

the precise age of the formation an open question, and to remain satisfied for the present with having arrived at the conclusion that the Older Parian deposits in Trinidad, and the rocks of similar age in South America, cannot be newer than the Gault.

List of fossils found by the Government geologists in the Older Parian at Cumana :—*Pteroceras*, *Cerithium*, *Turritella*, *Trigonia subcrenulata*, D'Orb., *Astrea Couloni*, *Arca*, *Cardium*, *Echinus*.

Those found in Trinidad since the survey, and alluded to in the above paper, but not included in the foregoing list :—*Belemnites*, *Rostellaria* ?,* *Natica* ?, *Cytherea* ?, *Plagiostoma* ?, *Pecten alatus* ?,† *Ostrea*, 2 sp.

DESCRIPTION OF A LAND SURFACE UNDERNEATH THE DRIFT ON THE COAST OF SUFFOLK; OBSERVED IN 1859.

BY S. R. PATTISON, Esq., F.G.S.

The low cliffs stretching from Gorleston, south of Yarmouth, towards Lowestoft, are mainly composed of boulder drift, and are well described by the late Mr. Trimmer in the Quarterly Journal of the Geological Society for 1857. As an independent confirmation of his observations on the intercalation of the whole boulder-clay double series, between the fluvio-marine and forest bed beneath, and the local marls and marsh and estuary beds occasionally above, I send the following note, made without having had the benefit of Mr. Trimmer's paper.

On the beach under Corton the section is as follows :—

	Feet.
Mould	2
Disturbed ferruginous sand	10
Alternations of gravel and sand, frequently interchanging. Gravel well rounded and small. Large masses of dark clay entangled in the gravel with lumps of chalk. Small rolled pebbles of chalk, boulders of slate rock, coal-measures, greenstone, red sandstone, oolites (very abundant), having an average depth of	30
Clean brown sand, with occasional very small pebbles	40
An irregular bed of peat, surface and contents of marshes, compressed rush-like plants matted together, and much mineralized with sulphate of iron	2
An irregular surface below the bog, covered with roots and lower portions of stems of ferns (<i>Pteris</i> ?) <i>in situ</i> , in a dirt-bed; occasionally large trees	5
Dark clay, with a greenish tinge, underlying the heath-like de-	

* Perhaps the *Pteroceras* of the Geological Survey.

† Possibly an *Avicula*.

posit above, abounding in Cyclas, opercula of Bithynia?, and traces of other Planorbis-like shells, very small flint-pebbles and occasional peaty layers 4

Total 93

CORRESPONDENCE.

Age of Prehistoric Man.

SIR,—In Professor King's valuable paper on the "Glacial and Post-glacial Deposits," in the 'Geologist' of last month, the learned author of this most interesting paper says: "The genus Homo belongs to both the glacial and post-glacial period; it was represented as early as the close of the subaqueous epoch, or the beginning of the second subaerial division of the glacial period, by a low form or extinct species, a view strongly countenanced by the Neanderthal skeleton, as well as the rudely chipped flint-implements occurring in the elephant-gravels of Amiens, Hoxne, and other places. Probably a higher type existed at the same time, as indicated by the skulls found in the Engis caves near Liège."

I must venture to express an opinion that the theory which assigns the Engis and Neanderthal skeletons to any particular division of the glacial period is scarcely warranted by the facts before us. Without wishing to throw any doubt on the demonstrated antiquity of the Engis skull, of which the age is fully proven, in the words of Huxley, to carry us back to the "further side of the vague biological limit which separates the present geological epoch from that which immediately preceded it," I would wish to ask what is the geological or palæontological proof of the following propositions:—

1. That the Neanderthal skeleton was probably coæval with the remains from the Liège caverns.
2. That it was coæval with the "high-level" flint-implement gravels of the Somme valley or of Hoxne.
3. That the species of man to which it belonged is extinct, *i. e.* different from a race having the same general cranial character as some existing Australians.

Sir Charles Lyell, in his 'Antiquity of Man,' remarks justly that the Neanderthal skull has given rise to surprise "because, having no such decided claims to antiquity [as the skull from Engis], it departs so widely from the normal standard of humanity;" and concludes his remarks on the evidences thus: "If we conceive the [Neanderthal] cranium to be very ancient, it exemplifies a less advanced stage of progressive development and improvement. If it be a comparatively modern race, owing its peculiarities of conformation to degeneracy, it is an illustration of what the botanists have called 'atavism,' or the tendency of varieties to revert to an ancestral type, which type, in proportion to its antiquity, would be of lower grade."

The fact cannot be too prominently brought before us, and must again be borne in mind, that no flint-implements or any other works of art were found in the Neanderthal cave, and that the tusk of bear which was found