

period, as *ervus megaceros*, appear, by various evidence, not to have been extinct till later times; though we should not venture to adopt Dr. Hibbert's opinion, that they have really lived within the historic ages of Europe. However, it deserves remark, in connection with this subject, that no one has yet succeeded in showing a real and certain distinction between the common red deer and the common ox of Europe, and the analogous bones of Kirkdale and other caverns.

Upon the whole, it seems probable that the palæotherian and other tertiary races of quadrupeds died and became extinct gradually, but not by any one law of uniform progression; that the elephant, and his accompanying tribes, began to exist during tertiary eras, rose to predominance before the close of the diluvial period, and, for the most part, perished in that period, or soon after. Some modern species (stag, ox) were co-existent with the elephant and hippopotamus in northern zones; others (*elephas primigenius*, *rhinoceros tichorhinus*), which abounded in diluvial, were also living in tertiary periods; and, perhaps, a few (as the horse) may have been in existence during all these periods. This is a point, however, extremely hard to determine; since, if, among living tribes, the diagnosis of species is far from clear, what errors may not be incurred by pronouncing a verdict on the imperfect evidence of a few fragmented or detached fossil bones?

ANCIENT MARINE DEPOSITS.

Raised Beaches.—Perhaps nothing more fully illustrates the rate and progress of geological research, than the attention given of late years to the phenomena, first brought prominently forward by M. Brongniart, which demonstrate, that within a comparatively modern period, certainly since the actual seas were filled with their existing mollusca, the beds of these seas have been subject to elevation and depression, so that, in particular places, large quantities of shells attached to their parent rocks, or mixed with the pebbles and sand of