These staircases may be seen in the tanks at Beit Jebrin, Deir Dubban, Maresa, and at Nos. V., VIII.,.XI., and XXII. in the Noble Sanctuary.

We may therefóre look for traces of these staircases in Souterrains Nos. I., III., and XXIX.; and not finding them, may we not fairly draw the inference—

1. That these souterrains are not tanks, but are ancient passages, which must have entrances and exits not now apparent ?

2. That if they are tanks, either (*a*) the steps have been cut away ; or (*b*) they still remain in the tanks blocked up with masonry ?

As it is very improbable that rock-cut staircases would be cut away without any apparent object for so doing, we may, from the absence of these staircases, have much reason for supposing (whether they be tanks or no) that these souterrains are of greater extent than the plastered walls would at present indicate. It is very desirable that all information on the subject should be collected together, as the matter has an important bearing on the question of the site of the Temple. Lieut. Conder's recent researches cause renewed interest in the matter.

Jan. 4, 1875.   CHARLES WARREN.

THE TEMPLE OF HEROD.

[This article and the following note on the tomb of David are reprinted from the *Athenæum* of Feb. 20th and Feb. 6th respectively, by kind permission of the proprietors.]

THE measurements of the Temple given in the Mischna are rendered with great precision, and are so perfectly intelligible that they have the appearance of having been taken on the spot or from a correct plan of the buildings. In the works of Josephus, on the other hand, however correct may be his descriptions, some of his measurements are given with a certain vagueness and want of method, rendering it very difficult to realise the form of the buildings he describes, and rather inducing the supposition that he spoke to some extent from recollection, and was often in want of memoranda or notes for the purpose of refreshing his memory.

For example, he tells us that the old cloisters of King Solomon (Ant. XX. ix. 7) were 400 cubits in length ; that Herod, in rebuilding the Temple, encompassed a piece of ground twice as large (Bel. I. xxi. 1) as that before enclosed, and yet that the courts of Herod measured only a stadium or 600 feet a side (Ant. XV. xi. 3). It is not in these passages alone that Josephus appears to contradict himself, for, on the several occasions when he mentions the size of the Temple courts, there is an ambiguity presenting great difficulties.

I offer a solution to the problem by assuming that the 600 with regard to Herod's outer courts should be applied to cubits instead of feet; that Josephus's [memory recalled the 600 feet, which is the measure (by my construction from the Talmud) of the length of the Inner Court, and ap-

plied it in error to the 600 cubits of the outer court. This solution will
clear up the anomalies in Josephus's own text, and will allow it to agree
with the Talmudic measurements.

From this standpoint let us reconstruct the outer courts of Herod,
represented on the exterior by the east, west, and south walls of the
present Noble Sanctuary, and by a line defining the exterior of north wall
drawn parallel to northern edge of raised platform, 8 cubits north of
the Golden Gate. These walls, measuring respectively 1,090, 1,138, 922,
and 997 feet, give an average of 593 cubits, a very close approximation
to the 600 cubits I have imputed to Josephus. If we now allow 8 cubits
(Bel. VI. v. 1) for the wall all round, 30 cubits (Bel. V. v. 2) for width of
cloisters on north, east, and west sides, and 105 feet (Ant. XV. xi. 5) for
that of the Southern Cloister, we obtain an average length of 505 cubits
for inner sides of these cloisters, the Talmudic measurement being 500
cubits, this again being a close approximation. We thus obtain coin-
cidence between the external measurements of the Mischna and of
Josephus. Within the area thus obtained let us re-construct the plan of
Temple and courts according to the above authorities, and observe what
buildings, souterrains, and cisterns now *in situ* can be identified with
portions of the Temple of Herod.

The Golden Gate (the old foundations of which are still *in situ*) will
now be found to form a continuation of the double wall of the Northern
Cloisters to the east, just as the Arch of Robinson led from the Southern
Cloisters to the west. The Golden Gate is thus that on which " was
portrayed the city Shushan. Through it one could see the High Priest,
who burnt the heifer, and his assistants going out to the Mount of
Olives." There appear to have been steps on arches leading down from
this gate into the Cedron towards the east, and leading up again past
the southern end of present Garden of Gethsemane : even now (see
Ordnance Survey $\cdot_{\frac{1}{10500}}$) there are stone walls in the valley which per-
haps may indicate the line of these steps ; they appear to have ascended
again to east, and, reaching the present road to Bethany, to have con-
tinued south-east on to a spot on level 2,460 feet just below some exist-
ing ruins shown on the Survey plan.

