

tions are not numerous, and chiefly concern the scope of certain of the schedules of work in technological subjects. We notice that by arrangement with the Postmaster-General, the institute will next year hold a special examination in magnetism and electricity for members of the Post Office staff, in connection with its examinations in telegraphy and telephony. The institute has been approved also by the Home Secretary for the purpose of granting certificates under the Order of February last prescribing the qualifications of surveyors for the purposes of the Coal Mines Act, 1911.

OXFORD.—The following members of Convocation have been appointed members of the new Board of Finance recently constituted by special legislation at the University, in pursuance of the scheme presented by the Chancellor, Lord Curzon of Kedleston, in 1908, and accepted by Council, Congregation, and Convocation:—The Right Hon. Sir George H. Murray, the Hon. Sidney Peel, Mr. F. W. Pember, the Dean of Christ Church (Dr. Strong), Mr. G. E. Baker, Mr. F. C. Miles, the Right Hon. F. Huth Jackson, Mr. H. T. Gerrans, and Mr. E. Armstrong. The first three gentlemen were nominated by the Chancellor, the next three were elected by Convocation, and the last three were nominated by Council.

MR. J. GOLDING has been appointed research chemist in dairying at University College, Reading. As stated in our issue of July 11, Dr. S. J. M. Auld has been appointed professor of agricultural chemistry at the same institution.

A SUMMER School of Geography is to be held in Yorkshire in August of next year. The school is being promoted by the Universities of Durham, Leeds, and Sheffield, in cooperation with the County and Borough Education Committees of Yorkshire.

MR. A. A. BOWMAN, lecturer in logic at Glasgow University, has been appointed professor of philosophy in the University of Princeton, New Jersey, in succession to Prof. J. G. Hibben, lately appointed president of the same University.

THE sum of 10,000*l.* has been given to the Chancellor of the Exchequer by a Welsh gentleman whose name has not transpired, for the furtherance of higher education in Wales. Of this amount the National Museum, Cardiff, is to receive 3000*l.*, the University College of Wales, Cardiff, 2000*l.*, and the National Library, Aberystwyth, 5000*l.*

New science laboratories at Cranleigh School, Surrey (the gift of Sir C. Chadwyck-Healey), were recently opened by Sir William Ramsay, K.C.B., F.R.S., who, in the course of his remarks, said that the effect of the laboratories would be to make it clear to them all that chemical discoveries were not at an end. It was not well, however, for the scholars to confine themselves to one subject only. They should strive to be as good as possible in many things, though they might excel only in one.

WE are informed that as a result of the efforts which have been made during the past two years a sum of 32,000*l.* is now available for the provision of new buildings for the Hartley University College, Southampton, and towards increasing its endowment. The larger portion of this sum has been promised by private individuals, but recently 2500*l.* has been promised by the Hampshire County Council, and 5000*l.* by the Southampton Borough Council. In addition to this the Southampton Borough Council has voted an additional 1*l.* rate for the college. The erection of the first block of new buildings, to provide accommodation for the arts departments of the college, can now be begun. A site has been obtained

on high ground, not far from the Southampton Common, and it is confidently anticipated that the transference of the college to its new quarters will result not only in a large increase in the number of students, but also in a greatly enhanced interest on the part of residents in the southern counties in the question of the maintenance of a centre of university education in Southampton.

SOCIETIES AND ACADEMIES.

PARIS.

