MACEDONIA.

IV.—MOUNDS AND OTHER ANCIENT SITES IN THE REGION OF SALONIKA.

THE object of these notes is to draw attention to some ancient sites mostly within easy reach of Salonika which seem to have hitherto escaped the notice of travellers. It has been possible to make a few additions to the list of mounds published by Mr. Wace in 1915, and supplementary notes are added in a few cases where further exploration has confirmed or modified his conclusions. A few of the mounds given in his list have been excavated with varying degrees of thoroughness, but it is to be feared that the results will not be published as a whole, and in many instances not at all.

Many of the mounds mentioned in these notes have been visited by both the authors independently. The Rev. W. Cooksey, C.F., has supplied the bulk of the information in Parts I., II. and III., regarding the sites in the vicinity of Salonika, and all of it with regard to the sites on and near Mt. Kotos (Hortiach Dagh). Mr. Woodward is responsible for the notes concerning sites further north, and also for the present form of Mr. Cooksey's notes, and for the maps which illustrate the article. The latter are based on the maps produced by the respective Survey Sections of French and British H.Q., Salonika, by kind permission of the Director of Military Intelligence at the War Office. Mr. S. Casson has kindly looked over these notes whilst in MS. and has supplied additional information which has been incorporated at various points. These additions are followed by his initials [S. C.]. The note at the end of the paper is also contributed by him.—[ED.]

I.—NOTES ON MOUNDS DESCRIBED BY MR. WACE.

(*B.S.A.* xx., pp. 123-132.)

The classification into Funereal Tumuli (A), Prehistoric Settlements (B), and Greek Town Sites (C) is retained, though the theory that some mounds of type A were, perhaps after all, look-out stations, or places from which fire-signals might be sent, receives some confirmation from the fact that excavation of further specimens of this class yielded no results in the form of a built tomb.

A 1, A 2. Of these two mounds, that on the crest of the hill has

been explored by the French, but yielded no finds.¹ From the stratification disclosed it appears that the excavated earth was piled on the highest point of a natural rise, and allowed to fall down the sides, after which the slopes were trimmed. The other mound, near the new railway to 'Mikra Bay' has been cut into without result. It is composed of almost white calcareous earth, of which there is here an outcrop.

A 9. The central mound of the three which rise on the ridge east of Dudular has been excavated for military purposes. The bulk of the mound consists of the stony rubble forming the normal surface of this region, but the south-west portion of the mound was composed of the reddish-brown mould, practically free from stones, which underlies the rubble stratum. This too seems a pretty late geological deposit, to judge by the shells which it contains at intervals. It appears that here a pit was first excavated, and the upcast thrown towards the south-west and that with the pit for centre the mound was then built up. Otherwise it is hard to account for the presence of the lower type of soil, as there are no surface 'pockets' of it in the vicinity.

A 11. This mound has yielded some pottery described as 'very beautiful and perfect' but not seen by either of the authors.

A 12, A 13, A 14. One of these contained a burial chamber.

A 15 ff. The French devoted some time to the exploration of some of these mounds, but no results have been heard of by the authors.

B 2. This was excavated during the summer of 1916 by the French, who cut a horizontal shaft into the centre of the mound. This yielded considerable quantities of prehistoric pottery and traces of rough walls, with patches of burnt soil.² The east slope seemed to have been occupied by an early Byzantine building, possibly a church.³

B 3. A fragment of a stone bracelet was picked up here, in 1916, by Mr. Woodward, and there is much prehistoric pottery on the site. A great portion of this mound, which is particularly steep to the north-east, consists of a natural rise.

C 3. This is kidney-shaped in plan, and measures approximately 230 × 100 yards.

C 6. The 'cone' at the south end of this striking site, thought by Mr.

¹ See p. 4.

² See p. 27.

³ In the floor of one of the rooms appeared to be the remains of a cruciform font.

Wace to be natural, is undoubtedly a prehistoric mound, placed on an outcrop of fresh-water limestone. There is a great quantity of prehistoric pottery to be seen on the surface, and a flint knife was found high up on

FIG. 1.—SKETCH MAP SHOWING ANCIENT SITES NORTH OF SALONIKA. (Scale ca. 1 : 100,000.)

the west side of the 'cone' about a foot below the surface.¹ Remains of presumably later walls are visible near the south end of the lower portion of the site, on the side facing the Galiko.

