

their separateness without, however, losing sight of their intimate interdependence.

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ROLLIN ARTHUR HARRIS

DR. ROLLIN ARTHUR HARRIS, of the U. S. Coast and Geodetic Survey, died suddenly of heart disease on the twentieth of January, 1918, in the fifty-fifth year of his age. He was born in Randolph, N. Y., April 18, 1863, and received his early education in the public schools and high school of Jamestown, N. Y. In 1881 he entered Cornell University, receiving the degree of Ph.B. in 1885. He remained at Cornell, taking up graduate work in mathematics and physics. In 1886-7 he was a fellow in mathematics and in 1888 he received the degree of Ph.D. From 1889 to 1890 he was a fellow in mathematics at Clark University where he pursued special studies in mathematics and lectured on mathematical subjects.

He entered the Tidal Division of the U. S. Coast and Geodetic Survey as computer in 1890, through the United States Civil Service. After becoming familiar with the work, he began the preparation of a publication into which would be gathered the tidal information scattered in various journals and memoirs and in which the methods of tidal reduction and prediction would be coordinated. Dr. Harris threw himself into the work with enthusiasm. Because of his splendid training in mathematics and his ability, he was specially fitted for the work, and the result, as embodied in the "Manual of Tides," which appeared in six parts in various reports of the superintendent of the Coast and Geodetic Survey, between the years 1884 and 1907, has placed our country well at the front in that branch of scientific enquiry. Taken as a whole the "Manual of Tides" is a monumental work of some 1,200 quarto pages of text and plate containing a large amount of original contributions, in a field cultivated by the most brilliant mathematicians.

It is gratifying to know that the "Manual of Tides" has received the recognition it

merited from scientists the world over. Perhaps it may not be out of place here to quote the words of the eminent French mathematician Henri Poincaré. In his "Mécanique Céleste" he subjects the various tidal theories to searching analysis and sums up by saying that "it appears probable that the final theory will have to borrow from that of Harris a notable part of its essential features."

Dr. Harris published a number of articles in SCIENCE and other scientific journals on mathematical and tidal subjects. Mention should also be made of "Arctic Tides," a monograph published by the Coast and Geodetic Survey in 1911 which is a classic of its kind.

Personally, Harris was a man of modest bearing, somewhat reticent, but possessed of a pleasing sense of humor. He was an indefatigable worker with a high conception of the obligations of the scientist. He was a member of scientific societies, both local and national. He leaves a widow, Emily Doty Harris, whom he married in 1890.

His loss will be felt by his friends and colleagues of the Coast and Geodetic Survey and by the many scientific men, engineers and explorers in many parts of the world, who brought their problems to him and received the benefit of his wide knowledge in a peculiarly abstruse branch of science.

SCIENTIFIC EVENTS

DR. FEWKES AND THE BUREAU OF AMERICAN ETHNOLOGY

MR. FREDERICK WEBB HODGE, who has been the head of the Bureau of American Ethnology of the Smithsonian Institution since 1905, has resigned to accept a position in connection with the Museum of the American Indian, founded by George G. Heye, of New York City. Mr. Hodge's resignation, to take effect February 28, has been accepted with regret by the secretary of the Smithsonian Institution, with whom he has been associated in scientific work for many years. Mr. Hodge will be greatly missed by his associates and generally by the men of Washington's scientific colony, among whom he is well known.