

a spermatozoon. In the case of the Aphides, the females which are produced directly from the act of impregnation, retain in themselves the property of awakening the power of development in the ova produced in their ovaries, and this power is transmitted from one brood to another until it finally dies out,—a process which seems to have its analogue in the disposition to the production of adventitious growths in the ovary, which is sometimes seen to be hereditary in the human female. In the Humble Bee it would seem that the ova from which the first brood are produced, are fertilized directly by spermatozoa; that ova transmit the awakened force to those which produce the second, and these in their turn to those which produce the third.

Mr. Girard read descriptions of two marine species of *Planariæ*, in addition to those given at the last meeting, as follows:—

*VORTEX WARRENI* Girard. General form elongated, sides nearly parallel; anterior and posterior extremities rounded. Small species, reddish brown, found on the shores of Boston Harbor. Not common.

*VORTEX CANDIDA* Girard. Body elongated, tapering away towards the posterior extremity; head rounded; sides entire; almost transparent, of a pale rose color. From Chelsea beach, found attached to the Horse-shoe Crab. Length, a quarter of an inch.

The generic position of these two species is still a matter of doubt; the genus *Vortex* not being as yet well circumscribed.

He then gave a brief account of the fresh water species of this family, known to him as the inhabitants of this country, as follows:—

*PLANARIA GRACILIS* Haldem. Suppl. to a Monogr. of Limn. &c. 1840, p. 3. Common about Cambridge in pools and rivulets.

*PLANARIA TIGRINA* Girard. Of this species I have seen but one individual in a damaged state, but showing itself distinct from all those I have known, being of a dark brownish color, dotted with large white spots, and smaller and more numerous black ones. Found in the State of New Jersey.

Obs. *Planaria gracilis*, and very likely *Planaria tigrina* will not remain in the genus *Planaria* as soon as we shall know their internal structure.

DENDROCELUM PULCHERRIMUM Girard. The largest species of that family hitherto known in the fresh waters of this country. It resembles *D. lacteum*, of northern Europe, from which it differs by having three pairs of eyes instead of one. From New Jersey.

DENDROCELUM SUPERBUM Girard. Of this species I know two varieties: the one is red, or rather delicate rose, the other milky white. They are of a much smaller size than the preceding, and are very common in rivulets, ponds, and pools of our vicinity. It reminds us of *Pl. vitta*, Dugès, which must be placed in the same genus.

Thus, the genus *Dendrocœlum*, of CErsted, created by that naturalist for the *Planaria lactea*, of Müller, would embrace three species more, the *Pl. vitta*, of Dugès, and the two above mentioned.

I would propose a new genus for one species of this country, which bears some striking resemblances to the *Planaria gonocephala*, of Dugès, which I would take for the type, and call the genus.

DUGESIA Girard. The anatomical character I am not yet prepared to give. As for the external appearance, the body is slender, elongated, tapering away posteriorly. The head, somewhat detached from it, is triangular, the summit of the triangle in front.

DUGESIA GONOCEPHALOIDES Girard. Has been found in Massachusetts and New Jersey, and will probably be found over a greater extent. It is quite common in ponds and rivulets, and differs from Dugès's *Pl. gonocephala* by the oblong shape of the transparent space which surrounds the eyes, whilst in *Pl. gonocephala* that space is circular. There are also two pairs of eyes in the American species.

He concluded with a general description of the organization of these animals as illustrated by M. de Quatrefages.