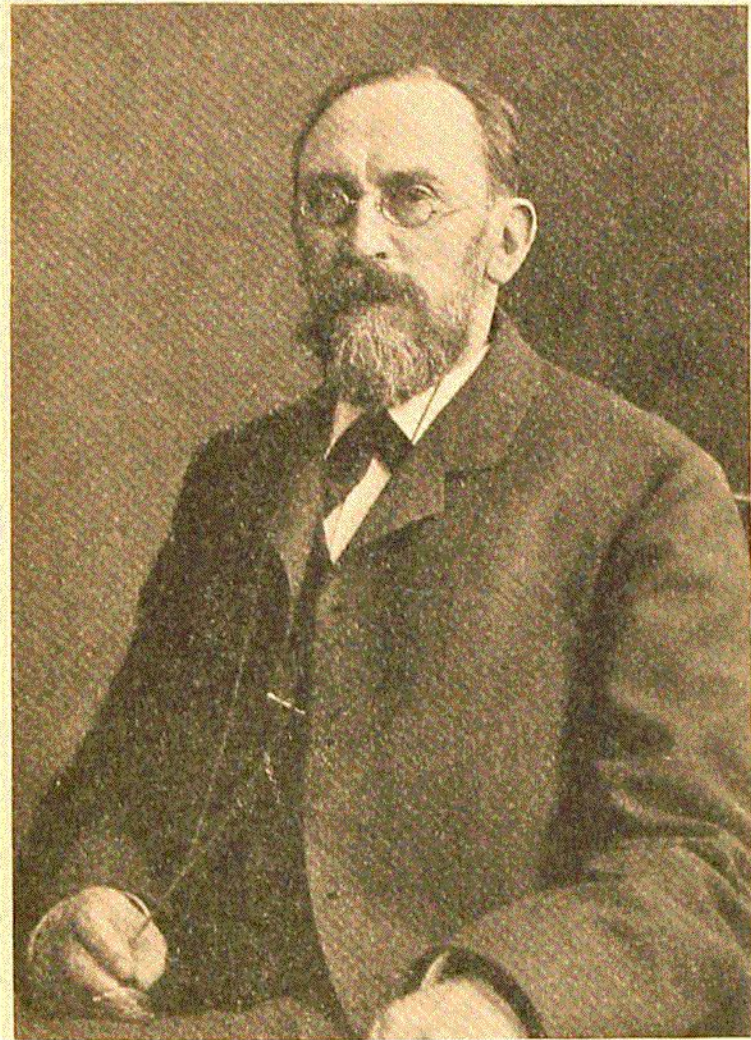


From 1886 to 1889 the Russian steamer "Vitiaz," under Makaroff, made a voyage round the world, during which valuable observations on the temperature and specific gravity of the waters of the North Pacific were made, and in 1890 Russian scientists, notably Lebedinzeff and Andrusoff, investigated the physical and biological conditions in the deep water of the Black Sea.

The "Vitiaz."  
Makaroff.  
Lebedinzeff  
and Andrusoff  
Observations  
in Black Sea.

In 1889 a German expedition on board the S.S. "National" was despatched to the North Atlantic, with the special object of studying the plankton (hence called the Plankton Expedition) by improved methods, under the direction of Victor Hensen, who was accompanied by several other scientific men.

The  
"National."  
Plankton  
Expedition.  
V. Hensen.



PROFESSOR VICTOR HENSEN.

From 1890 till 1898 the Austrian steamer "Pola" made observations in the Mediterranean and the Red Sea, the chemical work being in the hands of Natterer, who published some interesting results.

The "Pola."  
Natterer.

In 1890 systematic observations in the North Sea and adjacent waters were commenced by Swedish investigators under Otto Pettersson and Gustav Ekman, important results as to temperature, salinity, alkalinity, currents, gases, and plankton being achieved, a summary of which was published by Pettersson in English.<sup>1</sup>

O. Pettersson  
and  
G. Ekman.

During the years 1893 to 1896 Nansen made his remarkable drift on board the "Fram" across the North Polar Sea, during which valuable oceanographical observations were taken, his soundings tending to prove that the position of the North Pole is occupied not by land but by a deep sea, as Murray had

Nansen's drift  
in the  
"Fram."

<sup>1</sup> *Scott. Geogr. Mag.*, vol. x., 1894.