University and Educational Intelligence.

CAMBRIDGE.—As was generally expected, Report B in favour of the foundation of a separate women's university at Cambridge was rejected last week. Three of the six signatories, who produced the scheme after six months' labour, had signed its death-warrant by issuing a fly-sheet against it. The new scheme—C it may well be called—is supported now by a group of fifty-two. It offers women students degrees, teaching by the University for a limited number, also certain undefined privileges, but no power and no votes in the Senate or any controlling body of the University. Even this scheme seems to open up too many and too serious risks to the more conservative members of the University, who are appealing for support for a fourth scheme D. While rigidly limiting the number of women students admitted to the University and ensuring that they shall pay proper fees for teaching and examinations, this scheme limits any advance from the present position to the granting by diploma of titular degrees. Already several defections have taken place from the moderate party to the extreme conservative wing.

What might have been an agreed solution in 1897 can scarcely be accepted in that light in 1921, and unless the moderates, having shed their right wing, are prepared to go further than their fly-sheet suggests, it seems probable that the intervention of some outside body—the Royal Commission at present sitting on the financial resources of the University—will be sought.

THE annual prize distribution at the Sir John Cass Technical Institute was held on Thursday, February 10, when the prizes were distributed by Sir Frederick Black, who afterwards delivered an address on "Liquid Fuel in Peace and War." A summary of the work of the institute during the past session shows that the total number of students was 1060—a higher figure than in any previous year, and an increase of more than 50 per cent. on the previous session. An important development contemplated was the initiation of courses of instruction on petroleum technology adapted to the needs of those already engaged in the industry. In the course of his address Sir Frederick Black said that whilst the United Kingdom had become an important consuming centre of petroleum products, it was at present only on a comparatively small scale that petroleum was produced in this country. So far as manufacture or refining was concerned, much more work of that nature was likely to be undertaken at home, for large British companies interested in oil had their headquarters and distributing agencies here. After briefly describing how the products of petroleum used for fuel were obtained, Sir Frederick gave a general description of their use in internal-combustion engines and for steam raising. The war has developed enormously their use and established their importance. The relative advantages of oil and coal for marine purposes were discussed, special reference being made to the progress in the building of motor-driven ships since 1912. Great attention was being given to such important matters as the elimination of waste on the oilfields and in the use of liquid fuels. Oils that admitted of complete refining into such products as motor spirit and lighting and lubricating oils should be so dealt with in preference to burning the more valuable fractions for steam raising, provided that a heavier oil not capable of such complete refining could be made available.

Calendar of Scientific Pioneers.

February 17, 1600. Giordano Bruno died.—An enthusiastic supporter of the views of Copernicus and of other new learning, Bruno, after several years spent in visiting France, England, and Germany, returned to his native country, was arrested, and, refusing to recant his philosophical and scientific heresies, was burnt at the stake in the Campo di Fiori, Rome.

February 17, 1867. Alexander Dallas Bache died.—One of the most influential of American men of science, Bache was director of the United States Coast Survey. He played a leading part in the founding of the National Academy of Sciences.

February 17, 1874. Lambert Adolphe Jacques Quetelet died.—The designer and first director of the Brussels Observatory, Quetelet was also a statistician and applied the theory of probabilities to the physical and intellectual qualities of man.

February 17, 1875. Friedrich Wilhelm August Argelander died.—Trained under Bessel, Argelander in 1837 became professor of astronomy at Bonn, where he compiled his great catalogue and atlas containing 324,000 stars visible in the northern hemisphere.

February 18, 1899. Marius Sophie Lie died. February 19, 1897. Karl Theodor Wilhelm Weierstrass died.—Both Lie and Weierstrass were among the most prominent workers in pure mathematics of last century. The former, though a Norwegian, for some years held a chair of mathematics at Leipzig, while Weierstrass was long connected with Berlin University. Lie's chief work was on the theory of transformation groups; Weierstrass's on elliptic functions and the theory of functions.

February 20, 1762. Johann Tobias Mayer died.—Director of Göttingen Observatory, Mayer left behind him valuable lunar tables which greatly aided in solving the problem of finding the longitude at sea.

February 20, 1907. Henri Moissan died.—Moissan in 1886 was the first to isolate fluorine. He improved the electric furnace, and by suddenly cooling a solution of carbon in molten iron produced small artificial diamonds.

February 22, 1875. Sir Charles Lyell died.—Lyell was the greatest master of English geology, and the publication of his "Principles of Geology" marked an epoch in the history of that science. This work was "an attempt to explain the former changes of the earth's surface by reference to causes now in operation." Lyell is buried in Westminster Abbey.

February 22, 1901. George Francis FitzGerald died.—Erasmus Smith professor of natural philosophy at Trinity College, Dublin, FitzGerald is remembered for his knowledge and versatility, his brilliant conceptions, and his stimulating influence on his fellow-physicists.

February 23, 1812. Etienne Louis Malus died.—A French military engineer of distinction, Malus died at the age of thirty-six, having three years previously made his great discovery of the polarisation of light by reflection.

February 23, 1855. Karl Friedrich Gauss died.—Mathematics, astronomy, optics, and magnetism all engaged the attention of Gauss, who in 1807 became professor of mathematics and director of the observatory at Göttingen. His important investigation of terrestrial magnetism belongs to the latter part of his life. With Weber he invented new instruments, set up an electric telegraph, and built the first magnetic observatory. The Gauss Tower on the Hohenhagen, near Dransfeld, was erected to his memory in 1911.

E. C. S.