

LETTERS TO THE EDITOR

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- [7] *The Editor accepts responsibility for their letters as short as possible. The payment for this space is so great that it is impossible otherwise to ensure the appearance of communications containing interesting and novel facts.*

By Wynville Thomson and Natural Selection

I HAVE of late great reason to be thankful that my stupidity has not prevented me from thoroughly enjoying the teachings of Mr. Darwin and Mr. Wallace, which I confess to having regarded as chiefly curiosity and shrewd "wisdom in variation," for the last twenty years.

The title of the epoch-making book which came of age last month was, however, "The Origin of Species by Means of Natural Selection." Mr. Darwin, as I am well aware, has put forward this mode of the origin of species as a part only of a hypothesis which is universally looked upon as a supreme effort of genius.

It seemed to me, rightly or wrongly, that the focus of the discussion was turning the physical organs and not under conditions which held out the hope that it might throw some light upon a question which appears to underlie the whole matter, and which is still unanswered. Now physiological species are the result of the gradual modification of pre-existing species by natural selection, or by any similar process; or are they due to the action of a law to yet entirely unknown, by which the long chain of organisms rolls off in a series of definite links?

I have I sincerely follow Mr. Darwin's illustration. If one were to put his foot still to a leveler's, and he shows a flock of Lamingtons, never having seen or heard of a sheep before, he would see nothing but a flock of sheep, and would certainly, without partly guessing the continuity of the leveler, be content to see them down merely as a group of animals of the same species, that is to say, animals he'd do with one another and producing fertile progeny. He would judge on facts in his common observation, and without previous observational information I do not see how he could know more about them. But you have an opportunity of comparing the results of breeding throughout a long period of time, or of observing the process of breeding over half the world, which comes to much the same thing; the leveler might then have cause to say if he had not picked up the stages of the process.

The above examination of the above theories and the careful analysis of the forms of the deep sea seems to me fairly to represent these two methods; both of these promise to yield a mass of information in regard to the course of evolution, but so to the mode of the origin of species both seem to yet equally silent.

I will ask you in a week or two for space for a short notice on "The Aqueous Fauna in Relation to the Origin of Species."

C. WYNVILLE THOMSON

were introduced individually to Mr. Darwin by Dr. Sorby, vice-president of the Union, and then the interesting summary of the presentation of the address was at once proceeded with. After a few words on the work of the Union by Dr. Sorby, the address was read by Mr. Thomas Hink, B.A., B.Sc., and formally presented to Mr. Darwin by Dr. Sorby. Replying to the address, Mr. Darwin assured the deputation of his deep sense of the honour the Yorkshire Naturalists' Union had conferred upon him on that occasion, and only regretted that he had not done something more deserving of such an honour. He had no idea previously that there was an attempt a body of working naturalists in Yorkshire, but was pleased to learn that such was the fact, and to find from the Transactions that had been forwarded to him that they were doing useful work. Coming from such a body, the address was all the more gratifying to him, though he still feared he hardly merited the good things that had been said of him. The address which had been presented to him he and his family would for ever treasure and preserve, and he desired to express his warmest thanks, both to the deputation and those whom they represented, for it, and for the kind and considerate manner in which everything connected with it had been arranged. Subsequently the deputation were entertained at luncheon, and having spent a short time in familiar conversation with their hospitable host and his family, took the departure amid mutual expressions of kindness and regard.

The following is the text of the Address, which is dated August last:—

To Charles Darwin, LL.D., M.P., F.R.S., &c., &c.

SIR.—The Council and Members of the Yorkshire Naturalists' Union, all of whom, with scarcely an exception, are working geologists of one or more of the various branches of natural history, desire to express to you in a most respectful manner, and yet done so to express to you their admiration of your life-long devotion to original scientific research and their high appreciation of the almost unparalleled success of the investigations by which

you have contributed so largely to the modern development and progress of biological science.

More especially do they desire to congratulate you on the fact that your great work on the Origin of Species will come of age at an early date, and that your life has been spared long enough to enable you to see the leading principles therein enunciated accepted by most of the eminent naturalists of the day. On the spontaneous merits of that and of your other published works they need not dwell, as those merits have been recognized and admitted even by those who have dissented most strongly from the conclusions at which you have arrived. They may nevertheless be permitted to remind you that your writings have been instrumental in giving an impulse to biological and paleontological inquiries which has no precedent in the history of science, except perhaps in that which followed the promulgation of the gravitation theory of Newton, and that which was due to the discovery of the circulation of the blood by Harvey.

One of the most important results of your long-continued labours, and one for which you will be remembered with honour and reverence as long as the human intellect exists, stand in the pursuit of natural knowledge, is the scientific basis you have given to the grand doctrine of Evolution. Other naturalists, as you yourself have shown, had endeavoured to unravel the questions that had arisen respecting the origin, classification, and distribution of organic beings, and had even obtained faint glimpses of the transformation of specific forms. But it was left to you to show, almost to demonstration, that the variations which species of plants and animals exhibit, and in natural selection through the struggle for existence, we have causes at once natural, universal, and efficient which of themselves are competent not only to explain the existence of the present races of living beings, but also to connect with them, and with one another, the long array of extinct forms with which the paleontologist has made us familiar.

Further, the Yorkshire Naturalists are anxious to place on record their firm conviction that in the care, the patience, and the scrupulous conscientiousness with which all your researches have been conducted; in the ingenuity of the experiments you have devised; and in the repeated verifications in which your results have been substantiated by your own hands, you have furnished an example of the true method of biological inquiry that succeeding generations will deem it an honour to follow, and that should but lead to still further progress in the domain of organic science.

In presenting this small token of their high regard and esteem, the members of the Yorkshire Naturalists' Union cannot but hope and pray that many years of happiness and usefulness may yet remain to you, and that our Science and Literature may be still further enriched with the results of your researches.

(Signed) WILLIAM C. WILKINSON, F.R.S., President,
H. C. SORBY, LL.D., F.R.S., Vice-President,
GEORGE SWAIN, M.P., F.L.S., Secretary,
Wm. HENRIE FORDON, Secretary.

And Eleven other representative Officials.

NATURE

Nov. 18, 1880]

HOMAGE TO MR. DARWIN

ON Wednesday, November 5, a deputation from the Yorkshire Naturalists' Union waited upon Mr. Darwin at his residence, Down, Beckenham, Kent, for the purpose of presenting him with an address expressive of admiration for his long devotion to scientific research, and appreciation of the great and important results to which his investigations have led. Prof. Williamson, F.R.S., of the Owens College, Manchester, who is the president of the Union for the current year, was prevented from accompanying the deputation by the pressure of his professional duties. The deputation arrived at Mr. Darwin's residence about 1 p.m., and was received in a most hearty manner by the great naturalist himself, Mrs. Darwin, and other members of the family. The members of the deputation