

of Reserved Occupations will probably never be called on to use their professional knowledge for war purposes in a civil capacity, and the possibility has been examined of notifying them that they are released from their reservation. It was felt that it would be very invidious to take the initiative in this, but machinery has been set going to arrange for the possibility of release. It will be open to any scientific man reserved under the Schedule to apply for release, and his case will be considered by the appropriate panel. In arriving at its decision, the panel will give consideration to

any representation by the applicant's employer (university, firm, etc.), and to the possibility that the applicant's professional services might be needed later, even though the demand is not yet apparent. In view of the differences of demand in the various scientific subjects, each panel is adopting its own policy, but broadly speaking the general policy will be that release will be granted to anyone who is unemployed or likely to become so, while for others the grant will only be made after much more careful consideration of each application.

## OBITUARIES

### Sir Francis Goodenough, C.B.E.

**S**IR FRANCIS GOODENOUGH died on January 11, after a long period of ill-health, at the age of sixty-seven. It is possible to surmise that had he come under the influence of a science master at an impressionable age, as has happened to many of us, he would have made a career in some branch of science which would have gained a great leader. As it was he performed what is perhaps the more difficult feat, namely, the introduction of some measure of planning and science into commerce.

He lived to see the subject of management adorned by the adjective 'scientific' and to participate in international congresses under the double heading. He was one of the first and greatest salesmen in the gas industry, where he emphasized the importance of supplying a service as well as a commodity. Equally valuable were his services in the cause of education applied to gas engineers and gas salesmen. Here he insisted that the scheme, elaborated in conjunction with the City and Guilds of London Institute, should be one of education as distinct from examination only. It is known that the early difficulties in connexion with this were almost overwhelming, and that but for his patience it would have been difficult to overcome them.

Sir Francis was a pioneer of co-operative advertising and a leader of many other co-operative movements both within and without the gas industry. A man of rare vision and large ideas, faculties usually involving impatience, he was characterized by an easy and genial manner and the quality of complete sincerity. In addition to his successful career with the Gas Light and Coke Company, which he saw rise from something very much smaller to its present outstanding position, he was always visualizing developments ahead of the time.

Sir Francis was one of those who will probably appear greater in retrospect than he does at the time of his activities, when personalities and policies hold the stage. Science and commerce lie perhaps on opposite sides of the river of daily endeavour, but many bridges are being built across the river, over

which traffic struggles in either direction. One such bridge builder was Goodenough; the edifice he has erected, built on sound foundations, will stand the stresses of stream and wind and the increasing load of progress for many years to come. E. F. ARMSTRONG.

### Miss E. K. Pearce

**MISS ETHEL KATHERINE PEARCE**, whose death occurred on January 8, at Morden, Dorset, at the age of eighty-three, was an entomologist who devoted her energy and enthusiasm almost entirely to Diptera. A daughter of a vicar of Morden, she had around her one of the finest entomological hunting grounds even in a county as favoured as Dorset. The first series of her work, "Typical Flies", a photographic atlas in which the author sought to popularize and extend the study of an order of insects much neglected in those days, was published in 1915. A preface giving practical guidance for collecting and preservation is followed by a sketch of Brauer's classification of the Diptera, and his sixty families are named, the Aphaniptera (fleas) being included. The forty-five pages of reproductions from photographs, considering the great difficulty of such work, are admirable, the flies figured being all recognizable and characteristic. In some cases preliminary stages are shown. The photographs of typical Dorset localities are a very pleasing and helpful feature. They not only give information as to the habitat of the fly, but also tempt the Nature lover to explore such delightful environment.

The flies taken as types of the various families were chosen with the help of the late Prof. Theobald, F. C. Adams, and other capable authorities, with great care. A second series appeared with 125 photographs in 1921, and a third series with 162 photographs in 1928. In all, fifty-five out of the sixty families of flies enumerated by Brauer are represented in the three series by a type fly. The brief biological notes given under the figures add much to the interest of the book. The author was helped, too, in her work by her brother, Mr. N. D. R. Pearce.

Amiable and benevolent, and ever keen on doing useful work, Miss Pearce's death leaves the ranks of entomology the poorer. Her contribution cannot fail to aid beginners in classifying and identifying the flies they find. Non-specialists, also, who wish to place any fly they see in its systematic position, will likewise find Miss Pearce's guide a boon.

F. H. HAINES.

WE regret to announce the following deaths :

Prof. Aristide Busi, director of the Institute of Medical Radiology, Rome, aged sixty-five years.

