

## B. THE ACHAEMENID AND LATER REMAINS AT SUSA

By R. DE MECQUENEM\*

CYRUS took complete possession of Babylon with all its provinces including Susa in 539 B.C., and thus Susa became part of the great Achaemenid Empire (see p. 64). Cyrus, who died in 529 B.C. during a campaign in East Īrān, was succeeded by his son Cambyses, who died in 522 B.C., and was in turn succeeded by an Achaemenid of another branch, Darius I (521-486 B.C.). The most important monument in Susa, the great palace on the *Apadāna* tell, was begun at this period. The foundation stone was put in place by Darius (see p. 339). It enumerates the contributions brought by the different provinces for the construction of the palace, but in essentials the building is Assyro-Babylonian.<sup>1</sup> The Egyptian influence is evident only in the idea of the hypostyle hall.

In the Elamite period there had been a very large cemetery on the site chosen for this building, but this mound was razed to a convenient level and evened up with sustaining walls of fired and unfired brick, making a great foundation platform 820 feet (250 metres) long and 490 feet (150 metres) wide, like that of the royal residences at Nineveh and Khursābād. A supplementary area, 375 feet (114 metres) long and 180 feet (55 metres) wide, was required for the hypostyle hall. Below the platform an excavation was made, 27 feet 2 inches (9 metres) deep, the sides were faced with retaining walls, and an enormous amount of gravel was dumped into the excavation, thus making an excellent foundation.

The walls of the building can be traced by one or two rows of fired bricks, and the pavements by cement made of bits of brick and lime. The plan is very similar to that of the palace of Sargon (Fig. 75).<sup>2</sup> There were three courts of varying size, surrounded by great halls and apartments. The east entrance (on plan, Fig. 75, s), which was flanked on the inside by columns or piers, opened into the largest court (E), 173 feet (52.75 metres) by 179 feet 6 inches (54.36 metres), which was for service buildings. Nothing remains here but traces of pavement and door-hinge supports. On the south side there was a bank about 13 feet (4 metres) deep and 6 feet (c. 2 metres) wide containing remains of Parthian pottery and coffins. On the north side, at a depth of about 6 feet (2 metres), a row of stones was uncovered (L), foundations for eight large columns, and in the debris were fragments of an enamelled brick panel with the figure of a winged bull (Pl. 77 B) that recalls the bull of the Ishtar gate of Babylon.<sup>3</sup>

A wide corridor (X . . . X . . . X) led directly from the east portal to the central court (B), which was 106 feet 7 inches (32.5 metres) by 118 feet (36 metres). This also was paved. In the northeast corner, beside the entrance from the service court, were many fragments of two other decorative motifs executed in glazed bricks, the winged disk

\* Translated by PHYLLIS ACKERMAN.

<sup>1</sup> Iranian antecedents cannot be ruled out: see E. HERZFELD, *Archaeological history of Iran*, London, 1935, pp. 22-34.—*Ed.*

<sup>2</sup> V. PLACE, *Ninive et l'Assyrie*, Paris, 1870, I, pp. 20-36, II, pp. 196-200.

<sup>3</sup> R. KOLDEWEY, *The excavations at Babylon*, London, 1914, Figs. 16, 26.

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(Fig. 76) and a pair of confronted regardant lions sejant, with human heads, crowned.<sup>1</sup> On the north side of this court were two identical reception halls (H 5), connected by a passage with cement paving about 4 inches (10 cm.) thick. To the west these opened on to a paved court (F), where there were round columns, but the foundations of these columns were of stone, broken to bits, which had so merged with the gravel in which

