

MR. M. H. HADDOCK, of the Doncaster Technical College, has been appointed county mining organiser for Leicestershire, and to have charge of the new mining institute and technical school at Coalville.

It is proposed to erect a geological building in connection with the University of Wisconsin as a memorial to Dr. C. R. Van Hise, late president of the University, thus bringing together under one roof the departments of geology and mining engineering, and the State and Federal geological surveys.

IN connection with the New York Botanical Garden, which has well-equipped laboratories and an extensive horticultural library, a two-year course in practical gardening has been inaugurated for the purpose of providing careers for convalescent soldiers and sailors and to meet the increasing demand for trained gardeners.

THE following appointments to professorships in the University College of Wales, Aberystwyth, have been made:—*Physics*: Prof. G. Owen (University of New Zealand). *Mathematics*: Prof. W. H. Young (University of Liverpool). *Agriculture*: A. E. Jones (head of the Department of Agriculture, University of Wales) *Geology*: Capt. W. T. Pugh.

THE total number of higher education grants for ex-Service officers and men awarded by the Board of Education now amounts to 5400. The courses in respect of which grants have been awarded include more than 1000 for engineering and technological subjects, between 600 and 700 for classics, philosophy, and literature, and about an equal number for pure science and mathematics.

AN association has been formed in New York, called "The New York Association for the Advancement of Medical Education and Medical Science," the main objects of which are: To improve and amplify the methods of undergraduate teaching; to perfect plans for utilising the clinical material of the city for teaching purposes and to make use of teaching talent now unemployed; to bring about a working affiliation of the medical schools, hospitals, and laboratories, and the public health facilities of the city; and to initiate the establishment of a medical foundation in the city whereby funds may be secured to meet the financial requirements of all forms of medical education and investigation.

THE prospectus of the evening courses in technology at Leeds University for the session 1919-20 is now available. The arrangements announced are subject to revision in consequence of the special circumstances of the present time. Technological courses will be held, it is hoped, in the following departments of the University:—Civil, mechanical, and electrical engineering; coal-mining; textile and leather industries; colour chemistry and dyeing; and geology applied to sanitary and civil engineering. The evening courses in the department of textile industries, to refer in more detail to one department, are primarily designed to meet the requirements of persons who, having already passed through approved courses of study, wish to take up some particular line of research work, or to conduct trade investigations necessitating the use of special equipment.

THE Board of Agriculture and Fisheries announces that, as part of the Government schemes of higher education and training of ex-Service officers, provision is made by the Board for financial assistance for agricultural training by means of (a) grants for residential training with selected farmers in England and Wales, and (b) agricultural scholarships at approved universities or agricultural colleges in England or Wales. More than 1300 officers have now been approved for grants

under (a), of whom more than 1000 are actually in training on farms, whilst 65 out of the 100 scholarships available under (b) have been awarded. In view of the numerous applications which are still being received, the Board has decided that no application either for a grant for training on a farm or for a scholarship can be entertained by them (1) from any officer who has been demobilised by July 31, 1919, unless the application has been lodged at the appropriate district directorate of the Ministry of Labour on or before August 31, 1919; and (2) from any officer who has not been demobilised by July 31, 1919, unless it is received by December 31, 1919, except in any case in which it can be shown that for military reasons the application could not have been made by that date. All applications from non-demobilised officers should be made as soon as possible. Particulars of these farm-training grants and agricultural scholarships and of the manner of making application are given in the Board's booklet, "Land Settlement in the Mother Country" (L.S.9), which can be obtained either from the Board's offices at 72 Victoria Street, London, S.W.1, or from any district directorate of the Appointments Department, Ministry of Labour. The address of the appropriate district directorate can be ascertained at any post office. Non-demobilised officers should make their applications on Army form Z15 or Navy form S1299. Warrant officers, non-commissioned officers, and men in the ranks of suitable educational promise are also eligible for these grants.

SOCIETIES AND ACADEMIES.

PARIS.

Academy of Sciences, July 28.—M. Léon Guignard in the chair.—A. Laveran and G. Franchini: Some flagellæ of insects obtained in a pure culture, and in particular *Crithidia melophagi*. Details of the technique for obtaining pure cultures are given, and proof of the pathogenic action on mice.—A. Rateau: The theory of aeroplanes: application to an example.—R. de Forcrand and F. Taboury: The stability of the sulphones formed by the iodides of sodium, rubidium, and caesium. These compounds have the composition $MI+3SO_2$; their dissociation pressures have been measured at $-22.5^\circ C.$, $0^\circ C.$, $+9.65^\circ C.$, and at $15^\circ C.$, and the results are given in the form of curves.—N. E. Nörlund: The polynomials of Euler.—Ch. Platrier: The elastic equilibrium of a homogeneous isotropic body of revolution submitted to radial forces either proportional or inversely proportional to the radius.—H. Abraham and E. Bloch: Recording galvanometers with movable needle.—E. Brylinski: The induction reaction of alternators.—E. Poirson: A method of secret telephony. The telephonic currents are deformed by periodic interruptions by mechanical means, and the message cannot then be understood. The distorted currents can be rectified at the receiving end by a synchronised apparatus. Experiments have been carried out by this method with success over distances up to 600 km.—J. Lavaux: Electrolytic luminescence phenomena presented by certain metallic anodes.—Jh. Martinet: The indirubins.—Ch. Chavanne and L. J. Simon: The critical solution temperatures in aniline of mixtures of hydrocarbons. Application to the analyses of petrols.—H. Colin and O. Liévin: The spontaneous oxidation of complex organic compounds of cobalt. Alkaline solutions of glycerol or lactic acid containing cobalt absorb oxygen up to a maximum of one atom of oxygen for one atom of cobalt. Other substances, such as mannitol, erythritol, and glucose, under similar conditions absorb oxygen continuously beyond this limit.—P. Russo: The Eocene containing phos-

