

## UNIVERSITY AND EDUCATIONAL INTELLIGENCE.

OXFORD.—The examiners for the Burdett-Coutts Scholarship have reported that no candidate of sufficient merit has presented himself for examination. The Scholarship, therefore, has not been awarded this year.

There will be an election to a Geographical Studentship of the value of £100 at the end of Hilary Term, 1895. Candidates should send in their names to the Reader in Geography, 1 Bradmore Road, Oxford, before Wednesday, February 27, 1895.

The Savilian Professor of Astronomy, Prof. H. H. Turner, will lecture in the Schools on Thursday, November 8, on the subject of the Transit of Mercury on Saturday, November 10.

In a Convocation held on Tuesday, November 6, the degree of Master of Arts, by decree of the House, was conferred on Robert Warington, F.R.S., Sibthorpean Professor of Rural Economy.

CAMBRIDGE.—The Cavendish Laboratory Syndicate have presented a report on the pressing needs of the department of experimental physics. It appears that a large laboratory for elementary classes and an additional lecture room, together with certain accessory rooms, are urgently required. To erect and furnish these on a suitable scale would require some £10,000. As the University is unable to meet any such expense at present, it is proposed to put up part of the building at an expense of £4,000, of which half can be provided from the accumulated fees of students working in the laboratory. The Financial Board think that £2,000 more can be obtained from the Common University Fund. Mr. Fawcett, the architect, has prepared plans for the work, which are to be seen at the Cavendish Laboratory.

The Sedgwick Memorial Museum Syndicate state that the tenders for the building designed by Mr. T. G. Jackson, A.R.A., have been some £4500 in excess of the estimate based on the architect's calculations. They are reluctantly forced to the conclusion that the University cannot afford to supplement the Memorial Fund to the required extent, and they accordingly ask powers to reconsider the plan, or to substitute a new one for it.

At the annual election to Fellowships at St. John's College, on November 5, Mr. H. C. Pocklington was one of the successful candidates. He was bracketed Fourth Wrangler 1892, was placed in the first division of the first class with Mr. Cowell, the Senior Wrangler, in Part II. of the Tripos of 1893, and this year gained one of the Smith's Prizes, the other falling to Mr. Hough, also a scholar of St. John's. Mr. Pocklington presented a dissertation on the periods of the vibrations of a vortex-ring constituted by fluid circulating round a hollow core, in which the periods of the unsymmetrical vibrations are for the first time determined. The analysis also included a determination of the effect which an electric charge would produce on the vibrations and the stability of a vortex atom in a rotational æther. In a minor investigation, which will appear in the next number of the *Proceedings* of the Cambridge Philosophical Society, the forms assumed by two parallel cylindrical hollow vortices moving steadily through fluid, and the character of the surrounding motion, are investigated in detail.

Mr. S. Sandars has bequeathed to the University £2000 for the endowment of a Reader in "Bibliography, palæography, typography, bookbinding, book-illustration, and the science of books and manuscripts."

As the result of the prolonged discussion on post-graduate study in the University, the Council of the Senate have sanctioned a grace for the appointment of a syndicate to consider (1) the best means of giving further help and encouragement to persons who desire to pursue courses of advanced study or research within the University; (2) what classes of students should be admitted to such courses; and (3) what academic recognition, whether by degrees or otherwise, should be given to such students, and on what conditions.

Mr. Herman, of Trinity College, has been appointed Chairman of Examiners for the Mathematical Tripos, Part I.

Dr. Forsyth, F.R.S., Sir R. S. Ball, F.R.S., R. T. Glazebrook, F.R.S., and Prof. G. B. Mathews, have been appointed Examiners for Part. II. of the Mathematical Tripos.

Prof. Ewing, F.R.S., Prof. Osborne Reynolds, F.R.S., and W. N. Shaw, F.R.S., have been appointed Examiners for the Mechanical Sciences Tripos.

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DUBLIN.—The medals in Natural Science, given at Moderatorship, have been awarded as follows:—Gold medals to R. A. Rossiter and T. B. Jobson; silver medal to C. W. Orpen. The Professor of Botany's prizes for practical work on the Gymnosperms, to be accompanied by sections and drawings, have been given to T. B. Jobson, for work on the anatomy of the young stem of *Ginkgo biloba* and on the reproductive organs of *Taxus baccata*; and to R. A. Rossiter, for work on the floral development of *Thuja plicata* and *Larix Europæa*.

Lectures on the Experimental and Natural Sciences for Michaelmas Term commenced on November 2. Prof. Reynolds lectures on Inorganic Chemistry, Prof. Fitzgerald on Heat, Prof. Sollas on Mineralogy and Physical Geology. Prof. Mackintosh lectures on Zoology, and gives demonstrations on Comparative Anatomy. Prof. Wright lectures on Algæ and Fungi, and gives a series of demonstrations on the Vascular Cryptogams. The assistant to the Professor of Botany, Mr. H. Dixon, gives a course of Laboratory instruction on vegetable cells and tissues.

The special courses in Natural Science for 1895 are in Geology, the Cambrian Period; in Zoology, the Invertebrate Heart; in Botany, the Natural Orders, Cruciferae and Papilionaceae.

The Anthropological Laboratory has reopened for the session 1894-95. Dr. C. R. Browne will, under the direction of Prof. D. Cunningham, give, on three days in each week during Term, demonstrations on Anthropological Methods. These will be open to all students.

Assisted by a grant from the Royal Irish Academy, Dr. C. R. Browne visited, during the long vacation, the district of North Erris, in the county of Mayo, believed to be one of the most primitive regions in Ireland. The anthropological results of this visit will in due course be laid before the Irish Academy.

The Dublin University Experimental Science Association held its first meeting for its eighteenth session on the 6th inst. Prof. Sollas delivered the opening address, in which he treated of "Geological Time."

FROM a Return made to the Department of Science and Art, and published last week, it appears that the total amount spent on technical education during the year 1892-93, in England, Wales, and Scotland, was £529,718, and that the estimated total amount allocated to technical education for the year 1893-94 was £696,328. Forty-one out of the forty-nine county councils in England are applying the whole of the residue received under the Local Taxation (Customs and Excise) Act to technical education, and eight a part of it to the same purpose. Of the councils of the sixty-one county boroughs, fifty-three are devoting the whole of the residue to technical education, and seven a part of it. The thirteen county councils and the three county boroughs in Wales and Monmouth are not only devoting the whole of the residue to intermediate and technical education, but six of them are also levying a rate, or making grants out of the rates, for the same purpose. In the case of Scotland, twenty-three out of the thirty-three county councils are applying the available funds to technical education, and seven a part. Of the 194 burghs and police burghs, however, 122 are applying the whole to the relief of rates.

The Technical School Committee of the Birmingham Corporation have appointed Dr. W. E. Sumpner, of the Battersea Polytechnic School, from among seventy-five candidates, as Principal of the new local Technical School. The salary is £500 per annum.

THE extensive buildings that have been lately erected as an addition to the medical school at the Owens College, Manchester, were formally opened by the Duke of Devonshire, the President of the institution, on Tuesday.

## SCIENTIFIC SERIALS

*American Meteorological Journal*, October.—The meteorological services of South America, by A. L. Rotch. In the Argentine Republic there are now five stations of the first order, forty of the second order, and one hundred rain stations. The first of the *Annales* was published in 1878, and dealt with the climate of Buenos Ayres from observations since 1801. In Uruguay there is one observatory of the first order, at Villa Colon, near Montevideo, and in 1890 a Meteorological Society was established, and publishes a