

the shell be considered to require a generic or sub-generic distinction, Owen's name should be adopted for it. There seems, however, nothing to prevent it from being placed in one of the modern sub-genera of simple-lipped Pupæ. With regard to the form of its aperture, I may explain that some currency has been given to an incorrect representation of it, through defective specimens. In the case of delicate shells like this, imbedded in a hard matrix, it is of course difficult to work out the aperture perfectly; and in my published figure in the "Air-breathers," I had to restore somewhat the broken specimens in my possession. This restoration, specimens subsequently found have shown to be very exact.

As already stated, this shell seems closely allied to some modern Pupæ. Perhaps the modern species which approaches most nearly to it in form, markings and size, is *Macrocheilus Gossei* from the West Indies, specimens of which were sent to me some years ago by Mr. Bland, of New York, with the remark that they must be very near to my Carboniferous species. Such edentulous species as *Pupa (Leucochila) fallax* of Eastern America very closely resemble it; and it was regarded by the late Dr. Carpenter as probably a near ally of those species which are placed by some European conchologists in the genus *Pupilla*.

*Pupa vetusta* has been found at three distinct levels in the coal formation of the South Joggins. The lowest is the shale above referred to. The next, 1,217 feet higher, is that of the original discovery. The third, 800 feet higher, is in an erect *Sigillaria* holding no other remains. Thus, this shell has lived in the locality at least during the accumulation of 2,000 feet of beds, including a number of coals and erect forests, as well as beds of bituminous shales and calcareo-bituminous shale, the growth of which must have been very slow.

In the lowest of these three horizons the shells are found, as already stated, in a thin bed of concretionary clay of dark