NEWS and VIEWS

New Linacre Professor at Oxford : Prof. A. C. Hardy, F.R.S.

PROF. A. C. HARDY, whose recent appointment as Linacre professor of zoology and comparative anatomy at Oxford has been announced, is especially distinguished for his work in the sphere of oceanography. He is a leading authority on marine plankton, and throughout his researches has stressed the ecological aspect. Prof. Hardy started his career as a member of the Ministry of Agriculture and Fisheries Research Staff at Lowestoft in 1921, working on the natural history of the herring in relation to the plankton. In 1924 he joined the research staff of the *Discovery* as chief zoologist under the late Dr. Stanley Kemp. He went on the Antarctic voyage of 1925–27, and published, with the late Dr. E. R. Gunther, important results on the ecology of plankton animals in southern waters. These included studies of animal and plant interrelations (developing his hypothesis of animal exclusion), 'patchiness' of plankton, correlations of whale and plankton distribution, vertical migration and the combined effect of this with varying current systems at different depths.

In 1928 Prof. Hardy became the first professor of zoology and oceanography at the University College of Hull, where he developed on a large scale the use of his continuous plankton recorder, which he had originated while with the *Discovery*. He also demonstrated herring-plankton distribution correlations with his smaller plankton indicator, which has now become a commercial instrument. In 1942, Prof. Hardy was appointed regius professor of natural history in the University of Aberdeen. In recent years he has widened his interests to include the air, undertaking research on the aerial plankton, for which he has devised gear for catching insects in the upper air from kites and aircraft. Prof. Hardy is thus well fitted to help and enlarge the scope of the well-known ecological researches already being carried out at Oxford.

British Cotton Industry Research Association Fellowships

THE Council of the British Cotton Industry Research Association has decided to make an annual award of a limited number of research fellowships with the object of training young men in research methods in pure science, and particularly those branches of prime interest to the Association. The Association conducts research into the utilization of cotton, rayon, silk and synthetic fibres, and examples of scientific fields of present interest to the Association are: carbohydrate and protein chemistry; fundamental studies of high polymers; photochemistry; fundamental physical studies relating to properties of matter or electronics; theory of instrumentation; mathematics; studies on the colloidal state. The fellowships will be open to graduates of British nationality and will be tenable at any British university. Their value will depend on circumstances, but will not in any case be less than £200 per annum. The Association will be guided in its choice of the location of fellows chiefly by the type of research conducted by the professor under whose direction the candidate elects to work. Application for election to a fellowship should therefore be made through the professor and should be accompanied by a statement of the problem to be studied. It will be normal for the Association to wish to interview candidates, but the recommendation of the professor will be an essential and will carry great weight in the selection. Applications should be forwarded to the Director, British Cotton Industry Research Association, Shirley Institute, Didsbury, Manchester, not later than two months before the commencement of the work.

The object of the fellowships being to train young graduates in fundamental research methods, they will not be awarded for specific problems in connexion with industry. Further, the results of researches carried out with the assistance of a fellowship will be published from time to time in the scientific journals at the discretion of the professor directing the work, and if deemed by him worthy of such action. The only condition attaching to publication will be that suitable acknowledgment shall be made by authors of the receipt of a fellowship. Without in any way implying direction of or interference with the research, the Association would wish to feel free through its director of research to discuss progress with fellowship holders from time to time, and fellows would be given opportunities to visit the Association's laboratories, and thus become acquainted with the problems of the textile industries. Save in exceptional circumstances, the Association will not make more than two consecutive annual grants to the same person.

College of Aeronautics

THE following have been appointed to be the Board of Governors of the College of Aeronautics for postgraduate instruction in aeronautical science and engineering, which, as announced in the House of Commons in October last, is being created in accordance with the recommendations of the Committee presided over by Sir Roy Fedden, the report of which was issued last year: Air Chief Marshal Sir Edgar Ludlow-Hewitt (*chairman*), Dr. W. Abbott, Mr. H. Burroughes, Sir Roy Fedden, Mr. J. Ferguson, Sir Harold Hartley, Sir William Hildred, Sir Melvill Jones, Dr. E. B. Moullin, Mr. J. D. North, Sir Frederick Handley Page, Mr. E. F. Relf, Dr. H. Roxbee-Cox, The Lord Selkirk, Air Marshal Sir Ralph Sorley, Sir William Stanier, Rear-Admiral T. H. Troubridge and Mr. W. E. F. Ward. Invitations are being extended to the Governments of the Dominions and India which may wish to be associated with the College to appoint representatives on the Board of Governors. Preliminary steps are now being taken with the view of opening the College some time in the course of next year in temporary accommodation to be provided at Cranfield, pending the provision later of permanent premises.

Sensory Devices for the Blind Committee

THE Council of St. Dunstan's has set up a committee to be known as the Sensory Devices for the Blind Committee, and the following have agreed to serve: Prof. E. D. Adrian, professor of physiology, University of Cambridge (*chairman*); Dr. Clifford Paterson, director of the Research Laboratories, General Electric Co., Ltd., Wembley; Mr. Thomas Smith, superintendent of the Light Department, National Physical Laboratory; Flight-Lieut. E. Barton; Dr. B. H. C. Matthews, head of the R.A.F. Physiology Laboratory, Royal Aircraft Establishment, Farnborough; Mr. H. L. Kirke, head of the Engineering Research Department, B.B.C.; and Sir Ian Fraser. The Committee has had two preliminary

meetings and on its advice St. Dunstan's has decided to set up a Research Unit and to seek the full-time services of a research physicist and a biologist. Through the generosity of an anonymous benefactor, a substantial sum of money has been made available for the work of the Committee over a period of five years. The Committee will not only investigate guiding devices for the blind but also methods whereby the printed word in an ordinary book can 'read aloud' to the blind; the improvement of recorded talking books; braille machines, and other apparatus. The research work will include the better use of the little glimmer of sight which remains with many people who are technically blind, and the substitution of the sense of sight by the other senses.

