

enumerated by Mas'ūdī,¹ an Arabian naturalist and geographer of the tenth century, to whose works we shall presently refer.²

The numerous and distant peregrinations of the Arabs need not be followed. It will suffice to state that they were acquainted with the whole of Southern Europe, the southern half of Asia, North-West Africa as far south as 10° north, and the eastern coasts of the same continent as far as Cape Corrientes.³ In the time of Soleiman they had described in detail the islands in the Strait of Sunda, and everything indicates that they had landed on the Moluccas, Madagascar, and the Canaries. The Arabs must therefore be credited with the discovery of the Great Pacific beyond China, although it is generally maintained that this ocean was first made known by the travels of Marco Polo in the fourteenth century.⁴ (For Arab maps of the 11th and 12th centuries, see Plate V.)

**MARINERS'
COMPASS.**

One of the most important results arising from the relations of the Arabs with China is believed to have been the introduction of the mariners' compass. The property of the magnet was known to the Chinese from time immemorial, and they are reported to have applied it to navigation about the fourth century of our era, but this statement is not supported by sufficient evidence. The Arabs are supposed to have learnt the use of this marvellous apparatus in the East, and through them it is said to have passed to the sailors of the Mediterranean. Marco Polo does not, however, mention the mariners' compass, and we have no certain knowledge that it was in use among Chinese sailors at a time long posterior to the Arab voyages of the tenth or eleventh centuries. The Egyptians were accustomed to suspend the loadstone at the end of a string and to observe its motions. In its primitive form among sailors of the west the compass was simply a needle that had been touched with the loadstone and was floated on a piece of cork or on a straw during the night or misty weather. In this form it was in use among northern sailors as early as 1100 A.D., and it may quite well have developed in their hands into a complete nautical instrument. For a long time there appears to have been a prejudice against its use among sailors. Roger Bacon is reported to have said that no master mariner dared use it, so great was the appearance of its being constructed under the influence of some infernal spirit.⁵

¹ Flourished about 915 A.D.

² Mas'ūdī, *Meadows of Gold and Mines of Gems*, translated by Aloys Sprenger, M.D., London, 1841; *Les Prairies d'Or*, texte et traduction, par MM. Barbier du Meynard et Courteille, Paris, 1861.

³ See J. T. Bent, *op. cit.*, p. 190.

⁴ Japan was known to the Arabs as the Wak-wak Islands. For an account of an expedition of a fleet from Japan to East Africa in A.D. 945, see De Goege, *Verslag. kon. Akad. Wet. Amsterdam*, 1881, ser. 2, part x., Afd. Letterkunde, p. 189.

⁵ The following is an extract from a letter from Latini to Cavalcanti describing a visit to Roger Bacon at Oxford, apparently in the year 1258 :—"This discovery, which appears useful in so great a degree to all who travel by sea, must remain concealed until other times; because *no master-mariner dares to use it*, lest he should fall under a supposition of his being a magician; nor would even the sailors venture themselves out to sea under his command, if he took with him an instrument which carries so great an appearance of being constructed under the influence of some infernal spirit. A time may come when these prejudices, which are of such great hindrance to researches into the secrets of