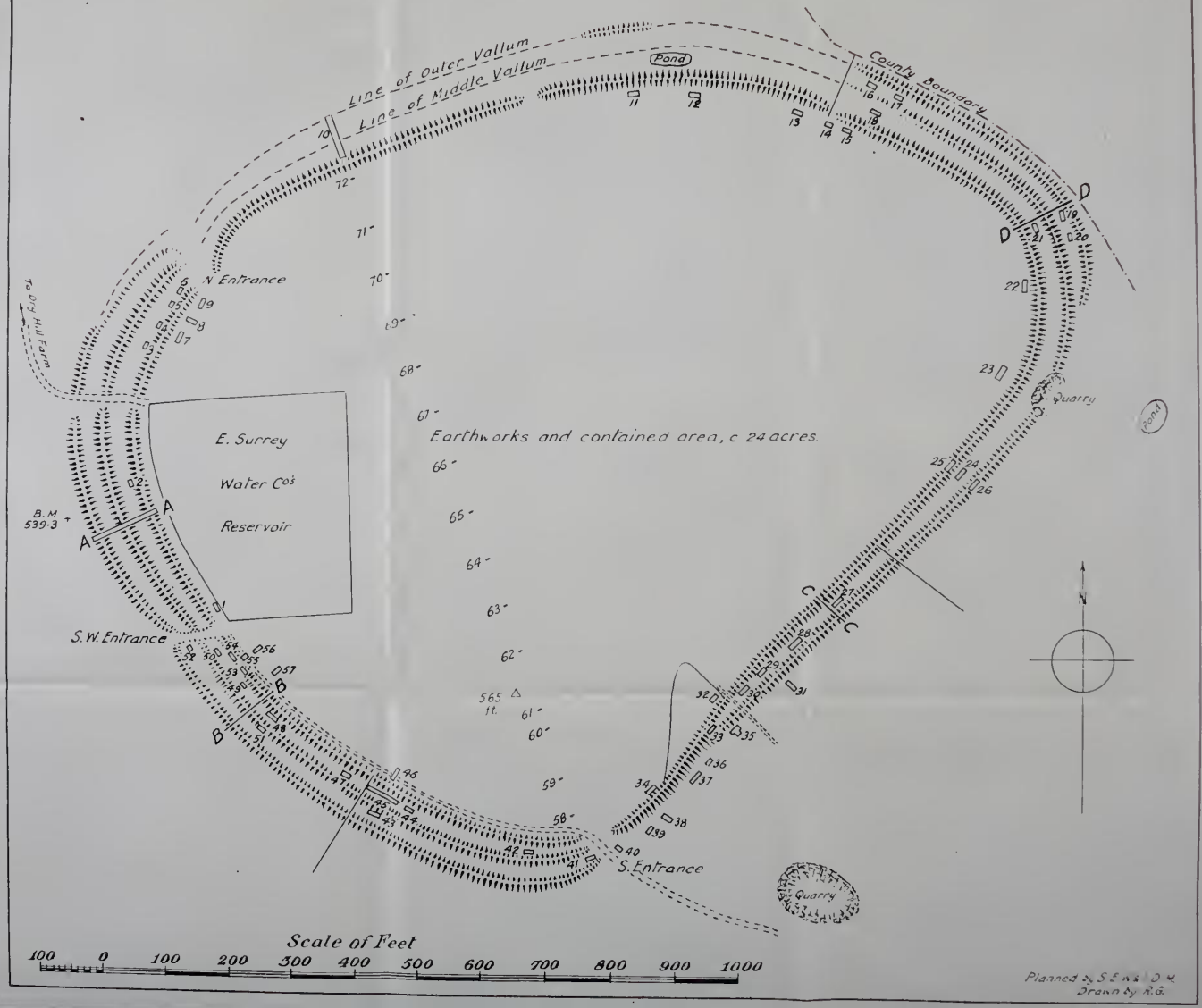
DRY HILL CAMP, LINGFIELD, SURREY.



DRY HILL CAMP, LINGFIELD.

BY

S. E. WINBOLT AND I. D. MARGARY, F.S.A.

I.—Introductory.

