

## LACONIA.

### II.—EXCAVATIONS AT SPARTA, 1906.

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#### § 12.—THE ROMAN STOA AND THE LATER FORTIFICATIONS.

(PLATE VIII. 3.)

IN plan the walls surrounding the Acropolis of Sparta form an irregular oblong, terminated to the east and west by two small hills which formed citadels or outlook points. Though no single complete part remains, and in many places the walls are levelled to the ground, the lines can still be traced fairly completely. (Plate VIII. 3.)

#### THE ROMAN STOA.

At the south eastern corner are the ruins of a Roman Stoa of the Imperial period (A).<sup>1</sup> They shew a series of small compartments (Fig. 1), covered with barrel vaults, ten on either side of three larger central rooms, which are roofed with crossgroined vaults and large semicircular niches at the back. The ground on the north side is as high as the vaults and originally must have formed a terrace overlooking the street on to which the Stoa opened on its south side. The walls are faced with triangular bricks, set with thick mortar joints ; the vaults are built of square

<sup>1</sup> The letters refer to the Enlarged Plan (Pl. VIII. 3).

bricks  $27 \times 27 \times 03$  m.; these bricks were made with a diagonal cross impressed on one side which, when they were used entire, served as a 'frog' or key to give a hold to the mortar. When used in facing they were easily broken along the diagonals, and four triangular facing bricks, each with one good facing side, were obtained from each.

The springing of the central cross vaults is of interest. The groin and arches are carried up in horizontal courses to a height of about 1.20 m. above the springing and then, still in horizontal courses, are set back so as



FIG. 1.—THE SPRINGING OF THE VAULTS IN ONE OF THE CENTRE COMPARTMENTS OF THE STOA.

to give a true radiating bed to the vaults and voussoirs (Fig. 2). The form is analogous to that used in Gothic vaulting. The keys to the niches are large and formed of a number of bricks penetrating some ten or twelve courses back into the vault (Fig. 3). The interior of the walls is of rough concrete.

On excavating in one of the side rooms, the floor was found at a depth of 2.73 m. from the surface and 3.27 m. from the springing of the vaults.

It is of red tiles '31 m. square, with a small brick skirting '06 × '06 m. at the angle between floor and walls.

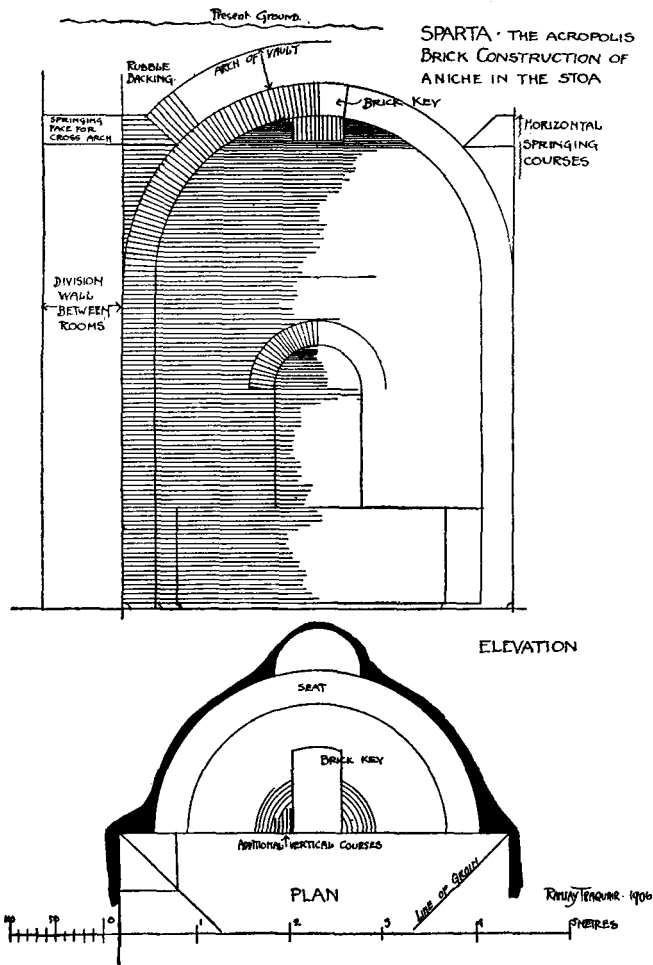


FIG. 2.—BRICK-CONSTRUCTION OF ONE OF THE CROSS VAULTS IN THE STOA.

### FORTIFICATION IN FRONT OF THE STOA.

In front of the Stoa and symmetrical with it is the fortification wall, flanked by four square towers in groups of two, opposite each end of the Stoa. The extremely close setting of these pairs of towers is noticeable; here it largely obviates the great defect of a square tower in fortification,

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by enabling each tower to flank almost completely the front line of its neighbour. In this way the large dead angle usual with square towers is avoided, but a great number of men must have been required to defend such a system, and the Stoa was evidently regarded as a point of special importance.

