

### UNIVERSITY AND EDUCATIONAL INTELLIGENCE.

CAMBRIDGE.—Mr. F. Horton, of St. John's College, has been approved by the General Board of Studies for the degree of doctor of science.

Science announces that an anonymous gift of 20,000*l.* has been made to Wellesley College. The money was given towards the 200,000*l.* fund which the college is trying to raise as an endowment. The total amount obtained thus far is 90,600*l.*

AMONG the scientific lectures arranged for advanced students of the University of London during the spring term of 1914 are a course of four lectures on carbohydrate fermentation at King's College, by Prof. A. Harden, University professor of biochemistry, at 4.30 p.m., on Mondays, beginning on January 26; and a course of eight lectures on physiological effects of anaesthetics and narcotics, at Guy's Hospital, by Dr. M. S. Pembrey and Mr. J. H. Ryffel, at 4 p.m., on Thursdays, beginning on January 22. The lectures, which will be illustrated by experiments, are addressed to advanced students of the University and to others interested in the subjects. Admission is free, without ticket.

THE annual report for the session 1912-13 of the Royal Technical College Glasgow, has now been circulated. The total number of individual students enrolled was 5069, of whom 610 were day students. The higher work of the college continues to grow in volume and in standard. The roll of students included 135 graduates of the four Scottish universities and of the Universities of Cambridge, London, Manchester, Allahabad, and Calcutta. The arrangements for the affiliation of the college to the University of Glasgow have been completed, and the ordinance of the University Court giving effect to the affiliation received the approval of his Majesty in Council on March 7, 1913. The report gives particulars of twenty-nine works and papers published during the session by members of the college. Details are supplied of the extensions and developments in the various departments of the college and of the continued interest shown by the manufacturers and merchants of the district in the work of the college.

THE Institute of Chemistry has issued in pamphlet form a full report of a conference of professors of chemistry held on October 17 last to consider the relation of the qualifications of the institute to those of other educational institutions; the general question of the training of professional chemists; and the work of the institute in matters of professional interest in all branches. The members of the conference included the officers and members of the council of the institute, the board of examiners, professors of chemistry in universities and colleges recognised for the training of candidates for the associateship of the institute, and in other well-known colleges and technical schools. The pamphlet contains a preliminary statement by the president of the institute, Prof. R. Meldola, submitted as a basis for discussion and circulated among members before the conference, notes received from members before the day of the conference, the report of the conference itself, and expressions of opinion since received. The symposium is of great interest to chemists as bringing together authoritative views on the training and qualifications of professional chemists.

ON Friday, December 5, the London Teachers' Association held a meeting to discuss a report to be

made by its education committee on the child and the kinematograph. The report will be based on the personal observations of the members of the committee of visits to picture palaces, on the results of their experience with children, and on the written compositions of 1300 children of Standard III. and upwards on the picture palace. Mr. Albert Smith, chairman of the education committee, considered the subject as regards its moral, physical, and educational effects on the child. Its physical effect was to produce a great frequency of headaches and to increase the number of children demanding eye treatment; its effect on character building was bad; the educational aspect showed that the results in a child's mind was "utter, hopeless, desperate confusion." Two things were needed, an efficient film censorship for all films shown to children and the establishment of educational conditions so that teachers should control films to be used in school work. In Germany the drawbacks of the kinematograph were minimised by proper restrictions. Dr. Garnett said that the London County Council had postponed consideration of this matter for six months. He had doubts whether the kinematograph would be of use in the teaching of history, geography, and industries, but he certainly thought it was of considerable use in the teaching of science, on account of the time-control.

THE annual prize distribution of the Northampton Polytechnic, London, E.C., was held on Friday, December 5, when the prizes were distributed by Mr. Cyril S. Cobb, the chairman of the London County Council. In his report, the principal, after giving details of the work of the institute, referred particularly to the delay in the erection of the technical optics annexe and its serious effect upon the unique work of the polytechnic in this subject. Mr. Cobb, in his address to the students, expressed his regret at the scheme having been apparently pigeon-holed at the Education Office of the council, and promised to unearth it with a view to a definite answer being given to the requests of the governing body in view of the great importance, both to the metropolis and the nation, of carefully planned developments in technological education in optics. Mr. Cobb also dwelt upon the necessity for employers, the apprenticeship system being practically dead, giving facilities for their apprentices and younger workmen to attend technical classes, remarking that if such facilities were not given the time might not be far distant when attendance at such classes might be made compulsory. In the laboratories of the polytechnic an interesting scientific development in electric furnace work was the subject of a lecture given by Mr. S. Field, the head of the technical chemistry department, with practical demonstrations by Mr. E. Kilburn Scott, another member of the staff, and the inventor of a new type of electric furnace. The furnace is a flame arc furnace, working at high voltages, the three arcs of a three-phase system being produced at the same point in one furnace. Air under pressure is blown, as usual, through the arc, and the nitrous oxide produced is absorbed in appropriate towers, but incidentally the furnace is so arranged that the waste heat of these products can be utilised for steam raising. A still more important feature of the furnace is that the arc can be started and stopped by means of discharges in an auxiliary circuit not part of the high-pressure power supply. This gives a very efficient and convenient form of control. Other and older types of electric furnaces were described, and, to some extent, demonstrated. Many interesting details of the work and equipment of the polytechnic were also on view, some of them involving novel features of both educational and scientific interest.