

fully. The licence for development in Great Britain is held by Messrs. W. J. Fraser and Co., Ltd., of Dagenham, Essex.

#### Norwegian Arctic Research

It was some ten years ago that the Norwegian Government, having acquired by treaty the sovereignty of Spitsbergen, instituted a department to deal with the scientific exploration of Spitsbergen, Bear Island and other arctic regions, including areas outside Norwegian jurisdiction. This department, Norges Svalbard-og Ishavs-Undersökelse, under the direction of Dr. A. Hoel, has now published a record of the ten years of its activity (*Skifter om Svalbard og Ishavet*, No. 73). Earlier Norwegian work was recounted in a previous publication (No. 1, *loc. cit.*; 1929). Almost every summer expeditions have been at work in Spitsbergen and East Greenland and occasionally in other islands, as Jan Mayen, Bear Island and White Island. In Svalbard (Spitsbergen, North-East Land, Bear Island, etc.) 560 sq. km. have been mapped on the land and 40,000 sq. km. from the air, and in East Greenland 9,200 sq. km. and 30,000 sq. km. In addition, large areas of the arctic seas have been charted and much oceanographical work accomplished. But no aspect of research has been overlooked, and the department has even erected navigation beacons and lights and introduced the musk-ox and the arctic hare to Spitsbergen. Winters have been used for working up results, and already the publications of the department number over seventy. The greater part of the cost is met by a State grant, but private contributors also help. The volume makes a fine record of careful scientific work.

#### Electrical and Allied Industries Research Association

THE seventeenth annual report of the British Electrical and Allied Research Association (E.R.A.) proves that the research scientific worker is becoming indispensable to the industry. It is his work that enables the producer to acquire new principles, data and methods which he can embody in his technique and products. The producer passes these benefits on to the distributor, and finally the consumer derives benefits from greater efficiency, trustworthiness and utility. The work enables the industry to gain substantial immunity from breakdowns and the consequent and ever-present risk of black-outs and extensive damage. The activities of the Association are expanding very satisfactorily. Nearly half the research work of the E.R.A. is now conducted by its own staff. Its success is built up largely upon the gratuitously given labours of its eighty committees comprising about 500 voluntary workers. It carries out researches in co-operation with many scientific and engineering institutions. The principal income of the Association consists of the following annual grants: Department of Scientific and Industrial Research, £24,500; electricity supply undertakings, £32,932; manufacturers, £19,737. In addition, the Institution of Electrical Engineers gives £1,000 and so also does the B.B.C. The accounts show a surplus for the year of £13,500 after transferring £5,000 to the reserve account, but it is pointed out that practically all this

sum is already required in connexion with particular researches in hand and is not available for next year's commitments. The Department of Scientific and Industrial Research and other important contributors are urging the Association to establish a more adequate reserve.

#### The Belfast-Stranraer Telephone Cable

IN 1853, the British and Irish Magnetic Telegraph Company laid a cable between Port Patrick and Donaghadee. This cable proved to be successful and was one of the forerunners of the Atlantic cable in laying which Lord Kelvin played a leading part. Until last year, the telephone and telegraph traffic had been carried by four telegraph cables laid in 1870, '79, '88 and '93 for telegraph working but afterwards converted to telephone working, and a 'continuously-loaded' cable made in 1921. In addition, a loaded cable connects Blackpool to the Isle of Man and thence to Ballyhorman, Northern Ireland. These cables were made by Siemens Brothers and Co., Ltd., and its associated company, Submarine Cables, Ltd., which claim to be the only British organization that undertakes the design, manufacture and installation of all types of submarine and land cables as well as the necessary carrier-current equipment. In the Engineering Supplement to *Siemens Magazine* of January a description is given of two more submarine cables completed last September, their opening coinciding with a special low charge for calls carried by submarine cable to Northern Ireland. As each of these cables can carry four calls simultaneously, there are eight circuits available to help carry the increased traffic brought about by the tariff reduction. It is possible to increase further the carrying capacity by the addition of more carrier equipment. One of the two new cables serves for transmission from Belfast to Stranraer and the other cable for transmission in the opposite direction. In addition to the submarine cables, there is a radio link connecting Ballygomartin, near Belfast, and Port Patrick.

