

RETIREMENT OF GEORGE WASHINGTON LITTLEHALES

PRINCIPAL SCIENTIST, UNITED STATES HYDROGRAPHIC OFFICE.

The International Hydrographic Bureau has received the announcement of the retirement from active service in the United States Hydrographic Office of Mr. George Washington LITTLEHALES, hydrographer, oceanographer, author, etc. whose work during the past half century has gained for him an eminent place in the advancement of the science of hydrography, oceanography and navigation.

Mr. LITTLEHALES was born in the State of Pennsylvania, U.S.A., on 14th October, 1860, and entered the United States Naval Academy as a midshipman in 1879 from which institution he graduated in 1883, and after spending two years afloat in the North Atlantic Squadron he received the post-graduate diploma and returned to civil life. In 1888 the George Washington University awarded him the degree of Civil Engineer which he had earned in the course of study.

In the summer of 1885 he joined the United States Hydrographic Office with which he has been continuously associated until his retirement. He has been for many years a leading student in oceanography, terrestrial magnetism marine hydrography, navigation and related subjects and has been associated in various official capacities with many scientific societies in the United States.

In earlier years as Chief of the Division of Chart Construction he did notable work in extending the field of usefulness of the Hydrographic Office. In later years he has been Chief of the Research Division of the Hydrographic Office where his work in hydrography and related sciences gained for him an international reputation as an hydrographer and oceanographer of the highest order.

It was due to his conception that magnetic surveys on the ocean came to be performed in a non-magnetic ship, and it was he who contributed the preliminary designs for the non-magnetic ship *Carnegie*, built by the Carnegie Institution of Washington for the purpose of making such magnetic observations.

He has been a representative of the United States at various international conferences, among which was the International Hydrographic Conference in London in 1919 when this Bureau was inaugurated.

Mr. LITTLEHALES has written many useful books and articles on the subjects of hydrography, oceanography and navigation.

Although Mr. LITTLEHALES has retired from active duty in the United States Hydrographic Office, the International Hydrographic Bureau hopes that he will continue for many years to come his useful and outstanding work in the field of hydrography, oceanography and navigation.

