Cosmic Rays Near the South Magnetic Pole

ADMIRAL R. E. BYRD'S book, "Antarctic Discovery" (Putnam and Co., Ltd.), which has just been published, contains a preliminary note on the cosmic ray records made by his expedition near the South Magnetic Pole. In an aeroplane flight from Little America (828 miles from the magnetic pole), a height of 12,000 ft. was reached and maintained for three hours while A. A. Zuhn made his observations. While the analysis of the records obtained during this flight, and also during regular ground-level observations, has not yet been completed, Admiral Byrd states that he has been informed by Zuhn that the intensity of radiation was fifteen times greater at 12,000 ft. than at ground-level in Little America, and eight times greater than that recorded in any observations made in the United States. It is to be regretted that it was necessary to replace the original argon of the ionisation chamber with carbon dioxide, owing to a leak which developed during thelong transport of the instrument. As, however, a radium capsule was available for standardisation, Admiral Byrd expresses the opinion that the validity of the records obtained will not be affected. He adds that a crucial test of this point is to be made before the records are formally published.

Exhibition of Chinese Art at South Kensington

THE exhibition of Chinese art at the Royal Academy, Burlington House, closed on March 7, when the number of visitors had reached the remarkable total of 422,048. This number constitutes a record for all the recent winter exhibitions, with the exception of the exhibition of Italian art. It justifies the opinion expressed at the time the exhibition opened that the quality of Chinese art, when once certain conventions had been assimilated, was such in its general outlook and approach to reality as was likely to appeal to the susceptibilities of a British public. This was most strikingly manifested in the attention attracted by the transcendent qualities of the scroll landscape paintings; but it was also to be noted that the bronzes and other exhibits belonging to the early prehistoric period and the T'ang figures received little less detailed inspection, so far as conditions allowed. The popularity of the exhibition did not, indeed, conduce to a full appreciation of the subtler qualities of this great art, and it is, therefore, all the more gratifying to learn from the Directors of the British Museum and Victoria and Albert Museum that arrangements are being made for the exhibition at South Kensington at an early date of the Eumorfopoulos collection of Chinese art. This exhibition will include not only the purchased objects already assigned to South Kensington and the British Museum respectively. which will be brought together again for this purpose, but also that part of the collection of which the purchase is not yet complete, through the generous public spirit of the owner. If the public displays an interest in this collection in any way comparable to the enthusiasm shown at Burlington House, it should prove a strong incentive to early action in providing the much desired Museum of Asiatic Art, so greatly needed in London.

Palæolithic Implements of the Warren Hill Gravel

A SELECTION from nearly 1,300 flint implements in the Sturge Bequest, from the gravel on Warren Hill, near Mildenhall, Suffolk, is on special exhibition at the British Museum, Bloomsbury, and will remain there for about three months. It will be found at the head of the main staircase, and is arranged in two desk-cases, one containing representatives of the main types and the other the specimens illustrated in the Sturge volume, with exceptional pieces showing the remarkable local patina and other special features. The exhibition is intended to show the sequence or association of implements in the same gravel, and to direct attention to the deposit, which is a geological puzzle. The long hill between Mildenhall and Icklingham lies at right angles to the River Lark near its south end, and was evidently formed before the valley was cut. The gravel seems to belong to an interrupted line of high-level deposits in a curve from Lakenheath to Snailwell, following the southeastern boundary of the Fens. It is now generally held that this gravel bank is a glacial moraine; but there were thousands of implements included in it, and some in an unrolled condition enable a limiting date, if not a sequence, to be supplied on archæological grounds. The collection shows that, besides first-class hand-axes of St. Acheul character, there was also a striking proportion of flake-implements resembling in form those from High Lodge near the north end of the same ridge; and these are now thought to mark the third stage of the Clacton industry. Their horizon elsewhere is evident, but at Warren Hill it remains to determine the relation between the Clacton and St. Acheul series, and to identify the glaciation producing this apparently homogeneous gravel, which must have been derived from an area, once thickly inhabited, in the neighbourhood. There is now a good opportunity to draw on the archæological material for a solution of the geological problem.

Archæological Investigation in Cornwall

AT the close of the present month, the Cornish Excavation Committee will begin the excavation of Castle Dore, a hill-camp which lies between Lostwithiel and Fowey. The excavation will be carried out by Mr. C. A. Ralegh Radford, who was in charge of the recent excavations at Tintagel. The Castle Dore camp, being situated on the line of a trade route which linked up Ireland, Cornwall and the Continent in prehistoric times, holds out every prospect by its geographical position alone of yielding material of interest and importance for archæological studies; but in addition, recent research, notably by the late Prof. Loth, the Celtic scholar, and by the late Mr. Charles Henderson, whose untimely death was a great loss to Cornish archæology, indicates that Castle Dore may be a focusing point of traditions which seem to indicate a connexion here with the King Mark of Arthurian story, whose bride Iseult was brought from Ireland by Tristan. King Mark lived at "Lancien" which Prof. Loth suggested may be the original form of the name of Lantvan, the parish in which Castle Dore is situated, and he also

traced a possible connexion with the St. Samson who is the patron saint of the nearby Goland Church. A menhir known as the Castle Dore stone, which once stood near the camp, is also thought to be connected with King Mark under the name Conomonus or Quonomorius, while a doubtful interpretation of a much obliterated commemorative inscription would point to Tristan being his son and not his nephew. Other suggestions, derived from like sources, have been put forward, of connexion with figures of Arthurian tradition. Although it is scarcely to be expected that excavation will bring to light anything in the nature of concrete evidence to support the connexion, the body of tradition which clings to this valley of Fowey encourages the hope that it preserves a folk-memory of what was once an important centre of early civilisation.

