



THE

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## EDITORIAL NOTES.

THE Editors of the GEOLOGICAL MAGAZINE desire to take this opportunity of thanking their friends and subscribers for the kindly expressions of good-will and promises of practical support that have followed the issue of the circular sent out with the December Number. They also wish to say that it is their hope and intention to make the Magazine of service to the geological world as a vehicle for the publication of original work, also as a review of the progress of the science and a means of intercommunication between fellow-workers in different parts of the world. In furtherance of this latter object, they appeal especially to geologists in the British Dominions beyond the seas and in foreign countries to continue to send copies of their publications for review. As a matter of fact, a large number of such publications are actually received, but it is feared that in the last three or four years a good many more never reached their destination. It is certain that a free interchange of ideas between widely separated parts of the world is one of the surest ways of forwarding the progress of knowledge. Geologists in the less developed countries where "fresh fields and pastures new" are constantly turning up, enjoy many opportunities denied to those in regions where field-work and mining investigations have been carried on for over a century and where the great fundamental principles of our science have long been applied and geological features mostly worked out. In new countries geologists and explorers also develop their own theories and represent fresh phases of thought, which should be disseminated as widely as possible for the benefit of mankind at large. The Editors trust that their readers will assist them in their ambition to help in the spreading of new light in the geological world.

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THE Annual General Meeting of the Geological Society of London took place on Friday, February 21, when the medals and awards were handed to the recipients, whose names have already been announced in this Magazine. A portrait of Dr. Henry Woodward, F.R.S., painted by Miss Lancaster Lucas, was formally accepted as a gift to the Society. The President also delivered his annual address, the subject chosen being "The Structure of the Weald and Analogous Tracts". It was pointed out how deep borings have shown that the Wealden anticline is a superficial phenomenon imposed on a huge wedge of Jurassic and Lower Cretaceous rocks forming a deep syncline: the accumulation of the Mesozoic sediments took place in a gradually deepening trough with

relatively stable sides, and the anticlinal structure was due to a slight reversal of the earlier direction of movement. Similar conceptions were extended to the Jurassic rocks of the Midlands and of Yorkshire; in both cases the recumbent wedge was found to be in evidence, and such structures can probably be traced in Triassic, Carboniferous, and even older rocks. It was also pointed out that where such formations lie above sea-level their outcrops represent areas of maximum development and coincide with the deepest parts of the old troughs. These considerations may be of wide application and have a practical bearing.

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THE Report of the Council of the Geological Society of London, presented at the Annual General Meeting on February 21, must be regarded as highly satisfactory considering all the circumstances of the time, since it shows that the Society has been able to keep most of its activities unimpaired. The number of Fellows shows, as might be expected, a slight decrease, and there are a good many vacancies in the list of Foreign Members and Correspondents. The financial position is satisfactory, in spite of the increased cost of nearly everything, and more especially of paper and printing. The production of volume lxxiii of the Quarterly Journal cost over £860 exclusive of postage. The generous action of the Council in remitting the annual contributions of those Fellows on active service has led to a diminution of receipts for some years, but that is now presumably a thing of the past. An increase of income may be expected in the future from the admission of women as Fellows, although this is not likely to be very great, at any rate for some time to come. It is well known that the Society's library has been found of the utmost value during the War to the Admiralty, the War Office, and many other Government departments, since it contains publications, and especially maps, not to be found elsewhere in this country. It is gratifying to observe that a small sum has been set aside from the Prestwich Trust Fund for the purchase of books on economic geology, in which the library is still somewhat deficient. It is certain that the demand for economic literature will increase greatly in the immediate future, and this is a step in the right direction.

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THE *Cambridge University Reporter* for February 18 last announces the subject for the Sedgwick Prize Essay for 1922 as follows: "The Petrology of the Arenaceous Sediments of Lower Cretaceous Age in England, with special reference to the Source of the Material." The prize, which is triennial and of the value of about £80, was not awarded in 1915 or 1918, as is natural under the circumstances, but even in normal times it has happened that no essays have been sent in. This is possibly owing to one of the conditions: that the prize shall be open to all graduates of the University who have resided in Cambridge for sixty days during the twelve months preceding the date at which the essay must be sent in. This greatly limits the number of possible candidates, since

few geologists can afford the time to reside for a term in Cambridge for this special purpose.

