

whether their application is for a senior or a junior studentship. Completed forms must reach the Corporation not later than June 21.

THE Principal Officer's report recently published on the work of the University of London during the year 1926-27 indicates a steady growth. Admissions (including no fewer than 382 graduates of other universities) numbered 7668, as compared with 3852 in the last year before the War and 7577 in 1925; there were 3967 candidates at degree examinations, including 1585 external students; the roll of internal students now comprises 9342 names. Among other interesting new developments the report mentions the institution of chairs of international law at the School of Economics and of bacteriology and epidemiology at the School of Hygiene and Tropical Medicine; a Ph.D. degree in the faculty of music, and diplomas in archaeology, public administration, anthropology, and nursing; the extension to University, King's, and East London Colleges of the plan, recently adopted in regard to the Imperial College, whereby alternative papers are set in the Final B.Sc. (Engineering) examination for internal students at the college; and an undertaking to contribute £200 a year for five years towards the maintenance of a British Institute in Paris. In connexion with university extension work were instituted a record of distinguished service and a system of stipendiary lectureships. Many benefactions are acknowledged; among them a gift of £180,000 from the Laura Spelman Rockefeller Memorial Trustees to the School of Economics. The report concludes with a reference to what, for the moment, overshadows all other interests of the University,—the decision to purchase eleven acres of land in Bloomsbury as its permanent home.

THE Association of Teachers in Technical Institutions held its annual conference at Plymouth on June 4. During the past year there have been abundant signs of increased appreciation of the value, both cultural and economic, of technical education, and this formed the chief theme of the presidential address delivered by Mr. H. Hall. The relationships of technical education to other forms of education and to industry and commerce, which have lately undergone investigation by a committee under the chairmanship of the late Lord Emmott, have in the past been associated with a good deal of scepticism as to the validity of the claims of technical teachers that their craft can provide the means of life as well as the means of livelihood; that they have on one hand opportunities not inferior to those of teachers in more academic fields, of developing character and endowing with the capacity for successful civic and social life, and, on the other hand, the power of increasing the capacity of their pupils for efficient service to industry and commerce. That this scepticism has, during the past year, been giving place to a more appreciative attitude is shown by quotations from speeches by the president of the Board of Education and the president of the National Union of Teachers, and from the reports of the Balfour Committee on factors in industrial and commercial efficiency and the Hadow Committee on the education of the adolescent. Mr. Hall ends this part of his address with a plea for definite action, and especially for an increase in day courses as recommended by the president of the Board on Mar. 31, when he said: "So long as employers are content with technical education of this type [evening classes], valuable as it is, they are missing the opportunity of conferring upon the work of their industry the dignity of a craft or profession for which a definite standard of education is required."

Calendar of Discovery and Invention.

June 12, 1712.—In Devereux Court, Strand, are the Grecian Chambers. Until 1843, on this site stood the Grecian Coffee House, which two hundred years ago was a resort for the fellows of the Royal Society. Thoresby the antiquarian, in his diary for June 12, 1712, wrote: "Attended Royal Society, where were present the President, Sir Isaac Newton, both the secretaries, the two professors from Oxford, Dr. Halley and Keill, with others, whose company we afterwards enjoyed at the Grecian Coffee House."

June 13, 1901.—Dewar's work on the liquefaction of gases was referred to under May 28, 1898, when he first liquefied hydrogen. Three years later, on June 13, 1901, he successfully transported through the streets from the laboratory of the Royal Institution to the rooms of the Royal Society no less than a gallon of the liquid gas.

June 14, 1699.—In the *Philosophical Transactions*, vol. 21, p. 228, is the entry: "Mr. Savery, June 14, 1699. Entertained the Royal Society with showing a small model of his engine for raising water by the help of fire, which he set to work before them; the experiment succeeded according to expectation, and to their satisfaction."

June 15, 1919.—Alcock and Whitten Brown, on June 14-15, 1919, made the first direct flight across the North Atlantic from Newfoundland to Ireland. Their machine, now in the Science Museum, South Kensington, was a Vickers-Vimy biplane fitted with two 360-h.p. Rolls-Royce engines. Assisted by a following wind, they flew a distance of 1890 miles in 15 hours 57 minutes at an average speed of 118.5 miles per hour.

June 16, 1657.—The application of the pendulum to clocks was due to Huygens, who on June 16, 1657, presented his first pendulum clock to the States General of Holland. The following year he described his clock in detail in a brochure entitled "Horologium," and fifteen years later gave the theory in his fine work, "Horologium Oscillatorium," published in Paris.

June 16, 1864.—Stokes announced to the Royal Society his discovery that when diluted blood is treated with certain reducing agents, its colour and spectrum undergo a reversible change. "The colouring matter of the blood, like indigo, is capable of existing in two states of oxidation, distinguishable by a difference of colour and a fundamental difference in the action on the spectrum. It may be made to pass from the more to the less oxidised state by the action of suitable reducing agents, and recovers its oxygen by absorption from the air." Of additional interest is that this discovery, fundamentally important for physiology and biochemistry, regarding this animal respiratory pigment, should have been contributed by a mathematical physicist.

June 16, 1874.—The Cavendish Laboratory at Cambridge owes its existence to the Duke of Devonshire, who had been impressed with the need of institutions for experimental research. The Laboratory was formally opened on June 16, 1874, though the inaugural lecture had been given by Clerk Maxwell three years previously.

June 17, 1885.—Among the most famous balloonists of last century was Henry Coxwell, whose last ascent as made on June 17, 1885, when he was sixty-six years of age. Many of his ascents were made for scientific purposes, and it was with him that Glaisher, on Sept. 5, 1862, rose to a height of seven miles. Glaisher became insensible, Coxwell's hands became frozen, and he opened the valve of the balloon by tugging at the cord with his teeth. E. C. S.