which occupy a more elevated position above the river plain are the oldest. In Auvergne and Velay, in Central France, where the bones of fossil quadrupeds occur at all heights above the present rivers from ten to one thousand feet, we observe the terrestrial fauna to depart in character from that now living in proportion as we ascend to higher terraces and platforms. We pass from the lower alluvium, containing the mammoth, tichorhine rhinoceros, and reindeer, to various older groups of fossils, till, on a table-land a thousand feet high (near Le Puy, for example), the abrupt termination of which overlooks the present valley, we discover an old extinct river-bed covered by a current of ancient lava, showing where the lowest level was once situated. In that elevated alluvium the remains of a tertiary mastodon and other quadrupeds of like antiquity are embedded.

If the Menchecourt beds had been first formed, and the valley, after being nearly as deep and wide as it is now, had subsided, the sea must have advanced inland, causing small delta-like accumulations at successive heights, wherever the main river and its tributaries met the sea. Such a movement, especially if it were intermittent, and interrupted occasionally by long pauses, would very well account for the accumulation of stratified débris which we encounter at certain points in the valley, especially around Abbeville and Amiens. But we are precluded from adopting this theory by the entire absence of marine shells, and the presence of fresh-water and land species, and mammalian bones, in considerable abundance, in the drift both of higher and lower levels above Abbeville. Had there been a total absence of all organic remains, we might have imagined the former presence of the sea, and the destruction of such remains might have been ascribed to carbonic acid or other decomposing causes; but the post-pliocene and implement-bearing strata can be shown by their fossils to be of fluviatile origin.