

'radioles,' as the fossil spines of *Cidarites* are usually called, presenting a very marked character, had been found in various formations from the lower oolite upwards. These spines are paddle-shaped, compressed, longitudinally grooved, flattened almost into plates, and strongly serrated on the edges. In the nummulitic beds of Val-Dominico near Verona such spines were found associated with plates much resembling those of *Cidaris*, but with the unique peculiarity of a row of holes penetrating the test in the areolar space round the primary tubercle. This character our new Urchin does not possess, but the radioles have the flatness, the longitudinal striæ, and the serrated edges of those of *Porocidaris*.

I do not attach much importance to the perforations in the plates. From Desor's figures they are not round and defined in outline, but lengthened and somewhat irregular, and they radiate from the insertion of the spine. Our species has a set of depressions occupying the position of these perforated grooves which are undoubtedly for the insertion of the muscles moving the large long spines, and as the test is thin these grooves might readily penetrate the plate, or so nearly penetrate it as to be worn into holes by very little drifting or wear.

Our recent species and the eocene form have another character in common; the areolar circles are not well defined, and the areolæ tend to become confluent.

Scattered plates only of this genus have been found fossil, and the ovarial plates were till now unknown. They present a very singular character, which is certainly of generic value. The ovarial