

delightful impressions that may be derived from flowers and birds, and the many strange four and six-footed creatures that he will encounter on his rambles in places seldom frequented by man.

A very fine form of *S. sulcatum* occurs on the Scott Graham farm in Nepean, now called Britannia Highlands. In dry seasons the narrow bottom of the stream lying about halfway between Carling Avenue and the Grand Trunk railway is exposed for some distance west of the boundary of the Shouldis farm. The shell may then be easily found in considerable numbers. At other times collecting is slow and difficult, even though the collector is equipped with a good dredge, and—what are indispensable in such localities—rubber boots. This stream is again productive near its outlet into the Ottawa below the Deschênes rapids.

conditions of environment. In fact nothing is so wonderful in nature as the adherence to type of every organized being properly regarded as a species. More interest is, however, manifested in departures from the normal than in persistence of type, just as variant races of men, like the giant Patagonians and pygmy Papuans, commonly attract more attention than races of ordinary stature. Variations from the usual form of *S. sulcatum* are few and limited. One is found in Bond lake, near Toronto. Another, which is well marked and constant, occurs in Masham, north of Ottawa, and, notably, in Lake Gorman, near Brudenell, in the county of Renfrew, at an elevation of about eleven hundred feet above sea level.

Dr. Sterki thinks it entitled to rank as a variety and calls it *palmatum*.⁴ He describes it as smaller

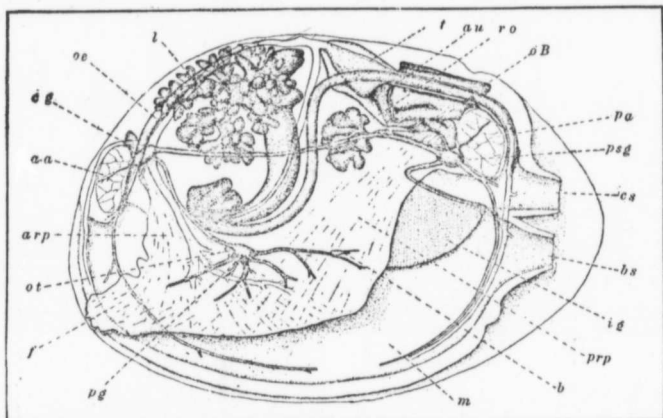


Fig. 2.

a.a.—Anterior adductor muscle.
a.p.—Ant. retractor-pedis muscle.
ar.—Auricle.
b.—Byssal gland rudiment.
bs.—Branchial siphon.
cg.—Cerebral ganglion.
cs.—Cloacal siphon.
f.—Foot.
fg.—Inner gill.
l.—Liver.

m.—Mantle.
ob.—Organ of Bojanns.
oe.—Oesophagus.
ot.—Otocyst.
pa.—Posterior adductor muscle.
pg.—Pedal ganglion.
prp.—Post retractor-pedis muscle.
psg.—Parieto-splanchnic ganglion.
ro.—Reproductive organs.
t.—Male follicle.

Fair specimens are obtainable in shallow water at Graham Bay station, at the intersection of the Richmond road and the Grand Trunk railway. A few miles farther to the southwest the shell is common in the creek north of Stittville; but nowhere have I found it in such numbers as in the stream about a hundred yards west of Ste. Justine station, in the county of Vaudreuil. In either place the shell may be readily collected in large numbers by means of a dredge with a quarter-inch mesh, such as is afforded by a kitchen utensil in common use.

As *S. sulcatum* is a true species, with an objective existence not depending on the opinion or whim of any systematist, it does not vary greatly in its characteristic features throughout the vast area over which it is disseminated, though it is occasionally modified in appearance by different

than the common or typical *sulcatum*, more inequipartite, the beaks being markedly anterior; less inflated, especially flattened over the lower part of the valves, more truncate anteriorly and posteriorly, inferior margin less curved; beaks narrower and little elevated; surface striae slighter; shell and hinge slighter.

In Lake Gorman the shell is quite abundant buried about an inch in the sand of the bay near the boathouse on the Rockingham road.

The animal of the variety *palmatum* has not been described. It is probably not distinguishable from the normal form represented in the following illustration, which may be regarded as typical of the anatomy of all the genus:

⁴Preliminary Catalogue of N. A. Sphaerilidea, An. Carg. Mus., Vol. X (1916), p. 432.