On the eastern side, the end of the Stoa has been incorporated in

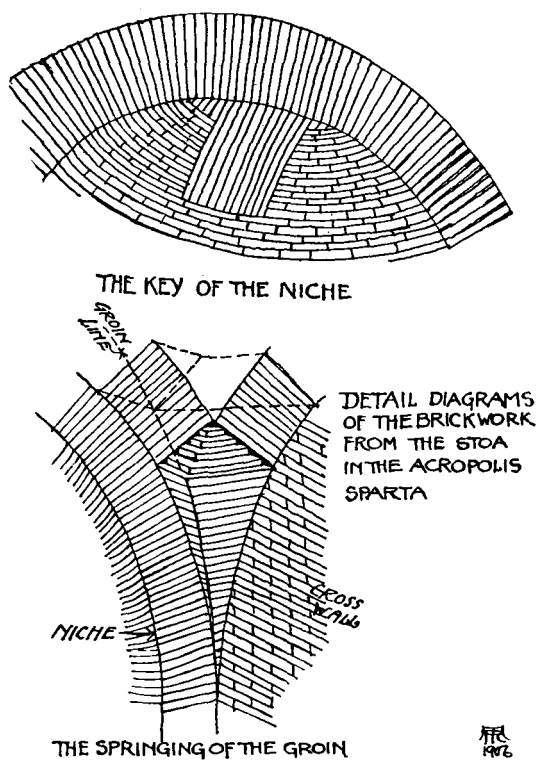


FIG. 3.—DETAILS OF CONSTRUCTION OF A NICHE IN THE STOA.

the fortifications, forming a square tower (B): it consists of two vaulted chambers of unequal size set at right angles to the line of the Stoa, and opening to the east with two large arches, both built up<sup>1</sup> (Fig. 4). One of these arches was excavated to its foundations, and the threshold was found 3.25 m. below

<sup>1</sup> The set-back at the springing is not uncommon in Roman work, and served to support the wooden centering for the arch.

the springing; it was broken across, evidently by the weight of the subsequent infilling.

At the northern side of the north arch is the beginning of a cross wall, behind which, and built into it, is a small surface water-drain. The

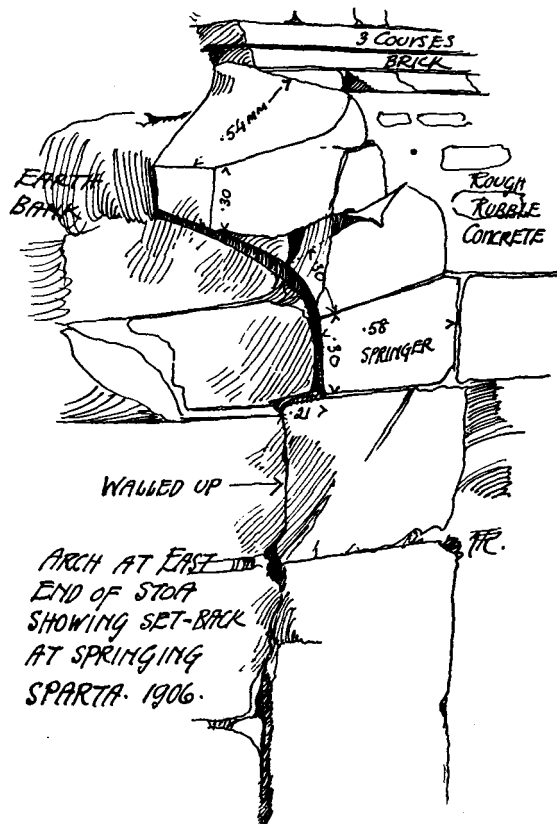


FIG. 4.—SET-BACK OF THE SPRINGING OF THE ARCH.

cross wall is of the same date as the Stoa, and is evidently the retaining wall to the higher ground on the north side of an old entrance.

The end of the Stoa is faced with large squared stones up to the springing of the arches, above that, with triangular bricks; to the front the stone-facing has been carried up the whole height of the wall, a storey higher than the existing remains of the Stoa. Between this and the south-

east angle is an opening leading into the street in front of the Stoa, flanked to the south by a square tower, now built up.

The fortification walls are of rubble concrete 3·80 m. thick, faced in the lower part with large squared stones evidently taken from earlier buildings, as dowel-marks are visible in some; most of the blocks are of poros stone, but there are a few marble blocks and architectural fragments. In the upper part the facing is of rubble with tile creasing courses; there is no sharp line between the two kinds of facing, the large heavy stones having been used in the lower part as being of greater value there, or as being too heavy to lift to any height.

The towers are entered by doors through the wall, which is carried through behind them; one of these doors has been excavated, and is lintelled with columns and large architectural beams. Column shafts are also used to bond in the tower walls with the thicker main wall, and in other parts of the fortifications as bonding stones in the walls. This use of columns is also found in the Byzantine walls of Constantinople; it was a simple and practical method of strengthening a thick wall or an angle, when old materials were to hand.

Immediately to the west of this wall and in the same line, excavations under the present road showed an old gate with wheel-ruts and sockets for the door pivots (Figs. 5, 6). This gate was flanked to the east by the end tower in front of the Stoa, and to the west by a square tower projecting from the angle on three sides; of this tower the two front angles were found. The wall to the back was too far gone to be accurately traced.

