

Mediterranean in general appearance and habits, is one of the great objects of fishery off the Sind and Mekran coasts. It comes in pursuit of shoals of anchovies, very much like the Mediterranean fish also. (*I. B. II. 231; Sir B. Frere.*)

[Friar Odoric (*Cathay*, I. pp. 55-56) says: "And there you find (before arriving at Hormuz) people who live almost entirely on dates, and you get forty-two pounds of dates for less than a groat; and so of many other things."]

NOTE 3.—The stitched vessels of Kermán (*πλοιάρια ραπτά*) are noticed in the *Periplus*. Similar accounts to those of our text are given of the ships of the Gulf and of Western India by Jordanus and John of Montecorvino. (*Jord. p. 53; Cathay, p. 217.*) "Stitched vessels," Sir B. Frere writes, "are still used. I have seen them of 200 tons burden; but they are being driven out by iron-fastened vessels, as iron gets cheaper, except where (as on the Malabar and Coromandel coasts) the pliancy of a stitched boat is useful in a surf. Till the last few years, when steamers have begun to take all the best horses, the Arab horses bound to Bombay almost all came in the way Marco Polo describes." Some of them do still, standing over a date cargo, and the result of this combination gives rise to an extraordinary traffic in the Bombay bazaar. From what Colonel Pelly tells me, the stitched build in the Gulf is *now* confined to fishing-boats, and is disused for sea-going craft.

[Friar Odoric (*Cathay*, I. p. 57) mentioned these vessels: "In this country men make use of a kind of vessel which they call *Jase*, which is fastened only with stitching of twine. On one of these vessels I embarked, and I could find no iron at all therein." *Jase* is for the Arabic *Djehaz*.—H. C.]

The fish-oil used to rub the ships was whale-oil. The old Arab voyagers of the 9th century describe the fishermen of Siraf in the Gulf as cutting up the whale-blubber and drawing the oil from it, which was mixed with other stuff, and used to rub the joints of ships' planking. (*Reinaud, I. 146.*)

Both Montecorvino and Polo, in this passage, specify *one rudder*, as if it was a peculiarity of these ships worth noting. The fact is that, in the Mediterranean at least, the double rudders of the ancients kept their place to a great extent through the Middle Ages. A Marseilles MS. of the 13th century, quoted in Ducange, says: "A ship requires three rudders, two in place, and one to spare." Another: "Every two-ruddered bark shall pay a groat each voyage; every one-ruddered bark shall," etc. (See Duc. under *Timonus* and *Temo*.) Numerous proofs of the use of two rudders in the 13th century will be found in "*Documenti inediti riguardanti le due Crociate di S. Ludovico IX., Re di Francia, etc., da L. T. Belgrano, Genova, 1859.*" Thus in a specification of ships to be built at Genoa for the king (p. 7), each is to have "*Timones duo, affaiticos, grossitudinis palmorum viiii et dimidia, longitudinis cubitorum xxiiii.*" Extracts given by Capmany, regarding the equipment of galleys, show the same thing, for he is probably mistaken in saying that one of the *dos timones* specified was a spare one. Joinville (p. 205) gives incidental evidence of the same: "Those Marseilles ships have each two rudders, with each a tiller (? *tison*) attached to it in such an ingenious way that you can turn the ship right or left as fast as you would turn a horse. So on the Friday the king was sitting upon one of these tillers, when he called me and said to me," etc.* Francesco da Barberino, a poet of the 13th century, in the 7th part of his *Documenti d'Amore* (printed at Rome in 1640), which instructs the lover to whose lot it may fall to escort his lady on a sea-voyage (instructions carried so far as to provide even for the case of her death at sea!), alludes more than once to these plural rudders. Thus—

" — se vedessi avvenire
Che vento ti rompesse
Timoni . . .
In luogo di timoni
Fa spere † e in aqua poni." (P. 272-273.)

* This *tison* can be seen in the cuts from the tomb of St. Peter Martyr and the seal of Winchelsea.
† *Spere*, bundles of spars, etc., dragged overboard.