

and though the attacks were severe, there were no deaths. As the outbreak was not recognized for some days, bacteriological examination of the patients proved negative. However, from a specimen of the milk delivered on October 29, a *Salmonella* food-poisoning organism was isolated, afterwards identified as being a 'Dublin' type, and four days later, the same organisms was again isolated from milk supplied by the same producer. Confirmatory evidence was obtained by serological tests of the blood of nine convalescents, whose blood showed specific agglutination for type 'Dublin' in high dilution. Examination by agglutination tests of the herd of 51 cows supplying the milk picked out three cows with a high agglutination for the 'Dublin' type. Specimens of milk and dung from these three cows were examined. The milk from all three, and the dung from two, were negative, but from the dung of the third animal a heavy growth of *Salmonella*, 'Dublin' type, was obtained, and this 'carrier' cow was removed from the herd, and no further trouble ensued. It is remarked that no amount of care in milking and distribution of such a raw milk could prevent it from being a danger to the consumer.

#### Insulators

A SEVEN-PAGE article on "Recent Developments in Electrical Insulating Materials" by Dr. L. Hartshorn (*J. Sci. Inst.*, July) will prove of great use to constructors of electrical apparatus and will serve as a base from which research on the properties of insulating materials advocated by the Radio Research Board may operate. The author describes the properties of ebonite, of 'loaded' ebonites, of synthetic resins which can be readily moulded or used to bond laminated material into insulating boards, and when of the hydrocarbon type have dielectric constants little more than 2 and power factors so low as  $2 \times 10^{-4}$ . Ceramics provide insulators of the stearite group depending mainly on magnesium silicate, and of the rutile group, principally titanium dioxide, used in the construction of condensers. After shaping, both are fired and cannot afterwards be worked without difficulty. They are apt to absorb moisture which alters their properties. Certain waxes, for example, the chloronaphthalenes, have high dielectric constants and fairly low power factors. A table of dielectric constants, power factors, resistivities, mechanical and electrical strengths and softening temperatures for nearly thirty insulators is given.

#### Photography in X-Ray Departments

THE brochure on "X-Ray Materials and Accessories", published by Messrs. Kodak, Ltd., might well contain the word 'photographic' did not the name of Kodak at once conjure up the word; its forty pages are devoted to a description of photographic supplies for medical and dental X-ray work. Routine work demands rigid control of variables for its quick effectiveness, and this firm has realized that, provided the actual exposures are reasonably correct, the development of X-ray films can be standardized by the use of reliable reagents, proper timing and regulation of the working temperatures. In the

planning of X-ray departments, insufficient attention is sometimes given to the developing and printing rooms, where laborious hours are spent in semi-darkness. Efficient planning should reduce these hours to a minimum, and the experience of Messrs. Kodak is at the service of those planning and being responsible for the photographic work in X-ray departments.

#### Handbook of International Organizations

AN English edition of the Handbook of International Organizations has now been issued by the Secretariat of the League of Nations. This volume of nearly 500 pages gives the particulars of nearly 760 international organizations, including addresses, names of officers, notes on finance, objects and activities. International bureaux under the direction of the League, official central bureaux and private associations and federations in so far as they have international objects and are not run for profit are included. These organizations are classified in the following groups to facilitate reference: politics and international relations; religion; arts and sciences; education; students and university organizations; medicine and hygiene; law and administration; press; feminism; labour and professions; agriculture; economics and finance; trade and industry; communications and transit; sport and touring; and miscellaneous. The utility of the volume is increased by the provision of a subject index, an alphabetical index and a geographical index. The latter indicates that 183 of the organizations have their seats in France and 140 in Switzerland, Great Britain coming next with 78 organizations and Belgium being fourth with 77.

#### Recent Earthquakes

THE violent earth tremors which were experienced on Monday, September 5, over a considerable area about fifty miles south of Algiers (*The Times*, Sept. 7) cannot be said to have affected an area where earthquakes of destructive intensity are usual. Small tremors are, however, quite common, especially where the land shelves steeply to the ocean deeps. Between 1911 and 1931, Mme. A. Hée listed 586 tremors, distributed in twenty-two different zones, only four of which reached destructive intensity. The observatory of Alger-Bouzaréah is actively engaged in recording and studying these local earthquakes, and we anticipate more information at a later date. An earth tremor shook Colombo, in Ceylon, early on Sunday, September 11, but no damage is reported (*The Times*, Sept. 12). In this zone severe earthquakes are practically unknown. Slight earthquakes are common along a line through Madras passing south-south-west near the southern edge of the Deccan of India, and these are often in sympathy with larger ones occurring in northern India, a fact which may be attributable to the strained condition of the peninsula. The Ceylon tremor was most probably a local surface shock due to slipping along a fault. Another strong shock was recorded by the Stuttgart Seismological Station on Sept. 7 d. 4 h. 15 m.

(Continued on p. 533)