Excavations at the "Amphitheatre," Charterhouse-on-Mendip, 1909.

BY H. ST. GEORGE GRAY.

I.—Bibliography.

1. Victoria County History, Somerset, Vol. I, 336 *et seq.*, by Dr. F. Haverfield, F.S.A.

2. Earthwork of England, by A. Hadrian Allcroft, 1908, pp. 589-591. Description, with sketch plan, of the "Amphitheatre."

3. Archæological Journal. The Rev. Preb. H. M. Scarth mentioned this earthwork in a paper on Barrows on the Mendips, Vol. XVI, 153.

4. Journal, British Archæological Association. The Rev. Preb. Scarth mentioned this earthwork in a paper on Mining Operations in the Mendips, Vol. XXXI, 138.

5. Proc. Som. Arch. and N. H. Society. Presidential Address by Mr. Wm. Long, 1869, Vol. XV, pt. i, 29.

6. History of Somerset, by the Rev. W. Phelps, Vol. II, 135 (Roman period).

II.—Situation of the Earthwork (see Maps).[1]

THE "Amphitheatre" is situated on the top of the Mendip Hills, at an altitude of about 975 feet above sea-level, in a field called the "Hundred Acres,"[2] a distance, as the crow flies, of 7¼ miles to the N.W. of Wells, 3½ miles N.E. of Cheddar Station, 1½ miles S. of Blagdon, and 2¾ miles W.S.W. of Compton Martin. To come to closer quarters, its position is 1 mile to the E.S.E. of the highest part of Black Down (1068 feet above mean sea-level), ⅝ mile N.N.W. of the new Charterhouse Church (Plate II, fig. 3), 2350 yards to the N.N.W. of

1. Maps.—*V. C. H. Somerset*, I, 336; *Journ. Brit. Arch. Assoc.*, XXXI, Plate 9; and Hoare's "Ancient Wiltshire," Vol. II, Roman Æra, Iter ii, Plate III, p. 39.

2. *Journ. Brit. Arch. Assoc.*, XXXI, 138.

the nearest part of the Roman Road (according to the position marked on the O.M.), and 2800 yards to the N.W. of the extensive Charterhouse lead-mines (which were worked considerably in Roman and later times, and probably in the Late-Celtic period also). There are also disused lead-mines at a shorter distance to the W. of the earthwork.

The Roman Settlement known as the "Town Field" is only two fields distant to the S.W., being bounded on its lower side by the high-road from Cheddar and Priddy to Burrington and Blagdon, on the N.E. by an ancient trackway known as "Rains Batch"—now a drove leading to the downs and the "amphitheatre,"—and on the N.W. by the field named "Lower Rains Batch." Between Charterhouse school and the lead-mines is what appears to be a square earthwork of low relief, close to the Roman Road, and marked "Roman Camp" on the O.M.

The Manor Farm, near by (Plate II, fig. 3), represents the site of a Carthusian house which was connected with Witham Priory.[3]

III.—Relics of the Roman Period found in the Immediate Neighbourhood.

It would be presumption on my part to claim to have done any original research in the collecting of information regarding finds of the Roman period made at Charterhouse, seeing that Dr. Haverfield has written so ably on the subject and devoted no less than ten pages in the *Victoria History of Somerset*[4] to nearly all that is known with regard to the Roman lead-mines of

3. "In A.D. 1250 Henry III exempted the lands of 'the prior and brethren of the new Chartreuse on Menedep' from regard of forest, to which, as lying within the bounds of Selwood Forest, they could have been otherwise subject." (E. M. Thompson's "Somerset Carthusians," 1895, p. 82.)

In the Perambulation of Mendip Forest, May 10th, 1298, 26 Edw. I, is mentioned the Fee of Chartruse (Charterhouse Mendip, belonging to the Carthusians of Witham),—*Proc. Som. Arch. Soc.*, XXXVII, ii, 83.

Charterhouse was granted to Robert May, 36 Hen. VIII.; in 44 Eliz. it was the seat of John May, sheriff of the county. It passed into the hands of the Gore family and in Collinson's time was bought by Welbore Ellis. (Collinson's "Somerset," II, 235).

4. Vol. I, pp. 334-344.

Mendip[4a] and the relics which their examination has revealed. The greater part of these antiquities were presented by the late Mr. A. Capper Pass to Taunton Castle Museum and to the Bristol Museum and Art Gallery, where the finer series is to be seen.

The first discoveries appear to have been made by the Rev. J. Skinner, rector of Camerton, in his digging near Charterhouse in 1819-20. Later the existence of Roman lead-mines became generally known; and about 1867-76, when attempts were made to resume the lead-mining, Roman remains were obtained in large quantities, "evidence being revealed of an active mining industry and a large mining population in the Roman period." What we see to-day is the valley of Blackmoor, with its excellent water supply and the extensive remains of old mining refuse, and between it and the "amphitheatre" enclosures called Town Field and Upper and Lower Rains Batch—fields which are known to have yielded a large number of Roman coins and other relics. No remains of foundations of the buildings of the mining settlement are visible at the present day, and it is a deplorable fact that no plans were made at the time when the area was so unmethodically and inadequately disturbed.

