The form assigned by Lele and Gae to Sagitta bombayensis agrees in all systematic details with the widely distributed species—Sagitta robusta Doncaster. Sketches and tables by Burfield and Harvey (1926) show that S. robusta presents variations within the specific limit and that S. ferox Doncaster is a synonym of S. robusta. The following table will show that S. bombayensis agrees, practically in all characters, with S. robusta. The description of the latter is based on the details given by Doncaster (1902), Burfield and Harvey (1926), John (1933) and also on Michael's description of S. ferox (1919).

S. bombayensis, Lele and Gae

S. robusta Doncaster

Head is broad and short

Collarette thick up to ventral ganglion

Body opaque and bodywall muscular

A thickened epidermis extends nearly all through the length of the body

The posterior fin is equally

Posterior fin widest in the middle of its caudal half Tail is 4 the body in length

short as the anterior fin

Distance between genital openings is about 12 per cent. in large specimens
Anterior fin and posterior fin separated by \(\frac{1}{3} \) the length of the fins

Prehensile jaws 9-10 Anterior teeth 4-10 Posterior teeth 8-26 Head broad and thick.
The shape of the head varies according to the condition of prehensible spines

Collarette well developed extending to ventral ganglion and in some cases to anterior fin Boly firm and opaque,

musculature strong
Epidermis is thickened
behind the head

The anterior fin may be as long as or longer than posterior, but generally slightly shorter

Posterior fin widest behind the septum

Tail is 25 to 32 per cent. of the body

Distance between genital opening is 13 per cent (smaller specimens)

Length of the posterior fin 18 to 20 per cent. of the body. Anterior fin to posterior fin is 7.8 per cent. of the body. Hence distance between the fin is $\frac{1}{3}$ nearly

Prehensile jaws 5-8 Anterior teeth 6-8 Posterior teeth 11-16

SAGITTA BOMBAYENSIS, LELE AND GAE—A SYNONYM OF SAGITTA ROBUSTA DONCASTER—WITH A RECORD OF SAGITTA PULCHRA DONCASTER, FROM INDIAN COASTAL WATERS*

In the course of a detailed study of chætognaths of the coastal waters of the different parts of India, some errors in the account of 'The common Sagittæ of the Bombay Harbour' by Lele and Gae (1936) have come to light. Russell (1936) and Kemp (1938) have pointed out the importance of Sagitta as an indicator of water movements which have in turn a bearing on fishery problems and the need for proper classification.

While describing species of Sagitta, it is customary to record the measurements of the collarette, ventral ganglion, anterior and posterior fins, distance between the fins, tail septum and seminal vesicles of a large number of specimens, as has been done by Michael (1919), Burfield and Harvey (1926), John (1933) and Subramaniam (1940). Lele and Gae do not observe this convention,

but base their description on three specimens, two of which are immature, although their species is stated to occur in swarms during the monsoon period. In instituting this species, they rely on only two characters—the number of prehensile jaws and teeth and the thick epidermis, while according to John (1933), the jaws and teeth fall off at times, while the thickened epidermis occurs also in *S. pulchra*, *S. ferox* and *S. regularis* (vide Doncaster, 1902).

S. robusta has been recorded from Madras (John, 1933) and the Gulf of Manaar (Varadarajan and Chacko, 1942). It has been described as a common species of Sagitta of the Indian Ocean by Doncaster (1902), Fowler (1906) and Burfield and Harvey (1926). Comparison of the specimens from both the coasts of India with Lele and Gae's species from Bombay, makes it evident that the latter is a synonym of S. robusta Doncaster as is S. gardineri Doncaster a synonym of S. enflata Grassi (vide Burfield and Harvey, 1926) recorded by John (1933) and Menon (1945) from the east and west coasts of India respectively.

A study of the plankton collections from Bombay enables me to record S. neglecta Aida, S. tenuis Conant and S. pulchra Doncaster, of which the last named is the first record from Indian Coastal waters.

Grateful thanks are due to Dr. H. Srinivasa Rao and to Dr. B. S. Bhimachar for helpful criticism, and to Dr. D. V. Bal, for the loan of the plankton samples.

Central Marine Fisheries
Research Station, P. C. George.
Calicut,
October 24, 1949.

^{*} Published with the permission of the Chief Research Officer, Central Marine Fisheries Research Station, Mandapam.

^{1.} Burfield, S. T., and Harvey, E. J. W., Trans. Linn. Soc., 1926, 19, 5. 2. Doncaster, C., Fauna and Geogr. Maldive-Laccadive Archipel., 1902, 1. 3. Fowler, G. H., Siboga Expeditie, 1906, 21, 6. 4. John, C. C., Bull. Madras Mus. (N. S.) Nat. Hist., 1933, 3, 1. 5. —, Rec. Ind. Mus., 1937, 39, 83. 6. Kemp, S., Presidential Address, British Association for the Advancement of Science, 1938. 7. Lele, S. H., and Gae, P. B., Journ. Bombay Univ., 1936, 4, 1. 8. Menon, M. A. S., Proc. Ind. Acad. Sci., 1945, 22, 9. Michael, E. L., Smithson. Inst. U. S. Nat. Mus. Bull., 1919, 100, 1. 10. Russell, F. S., J.M.B.A. of U.K., 1936, 20, 3. 11. Subramaniam, M. K., Curr. Sci., 1940, 9, 8.