the trying question (not of the design of Providence, but the less profound design of the United States Government in respect to Wilkes's captives) was still pending, that Darwin wrote to a friend at home:

"I thought it best to make a clean breast to —, and told him that the Boston dinner, etc., had quite turned my stomach, and that I almost thought it would be good for the peace of the world if the United States were split up. On the other hand, I said that I groaned to think of the slaveholders being triumphant, and that the difficulties of making a line of separation would be fearful. . . . Certainly I agree with you that the present American row has a very Torifying influence on us all."

Two months later, when that crisis had passed, he wrote to his American correspondent:

"Thanks for the newspapers (though they did contain digs at England), and for your note. It is really almost a pleasure to receive stabs from so smooth, polished, and sharp a dagger as your pen. I heartily wish I could sympathize more fully with you, instead of merely hating the South. We cannot enter into your feelings; if Scotland were to rebel, I presume we should be very wrath, but I do not think we should care a penny what other nations thought."

Again, in February, 1863:

"I read Cairnes's excellent Lecture, which shows so well how your quarrel arose from slavery. It made me for a time wish honestly for the North; but I could never help, though I tried, all the time thinking how we should be bullied and forced into a war by you, when you were triumphant. But I do most truly think it dreadful that the South, with its accursed slavery, should triumph, and spread the evil. I think if I had power, which, thank God, I have not, I would let you conquer the border States, and all west of the Mississippi, and then force you to acknowledge the cotton States.

For do you not now begin to doubt whether you can conquer and hold them?

"The *Times* is getting more detestable (but that is too weak a word) than ever. My good wife wishes to give it up, but I tell her that is a pitch of heroism to which only a woman is equal. To give up the 'Bloody Old *Times*,' as Cobbett used to call it, would be to give up meat, drink, and air."

In another letter some hope dawns: "I hope and think it not unlikely that we English are wrong in concluding that it will take a long time for prosperity to return to you." Happily, he lived to see the returning prosperity and reunion, and to rejoice in them.

If we were to touch upon the scientific topics which in some form or other make up the staple of these volumes, we should have to fill pages. Let such matters be relegated to the scientific journals. Nor may we venture now to cull from the livelier and more personal portions, and the charming exhibitions of good feeling, which light up the pages as with sunshine. Darwin's thanks for every service, and his praise of other people's contributions or elucidations are truly profuse. Disparagement he reserves for himself, and if he criticises, there is never an ill-natured word for the weak points of others. Yet playful hits abound. He was experimenting laboriously as to how long seeds would retain vitality under exposure to ocean water when he wrote: "Have not some men a nice notion of experimenting? I have had a letter telling me that seeds *must* have great power of resisting salt water, for, otherwise, how could they get to islands? This is the true way to solve a problem!" Nor will he allow "a good joke" at his own expense to be lost: "H. C. Watson, who I fancy and hope is going to review the new edition of the 'Origin,' says that in the first four paragraphs the words I, me, and my occur forty-three times! I was dimly conscious of the accursed fact. He says it can be explained phrenologically, which, I suppose, civilly means that I am the most egotistically self-sufficient man alive. Perhaps so. I wonder whether he will print this pleasing fact." A postscript adds: "Do not spread this pleasing joke; it is rather too biting." Of his almost single case of "writing in newspapers" he says:

"I have been gnashing my teeth at my own folly; and this not caused by —'s sneers, which were so good that I almost enjoyed them. I have written once again to own to a certain extent of truth in what he says, and then if I am ever such a fool again, have no mercy on me. I have read the squib in *Public Opinion*; it is capital; if there is more, and you have a copy, do lend it. It shows well that a scientific man had better be trampled in dirt than squabble."