The relics discovered at Charterhouse have been described, with several illustrations, by Professor Haverfield. Briefly they consist of:—230 bow fibulæ of bronze, 20 disc fibulæ (mostly enamelled), some penannular ring-brooches, a mask of bronze, keys, tweezers, pins, iron chains, a chopper, a knife, rings of iron, horse-shoes, nails, several inscribed pigs of lead and others uninscribed, sets of leaden weights, sling-bullets of

4a. Prof. W. Gowland, F.R.S., in his exhaustive paper on "The Early Metallurgy of Silver and Lead," *Archæologia*, LVII, 359-422, informs us that "the most important centres of Roman mining were the Mendip Hills (Somerset), the district of the Stiper stones and its subsidiary hills (Shropshire), the hill regions of North Derbyshire, and the neighbourhood of Holywell (Flintshire)" (p. 381). . . . "Somerset and Shropshire would seem to have outrivalled Derbyshire in the extent of their mines, but as in Derbyshire the ore appears to have been richer, this district may not have fallen much below either of the former in the amount of lead it produced" (p. 382). . . . "The smelting processes here (Mendips) were conducted in a most wasteful manner, some of the slags containing from 20 to 26 per cent. of lead" (p. 382).

lead, a lamp, a small pick, clay crucibles with lead adhering, sheet and bottle glass, several engraved signet gems, a small statuette of white clay, three inscribed stones, a spade of oak, and pottery, including much Samian and handles of large amphoræ. The coins discovered include a hoard of copper currency washed with silver, found in 1846, and deposited about the time of Carausius.[5] Others of earlier date include two British silver coins and two Republican, whilst the earliest Empire is represented by coins of Tiberius. Dr. Haverfield records that the later part of the fourth century is a blank.

Owing to the presence of British coins and fibulæ of Late-Celtic type, and also to the fact that several objects of lead have been found in the Glastonbury Lake Village, it is only reasonable to suppose that the smelting of lead was understood and practised before the advent of the Romans, although the workings were probably not developed to any great extent until the end of the first century A.D.; but of the furnaces and moulds used by the smelters we know practically nothing.

All the inscribed pigs bear emperors' names,[5a] from which we may infer that the mines were Imperial property.[5b] Military

5. The only coin recorded to have been found in the Amphitheatre is thus described:—"Silver coin of Claudius. *Obv.*—TI. CLAVD. CAESAR AVG. P.M. TR. P.=Laureated head. *Rev.*—PACI AVGVSTAE=Peace, with the emblems of Nemesis, and holding a *caduceus*; at her feet a serpent." (*Journ. Brit. Arch. Assoc.*, Vol. XXXI, 142.)

5a. The earliest inscribed pigs come from the Mendip mines; one bearing the name of Britannicus (c. 49 A.D.) was found at Blagdon; another, that of Tiberius Claudius (c. 49 A.D.), was found at Wookey Hole. Those distinguished by an imperial inscription of latest date also come from Somerset. Two found at Bristol bear the name of Antoninus Pius (139-161 A.D.), and another found at Bruton is inscribed with the same name and that of Verus (163-169 A.D.) also. (*Archæologia*, LVII, 402, 406). Prof. Gowland gives a Map of Britain, showing Roman Lead Mines and localities for Roman Pigs of lead. (*Op. cit.*, Plate lvi, facing p. 382, where the Charterhouse "amphitheatre" is barely mentioned).

5b. Prof. Gowland in relation to this subject says, "On a careful review of these facts it seems clearly evident that during the second half of the second century, or probably somewhat later, some change was initiated in the procedure of the Romans as regards the working of the mines and smelting works. As is well known, there were three distinct modes in which the mining operations of the Romans were carried out, viz.: (a) the mines were worked by the State itself; (b) they were let to private persons, companies, or towns; (c) they were farmed by the *publicani*, the farmers of the public revenue." *Archæologia*, LVII, 406-7).

discipline may probably have obtained and soldiers may have been employed at the mines under local administration. The large number of fibulæ and gems and the abundance of the better qualities of pottery indicate a certain amount of culture. So little is definitely known about the Roman roads of Mendip that it is impossible to follow the trade routes by which the lead was conveyed to ports and to the larger centres of Roman civilization; but it is beyond the scope of this report to make any observations on the subject of the Roman roads of Mendip.

IV.—Description of the Earthwork and Plan (Plate I).[6]

The "amphitheatre" is of elliptical form,[7] covering an area of seven-eighths of an acre. My plan (Plate I), originally plotted at a scale of 16 feet to an inch, and covering 1·9 acres of ground, has the margins set exactly to the points of the compass,[8] the E. and W. margin measuring 332 feet, the N. and S. 250 feet. The area surveyed is represented by contours of 6 inches vertical height, entailing the taking of some 1200 levels, which show a fall of 31 feet from the N.W. to the S.E.

The following are the dimensions of the earthwork:—From the middle of the entrance on the W. to the entrance on the E. 180 feet; from the crest of the bank on the N. to the S. crest, 146 feet. The external measurements from the foot of the bank are about 200 feet from N. to S. and 235 feet from E. to W. The arena is approximately 80 feet from N. to S., and 105 feet from E. to W. Its turf-clad surface is not level, a slight

6. This Plan is reproduced to the same scale as my Plans of Stone Circles in *Archæologia*, Vols. LVIII and LXI.

7. Mr. Allcroft, in his description of the earthwork, says that "the excavated material forms an irregular vallum of lozenge-shaped plan," as represented by his rough sketch-plan. He says also that the O.M. marks the earthwork as almost square, but the 6-inch O.M. (Somerset, Sheet XVIII S.E.—revised in 1902) represents the site as oval, and indicates the eastern and western entrances.

8. The Director-General of Ordnance Surveys informed me that the magnetic declination of the compass at Charterhouse on June 1st, 1909, was 17° 4′ W. of true N.

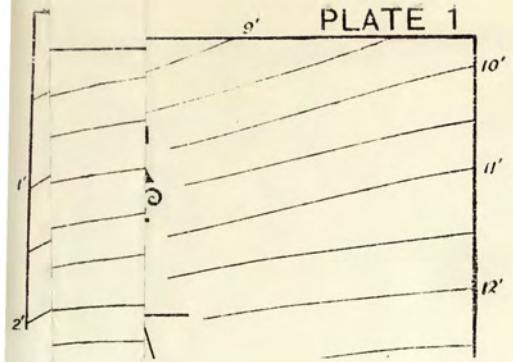
PLATE 1
9'
10'
11'
12'
1'
2'

