

News and Views

The Right Hon. W. G. A. Ormsby-Gore

ARCHÆOLOGISTS, while congratulating Mr. Ormsby-Gore on his promotion in the ranks of His Majesty's Ministry, will feel that, in his appointment to succeed Mr. J. H. Thomas as Secretary of State for the Colonies, the Empire gains what archæology can ill afford to lose. No more suitable appointment to the Colonial Office could have been made; but as First Commissioner of Works Mr. Ormsby-Gore has been responsible for the protection of ancient monuments, and to that duty of his department has brought a knowledge of archæology and an enthusiasm for the surviving relics of the past in Britain that has been an inspiration to the members of his staff and an encouragement to all who are interested in the scientific investigation and the preservation of sites and structures of archæological or historic interest in Great Britain. Of the work—much of it of first-rate scientific importance—which has been carried out under the supervision and with the co-operation of the Office of Works during his tenure of office, it is unnecessary to speak here in detail; but by his personal activities, more especially in his efforts to secure the preservation of the unique character of Avebury and its surroundings, and in the initiation of the excellent series of guides to ancient monuments, of which he has already published two volumes, while a third is in an advanced stage of preparation, he has widely extended public interest in this class of evidence of the nation's cultural development. He leaves behind him a well-established tradition of official sympathy with, and co-operation in, the aims of archæological studies in Great Britain, which will not readily be allowed to die out.

MR. ORMSBY-GORE takes up his duties as Secretary of State for the Colonies at a moment when many problems, actual and potential, have to be faced. Not only has he the advantage of his experience in a previous administration, but also he brings to his task a personal knowledge of British Colonies and their problems such as has been possessed by no previous holder of the office. As Under-Secretary he travelled widely in all the more important of the Colonial possessions of the Empire and gained a first-hand knowledge of local conditions, more especially in Africa, which cannot fail to carry the weight of authority in the discussions of matters of momentous interest which are imminent. Mr. Ormsby-Gore's readiness in the past to appreciate the contribution of scientific studies in the solution of the practical problems of administrator, settler and native alike, affords an assurance that no resource will be overlooked in helping the Colonies in their efforts to recover from the effects of the economic crisis and the unrest to which it has given rise.

Ancient Monuments in Southern England

THE second of Mr. Ormsby-Gore's guides to the ancient monuments, covering the area south of the Thames, includes the most impressive, as well as some of the most important, relics of the prehistoric period ("Illustrated Regional Guides to Ancient Monuments under the Ownership or Guardianship of His Majesty's Office of Works: Vol. 2, Southern England." London: H.M. Stationery Office, 1936. Pp. 86. 1s. net). Avebury, Stonehenge and Maiden Castle alone would serve to make this a volume of outstanding interest in the series; and in the subsequent periods its material is little less of note in its numerous aspects: to the important Roman fortresses of Richborough and Porchester must be added from the medieval period the castles of Dover and Carisbrook and the special attractions of the beautiful castle of Restormel in Cornwall and romantic Tintagel, while as an example of artistic achievement in a later age, the Queen's House at Greenwich by Inigo Jones is unrivalled in its way. Mr. Ormsby-Gore, following in general line the plan of his earlier volume, has provided for the prehistoric period a sketch of the cultures of the neolithic, bronze and iron ages, as well as of the period of Roman occupation, in which the monuments are called upon to illustrate and support the relation. Here the results of much recent research and discovery are digested and presented with a lucidity which cannot fail to hold and interest the least instructed visitor. The medieval period is treated under the two headings of Anglo-Saxon and Norman, and in this and the later sections history appears only to serve as a background. Mr. Ormsby-Gore has a gift of scholarship without pedantry. His second volume deserves the success which his first has already earned.

Archæological Discoveries in India and the Far East

DISCOVERIES of great interest to archæologists and students of the religious cults of India have been made in recent excavations carried out by the Archæological Department of the Government of India at Raigir in the District of Patna, the ancient Rajagriha, in an area adjoining the Maniyar Math, a site investigated some thirty years ago by Sir John Marshall and the late Dr. Bloch. Their investigations brought to light a circular brick structure, which was dated by its stucco figures in bas-relief at about A.D. 500. The nature of this structure has been the subject of much speculation. According to a statement of Mr. J. F. Blakiston, director-general of archæology in India, reported in *The Times* of June 1, two earlier strata of buildings underlying the foundations of the circular structure have now been discovered, which carry the dating of the site back at least two or three centuries earlier. A large quantity of pottery and terra-cotta objects, which seems to

