

Although sculptured externally in a very similar, in fact, almost precisely the same manner, they are readily distinguishable by certain characters within the valves. *Lucina dentata* has the margin rather coarsely dentate, the denticles at the sides corresponding with the external raised ridges, but along the ventral edge they are rather more numerous and finer. In *Lucina quadrisulcata* the margin appears almost smooth to the naked eye, but under the lens is found to be most minutely crenulated. Other distinctions in this species are the presence of a minute lateral denticle in the right valve which is located nearer the cardinal teeth than that in *Lucina cumingii*, and fits in between two small tubercular teeth in the left valve. It is usually rather more globose, has a larger lunule, which is in the right valve, and much larger cardinal teeth, the anterior in the left valve being the most conspicuous.

After a very careful examination I am unable to find any distinction in *Lucina eburnea*, Reeve, found at St. Elena, West Columbia, and Panama by Cuming, which will separate it from the West Indian *Lucina quadrisulcata*. The form and convexity are the same, and the lunule, sculpture, dentition, and the minute crenulation of the margin are quite similar.

In the fifth volume of the Voyage dans l'Amérique méridionale, p. 584, 1847, d'Orbigny gives some observations on all the recent and fossil species of this section (*Divaricella*) of *Lucina* then known to him. Of the former he mentions five, namely *Lucina divaricata*, Linn., from the Mediterranean, *Lucina quadrisulcata* (d'Orbigny), from Brazil and the West Indies, *Lucina serrata*, d'Orbigny, also a West Indian form, *Lucina sechellensis*, from the Seychelles Islands, and *Lucina ornatissima*, from the Mauritius.

The two last species, as far as I can ascertain, have never been fully described, but are merely known by the few observations which M. d'Orbigny makes upon them at the above reference. From these remarks, owing to their insufficiency, I am unable to identify the shells he had before him with any of the better known species. The former, *Lucina sechellensis*, approaches in some respects *Lucina cumingii*, and *Lucina ornatissima* may be identical with either *Lucina macandreae* or *Lucina irpex*.

Mr. Brazier¹ makes certain observations upon *Lucina dentata* with which I cannot agree, at the same time giving a synonymy which in my opinion constitutes an extensive "lumping" of species. Such distinctions as I have pointed out in the foregoing remarks must either have altogether escaped his observation, or else he may not regard them of specific importance. He says, "this species has a very wide range over the earth's surface, but it does not differ in sculpture." The former statement would be correct if all the forms which he tabulates under *Lucina dentata* were really identical. But this is not the case in my judgment, and I believe any one who with great care will study specimens (not descriptions and figures only) of these species, will arrive at a similar conclusion, meeting not only with differences of form and dentition but also of sculpture, which Mr. Brazier has failed to perceive.

¹ *Proc. Linn. Soc. N. S. Wales*, vol. viii, p. 229.