proved groundless, and possibly one of the greatest services that the Institute has rendered to the industry is the breaking down of such prejudice and by providing a bridge across which scientific men and practical men can come into contact. The work of Shaw Scott, the first secretary and editor, received from the new president, who is in a position personally to appreciate his work, the fullest and most well-To Shaw Scott's guidance and deserved praise. devotion the Institute owes much. Among the papers read at the opening meeting in Birmingham in November 1908. Echavarri spoke of aluminium and its uses, and referred to the "enormous" demand for aluminium in 1906 and 1907 when the world production was 15,000 and 23,600 tons respectively; these figures are interesting in comparison with that of 1,890,000 tons a year at the peak of production during the Second World War.

The concluding part of the address was devoted to the future. As one concerned with both the metallurgical and the chemical industries, Sir Arthur contrasted the essentially continuous processes characteristic of the chemical industry with the 'batch' process normal in non-ferrous metal production. "To any industrial metallurgist laying down a new plant, I would commend the technical approach of the industrial chemist as worthy of close consideration." This represents the crux of the plea made for the reduction or, if possible, complete elimination of 'idle time'. Coming from one who is essentially an industrialist, it is of the greatest interest that he pleaded for the encouragement "of those who are engaged on investigations which may at present be of little or no commercial value, but which are calculated to establish the underlying general principles of the science of metallurgy". As an instance of what can be done in this direction, the aluminium light-alloy industry was quoted as a practical example.

The Royal Air Force School of Education

A NEW Royal Air Force School of Education has been opened at Wellesbourne Mountford, near Leamington Spa, and one of its main purposes is to prepare newly appointed education officers for their professional duties in the R.A.F. The School is housed for the present in temporary accommodation because in view of the nature and the importance of the work a start could not be delayed. It is intended, however, to move the School to a more permanent location when this is feasible. Education in the R.A.F. differs little in its background from education in the civilian world. Its immediate purpose is to develop those qualities of mind and character which, while adapting the officer, the airman or the boy apprentice to the exercise of particular duties, yet helps him to achieve a worthwhile personal and social life and to appreciate the duties and privileges of citizenship. On the technical side, too. it is the task of the Education Branch to contribute a theoretical content towards technical and air-crew training of R.A.F. personnel for their day-to-day duties. Naturally the means and conditions through which these tasks are performed in the Service so far differ from those outside as to involve the young education officer in a period of some difficulty until he finds his feet. It is a function of this new school of education to minimize this period, and to orientate the professional qualifications and experience of the newly appointed officer (normally a university graduate and a trained teacher, and preferably with some initial teaching experience) towards his new duties.

To this end he is given instruction over a period of four weeks in the organisation and administration of R.A.F. education, in certain aspects of the theory and practice of Service teaching, in the part played by education in maintaining high standards of training and of morale, and in the methods to be employed for education in citizenship and current affairs. In addition to the lectures given by the permanent staff provision is made in the School programme for visiting lecturers of eminence in the civilian world.

It will be noted that the School lays emphasis on the scheme for the education of Service personnel in citizenship and current affairs. Indeed the School will play a part of growing significance in the further development of this scheme, and in the near future a series of courses will begin at Wellesbourne Mountford which are designed for the benefit of officers of branches other than education who may volunteer to assist in the running of discussion groups on their stations. These courses will train the officers in the technique of discussion-group leadership, and will include a factual background in citizenship and current affairs. Until the machinery of recruitment gets into its full stride, there will for some little time ahead be an acute shortage of education officers in the R.A.F. As a temporary expedient, suitable officers and others of the Service who have lesser qualifications but a liking for the work, and who volunteer for temporary duty in the Education Branch, will be accepted for duty as educational assistants-and to prepare them for this work special short courses are to be arranged for them at Wellesbourne Mountford almost immediately. They will follow the lines of the main course as for education officers, but on a somewhat lower plane. In the case of airmen volunteers, since they will be given acting noncommissioned officer rank on the successful completion of the course, training will also be given in disciplinary and other duties appropriate to the rank. Finally, it is intended that the School will, from time to time, provide specialized courses of a refresher nature to keep education officers up to date in the development of new educational techniques and of educational research.

Conference on Scientific Information Services

THE Royal Society is arranging a Conference on Scientific Information Services to be held in London during June 21-July 2. The Conference, which will consider information services from the point of view of the scientific user, in accordance with the recommendation made in 1946 by the Royal Society Empire Scientific Conference and the British Commonwealth Scientific Official Conference, will be attended by representatives of countries providing information services in English. Editors-in-chief, who will prepare memoranda as bases of discussion, have been appointed as follow for the four sections into which the Conference will be divided: Section 1, publication and distribution of papers reporting original work (Prof. J. D. Bernal); Section 2, abstracting services (Sir David Chadwick); Section 3, indexing and other library services (Dr. J. E. Holmstrom); Section 4, reviews, annual reports, etc. (Prof. H. Munro Fox). It is hoped to cover all scientific subjects, including agricultural, medical and engineering sciences. Material suggested for discussion should be submitted as soon as possible to the appropriate editor-in-chief c/o Assistant Secretary, Royal Society, Burlington House, London, W.1. Contributors are asked to

emphasize the practical steps that should be taken to implement their suggestions, including the provision of finance and the requisite personnel. Admission to the Conference will be by ticket only; applications should reach the Assistant Secretary of the Royal Society before June 1.

