

The inaugural address will be delivered by Sir Walter Langdon-Brown, emeritus professor of physics in the University of Cambridge. The following speakers have undertaken to give lectures and take part in discussions: Prof. J. C. Drummond, scientific advisor, Ministry of Food; Dr. Leslie J. Harris, director of the Nutritional Laboratory, University of Cambridge; Dr. Grace Calver, physician, Children's Department, Tavistock Clinic; Mrs. C. Neville-Rolfe, past vice-president, Eugenics Society; Sir Drummond Shiels, medical secretary, British Social Hygiene Council; Mrs. E. J. Hatfield, North London Collegiate School; Mr. R. Weatherall, Eton College; and Miss V. D. Swaisland, British Social Hygiene Council. Further information can be obtained from the Education Officer, British Social Hygiene Council, Inc., Tavistock House South, Tavistock Square, London, W.C.1.

International Relief Union

THE origin, aims, means and future of the International Relief Union are discussed by M. Camille Gorgé in a pamphlet recently issued by the Union (Geneva: International Relief Union). M. Gorgé points out that, for good or for ill, the States of the world have become so closely welded together that they form a great family from which no one member can dissociate himself without serious inconvenience or actual hardship. Although international co-operation has at present lost most of its vitality and force, sooner or later the nations must revert to the method of collective agreements, and use the instruments or machinery already established for that purpose. The International Relief Union, which was established by the Convention of July 12, 1927, was largely the outcome of a scheme elaborated by M. Giovanni Ciracolo to provide not only for immediate and organized relief for peoples overtaken by disasters, such as earthquakes or other catastrophes arising from natural causes, epidemics, famine, etc., but also for the scientific study of the causes of natural calamities, with the view of counteracting or limiting their effects. According to the Convention, the International Relief Union has a fourfold task: it must furnish first aid to the populations that are victims of public disasters, and co-ordinate, as occasion offers, the efforts made by other relief organizations; it must also encourage the study of preventive measures against disasters and seek to induce all peoples to render mutual international assistance.

The Convention did not come into force until December 27, 1932, and its financial resources were too limited for it to do its work freely and effectively. Special stress is laid upon the mobilization of the forces of good will against adversity beyond national frontiers, and upon encouraging scientific men to study how to combat or even counteract future disasters. Scientific workers are urged to co-ordinate research in all its branches so that the various communities may unite their concrete efforts, based on accurate data, to minimize the damage to the human family caused by great scourges. Aviation and

broadcasting have already done something to reduce the gravity of certain disasters, and fresh opportunities of foresight and defence continually arise. To assist scientific workers to explain their ideas and compare results in this field, the Union in June 1938 issued the *Revue pour l'étude des calamités*, replacing the *Matériaux pour l'étude des calamités*, previously published by M. Montandon in collaboration with the Société de Géographie de Genève. One of the first tasks of the Union in this field is to make a detailed study of the geography of natural disasters. A resolution of the first International Conference for Protection against Disasters, Paris, September 1937, recommended that the Union should consider the appointment of a Permanent International Committee for Protection against Disasters, collaborating with the Board of Scientific Documentation of the Union, and M. Gorgé briefly indicates directions in which such concerted scientific effort is required.

Wood Pole Transmission Lines

IN order to examine the incidence of risks from shocks and fire due to the use of wood-pole transmission lines, tests were undertaken of primary insulation at 19, 11 and 6.35 kv. The work is described by G. T. Garwood in the *Electrical Review* of April 12. The structure on which the tests were carried out comprised a plain-sawn English oak cross-arm, 5 in. by 3 in., bolted to a red fir-pole, 32 ft. by 11½ in. in diameter at 5 ft. from the butt. The pole was sound in every way and had been creosoted. The instruments used for the tests were two electrostatic voltmeters. The resistance between the cross-arm bolt and earth was measured on frequent occasions in the period during which the test was being taken and also under varying conditions of dryness. The megger readings ranged from 200,000 ohms with the pole dry to 50,000 ohms with it wet. With the 11 kv. connexions a current of 140 micro-amperes could be obtained from below a plain earthing collar. As 15 micro-amperes may give a fatal shock to a normal man, if his heart lie in the circuit, the experiments showed that a plain earthing collar round the pole is insufficient protection. In the destruction tests, about ten minutes after the wetting of the pole smoke appeared from the cross-arm near the insulator pin. Longitudinal 'shakes' opened up in the cross-arm and showed signs of carbonizing. After about twenty minutes, smoke appeared from these shakes, the source of the smoke moving steadily towards the pole. After thirty minutes, smoke appeared from the pole top and 'tracking' with small intermittent flames at the earthing collar. Heavy smoke and flames appeared at the pole-top after seventy-five minutes and after eighty-five minutes the test was stopped, it being clear that the complete destruction of the structure was inevitable.

Flavour of Bacon

THE Department of Scientific and Industrial Research has issued a report describing work carried out for the Food Investigation Board on the importance of various factors responsible for the pro-

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