II.—MOUNDS NOT IN MR. WACE'S LIST.²

Type A.—No definite additions can be made to this class. But see below, p. 62, Note.

Type B.—I. (B 27). At Yeni-Keuy³ (Jeny-Köj) two kilometres east-

¹ Now in the possession of A. Don, Esq. M.D., of Aberdeen.

² These (where shown) are numbered on the map (Fig. 1) in continuation of the numbering in Mr. Wace's paper, *loc. cit.*

³ It will be noted that the spelling of place-names is not uniform in the various papers. This is due to the difficulty of transliterating Turkish names, and as there is no generally accepted system it has been thought better to allow the contributors to transliterate as they please.—[ED.]

south-east of Gradobor village, on a platform of natural outcrop immediately south-west of the village is a large tumulus, with a considerable quantity of pottery on its sides. A deep ravine to the north-west of the site gives it additional strength.

2. (B 28). In the valley of the stream draining the Hortiach plateau in the direction of Kapudjilar (Kapoudzides), about $1\frac{1}{2}$ miles north-east of that village.

3. (B 29). In the marshy land between lakes Langaza and Beshik, about a mile north-east of Langavuk. Much prehistoric pottery, including a cooking-pot of dark hand-burnished ware, almost complete, was discovered here in digging trenches on the summit. [These are old Balkan War (1912-13) trenches. A large rough earthenware cooking-pot, brown, not black, said to have been found here, is in the B.S.F. Museum at Salonika.—S. C.]

4. (B 30). At Chauchitza (or Causiča) about seven miles north-north-east of Karasouli Station, and about 300 yards north of Chauchitza siding on the Constantinople railway, is a low mound which had been occupied, perhaps continuously, from prehistoric to late Roman times. Partial excavations revealed prehistoric pottery, a small Hellenistic bronze vase in perfect condition and coins of Constantine's dynasty, associated with urn burials. See also p. 32, where Mr. Casson discusses this site.

Type C.—In addition to the group of sites on the Hortiach plateau, which are described below, the following additions should be made to Mr. Wace's list.

1. (C 11). Near Dautbali, about $5\frac{1}{2}$ miles north of Salonika, on the west bank of a ravine about $\frac{3}{4}$ mile south-east of the village, is a town site roughly the shape of a flat iron, with the broad end to the south. At its northern end the ground rises so as to form a slight mound. The site is for the most part a natural formation, but its north end appears to be defended by an artificial ditch, and the southern scarp to be artificially emphasised. The buildings of which the foundations are visible on the summit of this site do not appear to be ancient although among them are fragments of large pithoi of coarse clay. Early Hellenic tombs were found close to the site, and on the site itself was found the fore-arm of a female(?) statue of about half life-size, in white marble, wearing a bracelet.

2. (a) (C 12). About a mile south of Yeni-Keuy (Jeniköj), on the west bank of a ravine running towards south-south-west is another

town-site, approximately four-square to the points of the compass. On the east of the ravine at this point are a series of shallow rectangular entrenchments of doubtful date. No surface finds have been reported.

(b) About a mile to the south-east of this site, at a point where this ravine is joined by another from the north-east, and close to a spring beside the old track from Lembet to Gradobor is a patch of ground rich in pottery of all ages. The erosion of the stream bed shows a quantity of stratified remains, among which is some pottery of a conspicuously bright red type, at a depth of about three feet below the present ground-level, in a layer of red earth resembling that mentioned under A 9 above.

West of the former site 2 (a) are the remains of an ancient causeway and bridge not far from the village of Gradobor.

3. There is what appears to be a town-site rather less than a mile north-north-west of Gradobor, on a spur of the main ridge of hills, not visited by either of the authors.

III.—SITES ON AND NEAR THE HORTIACH PLATEAU.

