XX.—*Notice of the Discovery of a Cist and its Contents at Moorhouse Farm, Brougham, Westmoreland. By Professor ROBERT HARKNESS, F.R.S., F.G.S. and Mr. VALLANCE STALKER.*

Read June 18, 1874.

A short time ago Mr. Hutchinson, the tenant of Moorhouse Farm, the property of the Right Hon. Lord Brougham and Vaux, informed one of the authors of this communication, Mr. Stalker, that he had recently laid bare a cist containing human bones, and desired him to examine the circumstances of the occurrence and the nature of the contents.

The locality where this cist was discovered is about $2\frac{1}{2}$ miles south-east of Penrith, in a field a short distance south-east of the farm-house, and very near the termination of a short low ridge running at west and south-east. In the immediate neighbourhood of the cist the ground presents a narrow and shallow basin-shaped hollow. This hollow is however the result of sand having been taken from the spot for mixing with lime; and it is owing to this that the cist was laid bare.

The cist, which consisted of four upright flags of Lower Permian sandstone, the rock of the neighbourhood, covered by an irregularly shaped flag of the same nature, had a north and south direction in its length, being about 34 inches long. The breadth, which was uneven, at the south end amounted to 26 inches, while the north end did not exceed 21 inches. The depth was 18 inches. The slabs which formed the northern and southern ends were inclosed by the longer side-flags, and were prevented from being pushed in by the lateral pressure of the sand on the outside by means of three small somewhat wedge-shaped boulders inserted into the north-west and south-east corners of the cist.

The bottom of the cist was rudely paved with small angular portions of sandstone of the same nature as the flags forming the sides. These small fragments were probably derived from the shaping of the ends of the cist. They were all more or less deepened in colour on the surface by the action of fire upon them.

The interior of the cist was in a great measure filled with fine sand, which had doubtless found its way into the cist from the surrounding soil through the crevices in the angles and under the covering flag. On removing some of the sand a skull, which had previously been observed by Mr. Hutchinson, was met with near its original position in the south-east corner of the cist.

The cervical vertebræ including the atlas and axis were next found, somewhat towards the south-east side. The left humerus was also obtained, and also a portion of the right one, together with a portion of the left scapula and the proximal end of the left radius. The dorsal vertebræ and ribs were in a very fragmentary state, and some of them had entirely disappeared. One of the lumbar vertebræ was met with, and a fragment of the pelvis, consisting of a portion of the left side, was also discovered. Both the femora were obtained, the left one being much better preserved than the right; and imperfect tibiæ were also found. The other bones of the extremities were in a very fragmentary and decomposed condition.

Judging from the position and state of the fragments of the skeleton, it would seem that the body, after being placed in the cist in a contracted position, with the face towards the north, had fallen on its right side, as the skull and other bones were found lying in greater quantities towards the south-east side of the cist. The bones of the right were all in a much more imperfect state than those of the left side; and this applies also to the right side of the skull. This greater amount of decomposition of the right side of the skeleton resulted doubtless from the greater amount of pressure to which this portion of the skeleton was subjected from having fallen on that side.

The condition of the skull, as regards developement, indicates a full-grown individual. Although many of the teeth are absent from the jaws, having dropped out after death, the lower jaw, which was also obtained, exhibits the dentition very nearly perfect, only one of the wisdom-teeth, that of the right side, being absent. This tooth probably fell out of the lower jaw, judging from the condition of its socket, also after death. The crowns of the teeth are very little worn, and their full and perfect developement as seen in the lower jaw indicates an individual who had reached maturity, but who was comparatively young. This inference is still further borne out by the condition of the suture of the skull, which was in a very open state; and in connection with the lambdoidal suture Wormian bones occur, especially two of large size in the left portion of this suture.

The general outline of the skull is strongly brachy-cephalic. There is an

absence of any angularity in the outline of the skull, and the mastoid process is only moderately developed. Not being in possession of means for properly determining the relative dimensions of the skull, or for comparing it with others, this description is left incomplete.

The lower jaw, which is rather massive, has a depth of an inch at the symphysis. The distance between the rami at the posterior angle is $3\frac{1}{8}$ inches, and the angle is somewhat oblique. The distance between this and the symphysis, measured on the inner side, is 3 inches. The mental protuberance is well developed and very prominent.

With reference to the bones of the limbs, the humerus has a length of $12\frac{1}{2}$ inches. The radius is too imperfect to afford any information regarding size. The femur is 18 inches long; and as both the proximal and distal ends of the tibiæ are wanting exact information cannot be obtained concerning its length. A portion of one of the fibulæ was also found, but this is in a still more imperfect condition.

Judging from the length of the femur the height of the individual to whom the skeleton appertained must have been about $5\frac{1}{2}$ feet; and the muscular impressions on the limbs indicate considerable physical power.

Besides the remains of the skeleton the cist afforded two urns, both of which had been placed on the left side of the body in close proximity to each other. The larger of these urns belonged to the forms known as "food vessels," and was in a very fragmentary condition. The base, however, was perfect and $3\frac{1}{2}$ inches in diameter.

A small portion of the side of this urn remains attached to the base. This bulges out rapidly, leading to the inference that the middle and upper portions had much greater diameters than the base.

The sides averaged about $\frac{1}{4}$ of an inch in thickness, and the clay used in the fabrication of this urn was mixed with small angular fragments of stone, which seem to have been produced by the breaking and crushing of larger pieces.

