In *Chaoborus*, Lichtenstein, must certainly be placed the following: *plumicornis*, F., *pallida*, F., *fusca*, Staeg., *flavicans*, Mg., *manilensis*, Sch., *punctipennis*, Say., the latter with *trivittata*, Lw., as a synonym.

Prof. Kertesz's catalogue gives the following species under "*Corethra*" and there are no means to hand of testing their true generic position, but the probability is that the majority, perhaps all of them, belong to *Chaoborus*. It may be noted that the above-mentioned catalogue uses the term *Corethra* to embrace the species now certainly referred to *Chaoborus* as well as the following ones of uncertain position: *antarctica*, Huds. (New Zealand), *nyblaei*, Zett. (North Europe), *obscuripes*, Wulp (Central Europe), *pilipes*, Gimm (Eastern Europe), and *rufa*, Zett. (North Europe).

E. Brunetti.

CRUSTACEA.

On the distribution of the different forms of the genus *Ibla*.—Until a few years ago only two forms of the genus *Ibla* (*I. quadrivalvis* (Cuvier) and *I. cummingi*, Darwin) had been described, but in 1907 Hoek described a third under the name *Ibla sibogae* (*Siboga-Exped.*, Mon. xxxia—Cirripedia Pedunculata—p. 48, pl. iv, figs. 20—22, pl. v, figs. 1—8, 1907). The most curious difference between *I. quadrivalvis* and *I. cummingi* is, as Darwin pointed out, the fact that whereas the large individuals of the former are hermaphrodite and possess a well-developed penis, similar individuals of the latter are exclusively female and possess no penis (*Mon. Cirripedia*—Lepadidae, p. 204). The typical form of *I. cummingi* can be readily distinguished on superficial examination by blue markings on its valves which are quite absent from those of *I. quadrivalvis*. All other differences are trivial and, in my opinion, fall well within the limits of individual variation. *I. sibogae* (except for minute structural differences which I also consider of little importance) differs from *I. cummingi*, with which its sexual features are in agreement, in the absence of the blue markings; from *I. quadrivalvis* it can hardly be distinguished unless the animal be dissected out of its shell.

I have recently obtained cotypes or paratypes of *I. sibogae* and have examined considerable numbers of specimens of the genus from the Gulf of Oman, the coast of Burma, the Straits of Malacca, the Gulf of Siam, Port Jackson and New Zealand. With the exception of those from Australia and New Zealand, these specimens agree either with *I. cummingi* or (more commonly) with *I. sibogae*. The series from the coast of Burma is a large one and includes almost every grade in a transition between these two forms, and I have no doubt that the form *sibogae* must therefore be considered merely as a variety of *I. cummingi*, as Hoek himself thought might prove to be the case. Among the specimens that represent this variety in the collection before me are some of those

which Lanchester (*P. Z. S.*, 1902 (i), p. 372) recorded from Pulau Bidan near Penang as *L. quadrivalvis*. The specimens from Port Jackson and New Zealand clearly represent the true *I. quadrivalvis* and are hermaphrodite. This form was not taken in the Malay Archipelago by the "Siboga."

Taking these facts into consideration, I am inclined to believe that *I. quadrivalvis* and *I. cummingi* are merely local races, the one confined to the southern part of the Pacific, Madagascar and the east coast of Africa, the other to the waters of the Oriental Region and the Persian Gulf; and that all records of *I. quadrivalvis* from the Oriental Region refer actually to *I. cummingi* var. *sibogae*, which occurs on the coast of Burma, in the Straits of Malacca, the Gulf of Siam, the Malay Archipelago and also at Muscat in Arabia.

Neither the variety *sibogae* nor the typical form of *I. cummingi* is invariably associated with *Pollicipes* as was the case with Darwin's specimens of the latter from the Philippines—he does not state that it was the case with those he examined from Lower Burma. Capt. F. H. Stewart took numerous specimens of both forms on an island off the coast of Burma (*Mem. Ind. Mus.*, iii, p. 36), but no specimens of *Pollicipes*; while the specimens of the latter genus taken by Dr. W. Mortensen in the Gulf of Siam do not appear to have been found on the same date as those of *Ibla* from the same locality (*Sacr. Vid. Medd. naturh. Foren. Köbenhavn*, 1910, pp. 81, 85). The sexual peculiarities of *I. cummingi* cannot therefore be correlated with a semi-parasitic mode of life, although they may possibly be due to climatic influences. Before theorizing on this point, however, it might be well to check the records of the different forms of the genus, and I would appeal to all students of the Cirripedia who have the opportunity of examining specimens of *Ibla* (or of any other genus) not to trust merely to an external examination of the shell in their determination of the species but to dissect the animal out before recording its name.

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