Academy of Sciences, July 22.—M. Lippmann in the chair.—M. **Bassot**: The preparation of a map of western Morocco on the scale of 1/200,000. Details are given of the measurement of the base and triangulation carried out up to the present. The work will be continued in October.—A. **Müntz** and H. **Gaudechon**: The degradation of phosphatic manures in the soil. From the experiments described it is shown that phosphatic manure should be given annually. Larger amounts than those required for one year are degraded to a non-assimilable form.—Paul **Sabatier** and Alph. **Mailhe**: The catalytic preparation of the phenolic and diphenylenic oxides. Mixed oxides. The method is based on the catalytic action of thorium oxide at 380° to 450° C., and examples are given of the ethers prepared in this way.—M. **Amann**: Observation of the solar eclipse of April 16 and 17, 1912, at the Observatory of Aosta, Italy.—L. **Ancel**: The photometry of the solar eclipse of April 17, 1912, with the aid of selenium and a recording galvanometer. The curve obtained during the eclipse is reproduced.—Louis **Dunoyer**: The disruptive discharge through pure sodium vapour.—P. **Noguès**: A new kinematograph. The instrument described can take 180 images per second, and has been applied to the examination of certain movements in running, jumping, and flight.—A. de **Gramont**: The ultimate lines and great sensibility of chromium, manganese, iron, nickel, and cobalt.—Félix **Bidet**: Equilibrium of the system ammonia gas and ethylenediamine chloride.—J. Languier des **Bancels**: The solubility of coloured resins submitted to the action of light.—A. **Guasco**: The detection of small proportions of carbon monoxide in air.—V. **Hasenfratz**: The hydrogenated derivatives of apoharmine.—G. **Vavon**: The catalytic hydrogenation of the ketones. An account of the products obtained from various ketones when acted upon by hydrogen in presence of platinum black. The course of the reaction depends upon the liquid in which the ketone is dissolved.—Edouard **Bauer**: The action of sodium amide upon 1:4-dibenzoylbutane.—F. **Jadin** and A. **Astruc**: The presence of arsenic in some parasitic plants and their hosts. Parasitic plants, like those growing directly on the soil, contain normally a small proportion of arsenic. There is no apparent connection between the proportions of arsenic present in the parasite and its host.—E. **Chuard** and R. **Mellet**: Variations in the proportion of nicotine in various organs of the tobacco plant in the course of growth.—M. **Gard**: The possibility and frequency of autofertilisation in the cultivated vine.—J. **Tournois**: The influence of light on the flowering of the Japanese hop and of hemp.—E. C. **Teodoresco**: The assimilation of nitrogen and phosphorus by the lower algæ.—I. **Pouget** and D. **Chouchak**: The law of the minimum. A discussion of a recent note by M. Mazé on the relations between a plant and its nutritive medium.—J. **Giaja**: The ablation of the pancreas in *Haliaetus albicilla*.—Pierre **Girard**: The electric charge of the red corpuscles of the blood. Measurements of the velocities of the red corpuscles in an electric field in isotonic solutions of saccharose, common salt, and serum.—Jean **Camus**: The toxicity of

mineral salts in the cephalo-rachidian fluid.—N. A. **Barbieri**: The non-existence of free or combined lecithines in yolk of egg and in biological structures.—Mme. and M. Victor **Henri**: Variation of the abiotic power of the ultra-violet rays with the wave-length. The abiotic power of the ultra-violet rays increases as the wave-length diminishes. There is no indication of a maximum.—Maurice **Holderer**: The mechanism of the arrest of diastases by filtration.—Em. **Bourquelot** and Marc **Bridel**: The reversibility of fermentations. The influence of the dilution of ethyl alcohol on the synthetic action of emulsin in this medium.—M. **Köhler**: The Echinoderms of the Charcot expedition.—J. L. **Dantan**: The working of the genital gland in *Ostrea edulis* and *Gryphaea angulata*. The protection of natural oyster beds.—E. **Boullanger** and M. **Dugardin**: The mechanism of the fertilising action of sulphur.—Ed. **Dujardin-Beaumetz** and E. **Mosny**: The evolution of the plague in the marmot during hibernation.—J. **Vallot**: The comparative absorption of the chemical and heat radiations of the sun between Mt. Blanc and Chamonix.

NEW SOUTH WALES.

Linnean Society, May 29.—Mr. W. W. Froggatt, president, in the chair.—Dr. R. **Greig-Smith**: Contributions to our knowledge of soil-fertility. No. 5. The action of fat-solvents upon sewage-sick soils. Experiments are brought forward to show that the action of the volatile disinfectants upon sewage-sick soils is to segregate or translate the fatty material which, in the soil under examination, constituted 19 per cent. of the volatile and organic matter. The lower layers of treated soil gave greater bacterial growths than the upper, into which the fatty substances had been carried by the evaporating solvent. When the soil was heated at 62° C. to kill off phagocytic protozoa, subsequent treatment with chloroform caused a very much increased growth of bacteria.—J. H. **Maiden** and E. **Betche**: Notes from the Botanic Gardens, Sydney. No. 17.—C. **Hedley**: Some land-shells collected in Queensland by Mr. Sidney W. Jackson. Primarily in quest of ornithological material and information on behalf of Mr. H. L. White, of Belltrees, Scone, Mr. Jackson visited the coastal districts of Queensland from Brisbane to Cairns in 1908. A large collection of land-shells was also gathered, a portion of which is treated of in this paper, including nineteen species, of which eleven and two varieties are described as new.—C. **Hedley** and A. F. Basset **Hull**: The Polyplacophora of Lord Howe and Norfolk Islands. Nine species referable to the five genera, Chiton (3), Ischnochiton (1), Ornithochiton (1), Acanthochites (2), and Lepidopleurus (2), are described as new, of which four are peculiar to Lord Howe Island, three to Norfolk Island, and two are common to both localities. None of them extend either to the mainland of Australia or to New Zealand, although two species are very closely allied to mainland species.