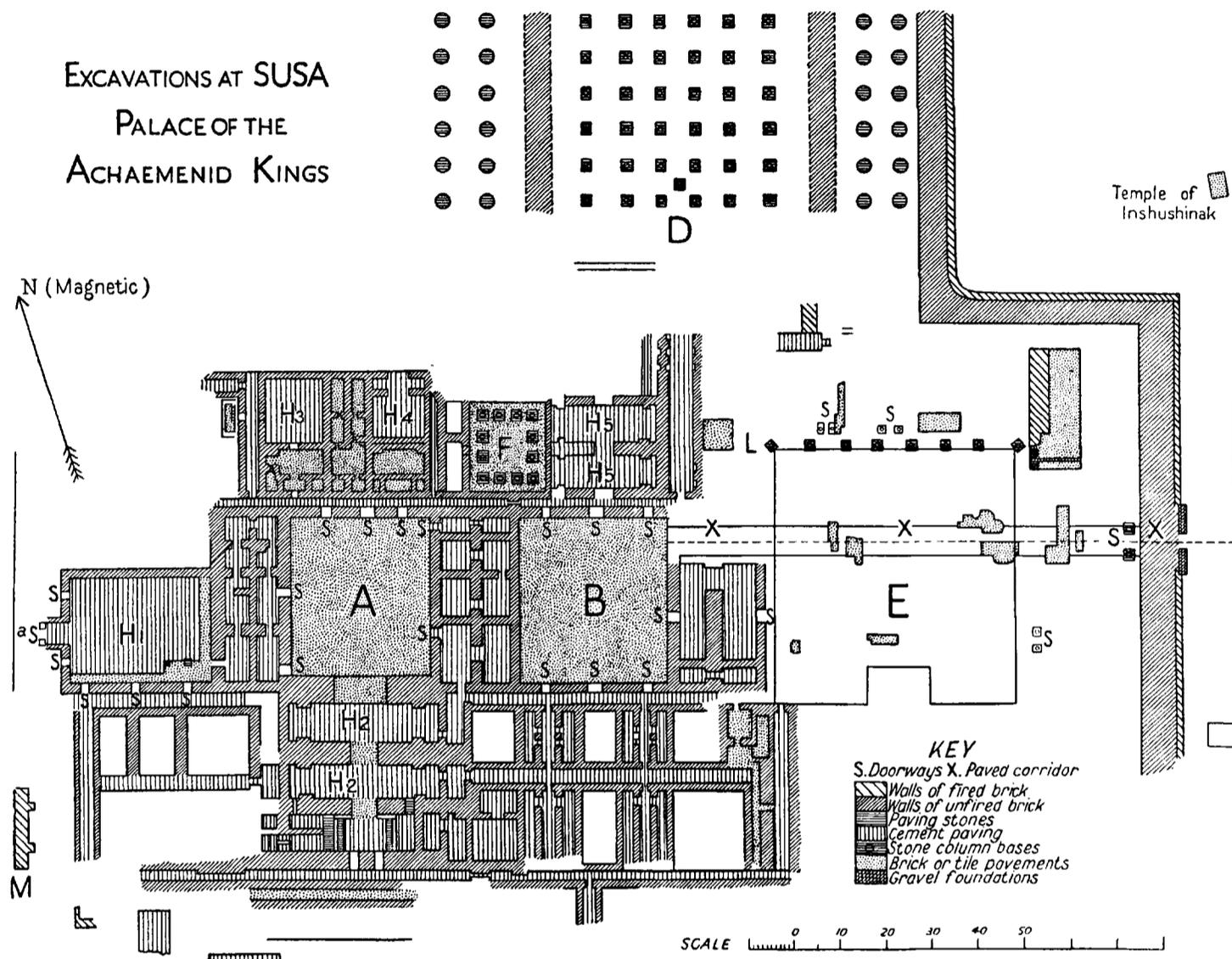


FIG. 75.

they were embedded that it was impossible to identify them. Hence we do not know either the number or arrangement of these columns. This might have been the '*paradayadam*' of Artaxerxes II (see p. 344), but, on the other hand, it might have been a hall with small columns of Xerxes.

Immediately to the east of the two reception halls were two galleries leading to the great hypostyle hall (D), and between the palace and the hypostyle hall were found the fragments of another set of glazed brick panels with lions passant,<sup>2</sup> again recalling those of the Ishtar gate of Babylon.<sup>3</sup>

<sup>1</sup> M. PÉZARD, *La céramique archaïque de l'Islam et ses origines*, Paris, 1920, Pl. 1.

<sup>2</sup> M. DIEULAFOY, *L'Acropole de Susa*, Paris, 1893, Plate opposite, p. 277 (in colour); or G. PERROT—C.

CHIPIEZ, *Histoire de l'art dans l'antiquité*, v, Paris, 1890, Pl. XI (in colour); or F. SARRE, *Die Kunst des alten Persien*, Berlin, 1922, Pl. 39.

<sup>3</sup> KOLDEWEY, *op. cit.*, Fig. 26.

