given him to be present at the invitation of Sir George Courthorpe when the first batch of white sugar ever produced from English grown beets was completed at Cantley in 1912. Earlier attempts in 1868 at Lavenham had only produced syrups.

In 1894 the refinery of David Martineau and Sons, one of the oldest established in the sugar industry, was burnt to the ground, and in the following year Dr. Schack-Sommer assisted members of the old company to carry on its tradition by the formation of a new company. Of this company, now known as Martineaus, Ltd., he became the first chairman, a position which he held for thirty years, until advancing years prompted him to retire at the age of seventy-two. His tact and ability during these years are gratefully remembered, and even in his retirement he was a frequent visitor to the place of his former labours up to within a fortnight of his death.

Mr. Hugh Richardson

WE regret to learn that Mr. Hugh Richardson, who for many years had a stimulating influence upon school science teaching, died on November 24 at seventy-two years of age. Mr. Richardson was educated at Bootham School, York, and King's College, Cambridge, where he graduated in 1887. In the following year he became a master on the modern side of Sedbergh School, Yorks, where he remained until 1897, when he became science master at Bootham School, remaining in that position until he retired in 1914. He was an enthusiastic teacher with unusually wide interests and fertility of ideas; and his work at Bootham School represented science teaching at its best, being both practical and comprehensive. The school possesses an astronomical observatory, and Mr. Richardson used this to teach astronomy by similar practical methods to those adopted by him for instruction in physics and chemistry, botany and geography. He was an examiner in botany for matriculation at the University of London in 1904–7, and was secretary of the Educational Science Section of the British Association during the years 1906–15.

When attention was being given to the application of scientific methods in the teaching of geography, Mr. Richardson, with the late Mr. A. T. Simmons, produced in 1905 the first helpful guide for use in schools, in their "Introduction to Practical Geography". He was also the editor from 1911 until 1919 of a Nature Study Series published by the Cambridge University Press.

During the last twenty years Mr. Richardson has led the life of an enlightened country landlord in Northumberland, planting trees, studying butterflies and their natural history relationships and raising varieties of primulas and gentians. He maintained to the last a keen interest in all developments of science and their relation to human life and will be remembered with affection and esteem by all who came in contact with him in educational and scientific circles.

WE regret to announce the following deaths:

Sir John Bland-Sutton, Bt., president of the Royal College of Surgeons in 1923–26, on December 20, aged eighty-one years.

Prof. F. A. Laws, emeritus professor of electrical measurements in the Massachusetts Institute of Technology, on November 12, aged sixty-nine years.

Prof. R. F. C. Leith, emeritus professor of pathology and bacteriology in the University of Birmingham, on December 14, aged eighty-two years.

Sir John Robertson, C.M.G., O.B.E., professor of hygiene and public health in the University of Birmingham, on December 16, aged seventy-four years.

Prof. H. Westergaard, formerly professor of statistics in the University of Copenhagen, known for his statistical work in connexion with population and other social problems, on December 13, aged eighty-four years.

News and Views

Twelve Notable American Inventions

THE granting of patents in the United States was provided for in the Constitution, and on April 10, 1790, Congress specified how patents were to be issued. It was, however, not until an act of July 4, 1836, that the Patent Office was established under a Commissioner. In that year, too, the Patent Office started numbering serially the patents issued. In connexion with the centenary of these events, a list of twelve of the inventions that have done most to change life in America, together with the inventors' names, has been drawn up. The list is as follows: The telephone, Alexander Graham Bell (1847–1922); the electric telegraph, Samuel Finley Breese Morse (1791–1872); the electric light, the cinema and the gramophone, Thomas Alva Edison (1847–1931); the commercial steamboat, Robert Fulton (1765–1815); the aeroplane, Wilbur Wright (1867–1912); the air-brake for trains, George Westinghouse (1846–1916); the linotype machine, Ottomar Merganthaler (1854–99); the sewing machine, Elias Howe (1819–67); the cotton gin, Eli Whitney (1765–1825); the vulcanization of rubber, Charles Goodyear (1800–60); a practical reaping machine, Cyrus McCormick (1809–84); and aluminium manufacture, Charles Martin Hall (1863–1914). The compilation of any such list is always a matter of great difficulty, but there can be no question that the inventors and inventions here recalled are truly representative of the great contributions to mechanical progress by men of American nationality.