

arvernensis^{*} (see fig. 135, p. 165), a portion of the upper jawbone with a tooth having been found by Mr. Wigham at Postwick, near Norwich. As this species has also been found in the Red Crag, both at Sutton and at Felixstow, and had hitherto been regarded as characteristic of formations older than the Pleistocene, it may possibly have been washed out of the Red into the Norwich Crag.

Among the bones, however, respecting the authenticity of which there seems no doubt, may be mentioned those of the elephant, horse, pig, deer, and the jaws and teeth of field mice (fig. 146, p. 167). I have seen the tusk of an elephant from Bramerton near Norwich, to which many serpulæ were attached, showing that it had lain for some time at the bottom of the sea of the Norwich Crag.

At Thorpe, near Aldborough, and at Southwold, in Suffolk, this fluviomarine formation is well exposed in the sea-cliffs, consisting of sand, shingle, loam, and laminated clay. Some of the strata there bear the marks of tranquil deposition, and in one section a thickness of 40 feet is sometimes exposed to view. Some of the lamelli-branchiate shells have both valves united, although mixed with land and freshwater testacea, and with the bones and teeth of elephant, rhinoceros, horse, and deer. Captain Alexander, with whom I examined these strata in 1835, showed me a bed rich in marine shells, in which he had found a large specimen of the *Fusus striatus*, filled with sand, and in the interior of which was the tooth of a horse.

Among the freshwater shells I obtained the *Cyrena consobrina* (fig. 26, p. 28), before mentioned, supposed to agree with a species now living in the Nile.

I formerly classed the Norwich Crag as older Pliocene, conceiving that more than a third of the fossil testacea were extinct; but there now seems good reason for believing that several of the rarer shells obtained from these strata do not really belong to a contemporary fauna, but have been washed out of the older beds of the "Red Crag;" while other species, once supposed to have died out, have lately been met with living in the British seas. According to Mr. Searles Wood, the total number of marine species does not exceed seventy-six, of which one tenth only are extinct. Of the fourteen associated freshwater shells, all the species appear to be living. Strata containing the same shells as those near Norwich have been found by Mr. Bean, at Bridlington, in Yorkshire.

^{*} Owen, Brit. Foss. Mamm. 271. Mastodon longirostris, Kaup, see ibid.