If the train of apparatus to be set up is too long for the room available, some of it may be put outside the laboratory. There is no question of cold and heat to be taken into account and during most of the year all that is needed is protection from the sun. There is always the advantage of good light and air and freedom from soot and dirt. Laboratory work is practically out-of-door work. There is no heating system, and no frozen pipes to be dreaded.

J. C. WITT

CHICAGO, SEPTEMBER 10, 1921

## CHARLES HENRY DAVIS 2ND

CHARLES HENRY DAVIS 2ND, Rear Admiral, retired, U. S. Navy, who was twice Superintendent of the Naval Observatory, died at Washington, D. C., December 27, 1921.

He was born in Cambridge, Mass., August 28, 1845, the son of Charles Henry Davis and Harriette Blake Mills.

Admiral Davis graduated from the Naval Academy in 1864. From 1875 till 1885 he was engaged principally in astronomical work, at first in the Naval Observatory at Washington, in the Department of Chronometers, and then in expeditions for the determination of longitudes by means of the submarine cables. Also, the latitudes of many stations were determined by Talcott's Method.

In No. 6, Navy Scientific Papers, published by the Bureau of Navigation, are given the investigations by Davis of Chronometer Rates as affected by Temperature and other Causes. The results of the longitude expeditions are presented in three publications of the Navy Hydrographic Office: with Lieutenant-Commander Francis M. Green and Lieutenant J. A. Norris "Telegraphic Determination of Longitudes, embracing the Meridians of Lisbon, Madeira, Porto Grande, Para, Pernambuco, Bahia, Rio de Janeiro, Montevideo, and Buenos Aires, with the latitudes of the Several Stations"; also with Lieutenant-Commander Green, and Lieutenant Norris, "Telegraphic Determination of Longitudes in Japan, China, and the East Indies, embracing the meridians of Yokohama. Nagasaki, Vladivostok, Shanghai, Amoy, Hong-Kong, Manila, Cape St. James, Singapore, Batavia, and Madras, with the latitude of the several Stations"; with Lieutenants Nornis and Laird, "Telegraphic Determination of Longitudes in Mexico and Central America and on the West Coast of South America, embracing the meridians of Vera Cruz, Guatemala, La Libertad, Paita, Lima, Anca, Valparaiso, and the Argentine National Observatory at Cordoba, with the Latitudes of the Several Sea-Coast Stations."

Davis as a Captain was Superintendent of the Naval Observatory from July, 1897, to April, 1898, leaving the Observatory to command the Dixie in the Spanish War. He returned to the Observatory in November, 1898, and remained on duty there as Superintendent until November, 1902. As Superintendent, Captain Davis took an active and successful part in the completion of the equipment of the New Naval Observatory and in formulating plans for the work to be carried on.

In 1904 Davis was made a Rear Admiral, and in 1904 and 1905 he was the U. S. representative on the international commission of inquiry on the North Sea incident which sat in Paris.

After service at sea as Squadron Commander, Admiral Davis was retired August 28, 1907. He continued to be interested in astronomy after his retirement, by reason of his achievements in science and because of his long service at the Naval Observatory.

His father, also a Rear Admiral, had twice been Superintendent of the Observatory and had established the Nautical Almanac Office.

## SCIENTIFIC EVENTS BRITISH SCIENTIFIC INSTRUMENTS<sup>1</sup>

THE exhibition of British scientific instruments held under the auspices of the Physical Society and the Optical Society at the Imperial College of Science and Technology, of which a description was given in our columns last week, is a timely reminder of the importance of scientific instruments in the national economy. Modern civilization is based, and must be increasingly dependent, on the extension of

<sup>&</sup>lt;sup>1</sup> From Nature.