

and *Plicatula placunea*. These beds consist here of greyish clay, which is used for making tiles; there of bluish argillaceous limestone, in black or brownish flags. In the Isle of Wight it becomes a fine sandstone, greyish and slightly argillaceous, which at Havre, and in some parts of the country of Bray, become well-developed ferruginous sandstones.

We have noted that the Lower Néocomian formation, although a marine deposit, is in some respects the equivalent of the *Weald Clay*, a fresh-water formation of considerable importance on account of its fossils. We have seen that it was either formed at the mouth of a great river, or the river was sufficiently powerful for the fresh-water current to be carried out to sea, carrying with it some animals, forming a fluviatile, or lacustrine fauna, on a small scale. These

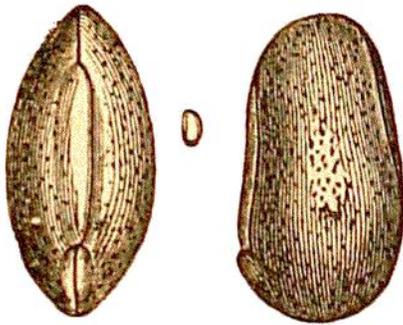


Fig. 143.—*Cypris spinigera*.

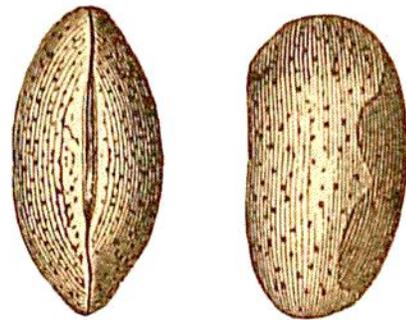


Fig. 144.—*Cypris Valdensis*

were small Crustaceans of the genus *Cypris*, with some molluscos Gasteropoda of the genera *Melania*, *Paludina*, and acephalous Mollusca of the five genera *Cyrena*, *Unio*, *Mytilus*, *Cyclas*, and *Ostrea*. Of these, *Cypris spinigera* (Fig. 143) and *Cypris Valdensis* (Fig. 144) may be considered as among the most characteristic fossils of this local fauna.

The Cretaceous series is not interesting for its fossils alone; it presents also an interesting subject for study in a mineralogical point of view. The white Chalk, examined under the microscope by Ehrenberg, shows a curious globiform structure. The green part of its sandstone and limestone constitutes very singular compounds. According to the result of Berthier's analysis, we must consider them as silicates of iron. The iron shows itself here not in beds, as in the Jurassic rocks, but in masses, in a species of pocket in the Orgonian beds. They are usually hydrates in the state of hematites, accompanied by quantities of ochre so abundant that they are frequently unworkable. In the south of France these veins were