

and permanent record of the functioning of the heart, lungs, thorax, etc. These records can easily be sent by post to the specialist in charge of the case.

The Royal Cornwall Polytechnic Society

THE annual report of the Royal Cornwall Polytechnic Society for 1935 provides ample evidence that although the Society has passed its centenary (see also p. 547 of this issue), age does not diminish its activities, and that it continues to play an important part in stimulating interest in education and industry throughout the county. Foremost among its proceedings are its exhibition and summer meeting, held last year at Penzance. At the exhibition both art and science were well represented, while the industrial exhibits included a working model of the flotation process of separating minerals that contain an excess of sulphides. There was also a special section of scientific apparatus used for teaching. The report contains three original memoirs, one on the ancient mining districts of Cornwall by Mr. F. J. Stephens, another on Cornwall's part in ceramic history by Mr. E. A. Rees and a third on some minor foundries of Cornwall, based on material collected by the late Mr. S. Michell. It also includes the report of the Cornwall Rainfall Association for 1934 and the report on the Falmouth Observatory, with meteorological notes and tables for 1935. The observatory receives a grant from the Falmouth Town Council, and is inspected periodically on behalf of the Air Ministry. In a comparison of the records at Falmouth with those in other parts of England and Wales, Mr. W. T. Hooper, the superintendent of the observatory, says: "It will be seen therefore that the maximum temperature range at Falmouth was 52°, as compared with 79° elsewhere, and our hottest day was 13° cooler, and our coldest day 14° warmer than the extreme temperature as a whole. This equability is the outstanding characteristic of our local climate." As regards sunshine, "in the year's aggregate, percentage and daily average, Falmouth is a good third in order of merit".

Working to Music

In the factory of the Standard Motor Co., Ltd., of Coventry, the employees work to music. According to the British Motor Number published with *The Times* of March 17, those sections of the factory where the noise is not too great are fitted with loud-speakers all supplied from a radio-gramophone unit. At set times during the day, programmes are given. When a suitable wireless programme is available it is given. At other times gramophone records bought by the Company are played. In those parts of the factory where the work is of a monotonous nature the music is particularly helpful, engendering an atmosphere of cheerfulness. Dance tunes and simple rousing marches are the most popular. Among other privileges many of the workers are allowed to smoke. Morning coffee and afternoon tea are provided, workpeople being allowed half an hour of freedom to visit the buffet in groups. The factory is designed to produce a complete car every four minutes. The parts of the car are carried on an ever-moving conveyor—the chassis

taking 2½ days to complete its circuit—the various processes such as body painting and the assembling of the car, which takes 2½ hours, being co-ordinated. The workers are proud that only very rarely has a customer calling for delivery had to wait for his car. Conveyors take the materials from worker to worker, each one of whom performs a single operation. On the test beds the 9 horse-power models are not run under their own power but driven electrically. As the energy consumed is at once recorded, a sufficient indication of their condition and the general tightness of their parts is obtained. The Standard Co. plans to produce three hundred cars a day, and when the present extensions are completed will have a floor space of more than a million square feet.

An International Air Force

A MEMORANDUM on the functions of an international air force has been issued by the governing committee of the New Commonwealth and by the Parliamentary Group of the British Section of the Society. Discussing the uses of an international air force, it is emphasised that the code of policing regulations to be drawn up must distinguish between acts of aggression and cases of default. Two distinct policing functions are involved—those of defence and of enforcement. The role of the international air force is that of a reinforcing agency, aimed at bringing aggressive action to a standstill. It is precluded from assuming the offensive, but to be effective the intervention of an international air force must be made in the shortest possible space of time. The main objective would be to paralyse the military activities of the aggressor and compel him to desist from hostilities, and distinction between military objectives and civilian centres is unlikely to be practicable. An international air force might also conceivably be called upon to enforce the decisions or awards of an international court or tribunal, but its main object is deterrent and its functions are those of a police and not of a military force. Attention is also directed to the psychological factors involved.

Empire Fibres Exhibition

AN Empire Fibres Exhibition is open at the Exhibition Pavilion of the Imperial Institute, South Kensington, S.W.7, until April 9. The object of the exhibition is partly to interest the general public, and especially school-children visiting the Institute, in vegetable fibres of the Empire, in the various methods of preparation for the market and in the different products into which they are converted; partly to interest technical experts and business men in existing and potential uses for Empire fibres. A series of eight stands or 'bays' comprise the exhibition. Two central bays, facing each other, are devoted to flax and linen exhibits organised by the Linen Industry Research Association with its headquarters at Lambeg, Northern Ireland. Here there are a number of exhibits showing the cultivation and processing of flax and its conversion into linen; also the various lines of research carried out at the Lambeg Research Institute under the guidance of the director, Dr. W. H. Gibson, and at the Flax

Research Institute near Sandringham under Mr. G. O. Searle. There are also stands illustrating, for New Zealand, the cultivation and uses of phormium fibre, and for India, jute, sunn hemp, coir and palmyra. The Hard Fibres Section of the British Empire Producers' Organisation has arranged a comprehensive group of exhibits of sisal and sisal manufactures, the collection and display of which were entrusted to Dr. Gibson and his sisal research staff at Lambeg. Other stands display Mauritius hemp, Ceylon coir, West African piassava, Cyprus hemp and manila hemp from Borneo.

