

NEWS and VIEWS

Engineering Science at Oxford:

Dr. Alexander Thom

DR. ALEXANDER THOM, who has been appointed to the chair of engineering science in the University of Oxford, graduated in engineering in the University of Glasgow in 1915, and after a varied experience in civil engineering construction both abroad and in Great Britain was engaged in aircraft design in the later years of the War of 1914-18. In 1921 he was appointed lecturer in engineering in the University of Glasgow, and from that time until the beginning of the present War, Dr. Thom was in charge of the subject of aeronautics and also of the specialist courses in civil engineering. This somewhat unusual combination was of considerable value to the teaching in both subjects, and large numbers of engineering students in all branches have benefited in their scientific training from the lectures in aeronautics given by Dr. Thom. His tenure of the post was marked by a large volume of research work in aerodynamics, comprising exhaustive studies of the flow of a fluid past a cylinder, stationary and rotating, employing both a small wind tunnel and, for an experimental investigation of the pattern round a cylinder at low Reynolds numbers, a small channel using water and oil. In the course of his studies he developed an arithmetical method of solution of the equations of flow for both ideal and viscous fluids. The results of his researches, which have throughout been characteristic of the originality of his mind, have been embodied in numerous papers contributed to Reports and Memoranda of the Aeronautical Research Committee, the Royal Society and the scientific and technical Press. Shortly before the outbreak of the present War, he was given leave of absence from his university duties to engage in work at the Royal Aircraft Establishment, Farnborough, and has latterly been in charge of new developments in the Aerodynamics Department.

Twenty-fifth Anniversary of the Genetical Society

AT its annual meeting on July 21 the Genetical Society completed the twenty-fifth year of its activity. A gathering was called on June 25, 1919, under the chairmanship of William Bateson, at which it was agreed to found the Society, and the first meeting was held on July 12 of that year. The original list comprised eighty-seven members, and the first president was Mr. A. J. (later Lord) Balfour, who held office until 1930. The Society's eighty-two meetings have been mainly devoted to communications on fundamental genetics, including also addresses by such foreign visitors as Drs. T. H. Morgan, H. J. Muller, A. H. Sturtevant, C. B. Bridges, R. Goldschmidt and Ø. Winge. Interest has, however, not been confined to this narrower field, but, as Bateson intended, has also covered plant and animal breeding, human and medical genetics and, of course, cytology and evolutionary theory. Visits have been made on a number of occasions to plant and animal breeding centres and exhibitions, as well as to Kew Gardens, East Malling and Rothamsted Research Stations, the Lister Institute and the Gardens of the Zoological Society. Joint meetings have been held with the Society for Experimental Biology and the Entomological Society, and doubtless this kind of activity will increase in the future as the applications of genetics become more widely appreciated. The

Society also sponsored the Seventh International Congress of Genetics held at Edinburgh in 1939.

Before the War, three or four meetings were held annually. This programme was interrupted in the early years of the War; but since 1941 a return has been made to the pre-war arrangement. The present aim is to hold one symposium and one paper-reading meeting during the winter and spring months, and to visit some appropriate research centre in the summer. The present membership numbers 146, of whom twelve are overseas. Dr. C. D. Darlington is now president and Dr. E. B. Ford and Mr. W. J. C. Lawrence are joint secretaries.

Education of the Pharmacist

AT the British Pharmaceutical Conference held in London on July 11, the chairman, Mr. H. Brindle, gave an address on the "Education of the Pharmacist". He reviewed the present system of pharmaceutical education and commented on the possible effects upon it of the Norwood Report and the Education Bill. The present qualifications in pharmacy include two diplomas granted by the Pharmaceutical Society: that of the chemist and druggist, and that of the pharmaceutical chemist. In addition, several universities have established degrees in pharmacy. All the diplomas and degrees are registerable qualifications for practice. The chemist and druggist diploma is mainly utilized as the qualification for retail practice, but Mr. Brindle hopes that the higher diploma and the degrees will be in greater demand. Retail pharmacy needs its share of the best brains and the most highly trained pharmacists. It offers opportunities certainly comparable in all respects with those of the other branches of the profession, such as hospital, manufacturing and research.

The Pharmaceutical Society in the past has demanded the university entrance standard for its preliminary examination and Mr. Brindle hopes that this will be maintained. The Norwood Report, however, foreshadows certain complications for retail pharmacy because of the recommendation that the general age for entering a university will in future be eighteen plus. This must lead to an alteration in the present system of apprenticeship. He suggested that apprenticeship has largely outlived its usefulness, and if it is to be retained it might with advantage occur after qualification. The university degrees in pharmacy are now well established, and the graduates are proving their value in ever-widening scientific fields. Mr. Brindle hopes that the post-war educational world will provide facilities for brilliant students unhampered by financial handicaps and that university education will be free to all who show themselves capable of benefiting by it.

Veterinary Practice by Unregistered Persons

IN accordance with the recommendation made by the Loveday Committee on Veterinary Education in Great Britain, the Minister of Agriculture and Fisheries and the Secretary of State for Scotland have appointed a Committee to inquire into the extent and effect of veterinary practice in Great Britain by persons who are not registered veterinary surgeons, and to make recommendations as to any measures which may be desirable to limit or regulate such practice. The Committee is constituted as follows: Sir John Chancellor (*chairman*); Mr. A. C. Brown; Sir Daniel Cabot, chief veterinary officer, Ministry

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