

of Agriculture and Fisheries; Mr. J. W. Salter Chalker, chairman of the Diseases of Animals Committee of the National Farmers' Union; Mr. Charles Dukes, general secretary of the National Union of General and Municipal Workers; Prof. James Gray, professor of zoology in the University of Cambridge and member of the Agricultural Research Council; Mr. C. M. Holmes, vice-president of the Association of Unqualified Practitioners and Animal Castrators; Mr. W. F. Holmes, member of Council of the Kennel Club; Mr. Robert Hobbs, member of Council of the Royal Agricultural Society of England; Mr. W. D. Jackson, past president of the National Farmers' Union and Chamber of Agriculture of Scotland; Sir Louis Kershaw, member of the Loveday Committee on Veterinary Education; Lieut.-Colonel P. J. Simpson, member of Council of the Royal College of Veterinary Surgeons. The Secretary to the Committee is Mr. G. H. Higgs, of the Ministry of Agriculture and Fisheries, to whom communications should be addressed at 99 Gresham Street (First Floor), London, E.C.2.

Biological Standardization

BIOLOGICAL standardization is the theme of the *Bulletin of the Health Organisation* (VI, 10, No. 2; 1942-43. Geneva (London: Allen and Unwin, League of Nations Publications Dept. 4s.)). The issue contains two articles on the biological standardization of heparin and on a provisional international standard for this substance, and other articles on standard preparations for the assay of the three gas-gangrene antitoxins, on the complexity of the tetanus toxin and on the variable interactions of tetanus toxins and antitoxins. The rest of the issue is occupied by seven articles from the Department of Biological Standards of the National Institute for Medical Research, London. The first of these deals with recent changes relating to international standards for certain sex hormones and for pituitary posterior lobe, due to exhaustion of stocks of the original preparations which had served as international standards for these hormones and the consequent need for their replacement by other samples. The other six articles deal with replacements of the substances of the international standards for the oestrus-producing hormone, for male hormones, progesterone and pituitary posterior lobe and with the international preparation of desiccated ox anterior pituitary gland and the international standard of prolactin.

Status of Statisticians

THE report of the Committee of the Royal Statistical Society on the Status of Statisticians, appointed by the Council on July 22, 1943 as amended and adopted by the Council, has now been issued. The present position in Great Britain is regarded as unsatisfactory in some respects. First, an employer requiring the services of a statistician on his staff has no common standard among the qualifications which he can accept as a certificate of proficiency, and the report, in confirmation of this point, notes that in recent discussions on the Society's report on official statistics, the Treasury representatives indicated how useful it would be to departments, in considering appointments to responsible positions in statistical branches, if approved statistical qualifications were in existence. The position is also unsatisfactory to an employer, because there are no generally recognized definitions or descriptions of the

various types of statistician. It is equally unsatisfactory to the employee, because there is no recognized status in his profession and no generally approved method of distinguishing between a genuinely accomplished man and a mere quack, or even a rank impostor. It is also unsatisfactory to an employee not to have any standards by which he can judge the level of his own attainment, or to which he can work. The situation is unsatisfactory for the general public, which is affected more than it realizes by bad statistical work.

The Committee considers, therefore, that there is a strong case for instituting some method of determining the professional status of statisticians. It believes that the universities must continue to be the main source of training in statistics, and it would welcome any extension of the facilities already provided, although it does not think that the universities can provide adequate tests of proficiency in statistics for all who are likely to require them; also, existing examinations are not sufficient to provide all the requisite professional qualifications. Accordingly the Committee proposes a scheme under which power would be sought by way of a Supplemental Charter to enable the Council of the Royal Statistical Society to confer on approved candidates a diploma in statistics and to issue a certificate to those who pass Part 1 of the examinations. This would provide specifically for those who may be termed statistical computers or junior statisticians. Candidates for the certificate or diploma should not be limited to fellows of the Society, and those for the diploma should be required to pass Parts 1 and 2 of the prescribed examinations, a suggested syllabus for which is appended to the report, and also to show that they had had satisfactory experience of statistical work over a period of not less than two years. A candidate for the certificate or diploma should be exempted from the whole or any section or sections of the examinations if he has passed examinations approved by the Council. While so far as concerns the scientific aspects of the Society's work, no change is suggested in the present system of election of fellows, in the qualifications required, or in their title, status and privileges, additional by-laws would be required to regulate the award of the certificate and the diploma.

Astronomy in the U.S.S.R.

POST-WAR astronomical research in the Soviet Union is being planned on a great scale. Nine of the nineteen Soviet observatories were in territory that was overrun by the Germans and have been destroyed or seriously damaged. Most important of these was the Pulkovo Observatory, near Leningrad, which was completely destroyed by air and artillery bombardment. Most of the equipment and the valuable library of the Observatory were removed in time to safer places. The Pulkovo staff has continued astronomical research work at Tashkent, Abastumani and Alma-Ata. Prof. Belyavsky, director of the Observatory, states that it has been decided that reconstruction is to commence immediately and that the instrumental equipment will be reinstalled at Pulkovo at the earliest possible moment, to make possible the resumption of work in fundamental astronomy. More powerful equipment is to be constructed in the U.S.S.R. or obtained from abroad. The Engelhardt, Nikolaeff and Tashkent Observatories will also carry on fundamental observations.

