

This general view of the structure of the recent species is necessary to enable the student to understand the nature of the fossil remains; for all the parts above described are found more or less perfectly preserved, either in their natural arrangement, or dispersed throughout the strata. The habits of these animals, of burrowing in the sand, were favourable to their preservation in a mineralized state. It was my intention to have given figures of all the genera into which the numerous fossil species have been divided by modern observers; but I found the attempt hopeless, from the changes in nomenclature and arrangement which are constantly taking place.*

CIDARIS (*Turban-Echinus*).—The first family of the Echinidæ are termed Cidarites, which includes the globular, spherical, and depressed species, having the mouth in the centre below, and the outlet, or vent, opposite, on the summit. The shell is com-

* M. Agassiz has commenced a work on recent and fossil Echinidæ; of which only two livraisons have appeared. It is to be regretted that this eminent naturalist has applied not only new generic, but also specific names, to almost every species he has figured. M. D'Orbigny's *Paleontologie Française*, is a refreshing example of the avoidance of this censurable and unnecessary practice; for, although some generic terms must be changed with the progress of science, and new ones adopted, the specific names affixed by the earliest observers, ought to remain, unless palpably absurd or leading to error.