#### The New Commonwealth Society

THE annual report of the New Commonwealth Society for the year ended September 30, 1937, refers to considerable progress in the development of international sections, new groups or sections having been formed in the United States, Austria and Czechoslovakia, and arrangements made for the Swiss Europa Union to perform the functions which would otherwise be carried on by a Swiss Section of the Society. The existing groups in Germany and Hungary have been considerably developed, and development in other countries during the period has to some extent outpaced the progress of the British section. Disappointing results have followed the introduction of facilities for the enrolment of group associate members, but the first international conference organized by the Society, held at Pontigny, August 13-23, was an outstanding success, as was a New Commonwealth Society Youth Camp at Llandanin in August, which included German, Dutch, Czechoslovakian, Norwegian, Hungarian, Greek, Swiss and British representatives. Four new pamphlets

were issued during the year, and the British Section concentrated its attention on an attempt to lay the foundations of an area organization throughout Great Britain. The report of the New Commonwealth Institute for the same period refers to the initiation of a Monthly Information Bulletin and to the formation of four special research committees, dealing respectively with legal, military, political and psychological questions. The Legal Research Committee adopted as a basis for its discussions Prof. Strupp's study and proposals for an International Peace Convention, and considerable progress has been made in the establishment of an adequate research library on problems of peaceful change and collective security.

#### *Journal of Pomology and Horticultural Science*

IN view of the increasing number of contributions to the *Journal of Pomology and Horticultural Science* received from overseas, it is felt that the scope of the journal, hitherto the official organ of the Long Ashton and East Malling Research Stations, should be extended to provide a medium for the publication of the results of horticultural research of wider interest. The editors have accordingly obtained the services of the following as associate editors: M. B. Davis, Central Experiment Farm, Ottawa, Canada; Dr. C. Barnard, Division of Plant Industry, Council for Scientific and Industrial Research, Canberra City, F.C.T., Australia; L. W. Tiller, Department of Scientific and Industrial Research, Wellington C.1, New Zealand; Prof. E. E. Cheesman, Imperial College of Tropical Agriculture, Trinidad. Intending contributors overseas are asked to submit their papers in the first instance to the associate editor in their respective countries.

#### Agricultural Research

THE annual volume for 1937 of the *Journal of the Royal Agricultural Society of England* has now been published and includes as in recent years the "Farmer's Guide to Agricultural Research". The latter has been a feature of the Society's publications for the past twelve years, and consists of a number of valuable summaries of recent research work in the leading branches of agriculture, each section being prepared by an acknowledged expert on the subject. The various sections and the authors responsible for them are the same as in the previous issue. Space does not allow of reference to all the many interesting articles in this number of the journal, but mention may be made of the account of two centuries of Cheshire cheese farming, which gives a vivid and often humorous picture of agricultural life in England during the period under review. The Leckford Estate, Ltd., forms this year's subject in the series of notable farming enterprises.

#### Polar Exhibition

A PRELIMINARY circular has been issued of the projected International Exhibition of Polar Exploration which is to be held at Bergen from May until

September, 1940, under the patronage of the King of Norway and the presidency of the Prime Minister, the Ministers of Foreign Affairs and Commerce and the chairman of the council of the city of Bergen. The aim is to present a general survey of exploration, natural conditions and inhabitants and resources in arctic and antarctic regions. Polar regions of all States are to be included. Exhibits will consist of charts, models of vessels and aeroplanes, instruments, equipment, diaries, photographs and paintings. Whaling, sealing, trapping and tourist traffic will also be represented. Buildings are to be erected for the exhibition, which will be held contemporaneously with a national exhibition of arts, crafts, fisheries and communications. The offices of the Polar Exhibition are Telegrafbygningen, Bergen, Norway.

#### National Baby Week Council and Physical Fitness

THE National Baby Week Council holds, and rightly so, that "physical fitness begins in the maternity and child welfare centre", which will be its slogan for this year. The centres cater for the well-being of the expectant mother, the nursing mother, the infant and child up to five years of age. A good start towards physical fitness can, and should, be given in those centres. The Council emphasizes that physical fitness cannot be obtained by physical exercise alone, and that nutrition, better housing and other reforms also bear a close relation to the whole problem. The Council will gladly advise representatives of organized bodies, or any individual requiring advice. Correspondence should be addressed to the Secretary, National Baby Week Council, 117 Piccadilly, London, W.1.

#### British Health Resorts Association

A NEW edition of the official handbook of the British Health Resorts Association has recently been issued (British Health Resorts—Spa, Seaside, Inland; including those of the British Dominions and Colonies. London: J. and A. Churchill, Ltd. 2s. 6d. net). The publication gives a brief, authoritative and impartial account of British health resorts, as contrasted with the purely holiday resort. The book is supervised by a medical advisory committee, contains a chapter on "Climate, Health and the British Resort", and gives general information which will enable medical men and their patients to make their choice of a suitable place.

#### National College of Physical Training

A SITE of more than two hundred acres on high ground at Merstham, Surrey, has been selected for the National College of Physical Training, which is to be erected under the Physical Training and Recreation Act for the purpose of training teachers and leaders. The land is protected on all sides from building encroachment, not only by natural features, but also, through the foresight of the local authorities, by town planning schemes, while close by are areas acquired in connexion with the 'Green Belt'.