

Engineers and the Community

IN an address delivered at the annual luncheon on June 8 of the Institution of Gas Engineers, the president, Dr. Harold Hartley, made some interesting comments on the relation of the engineer to the community. The term 'engineering', he suggested, should be extended to cover all endeavour utilizing the processes of Nature or scientific knowledge for the benefit and pleasure of mankind. This wider concept of the functions of engineers would bring the professional bodies closer together and give them increased influence in public affairs. The professional institutions set the standard for their members, and they can use their influence to ensure that, in the struggle for economic development, the fundamental cultural freedoms are not sacrificed. They can see that conditions are created which will enable everyone to give of his best in his own particular field; they should strive after something of the character of the old craft guilds, with their care for the reputation of their craft and their members, but also with a deep sense of public service. Dr. Hartley's audience consisted largely of gas engineers, and he rightly emphasized his points by reference to their special branch of the profession of engineering. He referred to the spirit of tolerance and loyalty which has characterized the gas industry in the past, and expressed the belief that this state of mind would enable the industry to overcome the difficulties inherent in the fundamental re-organisation which nationalization of the gas industry in Britain will involve. The Institution of Gas Engineers as a corporate body represents a limited number of types of men with specialist knowledge who are accustomed to thinking along similar lines; they should not find it difficult to co-operate with other specialists concerned in different ways with the industry, and with them to solve the problems lying ahead.

Acta Crystallographica

Acta Crystallographica is a new journal of crystallography published for the newly formed International Union of Crystallography by the Cambridge University Press. It is intended to replace the former *Zeitschrift für Kristallographie*, which between the two World Wars had attracted most of the original accounts of crystal structure analyses. In scope, however, it is intended to be wider, and sets out to reassemble the crystallographic work now scattered through a great variety of journals, and to be the main journal for experts in crystallography the world over. Six numbers are to be issued annually at a moderate cost made possible through subsidies from Unesco, and from numerous research associations and industrial firms in Britain and the United States. The first number, published in March, contains six full-length papers and three short communications on structure determinations of organic and inorganic substances; together with notes and book reviews. The papers are clearly illustrated, and data and methods are set out in sufficient detail for assessing their reliability. Linked with this new publication will be periodic structure reports analogous to the seven volumes of "Strukturbericht" (1931-39) and also a second revised edition of the "International Tables for the Determination of Crystal Structure" (1935). The editor and co-editors are to be congratulated on so promising a first number of a new scientific journal which is really necessary.

World Power Conference

A TWO-DAY meeting of the International Executive Council of the World Power Conference has been held at Stockholm. Nineteen countries were represented: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Great Britain, Hungary, India, Italy, Netherlands, New Zealand, Norway, Poland, Sweden, Switzerland, Turkey and the United States. The British delegates were Sir Harold Hartley, chairman of the International Executive Council and of the British National Committee of the World Power Conference, who presided; Mr. Harold Hobson, vice-chairman of the British National Committee and lately chairman of the Central Electricity Board; and Dr. A. Parker, director of fuel research, Department of Scientific and Industrial Research. It was announced that the Fourth Plenary World Power Conference in London will be held in July 1950 at the house of the Institution of Civil Engineers. The theme of the Conference was approved; it will be "World Energy Resources, and the Production of Power". The future activities of the World Power Conference were discussed, and tentative invitations were received from India, for a sectional meeting to be held in 1951 concurrently with the Fourth Congress of the International Commission on Large Dams of the World Power Conference; and from Italy and Switzerland, who may be the joint hosts at an 'Alpine' Sectional Meeting in 1952 or 1953. The Hungarian delegates suggested a 'Danubian' sectional meeting, to be organised jointly by the national committees of the Danubian countries, on a 'regional' basis. At the request of the Economic and Social Council of the United Nations—which has conferred consultative status upon the World Power Conference—consideration was given to the 'Fuels' and 'Power' Sections of the Provisional Programme of the United Nations Scientific Conference on the Conservation and Utilization of Resources, to be held in the United States in May 1949. It was announced that the first post-war Statistical Yearbook of the World Power Conference will be published shortly; it will contain data on resources and annual statistics covering the eleven years 1936-46. The next meeting of the International Executive Council will be held in Brussels during the first week of July 1949. The new edition of the booklet showing the names of national committees and representatives has been published; copies can be obtained upon application to Mr. C. H. Gray, secretary, International Executive Council, World Power Conference, 201/2 Grand Buildings, Trafalgar Square, London, W.C.2.

Cattle Health and Milk Production

THE three Fison Lectures, made possible by the generosity of Messrs. Fisons, Ltd., are part of the educational programme of the Animal Health Trust and were delivered last May by Prof. L. Seekles, of the Veterinary Biochemical School, University of Utrecht. Prof. Seekles chose "Mineral Disturbances of Cattle" as the theme of his first lecture. Our food-producing animals have, he said, become physiologically artificial beings. Experiments carried out in his laboratory strongly suggest that the forced development of the cow as a milk producer causes over-activity of the pituitary gland. Discussing this idea in relation to milk fever, Prof. Seekles suggested that preventive measures against this disease should be designed to prevent over-development of the