DRY HILL CAMP, Lingfield, with its extent of 24 acres and circumference of nearly a mile, is a big Wealden hill fort, though not comparable in size with Holwood (Keston) or Oldbury (Ightham), both over 100 acres. Situated in the S.E. corner of Surrey, close to the Kent and Sussex boundaries, this fort was in a district of dense forest, which was very rich in iron ore. The Early Iron Age earthworks are drawn round a gently-sloping sandy hill-top of about 550 feet altitude, which affords a magnificent outlook over the Weald in all directions. With the permission and assistance of Lt.-Col. H. Spender Clay, M.P., and his tenant, Mr. Graham, we, with the help of Mr. B. W. Pearce, made a three-weeks (April 18–May 7, 1932) spade attack on this fort hitherto unassailed archæologically, save for a short trench and three holes, of which no record seems to have been published, made, it is said, some forty years ago by Mr. Leveson Gower and party. With five spades regularly, and six or seven occasionally, at work, we catechized the place, in spite of its large area, somewhat severely; its answers were few and grudging. Ditches, banks and interior were dug very widely and thoroughly.

The defences still consist to a large extent of three banks and two ditches, two banks and ditches having been ploughed out on N. and N.W. We cut a trench through the triple banks on the W. side, and found that these measure 102 feet through. The banks and ditches are of only moderate height and depth. The inner bank, highest in position and piling, was obviously *the* defensive line: on it were laid selected collections of grey flint pebbles, both hand missiles and sling stones.

Many stretches of the ditches and places in the inner area close to the inner bank were used by the Celts for making fires, probably by the gangs who piled the banks. The chief feature at Dry Hill (hitherto reasonably presumed, but till now awaiting proof) is definite evidence of pre-Roman iron smelting, though no hearth was found. The ore used was to a large extent Cyrena limestone. Pieces of ancient slag are found well below the tilth (2 feet or more down, often on rock bottom) in many places in the camp, together with small isolated slats of Cyrena, which is not native to the site, but found in a natural stratum 350 yards away below the camp at "Beeches." This convenient stone contains both iron ore and lime for flux. Similar evidence of British iron smelting has been found at Hascombe and Saxonbury and other Camps. Here and there were signs of flint working—cores, flakes, and rough-outs, but very few in number. But, as at the similar camp of Castle Hill, Tonbridge, not a single scrap of pottery was found, nor any ancient iron implement. The puzzle here as elsewhere is why a fort made with so vast an expenditure of labour was so little inhabited. There was no real difficulty about water supply. The tribal "camp of refuge" theory seems best to fit the case. It is probable that the area, once cleared of birches, heather, bracken and gorse, was peacefully pastured, and never witnessed a battle.

II.—The Earthworks.

Plan of Camp.

The earthworks and the area they enclose occupy some 24 acres. The major axis, from a little S. of W. to a little N. of E., is *c.* 507 yards, while a line from a little W. of S. to a little E. of N. measures *c.* 473 yards. The periphery measured close along inside the inner bank is within a few yards of $\frac{3}{4}$-mile.

The S.W. Entrance.

The main entrance was undoubtedly on the S.W. (*see* Plate VII). It pierces three valla and two fosses diagonally, and is about 120 feet long and 12–15 feet wide. On the right the outer vallum overlaps that on the left by 16 feet, whereas

the inner vallum on the left overlaps that on the right by about the same distance. In the following description we proceed from the main entrance to the N.W., and so round the whole circumference. The distance through the triple banks here, as proved by Section A (see *Trenches*), is 102 feet. At the most westerly point is an entrance connected with a much-worn hollow way coming up from Dry Hill Farm, but we are satisfied that neither the entrance nor the hollow way is original. For a few yards N. of this entrance the outer vallum continues and then comes to an end, while the two inner valla and the fosse between continue for a short stretch. Then, at the lowest point of the camp, comes an entrance (N.W.) which was probably original. From this point all round the north side there can be seen only one vallum (the inner). There were faint indications on the ground outside that the three valla and two fosses originally existed all round this part of the periphery, and we proved this conclusively by trench **10.**