#### LATER EXTENSION OF THE FORTRESS.

This flanking tower disturbs the symmetry of the wall in front of the Stoa, which now shows two towers at one end and three at the other, with the gate between the two outermost at the western end. It is also of inferior workmanship; the facing is not of large blocks as in the others, but of rubble: for these reasons we are probably right in supposing that it was built later than the part in front of the Stoa. An additional proof exists in the walled-in opening already described at the east end of the Stoa; while a gate existed here, the flanking towers on each side were necessary to defend it; when once it was walled up and the gate placed at the west end, they were uselessly close together, but an additional western tower was necessary to flank the new gate.

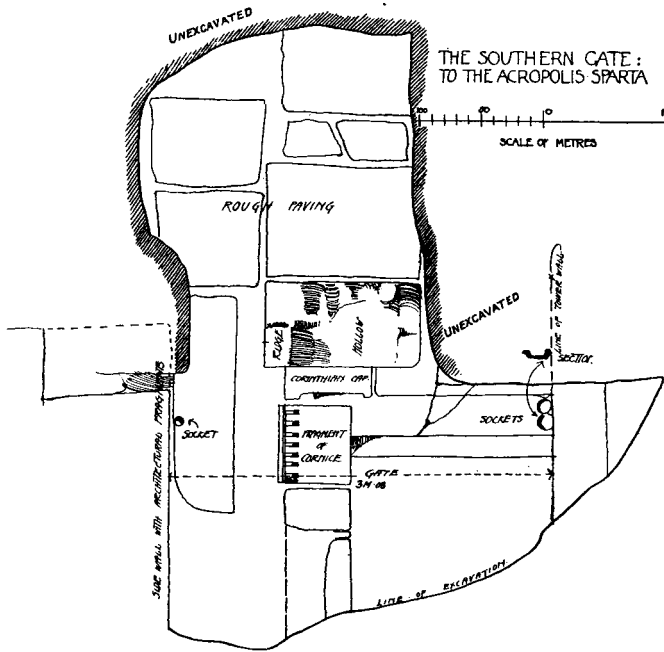
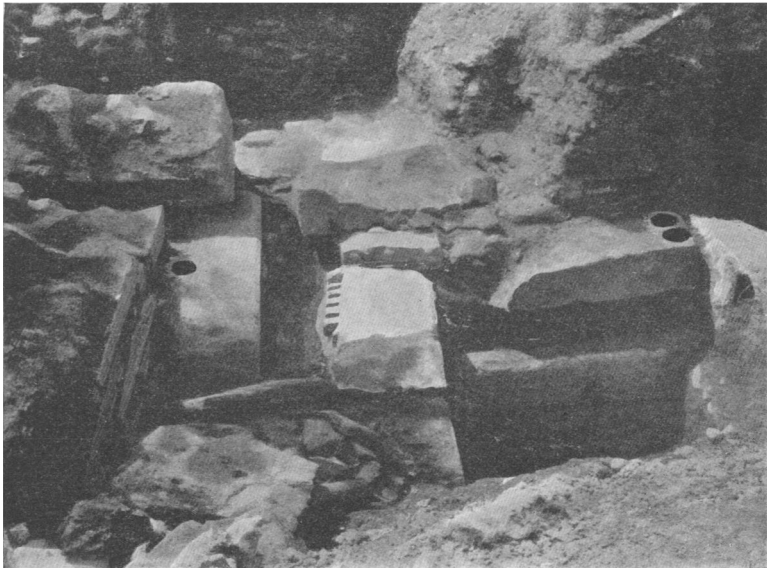


FIG. 5.



FIGS. 5 AND 6.—SOUTH GATE OF ROMAN FORTRESS: PLAN AND VIEW.



Westwards from the gate the wall breaks back about half the width of the space between Stoa and wall, and continues in a line almost parallel with the Stoa. The line from here to the Theatre has evidently been laid out so as to suit existing buildings and so as to include suitable existing walls as far as possible. Immediately to the west is a short length still standing to some height, somewhat thinner than the other walls but of similar construction ; in this are fragments of some Hellenic building in white marble.

Further westwards, where the wall again begins to show above ground

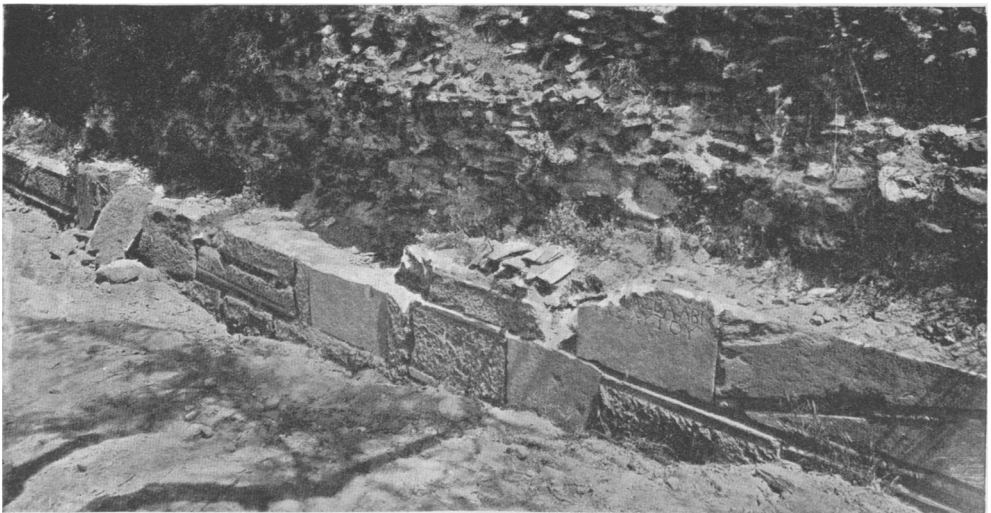


FIG. 7.—PART OF SOUTH WALL FACED WITH INSCRIBED AND MOULDED MARBLES.

