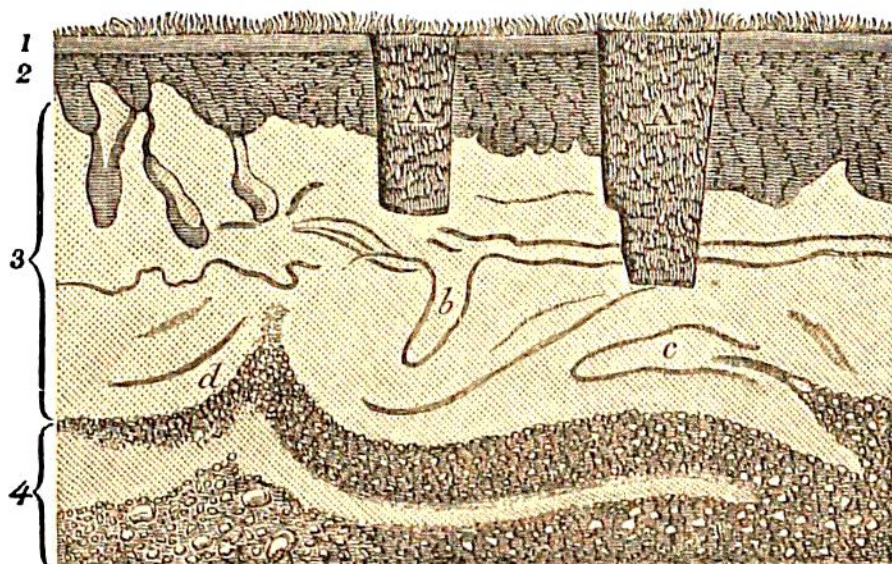


which I myself observed in several pits at St. Acheul, deserves notice. It consists in flexures and contortions of the strata

Fig. 21 A



Contorted fluviatile strata at St. Acheul (Prestwich, Phil. Trans. 1861, p. 299).

- 1 Surface soil.
  - 2 Brown loam as in fig. 21, p. 135,—thickness, six feet.
  - 3 White sand with bent and folded layers of marl—thickness, six feet.
  - 4 Gravel, as in fig. 21, p. 135 with bones of mammalia and flint implements.
- A Graves filled with made ground and human bones.  
*b* and *c* Seams of laminated marl often bent round upon themselves.  
*d* Beds of gravel with sharp curves.

of sand, marl, and gravel (as seen at *b*, *c* and *d*, fig. 21 A), which they have evidently undergone since their original deposition, and from which both the underlying chalk and part of the overlying beds of sand No. 3 are usually exempt.

In my former writings I have attributed this kind of derangement to two causes; first, the pressure of ice running aground on yielding banks of mud and sand; and, secondly, the melting of masses of ice and snow of unequal thickness, on which horizontal layers of mud, sand, and other fine and coarse materials had accumulated. The late Mr. Trimmer first pointed out in what manner the unequal failure of support caused by the liquefaction of underlying or intercalated snow and ice might give rise to such complicated foldings.\*

\* See Chapter XII.