

UNIVERSITY AND EDUCATIONAL INTELLIGENCE.

OXFORD.—The Rhodes trustees have decided to add 200*l.* a year for the next five years to the stipend of the reader in pathology. Mr. Alfred Beit and Mr. Wernher have supplied sufficient money to endow a professorship of colonial history, and to appoint an assistant professor in the same subject. They have also made a gift to the Bodleian Library.

Magdalen College has made a grant to the delegates of the university museum of 250*l.* a year for the next two years for the purpose of the payment of scientific assistants.

The following examiners have been appointed:—in chemistry, W. H. Perkin, jun.; in preliminary physics, E. S. Craig; in preliminary chemistry, J. E. Marsh; in preliminary animal physiology, W. Ramsden; in preliminary zoology, E. S. Goodrich; in medicine, organic chemistry, N. V. Sidgwick; in human anatomy, A. Thomson; in materia medica, R. Stockman; in midwifery, J. S. Fairbairn; in pathology, G. Sims-Woodhead; in forensic medicine and public health, J. D. Mann and A. L. Ormerod; and in human physiology, L. E. Hill.

THE Treasury, at the instance of the Colonial Office, has made a grant of 500*l.* a year to the Liverpool School of Tropical Medicine.

THE prizes and certificates gained by students at the Sir John Cass Technical Institute during the past session will be distributed by Sir William H. White, K.C.B., F.R.S., on Thursday, December 1. The laboratories and workshops of the institute will be on view, and there will be exhibitions of students' work.

At Bedford College for Women two occasional lectures, open to the public without fee, will be delivered on November 25 and December 8. The first lecture will be by Prof. Karl Pearson, F.R.S., on "Recent Work and some Unsolved Problems in Heredity," and the second by Miss C. A. Raisin on "London, its Early Foundation and Later Growth, a Geological Study."

THE alumni of the Massachusetts Institute of Technology are collecting, says *Science*, a fund for current expenses, which now amounts to more than 20,000*l.*, to be used in the course of the next five years. We learn from the same source that Harvard University has received from Miss Whitney a gift of 1000*l.*, the income of which is to be applied as a scholarship to aid meritorious students in the study of field geology or geography in the summer months, preferably in the mountain region of the western United States.

APPLICATION will be made to Parliament in the ensuing session for an Act to transfer University College, London, exclusive of the North London or University College Hospital, the medical school, and the boys' school, to the University of London, and to dissolve or provide for the dissolution of the college itself. The Bill will contain a clause authorising and providing for the making by the Senate of the university, or by such other body or persons as the Act may prescribe, of statutes and regulations for the management of the college; and provision will also be made for carrying on the work of the hospital, the medical school, and the boys' school.

THE new buildings of the Borough Polytechnic Institute were opened by Mr. Benn, chairman of the London County Council, on November 16. The buildings, which were urgently needed for the large number of students, have cost with equipment more than 24,000*l.* Toward this amount the central governing body of the City of London Parochial Charities contributed 3000*l.*, the London County Council 16,000*l.*, with a promise of a further sum. The Council also meets the cost of installation of the electric light and equipment, amounting to 2950*l.* The total cost of the land, about 1½ acres, buildings and equipment, by the end of the year will be not less than 96,000*l.*

WITH the object of giving to the school children of the United Kingdom better knowledge of the colonies, and of giving to the school children of each colony better know-

ledge of the United Kingdom and of other parts of the Empire, a syllabus of seven lectures on the United Kingdom, each to be illustrated by about forty lantern slides, has been drawn up by a committee connected with the Colonial Office. The subjects of the lectures are:—(1) the journey from the East to London; (2) London the Imperial city; (3) scenery of the United Kingdom; (4) historic centres and their influence on national life; (5) country life and the smaller towns; (6) great towns, the industries, and commerce; (7) defences of the Empire. Mr. H. J. Mackinder will give an account of the scheme, and exhibit some of the slides which have been prepared to illustrate it, at the Whitehall Rooms, Hôtel Métropole, on Wednesday, December 7, at 5 p.m. The Colonial Secretary has consented to preside.

At the inaugural meeting of the new session of the Royal Statistical Society on November 15, the new president, Sir Francis Sharp Powell, Bart., M.P., delivered an address on education in which he presented specially impressive figures to illustrate prominent educational features of various countries. The activity in educational matters of to-day was commended, and attention directed to the growing conviction that a more liberal education than that provided by purely technical instruction is necessary in this country. Among other interesting comparisons instituted in the address was one dealing with the average expenditure on education per child in Prussia and in England. Exclusive of central and local administration, it appears that the average expenditure per child on the register is in Prussia 1*l.* 15*s.* 6*d.* if buildings are included, and 1*l.* 10*s.* 8*d.* exclusive of buildings. The corresponding figures in England are 2*l.* 12*s.* 9*d.* and 1*l.* 17*s.* Further, the number of scholars per teacher is 66 in Prussia and 57 in England, excluding pupil teachers. It seems clear from these figures that Germany, with a smaller expenditure per child than our own, succeeds in securing better results, and it is to be hoped that English education soon may be conducted more scientifically, so that the value of our education may be more in accordance with our expenditure. The address also pointed out that in secondary education German activity is shown in the provision of technical schools for special branches of metal industries, for wood-working, engineering, and textile industries, and for agriculture.

SOCIETIES AND ACADEMIES.

LONDON.

Royal Society, June 16.—"Hydrolysis of Cane Sugar by *d*- and *l*-Camphor- β -Sulphonic Acids." By R. J. Caldwell, B.Sc.

The rates of inversion of cane sugar by two stereoisomeric acids were determined in order to compare the results with the case of inversion by enzymes, which are apparently all asymmetric substances. Wilhelmj's law holds accurately for half normal solutions of both dextro- and lævo-camphor- β -sulphonic acids. The velocity constant κ (equal to $10^4/t \log_{10} a/a-x$, where a is the initial cane sugar concentration, and x the concentration of the inverted sugar at the end of t minutes) was found to be 10.07 and 10.13 in two experiments with the dextro-acid, and 10.05 and 10.08 for the lævo-acid. The author concludes that there is no difference in the inverting power of the two acids attributable to their asymmetric structure. This result is in accord with the conclusion arrived at by Emil Fischer regarding the *d*- and *l*-camphoric acids (*Zeits. Physiol. Chem.*, 1898, vol. xxvi. p. 83). The relative activities of hydrochloric acid and camphor- β -sulphonic acid towards cane sugar are 100 : 90, whereas for milk sugar the ratio is 100 : 70.

November 17.—"Enhanced Lines of Titanium, Iron, and Chromium in the Fraunhofer Spectrum." By Sir J. Norman Lockyer, K.C.B., LL.D., F.R.S., and F. E. Baxandall, A.R.C.S.

In this paper the authors give the results of a detailed study of the enhanced lines of Ti, Fe, and Cr in relation to the lines of the Fraunhofer spectrum. In previous Kensington publications it had been shown that the enhanced lines of some of the metals are prominent in the spectra of α Cygni and the sun's chromosphere, whilst it has been generally recognised that the lines in the Fraunhofer spectrum are mainly the equivalents of lines in the arc spectra