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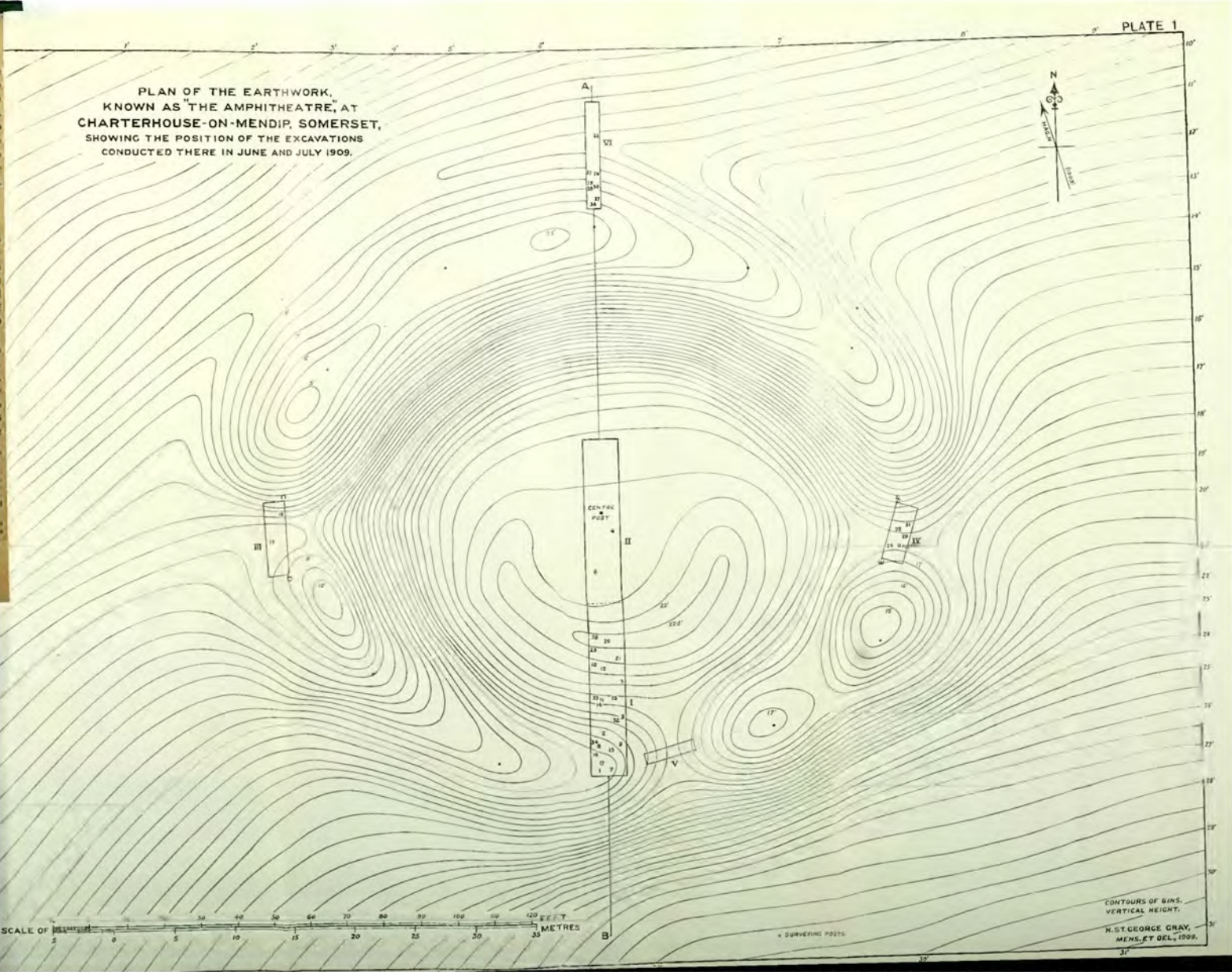
PLATE 1

PLAN OF THE EARTHWORK, KNOWN AS "THE AMPHITHEATRE," AT CHARTERHOUSE-ON-MENDIP, SOMERSET,

SHOWING THE POSITION OF THE EXCAVATIONS CONDUCTED THERE IN JUNE AND JULY 1909.



rise in the middle (height about 1ft.) being clearly visible as viewed from the S., E. and W. (see contours). The whole periphery, measured along the crest of the earthwork, is 510 feet.

The crest of the bank is fairly even and continuous in the N. half at the present time, but there has apparently been more disturbance in the S. half, especially in the S.E. parts; these inequalities are accurately represented in the Plan. A little to the E. of the most southern part of the bank a slight gap is observable across the summit, which had no appearance of being the site of an ancient entrance (see Plate II, fig. 1). But the gaps in the bank on the E. and W., some 10 feet wide as measured on the turf, are very clearly defined and at once suggest ancient entrances into the enclosure (Plate II, fig. 2).

In the N. half of the earthwork the bank, sloping regularly down to the arena, is very steep on the inner side, the fall from the crest to the arena varying from 11 feet on the E. to 15 feet on the W. The fall from the crest of the S. bank to the natural slope of the down on the outer side averages 9 feet. Before excavation there was just a suggestion of a ditch on the N. side of the earthwork and on the inner side of the S. bank also. The contours show this better than any description can do.

The above dimensions represent the size of the earthwork at the present day, but it must be borne in mind that well within living memory the whole area has been ploughed over, and the original height of the vallum can never be truly estimated. The vallum commands a fine view to the S. and E., but no view, of course, is obtainable from the arena.

The earthwork was first called an amphitheatre by Prebendary Scarth in 1858. He visited it in July of that year and found it ploughed over and sewn with hemp. The tenant pointed out to him the site of a similar earthwork about half-a-mile distant to the south, in the direction of the Cheddar Cliffs. Sir R. C. Hoare mentions such a site which he said

"has been destroyed;" this is probably identical with the place mentioned by Scarth.[9] The latter antiquary again visited Charterhouse in September, 1858, when he found that the second "amphitheatre" had been only partially filled up, owing, it is said, to the good effect produced by the visit of Sir R. C. Hoare. Scarth adds that this earthwork was much the same size as that under consideration, but that there were no entrances traceable.

V.—The Excavations, 1909.

