

may be procured, as well as the length of the period of their free-swimming life. The larvæ obtained by Brooks, Rice, Ryder, Winslow, and others were obtained by culture from fertilized eggs, and were at most six days old, and in the young straight-hinge stage. In Europe larvæ of a similar age, size and structure had been taken from the infra-branchial cavity of the parent oyster by Davaine, Lacaze Duthiers, Costé, De la Blanchère, Gwyn Jeffries, Saunders, Salensky, Möbins, Horst and Huxley, but the older, later or larger stages were quite unknown. This left room for some speculation as to the exact time, place and manner in which the succeeding stages should be found, as well as occasioned the prevalent mistake that the free larva settles down at this period to become a fixed spat. Brooks wrote, "All my attempts to get later stages than these failed . . . and I am therefore unable to describe the manner in which the swimming embryo becomes converted into the adult, but I hope that this gap will be filled, either by future observations of my own or by those of some other embryologist." In a similar way Jackson, at a later period, speaks of "a blank in the knowledge of the development of the oyster." This "gap" or "blank" is now completely filled. My studies prove that the larva continues to live as a larva in the sea-water about oyster-beds for two or three weeks longer, where it swims about, feeds, grows and changes in structure, and that it first settles down to become a sedentary spat, fixed to shells or other objects, at an age of three to four weeks from fertilization—the length of time depending to some extent on temperature, food, individuality or such causes. This information has been gained through the method of procuring oyster-larvæ from the waters of oyster-areas by means of a plankton-net, and connecting them in series with younger stages obtained by fertilization and culture and with older stages obtained by catching spat on glass, shells, etc., so as to make out the complete life-history.

The discovery that the hitherto unknown stages of the