



FIG. 3.—*Arthritica crassiformis* Powell. View of the anterior end of the animal showing the gills and the palps from the right side and ventrally. The ciliary tracts are shown by arrows. The dotted arrows represent currents beneath overlying structures.

Shelled larvae are incubated in the brood chambers described above. Many hundreds were extracted from specimens collected in late February and early March at St Leonard's Point, Takapuna, though the breeding season is probably a good deal longer than this. All the larvae were at about the same stage of development, the size being about 0.073mm high and 0.109mm long. The larvae had a velum, and on artificial liberation could swim well even at the earliest development of the shell. No specimens were observed incubating larvae past the prodissoconch stage. Though not yet taken in the plankton and never naturally liberated in the laboratory, there seems no reason—particularly from their large number and the small space available for growth—to doubt that they have a free swimming distributive phase of some duration.

DISCUSSION

Arthritica crassiformis has never been found apart from *Anchomasa* and so far as I have found always accompanies some individuals of the larger borers in any population examined. The relationship between the two bivalves is presumed to be commensalism, with benefits conferred on *Arthritica* and with no apparent effects