

intestine exhibits very energetic and uninterrupted peristaltic and antiperistaltic movements, giving it a peculiar moniliform aspect.

*Circulatory System.*—The heart (Pl. XI. figs. 5, 6, *h*) is placed immediately beneath the posterior part of the carapace, and exhibits a structure very similar to that observed in the higher Podophthalmia, being rather concentrated, of a somewhat short polygonal form, and furnished with six pairs of fissiform venous openings, for the entrance of the blood accumulated in the pericardial sinus. Moreover, the number and arrangement of the principal arterial trunks would seem to agree perfectly with that observed in higher Crustaceans.

*Generative System.*—The ovaria (Pl. XI. fig. 5, *ov*) form two partly connate masses of a somewhat irregular ovoid form, placed beneath the heart, and projecting anteriorly to a greater or less extent above the liver. They are found to contain numerous, perfectly translucent egg-cells which vary in size, and from their lower face give origin to two rather strong oviducts, extending straight downwards and opening close together on the sternal part of the antepenultimate segment of the trunk. Here, too, may often be seen affixed two pedunculated vesicles, the spermatophores (Pl. XIII. fig. 7).

The testes are combined as a comparatively small bunch of rounded, anteriorly pointing cæca, lying in front of the heart, immediately beneath the carapace. The vasa deferentia are very long and flexuose, extending posteriorly into the last segment of the trunk, where they curve abruptly downward, and form a considerable dilatation (see Pl. XI. fig. 4), within which may be observed the developing spermatophore. The latter exhibits in the present genus (see Pl. XII. fig. 23) a somewhat lageniform appearance, being gradually dilated toward the apex, and possessing a highly chitinised envelop. The spermatozoids constitute simple, elliptical, nucleate cells.

*Habitat and Distribution.*—All the known species of this genus are truly pelagic, the animals being often found in great profusion swarming at the surface of the sea, especially at night; but in all probability they descend at times to considerable depths, as is alleged to be the case with most other pelagic animals.

The genus would seem to be distributed throughout most parts of the ocean, except perhaps the Arctic region, where it is represented by a closely allied generic type, *Boreophausia*, G. O. Sars.