mainly with the explorations which have been carried on in various parts of the world.

"The year," he said, "of which I am about, with your permission, to give some account, has not been, so far as geographical discoveries are concerned, a very brilliant or sensational one. Brilliant and sensational years are, alas! likely to grow fewer and fewer as the globe we inhabit becomes ever better known to us. If, however, the year has not been made memorable by much *extensive* exploration it has put to its credit no small amount of *intensive* exploration. A good many gaps in our knowledge have been filled up, and a great deal of solid useful work accomplished. All this healthy activity has been represented in our Proceedings, and much of it has found its way to our Fellows through the papers which have been read in this theatre. Many of these have been extremely interesting. I may mention particularly the account of Messrs. Jackson and Gedge's journey to Uganda, Colonel Tanner's observations on the Himalayan Range, and Mr. Pratt's journey to Szechuen. These last were illustrated, as it will be remembered, by drawings and by photographs of exceptional merit, which were examined carefully by large numbers after our meetings closed. As you will have learnt from the report of the auditors, the total assets of the Society have considerably increased, and we are in a position to give most efficient assistance to any thoroughly well considered schemes which are laid before us. I am very sure, however, that the Fellows will consider that, although we are rich, it is none the less our duty to scrutinize carefully all proposals which are made to us, and to see that the money which they give so generously is applied only to really promising objects. Such we considered to be Mr. Ramsay's explorations in Asia Minor, and Mr. Theodore Bent's examination of the remarkable ruins at Zimbabye in South Africa. Instruments to the value of over £600 have been lent during the past year to intending travellers, and thirty-six gentlemen have received instruction from Mr. Coles, partly at the expense of the Society, for the purpose of making them more efficient as explorers. Our duties dividing themselves into two great classes—the acquisition of knowledge and the diffusion of knowledge—I think the Society will hail with pleasure a considerable increase of our expenditure under the head of 'Scientific Purposes,' which amounted for last year to nearly £600. That sum included £178 for the purpose just alluded to, £120 for the promotion of geographical education in connection with the Training Colleges, the University Local Examinations, and the Oxford University Extension Movement, and a contribution of £150 towards the salaries of each of the Geographical Lecturers at the Universities of Oxford and Cambridge. I am happy to be able to report that our efforts to promote geographical education in the first of these great national institutions are being crowned with success, thanks to the enlightened views now prevailing there, to the powerful assistance of the Warden of Merton and other friends in high place, and to the zeal and high intelligence of Mr. Mackinder, who is rapidly winning not only golden opinions for himself, but an excellent place for his science on the banks of the Isis. Negotiations are now in progress which will, I hope, result in the establishment of a Travelling Scholarship at the joint expense of our Society and of the University of Oxford. Our Fellows will, no doubt, have observed that efforts are being made to have the Ordnance Survey pushed on more rapidly than hitherto, as well as to make more generally accessible to the public the results of so much well-directed labour. They will approve, I feel sure, of the Society's assisting these efforts in all legitimate and reasonable ways."

The President then proceeded to review the exploring work of the year, most of which has already been dealt with in NATURE.

PARKA DECIPIENS.[1]

THIS very interesting fossil is derived from various localities in Scotland, all of which are believed to be Lower Devonian. It was first described in 1831 by Dr. Fleming, and since then has been noticed on several occasions, and variously regarded as the spawn of Mollusca or Crustaceans, and as of vegetable origin.

The material upon which the present observations are based was collected by Mr. James Reid[1] and Mr. Walter Graham, both of whom have offered many valuable suggestions as to the probable nature and affinities of the fossil. As found, the *Parka decipiens* usually consists of oval masses bearing rounded impressions or disk-like bodies of carbonaceous matter. Associated with these are also stems and linear leaves of two dimensions, and a third form having a general resemblance to Pachytheca, which is found in the same beds, and differing from it in having a more discoid form, and being devoid of structural markings.

The authors show that the fossil is probably a rhizocarp allied to *Pilularia*, and that there are at least three forms recognizable, of which one is referred to the species, and the other two to varieties. The views thus stated are based upon differences of size and upon the fact that certain of the disk bodies show spores of two kinds, and in some cases prothalli in various stages of development, all derived from the same sporocarp.

The paper is illustrated by a plate of figures.

[1] "Notes on Specimens from the Collections of Messrs. Graham and Reid," by Sir Wm. Dawson, LL.D., F.R.S., and D. P. Penhallow, B.Sc., F.R.S.C. Abstract of a paper read before the Royal Society of Canada, May 1891.

UNIVERSITY AND EDUCATIONAL INTELLIGENCE.

CAMBRIDGE.—In the list of the Mathematical Tripos (Part II.) Mr. Bennett, of St. John's, the Senior Wrangler, Mr. Crawford, of King's, the fifth Wrangler, and Miss Philippa G. Fawcett, "above the Senior Wrangler," are placed in the first division of the First Class.

SCIENTIFIC SERIALS.

THE *American Meteorological Journal* for May contains the following articles:—Cold waves, by Prof. T. Russell. In the report of the Chief Signal Officer for 1889, he expressed the view that the origin of cold waves was due to mixture of upper and lower air causing cooling of the layer next to the ground. On further examination of the subject, in connection with the observations at mountain stations, he admits the incorrectness of those views, and states that, while it is essential to connect the low temperature and high pressure in some way, the cooling of the ground by radiation, and of the air by contact and conduction, will not completely explain the cause of cold waves.—How could the Weather Service best promote agriculture?, by M. W. Harrington. The American Weather Service has hitherto devoted itself more particularly to the interests of commerce, while the State Services have had the interests of farmers more distinctly in view. What the farmer wants to know is, where and when a local shower will fall. While the complete solution of this problem may be impossible, the approximate solution lies in the multiplication of local forecasting stations, and in the intelligent use of the indications of the Central Office, combined with the indications which he can himself observe. The author recommends more attention to climatology as distinct from weather changes, and to the relations between plants, soil, and meteorology.—Is the influenza spread by the wind?, by H. H. Hildebrandsson. This is a translation, by the author, from an article in the Journal of the Medical Society at Upsala, and is, practically, a reply to an article in NATURE of December 19, 1889, where it is stated that the malady is probably spread by the wind. The author shows, by a map and table, the places and dates at which influenza occurred in Sweden, from inquiries of medical men. The result of the research goes to show that the influenza is propagated by infection, that it is conducted from place to place through human circulation, and that the time of incubation is two to three days. The state of the weather seemed to have no influence on the spread of the malady; in fact, it raged with the same severity in countries possessing very different climates, and during very different weather conditions.

SOCIETIES AND ACADEMIES.

LONDON.

Royal Society, June 4.—"On a Determination of the Mean Density of the Earth and the Gravitation Constant by means of

[1] Mr. Reid acknowledges his indebtedness to Mr. Langlands, the lessee of Myreton quarries, whose kind permission to examine these quarries was so freely granted.