

Museum. The party spent nearly five months in the field, returning with fine series of mammals and birds from this little-known part of Central Asia. Of especial interest in the series of big-game are four rams of the largest known of the wild sheep, as well as specimens of two forms of ibex, and a gazelle. Out of a total of about 650 mammals in the collection, eleven forms are new to science, and some twenty were not previously represented in the National Museum. Mr. George Mixter also visited Siberia, where he secured certain mammals from the region about Lake Baikal, among them bear and seal.

Of particular interest was a trip made by Dr. Ales Hrdlička to Siberia and Mongolia, to study the physical anthropology of the natives. His main object was a search for data concerning the race which is supposed to have peopled America. He gathered extensive information and collections, from which he draws the conclusion that there exist in several places in Siberia, Mongolia, and Tibet numerous remains of an ancient population which was physically identical with, and in all probability gave rise to, the American Indian.

The hunting trip carried on by Mr. Paul J. Rainey in British East Africa, in which the institution was represented by Mr. Edmund Heller, was very successful; nearly 4000 mammals, 1000 reptiles, and 400 birds were obtained, as well as many land shells and botanical specimens. From the collection, which supplements that of the Smithsonian African Expedition, there have been as many as forty new species and twelve new genera described.

The Astrophysical Observatory of the Smithsonian Institution again sent an expedition to Bassour, Algeria, for the continuation of the observations relative to the heat of the sun, an investigation on which the observatory has been working for the past seven years, with observing stations on Mt. Wilson, California, and during two seasons in Algeria. Mr. Abbot, the director of the observatory, states that the results of the work of 1911 and 1912 thoroughly establish the supposed variability of the sun.

UNIVERSITY AND EDUCATIONAL INTELLIGENCE.

LONDON.—The scheme for the administration of the East London College, a school of the University of London in the faculties of arts, science, and engineering, was sealed by the Board of Education on August 15. It establishes a governing body of nineteen members, nine of whom are representatives of the Drapers' Company, the body from which the college derives rather more than half its annual income; three representatives of the University, one of whom must be a woman, with the principal of the college *ex officio*, two of the Academic Board, which consists of the principal members of the teaching staff, one of the London County Council, and three coopted members. The representatives of the University are Lady Busk, Principal Sir Henry Miers, F.R.S., and Mr. F. D. Acland, M.P., Under-Secretary for Foreign Affairs, who is a member of the Senate of the University.

MR. HAROLD PEALING, Liverpool, has been appointed lecturer in physics in the South African College, Cape Town.

PROF. W. H. YOUNG, F.R.S., has been appointed Hardinge professor of mathematics in the University of Calcutta, for the purpose of organising a new school of higher mathematical thought and research. Prof. Young is retaining his chair in Liverpool University.

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WE learn from the Allahabad *Pioneer Mail* that at a meeting of the Bombay University Senate on July 26 Sir Alfred Hopkinson, K.C., until recently Vice-Chancellor of the Victoria University of Manchester, was appointed expert adviser on university teaching to the University for a period of six months.

THE calendar for the session 1913-14 of the Merchant Venturers' Technical College, Bristol, is now available. It will be remembered that the faculty of engineering of the University of Bristol is provided and maintained by this college, which, in addition, includes a secondary school for boys and a comprehensive series of evening classes in science, technology, and commercial and other subjects. The evening courses of work in technology have been arranged to meet the special needs of engineers, men engaged in the building trades in general, carpenters and joiners, plumbers, and painters and decorators. Saturday afternoon classes for miners have been arranged by the Gloucestershire and Bristol Education Committees and are given in the college. In addition special courses of instruction for women in domestic subjects are provided.

THE Education Committee of the Staffordshire County Council has published its "Directory for Higher Education, 1913-14." The booklet contains the regulations of the committee and details of schemes of work in operation throughout the county. Instruction in mining is provided by means of lecturers, whose whole time is devoted to the work, and their assistants. For this purpose the county is divided into two portions, comprising the North Staffordshire coalfields and the South Staffordshire coalfields respectively. Classes in metallurgy and iron and steel manufacture are conducted in accordance with the regulations of the Board of Education and the City and Guilds of London Institute. Classes in pottery and porcelain manufacture have been arranged at Burslem, Hanley, Longton, Stoke, and Tunstall. Boot and shoe manufacture, silk manufacture, horticultural and smaller agricultural industries are each to be taught in suitable centres. The directory also gives particulars of the numerous scholarships awarded by the committee, the holiday courses arranged, and the steps taken to provide suitable technological instruction in the rural districts.

