

NEWS and VIEWS

Mr. G. Shaw Scott and the Institute of Metals

THE first decade of the twentieth century produced a number of explorers keen to discover in the science of metals the most efficient and economic ways to adapt 'brass and iron' to the service of man. Papers published at the time were concerned with the micro-structures of metals and alloys, and the influence of the nature and distribution of micro-constituents on mechanical properties. Hence there arose a need for the results of such work to be published among manufacturers and users of metal, while scientific men required a fellowship for mutual help and criticism. The Institute of Metals was founded to meet these needs in September 1908, its temporary headquarters being the Department of Metallurgy of the University of Birmingham. The first secretary was Mr. Gilbert Shaw Scott, who is now retiring after thirty-two years of service.

In 1906, Mr. Shaw Scott graduated at the University of Birmingham as its first graduate in metallurgy, and was the first research student in the Department. In 1908 he read a paper on case hardening to the Iron and Steel Institute at its meeting in Vienna. From a large number of candidates, he was chosen to be the first secretary of the new Institute, and under his guidance it has grown from its original membership of 250 to a present world-wide membership of 2,500. Examples of scientific and technical progress with which he has been associated as secretary and editor to the Institute of Metals include the new knowledge of metallic crystals, equilibrium diagrams and micro-constituents of metals and alloys, the industrial use of microscope and pyrometer as instruments for the control of quantity and quality; the discovery and development of modern alloys of aluminium; the discovery of a copper alloy which can be hardened and tempered by heat treatment; the winning battle against corrosion, and bright annealing. Since 1908, his services to the members of the Institute of Metals have been to make available the new knowledge so necessary to the metallurgical industries. His friends will remember gratefully the prompt help and genial advice always received, and wish him on retirement many happy days.

Charles L. Mayer Prize of the U.S. National Science Fund : Dr. Alexander Lipschütz

DR. ALEXANDER LIPSCHÜTZ, director of the Department of Experimental Medicine of the Chilean National Health Service at Santiago, Chile, has been awarded the second 2,000 dollars prize given by Dr. Charles L. Mayer and administered by the National Science Fund of the U.S. National Academy of Sciences. The award was offered for an outstanding contribution made in 1943 to present-day knowledge of factors affecting the growth of animal cells with particular reference to human cancer. Dr. Lipschütz was born in Riga, where he received his early education. He occupied various positions in medicine and physiology at institutions in Switzerland and Germany before going to Chile about fifteen years ago to work at the Catholic University at Concepcion. Since 1938 he has been director of the Department of Experimental Medicine of the National Health Service at Santiago, Chile. Throughout the past six years Dr. Lipschütz, with Chilean collaborators, has studied the fibromyomas of the uterus

which can be induced in guinea pigs by the injection of certain sex hormones of the female. The growths closely resemble the fibromyomas ('fibroids') which occur in women during the childbearing period, and Dr. Lipschütz has shown that, like these, they dwindle and vanish when the stimulation of the sex hormones is withdrawn, as happens after the menopause in women. He and his associates have sought means to prevent the occurrence and enlargement of the growths while the hormones are still acting, and recently they have found that some other hormones have this effect, as do also certain synthetic substances. The molecular configurations responsible for the influence of the antifibromatogenic agents are now under investigation; a progress report by Dr. Lipschütz was published in *NATURE* of February 26, 1944, p. 260.

Award for Production of Magnesium and Calcium

MR. G. D. BAGLEY, leader of the experimental engineering group of the Union Carbide and Carbon Research Division, has been awarded the Jacob F. Schoellkopf Medal for 1944 by the Western New York Section of the American Chemical Society, for "outstanding and highly significant work, particularly in the fields of the commercialization of very active metals". Largely through his chemical and engineering skill, a process has been developed which produces magnesium in high-temperature vacuum furnaces with capacities which were formerly thought to be impossible. Previously, the dolomite-ferrosilicon reaction for making metallic magnesium had always been considered a laboratory curiosity. Mr. Bagley's production methods are being carried out at the Electro Metallurgical Company's plant at Spokane, Washington, with a rated capacity of 24,000 tons a year. Mr. Bagley has also developed a method for the production of metallic calcium. Before the War, calcium came almost exclusively from France and was made in small cells at a high production cost. When this source was cut off, Mr. Bagley designed large automatic cells, which are now producing a purer product at a considerably reduced cost. Mr. Bagley, who has been with the Union Carbide and Carbon Research Laboratories since 1918, has also been wholly or partially responsible for many other highly important chemical and chemical engineering developments.

Federation of British Industries :

Industrial Research Committee

THE Federation of British Industries has decided to strengthen its organization on the research side by making its Industrial Research Committee a permanent standing committee of the Federation, with its own secretariat. By its terms of reference this Committee will seek to stimulate national interest in research for industry and foster it in all appropriate ways. Thus it will encourage industrialists to devote a more adequate part of their resources to the promotion of research and its application to existing products and to the development of new products. It will provide money for the creation and maintenance of adequate facilities for postgraduate research; and encourage the education of the necessary research and development staff of universities, technical colleges and industrial establishments. The

Committee will promote contact and collaboration wherever possible between centres of industrial research or institutions and research workers; and facilitate co-operative research within British industry, with special reference to the needs of small-scale industries. Information on research questions will be provided by creating a liaison with appropriate reference libraries and technical and scientific institutions; and attention directed to the publications of professional, technical and scientific institutions, assistance being given where necessary in their distribution. The Committee will promote the compilation of general information on industrial research, particulars of organizations and the facilities available; and provide from time to time information for press and public on the achievements of British industrial research.

