retracted, entirely closes the mouth of the shell, the fold of the mantle closing the gill cavity was to be seen rising and falling, with a regular pulsating motion, as the animal in breathing took in the water, which was afterwards expelled through the siphon. The tentacle-like arms contrast strongly with those of most other Cephalopods, because of their relatively extreme slightness and shortness, though they are not shorter proportionately than those of the living Sepia. They are held by the animal, whilst swimming, extended radially from the head, somewhat like the tentacles in a sea anemone; but each pair has its definite and different direction, which is constantly maintained. This direction of the many pairs of tentacles at constant but different angles from the head, is the most striking feature to be observed in the living Nautilus. Thus, one pair of tentacles was held pointing directly downwards; two other pairs, situated just before and behind the eyes, were held projecting obliquely outwards and forwards, and backwards respectively, as if to protect the organs of sight. In a somewhat corresponding manner, the tentacular arms of the common cuttle-fish whilst living are maintained in a marked and definite attitude, as may be observed in any aquarium. Another living Nautilus was brought to the Consul at Kandavu during the stay of the Challenger. The natives were said to frequently catch them alive, and to give them to their chiefs, who eat them."1

<sup>1</sup> Narr. Chall. Exp., vol. i. pp. 490, 491.