

who fell at Magersfontein on December 11, 1899. The prize is 100*l.*, and it will be awarded every two years for the best essay on a subject dealing with ophthalmology and involving original work. The competition will be open to all British subjects holding a medical qualification. A committee nominated biennially by the Medical Board of the Royal London Ophthalmic Hospital will have the adjudication of the prize.

Two Theresa Seessel research fellowships, each of the yearly value of 300*l.*, are being offered in connection with Yale University for the promotion of original research in biological studies. Preference will be given to candidates who have obtained their doctorate and demonstrated by their work their fitness for carrying out successfully original research work. Applications for the fellowships, with reprints of scientific publications, letters of recommendation, and particulars as to the problems proposed by the candidates, must be sent before May 1 next to the Dean of the Graduate School, New Haven, Conn., U.S.A.

REFERENCE was made in these columns some time ago to the Imperial College War Memorial and Athletic Ground scheme. It now appears from papers issued recently that the enterprise has received a large measure of support from friends and old students of the college and its constituent parts, the City and Guilds Engineering College, the Royal College of Science, and the Royal School of Mines. Up to the middle of November a sum of more than 6300*l.* had been subscribed, and the early response to the appeal has been sufficiently satisfactory to enable the committee not only to proceed with the erection of the memorial tablets in the college buildings, but also to complete the purchase of a sports field at North Wembley, over which an option had been secured. Some of the college clubs are already utilising the ground for the purposes of football and hockey. The further sum immediately required to cover outlay on the memorial tablets, the purchase of the ground, and necessary expenses, including payment of the mortgage, is about 2500*l.*, and the committee is appealing to all friends and old students who have not yet contributed to take a hand in bringing the undertaking to a completely successful issue.

A PROGRAMME of university extension lectures for the coming term has been issued by the University of London. Courses of lectures will be delivered at about seventy local centres in different parts of London and the surrounding district. The subjects treated cover a wide range, and courses in literature, history, art, architecture, and economics are included in the list; in the direction of teaching of a non-vocational character important work is being done by the Board. When, however, we remember that the report of Sir J. J. Thomson's Committee on the position of natural science in our educational system emphasised the value of lectures which bring home to the general public the meaning of science and its importance in the life of the nation, it is astonishing to note that only two courses of the ninety-nine which are advertised—one by Prof. J. Cox on "The Bases and Frontiers of Physical Science" and the other by Mr. L. Tayler on "Human Biology and Welfare Problems" are in any way related to natural science. Prof. Cox's course of thirteen lectures will be delivered weekly, starting on January 14, at Gresham College, Basinghall Street, E.C.2; Mr. Tayler's course, consisting of twenty-four lectures, will be given on Mondays at the Technical Institute, Adelaide Road, Leyton. Particulars of the courses can be obtained from the Registrar, University Extension Board, University of London, South Kensington, S.W.7.

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Calendar of Scientific Pioneers.

January 14, 1742. Edmund Halley died.—The son of a rich London soapmaker, Halley began his astronomical work at Queen's College, Oxford, at the age of seventeen, and continued it until his death at the age of eighty-five. The friend of Newton, he succeeded Wallis as Savilian professor of geometry, Flamsteed as Astronomer-Royal, and Hans Sloane as secretary of the Royal Society. His name is associated with the study of the trade winds, the variation of the compass, Halley's comet, and many fundamental points in astronomy. To his "great zeal, able management, unwearied perseverance, scientific attainments, and disinterested generosity" was largely due the publication of Newton's "Principia." Halley is buried at Lee, near Greenwich, in the same tomb as Pond, Astronomer-Royal from 1811 to 1835.

January 14, 1874. Philipp Reis died.—While teaching at Friedrichsdorf, near Hamburg, Reis in 1861 constructed a telephone which was used with good results by Hughes in 1865, but Reis died when forty years of age, poor and almost unknown.

January 14, 1890. Gustave Adolphe Hirn died.—An engineer and physicist of Alsace, Hirn was a pioneer in the scientific testing of steam-engines.

January 14, 1905. Ernst Abbe died.—Born in 1840, Abbe, while a professor at Jena in 1866, joined Carl Zeiss and devoted himself to the theoretical investigation of optical instruments. His report on the South Kensington Loan Collection of Scientific Apparatus of 1876 led to the co-operation of the glass-maker, Otto Schott, and "Jena" glass became famous the world over.

January 14, 1906. Hermann Johann Philipp Sprengel died.—Trained as a chemist in Germany, Sprengel settled in England. He made notable advances in explosives, and by his invention of the mercurial air-pump rendered possible the Swan and Edison glow-lamps, Crookes's radiometer, and the Röntgen X-ray tube.

January 16, 1806. Nicolas Leblanc died.—The discovery of how to make soda from salt was, by J. B. Dumas, compared in importance with the improvement of the steam-engine by Watt. Leblanc made the discovery in 1787, and his patron, the Duke of Orleans, erected a factory for him. In 1793 the duke was guillotined, the factory confiscated, and Leblanc's patent cancelled. After years of poverty Leblanc's mind gave way and he shot himself. A statue of him now stands in the Conservatoire des Arts et Métiers.

January 17, 1910. Friedrich Kohlrausch died.—The successor in 1895 of Helmholtz at the Physikalisch Technische Reichsanstalt, Kohlrausch was an authority in the field of accurate physical measurement.

January 18, 1878. Antoine César Becquerel died.—Becquerel served in the French Army until the peace of 1815, and then gave himself up to scientific pursuits. A voluminous writer, he was a founder of electro-chemistry, for his work on which he received in 1837 the Copley medal of the Royal Society. His statue stands at his birthplace, Châtillon-sur-Loing.

January 19, 1878. Henri Victor Regnault died.—Distinguished alike as a chemist and physicist, Regnault's great researches on the expansion of gases were made at the Sèvres porcelain factory, of which he was director, but much of his later work was destroyed during the Franco-German War. E. C. S.

ERRATUM.—In last week's Calendar the year of Galileo's birth should have been 1564, and not 1571, which was the year Kepler was born.