The external surface of this "food-vessel" is of a light brick-red colour, the interior being a light-brown shade very near the original colour of the clay of which the urn is composed. The difference in colour has probably resulted from the greater influence of the heat in baking on the external than on the internal surface.

The fragments of this urn are ornamented externally with patterns of two kinds. Judging from the fragments collectively, the "food-vessel" seems to have had near its base a series of chevron lines running round it. Immediately above

these oblique zig-zag markings occur. To these succeed horizontal lines irregular in number and in distance from each other, occupying a breadth of above $1\frac{1}{2}$ inch, and showing in one fragment a series of no less than fourteen. Above these horizontal lines another series of short oblique lines occur in the form of four somewhat irregular rows surrounding the vessel and occupying a space of about $1\frac{1}{2}$ inch. To these another series of short horizontal lines succeeds. In one of the fragments this series exhibits eleven lines, which were also irregular in distance from each other. Above these horizontal lines is a single row of short oblique lines succeeded by a plain surface which probably approached the upper margin of the urn; but of the rim no portion remains.

The two series of horizontal lines which this "food vessel" exhibits bear distinct evidence that they have been formed by the impress of a twisted cord or thong. The oblique lines, which are deeper and wider than the horizontal, at first sight seem to have been produced either by the point of a stick or by the human nail; careful examination, however, shows that these oblique markings have the same kind of interruptions in them as occur in the finer horizontal lines, and leads to the inference that a twisted cord or thong gave rise to these interruptions. If this be the case the twisted cord was probably attached to the extremity of a wedge-shaped termination of a stick when used to produce the thick oblique impression.

DRINKING-CUP, BROUGHAM, WESTMORELAND. HEIGHT $3\frac{3}{4}$ INCHES.

The other urn (see woodcut), which is much smaller in size, belongs to the group known as "drinking-cups." Although considerably injured this is in a much more perfect condition than the "food-vessel." The height of the drinking-cup is $3\frac{3}{4}$ inches; the base is $2\frac{1}{4}$ inches. The greatest diameter is in the middle, and the form of the vessel is rather elegant.

The colour of the outside and inside is much more uniform than in the food vessel, being of a light brown shade. The composition is finer, the clay being mixed with very small fragments of stone, and also ashes.

The condition of the drinking-cup is sufficiently perfect to show the ornamentations on its surface in all its detail. This is much more delicate and regular in its arrangements than that of the food-vessel.

From the base, and extending for about $1\frac{1}{2}$ inch, is a series of oblique lines rather closely approximated passing round the cup; near the base these are overlapped by short and somewhat irregular oblique lines having an opposite direction. Above the more regular oblique lines is a series of three horizontal lines passing round the surface regularly, and occupying a breadth of about $\frac{4}{10}$ ths of an inch. To these horizontal lines succeeds a series of oblique lines in two rows proceeding in opposite directions, and producing a lozenge-shaped pattern. Succeeding the lozenge-shaped pattern is another series of horizontal lines, also in three bands, having about the same width as the horizontal series below. On one side of the cup the mode by which this ornamentation has been produced is very manifest, as six rows of lines instead of three occur, the result of the overlapping of the ends of the three thongs or cords which formed these lines. Above the upper horizontal series and occupying the upper portion of the cup a second series of lozenge-shaped patterns occur, having a width of about an inch, and terminating in the gently-rounded upper margin of the cup. Both the oblique and horizontal lines which ornament this drinking-cup have the same interruptions in them, showing that they are all the result of the same form and mode of impress.

With respect to the occurrence of these two vessels together in the same cist, we learn from the Rev. Canon Greenwell that this is a unique circumstance so far as his great experience in barrow opening is concerned, and places beyond doubt the use of these two kinds of vessels at the same time.*

There is one circumstance in connection with this cist which yet remains to be noticed.

* The remains of the "food-vessel" have been presented to the Museum at Oxford, and the "drinking-cup" to the Society of Antiquaries.

This is the occurrence of what appeared to be ashes, such as would result from the burning of dried grass in considerable quantities among the small portions of flags which formed the floor of the cist. It has been already mentioned that these small portions of flags bore distinct evidence of having been subjected to the action of fire. This circumstance and the occurrence of ashes on the floor of the cist may probably be accounted for by supposing the urns to have been fired on the spot previous to the interment of the body.

Some few years ago a large urn was discovered in the low grounds in the field adjoining that which has afforded the cist above described. This urn contained burnt bones, and was surrounded by a circle of stones.

Nothing of the kind was found in connection with the cist containing the bones and the two urns which we have described. But it by no means follows that such may not have been the case originally. The sand found in the cist and immediately around it, and that which has been removed for making mortar, does not seem to be a natural deposit, but rather an artificial accumulation. It probably formed a tumulus raised over this ancient burial-place.

With reference to the age of these remains: If we derive our conclusion from the nature of the ornamentation of the vessels we might be induced to infer that, as these consist of simple lines or furrows, they point to the neolithic age.^a Canon Greenwell, however, informs us that food-vessels and drinking-cups, such as those found in the cist at Moorhouse farm, have been met with by him associated with bronze implements; and that there is nothing in connection with the character of the ornaments inconsistent with their belonging to the bronze age, to which we have no doubt they are to be referred. And as no implements, nor any other articles, except those above alluded to, were found in this cist, the conclusion as to its age depends upon comparative evidence.

^a Lubbock's *Pre-Historic Times*, 1st ed. page 136.

SCALE.
Metres
30
20
10
0
10
20
30

ST VITALIS.
RAVENNA.

ST SERGIUS & BACCHUS,
CONSTANTINOPLE.