Certainly he was "the quietest of the set"; and as to the squib, our readers may enjoy it as much as Darwin did. It is—

"A lively account of a police case, in which the quarrels of scientific men are satirized. Mr. John Bull gives evidence that—

"The whole neighborhood was unsettled by their disputes; Huxley quarrelled with Owen, Owen with Darwin, Lyell with Owen, Falconer and Prestwich with Lyell, and Gray, the menagerie man, with everybody. He had pleasure, however, in stating that Darwin was the quietest of the set. They were always picking bones with each other and fighting over their gains. If either of the gravel sifters or stone breakers found anything, he was obliged to conceal it immediately, or one of the old bone collectors would be sure to appropriate it first and deny the theft afterwards, and the consequent wranglings and disputes were as endless as they were wearisome."

"Lord Mayor—Probably the clergyman of the parish might exert some influence over them?"

"The gentleman smiled, shook his head, and stated that he regretted to say that no class of men paid so little attention to the opinions of

the clergy as that to which these unhappy men belonged."

This little anecdote of Lyell it can do no harm to repeat; it is in a letter of the year 1854:

"Lyell told me that he was so delighted with one of Agassiz's lectures on progressive development, etc., that he went to him afterwards and told him that it was so delightful that he could not all the time help wishing it was true. I seldom see a zoölogical paper from North America without observing the impress of Agassiz's doctrines—another proof, by the way, of how great a man he is."

We have said that these volumes are admirably edited. We have found only one oversight. It is in the sentence on page 258 of the third volume: "Although, according to Dr. Gray, Brown, in common with the rest of the world, looked on Sprengel's ideas as fantastic, yet it was at his recommendation that my father in 1841 read his now celebrated 'Secret of Nature Displayed.'" The article from *Nature* (1874, p. 80) here referred to says, on the contrary, that Brown "looked upon Sprengel's ideas as *far from fantastic*." The authority for the statement seems to have been Darwin himself, who, in a foot-note on page 271 of the 'Fertilization of Orchids,' says: "Many years ago Robert Brown, to whose judgment all botanists defer, spoke highly of it (Sprengel's book) to me, and remarked that only those who knew little of the subject would laugh at him."

Here we drop these most interesting volumes, of which, after all, we have given only a partial and desultory account.

CHILDREN'S BOOKS.

MR. JOHN DIMITRY'S idea of excerpting from Rabelais the simple incidents of the lives of Grandgousier, Gargantua, and Pantagruel, for children, seems to us almost as fantastic as the humor of the original. 'Three Good Giants' is what he calls the handsome little book that results (Boston: Ticknor & Co.), but how this gluttonous and slaughtering trio can attach themselves to any notion of *good* in the infant mind, we cannot guess; much less how their history can inspire goodness. In fact, with all his exclusions, Mr. Dimitry has opened an unredeemed vista of gross animal living and brutal ferocity. We cannot think that it is a gain to the nursery library to put within reach the killing of Loupgarou, or Panurge's trickery, or the most of the moral examples here brought together with more than usual painstaking and literary skill. We suspect that the desire to save for children the grotesque designs of Doré and Robida weighed more with the compiler than he was himself aware in undertaking his task. Exceptions to Mr. Dimitry's punctiliousness are noticeable in his occasional misuse of shall and will, and he has more than once conived in the proof-reader's "Nôtre Dâme" and "Montpelier."

Classic in every sense, Hawthorne's 'Tanglewood Tales' will contribute to the delectation of the young for generations yet to come. The guise in which Houghton, Mifflin & Co. have now put it forth will be grateful to the children who receive it. A better child's book, with its admirable print and paper, it is not easy to name. Mr. Geo. Wharton Edwards's illustrations, if not even as sound, archæologically, as the pictures of Alma Tadema, or in all cases conformed to the text, are, perhaps, as well suited to children's minds as if they were severely correct. The readers for whom the stories were intended are not critical as to classical consistency, and the exaggerated giants and monsters of Mr. Edwards will impress the juvenile imagination more than something less suggestive of Gulliver and Brobdingnag. But why the artist should have