

CORRESPONDENCE.

DISCOVERY OF A PLEISTOCENE FRESH-WATER DEPOSIT, WITH SHELLS, AT HIGHBURY NEW PARK, NEAR STOKE NEWINGTON.

SIR,—Some of your readers may be interested in the discovery made to-day by me of fossil shells, of the ordinary Thames Valley species, in the more eastern of the two brick-pits in Highbury New Park.

The older and more western of these pits has been open for 20 years; but although it possessed well-marked and stratified beds of deep purple clays containing much wood, almost in a recent condition, yet no fossil shells have been discovered. The surface of the ground at the western brick-pit is 120 feet above the Ordnance datum-line. At a depth of 40 feet in this pit the yellow sands are well seen at the present time, false-bedded, 10 feet in thickness, and in many respects like the Cyrena-sands at Crayford, but, unfortunately, up to the present time no fossils have been found there. The surface of the ground at the newer and more eastern of the two pits in Highbury New Park, containing the newly discovered shell-bed, is 102 feet above the Ordnance datum-line. The clay-bed, 2 feet thick, and full of land and freshwater shells, accompanied by much wood, is 22 feet below the surface, and consequently 80 feet above the Ordnance datum-line. There are also some shells in the reddish loam or brick-earth, immediately above the clay, so that the Thames Valley fossiliferous beds reach at this point to 85 feet above the Datum. The London Clay surface is supposed to be 10 feet below the shell-bed.

At 750 yards to the north of this brick-pit the Hackney Brook formerly flowed, at a height of 75 feet, on a bare surface of London Clay.

At 530 yards due west of this pit the ground in Highbury Park is 142 feet high, and the London Clay reaches to within 5 feet of the surface, and is covered with coarse gravel, without any brick-earth.

The thick brick-earth series intercalated with gravel, sand, and clay beds on the Highbury New Park, therefore, probably owes its formation and preservation to the protecting influence of this high escarpment of London Clay. I have shown the importance of these escarpments, and their relation to the Thames Valley deposits, in papers read before the Geological Society.

Mr. R. Tate has kindly examined the fossils collected in the Highbury New Park pit, and gives the following list and remarks:

- | | |
|--|-----------------------------|
| “LAND SHELLS.— <i>Helix rufescens</i> , var. <i>depressa</i> , | <i>Succinea putris</i> , |
| <i>Zua lubrica</i> , | <i>Carychium minimum</i> . |
| <i>Clauvilia biphlicata</i> , | |
| “FRESH-WATER SHELLS.— <i>Limnæa palustris</i> , | <i>Valvata piscinalis</i> , |
| <i>Planorbis marginatus</i> , | <i>Pisidium obtusale</i> , |
| ” <i>spirorbis</i> , | ” <i>pusillum</i> . |
| <i>Valvata cristata</i> , | <i>Cyclas cornea</i> , var. |

“The above assemblage of species suggests a shallow pool or a slow running stream of slight depth, on the margins of which

semi-aquatic plants grew, affording shelter for the land snails, which inhabit usually marshy or damp situations; *Zua lubrica*, however, is more sylvan in its habits, than the others. All the species inhabit Great Britain, but *Clausilia biplicata* ranks amongst our rarest.—R.T."

In 1866, during the formation of a cutting through Hackney Downs, Mr. S. Skertchly made a large collection of Thames Valley drift-shells which he discovered there, and brought me a series which were named by Mr. R. Tate. I understand Mr. Skertchly also sent a set of specimens to Mr. Smith at the same time. In July, 1867, a notice of the discovery of these shells appeared in the *Natural History Repertory*, by Mr. George J. Smith. I inspected the section in 1866, and found that the Unios were in a bed of purple clay with sands above and below them. The surface of Hackney Down is 70ft. above the Ordnance datum-line, and the Cyrena and Unio bed, although partly covered up when I examined it in 1866, appeared to be, at least, 20ft. below the surface. The Hackney Brook formerly flowed 550 yards west of the above Cyrena bed on Hackney Down at a height of 51 feet above the Ordnance datum-line. I consider that in this part of its course the channel of Hackney Brook was on this same Pleistocene clay, which is three or four feet thick, and not in London Clay, as marked in Mr. R. W. Mylne's Map of London.

The discovery at Hackney Downs of a clay-bed with shells reminds us of the description of a similar section at Shacklewell by Mr. Prestwich in Vol. XI. of the *Quarterly Journal of the Geological Society*, at a locality not far distant from Hackney Downs. The clay-bed is described there to be between beds of sand; but neither Cyrena nor Unio are in Mr. Prestwich's list of fossils from that excavation. Sir C. Lyell, however, states in the "Antiquity of Man," that he had seen Cyrena at Shacklewell, page 161.

Cyrena and Unio are found together in great abundance at Grays, Crayford, and Hackney Downs. Mr. A. Harris, of Bradford, brought me, in 1867, a number of specimens of the same Cyrena, accompanied by an undescribed but remarkable species of Unio from a Pleistocene gravel 150ft. above the present Nile, and 1200 miles from the Mediterranean. I use the name *Cyrena* as more familiar than the term *Corbicula*, by which it is often recorded.

I should hope that shells may yet be found in the larger and older brick-pit in Highbury. The smaller brick-pit in Highbury New Park is easily found, as it is about one hundred yards west of the bridge over the New River in the Green Lanes, Stoke Newington, close to Aden Terrace, and about four hundred yards east of Highbury Barn Tavern. No doubt a considerable addition might be made to the number of species collected by me, and it is therefore very desirable that the spot should be carefully examined before it is filled up.—

ALFRED TYLOR.

STOKE NEWINGTON, July 5, 1868.