BOOKS RECEIVED.

Aus dem Luftmeer. By M. Sassenfeld. Pp. iv+183. (Leipzig and Berlin: B. G. Teubner.) 3 marks.

Einführung in die Biologie. By Prof. K. Kraepelin. Dritte Auflage. Pp. viii+356. (Leipzig and Berlin: B. G. Teubner.) 4.80 marks.

English History Illustrated from Original Sources, 1066-1216. By N. L. Frazer. Pp. xvi+234. (London: A. and C. Black.) 2s. 6d.

The Task of Social Hygiene. By H. Ellis. Pp. xv+414. (London: Constable and Co., Ltd.) 8s. 6d. net.

Studien an intracellularen Symbionten. I. Die intracellularen Symbionten der Hemipteren. By Dr.

P. Buchner. Pp. iv+116+Taf. 1-12. (Jena: G. Fischer.) 18 marks.

The Formation of the Alphabet. By Prof. W. M. Flinders Petrie. Pp. iv+20+ix plates. (London: Macmillan and Co., Ltd., and B. Quaritch.) 5s. net.

Les Alpes de Provence. By G. Tardieu. Pp. iv+310. (Paris: Masson et Cie.) 4.50 francs.

The Grouse in Health and Disease. Edited by A. S. Leslie, assisted by A. E. Shipley. Popular Edition of the Report of the Committee of Inquiry on Grouse Disease. Pp. xx+472+plates. (London: Smith, Elder and Co.) 12s. 6d. net.

Libya Italica. Terreni ed Acque, Vita e Coltura della Nuova Colonia. By P. V. de Regny. Pp. xv+214. (Milano: U. Hoepli.) 7.50 lire.

Le Zebre. By Dr. A. Griffini. Pp. xxviii+298+41 plates. (Milano: U. Hoepli.) 4 lire.

Festschrift W. Nernst zu seinem Fünfundzwanzigjährigen Doktorjubiläum Gewidmet von seinen Schülern. Pp. vi+487. (Halle a.d.S.: W. Knapp.) 21.60 marks.

Problems in Eugenics. Papers Communicated to the First International Eugenics Congress, held at the University of London, July 24-30, 1912. Pp. xix+490. (London: Eugenics Education Society.) 8s. 6d. net.

An Introduction to the Chart of the Elements. Second Edition. Pp. 43+chart. (London: The Metallic Compositions Co.) 3s. 6d.

FORTHCOMING CONGRESSES.

AUGUST 22-28.—(i) International Congress of Mathematicians, and (ii) International Commission on Mathematical Teaching. President: Prof. Klein. Treasurer: Sir J. Larmor, F.R.S., St. John's College, Cambridge.

SEPTEMBER (first week)—International Congress of Anthropology and Prehistoric Archaeology. Geneva.

SEPTEMBER 4-11.—British Association. Dundee. President: Prof. E. A. Schäfer, F.R.S. Assistant Secretary: O. J. R. Howarth, Burlington House, London, W.

SEPTEMBER 4-13.—International Congress of Applied Chemistry. Washington, D.C. President: Dr. W. H. Nichols. Secretary: Dr. B. G. Hesse, 25 Broad Street, New York City, U.S.A.

SEPTEMBER 8-11.—Société Helvétique des Sciences Naturelles. Atdorf. President: Dr. P. B. Huber. Secretaries: Prof. J. Brülisauer (German) and M. P. Morand Meyer (French), Atdorf.

SEPTEMBER 23-28.—International Congress on Hygiene and Demography. Washington. President: Dr. H. P. Walcott. Secretary-General: Dr. J. S. Fulton, Army Medical Museum, Washington, D.C.

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