Crab-Fishing at Uttarbhag, Lower Bengal.[1]

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SCYLLA SERRATA (Forskål) is the commonest edible crab of the deltaic Bengal. It is known as *Samudra Kekra* and large quantities of it are brought alive to the Calcutta markets where they command a ready sale, the flesh being greatly relished by the Bengalee population. The species grows to about 8 inches across the carapace and is one of the largest and strongest of the Indian crabs. *Scylla serrata* is widely distributed in the Indo-Pacific region and is abundant in estuaries, backwaters and mangrove swamps; it is also capable of living in fresh water. Stebbing[2] remarks that "On the muddy coasts of the Bay of Natal, Krauss says, this species lives in great deep holes, and wears the dingy earthly colour of its residence. They sit at the openings of their holes when the tide is coming to snap up the food which it brings them, and to sun themselves when the tide is going out. At any one's approach they vanish into their holes in a moment, or, if their escape is cut off, they raise themselves up on their hind legs, and by clashing together their powerful claws endeavour to scare away the intruder. By driving a spade into their slanting tunnels their retreat may be cut off, or they will clutch at the proffered point of a stick and may be so drawn out, but the Caffres, who consider

Fig. 2.

A boy using the implement employed for pulling out *Scylla serrata* (Forskål) from its burrow at Uttarbhag.

them dainty food, capture them by spear-throwing." I have noticed also that at Uttarbhag[3] the crab is found in deep burrows along the muddy banks of the Piali Nadi and connected channels at low tides, but the methods employed for fishing it are very different from those noted by Krauss in Natal.

The implement (Fig. 1) employed for pulling out crabs from their burrows consists of a blunt iron hook, lashed to a piece of split bamboo, the length of which depends upon the individual using it. When a crab

Fig. 1.

A portion of the Hooked-Stick used at Uttarbhag for pulling out *Scylla serrata* (Forskål) from its burrow. × 1/7.

[1] Published with permission of the Director, Zoological Survey of India.

[2] Stebbing, *A History of Crustacea*, p. 69 (London, 1893).

[3] For description of Uttarbhag and physical conditions prevailing there see Hora, "Animals in Brackish Water at Uttarbagh, Lower Bengal," *Curr. Sci.*, 1933, **1**, p. 381.

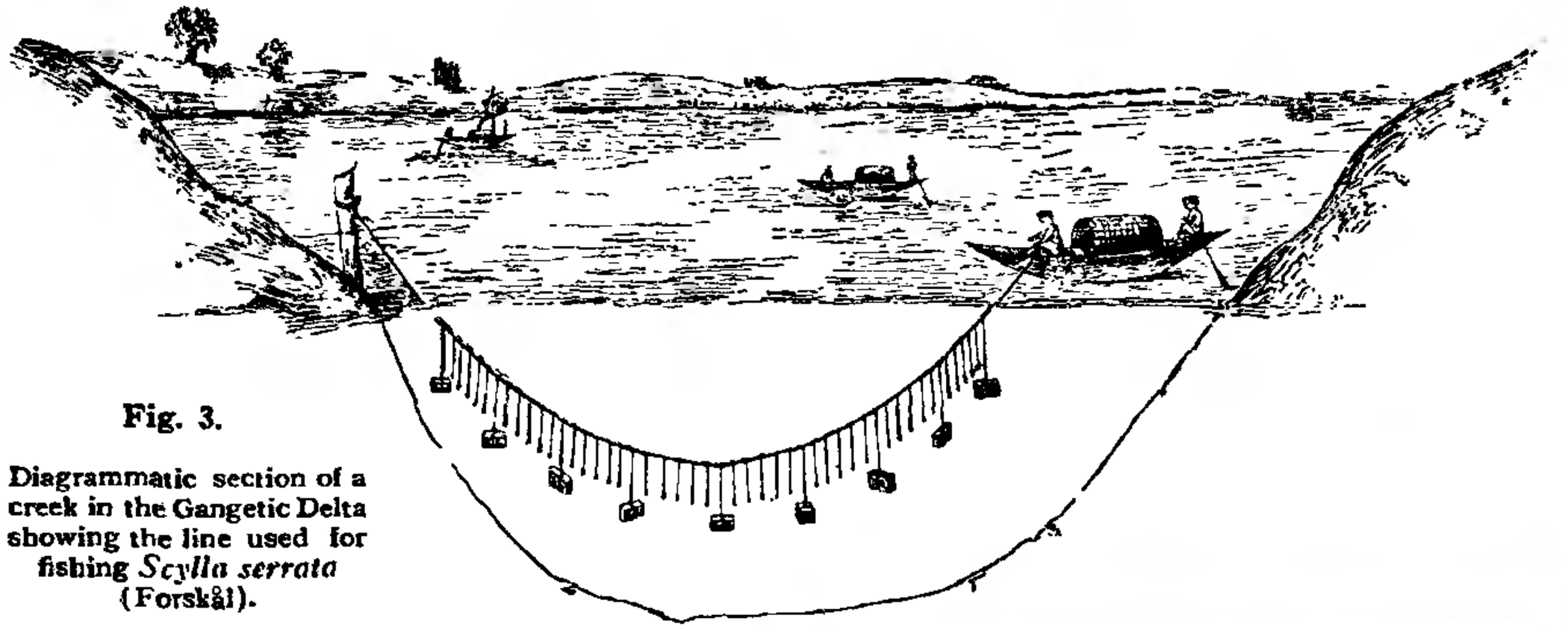

Fig. 3.

Diagrammatic section of a creek in the Gangetic Delta showing the line used for fishing *Scylla serrata* (Forskål).