Institution of Mechanical Engineers : Clayton Awards

The Institution of Mechanical Engineers has divided the Clayton Prize for 1947 in equal moieties. One half, valued at £650, has been awarded to Mr. J. E. Sears, formerly superintendent of the Metrology Department of the National Physical Laboratory, for his services to engineering science and manufacture by researches and development in metrology and gauging; the other half, to the value of £650, to Mr. T. E. Beacham, consulting engineer, for his contribution to the development of the variable-pitch propeller and high-speed hydraulic pumps and other hydraulic devices by way of research, invention and design.

A number of Clayton Fellowships are to be awarded during 1948; funds for this purpose have been derived from money bequeathed to the Institution by Mr. James Clayton, who died in 1944. Mr. Clayton was chief engineer of Messrs. Courtaulds and was closely associated with the development of equipment for the rayon industry. The Clayton Fellowships will in general be awarded for a year of postgraduate study or experience in mechanical engineering or a related science, and will be worth £250-£500. Candidates must be British-born subjects not less than twenty-three years old, and must possess an approved engineering degree or similar status.

Marketing Agricultural Produce

THE written evidence submitted to the Lucas Committee on the Marketing of Agricultural Produce by Mr. Thomas Shaw, on which that Committee largely based its recommendations for setting up a system of marketing for meat when the present rationing scheme and control by the Ministry of Food ends, has now been published, together with a foreword by Dr. John Hammond (from the author, Bretten-ham House, Lancaster Place, London, W.C.2). Insufficient attention has yet been given to the recommendation that producer marketing boards should continue to function only up to the point of procurement where the guaranteed price under the Agriculture Act applies, and that any participation in the functions of processing and marketing beyond that stage should fall within the ambit of a national slaughterhouse board or commission. Mr. Shaw's evidence details clearly the measures which the livestock industry most needs for efficiency, including complete reorganisation of the existing slaughterhouse set-up, utilization of all by-products and elimination of unnecessary profit margins, grading, division of poorer quality meats from the fresh, the manufacturing market and measures to mitigate seasonal variations in supplies. The proposed public corporation would be given powers to approve central factory abattoir schemes; to determine the terms and conditions under which such schemes should operate; to operate grading services at the abattoir and a price-governing formula; to authorize public funds required to implement the Government guarantee of prices, and linking that guarantee with qualities of the product; to make levies covering the cost of administration and the finance of industrial research

in connexion with the abattoir; and to make loans to central factory abattoir schemes. The scheme, which is intended to lead to the effective closing of the wide gap between producer and consumer prices, to relieve the State in increasing measure of its financial liability under the terms of its guarantee and lay the foundations for an efficiently operating home meat industry, has thus features in common with the development councils to be established under the Industrial Organisation and Development Act, 1947, as the functions listed for the New Cotton Board, the first of such councils to be established, clearly shows.

Royal Scottish Museum, Edinburgh

A NOTABLE feature of the activities of the Royal Scottish Museum during 1946 (Ann. Rep. 1946) was the record number of temporary exhibitions that were organised. These, all of topical interest and of strong public appeal, included the "Meet Scotland" Exhibition (which ran from August 1945 until March 1946), organised by the Museum itself; Peoples Jobs", organised by the Ministry of Fuel and Power, and a special health exhibition in connexion with the City of Edinburgh's Health Week. This was divided into sections dealing with maternity and child welfare, tuberculosis, school medical services, water supply, etc. A unique aspect of this particular exhibition, and one which must certainly be unique in the history of the Museum, was the presence of nursery school infants, "who," in the words of the report, "performed their exercises and ablutions, played their games and demolished their meals, completely unaffected by the mass of admiring onlookers". In reference to these and the several other special exhibitions which were provided for by various outside organisations, Dr. D. A. Allan, director of the Museum, writes: "The scope and variety of the Museum's offerings are largely determined by the possibilities of outside assistance, and the record for 1946 provides food for thought regarding museum developments in the years ahead". The attendance figures for the various exhibitions shown on p. 3 of the report certainly justify this observation. Important donations to the Museum during the year included the Fyfe collection of Japanese netsuké (presented by Mrs. E. J. Fyfe). A full list of acquisitions appears at the end of the report.

British Bee Plants

Many people are interested in learning the sources of the pollen and nectar collected by bees; others are more concerned with the pollination of flowers; while the bee-keeper often wants to know the most suitable plants for extending pastorage for his stocks. To all of these, to botanists and to other readers we can commend the booklet "British Bee Plants" as a storehouse of useful information. All the best bee-plants are dealt with, whether they are in the flower or vegetable garden, orchard, farm or countryside. Often useful hints are given regarding cultivation of particular plants, their uses and other details. Edited by A. F. Harwood, it is issued by the Apis Club, The Ways End, Foxton, Royston, at 3s.

British Social Hygiene Council: Summer School

"THE SCHOOLS AND THE LAND" is to be the theme of a summer school that the British Social Hygiene Council is organising at the Seale-Hayne Agricultural College, Newton Abbot, Devon, during July 30-August 13. The school will be concerned with the