

basin of the Mississippi as is the *Cyrena fluminalis* to the rivers of modern Europe. If, therefore, the relative ages of the Picardy and Natchez alluvium were to be decided on conchological data alone, the fluvio-marine beds of Abbeville might rank as a shade older than the loess of Natchez. My reluctance in 1846 to regard the fossil human bone as of post-pliocene date arose in part from the reflection that the ancient loess of Natchez is anterior in time to the whole modern delta of the Mississippi. The table-land, *d e*, fig. 26, p. 200, was, I believe, once a part of the original alluvial plain or delta of the great river before it was upraised. It has now risen more than two hundred feet above its pristine level. After the upheaval, or during it, the Mississippi cut through the old fluvial formation of which its bluffs are now formed, just as the Rhine has in many parts of its valley excavated a passage through its ancient loess. If I was right in calculating that the present delta of the Mississippi must have required many tens of thousands of years for its growth,\* and if the claims of the Natchez man to have co-existed with the mastodon are admitted, it would follow that North America was peopled by the human race many tens of thousands of years before our time. But even were that true, we could not presume, reasoning from ascertained geological data, that the Natchez bone was anterior in date to the antique flint hatchets of St. Acheul. When we ascend the Mississippi from Natchez to Vicksburg, and then enter the Ohio, we are accompanied everywhere by a continuous fringe of terraces of sand and gravel at a certain height above the alluvial plain, first of the great river, and then of its tributary. We also find that the older alluvium contains the remains of mastodon everywhere, and in some places, as at Evansville, those of the megalonyx. As in the valley of the Somme in Europe, those old post-pliocene gravels often occur

\* See Appendix D, on the age of the delta of Mississippi.