The *Moscow News* has reported the decisions of

an astronomical conference held in Moscow in September last. A great astrophysical observatory is to be established with headquarters at Simferopol in the Crimea. There will be three observing stations, one in the Crimea at an altitude of 2,000 metres, a solar station at an altitude of 3,500 metres, and a station somewhere in the southern hemisphere. The equipment will include a 120-in. reflector, two 80-in. reflectors, two 16-in. double astrographs, one 50-in. and one 30-in. Schmidt telescope, solar towers and a coronagraph. The training of astronomical staff has continued during the War; some sixty or seventy astronomers and astrophysicists will be required for staffing the new institution. Information has been received that the international latitude station maintained by the U.S.S.R. at Kitab, Uzbekistan, has continued to function regularly throughout the War.

Library Service in South Africa

IN his presidential address to Section F of the South African Association for the Advancement of Science delivered on June 29, 1943, on "Libraries and Science" (*South African J. Sci.*, 40, 81; November 1943), P. Freer referred particularly to the difficulties of book selection in scientific literature. He urged that this is not a matter for librarians alone, and that librarians should also do more to secure the writing and publishing of authoritative but simple and readable books on important subjects. After pleading for more care and co-operation in the discarding of surplus or unwanted stock, Mr. Freer indicates measures that are required for the full efficiency of the inter-library loan system. Until the master-catalogue of non-fiction in the libraries of the Union of South Africa is completed, as well as the publication of a new edition of the Lloyd's List of Scientific and Technical Periodicals, with a complementary volume covering the humanities, book-buying and discarding are both unscientific. As regards the imperfections and limitations of present abstracting and indexing services for scientific and technical periodicals, Mr. Freer notes that only forty-one of the three hundred abstracting and indexing periodicals in existence in 1937 were available somewhere in South Africa, and these periodicals only covered one third of the scientific papers concerned. He emphasized the need, for the advancement of science, of a highly trained staff and augmented resources to diminish the gap between the 6,000 titles in the Catalogue of Union Periodicals and the 15,000 acknowledged as being of international importance. Plans for post-war reconstruction contained no suggestions for a national library system, but in addition to national libraries, regional libraries and organization would be required. Finally, he referred to the contribution which science could make to the improvement of the printed book itself and its preservation.

Mexican Institute of Nutrition

ACCORDING to an annotation in the September issue of the *Boletín de la Oficina Sanitaria Panamericana*, the newly organized Institute of Nutrition in Mexico includes the following sections: bromatology, economic, social and dietetic departments, clinical medicine and a clinical laboratory, and maternal and child welfare. In the near future, the bromatology section will undertake studies of the chemical composition of legumes and maize, and the economic section will undertake an investigation of the state of nutrition of about seven hundred families in an area of

Mexico City. The clinical laboratory will determine the vitamin content and blood count of the families studied. The maternal and child welfare division has already started work on the vitamin content of the blood of pregnant women at different periods of pregnancy, and a training centre has made plans for courses for the selection of dietitians and experts in nutrition.

An Automatic Vibration Analyser

ONE of the potential causes of failures in an aeroplane power-plant or the aeroplane structure itself is excessive vibration. While every effort is made to reduce the number of modes of vibration which might be excited to objectionable amplitudes, it is desirable to measure the power-plant and aeroplane vibration characteristics in flight to ensure that there are no vibrations of sufficient magnitude to cause fatigue failures in any parts. In the Bell Laboratories an automatically tuned wave analyser has been developed to meet the needs of the Pratt and Whitney Aircraft Division of United Aircraft Corporation, which desired apparatus that when used in conjunction with suitable vibration pickups would measure the amplitude of vibration at a frequency equal to any predetermined multiple of engine revolution per minute, even when the engine speed is continuously changed. This analyser can be used with a recorder to draw curves of the amplitude of vibration of selected orders of frequency as a function of engine speed. An article by F. G. Marble (*Bell Lab. Rec.*, 22, No. 8; April 1944) describes the analyser and its use.

Illuminating Engineering Society

DURING the past few years the membership of the Illuminating Engineering Society has approximately doubled, it has formed new centres and groups throughout Great Britain, and its activities have greatly increased. In addition, it has in prospect a programme of still greater activity and of new developments in the post-war period. In order to cope with these developments the Council is now contemplating the appointment of a full-time paid secretary who, it is hoped, will eventually take full charge of its administration. In the meantime, however, the Council hopes to continue to benefit for some time to come from the services of its honorary secretary, Mr. J. S. Dow, who has been associated with the Society since its inception in 1909.

Institution of Electrical Engineers: Radio Section

ON the recommendation of the Wireless Section Committee the Council of the Institution of Electrical Engineers has decided to change the name of the Section to "Radio Section" and to modify Rule No. 1, which deals with the scope of the Section, to read as follows: "The Section shall include within its scope all matters relating to the study, design, manufacture or operation of apparatus for communication by wave radiation, for high-frequency and electronic engineering, or for the electrical recording or electrical reproduction of sound".

ERRATA.—In the communication "Physico-Chemical Properties of the Surface of Growing Plant Cells" by Prof. H. Lundegårdh and G. Stenlid in *Nature* of May 20, p. 618, Fig. 1 and Fig. 2 should be interchanged. The absorption maximum of the flavonone is in two places in the text erroneously assigned to 2550 Å. instead of 2850 Å.