From this spot a view could have been obtained direct over the east
wall, through the Gate Nicanor, over the altar into the Sanctuary. The
production of this visual line to east passes through the centre of the
present open court of the Ascension on summit of Olivet.

On this east wall, in which the Golden Gate is built, are, at the south-
east angle, the Phœnician characters in red paint, establishing the
great antiquity of this wall, and on which, until the destruction of
Jerusalem, stood the Porch or Cloister erected by King Solomom (Ant.
XX. ix. 7).

The Temple lies square to the west wall of the outer court, its western
end coincident with the western side of raised platform, and its southern
side eleven feet south of southern end of said platform.

This position is governed in some measure by the following passages

in Josephus :—Ant. XV. xi. 5, Ant. XX. viii. 11, Bel. II. xvi, 3, where it is stated that King Agrippa built himself a dining-room (overlooking the Inner Courts of the Temple) in the palace of the Asamoneans, which was situated at the northern extremity of the Upper City overlooking the Xystus, where the Bridge (Wilson's Arch) joined the Temple to the
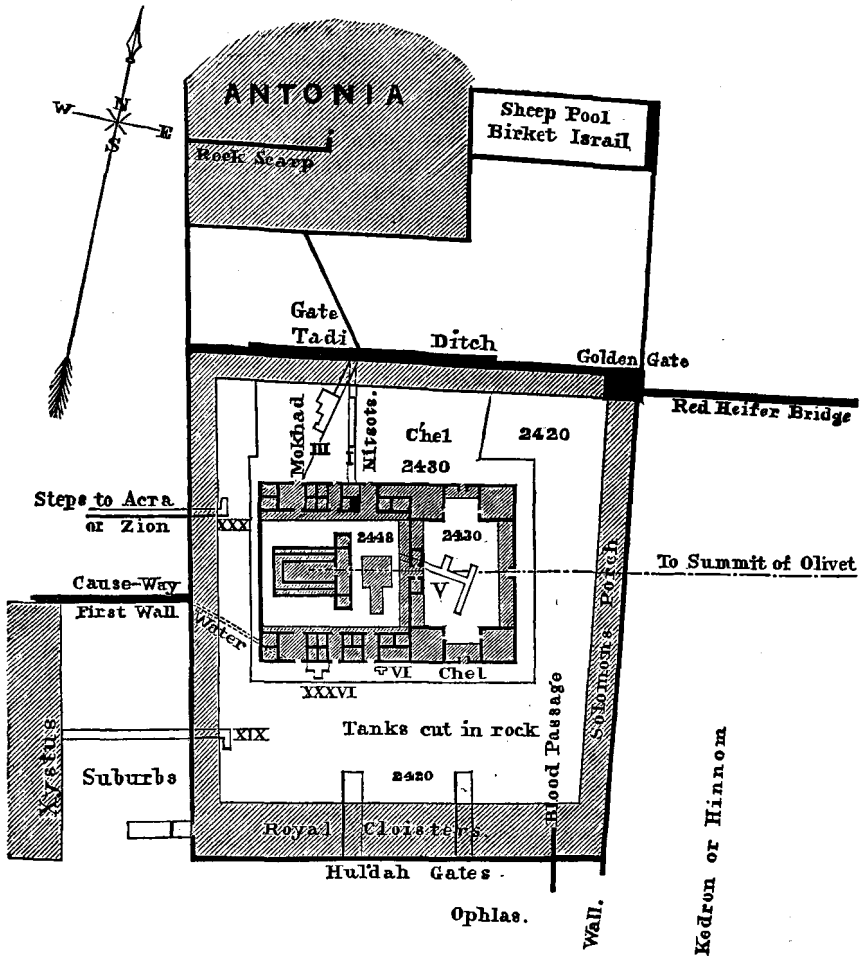
Xystus. It can be seen on plan that in order to see into the Inner Court it would be necessary to be in a line parallel to the side of the court, and thus the position can be fixed to within a few feet either from the northern or the southern portion of the Inner Court. Taking other

matters into consideration, it is apparent that it was the southern portion which King Agrippa built his dining-room to overlook.