The excavations cannot be regarded as altogether satisfactory. Some definite results, however, can be proved up to a certain point; other results must be regarded as tentative. The exploration was not exhaustive and we had hoped to complete more work in the time at our disposal; but the weather during the two periods (June 14th to June 24th, and July 26th to July 30th) was very variable, and persistent wet and stormy weather swamped our diggings to a considerable extent. The finest days at the beginning of the work were largely occupied in surveying and drawing the Plan (Plate I).

(a) *Cutting I, Southern Vallum.*

At first it was intended to carry this 10-ft. cutting from the crest of the southern vallum down to the foot of the interior slope, but as a slight depression was noticed in the latter position the cutting was continued northwards and joined up with the S. margin of Cutting II, making its length 47ft. (See Plan and Section, Plates I and III).

The position of Cutting I is also seen in the photographs (Plates II, figs. 1 and 3, and Plate IV).

The cutting (on the line of the N. and S. axis of the earthwork) was made into the S. vallum at a point where it is not so high as on the N. side of the structure. A little to the E. of

9. *Archæol. Journ.*, XVI, 153; Scarth's "Aquæ Solis," 1864, p. 30.

the cutting a gap exists in the crest of the vallum, across which Cutting V was subsequently made (Plate II, fig. 1; Plate IV, fig. 1).

Cutting I was by far the largest piece of digging undertaken, its maximum depth below the crest of the vallum being 8·2ft. At this depth we had penetrated the natural sand slightly.

Throughout the cutting the average depth of the turf and surface mould was found to be 0·8ft. Below this a black peaty mould, streaked in places with sand, or clay, or charcoal, was met with, its basal margin assuming a very irregular outline, as the Section shows. This mould was not a very conspicuous feature of the strata on the top of the vallum, but it formed a deep layer from half-way down the interior slope to its bottom. Below this, dark stiff clay and what appeared to be slimy 'washings' and waste brought to the spot from the lead mines to increase the size of the vallum, were met with. These materials continued downwards to the undisturbed sand, and were, in some places, as shown by dark lines in the Section, streaked with a still darker material partly consisting of charcoal,[10] mixed with waste from the lead workings.

In spite of the slight depression on the surface here, no evidence of an internal ditch to the vallum was found.

On the surface of the undisturbed sand a thin layer of iron-pan (bog iron-ore) was met with in many places. It was probably the result of oxide of iron being taken up by water constantly filtering through the vallum, which being arrested by an almost impervious stratum of compact natural sand, became deposited by slow degrees, as a thin layer of iron-pan.[11]

The body of the vallum was found to consist mainly of yellow sand, and it may safely be assumed that it was obtained in the immediate vicinity, chiefly in lowering the interior space for the purposes for which the enclosure was constructed.

10. This has been identified as oak by Mr. Clement Reid, F.R.S.

11. See H. St. G. Gray, "On the Stone Circles of East Cornwall," *Archæologia*, LXI, 19.

Towards the bottom of this thrown-up sand a peculiar streak of a yellowish-grey (sometimes bluish-grey) slimy material, probably derived from the lead mines,[12] was met with the whole way across the cutting; the shape and extent of this is best understood by reference to the Section, Plate III, and the photograph, Plate IV, fig. 2. The reason for this deposit is problematical, but after giving the subject much consideration, the following would seem to be the most plausible explanation. Previously to the formation of the vallum, and presumably in Roman times, there appears to have existed a gutter, or channel, in this position running down-hill from W. to E. (or from W.N.W. to E.S.E.), to carry off waste products from the ancient lead mines, before mentioned as situated to the W. of the earthwork. In cutting this gutter in the ground a bank of sand had been thrown up on either side. The channel may have become sluggish or choked from time to time, necessitating the clearing out of the 'washings' from the mines, and this material would be shovelled out and deposited on the slight banks of sand. At the time when the gutter became disused, sand would be thrown up in this position to form the S. vallum of the "amphitheatre." This explanation may not be the correct one, but it is the best the writer can offer.

In the sand under the seam of 'washings' flint flakes were found at 16, 32 and 34, and these may of course have been on the surface when the gutter was formed.[13] In the superincumbent sand at 2, 7, 8, 9, 15 and 17, flint flakes and implements, two pieces of burnt flint, and several fragments of Romano-British pottery were found. The flint saw, found at 17, is figured on p. 133.

In the dark material, from half-way down the interior slope of

12. Since writing this article I sent a sample of this material to Mr. Horace B. Woodward, who labels it "Mine washings probably."

13. Although it is an established fact that flint implements are frequently found with Roman remains, it is probable that this flint existed on the surface of the ground long before the arrival of the Romans. Flint is, of course, not indigenous on the Mendips.

FIG. 1.—View from the S.W., showing position of Cuttings I. and III.

FIG. 2.—View of E. entrance, looking E.N.E., showing position of Cutting IV.

FIG. 3.—View of "Amphitheatre" and surroundings, looking S., and showing position of Cuttings I. and VI.

From Photographs by H. St. George Gray.

the vallum to the bottom of the slope, flint implements and flakes and burnt flints were found at 3, 5, 10, 11, 13, 23, 33, and 39; but the other numbered finds represented Romano-British pottery, including no. 14, a piece of red Samian ware, found at a depth of 3·5ft. in the dark clay and mine-washings brought to the spot.

The following objects and pottery were found in this cutting:—

1. Piece of the base of a brown vessel, and fragment of grey ware having a 'cordon,' Romano-British; depth 1·2ft.

2. Small flint flake and bit of burnt flint; depth 1·7ft.

3. Flint flake and two pieces of burnt flint; depth 1ft.

5. Small flint scraper and two flakes; depth 0·8ft.

7. Nine pieces of Romano-British pottery, including one piece of base and three pieces of rim; depth 2·2ft. in sand.

8. Half a perforated stone, the central hole (diam. 1¼in.) having been formed by pecking; before fracture both the faces of the object were smooth. Probably of the Roman period, it being found at a depth of 3·5ft. in the sand.