(D), two piers and the angle of some earlier building were found, which had been built into the later walls. A small gate may once have existed here, though now built up, between the two piers, which are of exactly the same width and character. The building is very confused, and several walls have been raised from the same foundations.

From this point to the Theatre, the wall is full of architectural fragments and inscriptions ; particularly beyond the second tower the wall is almost entirely faced with inscribed or moulded blocks from which the mouldings have been dressed off where they projected beyond the face of the wall (Fig. 7).



The amount and variety of thin marble slabs built into the walls is also noticeable ; from here and from the Theatre some thirteen different kinds of marble were obtained, many of great beauty ; they included cipollino, pavonazzo, verde antico, purple, a red breccia marble and a fine white and purple marble from Taygetus. Along with them a considerable amount of a small marble frame moulding was found, with which and the marbles the walls of the Roman buildings were panelled.

The second tower from the gate (E) projects at an obtuse angle from the wall face and shows the springing of a brick-lined Roman vault. Here again an existing Stoa or other building has been utilised in the defence ; the later walls are built under the vaulting of the Roman building which showed above them. On excavating out from the wall no traces of further foundations were found.

To the west of this tower the wall again breaks back and continues to the Theatre with one tower only. A short distance from the tower are two piers from an older building (F) taken into the wall, and opposite the east end of the Theatre is a small opening ; both were probably gates, but have been built up. Opposite the Theatre the wall is in great part destroyed.

A large built drain was found under the wall to the east of the first tower, running towards the west end of the circular building on the Acropolis. Under the gate itself were five small circular earthenware drains 14 m. in diameter and in lengths of about 55 m. ; they were carefully jointed, with sockets set in a white cement, and were evidently surface water-drains from streets in the interior of the Acropolis. A similar built drain and similar pipes (Fig. 8) were found at the foot of the western extension of the Stoa wall.

After passing in front of the Theatre, the wall turns and follows the side line of the Roman stage building. Here it is entirely built, so far as now remains, of architectural fragments on an older foundation, probably that of the Roman stage ; a number of large blocks with a frieze decoration of ox-skulls and festoons have been built in here, which may have formed the front and sides of the stage ; the space between the Parodos wall and the stage has been built up, and the Parodos wall, of which the Hellenic foundations were found, has been strengthened and raised to form the outer wall. The Hellenic portion is of ashlar masonry set without mortar and with a small 'V' rustication.

The Theatre forms the south-western angle of the fortifications and, as it was heightened by an additional wall on the top, must have been a formidable tower; it is of large blocks, 38 cm. to 40 cm. high and 1.40 m. to 2 m. long, laid without mortar with dovetail cramps. Many of the stones show building knobs to the outside and there are numerous alphabetic masons' marks on the inner faces (cf. p. 403 above).

As the ground is much more level to this side than to the north, the ditch would have been a prominent feature had one existed. No indications were found, and a comparison of the levels between the

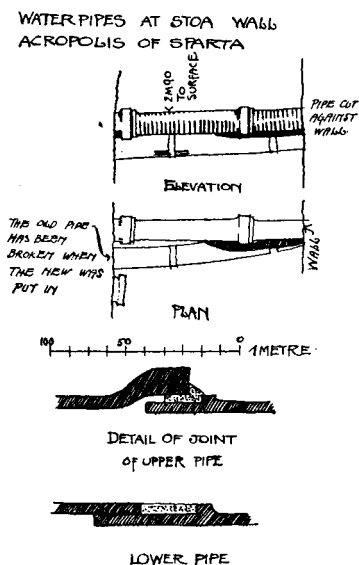


FIG. 8.—WATERPIPES AT STOA WALL.

# FOUNDATIONS OF SOUTH WALL NEAR GATE SPARTA 1906

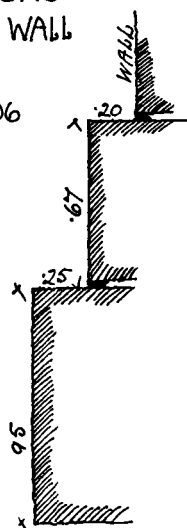


FIG. 9.—FOUNDATIONS OF S. WALL.

threshold of the gate and the foundations of the wall to the west of it showed that none could ever have been intended; the foundation level of the wall is only 90 cm. below the threshold, and further west is actually above it; the gate could hardly have entered from the bottom of the ditch. The foundations, wherever excavated, are well formed of large blocks in two courses with a small projection from the wall face (Fig. 9), but, as we have seen, were at no great depth at the south-eastern angle, where they are deeper down; the original ground level was lower than at present, and the apparent depth is caused by a later accumulation of earth.