The Altar, as suggested in "Recovery of Jerusalem," p. 207, stands over the western end of Souterrain No. V., a remarkable underground passage, which may well have served as a communication under the courts of the Temple in connection with the great water system necessary for keeping in order the Temple courts; whether it may have led from the altar to the Blood-passage, which appears to have been discovered at the south-east angle of Noble Sanctuary, or whether it connected the Gates Mokhad and Nitsots with the waterworks, or whether it was the underground communication to Gate Nicanor (Ant. XV. xi. 6), under which it runs, is not yet certain; possibly it may have served for all these purposes, but in either case it would have been a passage of some importance. There is a legend in Mejir ed Din that one of the ancient kings threw a roll from Olivet, which fell near the portion of raised platform where No. V. is situated: it is possible that this may have some reference to the concealment of the volume of the Sacred Law in this souterrain. The plan of Temple and Courts is constructed entirely from the Talmud; the chambers of the court can only be obtained from the descriptions in the absence of any measurements. The three gates to Inner Court, both on north and south, are placed at equal intervals from each other, and from the corners of the courts. The Gate Nitsots falls in such a manner that the Sakhra Cave entrance opens into it: this cave would appear to be continued through into Souterrain No. 1, forming a passage to the Gate Tadj. This may be the passage into the chil mentioned in the Talmud as leading from Nitsots, and, if in connection with No. V. Souterrain, it would have been also the occult leading from Antonia to the Gate Nicanor, made for King Herod (Ant. XV. xi. 6). Between this and the Gate Corban lies the rock over which the present dome is built. On this fall the chambers of the washers and of Parva. The drain discovered on the top of the rock may be the passage by which the refuse from the "inwards" was carried off.

The room Parva lies directly over the Sakhra Cave, and the notes in the Talmud (see "Prospect of the Temple," p. 377) are sufficiently curious, and appear to prove a complete identification. "Parvah is the name of a man who was a magician, and there are some of the wise men that say that he digged a vault underground till he could come to see what the high priest did on the day of expiation."

The gates, according to the Talmud ("Prospect," p. 326), were 46¾ cubits from centre to centre, and, if we produce the Souterrain No. III. upon the line of the Inner Court, we find it falls upon the Gate Mokhad. The position of this Souterrain and the chambers in it appear to coincide very closely to the chambers spoken of as leading from Mokhad. It passes obliquely towards where Souterrain No. I. is supposed to run out at the gate Tadi, on northern edge of raised platform. The Mischna tells us, "in the gallery that went under the chel he passed out through

Tadi." Again we read, "the priest gets out and goes along in the gallery that goeth under the Temple, and candles flare on every side, till he cometh to the bath-place; " and, again, " he goeth down a turning staircase that went under the Temple." Dr. Lightfoot says that it was some vault underground through which they passed from the north-west room of Mokhad, and thence to Gate Tadi. The position and shape of Souterrain No. III., with its chamber adjoining, appear to exactly fulfil the requirements of the case.

In the southern side of the Inner Court the chamber of the draw-well lies just north of Cistern No. VI., and not far from No. XXXVI., which two cisterns are in communication with the large tanks of the southern portion of the Noble Sanctuary, and with the water supply from Solomon's Pools and Wady Biyar. Dr. Lightfoot (p. 351) supposes the house of Abtinas to have been over the chamber of the draw-well, and the Mischna tells us that the priests guarded the Sanctuary in three places: in house of Abtinas, in the house Nitsots, and in the house Mokhad.

We thus find the priests guarding the Inner Court at the three points where there were subterranean communications with the exterior.

The Huldah Gates are represented by the double and triple gates on south side, the latter of which was also formerly a double gate, its old foundations being still visible.

The western gates are still *in situ*, that leading from Souterrain No. XXX., south of Bab al Mathera,'is the gate (Ant. XV. xi. 5) leading to the other city, or Acra, by a great number of steps down into the valley, and thence up again by the ascent. This may be the Gate *Kipunus* spoken of in the Mischna, the meaning of which word is "hole" or "through passage" ("Prospect," p. 226), giving a correct description of this vaulted descent.

South of this is the bridge or causeway leading over the valley north of the Xystus to the Upper City, along the first wall, at Bab as Silsile. This causeway is still *in situ*, except at Wilson's Arch, where a more modern construction has replaced the ancient bridge.

Further south are the two suburban gates (Ant. XV. xi. 5) at Bab al Magharibe and Robinson's Arch.

In the absence of further information, the shape and position of the Castle Antonia must remain highly conjectural; probably it stood on site of the modern Military Serai, connected with the Outer Court of Temple by two passages or cloisters.

The plan now put forward is thus shown to suit the features of the ground in a remarkable degree, and to coincide with existing ancient remains.

Throughout this article the cubit is assumed to be 21 inches.

C. WARREN.