Mr. W. M. Gardner, principal of Bradford Technical College during 1905-21, on December 22, aged seventy-eight years.

Mr. W. H. Lovegrove, formerly conservator of forests, Kashmir, on January 25, aged seventy-two years.

Prof. Ugo Mondello, the well-known seismologist, formerly director of the Ardenza Observatory, Italy, on December 3, aged sixty-one years.

Prof. S. Lees, Chance professor of mechanical engineering in the University of Birmingham, aged fifty-four years.

Mr. B. D. Porritt, director of research of the Research Association of Rubber Manufacturers, on January 28, aged fifty-six years.

Mr. F. T. Shutt, C.B.E., formerly Chief Dominion Chemist and assistant director of the Central Experimental Farm, aged eighty years.

Prof. C. A. Strong, formerly professor of psychology in Columbia University, aged seventy-six years.

## NEWS AND VIEWS

### Scientific Collaboration between Britain and France

A DELEGATION from the Centre National de la Recherche Scientifique, led by its director, Prof. H. Longchambon, has been visiting Great Britain during the past week. The other members of the delegation were: Prof. M. Fréchet, professor of mathematics at the Sorbonne; Prof. G. Darmon, professor of mathematics at the Sorbonne; Prof. F. Joliot, professor of physics at the Sorbonne; Prof. P. Auger, professor of physical chemistry at the Sorbonne; Prof. C. Sadron, professor of building legislation at the Ecole Nationale Supérieure des Beaux-Arts, Strasbourg; Prof. G. Dupont, professor of theoretical chemistry at the Sorbonne; Prof. Denivelle, professor of chemistry at the Ecole Supérieure de Chimie at Mulhouse; Prof. A. Mayer, professor of medicine at the Collège de France; Prof. L. Blaringhem, professor of botany at the Sorbonne; Prof. P. Chouard, professor of agriculture at the Conservatoire National des Arts et Métiers; Prof. P. Langevin, professor of experimental physics at the Collège de France; Dr. P. Montel, professor of mathematics at the Sorbonne. This, it may be presumed, is one of the measures referred to by Lord Chatfield when he spoke recently in the House of Lords on the exchange of information and extension of the liaison between the scientific organizations of Great Britain and France (see NATURE, Jan. 27, p. 142).

The programme arranged for the visitors included a reception at the Royal Society on January 29, when the guests were received by Sir Albert Seward and Prof. F. G. Donnan on behalf of the Royal Society. Dr. E. V. Appleton then addressed the meeting, and described the organization of the scientific effort for defence in Great Britain. The French delegation was introduced by Dr. Montel, after which Prof. Longchambon described the steps taken in France to mobilize scientific research for the country's war effort. Prof. Langevin also spoke. On January 30, the French delegation visited the

National Physical Laboratory at Teddington, and on the following day travelled to Cambridge, where they saw the Cavendish Laboratory (Prof. W. L. Bragg) and the Colloid Science Laboratory (Prof. E. K. Rideal). A meeting of the Royal Society was arranged for February 1, at which Sir Arthur Eddington was reading a paper on "The Masses of the Proton, Neutron, and Mesotron", and L. Jánossy and B. Rossi a paper on "Photon Component of Cosmic Radiation". Prof. E. J. Williams was giving an account of his experiments on the transformation of mesotrons into electrons (see NATURE, Jan. 20, p. 102), and Prof. P. Auger and Prof. P. M. S. Blackett were taking part in the discussion. On the same evening the French delegation were being entertained to dinner by British men of science.

### Scientific Research for the Services

THE Advisory Council of Scientific Research and Technical Development (see NATURE, December 30, 1939, p. 1085) held its first meeting at the Ministry of Supply on January 25. Colonel J. J. Llewellyn, in the absence of the Minister of Supply through illness, pointed out the Ministry has numerous establishments for research and development, etc., which, in some directions, work for all three Services: these establishments are supplemented by work in progress at various other research laboratories throughout the country. Lord Cadman, chairman of the Council, said that the research programme is most extensive, comprising more than a thousand items. The subjects being dealt with vary within very wide limits; it is therefore necessary to have an extensive and comprehensive scientific representation on the Council, which will function through a number of committees, on which other men of science will be invited to serve. So far, the committees formed deal with metallurgy, general physics, ballistics, structural engineering, communications, etc. The Directorate of Scientific Research of the Ministry of Supply