## ACHAEMENID ARCHITECTURE. B. REMAINS AT SUSAN

The west court (A) was the smallest and most enclosed, only 91 feet 10 inches (28 metres) by 112 feet 2 inches (34.2 metres). This was paved with bricks  $11\frac{3}{8}$  inches (30 cm.) square, and across this pavement transversally ran a line of glazed bricks from winged griffin panels. On the east and west sides were the royal apartments, series of rooms connected in succession by narrow corridors, and on the south were two halls (H 2), each 30 feet 3 inches (9.25 metres) wide and 110 feet 10 inches (33.8 metres) long. These were entered from the court through a vestibule and connected by a corridor, and a corresponding corridor to the south led to a smaller room. The royal apartments and these two great halls were paved with a concrete made of brick fragments and

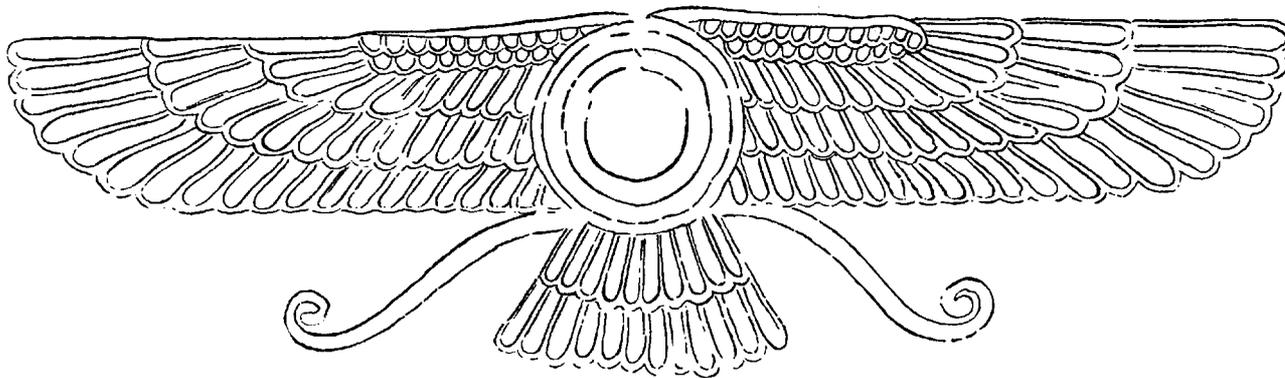


FIG. 76. Fravahr symbol, brick panel in relief, glazed, Achaemenid palace.

lime, coloured on top with red ochre, about  $4\frac{3}{4}$  inches (12 cm.) deep. The vestibule leading to the halls, however, and the passages connecting them with each other and with the room farthest south were all paved with bricks. On the north of this western court were two other large halls (H 3, H 4) and here the floor was raised about  $9\frac{7}{8}$  inches (25 cm.) above the general level, consisting of a bed of concrete, on top of that a layer of bricks, and then a surfacing of the concrete. These were surrounded by rooms with brick pavements. This was presumably the women's quarters.

Still farther west was a very large hall (H 1) with an outside entrance. The floor was surfaced with the same red concrete, about a foot (c. 32 cm.) thick, but on the east and south sides and in the southeast corner was a band paved with bricks set on a bed of ochre-brown cement at the same level as the main cement flooring, so that the floor here was raised about 3 inches (7.5 cm.), and the bricks edging the south corner were glazed light blue. Here, too, there were two columns. This suggests that there was a tribune in this hall, or more probably two, one on either side of the entrance. Many fragments of the glazed brick griffin panels (Pl. 77 A) have been found here, also pieces of the panels with the winged bull and pieces of panels showing the spearmen of the guard, the last not in relief. The disposition of these enamelled brick panels cannot be determined, but they may well have been on the two sides of the portal on the west, and on the north and east walls. The arrangement of the platform and the columns on the south side make it doubtful whether there were any there. Two stone door-hinge supports define the entrance on the west side (*a*), and two smaller doors apparently gave access to narrow rooms.

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Many other fragments of the panels with the spearmen in relief, a decoration which perhaps dates from the period of Artaxerxes II, Mnemon (404–358 B.C.), were found near the east<sup>1</sup> portal, and others which had been re-used in the construction of an Islamic aqueduct on that side had probably been picked up right at hand, showing that the representation of the royal guard had been displayed at the main entrance. On the west side under the fired brick wall were other similar fragments.<sup>2</sup>