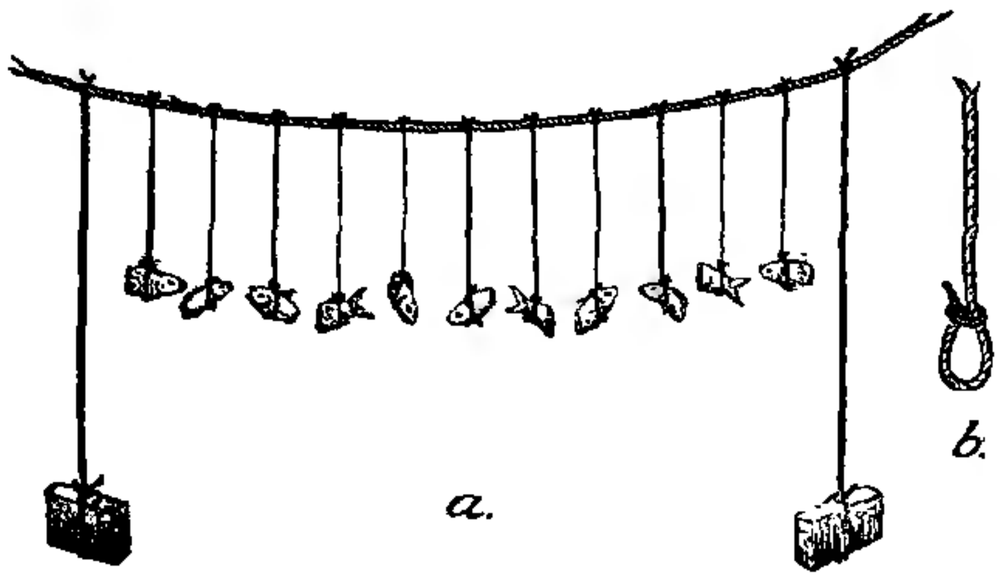

Fig. 4.

A portion of the line used for catching *Scylla serrata* (Forskål). (*a*) shows arrangement of weights and bait. (*b*) slip-noose for fastening bait.

hole is located, the hook-end is thrust into it (Fig. 2) and the rod is moved up and down or manipulated in such a way that the crab is hooked and then it is dragged out. The crab sometimes puts up a strong fight and several of its limbs are broken before it can be pulled out and secured in a basket. By this device a few crabs are collected for domestic use.

The commercial method of fishing is very ingenious. A suitable creek is selected and on one bank a thick bamboo is driven into the ground near the water level and one end of a line, which consists of about a quarter inch thick cord, is fastened to it and then the fishermen row to the other bank of the creek and go on releasing the line which is usually long enough to cover the width of the creek (Fig. 3). The other end of the line is fastened to a post in the boat. The line is weighted at regular intervals with half-bricks and in between the weights at short intervals are suspended pieces of fish which act as bait (Fig. 4*a*). Each piece is secured by a slip-noose (Fig. 4*b*) so that when the bait is pulled, the noose becomes tighter round it. Crabs are attracted to the bait and cling to the line with their strong claws. When the men in the boat feel that a sufficient weight of crabs is hanging on to the line, they begin to pull out the rope. The crabs cling to the bait with great tenacity and are transferred to the hold of the boat which is covered by planking. The weight of the rope is sometimes so

Fig. 5.

A pair of wooden pincers used for holding crabs when counting them for sale. × 1/7.

Fig. 6.

Bank of and small islands in a channel crowded with *Varuna litterata* (Fabr.). The small channel runs along the left-hand side of the road to Uttarbhag between milestones 4 and 5.

Fig. 7.

Fishing for *Varuna litterata* (Fabr.) in a small channel along the road to Uttarbhag between milestones 4 and 5.

Fig. 8.

Fishing for *Varuna litterata* (Fabr.) in a shallow, vast expanse of water at Uttarbhag. Notice several children fishing in a ring with circular nets.

heavy that 5 to 6 men are required to pull it out of the water. There is usually a small quantity of water in the hold and the crabs are kept alive in it for several days.[4]

The fishermen sell their catch to the retail vendors by quoting the price per score of individuals. The dead specimens are usually given away to poor people as they fetch very little price. In counting the crabs, a wooden pincer (Fig. 5) is used to catch each crab, as the bites of these crabs by their powerful claws are very much dreaded. These crabs are very active and the baskets containing them are securely covered.

The only other species of crab (*Chīti Kekra*) that is fished for food purpose on a small scale, but not for commercial exploitation, is *Varuna litterata* (Fabr.). It is a small species[5] rarely exceeding two inches across the carapace. It is found in great abundance and usually lives in burrows along the embankments or sides of pools. During hot months when the pools begin to dry, the crabs collect in wet places, usually in the middle of pools and are fished out by hand.[6] The real fishing season for these crabs is May-June when large numbers come together and lie along banks and in shallow waters (Fig. 6), presumably to migrate to the lower reaches of the delta for the purpose of breeding. The crabs are simply swept from such situations either with hands or with a small circular, conical net (Fig. 7). Their legs are broken and then they are stored in baskets or small earthen pots. In shallow waters the same type of circular net (Fig. 8) is used and a large number of specimens are collected. *Varuna litterata* is fished for domestic use and not brought even to the Uttarbhag market for sale.

[4] The boats are of the same type as those used for the trade in "Live Fish"; see Hora, *Jour. As. Soc. Bengal* (N.S.), 1934, **30**, pp. 1–15, pls. i-vi.

[5] For bionomics of the species, see Hora, "A Note on Bionomics of Two Estuarine Crabs," *Proc. Zool. Soc. London*, 1933, pp. 881–884, 2 pls.

[6] Hora, "Mud-fishing in Lower Bengal," *Jour. Proc. As. Soc. Bengal* (N.S.), 1932 (1933), **28**, pp. 197–205, pls. x–xi.