At the Theatre the south-western angle was found considerably to the south of the existing remains, and from here the curving wall forms the fortification line for some distance. To the north, the wall encircles a small steep hill; it is at first polygonal in plan with one semicircular (G) and one square tower (H) on the angles; between these two towers the aqueduct entered the Acropolis. To the north of the square tower the wall curves round rapidly to the east with an additional semicircular tower (I) on the angle. Beyond this, from the north side of the hill, it continues at right angles to the curve beginning the northern line of circumvallation.

In its present form this eastern end is a very well planned fort; the towers are so arranged as to flank the walls completely, and an additional flanking is obtained to the south by the Theatre and to the north by the right-angled projection of the wall (K). Search was made for a gate in this projection, but the wall was found to run through without opening; there are no signs of this end having formed anything in the nature of a true detached citadel or keep, separated from the city.

The towers are later in date than the main wall, as is shown by the very imperfect bonding of their walls with it, and as indeed their semicircular form would lead us to expect. The outer wall of the square tower is still standing to almost its entire original height; originally the tower has been in three storeys, with wooden floors and a barrel-vaulted roof supporting a flat platform. The point above this, where the wall is thinned to form the rampart, can just be seen; the construction is similar to that of the southern walls. No inscriptions were found and but few architectural fragments. The circular towers have carefully cut dressings, rounded to the plan, which therefore must have been recut if taken from an older building.

Of the northern walls only a few fragments are now left, the greater part being level with the ground; the large piece near the western end is the only part showing the original facing and is similar to the southern walls, but with fewer large facing blocks. In this wall are a great number of columns used as bonding-stones through the thickness of the wall; many of the facing blocks in the lower part have been torn out, and the upper part is now largely supported by these columns, acting as brackets. This explains the very ruinous state of even the foundations on the northern side. The road from Tripolis to Magoula or Mistra passes close to the walls and the large blocks have been torn from their lower parts as building material; the upper part has then fallen in, completely covering in places every trace

of the foundation, to reach which it would be necessary to dig through masses of shattered concrete.

The western half of the northern line is laid out in a great right-angled salient without towers or openings, beyond which the wall continues in a straight line flanked by four towers, to the small hill forming the eastern citadel. Of these towers two were excavated, that at the western angle (L) and the large central tower (M); the latter was almost completely built of architrave, frieze, and cornice fragments of some small late Roman building of the Corinthian order. Between these the French plan shows a third, now completely vanished, and masses of fallen masonry show the position of the fourth close to the eastern hill. From here stones were very evidently being plundered up to the moment when excavations were begun to trace the lost line.

Between the hill and the tower the threshold of the northern gate was found, with traces of the paved road outside it, flanked to the west by the tower and to the east by the hill, here very steep.

The walls of the eastern citadel (N) are very much destroyed, but the line can just be traced; the front line of the tower at the north-eastern angle was found, but owing to the depth of earth and the masses of fallen masonry we did not trace its southern junction with the wall. On the southern side of this eastern height is a square tower (O), of which the back wall with its door and the foundations of the front are still visible; the construction is of rubble, here pierced both long- and crossways with circular holes; the markings on the mortar in these holes show that rough wood beams, small tree stems, have been built in originally; both the form and the markings indicate pine, which may have been brought from Taygetus. This use of wood beams to strengthen a wall against the attack of the battering-ram or balista is very characteristic of early mediaeval fortification, and here probably indicates that the stock of columns was used up when this tower was built.

To the west of the southern tower, and beginning at the point where the line of the eastern wall would intersect it if continued, the face of the wall changes from cut masonry to irregular rubble, in a line gradually sloping up from below. Search was made for the foundations of the eastern wall near this point, and between it and the existing large fragment; it was found at one place at a depth of two metres, but is evidently quite lost elsewhere.

The French plan shows a broad opening here, and this, in conjunction with the sloping line of rough walling, would indicate a gradually rising road leading to the higher ground of the hill, with a gate (P). (Fig. 10.)

The large fragment of the eastern wall (R) between this point and the mound is the most remarkable piece still standing. It is 2·60 m. thick—1·20 m. thinner than the wall in front of the Stoa ; the lower part is faced with large blocks 45 cm. to 60 cm. thick taken from older buildings, and through its whole height is built of old stones laid with thick mortar joints and wedged up with small flat stones. Care has been taken to

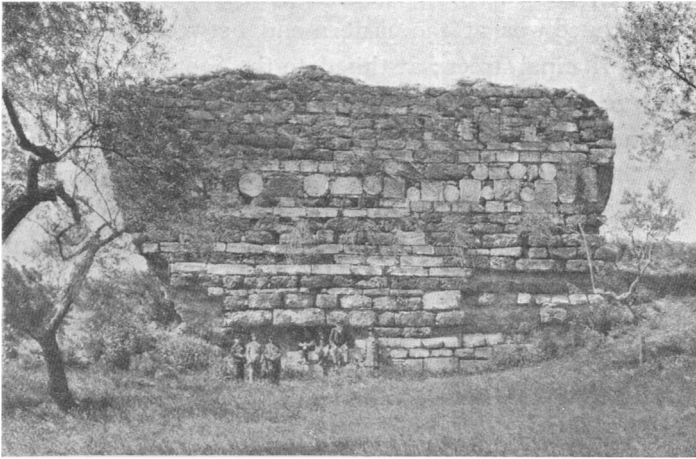


FIG. 10.—FRAGMENT OF EAST WALL.