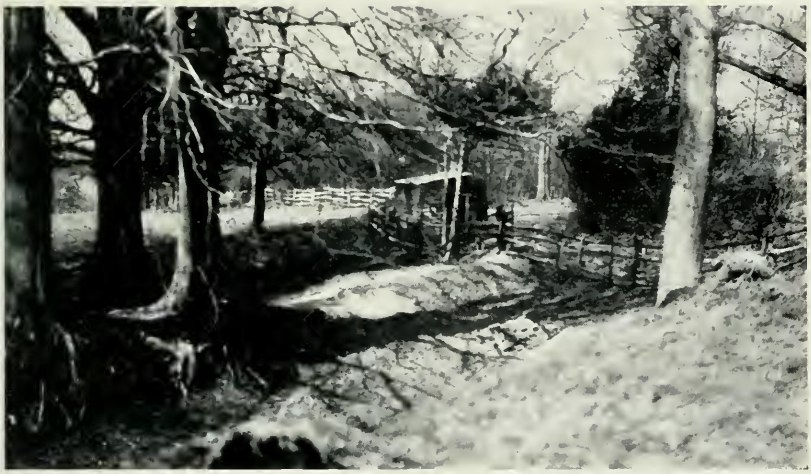
At about the northernmost point there is a pond, always containing water, on the site of the inner fosse. A few yards farther round towards the E. the triple banks appear again, measuring some 90 feet through. The Kent-Surrey county boundary is here aligned on the outside of the outer bank for some 100 yards, and at the point where the boundary runs off to the S.E. the works measure 94 feet through. At the turn to the S.W. the two outer valla are deliberately merged into one, bringing the outer fosse to a dead end, and the original defences were, for 125 yards, two valla with fosse between. After an opening (modern) the outer vallum and fosse have been obliterated for a distance of 45 yards; and then S.W. of another modern opening and the boundary of the wood, we have a stretch (140 yards) of two valla with fosse between, the top of the outer vallum being about 3 feet lower than the top of the inner, and 4½ feet above the field outside. A measurement here gave 50 feet through. At the S.W. end of this stretch the fosse definitely ends, and for the next 60 yards to the S. entrance the defences are represented solely by a high bank or small cliff, 11–12 feet high, of which natural feature the makers of the camp were satisfied to avail themselves (*see* Plate VII). We proved by trenches **35–40** that there

never was a fosse or outer vallum at this point. At the S. point of the camp is an entrance which we are inclined to think is not ancient. From this point bearing round to the N.W. and the main entrance whence we started, we have three valla and two fosses for a run of 246 yards. All along here inside the inner bank there was originally a slight fosse or hollow, probably dug out to supply material for the inner bank. Later the hollow served as a convenient track from the S. to the S.W. entrance. A measurement through this triple bank system taken 40 yards S.E. of the main entrance gave 97 feet (Plate VIII).

It will then be seen that for about three-quarters of the periphery the defences were triple valla and two fosses, and that on the S.E. side were only two valla and a fosse, and for a short space nothing more than a single steep natural cliff was thought sufficient. Considerable skill is shown in the siting of the camp. In all cases the inner vallum is on a higher level than the middle, and the middle than the outer. The measurements through the triple system are very uniformly about 100 feet. Over nearly the whole area the sandstone rock is barely 2 feet down ; hence it was difficult both to dig deep fosses and to find material for high valla. But the moderate depth of fosses and height of valla are compensated for by the comparative elevation of the inner vallum. We found by experimenting with 4–5 ounce hand-missile pebbles that standing on the top of the inner bank we, with unpractised hands, could make throws effective for several yards outside the outer bank. We may imagine that for at least some 50 yards outside the defences a clear space or glacis was maintained, so that there would be no near cover for a party advancing to the attack.

III.—The Digging of Trenches, Holes, etc.

We will again start from the main (S.W.) entrance, proceeding N.W. and so round the periphery, describing the results of trenches and holes, their positions being shown on the plan. Of whatever length, they were all 3 or 4 feet wide, and always dug down to the undisturbed subsoil ; 20 feet was the standard length, many being shorter.