A Medical Nobel Institute in Sweden

THE Royal Caroline Institute (Kungl. Karolinska Medico-Kirurgiska Institutet), which is the medical school of Stockholm—the University of Stockholm (Stockholms Högskola) having no medical faculty—and is in charge of the medical Nobel Fund, has decided to build a Medical Nobel Institute for research in the three theoretical disciplines, anatomy, biochemistry and physiology. The new Institute will consist of three departments in one building to be erected on the premises of the new medical centre at Norrbacka in the north-west region of the city. The Biochemical Nobel Institute was founded in 1937 and is directed by Prof. Hugo Theorell. The physiological department will be a Neurophysiological Research Laboratory privately endowed in 1940 for Prof. Ragnar Granit, who will also be in charge of the new institute. The anatomical department will be associated with a new chair in cell research to be created for Dr. Torbjörn Caspersson.

Relation of Employment to an Economic System

A MEMORANDUM "Employment After the War" submitted by the Social Credit Co-ordinating Committee, Greno House, Swinton, Mexborough, Yorks (3d.), for the consideration of Sir William Beveridge, argues that full employment is not the right objective of an efficient economic system. The essential function of industry is to supply the goods and services which people require, and it is no part of the function of industry to deprive people of leisure or to keep them occupied in order to reduce the difficulties of Government. Social security, with freedom, can only be realized if we recognize, first, that production is no longer a major problem: the problem to-day is that of distributing the abundance of goods that can be produced. Further, money is the social mechanism for the distribution of goods: thirdly, science has so well succeeded in harnessing solar energy to the service of man that the need for human labour in industry has decreased and will continue to decrease progressively; and, lastly, the true purpose of employment is to provide goods and services for our use and not to provide people with incomes. The memorandum then briefly summarizes the Social Credit proposals: a national credit office; the institution of a scientific price discount; and the distribution of national dividends. These proposals are designed to deal with what is described as the real problem, which is not how to share out the hours of work available, but how to remove from unemployment its ugly concomitants of frustration and a low standard of living.

Institute of Medical Laboratory Technology

THE Institute of Medical Laboratory Technology, which was incorporated in November 1942, with registered offices at 308 Dewsbury Road, Wakefield, Yorks, has issued a memorandum and articles of association. All scientific workers will commend the objects of this Institute. As its secretary, Mr. S. J. Denyer, says, its formation "indicates the desire of the laboratory technician to meet the increased demands of his profession and to acquire the professional status already accorded to other scientific workers". The Institute incorporates the Pathological and Bacteriological Laboratory Assistants Association and takes over the publication of the *Laboratory Journal* and the *Monthly Bulletin* previously issued by that Association. To meet modern demands, the Institute requires an approved educational standard as one qualification for membership. Ordinary members or associates of the Pathological and Bacteriological Laboratory Assistants Association may become ordinary members of the Institute by application, but others must be elected; they must be not less than twenty years old, they must have had not less than three years experience in an approved pathological, bacteriological or chemical pathology laboratory and must pass an intermediate examination controlled by the Institute. Candidates for the associateship of the Institute must either hold the certificate of the parent Association in one subject or must, after completing five years training in an approved laboratory and attaining the age of twenty-two, pass the Institute's final examination in one subject. Fellows must have been registered members of the parent Association for ten or more years, or must hold that Association's certificates in two or more subjects; in either case they can become fellows by application. Others may be elected to fellowship if they are already associates of the Institute and either pass the Institute's final examination in two or more subjects or submit an acceptable thesis, and have also been associates of the Institute for ten or more years, inclusive of previous registered membership of the parent Association.

It will be clear that the associateship and the fellowship of the new Institute are not lightly acquired; and ordinary membership must itself command respect. This will give to the technicians in the laboratories concerned the status which they deserve, for without their willing help, their interest in the work and their devotion to it, many great discoveries would not have been made. It is good to know that members of the medical profession give willingly of their time to help to train these essential workers; every other kind of scientific worker will wish to do the same.

Smithsonian Institution: Annual Report

THE report of the Smithsonian Institution for the year ended June 30, 1942 (Washington, D.C.: Gov. Printing Office. 1.50 dollars), includes the report of the secretary together with the reports on the United States National Museum, the Bureau of American Ethnology, the International Exchange Service, the National Zoological Park, the Astrophysical Observatory, and the Division of Radiation and Organisms, together with a general appendix on the lines of that in the previous report. Referring to the war activities of the Institution, the secretary's report states that a War Committee has been constituted and a detailed roster prepared of the scientific staff, numbering