

been established, colonies had been founded, countries rich in precious metals had been conquered, and people rested in the enjoyment of wealth. The time had not yet come when civilised and educated nations would thirst for knowledge, and would send their vessels to investigate what still remained unknown regarding the sea. The expedition of Edmund Halley, in 1699, to improve our knowledge concerning longitude and the variation of the compass, was a purely scientific voyage; still scientific voyages were really initiated at the time of James Cook, in the latter half of the eighteenth century.

In the foregoing short account the important additions made to the knowledge of the distribution of land and water during the period under consideration have been indicated. Let us now turn to some other aspects of the science of Oceanography. After Magellan's voyage of circumnavigation the nomenclature of the sea assumed a modern character. Sebastian Münster, in the first general map in his *Cosmography*,¹ introduces the following denominations:—*Mare Pacificum*, *Mare Indicum*, *Mare Septentrionale* applied to the Arctic Ocean, *Oceanus Occidentalis* applied to the basin of the Atlantic north of the equator, and *Mare Aethiopicum* to the southern part of the Atlantic. Gerard Mercator, in his famous universal map, replaces the *Oceanus Occidentalis* of Münster's maps by *Oceanus Atlanticus*, corresponding to the North Atlantic, the southern part of the Atlantic is called *Oceanus Aethiopicus*, and at the western opening of the Strait of Magellan we read *El Mar Pacifico*.²

NOMENCLATURE OF
THE OCEANS.

MÜNSTER.

According to Krümmel,³ in the second half of the sixteenth century and beginning of the seventeenth, the term *Atlantic* was applied:—(1) to the sea lying to the west of Morocco (Münster); (2) to the sea to the south-west of Liberia (Münster later); (3) to the north-west portion of that ocean (Michael Mercator); (4) to the whole of the North Atlantic (Gerard Mercator); (5) to the whole Atlantic (Varenius); and (6) to the Universal Ocean (Ortelius).

Varenius was the first to undertake a critical examination of this nomenclature, and he arranged it as follows:⁴—(1) The *Atlantic Ocean*, often called *Mare del Nort*; this is the sea enclosed between the western coasts of the Old World and the eastern coasts of the New. He divides the Atlantic into two parts, one north and one south of the equator; in the north this ocean joins the Hyperborean Sea, and in the south the Austral Ocean. (2) The *Pacific Ocean* (*Mare Pacificum*), often given the name of *Mare del Zur*; it is situated between America and Asia, and extends its immense

VARENIUS.

¹ Münster, *Cosmographia Universalis*, Basel, 1544.

² This Spanish nomenclature, as observed by Krümmel (*Versuch einer vergleichenden Morphologie der Meeresräume*, Leipzig, 1879, p. 3), often used at that period, did not simplify matters. Thus we find a *Mar del Nort*, sometimes applied to the North Atlantic and sometimes to the whole Atlantic; a *Mar di India*, or even a *Mar del Zur*, standing for the Pacific. Traces of this singular nomenclature still exist in the names of two parts of the Nicaragua Republic, *San Juan del Norte* (or Greytown), being situated twenty miles south of *San Juan del Sur*.

³ Krümmel, *op. cit.*, p. 6.

⁴ Varenius, *Geographia generalis in qua affectiones generales telluris explicantur*, p. 82, Cambridge, 1672.

(SUMMARY OF RESULTS CHALL. EXP.—1894.)