The paving throughout was covered with a coating of polished red ochre. The walls, which were of sun dried brick covered with whitewash on the inside, like those of the Assyrian palaces, have disappeared, only one piece remaining to show what they were, a section 3 feet (1 metre) long and less than 2 feet (60 cm.) high. At Persepolis the door and window frames were of stone and they have been found (see Pl. 86 A, B), but none have been found in the palace of Susa. There are, however, stone supports for thirty-five door hinges: twenty-six for double doors, and nine for single doors. These were set into the concrete of the corridors and rooms, or projected slightly from the walls. These stones are sometimes very large, cylindrical or half-cylindrical, showing that material left over from the construction had been used. This would seem to indicate that when the stone was brought down from the quarries, which were in the mountains, on the banks of the Karkhā about twenty-five miles (40 km.) from Susa, it was cut in cylinders. The blocks must have been set in place before they were finished to the desired shape. The stone is a Cenomanian limestone, slightly bituminous, which makes it subject to disintegration from heat and humidity, so that the surface had to be protected. The hinge-supports have grooves into which were fitted bronze plaques,  $7\frac{1}{16}$  by  $7\frac{9}{16}$  inches (18×19.2 cm.) and  $2\frac{11}{16}$  inches (6.8 cm.) thick, with a circular depression 2 inches (5 cm.) in diameter and  $\frac{1}{8}$  of an inch (2 cm.) deep.

Stone decorations include a fragment of a fluted plinth with a band of rosettes (Pl. 100C), and a block of stone showing traces of a bas-relief (Pl. 100A), the fore-quarters of a winged regardant griffin, as well as the base of a series of archers (Pl. 100B), which prove that there were in the palace stone sculptures analogous to those at Persepolis, and this is further established by additional similar fragments found in the Sāsānian palace where they had been used for building material (see p. 327). A fragment of a statue in high relief suggests that there may have been bulls with human faces like those at Khursābād and on the portal of Xerxes (see Pl. 83). Two fragments of drapery and a sandalled foot belonging to a colossal figure have also been found. Possibly this was a statue of Darius himself.

The most important feature in the decoration of the palace, however, was the panels of enamelled bricks, with illustrative and decorative motifs, which played the same role as tapestries. The symbolic animals are especially significant, notably the winged griffins. Two pairs of these have been reconstructed, differing in position and in glazes. Each panel is a little over 7 feet (2.30 metres) long and nearly 5 feet (1.50

<sup>1</sup> The de Morgan reconstruction was assembled from pieces gathered here.

<sup>2</sup> It was fragments from this area that Dieulafoy used for his reconstruction of this panel.

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metres) high. Four glazes are used : blue, white, yellow, and green. The head and fore feet are those of a lion; the neck is feathered; there are goat's horns, while the ears are those of a hyena. The wings are in three colours. The body is that of a bull, the tail perhaps that of a lion, and the hind feet are eagle's claws. This fantastic beast, composed of so many diverse elements, but nevertheless coherent and giving an impression of life and strength, is reminiscent of the character of the Achaemenid Empire itself. The twenty-three satrapies of that immense organization which worked for Darius were utterly diverse in character and composition, yet the Empire held together for three centuries.

On the southwest, outside the palace plan, there are vestiges of a very heavy foundation in fired bricks (M). This was probably part of the surrounding wall of the palace, but it is difficult to say why fired bricks were used at this point. Possibly there was a watch-tower there.

The hypostyle hall at Susa (D) is similar to that of Xerxes at Persepolis (see pp. 317-18). There were six rows of six columns and two lateral portals, each with two rows of six columns.<sup>1</sup> There is no portal on either the north or the south side. It is doubtful whether the hall was enclosed in walls, but probably there were walls between the hall and the portals, carrying interior stairs which led to the terrace. No foundations for these walls have been discovered, but plaques of unfired earth with red and blue paint on them have been found, which were presumably part of the revetment of these walls. At Pasargadae<sup>2</sup> similar facings have been found which are curved and belonged to the columns of the hypostyle hall of Cyrus. On the south there must have been a low wall, perhaps decorated with a frieze of the lion panels, which separated the hall from the palace. The distance between the axes of the columns varies from 27 feet to 27 feet 6 inches (8.25-8.4 metres), that between the bases from about 19 feet 5 inches to 19 feet 7 inches (5.90-5.95 metres). There are many indications of repairs necessitated by accidents when the bases were shaped, notably squared fragments that had been fitted in and fixed with molten lead. Both in the hall and in the porticoes the columns seem to have been painted yellowish white.

