1. Coryceeus varius, Dana (Pl. LII. figs. 1-14).

Length, 1-8th of an inch ( 3 mm .). Body slender and elongated; third thoracic segment produced into two long and acutely-pointed lateral processes, which extend as far backwards as the middle of the abdomen (figs. 1, $a, a$, and fig. $3, a$ ); caudal stylets variable in length, but in the adult many times longer than broald, and usually about twice as long as the abdomen. Anterior antemne (fig. 6) less than half as long as the first segment of the body, six-jointel, the joints of nearly equal length ; posterior antennæ (fig. 7 male, fig. 8 female) much larger, and forming a strongly prehensile limb, basal joint bearing two very long spine-like setae, second joint sulquadrate, produced at its inner distal angle into a broad acutely pointed, triangular tooth, third joint small, bearing a few small curved, acuminate sete, and at the apex an extremely long falcate claw, which when flexed on the limb interlocks with the two long setre of the basal joint. In the female the terminal claws are much shorter than in the male, while the triangular tooth of the second joint is larger. Posterior foot-jaw (fig. 11) prehensile, and armed with a long, falciform apical claw, at the base of which are two small flagellate setæ (fig. 11, a). Inner branches of the first three pairs of swimming feet (figs. 12, 13) very short. Distal extremities of the caudal stylets slightly dilated (fig. 1, a), and giving attachment to several setæ, the innermost being robust and about half the length of the stylet, the second half the length of the first, the third rather longer than the second, but much more slender and flexuose ; there is also a small spine at the outer angle, and a very minute marginal seta a little removed from the apex of the stylet. The eyes are situated quite on the front of the head, quite distinct and remote one from the other towards the side of the body.

Habitat.-Forms which I refer to Coryceus varius occurred in the surface gatherings from a very large proportion of the places visited by the Challenger. The following list of localities shows the wide distribution of the species:-Off Port Jackson, Australia; between Sydney and Wellington; off Kandaru, Fiji ; between Api and Cape York; off south of Papua; at many localities amongst the Philippine Islands; Pacific, north of the Sandwich Islands, in lat. $30^{\circ} 22^{\prime} \mathrm{N}$., long. $154^{\circ} 56^{\prime} \mathrm{W}$. (Station 256 ); in lat. $36^{\circ} 32^{\prime}$ S., long. $1.32^{\circ} 52^{\prime}$ W. (Station 287.) ; lat. $37^{\circ} 3^{\prime}$ S., long. $44^{\circ} 17^{\prime}$ W. (Station 326) ; lat. $32^{\circ} 24^{\prime}$ S., long. $13^{\circ} 5^{\prime} \mathrm{W}$. (Station 335) ; lat $12^{\circ} 16^{\prime}$ S., long. $13^{\circ} 44^{\prime} \mathrm{W}$. (Station 341) ; lat. $9^{\circ} 43^{\prime}$ $\mathrm{S}_{\mathrm{ty}}$ long. $13^{\circ} 51^{\prime} \mathrm{W}$. (Station 342) ; lat. $3^{\circ} 10^{\prime} \mathrm{N}$. , long. $14^{\circ} 51^{\prime} \mathrm{W}$. (Station 348) ; in various localities between lat. $5^{\circ} \cdot 28^{\prime} \mathrm{N} .$, long. $14^{\circ} 38^{\prime} \mathrm{W}$. ; and lat. $10^{\circ} 55^{\prime} \mathrm{N}$., long. $17^{\circ}$

