

Fig. 305.

*Cypris spinigera*,  
Filtton.

Fig. 306.

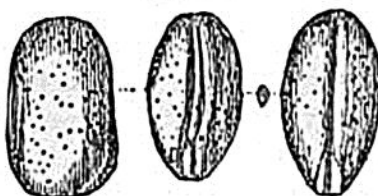
*Cypris Valdensis*, Filtton.  
(*C. faba*, Min. Con. 435.)

Fig. 307.



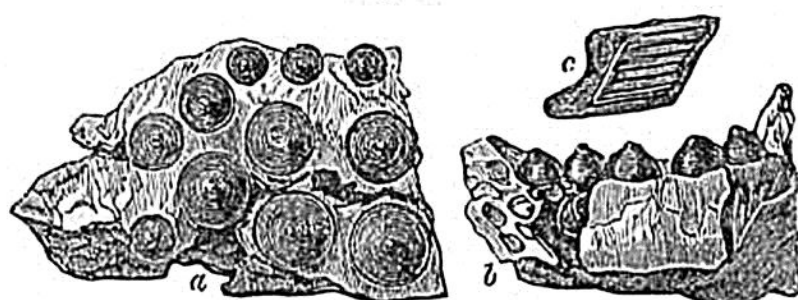
Weald clay with Cyprides.

*Hastings Sands.*

This lower division of the Wealden consists of sand, calciferous grit, clay, and shale; the argillaceous strata, notwithstanding the name, being nearly in the same proportion as the arenaceous. The calcareous sandstone and grit of Tilgate Forest, near Cuckfield, in which the remains of the *Iguanodon* and *Hylæosaurus* were first found, constitute an upper member of this formation. The white "sand-rock" of the Hastings cliffs, about 100 feet thick, is one of the lower members of the same. The reptiles, which are very abundant in this division, consist partly of saurians, already referred by Owen and Mantell to eight genera, among which, besides those already enumerated, we find the *Megalosaurus* and *Plesiosaurus*. The *Pterodactyl* also, a flying reptile, is met with in the same strata, and many remains of Chelonians of the genera *Trionyx* and *Emys*, now confined to tropical regions.

The fishes of the Wealden are chiefly referable to the Ganoid and Placoid orders. Among them the teeth and scales of *Lepidotus* are most widely diffused (see fig. 308). These ganoids were allied to the *Lepidos-*

Fig. 308.

*Lepidotus Mantelli*, Agass. Wealden.

a. Palate and teeth.

b. Side view of teeth.

c. Scale.

*teus*, or Gar-pike, of the American rivers. The whole body was covered with large rhomboidal scales, very thick, and having the exposed part coated with enamel. Most of the species of this genus are supposed to have been either river-fish, or inhabitants of the sea at the mouth of estuaries.

The shells of the Hastings beds belong to the genera *Melanopsis*, *Melania*, *Paludina*, *Cyrena*, *Cyclas*, *Unio* (see fig. 309), and others, which inhabit rivers or lakes; but one band has been found at Punfield, in Dorsetshire, indicating a brackish state of the water, where the genera *Corbula* (see fig. 310), *Mytilus*, and *Ostrea* occur; and in some places this bed