About ten miles east-south-east of Salonika the prominent two-peaked mass of the Hortiach mountain rises to a height of nearly 4,000 feet. The name Kotos belongs strictly to the higher of the two peaks, which lies to the south-east of that to which is given the name Hortiach Dagh (Hortač Dag on the Austrian Staff Map). West of this mountain lies the so-called Hortiach plateau from which the ground falls steeply to the north, less steeply to the south, and on the west rises again to the lower ridge of Beaz Tash. The formation of the ground suggests that this plateau was once a lake-basin which was eventually drained by two streams, one falling steeply from the north-east corner and the other towards the south. All round this plateau ancient remains abound.

1. In Hortiach village, at the foot of the mountain, numerous marble fragments, some of apparently Roman date, are built into the church. This is an early Byzantine cruciform structure, the pendentives being carried by a horse-shoe shaped string-course in the angles. In addition to some columns of *verde antique* and other unfluted columns of common marble there are some fragments of good egg-and-dart moulding; the threshold, a slab of hard black shale, is incised with circles and lines, cut with a bow-drill, the former about an inch in depth, the latter less.

2. The aqueduct, of which a large fragment is preserved in good condition, stands in the bed of the stream draining the plateau towards the south. In the foundations are blocks of marble and travertine (quarried locally) resembling the style of the small surviving portion of the original Hellenistic walls of Salonika. Portions of the aqueduct may be Roman work, but the bulk is Byzantine. Possibly the water was carried at two levels, one over the lower, and one over the upper set of arches. [This aqueduct was found intact and in working order nearly as far as Akukli. It was restored and used in 1916 as the water-supply for British troops here.—S. C.].

3. Rather more than a mile south of the aqueduct, on the old road from Hortiach to Salonika, via Akukli and Kapudjilar, is a stone bridge of Roman type, built of travertine, and probably rebuilt from the old material. [This is most probably Turkish, and is on a Turkish road.—S. C.].

4. On the knoll above this bridge is a well-marked site, largely overgrown with trees: it has a double wall of considerable height and thickness standing at many points, and is strengthened with an artificial ditch and an extra wall at the point where it joins the neighbouring high ground.

5. Another site exists concealed among the chestnut trees north of the village of Hortiach. [These two are probably large Byzantine summer residences, not towns.—S. C.].

6. A hill fort exists (close to the golf-links) at the junction of the roads to Kirech-Keuy (Kireköj) and Kapudjilar, on a commanding site overlooking the plain south-east of Salonika, and the bay, with Olympus, Pelion and Ossa visible in the distance on a clear day. On the south there is a steep fall to a ravine running down towards Kapudjilar. On the hill-top, which is scarped all round, is an almost circular enclosure, with the remains of a palisade of pointed stones inclined outwards. In excavating the summit (for a dug-out) an ancient excavation resembling in form a British Celtic burial was found, which yielded only a few indeterminate potsherds. On the southern slope is a spring enclosed in a rough wall connected with that round the summit.

7. Near the head of the steep ravine, falling towards Aivasil from the north-east angle of the plateau, is a striking site of great natural strength. The site is on a narrow projecting spur flanked by two ravines which unite close below the north end of the site, and rises perhaps 500 or 600 feet

above the level of the stream-beds at its highest point. To the south an artificial cut has been made, uniting the two ravines, to a depth of 60 or 70 feet, with a vertical face on the town side. The site is on two levels and at a point on the west side is a wall of unsquared stone still standing to a height of about ten feet. South of the protecting ditch four graves were found by troops in pitching a camp, but unfortunately no record of any sort was kept of their contents. They were formed of slabs of shale. The site is likely to yield many more graves, and would well repay excavation. It appears to have been artificially levelled, and rises above the ground level of the main plateau.

It is possible that this site was occupied in pre-classical times as well, as the interesting graves which yielded jewellery and other finds of the geometric period when excavated in 1916¹ were situated lower down the same ravine to the south-east of Aivasil.

8. Remains on the Summit of Mt. Kotos.

The summit of Mt. Kotos, the higher of the two peaks of the Hortiach Mountain, consists of a ridge higher at the south end than at the north, with a narrow saddle between the two extremities of the ridge, and is precipitous on all sides, though less so on the west. The whole summit ridge shows many traces of ancient occupation,² the area comprised being about equivalent to that of many of the city-sites mentioned in these notes, though rather longer and narrower than the average of them.

