This conclusion, however, hardly leads us nearer an identification of Tell el-'Ash'ari with 'Ashteroth Karnaim. For this, as I have observed, there is no other evidence, and, by itself, this is not enough. On whatever site in this region 'Ashteroth Karnaim may have lain, the worship of the goddess may easily have extended to the neighbouring towns as well; and Tell el-'Ash'ari may only be one of such subsidiary sanctuaries. That it was the Karnion in which the 'Αστεροθάμαι lay, is, as I have said, hardly possible in face of the fact that, while Karnion was difficult to approach, ἐκ τῆν πάντων τῶν τόπων στενότητα (2 Mace. xii, 21), Tell el-'Ash'ari lies on two sides open to the plain.

The identification by M. Clermont-Ganneau of the writer of the other inscription which I found at Tell el-'Ash'ari with the writer of the inscription in honour of Otho, which I discovered in Taffas in 1891, and recorded in the "Critical Review" for January, 1892, is extremely interesting. M. Clermont-Ganneau is right in saying that the two places "may be regarded as practically forming part of the same territory." For to-day Tell el-'Ash'ari is held, and its fields are cultivated by, inhabitants of Taffas.

Professor W. Ramsay, of Aberdeen, has reached independently the conclusion that the inscription is to Zeus, not Apollo, and that the letters indicating the latter name are part of a personal human name.

THE VIRGIN'S FOUNT.

By Dr. Schick.

As the rain during the winter of 1900–1901 was not sufficient to fill the cisterns, there is now (in the summer of 1901) a scarcity of water in Jerusalem. Also the periodical flow of water from the Virgin's Fount is much less copious than usual, and very little water comes down through the aqueduct to its outlet at the pool of Siloam. The municipality sent people to look into the matter and make a report. The advice given was to clear out the basin at the Virgin's Fount by removing the large deposit of stones and earth which had accumulated during the course of centuries.

Yusuf Pasha, who is now here and interests himself in such matters, called one day and asked me to go down with him to the
Virgin's Fount (‘Ain Umm ed-Deraj). I went with him and saw several things of which I now send a report. In illustration of my report I have prepared plans and a section¹ based upon the Ordnance Survey, Sir C. Warren's drawing (Plate XLIII), to accompany the Jerusalem "Memoir," and my own observations.

Having dismounted from our donkeys, we descended the first flight of steps to the landing. The vault here is about 9 feet wide, or nearly the breadth of the upper stair. The second, or lower, staircase commences in the middle of the landing, and is only 4 feet wide. It is on the northern side of the landing, which, to the south of it, has a breadth of 5 feet. Chairs were brought, and we sat down until our eyes had become accustomed to the darkness and we had heard what the people had to tell us. They said water

¹ The plans and section are preserved in the office. Only those portions which include the Virgin's Fount are published here.
THE VIRGIN'S FOUNT. 31