[*Photo: B. W. Pearce.*

S.W. (main) entrance from S.E. side, showing 3 banks: from inner bank.

[*Photo: B. W. Pearce.*

The single bank or cliff, *c.* 11 ft. high. S.E.

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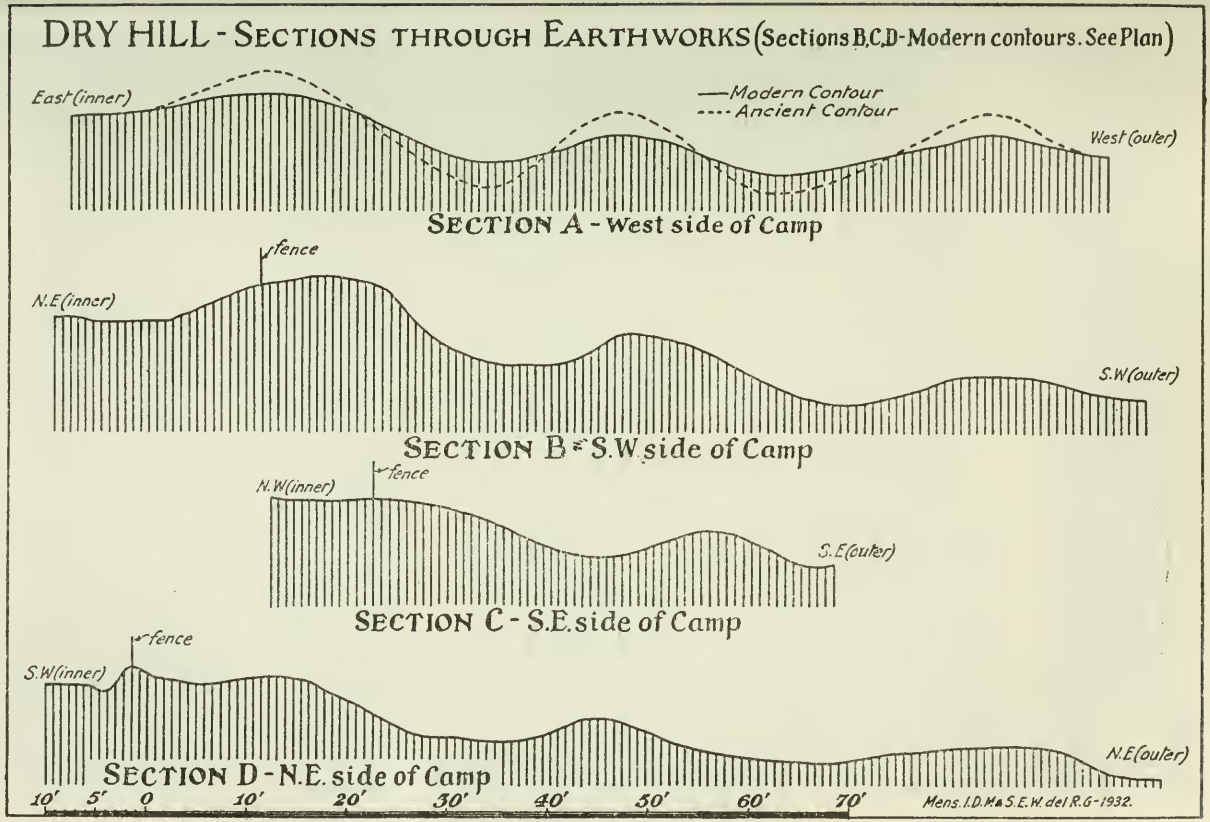
DRY HILL - SECTIONS THROUGH EARTHWORKS (Sections B,C,D-Modern contours. See Plan)
East (inner)
—Modern Contour
---- Ancient Contour
West (outer)
SECTION A - West side of Camp
fence
N.E (inner)
S.W (outer)
SECTION B - S.W side of Camp
N.W (inner)
fence
S.E (outer)
SECTION C - S.E. side of Camp
fence
S.W (inner)
N.E (outer)
SECTION D - N.E. side of Camp
10' 5' 0 10' 20' 30' 40' 50' 60' 70'
Mens. I.D.M. & S.E.W. del R.G-1932.

