

of Empire programmes were provided, while the aggregate time of operation for the television sound and vision transmitters has increased from 1,619 hours in 1937 to 2,679 hours in 1938. Among the increased programme facilities provided during the past year were daily news services in Arabic for listeners in the Near and Middle East, and in Spanish and Portuguese for listeners in Latin-American countries. Towards the end of the year, also, daily news services, intended primarily for European reception, were broadcast in French, German and Italian.

On the engineering side, a new medium wave transmitting station was opened at Aberdeen in September; and the construction of a new high-power transmitting station at Start Point in South Devon, and of a medium-power station at Clevedon, Somerset, is proceeding satisfactorily. The number of transmitters normally in use at the Daventry short-wave station has been increased from four to six, so that larger areas may be covered for longer periods. Further expansion is in hand at this station, including the provision of new transmitters and aerial systems. The scope of the television programmes has been considerably extended during 1938 by the provision of increased studio facilities at Alexandra Palace, by the purchase of a second mobile television unit for outside broadcasts, and by the establishment of improved relay link arrangements for such broadcasts. The report concludes with a statement of the financial position as at December 31, 1938.

Antarctic Whaling

THE *Polar Record* for January, a journal which has now widened its scope to include various articles in addition to news of polar expeditions, contains some details of the International Whaling Agreement of 1938. The measures agreed on in 1937 included a minimum size limit for various species, the restriction of the Antarctic whaling season from December 8 to March 7 and the prohibition of pelagic whaling in temperate and tropical waters. Last year the conference went further, though it was decided that restrictions on the numbers of whale catchers were impracticable at present. It was, however, agreed to prohibit the killing of humpback whales in waters south of lat. 40° S. for one year. This species is more vulnerable than blue and fin whales, and it is hoped thus to save the stock from exhaustion. It was also decided to prohibit all pelagic whaling for at least two years in the Pacific waters south of lat. 40° S. between long. 70° W. and 100° W. These waters so far have no pelagic or other whalers and so may well serve as a sanctuary for hunted species. In spite of these restrictions, it is admitted that the industry as a whole is probably taking an unduly large number of whales.

Australian Cancer Research

THE present position of organizations combating cancer in the Antipodes can be seen from the report of the ninth Australian Cancer Conference held in Sydney during April 5-8, 1938 (Canberra: Govern-

ment Printer, 1938). In many centres of the Commonwealth, new radiological plant has been installed and old apparatus improved, and attempts are being made to improve facilities for diagnosis in country districts. In an address given on the occasion of the Conference, Prof. E. C. Dodds pleaded for development of general research in basic sciences as being probably the best way of helping existing lines of cancer research. Dr. Robert Fowler discussed the research value of clinical records with particular reference to the 'follow-up' of cancer patients, and considered in some detail the indexing of cases. In a population of six and a half millions in Australia there were more than 7,500 deaths from cancer during 1936. A statistical examination of this cancer mortality was made by Dr. M. T. Holmes, who also summarized the results of treatment with radium at Australian centres over a nine-year period. Of 35,000 cases treated with radium, less than 10 per cent showed no improvement. Examination of data along similar lines should indicate how methods of treatment develop and how they compare with those of other countries.

The Dutch Physical and Medical Congress

THE twenty-seventh Dutch Physical and Medical Congress will be held at Nijmegen during April 11-13, 1939, under the presidency of Dr. G. Holst. General lectures will be given by Dr. G. Holst on "The Properties of Magnetic Materials" and by Prof. B. Brouwer on "The Significance of the Hydrodynamic Relations within the Skull Cavity and the Semicircular Canal for Neural Surgery" on April 11, and by Prof. L. S. Ornstein on "Physics and Biology" and by Prof. E. Gorter on "Very Thin Films" on April 12. The scientific work of the meeting will be dealt with in the four sections: Mathematical and Physical Sciences, Biological Sciences, Medical Sciences, Geological-Geographical Sciences, some seventy papers having been promised. A full programme of social functions, visits to factories, laboratories, hospitals and other places of interest has been arranged. Information can be obtained from the "Natuuren Geneeskundig Congressbureau", Bureau Vreemdelingenverkeer, Keizer Karelplein 9, Nijmegen, Holland.

Kathleen Schlesinger Research Fellowship

THE Medical Research Council invite applications for the Kathleen Schlesinger research fellowship which has been provided from a fund established by the late Mr. Eugen M. Schlesinger and Mrs. Schlesinger in memory of their daughter. It will be awarded to a suitably qualified person who will devote his or her whole time to "investigating the origin and nature of cysts of the brain whether arising from tumours or not or to such studies of other conditions of the central nervous system as the Council may from time to time permit". It will ordinarily be tenable at the National Hospital for Diseases of the Nervous System, Queen Square, London, and for a period of one year in the first instance. The stipend will be at the rate of £300 per

annum, with up to £50 per annum for research expenses. Further information can be obtained from the Secretary, Medical Research Council, 38 Old Queen Street, Westminster, S.W.1.