Localization in the Visual Cortex

DR. GORDON HOLMES, in his Ferrier Lecture before the Royal Society on "The Organisation of the Visual Cortex in Man" (*Proc. Roy. Soc.*, B, **132**, 348; 1945), dealt chiefly with the question of localization within the visual area of the cerebral cortex. As he himself has shown, by study of the visual-field defects resulting from gunshot wounds of the cortex, there is apparently a very sharp point-to-point representation of the retina in the cortex. The conception of definite fixed anatomical connexions between each point of the retina and the corresponding point in the cortex has been supported by recent histological studies of the actual nerve fibre connexions, particularly by Le Gros Clark. Such a rigid fixed relationship between retina and cortex would appear, however, to stand in marked contrast to the situation in other parts of the cortex, notably the motor area, where localization is by no means sharp and undergoes considerable physiological variations. But more recent clinical studies have shown that there must be a good deal of plasticity in the functional organization of the visual cortex. For example, patients suffering from hemianopia compensate for the loss of half the visual field by developing a new fixation point ('false macula') in the centre of the surviving field of vision; a similar adaptation occurs in a squinting eye. In such cases there must be a complete functional reorganization in the cortex, though the fibre connexions, of course, cannot change. The conclusion is that, although there is an accurate point-to-point representation of the retina in the cortex, the functional organization of the visual cortex is not thereby rigidly fixed; on the contrary, it exhibits considerable plasticity.

Recent Earthquakes

DURING April and the early part of May 1945, the United States Coast and Geodetic Survey, in co-operation with Science Service and the Jesuit Seismological Association, determined the provisional epicentres of five earthquakes. The first two occurred on April 15, the first at 2h. 35·2m. G.M.T. and the second at 19h. 50·6m. G.M.T. The former had an epicentre at lat. 56° N., long. 164° E., which is east of Kamchatka, and the latter an epicentre at lat. 22·5° N., long. 108·0° W., which is off Mazatlan, Mexico. The third earthquake was on April 19 at 13h. 03·5m. G.M.T. from an epicentre near lat. 40° S., long. 179° E., which is east of New Zealand. The earthquake of April 21 at 17h. 14·5m. G.M.T., according to the calculations based on reports from twelve earthquake observatories (instrumental), had its epicentre at lat. 19·3° N., long. 100·6° W. Its depth of focus was below normal, probably 50–100 km. below the surface of the earth. The earthquake was felt in Mexico. The fifth earthquake was on May 19 at 7h. 55·8m. G.M.T. The provisional epicentre, based on instrumental reports from eight observatories, has been estimated at lat. 16·0° N., long. 98·4° W., which is west of Mexico.

Mr. E. W. Pollard, at his observatory at Binstead, Isle of Wight, registered five earthquakes during April, the first on April 15 being the greatest. May is reported as being a very quiet month, only two earthquakes being recorded, on May 9 and 19. The former was small and the latter medium strength.

Localization of Faults in Low-Voltage Cables

PRACTICAL limitations of well-known fault-locating tests are considered, and some new tests capable of high accuracy are described, in a paper read by J. H. Savage recently before the Institution of Electrical Engineers in London. The new tests include a D.C. valve-voltmeter circuit for core-to-sheath insulation faults, audio-frequency search methods for open circuits and radio-frequency tests for conductor defects. Mention is also made of fault localization based on wave-reflexion effects. The paper deals mainly with factory technique for rubber- and plastic-insulated cables; but some of the methods can be applied to other types and to field work. As faults on cables carrying current are accompanied by local changes of electric and magnetic fields, and circuit unbalance and wave reflexions can be produced, future developments are likely to be in the direction of electronic devices, because these are eminently suitable for detecting and recording such effects.

Chinese Visitors to Britain

EIGHT Chinese visitors of widely varying professions are visiting Britain as guests of the British Council: Dr. Wang Ging-Hsi, director of the Institute of Psychology of the Academia Sinica, a well-known Chinese physiologist; Dr. Sah Pen-Tung, president of the National University of Amoy, Fukien, who is a physicist especially interested in radio-engineering; Dr. Yang Chen-sheng, professor of Chinese literature, and acting dean of the College of Arts of the National University of Peking; Prof. Tung Li Yuan, librarian of the National Library, Peking; Colonel (Mrs.) Chow Mei-You, head of the Nursing School in the Army Medical School; Miss Gao Ren-Ying, acting national general secretary of the Chinese Y.W.C.A., who is studying social conditions in Britain; Miss Priscilla Huang and Miss Chi-yi Chen, both of whom are interested in children's and women's welfare and all services of rehabilitation of war casualties.

Canadian Awards for Postgraduate Training

THE National Research Council of Canada is providing opportunities for postgraduate training in science for men and women whose studies have been delayed or interrupted by war service, either military or civilian. Three classes of award are available for the academic year 1945–46 as follows: bursaries (450 dollars) for students who have graduated with high distinction in scientific subjects; studentships (750 dollars) for students who have had experience in research work in science for at least one year following graduation; fellowships (900 dollars) for students who have given distinct evidence of capacity to conduct independent research in science. One group of applications is under consideration and