

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 2×10^{-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.

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58 s. with suggested epicentre in Formosa, but no confirmation has yet been obtained.

Prontosil

MESSRS. BAYER PRODUCTS, LTD., Africa House, Kingsway, London, W.C.2, have issued a booklet surveying the chemotherapy of 'Prontosil', the trade name of three varieties of the sulphonamide series of drugs. Prontosil has been found to possess active properties against human infections caused by the bacterial streptococci, and to be of great service in the treatment of puerperal fever and certain forms of blood-poisoning. It also appears to be of service in the treatment of meningitis caused by the meningococcus and in some other infections. The booklet gives a useful summary of the experimental work that has been done on the physiological action of Prontosil, and of its use in treatment. A bibliography of some two hundred of the more important references is appended. Although a trade production, this booklet gives a fair presentation on the subject of 'Prontosil'.

Appointments in the Colonial Service

THE following appointments and promotions have recently been made in the Colonial Service: G. W. Anderson, to be agricultural officer, Kenya; G. K. G. Campbell, to be agricultural officer, Nigeria; L. J. S. Littlejohn, to be botanist and plant pathologist, Cyprus; S. M. McCombe, to be agricultural officer, Uganda; C. W. R. McCreary, to be agricultural officer, Nyasaland; P. R. Stephenson, to be entomologist, Uganda; J. Barker, to be nutritional investigator, Nyasaland; E. Collins, to be Government analyst, Mauritius; J. P. Glasgow, to be field officer, Tsetse Research Department, Tanganyika Territory; R. L. Stafford, to be assistant meteorologist, Nigeria; H. E. B. Williams, to be sleeping sickness control officer, Nigeria; J. A. Fawdry, inspector of mines, Tanganyika Territory, to be chief inspector of mines, Northern Rhodesia; W. G. Beaton, veterinary research officer, to be senior veterinary officer, Nigeria; N. Clarke, veterinary officer, to be senior veterinary officer, Nigeria; R. Dunwoody, veterinary officer, to be senior veterinary officer, Nigeria; A. B. Ackland, chief clerk, Agricultural Department, to be produce inspector, Agricultural Department, Fiji; P. W. Briggs, agricultural officer and ginnery inspector, Tanganyika Territory, to be agricultural officer and ginnery inspector, Uganda; R. W. Hamilton, chief inspector of antiquities, to be director of antiquities, Palestine; W. O. Harvey, game ranger, Tanganyika Territory, to be deputy game warden, Selangor and Negri Sembilan, Federated Malay States; H. L. Manning, assistant agricultural officer, British Honduras, to be plant breeder in charge of the Cotton Experiment Station, St. Vincent (under the Empire Cotton Growing Corporation).

Announcements

As we go to press, confirmation has reached us of an announcement made a few days ago that Dr. S. B. Nicholson, using the 100-inch reflector at

Pasadena, has discovered two new satellites of Jupiter. The objects are extremely faint, the estimated magnitude being 19. No particulars are yet available as to their orbits.

PROF. FLORENCE BARBARA SEIBERT, assistant professor of biochemistry, Henry Phipps Institute of the University of Pennsylvania, Philadelphia, has received the Trudeau Medal in recognition of her research on the chemistry of protein molecules derived from the tubercle bacillus. Prof. Seibert is the first woman to receive the Trudeau Medal.

DR. HERMANN FINK, professor of the biochemistry and technology of fermentation in the University of Basle, has been awarded the Scheele Medal of the Stockholm Chemical Society.

DR. HANS HERENSKY of Johannesburg has been given the Leibnitz Gold Medal of the Prussian Academy of Sciences and Dr. Georg von Bekesy of Budapest the Leibnitz Silver Medal.

PROF. H. FRIESER, of Dresden, has become editor of the *Zeitschrift für wissenschaftliche Photographie, Photochemie und Photochemie* published by Joh. Ambr. Barth, of Leipzig, previously edited by him with Prof. Schaum, of Giessen.

A NEO-HIPPOCRATIC CONGRESS will be held in Marseilles on September 29 under the presidency of Dr. Cornil, dean of the faculty of medicine. Further information may be obtained from Dr. Martiny, 10 rue Alfred Roll, Paris.

AN International Balneological Association has recently been founded in Budapest. The first meeting will be held in Germany this year, the next in France in 1940, and the third in Italy in 1942, during the world exhibition.

WE have received vol. 9 of "Studies from the Connaught Laboratories, University of Toronto" (The University of Toronto Press, 1938), edited by the director, Dr. J. G. FitzGerald. In this volume are bound together reprints of fifty papers, published in different journals during 1937, from the Connaught Laboratories and University of Toronto. The papers cover a wide range of subjects, from public health and pathology to biochemistry and physiology. A brief inspection of the volume gives a good idea of the activities of the Toronto School. A list of the papers included is given at the beginning of the volume, but there is no subject or author index, which would add to its value as a work of reference.

ERRATUM. In the letter entitled "Control of Insects by Methallyl Chloride", by Dr. C. J. Briejèr, in NATURE of June 18, p. 1099, the third line under the formula: "Mixtures of its vapour with air are not explosive in concentrations of 105-339 gm. per cub. m.", should read, "Mixtures of its vapour with air are explosive in concentrations of 105-339 gm. per cub. m."