

components; no loose wiring; screw connexions throughout and absence of soldering; gravity switch a single unit, and integral with the base assembly, being readily accessible for adjustment; dial mechanism and gravity switch springs protected from dust, lint, insects, etc.; all spring contacts double-connected in parallel; gravity switch springs operated by a bronze roller; simplified tamper-proof ringer; induction coil and condenser sealed in bakelite cases; cellulose acetate sheet and plastics used instead of paper, fibre and textile insulation; new tipless cord which is easier to connect, prevents error, is more durable, snarl-resistant, and cheaper to use; components of entire set replaceable with a screwdriver by unskilled repair men and impossible to assemble incorrectly; rust-resisting steel base plate of sufficient thickness to prevent thread stripping.

### Electrical Installations in Hospitals

A PAPER on this subject read recently in London by F. Charles Raphael before the Institution of Electrical Engineers reviews the considerations which apply more particularly to hospitals than to other public buildings. For permanent work, paper-lead cable is recommended for the circuits to the fuse-boards and wiring in conduit for the sub-circuits. Under-floor ducts are not recommended for hospital wiring. Suggestions are made regarding the selection of accessories and fittings. For general ward lighting a comparatively low value of horizontal illumination is recommended, with local lighting at the beds. Capacitance dimming is described, the future use of fluorescent lamps is discussed, and the shadowless lamp for operating-table lighting is described. Precautions to be taken against explosions in operating theatres are referred to and the requirements for screening in connexion with high-frequency (diathermy) apparatus necessitated by war conditions are reviewed, the opinion being expressed that regulations for this will be continued after the War. The precautions necessary in the construction and use of apparatus for electric therapy are discussed, developments in X-ray apparatus are dealt with and questions of voltage-drop and shielding are briefly mentioned. On ultra-violet treatment, the opinion is expressed that the mercury lamp, possibly supplemented by ordinary tungsten filament lamps, should eventually entirely displace the more expensive arc-lamp treatment and that there is no need to aim at an artificial reproduction of sunlight. Other subjects which are dealt with briefly are infra-red rays, cardiograph wiring, heating, ventilation of operating theatres, water supply pumps, cooking, refrigeration, lifts and signalling circuits.

### Tuberculosis in Peru

THE following results as to the incidence of tuberculosis in Peru were recently obtained by Dr. Ricardo Martinez of Lima (*J. Amer. Med. Assoc.*, Oct. 24). A positive index to tuberculin was found in 68.45 per cent of conscripts, 65 per cent in school children of the Callao province, 77.98 per cent among the applicants for entrance to the University of Lima, and 95 per cent in the various groups of teachers and unions of workers. The proportion of positive reactions to tuberculin in conscripts from coastal areas was 74.64 per cent, 58.43 in those from the mountains and 75 per cent in those from wooded regions. The positive results to tuberculin are higher in Peru

than in the Argentine, Brazil, Paraguay and Uruguay, and less than in Cuba and Venezuela. X-ray examinations of school children show that active tuberculosis increased from 4.1 per cent in 1938 to 5.3 per cent in 1941.

### Bibliography on Management and Labour

THE Sheffield City Libraries have issued as Research Bulletin No. 7 a select bibliography on management and labour. This covers approximately the period 1932-42, the periodical references being, however, limited mainly to periodicals which are available in the Commercial and Science and Technology Libraries at Sheffield. Books not easily consulted or obtained have also been excluded, but some older classic books have been included, such as F. W. Taylor's "The Principles of Scientific Management". These limitations somewhat diminish the value of an otherwise excellent compilation, for there are a number of excellent modern books such as T. N. Whitehead's "Leadership in a Free Society", C. I. Barnard's "The Functions of the Executive", F. J. Roethlisberger's "Management and Morale" which cannot be excluded on these grounds, and the omission of reference to any of the works describing the important investigations initiated by Elton Mayo at the Western Electric Co. is a serious defect. References to readily accessible pamphlet literature, especially that issued in Great Britain during the War, are also incomplete. Owing to the paper shortage, copies cannot be supplied to individual students, but are available to firms and research organizations on official application, with which 3d. should be enclosed to cover postage.

### Announcements

PROF. A. C. CHIBNALL, professor of biochemistry in the Imperial College of Science and Technology, has been appointed Sir William Dunn professor of biochemistry in the University of Cambridge, in succession to Sir Frederick Gowland Hopkins (see NATURE, April 10, p. 415).

DR. E. D. HUGHES, lecturer in chemistry at University College, London, has been appointed professor of chemistry at the University College of North Wales, Bangor.

THE following appointments and promotions have recently been made in the Colonial Service: P. C. Owen, assistant conservator of forests, Sierra Leone; J. S. Webb, mineralogist, Nigeria; R. A. Hutchinson, veterinary officer, Gambia; N. V. Rounce, district agricultural officer, Tanganyika Territory, to be senior agricultural officer, Tanganyika Territory.

THE Academia Nacional de Medicina of Buenos Aires has recently established the Hirsch Medical Scholarship with a fund of 500,000 pesos (about £30,000) given by Mr. Alfredo Hirsch, of Buenos Aires. Selected students will follow medical studies in the United States or Great Britain for two years, beginning in the middle of 1943. For the first ten years the scholarships will be given for studies on cancer, leprosy and infantile paralysis.

ERRATUM. In the article in NATURE of May 1 on "Cultivation of the Douglas Fir in Great Britain", on p. 493, col. 1, line 17, the word "and" is superfluous; *Pseudotsuga Douglasii* and *Ps. taxifolia* are alternative names for the same tree.