Trench **1.**

At the bottom of the first spit were found 15 hand-missile water-worn flint pebbles, probably rolled down from the top of the inner bank, where ammunition seems invariably to have been kept.

Section A (*Plate VIII*).

This was a cut, about 130 yards N.W. of the entrance, to determine the construction of the defences at a typical point. The system is 101 feet 10 inches through : cf. 105 feet through the W. defences of Holmbury Camp. The following horizontal measurements are taken from the point where the inner vallum begins to rise on its inner side : to the middle of the inner vallum, 19 feet 6 inches ; thence to the middle of the inner fosse, 21 feet 7 inches ; thence to the middle of the second vallum, 12 feet 7 inches ; thence to the middle of the outer fosse, 16 feet 4 inches ; thence to the middle of the outer vallum, 20 feet 10 inches ; and thence to the return of the vallum to outside level, 11 feet. From inner to outer the original heights of valla (present height + 2 feet) and depths of fosses are : vallum, 6 feet 11 inches ; fosse, 6 feet 10 inches ; vallum, 3 feet 10 inches ; fosse, 7 feet 6 inches ; vallum, 5 feet 7 inches. The diagram of Section A shows the ancient and existing contours.

"*Finds.*"—Comparatively little was found in this section. Not a single sherd of pottery. In inner bank and fosse a few pebbles ; in outer fosse a dozen slats of Cyrena limestone, obviously imported ore, probably from the "Beeches" quarry. This suggests iron smelting in the camp.

2, 3. Nil.

4. A pebble, probably rolled down from inner bank.

5. Slat of Cyrena and charcoal layer.

6. Nil.

7–9 were made in a hollow protected by rising ground from the S.E., where signs of inhabitation might be expected.

7. Iron slag.

8. Pebbles.

9. Signs of fire at the bottom of the trench, and throughout

its length: charcoal, burnt sand, ancient iron slag, and Cyrena. At the S.W. end the flat rock bottom (2 feet down) had been used as the base of a fire.

10 was dug outwards from outside the single bank which runs along the N.W. side of the camp in order to test the existence of original middle and outer valla with two fosses. It was completely successful, and with surface indications proves that the triple banks existed from the N.W. entrance to the point on the N.E. where they are still visible, *i.e.* where the county boundary begins to coincide with the outside of the outer vallum. We found both fosses and the two outer valla quite clearly defined. The bottom of the inner fosse was 3 feet down from the present surface, and the system was approximately 96 feet through. The fosse filling, composed of loose soft sand, collapsed shortly after digging—happily with no ill result, though it is a warning that as soon as it is discovered in digging that the material is loose and soft, the trench should be widened from 4 to 8 feet at the top, and the trench dug to slope on both sides. Further, that if the trench is to be kept open, the sides should be shored up. Among the indications that these were originally triple banks is the fact that the inner vallum is here some 12 feet above the level of the field outside.

11, 12, on the site of the inner fosse.

11. Pebbles and a flint flake.

12. Pebbles and Cyrena.

13–15, where the triple banks begin again, here about 90 feet over all.

13. One pebble.

14. Nil.

15. A group of thirteen missile pebbles at the N.W. end of the trench.

16, 17, 18. The centre vallum along here is mostly worn down into a kind of terrace. Finds, nil. The fosses and valla here are of stiff clay, which on this side of the camp forms the subsoil, so that there would have been no difficulty in storing water: see lower, after **26.**

19–21, at the N.E. angle of the camp, just before the outer fosse definitely ends.

19. Remains of a fire—charcoal and wood ashes (top

12–14 inches down). The burnt layer—averaging some 5 inches in thickness—extended all through the trench and represents a great amount of burning.

20. Nil.

21. One pebble.

22. 40 yards farther N.E. Cyrena and a pebble.

23. One pebble.

24. Cyrena and a burnt layer on the original bottom of the fosse (at 2 feet).

25, 26. Nil.