had come that morning, and would probably come again about noon; but the flow was so small that the water did not reach the lowest step, and none passed into the aqueduct. When the flow ceased the water gradually fell until it reached the level we saw—about 2 feet below the lowest step. It seemed as if it ran off through some unknown channel or fissure. We then went down the lower steps, and had a plank placed across the basin from the steps to the entrance to the Siloam aqueduct so as to be able to examine everything. There is a sort of fissure in the rock which, before the basin was cleared, was unknown. There was some water standing in it, and the workmen said that water issued from it. But the real opening in the rock from which the water gushes out is more to the east (nearer the stairs), in the vertical face of the rock, which is there cut down rather steeply (see section). The opening is less than a foot wide, of oval form, rough, and evidently natural. Its bottom falls rapidly westward, and it was, when we saw it, full of water. The workmen intended to blast this rock with gunpowder, but I advised Yusuf Pasha not to allow them to do so, as it would greatly injure the place. A sort of pool or reservoir, about 7 feet wide, and 30 feet long, extends eastwards from the mouth of the Siloam aqueduct, and its eastern end, for a distance of 7 feet, lies beneath the lower staircase. The northern side is clearly rock; I could not make out whether the east end was rock or masonry coated with cement. The pool was more than half cleared, but the bottom was still covered with mud. We therefore deemed it necessary that the pool should be completely cleared out, and the sides and bottom examined for any aqueduct or fissure by which the water could escape. This was done, and the southern side of the pool was found to be radden, that is a filling up with all sorts of stones without order like a tumbled-down wall, and not rock. Through this radden the water ran away. They then built a wall there, and filled up the pool again, completely beneath the steps, and outside them to a level 3 feet below the tread of the lowest step. This new bottom for the pool was paved and cemented as far as the mouth of the Siloam aqueduct, and the water flowed down again to the pool of Siloam. The water now stood as high as the second step from the bottom, and the basin was too shallow for people to drown whilst bathing. This lasted only a week, for the wall and other work done by the fellahin was bad, and the water ran away and was lost as before.
The overseer of the work had heard me tell Yusuf Pasha, as we were sitting together, that if a shaft was sunk beneath our chairs the second aqueduct, of which I excavated the lower part some years ago (Quarterly Statement, 1891, p. 13), would probably be found. Upon this he sunk a shaft, and at a depth of $6\frac{1}{2}$ feet found a rock-hewn aqueduct running south. Its lower part was full of mud and water, but it was examined for some distance by Dr. Masterman and Mr. C. Hornstein. From their description it appears to be built in the same way as the portion I discovered. The course of the aqueduct is shown on the plans, and its level and height on the section. It is just under the mihrab in the porch, and the level of its bottom is slightly lower than that of the celebrated Siloam tunnel. It was clear that the water found its way through the raddun to this old aqueduct, so a substantial wall was built under the lower steps, and the basin was filled up with good masonry to the desired level. All was then properly paved.

\footnote{See p. 35.}
and cemented, and the water has since kept up to the level of the second step from the bottom, and now runs through the aqueduct to the pool of Siloam.

It has hitherto been supposed that the source of the spring was beneath the lowest step, as reported by Robinson and others; but it is now clear that the water, when it gushes forth from the true mouth, strikes the east end of the basin with some force, and, being deflected westwards, appears to run from beneath the lowest step. Others have said that the water rose from the bottom of the basin, and this is in a sense true, for when the basin is filled with rubbish to a level higher than that of the true mouth the water has to force its way upwards through the deposits. There is also the fissure to the west, but from this, when filled with earth, little water can issue.

The Buildings.—Over the eastern portion of this little pool there is no vaulting, but covering stones, more than 5 feet long, are laid across, and above these the lower staircase is built. The first stone is really the lowest step. On the north side the rock is visible about 20 feet higher up, so I think that towards the east, on that side, the rock formed a cliff some 30 feet high. From a fissure in this cliff the waters of Gihon may have poured forth originally. The south side of the porch is masonry, and in this there is a mihrab built by the Moslems. Behind the facing stones is the rock upon which the arch constructed over this place rests. As the crown of the arch is not in the centre of the porch, but about a foot to the south, it is clear that the south end of the arch must rest on the rock behind the masonry which seems to have been built only to obtain a mihrab. This arch, of which the crown is 15 feet above the landing, is usually held to be modern. This is certainly wrong, for the string course visible on the north side is covered with ancient incised writing, in small letters, which are so worn by age and purposely defaced with tools that nothing can be made of them. Possibly the writing may be preserved behind the masonry on the south side. The arch is also of two different dates, half of it having been destroyed and rebuilt. Thus the eastern half, though some of it looks old, is of later date than the western. The upper staircase was built long after the lower one, but the date of its construction cannot be fixed with certainty. The rise of the steps is the same in both staircases (10 inches); but the tread is 14 inches in the lower and 20 inches in the upper staircase. The number of steps in the lower is 14, and in the upper 16.
highest step of the upper staircase a stone slab of some height has been set up, so that visitors have now to enter at the northern corner.

