

engineering at the University of Illinois, where he produced a long series of scientific and technical papers. Then, during a period of four years, he undertook the Herculean task of editing the "International Critical Tables", a task which was rendered supremely difficult by the fact that it had to be undertaken *de novo* instead of undergoing a progressive development. The completed tables, which have recently been made much more accessible and easy to use by the addition of a new index volume, will remain as a monument to Washburn's patience and skill, and are likely for many years to serve as a foundation, to which successive volumes of the "Annual Tables" may be added in order to maintain the up-to-date character of the whole edifice.

When appointed to the Bureau of Standards in 1926, Washburn undertook a wide programme of investigation and research, from which two items may be selected for comment. The first was the remarkable achievement of preparing crystals of rubber, by distillation under extreme conditions of low pressure and short distance, in which Washburn was keenly interested when I visited him at the Bureau of Standards in 1930. The second, which will perhaps be appreciated more widely than any other feature of his career, was his discovery in January 1931 of the fractionation of light and heavy water by the process of electrolysis. The separation of isotopes on a practical scale marks the beginning of a new period in chemistry, and, since Washburn's method of separation is already being developed as a manufacturing process, his name will long be remembered as the originator of this new period.

T. M. LOWRY.

DR. L. R. FARNELL

WE regret to record the death of Dr. L. R. Farnell, formerly rector of Exeter College, Oxford, and the well-known authority on the religious cults of ancient Greece, which took place at Parkstone, Dorset, on March 28.

Lewis Richard Farnell attained the age of seventy-eight years on January 19 last, having been born at Salisbury in 1856. The second son of John Wilson Farnell, he was educated at the City of London School, of which Dr. Evelyn Abbott was then headmaster, and at Exeter College, Oxford, where he won an open classical scholarship. Practically the whole of the rest of his life was devoted to the service of his College and University. Two years after taking his degree in 1878, with first-class honours in both Classical Moderations and *Literæ Humaniores*, he was elected to a fellowship of his College. He then studied classical archæology in Germany and travelled in Greece and Asia Minor, returning to Oxford to serve Exeter as tutor, sub-rector, senior tutor and dean, and from 1914 until 1928 as rector, in which office he succeeded the late Dr. W. W. Jackson.

His studies in classical archæology, more especially of the attributes of the gods as represented in art, led Farnell to the comparative study of Greek religious cults. He rapidly attained a high reputation as an interpreter of obscure passages in Greek literature in the light of his research. His greatest achievement, however, was his monumental work "The Cults of the Greek States" in five volumes, which appeared between 1896 and 1909, with a supplemental volume on hero cults, published in 1921. In this work Farnell showed a mastery of detail which was equal to, if it did not surpass that of the best German scholarship of the day, combined with an unusually wide knowledge of comparative material. His contribution to the study of Greek culture is original in conception, fundamental and epoch-making.

Farnell was also the author of a number of smaller works, dealing with the religions of Greece and the ancient East and with comparative religion, in which he showed a great gift of lucid, semi-popular exposition, combined with sound scholarship. He was a frequent and valued contributor to the learned periodicals concerned with his special studies.

In 1901 Farnell was one of the first to receive the newly instituted degree of D.Litt. of his University. He was University lecturer in classical archæology from 1905 until 1914, the first Wilde lecturer in natural and comparative religion, Hibbert lecturer in 1911, and Gifford lecturer in 1919. He served as Vice-Chancellor of the University in 1920-1923. If he required a high standard from his pupils in conduct, industry and scholarship, his whole life and work afforded them an admirable example.

DR. ALBIN STOCKÝ, professor of archæology at Prague, died on April 18 at the age of fifty-eight years. He was the author of numerous publications dealing with Bohemia in the Stone and Bronze Ages. He had served on various archæological commissions and had given valuable assistance to museums in connexion with the identification of objects dating from prehistoric times.

WE regret to announce the following deaths:

Mr. Henry S. Hall, formerly head of the military and engineering side at Clifton College, author of many well-known textbooks of mathematics, on May 3, aged eighty-five years.

Mr. Carl Olaf Lundholm, technical adviser to the Nobel Trust in 1909-14, a pioneer in the manufacture of explosives, on May 8, aged eighty-four years.

Dr. J. P. van der Stok, director of the Section of Oceanography and Maritime Meteorology at the de Bilt Meteorological Institute, near Utrecht, in 1899-1923, formerly director of the Magnetic and Meteorological Observatory, Batavia, on March 29, aged eighty-three years.