9. Burnt flint flake; depth 4·5ft. in sand.

10. Small flint scraper; depth 1·5ft.

11. Two flint flakes; depth 2·5ft. in sand.

12. Piece of rim of a brown Romano-British pot; depth 1·2ft.

13. Flint flake; depth 2·3ft.

14. Piece of red Samian pottery, in a somewhat decayed state; depth 3·5ft. in dark material.

15. Flint flake; depth 4·5ft. in sand.

16. Flint flake; depth 6·7ft. in sand.

17. Saw, length 1¾ins., consisting of an almost translucent flint flake worked along the straight edge in fairly uniform serrations; the opposite edge is also partly worked; depth 6·7ft. in sand.

20. Six small fragments of Romano-British pottery, including one piece of rim; depth 1·7ft.

21. Seven fragments of common brown Romano-British pottery, including one piece of rim; depth 2ft.

23. Lump of unworked lead; depth 1·8ft.

32. Two flint flakes; depth 4·3ft. in sand.

33. Burnt flint; depth 4ft. in dark streaked material.

34. Flint flake, and small piece of a worked flint implement; depth 6·6ft. in sand.

39. Four flint flakes, two small pieces of burnt flint, and several tiny fragments of red Roman pottery; depth 1·5ft.

In addition to the above remains, the following rock specimens, concretions, and slag, were collected from this

cutting, most of which have been kindly examined and identified by Mr. Horace B. Woodward, F.R.S., F.G.S. :—

(a) Lumps of Old Red Sandstone.
(b) Decomposed micaceous sandy rock, probably from O. R. Sandstone.
(c) Carboniferous Limestone.
(d) Grey chert in Carboniferous Limestone.
(e) Decomposed chert (?) from Carboniferous Limestone.
(f) Ironstone concretion in Lower Limestone Shale—probably near junction with O. R. Sandstone.
(g) Ironstone concretion.
(h) Ferruginous concretion, and iron-pan.
(j) Slag, from lead-workings.
(h) Black slag (like bottle-glass) from lead mines.

(b) *Cutting II, in the middle of the Arena.*

This cutting was 10ft. wide and 45ft. long (viz., 20ft. to the N. and 25ft. to the S. of the "Centre Post.") It was dug in the endeavour to find out the reason for the slight rise in the turf in the middle of the site, and to ascertain if a level arena floor existed below. The result was disappointing; undisturbed sand was reached in the middle at a depth of 1·4ft., above which mould had accumulated; below this sand, rock *in situ* was revealed at a depth of 1·8ft., below the surface. (This is clearly seen in the Section, Plate III). There was no indication of a smoothed floor.

The position of the cutting is seen in the photograph, Plate IV, fig. 1.

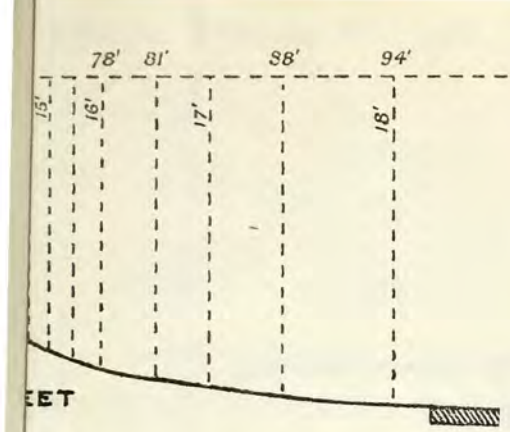
The following relics were found here :—[14]

4. Rim of brown-coloured pottery, Romano-British ; depth 1ft.
6. Piece of grey pottery; and a piece of red pottery, very friable, enough glaze still remaining to indicate Samian ; depth 1·4ft.

(c) *Cutting III, Western Entrance.* [*See Plates I, II, (fig. 1), and III.*]

Antiquaries have been divided in opinion as to whether the gaps in the vallum on the E. and W. of the earthwork are modern or the result of intentional construction in early times.

14. The position of the numbered 'finds' is shown in the Plan, Plate I, and the Sections, Plate III.



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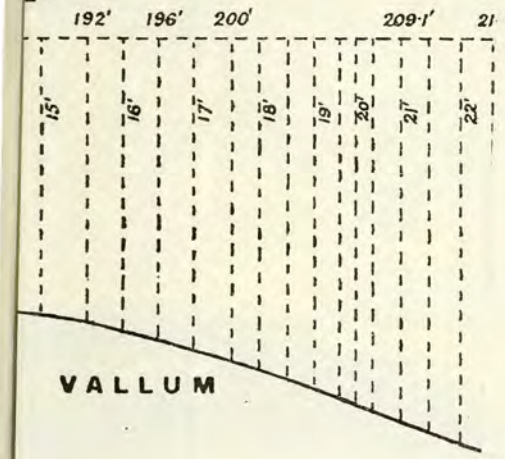

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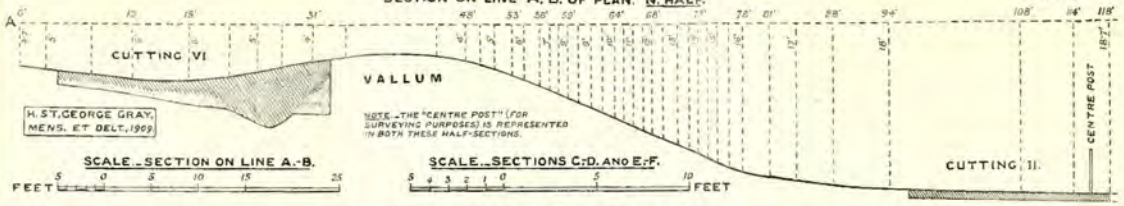
(c) *Cutting III, Western Entrance.* [*See Plates I, II, (fig. 1), and III.*]

Antiquaries have been divided in opinion as to whether the gaps in the vallum on the E. and W. of the earthwork are modern or the result of intentional construction in early times.

14. The position of the numbered 'finds' is shown in the Plan, Plate I, and the Sections, Plate III.

PLATE III.