International Cancer Congress

THE second International Congress of the Scientific and Social Campaign against Cancer will be held in Brussels on September 20-26. The Congress is under the patronage of His Majesty the King of the Belgians and of Her Majesty Queen Elizabeth, and has the support of the Government. The National Executive Committee consists of Dr. Lerat (chairman), president of the Belgian National League against Cancer, Profs. Delrez, Dustin, Goormaghtigh and Maisin, directors of the Anti-Cancer Centres of Liège, Brussels, Ghent and Louvain respectively; Dr. Sluys, president of the Belgian Society for Radiology; Dr. Timbal, director-general of the Government Department of Hygiene; Mr. H. Marchal, treasurer, and Mr. W. Schraenen, general secretary of the Belgian National League against Cancer and of the Congress. programme of the Congress has been divided into two main groups, embracing the scientific campaign and the social campaign against cancer, and the subjects on which official reports will be prepared and upon which individual communications are invited are grouped together under the following headings: (1) The experimental investigation of cancer, which comprises the study of carcinogenic substances, transmissible agents and viruses, growth substances, and factors of predisposition and resistance such as heredity, metabolism and immunity; (2) the diagnosis of cancer by histological, radiological and serological methods; (3) the treatment of cancer by surgical, medical and radiological methods. In the second group, on the social campaign against cancer, the subjects dealt with are: (1) Access of patients to diagnosis and treatment; (2) medicosocial assistance to incurable cases; (3) cancer and demography including statistics and racial incidence. The list of official rapporteurs is not yet complete, but among those who have agreed to present reports are: M. Borst, J. W. Cook, W. Cramer, H. F. Deelman, L. Dublin, A. P. Dustin, J. Ewing, W. E. Gye, H. Holthusen, E. L. Kennaway, J. Maisin, M. Nagayo, F. Pentimalli, Cl. Regaud, P. del Rio Hortega, G. Roussy, C. Rowntree, H. Schinz, F. Carter Wood. Further particulars may be obtained from Mr. W. Schraenen, General Secretary to the Congress, 13 rue de la Presse, Brussels, Belgium.

Colonial Administration

A SYMPOSIUM on "Peace and the Colonial Problem" published by the National Peace Council (39 Victoria Street, S.W.1. 6d.) contains the speeches delivered by Sir Arthur Salter, the Marquis of Lothian, Prof. N. Bentwich, Sir John Harris and others, at a Conference organised by the National Peace Council and held at the Livingstone Hall, Westminster, in October 1935. Sir Arthur Salter states that he considers that it would be both wrong and impracticable at this moment to transfer colonies to the dissatisfied countries of the world. He holds, however, that a remedy might be found in an extension of the mandate principle, whereby colonies would be held under a double trusteeship (1) to the inhabitants of the country and (2) to the world in general. Countries holding mandates should be responsible for the execution of their trusteeship to an international authority under a mandate, and the terms of this mandate should be extended so as to remove so far as possible the economic disabilities suffered by countries not possessing colonies.

PROF. NORMAN BENTWICH, in referring to the question of equality of economic opportunity, said that there should be real equality of opportunity for investment of capital and for obtaining concessions in the colonies. This would provide some alleviation of the economic grievances of those countries which are without colonies. He also advocated that the administrative services in colonies brought under mandate and in mandated territories should be open to the subjects of States other than the governing power. In Palestine it has been developed to some extent, and no difficulty has been found, for example, in working the medical or engineering services with persons coming from different countries. The adoption of a system of mandates and international responsibility would give an opportunity to foreign subjects and an assurance and a greater confidence to the native inhabitants of those countries.

Rapid Growth of the Use of Electricity

The annual report of the Electricity Commissioners for the year ended March 31, 1935 (H.M. Stationery Office. 3s.), records a noteworthy expansion of the public supply of electricity. There is an increase of 1,715 million units on the output of the previous year. This is the largest actual increase hitherto recorded, and is equivalent to a growth of 12.1 per cent. The expansion is largely due to the increase of the domestic load. The Commissioners point out that owing to the persistent demand for the facilities and amenities capable of being provided by a public supply of electricity, there will doubtless be a great increase in the present consumption before 'saturation point' will be reached. There will be a wide field of opportunity presented for the electrical and mechanical equipment of industry when the present factory generating plant and prime movers become obsolete. There are possibilities also attached to the further development of railway electrification. The steamdriven power stations included in the returns account