arrange these stones in a decorative manner ; at the bottom are three courses of large white marble blocks, then three of brown poros stone ; above this a narrow band of white marble and a broad one of brown stone ; then come three courses of marble with an occasional poros block, and one of poros with an occasional marble intruder. Above this is an evident attempt to get the effect of a Doric frieze with alternate blocks of poros or marble, and column drums ; the courses at the top are more irregular, but still show an attempt to form a pattern. South of this wall is a large tower, now covered by a mound, and a short distance to the south again is the Stoa tower.

## GENERAL CONCLUSIONS.—DATE OF THE FORTIFICATIONS.

The most noticeable point in the plan is the alignment of the southern wall. The face of the Theatre at the extreme western end is practically parallel with the line of the Stoa at the eastern end, and this line has been traced from the Stoa to the circular building in the centre; the fortifications run parallel to this line. From this it is clear that a great street ran from the Theatre to the Stoa, with its entrance from without, at the built-up eastern gate, and that the walls have been built to include it. The part in front of the Stoa is evidently earlier than the rest: at first the entrance was at the eastern end between the two towers and leading to the principal street; at this date the Stoa must still have been an important centre, but later the eastern gate was built up and the gate with its flanking tower placed at the western end. To this later period the main part of the walls probably belongs. Comparatively few architectural members are found in the Stoa fortifications, which suggests that the buildings of the city were still standing; but the adjoining strips of fortress-wall are full of fragments from older buildings which must have been ruined when these walls were constructed. The lack of architectural remains in the eastern and northern walls is due to the position of the official Roman town to the south of the Acropolis. Evidently elaborate buildings were rare on the northern side.

The very small number of gates shows that at a later period the Acropolis became a castle, rather than a walled town, held by a Byzantine garrison, but with no large civil population; and that as the civil population grew less, the numerous gates which had been necessary for them were built up. At a later period the towers were added to the western citadel; the southern tower of the eastern citadel is probably even later. The strengthening by wood beams is not found elsewhere.

In 267 A.D. the Heruli invaded Greece and laid in ruins Athens, Corinth, Sparta, Argos, and the cities of Achaia. This date corresponds with that which the architectural fragments would lead us to expect, and we may well imagine that the fear of a second inroad would lead to the immediate fortification of the central part, largely with the fragments of the ruined town; the original laying out of the town would still be preserved,

and some attempt made at a dignified appearance. To this period we may assign the portion in front of the Stoa.<sup>1</sup>

In 396 A.D. the city was sacked by Alaric. After this blow the energy of the citizens and their ancient pride would be lessened, and we might expect the more careless work of the main walls ; no ancient buildings would now be undamaged, and the walls would be built of every fragment which could be found ; the fresh and unweathered state of these pieces shows that they cannot have lain for long before being used. To about 400 A.D. belongs the main line of the *enceinte*, so far as we can judge ; at this time, too, a zone would be cleared round the walls for obvious reasons of defence, and to this we owe it that no traces of buildings are found near the walls. Subsequently, as the Greek population grew weaker and the Acropolis became more and more a fortress or garrison town, the gate to the east end of the disused Stoa was built up, and a more convenient gate with its flanking tower was placed at the western end ; soon the open gates became less necessary and more dangerous, and were walled up, leaving only the three existing openings to the north, south and east ; later the towers were added to the eastern end, and lastly, the tower flanking the east gate.

After the Frankish conquest of 1205 the court of Lacedaemon was famous for its brilliance, and Villehardouin lived here at least until Mistra was built in 1248. The Franks probably made few alterations ; the intention of fortifying Mistra must have existed from the beginning and would prevent them from making any additions to Sparta. The complete absence of any Byzantine architectural fragments in the walls also goes to show that no additions had been made for many years before the Frankish period ; the latest work might be placed at say 700–800 A.D. At the Frankish conquest the buildings and walls must have been sufficiently well preserved to accommodate the court of the Prince of Achaia, but their subsequent history is that of slowly mouldering walls, a quarry at first for Mistra and later, for every passer by.

<sup>1</sup> The walls of Gortyna in Crete, as described by Mr. A. Taramelli (*American Journal of Archaeology*, vi. 101), are strikingly like these Spartan walls in construction and thickness, and evidently belong to the same period. He assigns them to a date posterior to the death of Alexander Severus in 235 A.D.



