



Fig. 98.



Fig. 99.

*mucronatus* of the Devonian series. Both are of common occurrence. The hinge-line of the latter is sometimes shorter (as compared with the height of the shell,) than is shewn in the figure. In our Western Devonian rocks, several other species occur: as *S. duodenarius*, with eight or nine rounded ribs on each side of the mesial fold; *S. rari-costatus*, with two or three coarse plications on each side of the fold; *S. gregaria*, a small species, &c. These are figured and described by Mr. Billings in the *Canadian Journal*, vol. VI. Another common species of the Upper Silurian series, is *S. radiatus*. This differs chiefly from *S. Niagarensis* by its finer and more numerous plications. A third Niagara species *S. sulcatus*, has about eight plications on each side of the mesial fold, crossed by the rough and strongly-pronounced edges of the layers of growth.

*Athyris*:—The shell in this genus has internal spires as in *Spirifer*, but the hinge-line is curved, and the area is absent or rudimentary. Species range from the Silurian to the Triassic formations. Several occur in our Devonian rocks. One of the most common of these, *A. clara*, (Billings,) is represented in fig. 100. *A. Maia* is a somewhat similar species, but with a more developed or longer mesial fold and sinus, and with a slight space or false area between the beaks. These and other Devonian species are described in detail by Mr. Billings, in the *Canadian Journal*, Vol. V.



Fig. 100

*Spirigera*:—This genus or sub-genus differs from *Athyris* in having a perforation or foramen in the beak of the ventral valve. *S. concentrica* of the Devonian rocks is shewn in fig. 101. The genus *Retzia* is nearly allied to *Spirigera*, but the shells are smaller and strongly ribbed.



Fig. 101.