PARTICULARS have been issued by the Royal Horticultural Society with reference to the examinations for the national diploma in horticulture, which, so far as possible, will be held in the latter part of June of each year. The scheme, which has been approved by the Board of Agriculture and Fisheries, sets forth that candidates for the diploma must (a) register themselves with the society, and (b) pass two examinations, a preliminary and a final. The examinations are open to both men and women. The preliminary examination will be based upon the general principles of plant-growing, an elementary knowledge of botany, chemistry, and physics, so far as acquaintance with these subjects is essential to an understanding of garden practice. Care will be taken to ascertain that the candidate is able to perform the operation of gardening with proper skill, and also that he understands the reasons for the methods employed. The syllabus for the final examination will be divided into sections each dealing with one particular branch of horticulture. Candidates may enter for the branch in which they feel themselves most proficient. All particulars, forms, &c., may be obtained from the secretary of the Royal Horticultural Society, Vincent Square, S.W.

THE calendar of the Royal Technical College, Glasgow, for the coming session contains details of the scheme affiliating the college to the University of

Glasgow. The college retains its autonomy in all matters relating to its internal affairs—finance, appointment of staff, and so on—but it has no representation in the Court of the University. An advisory committee has been set up, consisting of members of the University Court and representatives of the college, which will consider all matters affecting their joint interests. A joint board of studies in the faculty of applied science is provided, and will consider all matters relating to the subjects and standard of the several courses. The degree examinations will be conducted by a board of examiners representative of both institutions, with external examiners appointed by the University Court. Students will be free to attend the classes constituting the courses of study in either the University or the college, or in both, the fees being the same. The combination and coordination of the resources of the University with those of the college should be to the advantage of both. The University of Edinburgh, too, has recognised the day classes of the college as qualifying for its degree of bachelor of science under certain regulations.

SOCIETIES AND ACADEMIES.

PARIS.

Academy of Sciences, August 18.—M. A. Chauveau in the chair.—M. Borrelly: Notes on Hind's nebula. This nebula is now at a maximum period of brightness.—M. Aries: The formula for the velocity of sound. Reply to M. Duhem.—MM. Massol and Faucon: The presence of absorption bands in the ultra-violet spectrum of some abnormal alcohols of the fatty series. The study of pentane and some derivatives of methylpropane and methylbutane shows that the two absorption bands previously found in the three primary alcohols do not appear in the corresponding hydrocarbons; the halogen derivatives are also free from bands. The aldehydes give one large absorption band intermediate in position between the two alcohol bands.—Paul Godin: Free thoracic and abdominal respiration in the course of growth.—De Montessus de Ballore: Remarks on the earthquake at Gallipoli, August 9, 1912.

BOOKS RECEIVED.

A History of British Mammals. By G. E. H. Barrett-Hamilton. Part xiv. Pp. 361-408+plates. (London: Gurney and Jackson.) 2s. 6d. net.

Handbuch der Vergleichenden Physiologie. By Hans Winterstein. Lief. 36. Zweite Hälfte. (Jena: Gustav Fischer.) 5 marks.

Świat I Cztowick. By Dr. J. Mianowskiego. Pp. 355. (Warsaw.) 2 rub.

A Treatise on Quantitative Inorganic Analysis. By Dr. J. W. Mellor. Being vol. i. of a Treatise on the Ceramic Industries. Pp. xxxi+778. (London: C. Griffin and Co., Ltd.) 30s. net.

The Application of Physico-Chemical Theory to Technical Processes and Manufacturing Methods. By Prof. R. Kremann. Translated from the German by H. E. Potts, and edited by Dr. A. Mond. Pp. xv+212. (London: Constable and Co., Ltd.) 8s. 6d. net.

Botany. By Prof. E. Brucker. Pp. xv+185. (Thresholds of Science Series.) (London: Constable and Co., Ltd.) 2s. net.

Ministere de l'Agriculture. Direction Générale des Eaux et Forêts. Service des Grandes Forces Hydrauliques. (Région du Sud-Ouest.) I., Comptes rendus des Opérations Effectuées. II., Résultats Obtenus pour le bassin de l'Adour au 31 Décembre, 1910. Tome i. Pp. 262+plates. Résultats Obtenus

pour le bassin de la Garonne au 31 Décembre, 1910. Tome ii. Pp. 515+plates. 2°. Partie Eaux et Améliorations Agricoles. Service des Grandes Forces Hydrauliques. (Région des Alpes.) Comptes rendu et Résultats des Etudes and Travaux au 31 Décembre, 1911. Tome vi. Pp. 494. Annexe du tome vi. Nivellements.

Ist es Wahr dass $2 \times 2 = 4$ Ist? By Fred Bon. Erster Band. Pp. xxviii+523. (Leipzig: E. Reinicke.)

British Rainfall, 1912. By H. R. Mill. Pp. 372. (London: E. Stanford, Ltd.) 10s.

A New School Geometry. By R. Deakin. Part ii. Pp. viii+161-202. (London: Mills and Boon, Ltd.) 1s. 6d.

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