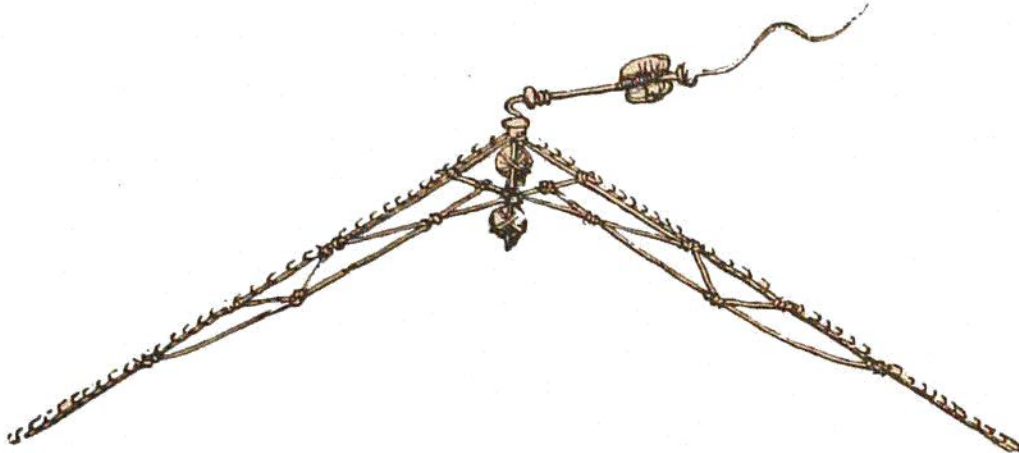


all along their length, the points of the hooks being directed towards the angle of the machine.

The whole is very ingeniously strengthened by well-planned cross pieces, and is weighted with stones. It is dragged on the bottom by means of a light Manila hemp cord, not more than  $\frac{1}{8}$ th of an inch in diameter of section, which is attached to the angle. A stone attached to a stick is fastened just in front of the angle to keep the point down on the bottom. The hooks creeping over the bottom and sweeping an area nearly 14 feet wide, catch in the upright sponges and drag their bases out from the mud. These sponges, once so rare and expensive, were a drug in the market at the time of our visit to Cebu. They were brought off to the ship in washing-baskets full, and sold at two shillings a dozen.

Mactan Island consists of an old coral reef raised a few feet (eight or ten at most) above the present sea level. At one



MACHINE USED AT CEBU TO DREDGE UP *EUPLECTELLA ASPERGILLUM*.

part of the island, where a convent stands, a low cliff fringes the shore, being the edge of an upper stratum of the upheaved reef, of which the island is composed. This raised reef is here preserved, but has been removed by denudation, over the portion of the island immediately fronting Cebu, with the exception of a few isolated pillar-like blocks, which remain, and are conspicuous from the anchorage. These show that the whole island was once of the same height as the distant cliff.

Opposite the town of Cebu, the island of Mactan is bordered by a wide belt of denuded coral flat, partly covered at high tide. The surface is scooped out into irregular basins and sharp projecting pinnacles, and covered in all directions with mud, resulting from the denudation. Very few living corals are to be found on these flats, but they are fringed at their seaward margin by small beds of living corals.