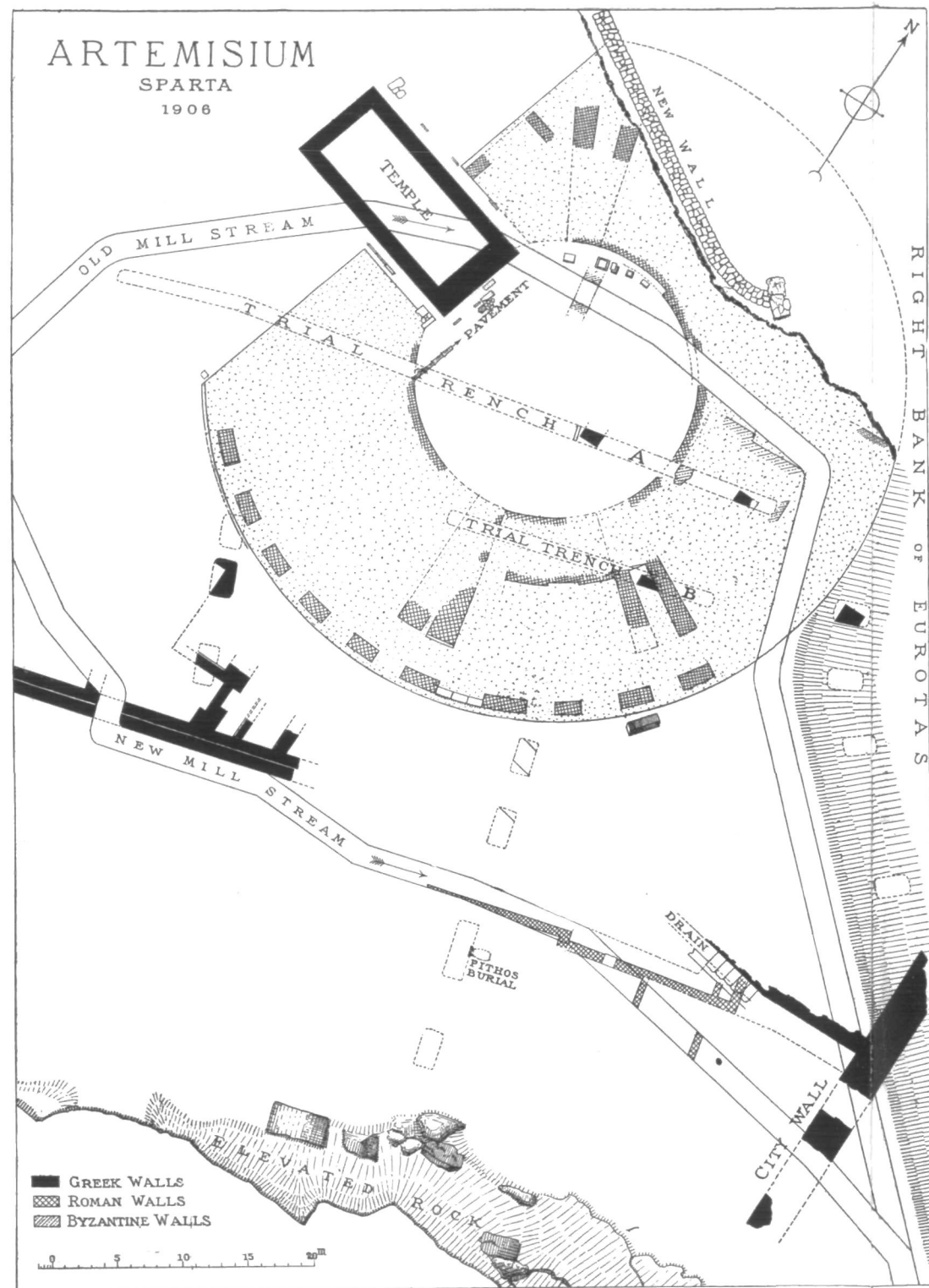
## THE BUILDING CALLED VASILOPOULA.

About 150 metres to the south of the Theatre are the remains of two buildings now collectively known as *ἡ Βασιλοπούλα* 'The Princess.'