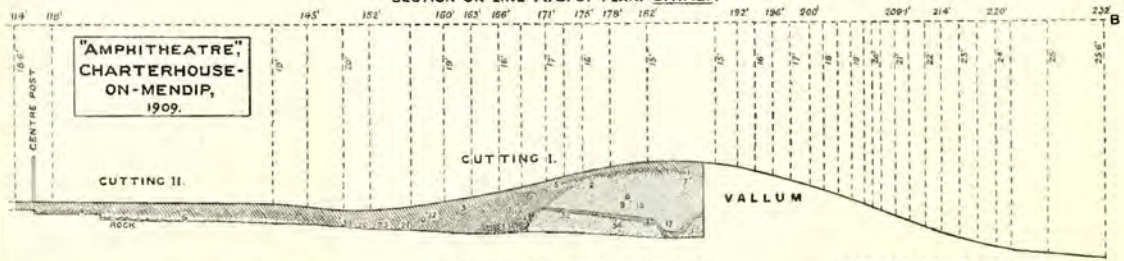
SECTION ON LINE A.-B. OF PLAN. N. HALF.



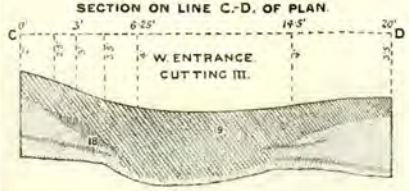
SCALE.-SECTION ON LINE A.-B.

SCALE.-SECTIONS C.-D. AND E.-F.

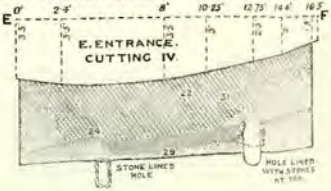
SECTION ON LINE A.-B. OF PLAN. S. HALF.



SECTION ON LINE C.-D. OF PLAN.



SECTION ON LINE E.-F. OF PLAN.



REFERENCES TO SOILS.

- TURF AND SURFACE MOULD.
- BLACK PEATY MOULD, SOMETIMES STREAKED WITH SAND, OR CLAY, OR CHARCOAL.
- YELLOW SAND.
- SAND, PREVIOUSLY UNDISTURBED.
- CLAY, AND 'WASHINGS' AND WASTE FROM LEAD-MINES, BROUGHT TO THE SPOT.
- CHARCOAL (SECTION C.-D.)

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Cutting III, 20ft. from N. to S. and 6ft. from E. to W., was made across the western entrance. The turf-clad gap at the present day is 6ft. below the crest of the vallum on its N. side, and 1·5ft. lower than the crest of the bank on its S. side.

The sectional diagram on the line C.D. of Plan (Plate III) shows the result of this excavation at a glance. Here, again, the black peaty mould, previously mentioned, was met with, extending in the middle to a depth of 3·7ft., and on the borders of the cutting, on the slope of the vallum, to an average depth of 1·2ft., its lower margin being decidedly concave and resting on the sand below. On either side of this concavity the cutting revealed the gradual rise of the thrown-up yellow sand which formed the core of the vallum. Below this sand was a thin seam of sandy clay of a yellowish-grey colour. Seams of charcoal were also noticed, and have been indicated in the Section.

Proof was afforded that an ancient entrance, about 8¼ feet wide, existed here.

The 'finds' were of no dateable importance :—

18. Flint, much calcined ; depth 2·5ft. among black material and charcoal.
19. Flint flake ; depth 1ft.

(d) *Cutting IV, Eastern Entrance.* [*See Plates I, II (fig. 2), and III.*]

The eastern gap through the vallum proved to be more interesting than the western one. Its condition at the present day is well seen in Plate II, fig. 2.

Cutting IV was 16ft. from N.N.E. to S.S.W. and 6ft. wide, the crest of the vallum on the N. standing 8ft. above the turf-clad surface of the gap, and the S. crest rising to a height of 2·5ft. above it.

The sectional diagram on the line E.F. of Plan (Plate III) shows the deposits found below the surface. Here, again, we found on either side the sloping sandy core of the divided vallum, the outline of which was more irregular than in the

case of its counterpart in the W. entrance. The black peaty mould was found to extend to a depth of 3ft. in the middle of the cutting and to a depth of 1·3ft. at the margins. A thick seam of clayey material[15] was found below, which narrowed considerably towards both ramparts. Beneath this seam more sand was met with.

In the S. half of the cutting at a depth of 4·2ft. from the surface, a slab of stone was found. Its removal revealed a square hole lined with stones (some 4 or 5ins. across), the internal depth below the cover-stone being 1·3ft. It was found to be partly filled with sand, but no relics were obtained. It may have served the purpose of a socket for a wooden post, all trace of which had disappeared. The cover-stone, which measured 0·9ft. by 0·8ft. and 0·25ft. thick, appeared to be on the level of the natural sand. The outline of the hole is clearly indicated, projected into the Section (Plate III).

Another curious hole was found on the N.W. margin of the cutting, as outlined in the sectional diagram. Its upper margin was on a level with the top of the seam of clayey material and below the sand forming the lower part of the slope of the N. vallum. Its upper half was lined with stones; the lower half had no such lining and its rounded bottom (where it was about 1ft. in diameter), penetrated the undisturbed sand. The lower half of the hole contained nothing but fine sand, decayed vegetable products and other dark material, iron-pan and possibly other ferruginous matter, but apparently no burnt remains of any kind. The hole was 2·4ft. deep below the upper margin of the seam of clay, the depth of the bottom from the surface of the ground being 5·5ft.

The precise use of this recess was not determined. From its position it appears to have been made before the vallum of sand was thrown up. On the other hand it may have been made subsequently and become covered rapidly by the silting down of the slope of the bank of sand.

15. Probably washings from the lead-workings.

FIG. 1.—View from the N.N.W. embankment, showing the interior space, the southern bank and the modern gap in it; also the position of Cuttings I. and II.

FIG. 2.—View of Cutting I. into the embankment, looking S.S.W., excavated down to the natural sand.

