

Original Articles.

PRESENTATION OF THE MEMORIAL TO DR. DARWIN.

THE memorial of the Yorkshire Naturalists' Union was presented to Dr. Darwin at his residence, Down, Beckenham, Kent, on 3rd Nov., by a small deputation consisting of Dr. Sorby, F.R.S., of Sheffield, Vice-president of the Union; and Messrs. Geo. Brooks, *ter.*, F.L.S., of Huddersfield; W. Cash, F.G.S., of Halifax; J. W. Davis, F.L.S., F.G.S., of Halifax; and Thomas Hick, B.A., B.Sc., of Harrogate. Prof. Williamson, F.R.S., of the Queen's College, Manchester, the President of the Union, 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, including Miss Darwin and Mr. Francis Darwin. Fortunately Mr. Darwin was in a much better state of health than he has enjoyed of late, and on that account the fears of the deputation that their visit might prove too fatiguing for him were happily not realised. The members of the deputation were introduced individually to Dr. Darwin by Dr. Sorby, and then the interesting ceremony of the presentation of the address was proceeded with.

Dr. Sorby stated that the Yorkshire Naturalists' Union, on whose behalf the deputation appeared, was a confederation of natural history societies which are located in various towns in the great county of York. It was originally formed in 1861, but was reorganised and renamed in 1877; and at present there are twenty-seven societies in the Union, with an aggregate of about 1,500 members. Among the objects of the Union are the investigation of the natural history of the county in all its branches; the combination and organization of individual effort; and the cultivation and diffusion of a taste for natural history pursuits. The work of the Union is done by means of sections, each devoted to one department, after the plan of the British Association, and from time to time reports of what has been done are published in the form of Transactions.

The address was then read by Mr. THOMAS HICK, and formally presented to Dr. Darwin by Dr. Sorby, who expressed the great gratification he personally felt in doing so. Replying to the address,

Dr. 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 so strong a body of working naturalists in Yorkshire, but he 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 distinguished host and his family, took their departure amid mutual expressions of kindness and regard. The following is the text of the address, which is beautifully engrossed and illuminated by Mr. Chas. Goodall, of Leeds, and very handsomely bound:—

TO CHARLES DARWIN, LL.D., M.A., F.R.S., &c., &c.

Sir—The Council and Members of the Yorkshire Naturalists' Union, all of whom, with scarcely an exception, are working students in one or more of the various branches of natural history, desire to express to you in a most respectful manner, and yet with the greatest cordiality, 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 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 conspicuous merits of that and your other published works they need not dwell, as those merits have been recognised 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 impetus to biological and palaeontological inquiries, which has no precedent in the history of science, except perhaps in that which followed the promulgation of the gravitation theory by 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 wherever and as long as the human intellect exerts itself 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 effective, 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 to which your results have been submitted 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 cannot but lead to still further conquests in the domain of organic nature.

In presenting this small tribute 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.

WILLIAM C. WILLIAMSON, F.R.S., President.
 H. C. SORBY, LL.D., F.R.S., Vice-President.
 GEORGE HADGE, *tor*, F.L.S., Secretary.
 Wm. DENISON ROEBUCK, Secretary.
 THOMAS LAYTON, President, Vertebrate Section.
 Wm. EAGLE CLARKE, M.R.O.U., Secretary, Vertebrate Section.
 Wm. CARR, F.G.S., President, Conchological Section.
 J. DARKESS BUTTERFIELD, Secretary, Conchological Section.
 GEO. T. FORBES, F.L.S., President, Entomological Section.
 S. D. BAIRDSTON, F.L.S., Secretary, Entomological Section.
 CHAR. F. HORSNER, F.L.S., President, Botanical Section.
 F. ARNOLD LIND, F.L.S., Secretary, Botanical Section.
 Wm. WEST, Secretary, Botanical Section.
 JAS. W. DAVIS, F.R.S., F.L.S., F.G.S. } *Memorial Committee.*
 THOMAS HICK, B.A., B.Sc. }

August, 1880.

Since the return of the deputation a letter has been received from Dr. Darwin by Mr. W. D. Roebuck, in which he writes:—"The address which was presented to me is certainly one of the greatest

honours ever paid to a scientific man. It is admirably expressed, and the engraving seems to me an exquisite work of art. I fear that I by no means deserve all that is said of me in the address; but it shows the great kindness and sympathy of the senders. Pray accept my best thanks for all the kind interest which you have shown in the affair, and believe me, dear sir, yours faithfully,
CHARLES DARWIN."

ORTHODONTIUM GRACILE.

By J. CASH.

THE discrepancy between Wilson's figure and the description of the peristome of this moss in the "Bryologia Britannica," is certainly curious, and it were much to be desired that we had some means of explaining it. The species was unknown until, on the 23d March, 1833, Mr. Wilson discovered it at Helsby, Cheshire; and, as appears by his journal of that period, he devoted "nearly a whole day" (29th March) to making a drawing of it. It is therefore certain that, so far as this drawing is concerned, no inaccuracy can have crept in from any want of care or pains bestowed upon the subject. I happen to possess several tufts which were gathered by Mr. Wilson at the time named. The packet is labelled, in his own writing, as follows:—

"*Bryum gracile* (Wilson in Eng. Bot. Suppl. t. 2835.) *Orthodontium lineare*, Schwæg. Near Warrington, March, 1833. On sandstone rocks. W. Wilson."

The condition of these specimens indicates that they must have been gathered when the fructification had reached maturity. Most of the lids are fallen; in some cases they still adhere to the perfect capsule; in a few, the lids, though adhering, are partially lifted; and in one, at least, there is a calyptra *in situ*. I sacrificed several capsules—one of which was just ripe, and full of spores—in order to elucidate the point which has been raised, namely, as to the comparative length of the internal processes of the peristome. These processes I found in most instances fragmentary, as may be imagined in specimens nearly half a century old, but in one or two of the capsules they were still perfect, and the result of my examination was to confirm the accuracy of the figure in Bry. Brit. The perfect cilia are unquestionably equal in length to the outer teeth of the peristome.