

UNIVERSITY AND EDUCATIONAL  
INTELLIGENCE

EDINBURGH.—The Marquis of Hartington has, by a large majority over Mr. Cross, been elected Lord Rector of Edinburgh University.

PRUSSIA.—We notice from the last report of the Prussian Minister of Instruction that the present number of instructors in the ten universities amounts to 896, viz., 466 ordinary professors, 7 honorary, 199 extraordinary, and 224 *privat-docenten*. The philosophical faculties include 400, the medical, 250, the legal, 86, and the theological, 110. The number of instructors varies from 29 at Münster, to 201 at Berlin. The number of students is about nine times that of the professors, viz., 8,209, and includes 1,080 from other countries than Prussia. According to their faculties they are divided as follows: evangelical-theological, 684, catholic-theological, 289, legal, 2,261, medical, 1,349, and philosophical, 3,626. The attendance at the universities during the past summer was Berlin 2,237, Breslau, 1,245, Göttingen, 917, Bonn, 897, Halle, 827, Königsberg, 620, Greifswald, 503, Marburg, 401, Münster, 315, and Kiel, 241.

In the budget submitted to the present Prussian House of Deputies are the following items:—Erection of the German Industrial Museum, 998,000 mk.; erection of a Polytechnic in Berlin, 8,393,370 mk.; erection of an Ethnological Museum in Berlin, 1,800,000 mk.; and for the Berlin University, erection of a Herbarium, 422,000 mk.; of a Clinic, 1,955,000 mk.; of a new building for a second Chemical Laboratory, as well as of a Technical and Pharmaceutical Institute, 967,000 mk.

BONN.—On entering upon the duties of rector of the University, Prof. Kekulé, the distinguished chemist, delivered, on October 18, a brilliant address on the scientific position of chemistry, and the fundamental principles of this science. He made the following definition of chemistry as distinct from physics and mechanics:—"Chemistry is the science of the statics and dynamics of atoms: physics that of the statics and dynamics of molecules; while mechanics considers the masses of water consisting of a large number of molecules." After rapidly sketching the growth of the present atomic theory, he claimed that the mass of results now obtained showed that chemistry was slowly but surely approaching its goal, the knowledge of the constitution of matter. In opposition to the opinion that theory should be banished from the exact sciences, he regarded it as an actual felt necessity of the human mind to classify the endless series of individual facts from general standpoints—at present of a hypothetical nature—and that it was precisely the discussion of these hypotheses which often led to the most valuable discoveries.

VIENNA.—In Vienna the question is being agitated of separating the natural sciences at the University into a separate faculty, apart from the philosophical faculty, as is the case in Strassburg and a few other universities, which have risen superior to the old mediæval classification.

STRASSBURG.—The imperial authorities have finally decided upon extensive appropriations for the new buildings of the University. They will embrace edifices for lecture-rooms, chemical and physical laboratories, and surgical and psychiatric clinics. The new observatory will be completed next year, and the botanical gardens are rapidly being laid out. In 1882 the University expects to occupy its new buildings.

KÖNIGSBERG.—Prof. W. Lossen, of Heidelberg, well known by his researches on hydroxylamine, has accepted a call to the Chair of Chemistry at the University of Königsberg.

UPSALA.—The University is attended at present by 1,395 students, of whom the half are included in the philosophical faculty. The corps of teachers embraces sixty-three ordinary and extraordinary professors, and fifty-four *privat-docenten*. Of these eighty-two are in the philosophical faculty.

ST. PETERSBURG.—The lectures at the St. Petersburg Ladies' High Medical School re-opened this year on October 13. One hundred and eighteen students were admitted, though a far larger number of applicants passed the examination. The number of the students admitted, however, was limited as above because of want of room. A fifth class has now been added, and the students receive, after having finished the studies, the degree of surgeons.

