in the great chalk pit the general character of the Chalk and the Lower Eocenes as they occur in the British Islands, described their foreign equivalents, and the beds which are probably intermediate in age between the Upper Chalk and the Thanet Sands of England. Though we find in our home section the Thanet Sands lying conformably on the Chalk, it is more than probable that we have lost some hundreds of feet of chalk, either by sub-aërial or sub-marine denudation, or by decomposition after the deposition of the superincumbent sands. That some of the Chalk has been removed by decomposition is evident from the occurrence of the well-known bed of green-coated flints at the top of the Chalk, which bed must have been formed by the quiet and slow removal of the Chalk in which the flints were originally imbedded.

The Thanet Sands and Woolwich and Reading Series are both of very limited extension in England, the former formation extending only from Pegwell Bay to a little to the west of London; yet the *Sables de Bracheux* and the *Argile plastique* of the continent of Europe shows us that the original extension of these formations was by no means inconsiderable.

Leaving the great Chalk and Thanet Sands Section, the party were conducted nearer to the town of Woolwich, where a fine exposure of the Shell-beds of the Woolwich and Reading Series reposing on the Thanet Sands gave an opportunity for the collection of some of the estuarine shells which are so markedly characteristic of the Woolwich Beds. *Ostrea pulchra* and *Cyrena cuneata* almost form the Shell-beds, but intermingled may be found many specimens of *Melania inquinata* and *Cerithium funatum*.

ORDINARY MEETING, MAY 2ND, 1873.

HENRY WOODWARD, Esq., F.G.S., F.Z.S., &c., President, in the Chair.

The following Donations were announced:—

“On the Wealden as a fluvio-lacustrine formation, and on the relation of the so-called Punfield Formation to the Wealden and Neocomian,” by C. J. A. Meyer, F.G.S.; from the Author.

“Further Notes on the Punfield Section,” by C. J. A. Meyer, F.G.S.; from the Author.

“Abstract of Proceedings of the Geological Society;” from that Society.

“Journal of the London Institution;” from that Institution.

“Transactions of the Woolhope Naturalists’ Field Club, for 1871;” from that Club.

The following were elected Members of the Association :—

Frederick Berry, Esq.; Rev. John Clifford, M.A., LL.B., B. Sc.; George Rixworthy De Wilde, Esq.; Henry Tilston Hodgson, Esq., M.A.; Richard Stephen Hulbert, Esq.; Edwin James Layton, Esq.; Robert Macgillivray, Esq.; Hugh B. Price, Esq.; and Arthur Thompson, Esq.

The following Paper was read :—

ON THE VALLEY OF THE VÈZÈRE, PÉRIGORD, ITS LIMESTONES, CAVES, AND PRE-HISTORIC REMAINS.

By Professor T. RUPERT JONES, F.R.S., F.G.S.*

Geography.—The River Vézère rises in the Department Corrèze, west of Puy de Dôme, traverses the Department Dordogne, and joins the Dordogne River near Sarlat; the latter river running into the estuary of the Gironde near Bordeaux. The country was a part of the old Aquitania, and subsequently of Périgord.

Geology.—The Vézère rises in hills of metamorphic rocks—gneiss, mica-schist, &c., with quartz veins, a part of the old central plateau of France. Some patches of Coal Measures, and a fringe of red sandstone, are succeeded westward by Rhætic and Jurassic rocks; and at about the eastern limit of the Department Dordogne the river begins to run over almost horizontal Cretaceous rocks, which it traverses nearly to its junction with the Dordogne; thence to the coast the land is formed mainly of Tertiary strata. At Condat, where the railway traveller descends upon the valley of the Vézère, there is a well-known hill of Jurassic limestone, which presents an old cave called “Badegoul.” Further down the river the banks present nearly vertical sides, fluted with deep horizontal channels, excavated by frost and water in the softer bands of the Cretaceous limestones. The hard ledges at some places have served as terraces and galleries of rock-hewn dwellings, even large chateaux. Frequently caves, or rather large recesses, have been

* The paper was illustrated by specimens, casts, maps, and drawings, which were described and commented on at large.