have been buried purposely, has been found in a brick enclosure to the east of the Math. Among this pottery one type has a series of spouts, in number from four to thirty-four and of various designs. Most of the vessels bear representations of snake-hoods. This fact is taken as a confirmation of the theory that the site was sacred to the worship of the Nagas or snake-goddesses. Pottery with multiple spouts is not known from other sites in India. The popular name of Maniyar Math, it is thought, may preserve a tradition of Mant Naga, the preserver and rain-giver of Rajagriha. If this indeed be so, it is suggested that these vessels with their multiple channels were the votive offerings of suppliants for rain, which were deposited in the compound of the shrine. Serpent worship at Raigir can be traced back to the third century B.C. and still persists as a popular cult. In the course of excavations carried out on behalf of the Raffles Museum, Singapore, on the Phinsoon Estate at Sungei Siput, Malacca, Prof. Van Stein Callenfels, the distinguished authority on the archæology of the Malayan archipelago, it is reported by Reuter, has discovered a number of human skeletons believed to date from about 2,500 B.C.

The Approach to the Absolute Zero

THE Science Museum, South Kensington, has recently performed a most useful public service in arranging, in connexion with the Very Low Temperatures Exhibition, for a series of demonstrations and lectures by eminent authorities on recent scientific and technical developments. The series was concluded on Wednesday, May 27, by Prof. F. Simon, late of Berlin and Breslau and now of the Clarendon Laboratory, Oxford. Of the problems which can be investigated by experiment in the new temperature region below 1° Absolute, one of the most interesting is the specific heat of paramagnetic salts. In experiments carried out in conjunction with Kürti, Rollin and Lainé with the huge electromagnet of the Paris Academy of Sciences, it has been proved that the paramagnetic salts used become ferromagnetic at very low temperatures, showing Curie points of about 0.01° Absolute (see p. 961). The small helium liquefier used in the experiments was transported from Oxford. At the Science Museum, Prof. Simon succeeded in demonstrating a temperature of 0.12° Absolute, a noteworthy achievement, of which Prof. Simon and his co-workers, Mr. G. L. Pickard and Mr. A. H. Cooke, who were responsible for erecting the apparatus in the Science Museum and for the fact that the demonstration went off without a hitch, may well be proud. The magnet used in the experiment was lent by the Imperial College of Science and Technology; the hydrogen and helium pumps by Messrs. W. Edwards and Co.; the Cambridge Instrument Co., Ltd., provided a galvanometer. The limiting temperature region for this method lies between 0.01° and 0.001° Absolute. Further reduction of temperature will depend on the use of nuclear paramagnetism, starting at about 0.01° Absolute. Even to this method there will be

a temperature limit, and the distance from the absolute zero, although very small when measured in degrees, is in reality an infinity. Although this unique series of lectures has now come to an end, the *Exhibition of Very Low Temperatures* will continue until the end of June. The Exhibition has so far attracted more than 140,000 visitors, and interest in it has not in any way diminished during the three months in which it has been on view.

Maiden Voyage of the *Queen Mary*

BRITAIN'S newest and finest liner, the *Queen Mary*, left Southampton Docks on Wednesday, May 27, and entered New York Harbour about four and a half days later after successfully completing her maiden trans-Atlantic trip. Whatever may have been the results of this crossing from the point of view of marine navigation, a new standard was set up in radio communication by the most successful completion of a series of daily broadcasting programmes throughout the voyage. Never before has the whole world been able to follow so closely the daily happenings on board an ocean liner. The progress made in this application of the art of radio communication is illustrated by a note from a special correspondent of *The Times*, who recalled that he was one of the only two journalists on board the *Mauretania* on her maiden voyage to New York nearly thirty years ago: his instructions were to send not more than twelve words a day by wireless, and to post an article from New York. In contrast with this, the *Queen Mary* carried about 150 journalists, and some twenty broadcast commentators of various nationalities. During the voyage, more than sixteen hours actual broadcasting took place from the ship, while many hundreds of wireless messages of all kinds were sent to all parts of the world. To enable this work to be carried out, the normal wireless installation in the *Queen Mary* (which was referred to in NATURE of January 18 last) was supplemented by special equipment fitted by the British Broadcasting Corporation. More than twenty microphones were fitted in various parts of the ship so that the general life on board could be described direct from the scene of activity in the course of the daily broadcasting programme. Each evening, listeners to British stations were provided with an interesting commentary direct from the *Queen Mary*, while on one afternoon a special programme was arranged for schoolchildren.

THESE broadcasts were received in Great Britain via the ship-to-shore radio-telephone service of the Post Office; they were naturally relayed through the Empire system, and the high standard of performance attained is greatly to the credit of all those concerned with the arrangements. Similar programmes were arranged by the appropriate authorities for listeners in America, Denmark, France and Holland. The climax of this radio sound-picture was provided by the joint programme arranged by the B.B.C. and the National Broadcasting Company of America, as the *Queen Mary* proceeded up the