

Educational Topics and Events

CAMBRIDGE.—Dr. L. Howarth, of King's College, has been appointed University lecturer in the Faculty of Mathematics.

J. H. Lockhead, of Christ's College, has been appointed senior curator of the Museum of Zoology.

The Benn W. Levy research studentship in biochemistry will become vacant on September 30. Applications from candidates should be addressed to Sir Frederick Gowland Hopkins at the School of Biochemistry before July 31.

ACCORDING to the law of New York State, a licence to practise as an optician can be issued only to a person who has graduated in arts or science and in optometry at a university, and has passed the examination of the State Board. The announcement of the professional courses in optometry for the winter and spring sessions 1936-37 at Columbia University shows further that for admission to the University a candidate must have completed a four-year course of study at a secondary school in English, history, a foreign language, algebra, geometry, and either physics or chemistry. The first two years at the university are devoted to English, German, mathematics, contemporary civilisation, physics, chemistry, physiology and physical education; the third and fourth years to geometrical, physical and physiological optics and workshop practice. The work is done on the eleventh floor, of 10,000 square feet, of the Pupin Physics Laboratories of the University. The cost to a student is estimated at about 600 dollars per annum for a student living at home and 900 dollars for one living in one of the halls of residence. These are minimum figures, and do not include the cost of professional equipment, about 500 dollars, which the student would utilise in his or her practice.

In the recent report of the University Grants Committee, suggestions were made as to the need for improvements of methods and lecture systems in the universities of Great Britain, and it is therefore timely to learn of the proposals which are being advanced in the case of one of the oldest of the American technical institutions. When addressing the alumni of the Rensselaer Polytechnic Institute on the occasion of his induction, Dr. William Otis Hotchkiss gave an outline of the plans and purposes which, as its new president, he hopes to be able to carry into effect (*R.P.I. Bulletin*, 34, extra to No. 4, Dec. 1935). Dr. Hotchkiss takes 'efficiency' as his ideal, defining it in the best and broadest sense as the use of the time, ability and opportunity of the student, not only in the classrooms but also in the wider activities of life. The time allotted to courses should be properly proportioned between three groups: (a) English and other general subjects such as economics; (b) fundamental mathematics and science; (c) applied engineering subjects. While group (a) is necessarily distinct from the other two, it may well be objected that groups (b) and (c) should not be separated, but that the ideal to aim at is the successful blending of the two. In engineering and other technical courses, mathematical and fundamental scientific principles should be taught and developed on the most logical lines, but should

also be translated, at every stage, directly into their practical applications. A course in accordance with these ideals would require new modes of presentation and of examination, no doubt; but it is in this direction alone that the most efficient use of time and energy, both of teachers and students, may be attained.

Science News a Century Ago

Criminal Statistics for England and Wales

At a meeting of the Statistical Society held on June 20, a paper was read by S. Redgrave on "Some Data on the Present State of Crime in England and Wales". The main object of the paper was to show the proportionate amount and degree of crime in the different counties of England and Wales in 1835. The numbers given only related to persons proceeded against, and not the number of offences committed. The total number of persons charged with indictable offences at the assizes and sessions in 1935 was 20,731—17,275 males and 3,456 females—being in the proportion of 1 in 631 to the population. As a result of the trials, 523 were sentenced to death, 3,629 to transportation, 9,915 to imprisonment, 58 to be whipped, 357 were fined and 242 were discharged on sureties. Of the total, 4,034 were acquitted, and 1,943 discharged without trial.

Sunspots and Temperatures

ON June 23, 1836, *The Times* published the following note: "M. Colomb Menard de Nismes, the French astronomer, states that whenever the sun exhibits spots on its disc, its temperature becomes much colder, and that when the spots are not visible the heat is much greater, and storms are of more frequent occurrence and greater violence. Herschel also came to the same conclusion after more than 20 years observation. . . . Never have so many of these spots been observed as during the present year between February and the end of May. Up to the 22nd of April M. Menard had counted 10 and up to the 19th of May 13, and the season had been remarkable for its coldness."

Museums and Libraries of Vienna

REFERRING to the institutions for the encouragement of science and literature at Vienna, the *Athenaeum* of June 25, 1836, said: "These consist of the Imperial Museum of Antiquities, Medals and Coins, including the Egyptian collections; the Museum of Natural History; the Museum of objects specially interesting to the students of history and the arts; the Museum of Arts and Manufactures, and different collections belonging to the University, the Theresian and Chirurgical Academy. All are gratuitously accessible to the public; but certain days and hours are set apart for scientific persons who wish to examine the different collections more minutely than they are enabled to do on public days. Besides the Imperial Library . . . there is a University Library, which possesses 100,000 volumes. The fine private library of the Emperor, an heirloom in the Imperial family, is also accessible to the public. Free admission is given to every person, without any previous application, and no instances have occurred of books being purloined. . . ."