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THE list of fifteen candidates selected by the Council for election to the Royal Society contains several names of interest to geologists. The many contributions of Dr. J. W. Evans to geology and mineralogy are well known to all, as well as his wide experience of travel and his activities at the Imperial Institute. He is also now taking a prominent part in the organization of the new Imperial Mineral Resources Bureau. Dr. W. D. Matthew is a Canadian palæontologist who has contributed largely to our knowledge of the fossil mammals of the North American Continent, especially by his generalizations as to the phylogeny of the Cervidæ, Felidæ, and other groups. Sir Charles F. Close, Director-General of the Ordnance Survey, is responsible for the excellent maps which are so invaluable for geological work of all kinds in this country. Mr. E. Heron-Allen, although primarily a protozoologist, recently gave a most interesting lecture before the Geological Society on the application of X-ray photography to the elucidation of the structure of minute fossils, especially Foraminifera, showing results of remarkable technical excellence.

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THE retirement of Sir Lazarus Fletcher, Knt., M.A., F.R.S., Director of the Natural History Museum, marks the disappearance from active service of the last of the four Keepers who under Professor Owen represented this great section of the old British Museum in Bloomsbury, and were responsible for the transfer of its several collections in 1880 from Great Russell Street, W.C., to their present home in Cromwell Road, South Kensington. Mr. Fletcher, who, after a remarkably brilliant career as a student and mathematician at the University of Oxford, entered the Museum as a First-class Assistant in Mineralogy in March, 1878, succeeded Professor Story Maskelyne as Keeper of Minerals in 1880, a post which he held for twenty-nine years, being made Director of the Museum in 1909, and retiring after ten years in the month of March. During this long period of forty-one years Sir Lazarus Fletcher has rendered important services to science and to the Museum; amongst others may be specially mentioned the arrangement of the entire Mineralogical Collection, and the preparation and publication of a most admirable series of Guide-books, namely, an Introduction to the Study of Meteorites, 1881; to Minerals, 1884; to Rocks, 1895; and, still earlier, an Optical Indicatrix in 1872. Numerous are the honours, medals, and awards which have been conferred upon Sir Lazarus Fletcher, but notwithstanding he is probably one of the most modest, reserved, and retiring scientific men of eminence in London.

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THE *Times* of March 13 last announced the appointment of Dr. Sidney Frederick Harmer, F.R.S., as Director of the Natural History Museum in place of Sir L. Fletcher. Dr. Harmer, who is the son of

Mr. F. W. Harmer, M.A., F.G.S., was formerly Fellow of King's College, Lecturer in Zoology, and Superintendent of the University Museum of Zoology at Cambridge. In 1907 he was appointed Keeper of Zoology at the Natural History Museum, and it is understood that he will continue to hold this post for a time, conjointly with the Directorship. Dr. Harmer has specialized in Invertebrata, especially Polyzoa, and with Dr. Shipley, now Vice-Chancellor of the University, he edited the Cambridge Natural History. Geologists may feel every confidence that in Dr. Harmer's hands the interests of their science will receive due consideration, and that every facility will be afforded to enable the specialists in charge of the different branches of the Museum to maintain the high standard of the collections and to continue their invaluable work of investigation and research. This appointment is very satisfactory also in that it shows the success of the protest put forward by many leading zoologists and geologists against the proposed appointment of a layman to this important post, which may be regarded as the blue ribbon of the biological world.

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THE *Mining Magazine* for February last contains a reprint of an interesting lecture by Mr. J. Morrow Campbell on the minerals of the Tavoy district of Burma, a region which has lately come into so much prominence as a producer of tungsten ores. As is well known, the origin and mode of occurrence of the ores in Tavoy have led to a good deal of controversy. Without entering in any way into the merits of the rival theories, it is perhaps permissible to point out the great interest which attaches to such investigations from the scientific as well as from the practical point of view. The origin of ore-deposits and the laws governing their formation are matters within the province of the theoretical petrologist just as much as the study of the silicates, and they possess the added advantage of possibly leading to results of practical value in the prospecting and locating of valuable mining areas. If it can be established, as seems possible, that ores of particular metals commonly show definite relations to one another and to certain types of igneous rock, it will become possible to draw conclusions as to the probability of successful development of metalliferous areas by exploration of a particular kind, such as diamond drilling, for example. As a concrete instance the well-known relations of copper and tin ores in Cornwall may be mentioned, or the association of platinum with serpentine, which actually led to the discovery, based on scientific reasoning, of platinum in the Serrania de Ronda in the South of Spain. In this way the theoretical and the practical geologist can work hand in hand for their mutual benefit and the good of the science in general.

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AFTER two years' interval owing to war conditions, the British Association for the Advancement of Science will resume its series of annual meetings this year at Bournemouth, from September 9 to 13, under the presidency of the Hon. Sir Charles Parsons, K.C.B., F.R.S.