Opposite a point about midway between **22** and **23,** 50 yards away from the outer bank, and some 50 feet lower in level, is a big pond which always contains water, the soil being clay. Beside it is a hollow way which joins a trackway along the ridge which makes for Markbeech. By this route communication was probably maintained in prehistoric times between Dry Hill and both Castle Hill, Tonbridge, and Saxonbury, in Eridge Park.

The next stretch of earthworks from the wood gate to the S. entrance, 208 yards, consists for two-thirds of the distance of two valla and a fosse; then the fosse and outer vallum come to an end, and for the remaining one-third (S.W. end) a steep bank sloping outwards was the sole defence.

Beginning at the N.E. end:

Measurement C across the two valla (at 42 yards from the wood gate), 50 feet.

27, 28. Pebbles.

29 produced a definitely laid stone floor, 7 inches thick, the top of which was 16 inches down. Compare **45.**

30. Iron slag (at 20 inches) with Cyrena and charcoal.

31. Yellow clay subsoil (at 18 inches), sloping naturally outwards, proved that there was never a fosse here.

32, in a triangular shaw, and **34,** on the crest of the cliff. Nil.

33. Ancient iron slag and flints.

35. This showed a depression adjoining the vallum, probably a scoop for soil to complete the vallum, which here curves inwards, so that there was no inner fosse to provide the soil. Extended outwards, this trench disclosed a layer of burnt material with much charcoal and ancient iron slag. The layer

[*Photo: H. Connold.*

View of three banks, near entrance.

[*Photo: H. Connold.*

Section A through three banks and two ditches. 102 ft. through.

[*Photo: B. W. Pearce.*

Stone platform in inner fosse, trench 45.

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was 4–5 inches thick, and oval in extent, 8 feet by 5 feet. The centre of the patch was 19 feet out from the centre of the outer vallum. There were not enough traces of heating to justify our calling this a true smelting site: but a fire must have been made there, and the layer was rich in slag.

36–40. Dug outside the steep bank to test whether there was originally a fosse and outer vallum. Both were disproved. Below the bank were found several pieces of worked flint.

37 revealed a cavity in the sand rock, 2 feet deep, with a flat rock bottom 3 feet 10 inches wide, from which sandstone seems to have been quarried. No fosse was found in any of the trenches **36–40**, and a flat layer of sandstone extends outwards from the cliff.

The S.W. stretch of earthworks with 3 valla and 2 fosses continues for 246 yards to the main (S.W.) entrance.

41 was dug 6 feet from the S. entrance, where the outer fosse appeared to end. The trench showed the fosse clearly, with its centre aligned on the foot of the cliff to the N.E.

42. Nil.

43. A definite layer of charcoal, 1 in. thick, 7 feet long on the outer side of the trench and 3 feet long on the inner side.

44. Nil.

45. This trench revealed a perplexing platform or path with the details of which we deal below.

46. Lumps of Cyrena.

47, dug 4 feet deep, gave a clear idea of the rounded character of the fosse floor.

48 revealed a thickish (3 inches average) burnt layer of charcoal and ash, the top of which was 1 foot 6 inches down, above stones that had silted down on to the fosse floor: one big lump of rough iron slag. The layer, probably ancient, had been covered with small stones.

49. Iron slag, pebbles, and a little charcoal.

50 produced greyish silt, charcoal, and many small pieces of iron slag—of Tudor appearance. The bottom of the grey silt was V-shaped, and may represent a drainage ditch made in Tudor times.

51. Nil.

52. The fosse slopes down towards the entrance, and its

ancient bottom is here 3 feet 10 inches below the modern bottom. Charcoal at 2 feet 3 inches and 3 feet 6 inches down.

53, 54 were dug on top of the inner vallum in order to see if remains of postholes could be traced. From the flatness of the surface it may be presumed that the vallum has been worn down, probably by at least 2 feet. It was not likely that indications of postholes would remain in this very fluid sand. The weight of pebbles lying on the old surface was enough to make them (or many of them) subside vertically when the sand was silting down on either side.

