chair of its subject in the United States). From 1898 until 1922 he was director of the Sheffield Scientific School. His most important work was concerned with the protein element in human nutrition in the days when Carl von Voit's dietary standards were generally accepted; as a result of experiments performed during 1902–3 on himself, his colleagues, students and volunteers from the United States Army, Chittenden showed that good health, physical vigour and nitrogenous equilibrium can be maintained on levels of protein intake considerably below those specified by Voit. In 1909 he served on the Remsen Referee Board to report on the toxicity of sodium benzoate in foods, and after the First World War, together with Graham Lusk, he represented the United States on the Inter-Allied Scientific Food Commission in London, Paris and Rome. His best-known books are "Physiological Economy in Nutrition" (1904) and "The Development of Physiological Chemistry in the United States" (1930). Many honours came his way. In 1896 he was elected president of the American Physiological Society, which office he held for a record number of nine years, and in 1906 the first president of the American Society of Biological Chemists. A scrupulously neat person, who possessed an unerring flair for attracting worth-while pupils, Chittenden died at New Haven on December 26, 1943, in his eighty-seventh year.

Lobachevski and Non-Euclidean Geometry

This year marks the centenary of the death of the Russian mathematician, N. I. Lobachevski, on February 24, 1856. He was born in 1793 at Nijni Novgorod, and at the age of eight became a scholar at the Gymnasium at Kazan, where he made remarkable progress in the study of mathematics and classics. When fourteen years of age he entered the University of Kazan and spent the next forty years there, first as a student, then as a professor and finally as rector. Lobachevski played a major part in the development of the University and undertook a great deal of teaching and administration. In spite of this, he was still able to give time to mathematical thought and succeeded in creating a new field of mathematics. For more than two thousand years the question remained unsolved as to whether Euclid's parallel postulate is an independent axiom or can be deduced from other axioms. Lobachevski was the first to settle the question by constructing a non-Euclidean geometry, based on the hypothesis that through a fixed point there is an infinity of lines parallel to (that is, not meeting) a given line. This situation occurs on a pseudosphere. In 1855 "Pangeometry", the completed works of his mathematical life, was published; it was written in French and Russian and had been dictated because of his blindness.

Inland Waterways in Britain

The Minister of Transport and Civil Aviation announced in the House of Commons on February 1 that he has appointed a Committee of Inquiry into Inland Waterways with Mr. Leslie Bowes as chairman. The other members of the Committee are Messrs. J. Corbett, G. C. Godber, H. E. Hopthrow, W. A. Muddell (chairman of the Land Drainage Committee of the River Boards' Association), F. Ritchie (National Parks Commission), M. Rowe and J. Wilson. The Committee will consider and report on the future of the system of inland waterways in Britain and propose any measures necessary to achieve: (i) the maximum economic use of the system; (ii) the future administration of and financial arrangement for inland waterways which cannot be maintained economically for transport purposes, having regard to requirements of public health and safety, and the facilities which these waterways can provide for recreation, water supply, land drainage and dispersal of effluents; and (iii) the conversion of canal sites to other purposes when this is desirable and practicable. The Committee will also consider the present law relating to the closing of waterways to navigation, and make recommendations.

Permanent Exhibition of Scientific Instruments in London

A permanent exhibition of instruments made by a selection of the hundred and forty member firms of the Scientific Instrument Manufacturers' Association of Great Britain was opened on February 9 by Sir Norman Kipping, director-general of the Federation of British Industries. The exhibition is housed at the Association's headquarters at 20 Queen Anne Street, London, W.1, and though not intended to be public, it is open to all those interested in scientific instruments, especially visitors from overseas. Besides being a centre where visitors can see a representative selection of instruments, the display will also serve as a meeting-place for makers and users of instruments in Britain. An extensive catalogue library is being built up. Since it is impossible to give space to all member firms at the same time, a rota system has been worked out so that each member will have a chance to exhibit, and at the same time the character of the display will change constantly. In opening the exhibition Sir Norman said that the output of the British instrument industry is valued at £60 million a year, of which £15 million is exported. Stressing the importance of instruments in all branches of industry, he said that the fact that of the fifty thousand workers in the instrument industry in Britain, two thousand five hundred are engaged on research and development work augurs well for the future.

Shortage of Science and Engineering Graduates in British Industry

A letter sent to Mr. Iain Macleod, Minister of Labour, signed by Sir Norman Kipping, director-general of the Federation of British Industries, reaffirms the concern of the Grand Council of the Federation at the continuing shortage of science and engineering graduates. It not only urges that industry is handicapped by the general shortage, but also refers to the growing effect of the selective deferment from National Service which is granted to such graduates who take up government or government-supported jobs related to national defence; the effect in practice is that these men remain in the same sort of job and are lost to industry indefinitely. The Federation regards the situation as so serious that, while appreciating the difficulties of exempting all science and engineering graduates from National Service, it urges the Government most strongly to grant deferment where requested to all science and engineering graduates with first- or second-class honours degrees who take up employment in industry generally as well as in government establishments or on government-sponsored projects, and to continue deferment so long as they remain in such employment. It estimates that the entire annual output of