(a) At the highest point of the northern end of the summit ridge the native rock has been cut out so as to form a shallow flat-bottomed basin, presumably to collect rain water. At one point near its southern edge is a series of circular sinkings deep enough to permit the use of a pitcher to draw water from the basin, which seems elsewhere to be only about four inches deep.

(b) A few yards to the south of this basin, and slightly below the summit is a sunk store-chamber or cistern of bee-hive shape, with sides of rough stone plastered over, and a circular opening at the top. Its diameter is about eight feet, and the depth to the top of the débris accumulated within is slightly greater.

¹ By Lt.-Col. T. Gayer Anderson, D.S.O., and Lt.-Commander Ernest Gardner, R.N.V.R. See pp. 17 ff.

² During 1917 some portions of the area were excavated by the French authorities, but the work was apparently abandoned, and in July, 1918, many of the trenches were falling in.

(c) To the south-west of this cistern is the mouth of a shaft about four feet square, lined with slabs of shale, which has not been cleared to a depth of more than three feet.

(d) Between (b) and (c) is a tomb formed of shale slabs plastered on the inside, with covering slabs of the same material, in the form of a vault, of which only about one third now remains.

(e) Close by is a large block of marble with a rough moulding which has only been partially uncovered.

(f) The higher, southern end of the site has yielded the remains of a hut-circle or *tholos*-tomb about twelve feet in diameter, of which the walls still stand to a height of $2\frac{1}{2}$ feet above floor-level. It is built of small blocks of the local stone, roughly hammer-dressed, and is approached by a narrow corridor leading to a doorway on the north side. This doorway, of which the sides converge towards the top, has a doorpost preserved on the right hand side, made of a thick slab of the coarse local marble.

A large heap of fallen stones to the east of this building indicates that a second structure, of considerable size, stood close by.

(g) Close to the extreme south-east angle of the site is a short stretch of wall running east and west, built of coursed masonry of which the stones are roughly hammer-dressed and vary in thickness from eighteen inches in the lowest courses to six or eight, higher up. Ten courses remain standing. The wall does not appear to continue across the whole breadth of the site at its southern end, and on the east overhangs the precipice, indicating that the portion which presumably returned along the east side of the site has been carried away by a rock-fall on a large scale.

A considerable quantity of pottery is to be found lying on the site especially on the saddle between the two extremities.¹

IV.—SITES TO THE NORTH OF THE SALONIKA PLAIN. (Fig. 2.)

In the area bounded on the west by the Vardar, on the north by the foot-hills lying between that river and Lake Doiran, on the east by the railway line from Salonika via Sarigöl and Kilindir to Doiran station, and extending on the south as far as the south end of Lake Amatovo, many of

¹ A stone implement of the *coup-de-poing* type was found on the site, close to the shaft (c) above, by Lt.-Col. James, R.A., M.C., in 1918. It was of a dark-green stone, resembling jade (?), and about $4\frac{1}{2}$ inches long. Flaked like the normal 'palaeolithic' implements it had been subsequently polished smooth by use, not by grinding.

the hill-tops show signs of ancient occupation. The following list of sites is by no means complete, and there is little evidence of the date of many of the sites described.

1. Five hundred yards south of the village of Vardino, on the east bank of the stream draining from Lake Amatovo into the Vardar is a

FIG. 2.—SKETCH MAP SHOWING ANCIENT SITES BETWEEN JANESH AND THE VARDAR.
(Scale ca. 1 : 200,000.)

large steep-sided tumulus, even larger than that at Yeni-Keuy (II. B (1) above), and probably prehistoric.

2. East of Vardarovci village, and about a mile south-south-west of Amatovo station is a large city-site crowned with a low tumulus (not visited).¹

¹ This site is about five miles south of No. 1, and therefore does not come into the area shown on the map.

3. The southern slopes of the hill on which rises the Byzantine castle of Avret-Hissar (see below, p. 98 ff.).

4. On a hill top five kilometres north-east of Avret-Hissar is a small 'city-site' or large fort with sides artificially scarped. Many tile fragments lie on the site.

5. East of the Sarigöl-Kilindir railway, about a mile south-south-east of the ruins of Janesh is a prominent site which appears to be a prehistoric tumulus of which the top has been levelled down and occupied in historic times.