54. Ten hand-missile pebbles came out just below the turf, within a length of a foot or two, as was the case at Hembury Fort, Devon (1931). The top of the inner bank, from which they could be most effectively thrown, was naturally the place where store of such ammunition would be kept in readiness. Altogether forty of these hand-missile pebbles were found within 6 feet of the S.E. end of the trench.

53. In similar circumstances thirteen more pebbles were found.

55. A flint core, a pebble, and a piece of iron slag were found 6 inches down, on the top of the rock subsoil. A hollow (*c.* 10 feet wide) had been made along here for about 45 yards from the entrance, the upcast being used for the inner bank, heightened near the entrance. This hollow, found again at **46,** continued to the S. entrance. It served as a track in more recent times, and is still a surface pathway.

56. Many pebbles, probably from the inner vallum.

57. Nil.

58–72. These fifteen holes from the S. entrance to the N.W. side were dug to test the inner area for signs of inhabitation. From this point of view they were fruitless, producing nothing but a few pebbles, from **59** and **63** only ; a few pieces of iron slag and some fragments of charcoal.

Trench **45** (Plate VIII).

To return to the long trench **45** in the inner fosse, which was begun S.E. of the fence, 107 yards from the S.W. entrance, and extended S.E. At 1 foot down we came on a hard platform of well laid cobble stones and iron slag, 43 feet long and mostly 3 feet 6 inches wide, neatly defined on either side ; later, we

found by sections that it was about 1 foot 10 inches deep (Plate VIII). The slag continued for 23 feet, petered out at either end, and at the S.E. end (farthest from the fence) there was a mass of charcoal just on the stones. On the top of the platform at the N.W. end were found two much-corroded horse-shoes, and near these a corroded door hinge. Slats of Cyrena limestone were very frequent. On removing some of the surface stones, we found charcoal mixed with slag under them. Nearly in the centre the platform consisted for a length of 9 feet of bigger stones standing up above the general level, not surfaced (Plate IX). Two sections were then cut through the platform, (*a*) 4 feet 6 inches from the S.E. end, and (*b*) 15 feet from the N.W. end. (*a*) The platform here was 3 feet 6 inches wide. Top 6 inches of stone, slag and charcoal. Under this 6 inches, mainly soil, below which 10 inches (in the centre) of burnt layer resting on the rounded bottom of the fosse, which consisted of grey washed sand and stone. (*b*) Platform, 4 feet wide. Top 7 inches of smallish sandstones in two layers: under this, 3 inches of stone, slag and pieces of lime; below which grey washed sand down to fosse bottom of yellow sand, on which were fragments of charcoal.

In cutting the latter section we found under the crust of the platform half of a red-and-yellow brick, 4 inches wide and 2¼ inches thick—almost certainly of Tudor date. This was the first definite indication that the platform was not ancient, *i.e.* coeval with the camp. This was confirmed by the horse-shoes found lying on the platform without any intervening layer: and as one of the horse-shoes, kindly reported on by Dr. H. R. Murray, was found to be of a type worn by draught horses at the end of the sixteenth and beginning of the seventeenth century (the other being of a kind widely diffused both in time and place), the platform might be dated roughly about 1600. The type of slag mainly prevalent was also that connected with Tudor or Stuart blast furnaces. The surface stones were not burnt, and the positions of the layers did not suggest a bloomery platform. The platform, therefore, cannot be claimed as ancient; but it still belongs to archæology to say, if possible, what was the use of so complicated a structure. The idea that it was laid as a hard track seems to be contradicted by the fact that at neither end or anywhere else was

there ingress to or exit from it. It lies inexplicably in the fosse, and is described here in detail in the hope that someone may discover its *raison d'être.* We later found intermittent traces of it N.W. of the fence, so that from its quite definite end on the S.E. it seems to have extended for about 130 feet in all. It is certain that this platform had no connection with the original occupation of the camp.

Below the camp on the E. side, and W. of the brook, is a rectangular field which is traditionally called "The Burial Ground," and here, it is said, was found in 1810 the Roman gold ring which is now in the British Museum. We made some examination of the surface of this field for indications, but found nothing to suggest excavation.

IV.—Inferences from Objects found in Digging.

