They are now often out of easy reach, the former floors of the caves having slipped away. They are grouped in all sorts of ways, and amongst them one was seen in which a finger was missing, the native having possibly had a finger cut off as a matter of ceremony. The figure of a whole man is said to exist thus executed, in Cowan Creek, close by. Exactly similar hand marks, made in the same way by the Pueblo Indians, occur in New Mexico in caves in the neighbourhood of the town of Zũni.

The steam pinnace was frequently engaged in dredging and trawling in Sydney Harbour, and the tow-nets were extensively used. Annelid and Ascidian larvæ were especially abundant on the surface, and large collections of Invertebrates were made from the bottom. Of the numerous forms here obtained none were more interesting to the naturalists than Trigonia (Trigonia lamarckii), a genus of which over a hundred fossil species from Secondary formations of Europe, the United States, parts of South America, Africa, India, &c., are already known. The genus was supposed to be extinct until discovered living in Bass Strait by Quoy and Gaimard, by whom the soft parts were first described. Huxley subsequently gave further details of the anatomy, and Selenka has still more recently published a memoir on this subject. Von Willemoes Suhm, who examined all the recent species known, at the time of his death, thought they might be reduced to four—Trigonia lamarckii and Trigonia strangii from Port Jackson and Botany Bay, Trigonia uniophora from the region of Torres Strait, and Trigonia margaritacea (= Trigonia pectinata) from Bass Strait and Southeast Australia. Besides these there is in the Sydney Museum (in single valves) a Trigonia showing very large tubercles on the radiating ribs like some of the fossil forms, which appears to be undescribed. Since von Willemoes Suhm made the above notes another species (Trigonia acuticostata), which was previously only known as a Miocene fossil, has been dredged alive in Bass Strait.

Several specimens of the Port Jackson Shark (*Cestracion philippi*) were also procured, and it is interesting to note that the remains of a closely allied Plagiostomous fish have been found in Secondary deposits along with *Trigonia*.

Von Willemoes Suhm says:—"The Phyllopods got at Sydney belong to the genera Limnetis and Limnadia, and are especially interesting because of Limnadia, found in some places in Europe, is constantly parthenogenetic, the male being known only from the Australian species, as described by Claus. Kreeft says that males and females are constantly found together here, except in the wet season, as now, when no living animals but only some shells, could be got."

The Challenger remained at Sydney from the 6th April to the 8th June, as the ship required docking and a general overhaul, and during this time the members of the

¹ A Dipterons insect was obtained by von Willemoes Suhm, which has been made the type of a new species, Dasypogon diversipes, Kirby (Ann. and Mag. Nat. Hist., ser. 5, vol. xiii. p. 458, 1884).