

M. Ferry, the Minister for Public Instruction, enabling him to take with him a trained botanist. In his last address before the Geographical Society of Paris he entered into many interesting details showing that the negro populations of the region he is to visit were half-civilised races susceptible of intercourse with European nations.

THE public subscription for M. Michuho-Maclay gives very good results. On November 1 the sum had already reached, at the *Golos* office alone, above 2,786 roubles (about 278*l.*)

UNIVERSITY AND EDUCATIONAL INTELLIGENCE

CAMBRIDGE.—The anniversary dinner of the Cambridge Philosophical Society is to take place in the new hall of Pembroke College on November 29, at 7.15, under Prof. Newton's presidency. The occasion will be clouded by many memories of Professors Maxwell and Garrod.

The Botanic Gardens Syndicate are to obtain plans and estimates for the erection of a curator's house in the Garden.

There is much questioning as to Dr. Power's justification regarding the coming changes as a "revolution," especially in laying down the office of Vice-Chancellor. A reform in which the University concurs to a great extent can hardly be regarded with such grave anxiety. Dr. Power, in the speech referred to, said that the new comparative anatomy buildings had been for a considerable period in use, although the dispute as to the respective liabilities of the University, the architect, and the contractors for the accident to the roof and floors is not yet settled. The recent addition to the rooms for human anatomy had proved satisfactory. Dr. Power again warned the University of the rapid rate of increase of permanent expenditure and the very uncertain nature of the income, depending so largely on the fees and dues from members of the University. He acknowledged that the department of chemistry had been existing on a starvation allowance, and that some professors and lecturers had been paying heavy expenses out of their own pockets rather than make fresh demands on the already overburdened finances of the University.

Dr. E. H. Perowne enjoys the singular felicity of having become Master of Corpus Christi and Vice-Chancellor in one year. Mr. G. F. Browne, the senior proctor, desires to maintain strongly the college system as against the lodging-house system, especially in regard to discipline. But this would not involve any diminution in the urgent need for more thorough University science teaching, and the more complete recognition as a duty, of banishing the mere schoolboy and the idler, or the mere athlete, to the schools or elsewhere, instead of employing such ability as is here set to lecture in the ABC of subjects.

At Christ's College it is proposed to give open scholarships and exhibitions in natural science for entrance in October, 1880, by examination on Friday, March 19, and following days. He must show that he will probably be able to pass the "Little-go" at latest by the end of his third term of residence. A candidate may gain a scholarship for mathematics or classics in combination with natural science. No candidate will be admitted who has kept any actual terms by residence, but there will be no limitation of age. In mathematics there will be papers in Euclid, algebra, plane trigonometry, and conic sections, geometrical and analytical. Candidates for natural science scholarships must all take chemistry, and also either physics or biology in addition. The principles of spectrum analysis are included in theoretical chemistry, physical measurements and manipulations in physics; also statics, dynamics, optics, heat, and electricity; in biology the conditions are exceedingly well stated, as—*Physiology*: Fundamental principles of the chief physiological processes of plants and animals; general histology of their principal organs; *Morphology*: Fundamental principles of morphology as illustrated by forms representing the principal classes of the vegetable and animal kingdoms; principles of the classification of plants and animals; practical microscopical examination of the various tissues; dissection and description of typical plants and animals. The examinations will be held in common with those at Emmanuel and Sidney Sussex Colleges, as before.

The last Report of the Board of Natural Sciences Studies was to be offered for confirmation to-day (Thursday), at 2 P.M., and it was expected to be non-placeted, although it might be carried on a division.

PROF. BURDON-SANDERSON announces that he will begin a course of weekly lectures at University College, Gower Street, to ladies, on physiology, on Friday the 21st, at 4 P.M. The first lecture will be public.

MR. P. R. SCOTT LANG, M.A., B.Sc., F.R.S.E., who has for some years been assistant to the Professor of Natural Philosophy—Prof. Tait—in the University of Edinburgh, has been appointed by the Queen to the chair of mathematics in the University of St. Andrews.

MR. MARK FIRTH has signified his wish to found a chair of chemistry in connection with Firth College, Sheffield. He proposes to invest a sum sufficient to produce an annual income of 150*l.*, and this, together with the fees of students, will amount, it is believed, to a sufficient sum. Mr. Firth proposes that the appointment shall be first filled by Dr. Carnelly, Owens College, Manchester.

THOSE of our readers interested in the higher education of girls may be glad to know that a Calendar of Queen's College, Harley Street, has been published.

THE *Golos* learns, according to the *Times* Berlin correspondent, that the Russian Government intends thoroughly changing the statutes of the University of Dorpat, in Livonia, that strong bulwark of German science and culture. Among the proposed alterations now under consideration in the Imperial Council, the chief one aims at restricting certain liberties hitherto enjoyed by German-speaking students and subjecting them to police surveillance similar to that now in force at all other Russian Universities.

SCIENTIFIC SERIALS

The American Journal of Science and Arts, October.—An examination of the chemical composition of amblygonite, by Mr. Penfield, leads him to give a new and more simple formula for the mineral. He shows that the hydroxyl group in amblygonite is isomorphous with fluorine.—From general geological sections in Iowa, Mr. McGee concludes that residuary clays and others of equal compactness were passed over by a thick ice-sheet with or without serious disturbance, and that the plane of contact between glacial drift and subjacent residuary clay is not always clearly defined.—Mr. Dale describes a peculiar fault at Rondout.—The first portion of a research, by Mr. Gibbs, on the vapour densities of peroxide of nitrogen, formic acid, acetic acid, and perchloride of phosphorus, is given, and the two remaining papers are from English publications (Crookes on radiant matter and Draper on oxygen in the sun).

The American Naturalist, October.—John A. Ryder, an account of a new genus of minute paupod myriapod (with figures).—Wm. Barbeck, on microscopical fungi attacking our cereals.—C. L. Herrick, fresh-water entomostrea (describes and figures *Diaptomus longicornis*, n.sp.).—S. K. Lum, notes on the thrushes of the Washington Territory.—John Ford, the leather-turtle.—S. L. Frey, Were they mound-builders?—Recent literature: Proceedings of scientific societies.

The American Quarterly Microscopical Journal, vol. i. No. 4.—Prof. S. A. Forbes, on some sensory structures of young dogfishes.—Dr. C. L. Anderson, spores with a spore glossary.—Dr. J. J. Woodward, on the oblique illuminator, and on a new apertometer.—F. H. Wenham, on Prof. Smith's apertometer.—John Mayall, on measuring aperture.—R. Hitchcock, aperture, angular and numerical.—J. D. Hyatt, on the tongue of the honey-bee.—Thomas Taylor, on oleomargarine and butter.—W. C. Hubbard, Haeckel v. Virchow.—Prof. Stowell, the origin and death of the red blood-corpuscle.—B. Eyferth, on the simplest forms of life.—An announcement from the publishers states "that the existence of the *Quarterly* ceases with this number." The editor found that it would be impossible for him to give the journal the necessary supervision during the coming year, hence the necessity of this suspension.

Journal of the Franklin Institute, October.—Prof. Thurston here publishes an investigation of the strength of American timber, several varieties of which (white and yellow pine, locust, black walnut, white ash, white and live oak) were submitted to testing machines in the Stevens Institute. The results show that American timber has a constructive value equal, if not decidedly superior, to European timber. (The numbers were almost invariably higher than those of Barlow, Tredgold, or