## SOCIETIES AND ACADEMIES

LONDON

Linnean Society, November 1.—Prof. Allman, F.R.S., president, in the chair.—Messrs. S. M. Samuel and P. Wyatt Squire were duly elected fellows of the Society.—A communication was read by Dr. G. King on the source of the winged cardamom of Nepal. By Dr. Pereira it had been regarded as the produce of *Anomum maximum*, Roxb.; but this is indigenous to Java. Roxburgh named two Indian species, *A. aromaticum* and *A. subulatum*, and Dr. King shows that the latter is the so-called winged cardamom of Nepal, its true habitat being the Morung mountains and not the Khasia hills as asserted by Voigt.—There followed a paper by Capt. W. Armit on Australian finches of the genus *Poephila*. Mr. Gould had recognised two birds, *P. gouldiae* and *P. mirabilis*, as good and distinct specific forms, a statement questioned by Mr. Diggles at the Queensl. Phil. Soc., 1876. Capt. Armit having studied the live birds in their native haunts gives his evidence in favour of Mr. Gould as to the just separation of the said Australian finches.—The self-fertilisation of plants formed the subject of an interesting paper by the Rev. G. Henslow, a notice of which we shall give elsewhere.—Mr. Ed. J. Miers gave a revision of the Hippidea." This group of the Anomourous Crustacea, although, by their elongated carapace and antennæ bearing considerable resemblance to certain of the Crystoidea, to wit the Chilian, *Blapharipoda spinnimana* and *Pseudocorystes sicarius*, yet the author considers their true affinities to be with the Oxyostomatous Brachyura, through the Raninidae. The Hippidea inhabit all the warmer temperate and tropical seas of the globe. Their life history and habits lately have received considerable elucidation at the hands of Mr. S. J. Smith, of Connecticut, in a study of the development of the common species of the eastern shores of the United States. Their limits are restricted northwards by the cold winters. The *H. talpoidea* lives gregariously, burrowing in the loose, changing sands near low-water mark. Other species, however, inhabit deep water, such as the *Albunea guerinii* in the Gulf of Algiers, &c.—Mr. E. M. Holmes laid before the meeting the late Dr. Hanbury's collection of cardamoms (from the Pharmaceutical Society) in illustration of Dr. King's paper above mentioned; he also drew attention to an undetermined fungus in a sugar cane, which mould had caused the destruction of a plantation in South India.—The Rev. T. H. Sotheby exhibited branches of two remarkable shrubs, *Colletia cruciata*, Hook., and *C. Biconensis*, Lindl., grown in Lady Rolles' garden at Bicton. These South American plants it seems, are not unknown in this country (one Fellow present stating he possessed them now in flower), but the history of their introduction, nevertheless, is a curious one.—Dr. Masters showed an unusual specimen of a grape within a grape, viz., adventitious fruit developed in place of the normal seeds; he also explained the *rationale* of adventitious tubers producing buds on the root of some examples of *Brassica Rapa* exhibited by him.—Some twigs and flowers of British grown gum trees were shown by Mr. A. O. Walker, among others *Penstemon Clevelandii* said to have flowered here for the first time.

Physical Society, November 3.—Prof. G. C. Foster, president, in the chair.—The following candidate was elected a member of the Society: Alexander Jessemann.—Prof. McLeod described some experiments he has recently made to determine the exact number of vibrations of tuning forks by means of the apparatus he exhibited to the Society on April 28 last, and which was designed for determining slight variations in the speed of machinery or other analogous purposes. He has studied two sets of forks belonging to the Physical Laboratory at South Kensington, and a new set just received from König, and his results exhibit a remarkable concordance, the extreme results in the worst set of observations on a fork of 256 complete vibrations only differing by 0.005 per cent., and in a good set they agreed within 0.00078 per cent. Examining the new series from 256 to 512, he found them to give from 0.3 to 0.5 of a vibration more than was anticipated, but as this variation may be due to a difference between the temperature and that at which they were adjusted, he is waiting to ascertain what this was. He considers also that the manner in which the fork is held has an effect on its vibrations, and he hopes to be able to get some information as to the effect of temperature on elasticity.—Dr. Huggins exhibited some artificial gems recently prepared by M. Feil, the well-known glass manufacturer of Paris, who has succeeded in crystallising stones of the corundum class.