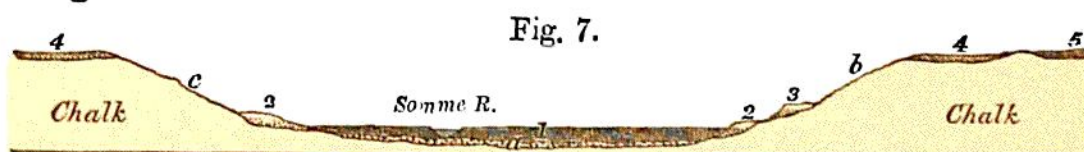


tertiary strata, of which the larger part is missing, because their denudation has contributed largely to furnish the materials of gravels in which the flint implements and bones of extinct mammalia are entombed. From this source have been derived not only the regular-formed egg-shaped pebbles, so common in the old fluviatile alluvium at all levels, but those huge masses of hard sandstone, several feet in diameter, to which I shall allude in the sequel. The upland loam also (No. 4) has often, in no slight degree, been formed at the expense of the same tertiary sands and clays, as is attested by its becoming more or less sandy or argillaceous, according to the nature of the nearest eocene outlier in the neighbourhood.



Section across the Valley of the Somme in Picardy.

- 1 Peat, twenty to thirty feet thick, resting on gravel, *a*.
- 2 Lower level gravel with elephants' bones and flint tools, covered with fluviatile loam, twenty to forty feet thick.
- 3 Higher level gravel with similar fossils, and with overlying loam, in all thirty feet thick.
- 4 Upland loam without shells (*Limon des plateaux*), five or six feet thick.
- 5 Eocene tertiary strata, resting on the chalk in patches.

The average width of the Valley of the Somme between Amiens and Abbeville is one mile. The height, therefore, of the hills, in relation to the river-plain, could not be correctly represented in the annexed diagram (fig. 7), as they would have to be reduced in altitude ; or if not, it would be necessary to make the space between *c* and *b* four times as great. The dimensions also of the masses of drift or alluvium, 2 and 3, have been exaggerated, in order to render them sufficiently conspicuous ; for, all important as we shall find them to be as geological monuments of the post-pliocene period, they form a truly insignificant feature in the general structure of