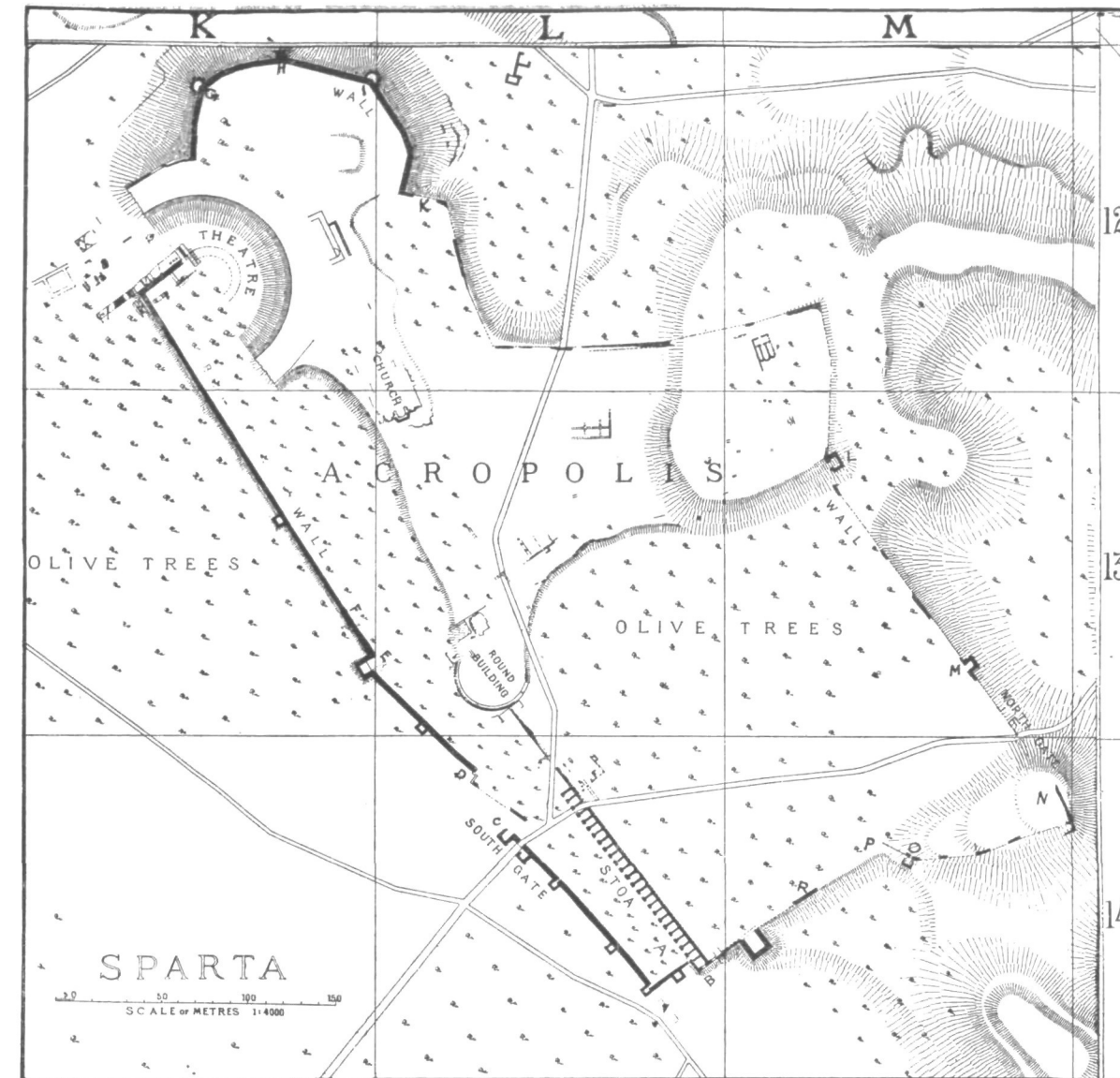
The northern ruin consists of a building square in plan outside and circular inside, originally covered with a brick dome and now filled up to about the springing with rubbish (**J. 12**). This is surrounded on three sides by a building divided into irregular rooms, which still shows traces of windows on the west side. The masonry is rough rubble with tile bonding courses, and the walls are 1 m. to 1.50 m. thick; there are no ancient remains.

The building to the south consists of a large courtyard, about 90 by 60 metres, with a tower or house in several storeys at the northern end and remains of other buildings to the south (**J. 13**). The French Plan of 1833 shows slightly more than now exists. The walls are of rubble about 1.50 m. thick, partly faced with large blocks, of which a few are ancient. In the eastern wall is a square pilaster capital, and on the ground to the north of the tower, a circular capital of late Roman work; they are Corinthian without volutes, of the 'Tower of the Winds' type, similar to fragments found at the Theatre and 'Tomb of Leonidas.' In the tower wall is a small fragment of Byzantine carving—a cross and part of a frieze. The buildings are evidently late in date, and were probably a roughly fortified farmstead and house. Excavation in the dome of the northern building would probably settle the date; they may be either late Frankish or Turkish.

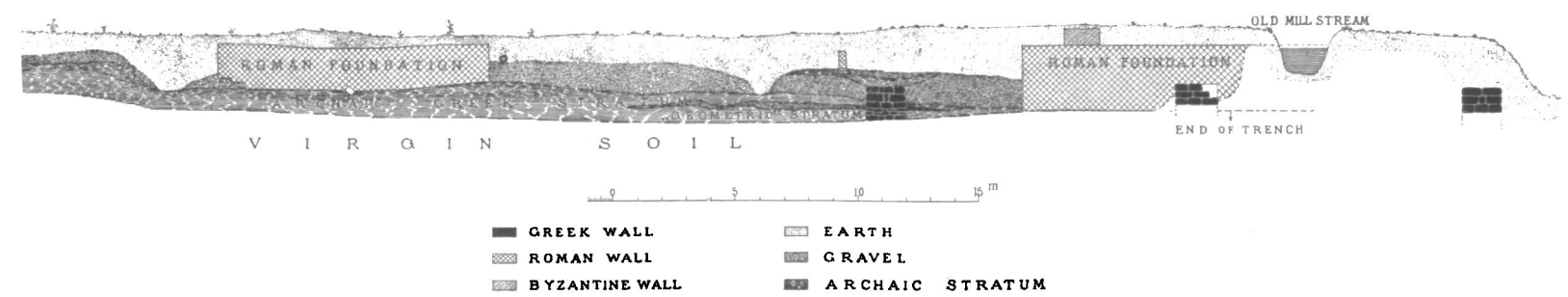
RAMSAY TRAQUAIR.



## I. THE ARTEMISIUM.



### 3. ENLARGED PLAN OF ACROPOLIS.



## 2. THE ARTEMISIUM.—SECTION ALONG TRENCH A. NORTH SIDE.

SPARTA.—ENLARGED PLANS.