6. The prominent rocky outcrop of Kalabak (or Pic de Krečevo) rising south-east of Lake Ardzan was occupied by a settlement of some sort in classical times. Coins are reported to have been found and Hellenic pottery fragments are plentiful.

7. The summit of the spur north of Mihalova (situated immediately north of the *c* in Malovci on the Austrian Map (1/200,000)) has a prominent earthwork of uncertain date, most clearly visible on the west of the summit. No pottery was visible on the surface.

8. The mound at Chauchitza (Causiča) mentioned above II. B (4), which was perhaps in Roman times, a cemetery only of a presumed site on a spur of the foothills further north.

The Roman road running south-west from Avret-Hissar, approximately in the direction of site No. 2 at Vardarovci, forms a conspicuous ridge in the plain. It can be traced with more difficulty for a short distance up the Zensko valley, but subsequently disappears.

W. COOKSEY, C.F.

A. M. WOODWARD.

NOTE.

Besides the mounds above referred to by Mr. Woodward there are prehistoric mounds at the following places :—

AKBUNAR.—A small mound more of a conical than a flat-topped shape is situated about two kilometres south-east of the village near the small Roman cemetery discovered here in 1918. I carried out a small excavation in the side of this mound in the summer of 1918 and

found several fragments of good painted sub-Mycenean wares and several bone implements, but was not able to establish any satisfactory stratification. (See Plate IV. 12-18, and p. 31.)

BEROVO.—In the valley of the Langaza below the village of Berovo at a point opposite the forty-first kilometre stone on the Salonika-Serres road. (Fig. 3.) I was not able to examine this mound in detail, but it appeared to be of type B.

DRIMIGLAVA.—The large mound upon which the northern part of this village is built is entirely prehistoric and rich in fragments of every kind of undecorated prehistoric ware.

GNOINA.—Just west of the Chiftlik of Gnoina is a long flat-topped mound of type B. The usual prehistoric burnished wares were to be found on it in large quantities, but a fairly extensive Hellenic stratum covered the top of the mound. (Fig. 3.)

GUVEZNE.—In the valley of the Guvezne Dere about three kilometres north of the village is a large mound of type B. The usual prehistoric burnished and incised wares were common, but I was not able to find anything Hellenic.

KOPATSI (Struma valley).—There is a very large prehistoric mound of type B north of the village. Adjoining it to the south is an Hellenic site. The usual types of undecorated prehistoric wares are common on the surface.

KILOMETRE STONE 34 on the Salonika-Serres road.—There is a flat-topped prehistoric mound just east of this point with a small church built upon the top. I was not able to examine this site in detail.

TUMBA (on Lake Langaza).—A flat-topped prehistoric mound of type B. I was not able to examine this mound in detail.

YENI-KEUI (near Gnoina).—Near the small hamlet of Yeni-Keui is a very well preserved flat-topped mound of type B situated on a rocky scarp on the edge of the ravine of the Kuru Dere. Prehistoric and Hellenic wares have been found on the surface.

The following classical burial mounds of type A are additional to those given above by Mr. Woodward :—

MEKES.—About a kilometre west of this village are two small conical mounds. No pottery has been found at either.

DRAGOS.—Just to the west of this village there are two small conical mounds similar to those at Mekes.

FIG. 3.—SKETCH MAP OF THE AREA BETWEEN SALONIKA AND THE STRUMA.
(Scale, *ca.* 1 : 900,000.)

The mounds at Gnoina, Guvezne, Drimiglava, Tumba, and Yeni-Keui belong to the Langaza valley group and are situated on the important prehistoric route followed by the Via Egnatia. The mound at Yeni-Keui commands the defile where a northern branch of this route leads round Deve Kran to the plains of the lower Vardar.

The mound at Akbunar belongs to the Salonika littoral group.

The mound at Kopatsi in the Struma Valley is the only example of a prehistoric site in the upper half of this valley and seems to lie upon a

prehistoric route running between the Langaza and Struma valleys giving a shorter and quicker line of communication than the route that follows the line of Lakes Langaza, Beshik and the coast. The mounds at kilometre stone 34 and at Berovo seem to give the general line of this shorter route which ran up the Guvezne Dere or the Langaza valley, and thence over a ridge near Berovo to the head of the Kopatsi Dere and so to the Struma valley.

S. CASSON.