

Fig. 257 represents a peculiar plant, the *Nöeggerathia expansa*, found in Russia.

Fig. 257.

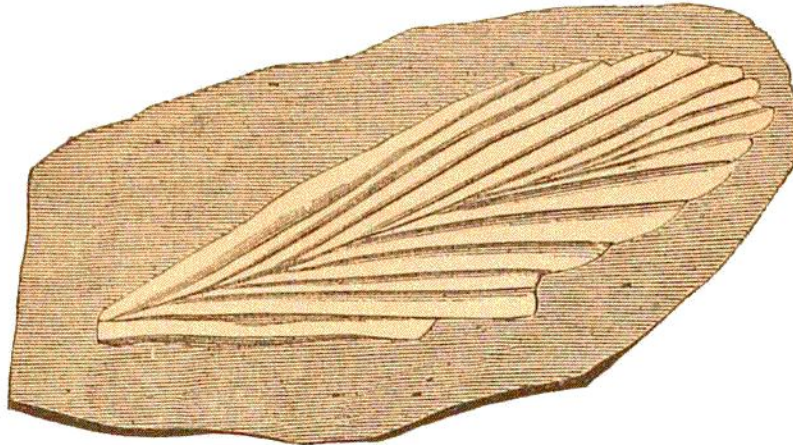
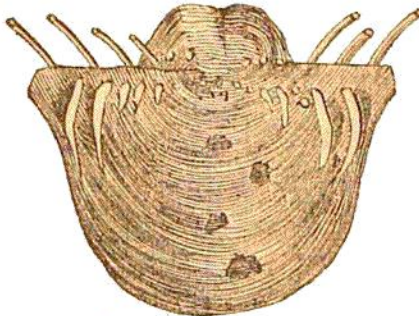


Fig. 258.



*Productus horridus.*

Fig. 258 shows a somewhat peculiar brachiopod shell, the *Productus horridus*.

Several new genera and many new species of fishes, and especially of reptiles, appear in this formation, and clearly distinguish it from the carboniferous. In England, Russia and Thuringia, several thecodont saurians have been found, such as the *Protosaurus*, *Thecodontosaurus* and *Palæosaurus*. In this country Professor Emmons has found in the sandstone of North Carolina the *Palæosaurus*, the *Clepsiosaurus*, and one which he names *Rutiodon Carolinensis*, and he considers these fossils as proving that sandstone to be Permian. Under *Lithichnozoa* we shall see that other reptiles are found in this rock, as shown by their tracks.

*Lithichnozoa.*—The first tracks discovered and described by Dr. Duncan in Scotland, are now thought to be in Permian rather than Triassic sandstone. The sketch, Fig. 259, evidently of a tortoise, was given by Dr. Buckland.

Lately Sir William Jardine has described these tracks in a splendid folio. He has given nine species: five of them he refers to Chelonians, two to Saurians, one to Batrachians, and one is left doubtful.

Having now reached the top of the Palæozoic deposits, it may be well to state certain leading facts as to the organic remains common to the whole.

1. These deposits are characterized by the entire absence, so