pituitary gland during pregnancy. The biochemical features of grass tetany and 'Utrecht abnormality of milk', which results in curdling of the milk of apparently healthy cows during transportation of their milk or when it is boiled, were also discussed. The second lecture, entitled "Gastro-intestinal Auto-intoxication in Cattle and Horses", included a discussion of Dutch methods of treating acetonaemia. Much attention has been recently given to treatment with potassium chlorate, which may be beneficial if the liver is not seriously damaged. Lactate therapy, practised since 1942, has also given good results. The third lecture dealt with the complex subject of real and conditioned deficiencies of trace elements. Evidence has been obtained that in many cases increased motility of the intestine, due to causes independent of the amounts of trace elements in the food, such as the intake of protein and other components of rank spring grass, nematode infestations and paratuberculosis, may cause decreased absorption of trace elements. Intravenous administration of radioactive copper salts had shown that the liver plays an important part in the accumulation of copper. No relation between grass tetany of Dutch cattle and the intake of manganese could be obtained, but significant differences between the manganese content of grass from different soils were noted, the more alkaline soils containing the least manganese.

Earthquakes Registered in New Zealand during February 1948

Six strong earthquakes were registered by the seismographs in New Zealand during February 1948. They were on February 9 (2), 10, 14, 16 and 23, that on February 9 being felt in Anatolia (Turkey). In addition, eighteen local earthquakes were felt in some place in New Zealand during the month. The greatest intensity of any one of these was scale 5 (Modified Mercalli intensity scale) in the Cook Strait region of both islands on February 4, the epicentre being near lat. $40^{\circ}95'$ S., long. $173^{\circ}6'$ E., and depth of focus approximately 50 km. Earthquakes with scale 4 intensity occurred on February 9 in the Wellington and Wairarapa Regions, on February 18 in the Uruwera District and on February 29 near Lake Coleridge.

Union Catalogue of German Books and Periodicals

OWING to the scarcity of German books and periodicals published since the beginning of the Second World War, the Foreign Office has requested the National Central Library to compile a union catalogue of such of these publications as have reached the United Kingdom. A circular has been issued asking libraries and other institutions to co-operate by amending a check-list indicating their holdings. Anyone who is willing to assist but has not seen the circular should write to the National Central Library (German Union Catalogue), Malet Place, W.C.1.

Geophysics at Hamburg

AT Hamburg, the University Meteorological Institute, the Centre for Earthquake Research and the University Institute for Oceanography have been amalgamated to form the Geophysical Institute of the University of Hamburg. The address is now Hamburg 13, Rothenbaumchaussee 33. The new Institute is working under difficulties, and would welcome exchanges of geophysical publications.

Society for the Bibliography of Natural History

At a general meeting of the Society for the Bibliography of Natural History held at the British Museum (Natural History) on February 28 the following officers were elected: *President*, Dr. J. Ramsbottom; *Secretary and Treasurer*, Mr. A. C. Townsend, British Museum (Natural History), Cromwell Road, London, S.W.7; *Committee*, Prof. F. Balfour Browne and Messrs. J. Delacour, W. N. Edwards, F. J. Griffin, Francis Hemming and C. Kirke Swann. It is hoped to revive the activities of the Society, which was founded in 1936, and it was announced at the meeting that a further part of the second volume of the Society's *Journal* is in the press. This consists of a bibliography of whaling by Dr. J. Travis Jenkins. The last part of the *Journal* to be published was Vol. 2, Part 3, issued in April 1946.

Research on Nematology

THE Institute of Agricultural Parasitology, Winches Farm, 395 Hatfield Road, St. Albans, Herts, formally ceased to exist as such on September 30, 1947. So far as plant-eelworm work is concerned, its place has been taken by a new Nematology Department of Rothamsted Experimental Station with the following scientific staff: Dr. T. Goodey (head of the Department), Dr. B. G. Peters, Dr. Mary T. Franklin, Mr. D. W. Fenwick, and Mr. J. B. Goodey. From June 30 this Department will be housed at Rothamsted Experimental Station, Harpenden, Herts. Winches Farm is continuing as a field station of the London School of Hygiene and Tropical Medicine, with Mr. J. W. G. Leiper as administrative officer.

University of Leeds

THE University of Leeds has received a further grant of £10,000 from the Worshipful Company of Clothworkers, making a total grant of £30,000 to meet the capital cost of the extension of the Textile Industries Department now in course of construction. The British Hat and Allied Feltmakers' Research Association has given £1,000 for research in the same Department.

The following appointments have been made: Dr. F. Henriques, lecturer in social anthropology; Mr. A. N. Greenwood, lecturer in electrical engineering; Mr. C. Kisby, lecturer in textile design.

Commonwealth Fund Fellowships

THE list of awards of Commonwealth Fund Fellowships tenable by British graduates in American universities for one year, beginning September 1948, includes the following: E. R. Andrew, Christ's College and Pembroke College, Cambridge, to Harvard University, in physics; J. R. G. Bradfield, Trinity College, Cambridge, to the College of Medicine, University of Illinois, in biology; S. L. Bragg, Trinity College, Cambridge, to the Massachusetts Institute of Technology, in engineering; Dr. Archibald Brown, University of Glasgow and Trinity College, Cambridge, to Yerkes Observatory, University of Chicago, in astronomy; Dr. C. A. Bunton, University College, University of London, to the College of Physicians and Surgeons, Columbia University, in biochemistry; Dr. G. M. Carstairs, University of Edinburgh, to Cornell University, in cultural anthropology; R. B. Hunter, University of Edinburgh, to Johns Hopkins School of Medicine, in medicine; Dr. D. O. Jordan, University of London and University College, Nottingham, to Princeton