British Speleological Research

It will be remembered that one of the purposes with which the British Speleological Association, of which Sir Arthur Keith is president, was founded recently, was that of holding annual conferences for the discussion of problems relating to this branch of investigation and for the co-ordination of the results of research in all matters affecting the study of caves. The first of such conferences will be held, by invitation of the Mayor and Corporation, at Buxton on July 24-27 next. The conference is free to members of the Association, but others who are interested in cave exploration may attend on payment of a fee of five shillings. The Association is already actively at work in various directions. A bibliography of papers on British speleology is in course of preparation, and a catalogue is being compiled of all prehistoric artefacts now in public or private collections which have been found in British caves. Preparations are also being made for an important undertaking, which will be of considerable scientific interest and ultimately of no little public service. A survey is to be made of the more important underground rivers and streams with the view of assisting the Inland Water Survey Committee of the Ministry of Health. In view of the necessity of conservation of water supply and the weaknesses in this important branch of public service revealed recently by climatic conditions, this work of the Association cannot fail to assume a position of some importance. Particulars of the forthcoming conference and of the objects of the Association may be obtained from the Honorary Secretary and Treasurer, Mr. G. H. Hill, The Museum, Buxton.

Announcements

THE first soirée this year of the Royal Society will be held in the rooms of the Society at Burlington House, London, W.1, on May 28. The second soirée will be held on June 30, and, in connexion with the Second International Congress for Microbiology, a further soirée will be held on July 29.

At the annual general meeting of the Ray Society held on March 12, the following officers were re-elected: *President*, Sir Sidney Harmer; *Treasurer*, Sir David Prain; *Secretary*, Dr. W. T. Calman. Dr. Robert Gurney was elected a vice-president, and Dr. G. P. Bidder, Dr. Malcolm Smith, and Captain Cyril Diver were elected new members of Council. It was announced that the first volume of Mr. F. J. Killing-

ton's monograph of the British Neuroptera, forming the issue for 1935, would shortly be published. The second volume of this work will form the issue for 1936. Among the works in preparation are monographs of the British freshwater planarians, by Mr. P. Ulyott, and on the British Tunicata, by Dr. John Berrill.

A DISCUSSION on "The Design of a Family Budget", with special reference to food, will be held at a joint meeting at the Royal Society of Arts of the Engineers' Study Group on Economics and the Association of Scientific Workers on March 31 at 7.45 p.m. A report from Section A of the Engineers' Study Group will be presented by Dr. E. H. Tripp, and the discussion will be opened by Sir John Orr; contributions to the discussion will be made by Sir Daniel Hall, Sir Frederick Gowland Hopkins, Mr. G. D. H. Cole and others. Further particulars can be obtained from the honorary secretary of the Engineers' Study Group, Hazlitt House, Southampton Buildings, Chancery Lane, W.C.2 (telephone, Holborn 1068).

IN connexion with the exhibition of Very Low Temperatures at present on view in the Science Museum, a series of lectures will be delivered in the Lecture Theatre of the Museum on Wednesdays from April 1 until May 27. Each lecture will commence at 5.15 p.m. Prof. M. W. Travers will speak on the development and uses of low temperature; industrial uses of low temperatures will be discussed in three lectures by C. G. Bainbridge, J. T. Randall and Dr. I. J. Faulkner, respectively; while the approach to the absolute zero will form the subject of lectures by Dr. J. D. Cockcroft, Prof. F. A. Lindemann and Prof. F. Simon, respectively. Admission, which is free, will be by ticket only, for which applications should be sent as soon as possible to the Director, The Science Museum, London, S.W.7.

APPLICATIONS are invited for the following appointments, on or before the dates mentioned:

A head of the Engineering Department of the County Technical College, Wednesbury—The Director of Education, County Education Offices, Stafford (April 4).

A principal of the Radcliffe Junior Technical School and Technical College—The Secretary of Education, Town Hall, Radcliffe (April 4).

A lecturer in mathematics and physics in the Cheltenham Technical College—The Secretary (April 6).

An assistant (grade III) for abstracting scientific and technical literature for the Department of Scientific and Industrial Research—The Establishment Officer, 16 Old Queen Street, Westminster, S.W.1 (April 15).

A University professor of anatomy in St. Bartholomew's Hospital Medical College—The Academy Registrar, University of London, S.W.7 (April 17).

A senior lecturer in biochemistry in the University of Liverpool—The Johnston Professor of Biochemistry (April 17).

A lecturer in agricultural chemistry in the Edinburgh and East of Scotland College of Agriculture—The Secretary (April 18).