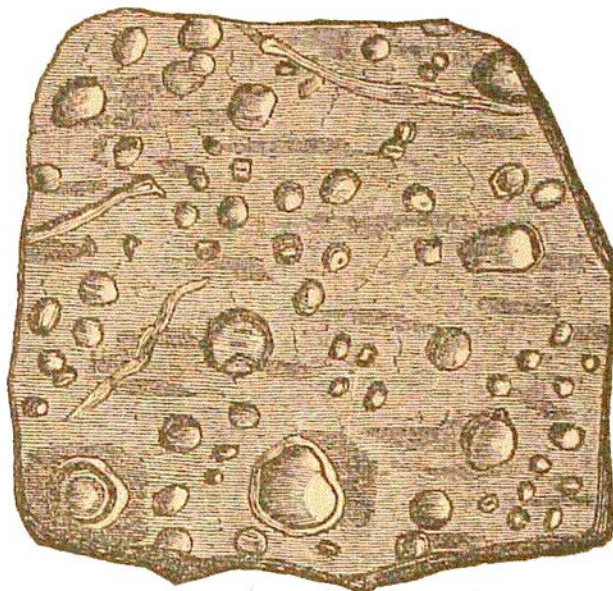


direction of the wind at the time they were made can sometimes be determined by the parallel elongation of the rain impressions. Fig. 319 will give an idea of the usual appearance of the fossil rain drops.

Fig. 319.

*Fossil Rain Drops.*

These fossil rain drops are found on all the aqueous deposits as far back as the Cambrian.

*Mode of Formation of the Tracks.*—A child hardly needs any help in forming a theory as to the origin of fossil footmarks. He will say they must have been made by animals walking over the surface while the rock was soft, which was subsequently hardened. The rain drops, which are frequently on the same surface, show that it was out of water when trodden upon, though some cases prove it to have been sometimes under the water. The whole surface must have been subsequently covered in order to bring mud over the tracks to form the rock above them and preserve them. Thus would the tracks be slowly filled up, and not entirely disappear till several layers of mud had accumulated above them; and besides, the weight of the animal would bend downward several layers of mud beneath the tracks, so that when the rock was afterwards split open, we should find the same tracks, more or less perfectly exhibited, on several layers. Putting these layers together by hinges, we get a *fossil book* of great interest. Fig. 320 represents the most remarkable volume of this sort ever put together. Two tracks are here shown passing through five layers