Earthquakes in Japan and Greece

AN earthquake, reported as the strongest for five years, shook several parts of the island of Kyushu at 12.22 p.m. local time on March 20 (3.22 G.M.T.). The shock was felt in Fukuoka but appears to have been strongest in Miyasaki where property and power lines were damaged and twenty people injured. The nearest active epicentre to this region appears to be 31.8° N., 131.8° E. where shocks occurred on 1929 5 m. 21 d., and 6 m. 11 d. There are three lines of weakness near the island of Kyushu according to Imamura: two pass through Nagasaki and run roughly east-north-east and south-south-east whilst the other is just off, and approximately parallel to, the south-east coast.

AN earthquake shock of considerable intensity was felt on March 27 in Athens and other Greek towns though no great damage is reported. The epicentre of the shock was probably near Chalcis though very little information is at present available. It will be remembered that the centre of the disturbances on July 20, 1938, was near 38.35° N., 23.8° E., near Scala Oropos.

Royal Geographical Society: Awards

HIS MAJESTY THE KING has approved the award of the Royal Medals of the Royal Geographical Society as follows: The Founder's Medal to Mr. Arthur Mortimer Champion, for his surveys of the Turkana Province and the volcanoes south of Lake Rudolf; the Patron's Medal to Prof. Hans Ahlmann of Stockholm, for his exploration and glaciological studies in the Arctic. The Council has awarded the Murchison Grant to Mr. Robert Bentham, for his mapping and geological investigations in Ellesmere Land; the Back Grant to Lieut.-Commander R. E. D. Ryder, for his captaincy of the *Penola* and his marine surveys on the British Graham Land Expedition; the Cuthbert Peek Grant to Mr. W. Vaughan Lewis, for his physiographical studies in Great Britain and Iceland; the Gill Memorial to Mr. J. V. Harrison, for many years' exploration in Central and South America and Southern Iran.

Announcements

COLONEL J. A. MANIFOLD has been appointed director of hygiene at the War Office in succession to Major-General H. H. A. Emerson, who will retire shortly.

THE Herbert Jackson Prize for 1938 of the L.M.S. Railway Co. has been awarded to Mr. J. N. Bradley, an assistant metallurgist in the Company's Research Laboratory at Derby, for his paper entitled "The Separation of Mixed Gunmetal and White Metal Borings". A Jackson Medal has also been awarded

to Mr. C. W. Newberry, research assistant in the engineering section of the same Laboratory, for a paper entitled "An Investigation into the Occurrence and Causes of Locomotive Tyre Failures". The Herbert Jackson Prize is awarded annually by the L.M.S. in memory of the late Sir Herbert Jackson (an original member of the L.M.S. Advisory Committee on Scientific Research), to a member of the Company's research staff for the best written account of an investigation carried out in the Companies' Laboratories during the year.

AT the annual general meeting of the Ray Society held on March 23, the following officers were re-elected: *President*, Sir Sidney F. Harmer; *Treasurer*, Prof. F. E. Weiss; *Secretary*, Dr. W. T. Calman. Dr. John Ramsbottom was elected a vice-president, and Mr. E. R. Martin, Mr. D. M. Reid, and Col. R. B. Seymour Sewell were elected new members of Council. It was announced that a "Bibliography of the larvæ of Decapod Crustacea" by Dr. R. Gurney, and the first of two volumes on "The Comity of Spiders" by Dr. W. S. Bristowe are in the press and will be published shortly. The first volume of a work on "British Water Beetles" by Prof. F. Balfour-Browne is nearly completed and will form the issue to subscribers for 1939.

THE University of Pavia has arranged a celebration in honour of the eighteenth-century physiologist, biologist and vulcanologist, Spallanzani (1729-1799), which is to be held in Pavia on April 11-14. A monument to Spallanzani is to be unveiled and a programme of scientific addresses, mainly on modern genetical problems and the physiology of reproduction, is being prepared by delegates invited from various countries, including Prof. R. Ruggles Gates, Prof. F. A. E. Crew and Dr. C. F. Pantin from Great Britain. Meetings of the societies for experimental biology, botany, geology and veterinary medicine are also being held at the University, and on April 15 a visit will be paid to the Spallanzani Museum at Reggio Emilia.

IN 1937 the birth-rate in the U.S.S.R. was 18-19 per cent higher than in 1936 and the increase in population was a little more than 2 per cent. During the first ten months of 1938 there were 100,000 more marriages in the Soviet Union than in the corresponding period of 1937.

PROF. V. A. FOCK, of the University of Leningrad, writes that the transcription of his name in the article on the U.S.S.R. Academy of Sciences in *NATURE* of February 25, p. 343, namely, Fok, is incorrect and should be as here indicated.

ERRATUM. In the list of "Forthcoming Books of Science" in *NATURE* of March 11, p. 428, the volume by Prof. E. J. Conway to be published by Messrs. Crosby Lockwood and Son, Ltd., should be entitled "Microdiffusion Analysis and Volumetric Error".