**Probable History of the Spring.**—There appears originally to have been an overhanging cliff, some 30 feet high, with a large fissure from which the water gushed forth and then ran down the Kidron Valley as a "brook." It was soon found necessary to store water for daily and future use, and a small pool was made. In the times of David and Solomon a larger pool was constructed, which was called the "King's Pool." The position of this pool is not known, but it probably occupied the width of the valley, leaving only space for a road on each side. Next a covered conduit was made on the west side of the pool, to convey the water to another pool (Neh. iii, 15) situated in the Tyropœon Valley and so inside the town. This conduit, sometimes called the "second" aqueduct, is that which I discovered, and of which I excavated the lower portion for a length of 600 feet. During the work at the spring, 200 feet of the upper portion was found. Above the conduit a paved road was made for nearly the whole length. Thus matters remained until Hezekiah "stopped" the spring and made the famous aqueduct to convey the water direct to Siloam, and deny its use to an enemy besieging Jerusalem. The earlier aqueduct then fell into disuse and was neglected. "Stopping" the spring was an easy matter, but making the tunnel through the Ophel hill required a long time. The cave or fissure from which the water issued was enlarged towards the west, and the shaft and ascending passage leading to the city on Ophel, which were discovered by Sir C. Warren, were made at the same time as the tunnel. If the chamber into which the ascending passage led was in the city, as seems probable, then the city wall did not stand on the edge of the higher part of the Ophel Hill, as Dr. Guthe, who is followed by Dr. Bliss, thought he had discovered, but lower down, on the brow of the hill, as shown in Section III. Even there it would be 88 feet above the bed of the valley. We learn from Nehemiah iii, 17–26, that the wall at this point was double, so the main wall probably stood on the edge of the hill, and the other, some distance lower down, was an outwork. When, after the destruction of the city by the Romans, this portion of it was left desolate, the waterworks beneath were no longer used, and fell into decay.

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1 The aqueduct appears to have been used for irrigation purposes during the early Arab period.—Ed.
2 This part of the section is not published.
Ancient City Sewer.—Sir C. Warren mentions ("Recovery of Jerusalem," p. 255) an underground channel, referred to by Dr. Barclay in his "City of the Great King" in a manner which implies that it was in some way connected with the Virgin’s Fount. It is near that spring, and appears to the west of it on Plan I; the level of its exit is shown on the section. About 40 years ago I entered this rock-hewn channel with a few assistants, and found it quite dry. We followed it in a north-west direction for 400 feet, when a broken covering slab stopped further progress. A few years later I noticed that the main sewer of the city had an outlet about 250 feet south of the Dung Gate, and that the fluid, after running eastward on the surface of the ground, fell into an opening near the road going down to the Siloam Pool, and then, continuing underground, came to the surface again at the exit mentioned above. Thence the fluid ran down the steep eastern slope of Ophel to the gardens in the Kidron Valley. This state of things lasted a few years, when a change was made and the fluid was carried down the Tyropoeon Valley to the Birket Hamra, below the well-known small pool of Siloam. This sewer is certainly old, and in ancient times it probably crossed the Kidron Valley in a diagonal line, below the "King’s Pool," and, running southward, passed to the east of Bir Eyyûb.

THE RECENTLY-DISCOVERED AQUEDUCT FROM THE VIRGIN’S FOUNTAIN.

From a Paper by Dr. Masterman.

The work in the basin of the Virgin’s Fount, described by Dr. Schick (p. 29), was carried out by the fellahin of Silwan; and the overseer he mentions was Juma’a, one of Dr. Bliss’s most trusted and skilled workmen. Juma’a, acting upon what he had heard Dr. Schick say to Yusuf Pasha, commenced digging on September 9th, and came upon the aqueduct.

On September 14th Mr. Hornstein, who is in close touch with the fellahin of Siloam, brought Juma’a and some of his assistants

1 Not published.
2 This is probably part of the ancient sewer of the City of David, on the eastern hill. It could not well have served as the sewer of the western hill before the Tyropoeon Valley was filled with rubbish.—Ed.