of these specimens, in which the shorter, higher and deeper portion of each valve is regarded as anterior, and the prolonged portion as posterior.

Shell compressed convex, about one-third longer than high, narrowly subovate and very inequilateral.

Anterior (?) portion of each valve short, its margin shallowly concave above the midheight, convexly curved and narrowing rapidly inward to the base below; posterior(?) portion much longer than the anterior, decreasing gradually both in height and depth, its extremity obliquely subtruncate above and narrowly rounded below. Ventral margin convexly curved anteriorly, almost straight but slightly concave behind. Cardinal border descending very gradually behind the beaks and much more rapidly so in front of them; umbones broad and more or less flattened; beaks appressed, incurved, with a forward (?) inclination, placed considerably in advance of the midlength.

Surface marked with numerous fine close-set, concentric raised lines, or minute narrow ridges. Impressions of the hinge teeth minute and very indistinctly defined in all the specimens that the writer has seen. On the shorter and presumably anterior portion of the hinge line there appear to be about four of these impressions; and on the longer and presumably posterior portion, about twice as many.

Associated with these specimens there are quite a number of badly preserved casts of the interior of the closed valves of a shell which may be referable to this species, but which show no impressions of any of the hinge teeth. These casts have much the same marginal outline as the typical *C. parvidens*, but in some of the former the valves seem to be proportionately more convex, the umbones farther apart, and the beaks more curved.

EXPLANATION OF PLATE III.

(The originals of all the figures on this plate are mere casts of the interior of the shell, and the whole of the figures, except figs. 7 and 14, are of the natural size. The originals of figs. 4-15, both inclusive, are from the Chazy sandstone at the Hog's Back).

Modiolopsis parviuscula (page 106).

- Fig. 1. A right valve of this species, from Cornwall, Ontario.
- Fig. 2. A left valve, from Punk Island, Lake Winnipeg.

CYRTODONTA BREVIUSCULA (page 107).

Fig. 3. The type of this species, a left valve, from three miles east of Ottawa.