Finds (Plate IX).

Objects found were: groups of water-worn pebbles, obviously imported to the site, probably from the Eden Valley, where they are found in plenty N. of the river at Edenbridge. There can be no doubt they were collected and selected by man. A few signs of flint-working. Lumps of ancient iron slag here and there, and many remains of ancient fire-making. These fires, always very close to the earthworks or in the fosses, were most probably made by gangs of workers while the defences were being constructed. Why the iron slag was imported is not easy to explain: we found nowhere any clear indications of a smelting hearth. But the frequent finding of lumps of Cyrena limestone in association with fire remains and slag strongly suggests that the pre-Roman Celt may have done some iron-smelting here. Not a single scrap of pottery gave evidence of inhabitation, or of the date when the fort was made. Taking the evidence as a whole, we conclude that the fort was made in pre-Roman times as a place of defensive refuge for neighbouring Celtic tribes, but never used either in battle or for ordinary life.

The only evidence for date consists of ammunition pebbles, which are a frequent feature of Early Iron Age forts, the character of the earthworks, lumps of prehistoric iron slag, and some few worked flints. Though this evidence is tenuous,

[*Photo : H. Connold.*

Detail of centre of stone and slag platform, trench 45.

[*Photo : H. Connold.*

Missile pebbles, iron slag, Cyrena limestone and worked flints, samples of the slender evidence afforded by the Early Iron Age hill-top fort of Dry Hill, Lingfield, during three weeks of excavation.

facing page 90]

we feel confident that Dry Hill Camp was constructed in the last century or two before Roman times. It is certainly not Roman, and was probably already in disuse before the Roman conquest. There would have been no difficulty about a water supply: the clay round the N.E. side would hold it in plenty.

We found pebbles in 26 places, mostly in groups, and in only two cases (trenches **59** and **63**) not on or quite close to the inner vallum. Apart from the irrelevant trench **45** (the Tudor platform), charcoal and burnt layers were found in 14 places, always in the fosses or close to the earthworks. Ancient iron slag was found in 10 places, and Cyrena slats in 10 places, sometimes in association with the slag.

Charcoal from trenches **19, 30** and **45** was kindly examined by Mr. J. Cecil Maby. Of 10 specimens from trench **19** (ancient), 9 were of beech and 1 of common oak. From trench **30** (ancient) 8 pieces were all of beech. This helps further to confirm the fact that the beech was an indigenous tree before the invasion of Julius Cæsar.

Specimens of "finds" are in the Guildford and Tunbridge Wells Museums.

Though to some extent disappointing, we think that our three weeks' work was worth doing. It proves the original nature of the defences, with interesting irregularities adapted to the nature of the ground, and demonstrates once again the paucity of evidence that may be expected in some Early Iron Age hill forts. We may claim that we have shown that money and time need not be again expended on Dry Hill.

Some £30 were spent, and grateful acknowledgment is made of the following contributions: Lord Onslow, £5; Lt.-Col. H. Spender Clay, M.P., £5; the Council of the Surrey Archæological Society, £10. For assistance in various ways we are indebted to Messrs. B. W. Pearce, E. Straker, W. S. Darlington, and H. Baker.

Among visitors were Brig.-General E. G. Godfrey-Faussett, Chairman of Council, Sussex A. S., and Miss O. M. Heath and Mr. H. Nevill, Hon. Sec. Surrey A. S.

Postscript.—Just before this article went to press, Mr. W. Staplehurst, of Brighton, informed us that when the reservoir

was made on Dry Hill he found a Roman coin there. It is a denarius of Commodus (180–192). Obv: M. COMM. ANT. P. FEL. AVG. BRIT. P.P. Laureate head of Commodus left. Rev.: SEC. ORB. P.M. TR. P. XIIII COS. V DES. VI. Security sitting left holding globe. In connection with the Roman ring found below the camp this find is interesting, but of no special significance. It probably means no more than that Britons in Roman times visited Dry Hill as they did many other prehistoric earthworks. Commodus took the title of 'Britannicus' because of the victories of Ulpius Marcellus in Britain in A.D. 183.