"AMPHITHEATRE," CHARTERHOUSE-ON-MENDIP, 1909.

From Photographs by H. St. George Gray.

This ancient entrance appears to have been about 8·5ft. wide at the time it was allowed to fill up, which is much about the same as the width of the western entrance.

The relics found here are attributable to the Romano-British period, and consist of the following:—

22. Flint flake; depth 0·8ft.

24. Piece of rim of Romano-British pottery; depth 2·5ft.

29. Piece of red pottery, Romano-British; in middle of cutting at bottom of clayey material; depth 3·8ft.

31. Three pieces of dark brown Romano-British pottery, a flint flake and a burnt flint; depth 1·5ft.

(e) *Cutting V, Southern Vallum.* (*See Plan, Plate I.*)

As before mentioned a break occurred in the vallum a little to the east of south. The position is seen to the E. of Cutting I, in Plate IV, fig. 1; also in Plate II, fig. 1.

Cutting V, 14ft. by 3ft., was excavated in the endeavour to explain the existence of this slight gap, which has never been regarded as indicative of an ancient entrance. Here the mould was deepest (depth 2·5ft. below the surface) in the middle of the cutting, as in Cuttings III and IV; it was not, however, of the black peaty kind met with elsewhere, but of a lighter brown colour, like the surface soil of the down. The excavation was carried to a depth of 3·5 ft. below the surface into the sand of the vallum. No relics were found.

We do not regard this gap as an ancient one, and the vallum in this part has probably been reduced for some agricultural purpose, and perhaps by ploughing. On the other hand there was no actual proof that this little break in the vallum was modern; and lack of time and bad weather prevented the extension of this excavation.

(f) *Cutting VI, external slope of the Northern Vallum.* [*See Plates I, II* (*fig.* 3,) *and III.*]

Immediately on the outside of the N. vallum a shallow trench was observed, well indicated by the 6-inch contours of the Plan. Even slighter trenches round tumuli and other

ancient remains have, on excavation, revealed well-defined ditches cut into the sub-soil or rock. Digging was therefore carried out here to test the assumption of the possible existence of an external fosse.

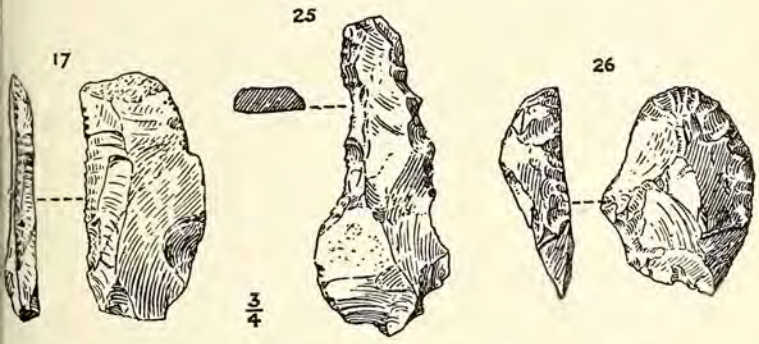
Cutting VI, measuring 29ft. long by 4ft. wide, was excavated on the line of the short axis of the earthwork, true N. and S. (like Cuttings I and II). The N. end of the cutting proved to be of little interest (undisturbed sand and stone being reached just below the turf and surface mould), beyond the finding of a long flint scraper, no. 25, figured on p. 133

At 10ft. from the N. end the dark peaty material found in the other cuttings began to make its appearance, and in carrying the digging further southwards this somewhat slimy and tenacious deposit was found to extend to a considerable depth, and to be streaked with a rotten black substance—apparently the remains of decayed wood or charcoal. It was soon ascertained that this deposit extended to a greater depth than the level of the natural sand. As elsewhere, the sandy core of the vallum was revealed, as seen in the sectional diagram at the top of Plate III. The margin of the natural sand was carefully followed downwards from both sides, and a small ditch was distinctly traced under the lower half of the external slope of the vallum. It took the form of a broad V, penetrating the sand to the extent of 2·8ft., its width at the natural sand level being about 8·6ft.

The purpose of this small ditch appears to have been to obtain sand for building up the core of the vallum and probably for drainage purposes also. As the ditch was not expected so far southward under the slope of the vallum, an explanation for this position must be offered. It is probable that originally the crest of the vallum was much higher than it is at the present day, and that the summit was composed of a thick layer of this dark peaty material. Denudation and silting, together with the inroads of the plough, were apparently the reasons for the lowering of the vallum and the filling of the

ditch ; and from these causes it appears evident that the vallum was originally higher, and narrower at the base, than at the present time.

Not only is this cutting interesting structurally, but the shards of pottery found in the excavated material is of dateable importance.[16] Resting on the bottom of the ditch at a depth of 5·6ft. from the surface seven small fragments of Romano-British pottery, no. 38, were found. On the s. margin of the



Flint Implements found in the earthwork at Charterhouse-on-Mendip, 1909.

(From drawings by Mrs. M. B. Sprankling.)

cutting at a depth of 4ft. in the sand of the vallum, a piece of red Romano-British pottery, no. 36, was uncovered. Of more importance still was the discovery of a small piece of red Samian ware (much decayed, but identifiable), no. 37, on the old surface line under the sandy core of the vallum, at a depth of 4ft. These shards, of course, afford very strong evidence of the earthwork being constructed in the Roman period.

The flints found in the dark silting of the ditch were also interesting, and included a scraper, no. 26, with bevelled edge, figured in the accompanying illustration.

16. Through an oversight the numbered 'finds,' although marked on the Plan, have been omitted in this Section, but the position of each is carefully recorded in the list of them.

The following is a complete list of the 'finds' from Cutting VI :—[16]

25. Long narrow flint scraper, with hollowed scraping edges ; length $2\frac{5}{8}$ins. ; depth 1ft.

26. Scraper of grey flint, with rounded bevelled cutting-edge ; depth 3ft in dark deposit.

27. Flint flake ; depth 2·5ft. in dark deposit.

28. Flint flake ; depth 1·5ft. in dark deposit.

30. Flint core (small) ; depth 3·2ft. in dark deposit.

(Several small flint chips and burnt flint were also found in this cutting).