phate at Oued Zem (western Morocco).—G. **Reboul** and L. **Dunoyer**: The utilisation of temperature for the prediction of barometric variations.—L. **Blaringhem**: Floral variations in the large marguerite, *Leucanthemum vulgare*.—Mme. E. **Bloch**: Anatomical modifications of roots by mechanical action. Compression causes important local modifications, but the general development of the plant is uninfluenced, flowers and fruit remaining normal.—H. **Bierry**: Food ration. The minimum requirements of sugar and of fat.—L. **Vialleton**: The epiphyses and cartilage of conjugation in mammals.—A. **Paillet**: The cytology of the blood of the caterpillars of the Macrolepidoptera.

CALCUTTA.

Asiatic Society of Bengal, July 2.—G. R. **Kaye**: Hindu astronomical deities. This paper deals primarily with the navagraha or nine planets and the planetary cult as it obtains in India. It also refers to a separate solar worship which is traced back to Vedic influences, while it is indicated that the planetary cult proper is possibly of exotic origin. Details of planetary iconography are given which are traced to Paurānic teaching, and are illustrated by photographs of ancient sculptures of the navagraha, and extracts from early texts and inscriptions; and these details are contrasted with the modern practice as exhibited in paddhatis and pañchāṅgas.—H. B. **Hannay**: Note on ancient Romic chronology. The paper indicates the nature of the sothic cycle, starting from zero at the autumnal equinox as understood by the ancient Egyptians; also the nature, length, and practical significance of the Sed and Hunti Hebs, or festivals, as based on that cycle; it shows that all official and other data from monuments, etc., regarding sothic risings, hebs, etc., are placeable in the cycle.

BOOKS RECEIVED.

Board of Agriculture and Fisheries: Guides to Smallholders. No. 2: Dairy Farming under Smallholding Conditions. (London: Board of Agriculture and Fisheries, 1919.) 2d.

Experimental Researches carried out in the Department of Glass Technology, University of Sheffield. (Reprinted from the Journal of the Society of Glass Technology.) Pp. iii+178. (Sheffield: The University, n.d.)

The Stars Night by Night: Being the Journal of a Star Gazer. By J. H. Elgie. First published as "Night Skies of a Year," 1910. Pp. xiv+247. (London: C Arthur Pearson, Ltd., 1919.) 1s. 6d. net.

Problems of Fertilisation. By Prof. F. R. Lillie. (University of Chicago Science Series.) Pp. xii+278. (Chicago: University of Chicago Press; London: Cambridge University Press.) 1.75 dollars.

A Source Book of Biological Nature-Study. By E. R. Downing. (University of Chicago Nature-Study Series.) Pp. xxi+503. (Chicago: University of Chicago Press; London: Cambridge University Press, 1919.) 3 dollars.

Mining and Manufacture of Fertilising Materials and their Relation to Soils. By S. E. Lloyd. Pp. vi+153. (New York: D. Van Nostrand Co.; London: Crosby Lockwood and Son, 1919.) 9s. net.

Mathematics for Collegiate Students of Agriculture and General Science. By Profs. A. M. Kenyon and W. V. Lovitt. Revised edition. Pp. vii+337. (New York: The Macmillan Co.; London: Macmillan and Co., Ltd., 1918.) 10s. 6d. net.

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The Whole Truth about Alcohol. By G. E. Flint. With an introduction by Dr. A. Jacobi. Pp. xii+294. (New York: The Macmillan Co.; London: Macmillan and Co., Ltd., 1919.) 6s. net.

Lectures on the Principle of Symmetry and its Applications in all Natural Sciences. By Prof. F. M. Jaeger. Pp. xii+333. (Amsterdam: "Elsevier" Publishing Co.; London: Cambridge University Press, 1917.) 20s. net.

Medicine and Nursing. By Sir William Osler. (Essays on Vocation.) Pp. 12. (London: Humphrey Milford; Oxford University Press, 1919.) 6d. net.

Annual Reports of the New York State College of Agriculture at Cornell University and the Agricultural Experiment Station, established under the direction of Cornell University, Ithaca, New York. Vol. i., 1914. Pp. clxxxii+1140+13. Vol. i., 1915. Pp. lxxxix+996+8. Vol. i., 1916. Pp. lxxxvii+827+7. Vol. i., 1917. Pp. xc+1183+8. (Ithaca: Published by the University, 1915-18.)

House of Representatives: Library of Congress. Report of the Librarian of Congress and Report of the Superintendent of the Library Building and Grounds for the Fiscal Year ending June 30, 1918. Pp. 191. (Washington: Government Printing Office, 1918.) 45 cents.

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