

University and Educational Intelligence.

CAMBRIDGE.—The Council of the School of the Biological Sciences has been constituted as follows: Dr. Adrian, Prof. Barcroft, Mr. Bartlett, Mr. Blackman, Prof. Buxton, Mr. Forster Cooper, Prof. Dean, Sir F. G. Hopkins, Mr. Nicholas, Dr. Rideal, Prof. Seward, and Prof. J. T. Wilson.

The Faculty Board of Medicine has reported in favour of continuing the diplomas in public health, hygiene and tropical medicine, and hygiene until 1930, but for no longer unless the University otherwise determines at a later date. The foundation in 1922 of the London School of Hygiene and Tropical Medicine has altered the situation at Cambridge. When the new school is completed it should offer facilities for teaching and research with which Cambridge would be unable to compete. The Cambridge diploma in public health established in 1875 may be succeeded in due course by analogous diplomas at the new school.

The provision of facilities for special study and teaching in neurology and mental hygiene at the Maudsley Hospital, and the fact that only part of the course of study for the diploma in psychological medicine could be well provided at Cambridge, has led the Faculty Board to recommend that this diploma be discontinued as from October next. The Faculty Board recommends that the diploma in medical radiology and electrology should be continued for a further period of three years, with a fresh provision that before admission to the second part of the examination the candidate should have had a proper clinical experience of the subject.

READING.—Mr. Alfred Palmer, president of the Council of the University, has been given the degree of Doctor of Science *honoris causa*. This is the first degree which has been awarded by the University.

FROM University College, London, we have received "These Hundred Years," the oration delivered by Sir Gregory Foster on the occasion of the thirtieth celebration by the College Union Society of the foundation of the College. The title of the address is a reminder that the College centenary is to be celebrated this year. The great transformation—religious, political, social, and educational—that has taken place in these hundred years is, as Sir Gregory Foster says, due largely to the progress of science. He quotes Sir John Herschel's scathing criticism of the state of the exact sciences at the beginning of the nineteenth century: "Mathematics was at its last gasp, astronomy was nearly so. . . . The chilling torpor of routine had spread itself over all those branches of science which wanted the excitement of experimental research." There was no place in England where chemistry was systematically taught, and there was no chemical laboratory until one was opened at University College in 1828. The important part played by the College in the astounding progress witnessed by the hundred years that followed is briefly touched on in the address and will doubtless be celebrated at length in due course. In accounts of the origin of the College (and of the University of London) its debt to the poet Thomas Campbell is commonly acknowledged, but it is not so commonly recognised that the great principle of freedom from religious rivalry which the poet so eagerly and successfully championed was by him imbibed from the University of Berlin, founded, under the guidance of Wilhelm von Humboldt, in 1809, "unattached to any particular creed or school of thought, and devoted only to the interests of science and learning."

Calendar of Discovery and Invention.

February 20, 1880.—In one of the notebooks of David Edward Hughes preserved at the British Museum is an entry dated Feb. 20, 1880: "Mr. Spottiswoode, President of the Royal Society, Prof. Stokes, and Prof. Huxley visited me to-day at half-past 3 p.m. and remained until 6 p.m. in order to witness my experiments with the extra current Thermopile, etc." Hughes was then making experiments in the transmission of signals across space by means of the radiation given off by what he called the 'extra current' from a small spark coil, using for reception a Bell telephone and battery connected to a separate receiving circuit including sometimes a microphone. Neither Hughes, however, nor his visitors had any conception that the effects obtained were due to electro-magnetic waves.

February 21, 1824.—While professor of chemistry at Jena, Johann Wolfgang Döbereiner in 1823 discovered that when platinum in a fine state of division, known as platinum black, is placed in oxygen, it absorbs many hundred times its own volume with a considerable rise in temperature. Spongy platinum he found acted in the same way, and on Feb. 21, 1824, he patented his lamp, in which a stream of hydrogen is ignited by being directed on to such platinum.

February 22, 1804.—Trevithick, the famous Cornish engineer, was a pioneer in the use of high-pressure steam and was the father of the locomotive. His first practical experiments with a railway locomotive were made at Merthyr Tydvil in 1803-4, and on Feb. 22, 1804, his engine conveyed 10 tons of ore, 70 men, and five wagons a distance of 9½ miles at about 5 miles an hour.

February 22, 1831.—The virtual founder of the British Association was Sir David Brewster. Johnston the chemist, in 1830, had written an account of the German Association of men of science. On Feb. 22, 1831, Brewster wrote to Prof. Phillips at York: "It is proposed to establish a British Association of men of science similar to that which has existed for eight years in Germany, and which is now patronised by the most powerful sovereigns of that part of Europe. The arrangements for the first meeting are in progress; and it is contemplated that it shall be held in York, as the most central city for the three kingdoms." Murchison, Robison, J. D. Forbes, and Vernon Harcourt were among its chief promoters.

February 24, 1891.—The process for producing seamless steel tubes such as are used in modern boilers is due to Reinhard and Max Mannesmann, one of whose patents is dated Feb. 24, 1891. A heated round billet is spun at a high velocity by rollers which, being slightly inclined to one another, also give the billet an endwise motion. A flow of metal takes place from the interior outwards, a tube being formed the interior of which is smoothed by its being forced over a mandril.

February 24, 1896.—No discovery created more stir in scientific circles than that of the Röntgen rays, but no sooner had it been made known than a new field of investigation was opened up by Henri Becquerel, who, seeking to test whether such rays always accompanied the excitation of phosphorescent light, was led to the discovery of radioactivity. His experiments were made known to the Paris Academy of Sciences in his memoir, "Radiations émises par phosphorescence," read on Feb. 24, 1896.

February 26, 1788.—The Linnean Society was founded through the efforts of Sir James Edward Smith, the inaugural meeting being held on Feb. 26, 1788, at the Marlborough Coffee House. E. C. S.