resemblance to that of *Scalpellum peronii*. Whereas the parasites in the first three species (*Scalpellum vulgare*, *Scalpellum ornatum*, and *Scalpellum rutilum*) are in such an extraordinarily modified and embryonic condition, that they can hardly be compared with other Cirripeds, those of the other three (*Scalpellum peronii*, *Scalpellum rostratum*, and *Scalpellum villosum*) are pedunculated Cirripedia, remarkable for their smallness.

These are the facts which were known to Darwin; he then enters into a masterly discussion of the evidence that these parasites are really the males of the Cirripedia to which they are attached. Curious and novel as was the fact, his reasoning was so convincing that this theory has been generally accepted.

With respect to the occurrence and the structure of these complemental males, I believe I have been enabled to augment our knowledge not inconsiderably. Though the principal result of my investigations has been to convince me of the exactness of Darwin's theory, I think the question is important enough to justify me in giving all the information which I possess in the following pages.

I observed the complemental male in nineteen out of the forty-one new species of *Scalpellum* described in my Report.[1] I found them all in or about the same place, viz., at or near the occludent margin of the scutum at the interior side of this valve, a little above the adductor muscle. As a rule they are placed in a pouch formed by the mantle; very often, but not always, I found them on the left as well as on the right hand scutum. In five different species I took either from one or from both scuta two or more specimens, in the other species each, or one only, of the two scuta was furnished with a single male. In one species (*Scalpellum marginatum*) the male was seated at a considerable distance from the occludent margin of the scutum, and hence it happened that at first I did not find it out. In one species (*Scalpellum recurvirostrum*) the only male observed was still in the Cypris-larval or pupa stage; in three other species (*Scalpellum regium*, *Scalpellum eximium*, and *Scalpellum velutinum*) males in the pupa stage were attached along with full-grown males. The male of *Scalpellum brevecarinatum* could not be studied, being in a very unsatisfactory condition.

In eighteen out of the nineteen cases I was able to form an opinion as to the condition of the male when the testis was ripe, and the little creature therefore full-grown or nearly so. In five of these eighteen cases the condition can be said to correspond with that of the male of *Scalpellum vulgare*. In thirteen the males are still more degenerate. These five are *Scalpellum tritonis*, *Scalpellum intermedium*, *Scalpellum parallelogramma*, *Scalpellum elongatum*, and *Scalpellum triangulare*. I think they correspond with *Scalpellum vulgare* in as far as there are rudimentary valves visible in them. The thirteen remaining species all, no doubt, belong as regards the structure of their males

[1] Zool. Chall. Exp., part xxv. The small species represented by single specimens have not been investigated so thoroughly as would have been necessary to make out whether a male really occurred or not. I often found myself unable to do so without spoiling the specimen.