

knowledge in all sorts of unexpected fields. To illustrate an argument he was fond of quoting anecdotes about the great classical figures of physics, and this he could do in the most entertaining way. But he was equally at home in the latest developments of science and was a shrewd commentator on people and politics.

All this erudition was combined with great charm, good humour and kindness. His kindness, however, had its drawbacks when it came to administration, for he could not bring himself to say anything which would disappoint his hearer, and preferred to defer a difficult decision indefinitely rather than cause anyone disappointment. Another idiosyncrasy was that he could scarcely ever be persuaded to write a letter; thus a visit from him usually came as a surprise, preceded at the best by a telegram, but more often introduced by an apologetic chuckle as he explained that he had meant to write. His genial presence both at home and abroad will be sadly missed by a host of friends. He leaves a widow, two sons, four daughters and three grandchildren.

D. SHOENBERG

Dr. N. S. Shatsky

DR. NIKOLAI SERGEEVICH SHATSKY, member of the Academy of Sciences of the U.S.S.R. and director of the Institute of Geology, died in Moscow in November 1960. He was born there on August 28, 1895. He began his geological career as a stratigrapher, carrying out a detailed geological survey in the Donetz basin, and in the Caucasus and Volga regions. This work led him to the study of geological formations as stratigraphical units. At the same time, Shatsky was writing of oil and coal-bearing strata, iron ores, manganese ores and phosphorites. It was, however, in the field of tectonics that Shatsky excelled, and it is not without reason that he is considered to be the founder of a new tectonic school in the U.S.S.R.

His tectonic and palaeogeological investigations in the European and Asiatic parts of the U.S.S.R. led him to establish a new Upper Proterozoic system, which he named the Rhiphaean system, and a new

orogenic epoch, coeval with this system, which he named the "Baikalian" epoch. However, his greatest achievement, shared with numerous collaborators, was a tectonic survey of the whole territory of the U.S.S.R., leading to the publication in 1956 of a most original, and in a sense most beautiful, tectonic map of the U.S.S.R. on the scale of 1 : 5,000,000. This map was the first of its kind. In it different colours were used for the major orogenic epochs and a number of tectonic structures were indicated by special signs. The Rhiphaean system and the tectonic map were briefly reviewed in Britain (*Proc. Geol. Soc., Lond.*, No. 1501, 108; 1953; and No. 1557, 29; 1958). Shatsky was also interested in the history of geology, and in 1941 he published, in Russian, a book on the life and work of the famous British geologist, R. I. Murchison, who greatly advanced the progress of geology in Russia. In March 1960, Shatsky was elected an Honorary Fellow of the Geological Society of London.

S. I. TOMKIEFF

Mr. B. Welbourn

MR. B. WELBOURN, formerly director and chief engineer of British Insulated Cables, died on July 1 at the age of eighty-five. He retired in 1945 on the formation of British Insulated Callender's Cables, Ltd., through the amalgamation of the British Insulated Co. and Callender's Cable and Construction Co.

Mr. Welbourn graduated from King's College, London, in 1896. After a period of service with the Electrochemical Co. of St. Helens, he joined, in 1897, the British Insulated Wire Co., of Prescott, becoming contracts manager in 1902, in which capacity he travelled widely. In 1927 came his appointment as chief engineer, and in 1942 he was elected to the board of the British Insulated Co.

In a life-time spent in the electrical industry, in which he had such a notable career, Mr. Welbourn had served as a member of the Council of the Institution of Electrical Engineers, was a vice-president of the Institution and past chairman of the Manchester and Liverpool centres.

NEWS and VIEWS

Canadian Scientific Attaché in Washington:

Dr. E. O. Hughes

DR. E. O. HUGHES, of the National Research Council of Canada, has been appointed as scientific attaché to the Canadian Embassy in Washington. While in Washington, Dr. Hughes will also serve as Canadian liaison officer at the British Commonwealth Scientific Office. Born in Wales, in 1916, Dr. Hughes received his initial education in Winnipeg, Manitoba, and Halifax, Nova Scotia. After undergraduate training in biology at McGill and Dalhousie Universities, he received an M.A. degree in 1939 from the University of Western Ontario. In 1942 he was granted a Ph.D. degree at the Ohio State University. During 1942-45 he was engaged in the administration of medical research for the National Research Council of Canada and the Royal Canadian Army Medical Corps. In 1945, Dr. Hughes became assistant professor of plant sciences in the University of Oklahoma, Norman, Oklahoma. In 1952 he returned

to Canada as a research biologist and editor in the Division of Applied Biology of the National Research Council. His work was primarily concerned with the classification and physiology of freshwater algae. During 1956-60 he was assistant to the director of the Biology and Health Physics Division of Atomic Energy of Canada Limited, Chalk River, Ontario. For the past year he has been acting chief of the public relations office at the National Research Council of Canada.

C.S.I.R.O. National Standards Laboratory:

Mr. N. A. Esserman

MR. NORMAN A. ESSERMAN, director of the National Standards Laboratory of the Commonwealth Scientific and Industrial Research Organization (Australia), has retired after twenty-three years service. Mr. Esserman graduated from the University of Sydney in 1916 with first-class honours in mathematics. He went to England in 1917 and worked in the Arsenal Branch of the