

NOTES ON A DISCOVERY AT GREENHITHE, KENT.

By the Rev. J. M. GATRILL.

The discovery of one of those artificial cavities in the chalk known as "Dane holes," so frequently found in the counties of Kent and Essex, would not, as a rule, call for remark. There are, however, some details of special interest connected with one which was opened at the beginning of last year in the parish of Greenhithe, Kent, which may be worthy of attention.

Some twelve months ago, the workmen in the employ of the Greenhithe Chalk Company came, in the course of their excavations, across what had once been a large pear-shaped cave in the chalk.

The broadest part, which was a few feet above the base or floor, was between twenty-two and twenty-three feet in width. The floor was nearly circular in shape and quite smooth, while the roof arched over in a dome-like shape to a point in the centre whence a perpendicular shaft ran to the surface of the ground. The depth from the mouth of this funnel or shaft to the bottom of the pit was about thirty-five feet. There was no other means of access to the cave, as the nature of the ground forbade anything like a horizontal adit. The sides of the pit had been roughly worked with a pick, the marks of which were plainly visible in the chalk. Both the shaft and the cavity were completely filled with a mass of sand and gravel, and an enormous quantity of animal bones. Many cartloads of these remains were taken out and thrown on one side by the workmen. They belonged to the horse, ox, pig, dog, and deer. A few bones of birds were found, the horn of *Bos longi cornis* (now extinct in Europe), and a large quantity of mice bones—the former possessors of which had lived and died in the midst of plenty. The remains of coarse Roman pottery were also discovered, but in no case was a perfect vessel found—only broken fragments. One or two pieces of Samian ware were also turned up, one bearing the potter's name "*Licinius*." There were no coins and no flint weapons, the only other relics being a brick for flooring, a piece of fine white tile, iron nails, a fragment of iron hoop, a small ferule, an iron hook (for opening doors), two carved bone sockets, and two worked stones, apparently used for making pottery. But what gives special importance to this discovery is the fact that beneath this mass of *debris*, and on the floor of the pit, were found three human skeletons lying side by side. Unfortunately, the bones were scattered and lost by the workmen, and only one skull was in a sufficiently good state of preservation to bear removal. It is now in the possession of the author of these notes. It belonged to a middle-aged man, and measures twenty-

and-a-half inches in circumference. It is narrow in the front part; the teeth are all perfect and very sound.

It is needless to enter into a discussion as to the purpose for which, or the people by whom, these pits were made. Camden, writing in 1606, says, of similar holes to the present, which he saw on the opposite coast of Essex:—"Neere unto Tilbury, there bee certain holes verie deep, the mouthe whereof is but narrow, but within they are large and spacious, the country folks calling them Dane holes." And Hasted describes them as being "ten, fifteen, and twenty fathoms deep. At the mouth they are narrow like the tunnel of a chimney, or the passage of a well, but at the bottom they are very large, insomuch that some have several partitions or rooms, one within another, strongly vaulted and supported by pillars of chalk." In the neighbouring parishes of Dartford, Crayford and Bexley—a district bounded by the rivers Darent and Cray—such excavations are extremely numerous. Hundreds have been destroyed within the memory of man. Thirty years ago no less than fifty could be counted within the area of an acre in the parish of Bexley. Mr. Roach Smith is of opinion that many of these caves are of a very remote antiquity. They may possibly have been originally dug for the purpose of getting chalk, and afterwards used as granaries or even dwelling places. That pits were used for the purpose of storing grain by the ancient Germans has been left on record by Tacitus. Within the recollection of our forefathers some of these pits formed convenient receptacles for smuggled goods. Pliny's description of chalk seems to bear out the notion that the former—the getting chalk—was the primary object the excavators had in view. "Chalk is chiefly obtained in Britain by means of *pits sunk like wells*, with very narrow mouths, to the depth sometimes of 100 feet, where they branch out like the vein of mines" (lib. xvii, c. 8). At the same time it does seem a far easier and a more obvious course to get at the chalk by means of a pit with a wide mouth like our modern chalk pits. Possibly Pliny is speaking of districts in which the chalk lay beneath a stratum of gravel or other soil, and could not be reached without making a shaft. But in this neighbourhood the chalk is close to the surface, and therefore it would be unnecessary to sink a shaft in order to find it. Indeed, the workmen who discovered the pit we are speaking of, laughed at the idea of its having been formed for the purpose of getting chalk. For whatever purpose, however, the cave in question was formed, it is obvious that it is præ-Roman in date. All the pottery found in it belonged to the Roman-British period. In all probability during the Roman occupation a farm or villa was built at or near the opening of the pit's mouth. The inhabitants found it a convenient dust-hole close at hand, into which they threw all the bones, broken shards, and other household refuse. They also turned it to baser uses, since there were evident marks of the passage of excrementitious matter down the well. Although no traces of a building have as yet been found still this supposition derives force from the fact of a silver coin of the Emperor Hadrian's having been found lately in a plantation a hundred yards distant from the place we are speaking of. It was dug up at a depth of about five feet from the surface. It is in a good state of preservation, and bears on its obverse side a bust of the emperor, with the legend—"Imp. Cesar Trajan Hadrianus Aug." On the reverse is a figure of Liberty seated, with the motto on the exergue, "LIB, PUB" (Libertas

Publica), and round the rim, "P.M.T.R. P. COS, iii"—"*Pontifex Maximus, Tribunus Plebis, consul ter.*" It is in the possession of G. Head, Esq., Ingress Cliff, Greenhithe.

It is more difficult to account for the presence of human remains in the pit. From the orderly manner in which the bones lay when found, it is fair to infer that the bodies were placed there designedly, and placed there before the pit became a hiding place for domestic rubbish. The position near the centre of the floor militates against the idea that the bodies were thrown in at or about the same time that the animal remains and pottery were tossed in. May not the original excavators of these holes have occasionally used them as burying places, or may not these bones be the remains of persons who at some time or another using the pit as a place of concealment, perished there from starvation?

It has been suggested with great show of probability that this and similar holes were originally made not so much for the purpose of getting chalk as flints, which, as is well known, are more easily worked when newly dug up than after exposure to the sun and air. The care which had evidently been taken to finish off the walls of the cave so as to render them smooth and even seems to the writer of this paper to tell against such a supposition. That such may have been the *original* purpose is quite possible, but that afterwards the hole was adapted so as to form a dwelling or, at all events, a hiding-place admits of little doubt.