

in front, yellowish or light brown. Dorsal valve convex, sometimes flattened from about the middle of the valve to the front. Ventral valve rather deeper, or more convex than the opposite one, with a slightly raised longitudinal flattened elevation or fold along the middle. Beak moderately incurved, truncated by a circular foramen, somewhat separated from the hinge-line by a deltidium; beak-ridges sharply defined. Surface of both valves from the beaks smooth up to a certain age, then radiating and irregularly plaited, some ribs being shorter than others, the central ones straight, those on the lateral portions of the valves somewhat curved. Shell structure perforated by canals. In the interior of the dorsal valve the loop long and simple, after being attached to the hinge-plate and having given off its crural processes, the principal branches are outwardly curved,

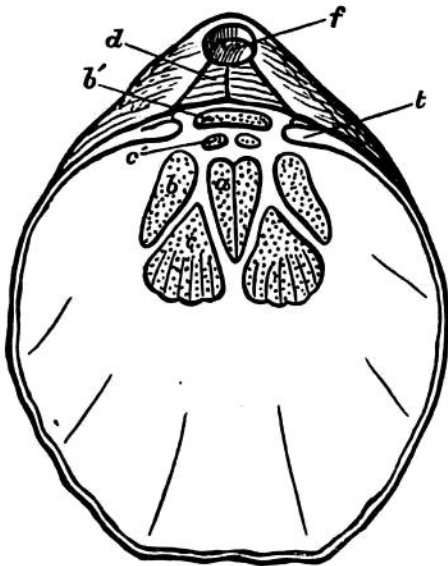


Fig. 1. *Waldheimia flavescens* (enlarged).

Interior of ventral valve. *f* foramen, *d* deltidium, *t* teeth, *a, a* adductor impressions, *c* divaricator, *c'* accessory divaricators, *b* ventral adjustor, *b'* peduncular muscle.

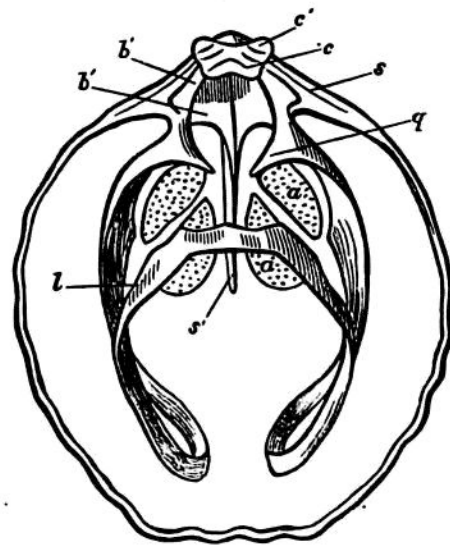


Fig. 2. *Waldheimia flavescens*.

Interior of dorsal valve. *c, c'* cardinal process, *b, b'* hinge-plate, *s* dental sockets, *l* loop, *q* crura, *a, a* adductor impressions, *s, s* septum.

and on reaching to about three-fourths of the length of the valve become reflected. The median septum extends along the bottom of the shell from under the hinge-plate, to a little beyond one-third of the length of the valve. Brachial or labial appendages largely developed, and united to each other by a membrane. The principal lateral branches commence on either side of the mouth, and by an outward curve and facing the bottom of the smaller valve extend to within a short distance of the frontal margin, then becoming suddenly bent back upon themselves to within a short distance of the mouth, are by an elegant semicircular curve directed towards the centre of the larger valve, and form the commencement of the shorter spiral central lobe (Pl. III. figs. 11, 12). Proportions variable, length 36, width 30, depth 20 mm.

*Habitat.*—*Waldheimia flavescens* was picked up in great numbers by the Challenger