35. Scraper of grey flint, showing evidences of prolonged use ; (depth unrecorded,—it fell down deep into the cutting).

36. Fragment of red pottery, Romano-British ; depth 4ft. in sand at S. end of the cutting.

37. Fragment of red Samian pottery, much decayed ; depth 4ft, on the old surface line under the sand forming the bank.

38. Seven small fragments of dark brown pottery, Romano-British ; depth 5·6ft. on bottom of little ditch.

VI. Concluding Remarks.

Date.—From the fact that Roman pottery, including red Samian ware, was found deep in the vallum, at the bottom of the eastern entrance, and at the bottom of the little ditch on the north, there can be no question of the earthwork being constructed in Roman times. No fragment of pottery or other objects of earlier date were found in these excavations, which, however, were not sufficiently extensive to be regarded as exhaustive. Post-Roman date is not suggested, for no object found can be attributed to a later period than the Roman Occupation. As previously stated the finding of flint scrapers and other implements does not affect the question of the date of construction ; and it is probable that some at least of these objects were on the surface at the time the earthwork was thrown up.

In connection with date, Mr. Allcroft did not appear to regard the Charterhouse earthwork as of Roman origin when he wrote "Earthwork of England," for he says, "Both *cavea* and *arena* are too straitened to suggest Roman work, nor is it clear why the Roman, departing from his customary method,

should have preferred to construct it of earth when there was stone and to spare close at hand."

Earthwork of somewhat similar design.—"Church Barrow," just outside the Romano-British village of Woodcuts, excavated by Pitt-Rivers in 1884-5,[17] is in some respects similar to the Charterhouse earthwork. It is not so large as the Charterhouse enclosure, and only half the circular earthen vallum remains; the arena, which is also sunk below the general ground level, is about 60ft. across and the bank about 5ft.[18] above the arena, the maximum height above the arena at Charterhouse being 15ft. General Pitt-Rivers did not, as was his usual practice, excavate the Woodcuts earthwork exhaustively, making only one cutting 10ft. wide, across the area. The presence of a fragment of Samian pottery beneath the vallum proved, in conjunction with other evidence, that the amphitheatre, or theatre, was in all probability constructed after the Romans had occupied the place. At Charterhouse we have obtained exactly the same evidence, a piece of Samian pottery being found in the vallum at a depth of 3·5ft., and another fragment on the old surface line under the vallum.

Use of the Charterhouse earthwork.—Although the place was in all probability used by the comparatively large mining community of Roman Charterhouse for sports and pastimes,—and it is not likely that they would be without some sort of an enclosure near the "Town Field" in which they could watch and take part in sports and games, combats and perhaps cock-fighting,—it is a question if the site can be called an "amphitheatre" in the sense that we should style the much greater Maumbury Rings at Dorchester an amphitheatre. In general outline the much smaller Charterhouse enclosure is, to some extent, comparable with Maumbury, but the orientation, which may have no significance in these earthworks, is different.

17. "Excavations in Cranborne Chase," I, 24, 124.

18. Mr. Allcroft in "Earthwork of England," 1908, p. 592, gives 18ft. for this dimension, having made his calculation from the wrong "Scale of Feet."

Mr. Allcroft regards the word "amphitheatre" too dignified for a work so small as Charterhouse, and he says, "It raises false ideas of space and grandeur." In this I quite agree with him.

Professor Haverfield says, "We cannot decide its precise use, but it is ill-suited to form a pond or water reservoir, and the notion of a tiny amphitheatre is not wholly absurd."

The present excavations have proved the earthwork to be Roman, but our knowledge as to the precise use of this ancient area has not been greatly increased. It was disappointing not to find a levelled arena or any other distinctive feature which would justify us in using the term "amphitheatre" in its full significance for this ancient earthwork.

With regard to structural details the existence of eastern and western entrances, apparently of a simple character and small dimensions, has been proved; and this is important seeing that Professor Haverfield in the *Victoria County History*[19] says that the ordnance sheet marks "two entrances which do not exist." He goes on to say that he has examined the earthwork and has "had it surveyed for this article."

In speaking of Maumbury Rings and of the Charterhouse earthwork, Mr. Allcroft says that "both are formed without fosses by excavating the area only."[20] It is true that we did not feel at all confident in finding a fosse outside the N. vallum, and the proof of its existence exemplifies the danger of making hasty statements in respect to the structure of ancient sites without the assistance of the pick and shovel.

* * * * * *

My thanks are due, on behalf of the Som. Arch. and N.H. Society, to the subscribers to the Excavation Fund for having made it possible to carry out this survey and exploration; to Lord and Lady Annaly for permission to make the excavations on their property; also to Messrs. Davids and Maxwell, of

19. *V.C.H. Somerset*, I, 336, where an archæological map of Charterhouse is given and illustrations of the best of the Roman relics found at the Charterhouse mines; but there is no plan of the "amphitheatre."

20. "Earthwork of England," 591.

Banbury, the agents of the estate, and to the tenant of the farm, Mr. Chas. Watts.

I am also greatly indebted to Dr. R. Thurnam, of Nordrach-on-Mendip, for kindly lending me a tent during both periods of the excavations, which, considering the rough weather experienced during the greater part of the time, was of the greatest service to myself and the workmen. Great assistance was rendered to me in the general arrangements for the work and in the employment of labour by the Rev. G. M. Lambrick, Rector of Blagdon and Curate of Charterhouse ; and in minor details I wish to acknowledge the help of Mr. Wm. Brown of the Manor Farm, Charterhouse, and of Mr. and Mrs. A. A. Young, of Middle Elwick Farm.

My foreman, John Lush of Dorchester, had undertaken similar work in the excavations at Avebury and Maumbury Rings. The Blagdon men employed for the work were :—Christopher Tidball, Isaac Filer, R. Monk, O. Monk, F. Young, and Herbert Lyons (boy).

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