

as well as the talcose cement, are thickly set with small octahedral crystals of magnetic iron ore.

These facts lead inevitably to the conclusion that the rock has been in a somewhat plastic condition since its original consolidation. The case is even stronger than that of the elongation and distortion of organic remains, and these by common consent are thus explained. Whether we can tell exactly how the elongating and compressing force operated, we are sure that these pebbles must have been acted upon by it in a direction perpendicular to the strike: and if they had not been softened, though they might have been crushed, they would neither have been elongated nor flattened.

At the other locality, which is in North Wallingford, Vermont, where the pebbles are cemented by talcose schist, they are not as much elongated as at Newport, perhaps; but some features are shown more distinctly. Though the pebbles are mostly quartz, they are occasionally granite and probably some other rocks. The quartz is white, almost hyaline, and much purer than that at Newport. Yet have its pebbles been so compressed and bent as to prove them to have been in a plastic condition. Fig. 145 shows them as they appear on the surface of a joint crossing the layers at right angles. Fig. 146 shows a single pebble, ten inches long, not only elongated but bent.

Fig. 145.

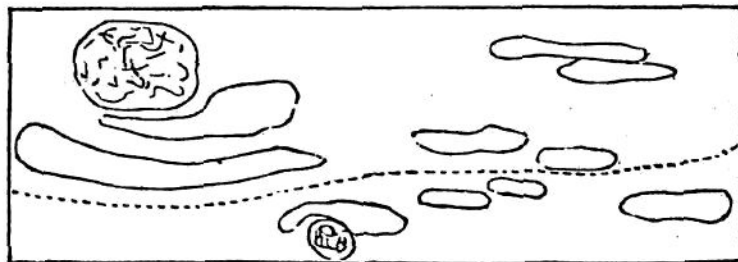
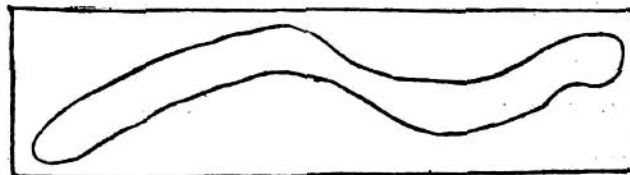


Fig. 146.



The same bending is manifest on the cross sections at Newport, but we did not notice any examples quite so striking as at Wal-