The columns of the portals had a circular bell-shaped base in the form of an inverted lotus (Pl. 102). The maximum diameter is 7 feet 10 inches (2.40 metres), and the distance from axis to axis 27 feet 5 inches (8.35 metres). They were fluted, without entasis, with a slight taper, constructed in four sections, and they terminated in capitals composed of the addorsed forequarters of two bulls (Pl. 101). The total height of the column was 50 feet 6½ inches (15.43 metres). The columns of the hall had a square base surmounted by a torus. The capital was probably composed with a bell-shaped base and above that a square pillar with volutes and then the two-headed capital. This is a hypothetical reconstruction following the analogy of the hall at Persepolis, for no signs

<sup>1</sup> Only one row has actually been found in place on the west side, but it has been assumed that the building must have been symmetrical.

<sup>2</sup> E. HERZFELD, Bericht über die Ausgrabungen von Pasargadae, 1928, *Archaeologische Mitteilungen aus Iran*, VIII (1929/30), p. 13.

of the bell have been found and a surprisingly small number of fragments of sculpture. The hall, like the palace, was used for many centuries as a quarry. It is notable that many of the two-headed capitals from the columns of the hall were very much less finished than those from the portals. The floor of the hall was tiled with stone squares or with bricks made of different coloured earths, in imitation of aragonite. On the south side, in the central bay, is a foundation formed of two half-cylinders, the top levelled off.

The four bases on the north end of the central bay bear trilingual inscriptions. There was none on the north side. These state that the *Apadāna*, burned under Artaxerxes I, was rebuilt by Artaxerxes II Mnemon (see p. 344). A fire in such a high hall is surprising. It has been presumed that great curtains must have hung down from the roof and carried the flames up to the dry beams which were also doubtless worm-eaten. This is possible, but it is simpler to assume that it was the roof that was set on fire. It was constructed of three layers of beams with a covering of earth above this and then a coating of mortar. Watchers on the terrace might have made a fire in a hollow and by accident set fire to the top layer of beams.

The terrace of the hypostyle hall seems to have been the most important part of the building. In the hall itself the columns are so close together that they would not have permitted the display incident to great fêtes or parades. They are, rather, handsome pedestals, the superb base of a throne: the terrace. This is splendidly spacious, and being more than 50 feet (*c.* 15 metres) above the platform, which is in turn nearly 15 feet (*c.* 5 metres) above the plain, ceremonies conducted there could have been watched by the whole population. It would also have been the most comfortable place to sleep, well above the sun-warmed buildings.

According to one calculation<sup>1</sup> the foot used as the unit of construction was approximately 13 inches (33 cm.), probably  $13\frac{1}{8}$  inches (33.4 cm.); but according to another estimate<sup>2</sup> it was the Babylonian foot, which was  $13\frac{1}{8}$  inches (34.3 cm.). The orientation of the palace was  $15^{\circ} 30'$  to  $16^{\circ} 30'$  west of north. The level of the pavements is 47 feet 6 inches (14.5 metres) above the level of the little Susa river, the Shāvūr.

The tell of the Acropolis seems not to have been inhabited in the Achaemenid period. The top was enclosed in a wall of which only the foundations, 12 feet (*c.* 4 metres) high, made of unfired bricks, remained. The Parthian, Sāsānian, and Arab levels here are not more than 6 feet (*c.* 2 metres) deep, and occur only in a few places.

The Achaemenid burials consist of graves simply dug in the earth for adults, and young people were again buried in jars. A bronze sarcophagus containing the remains and jewels of an Achaemenid lady (see p. 379) is unique. Probably an Elamite sarcophagus was re-used.

A pit<sup>3</sup> faced with bricks, constructed by the Elamites and used as a cistern by the

<sup>1</sup> DIEULAFOY, L'Acropole de Suse, p. 256.

<sup>2</sup> M. L. PILLET, Le palais de Darius I<sup>er</sup> à Suse, Paris, 1917, p. 99.

<sup>3</sup> The over-all dimensions were: 46 feet (14 metres) by 23 feet (7 metres); the depth:  $42\frac{1}{2}$  feet (13 metres).

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Achaemenids, was uncovered in digging the 1930-2 Acropolis trench (see p. 139), and various Achaemenid objects were found there: fragments of aragonite vases inscribed with the names of the Kings Xerxes and Artaxerxes; a scarab; some carnelian beads; and bits of stone horns and ears from the double bulls' head capitals of the *Apadāna*. Among the many small objects recovered is one cylinder seal that is especially interesting because of its unusual type (Fig. 77).



FIG. 77. Cylinder seal, Achaemenid period.

In 331 B.C. Alexander the Great took Susa. The wealth that he found there was sufficient to permit him to enrich all his troops. After that Susa diminishes in importance. Ahvāz became the capital of Elymais in the second

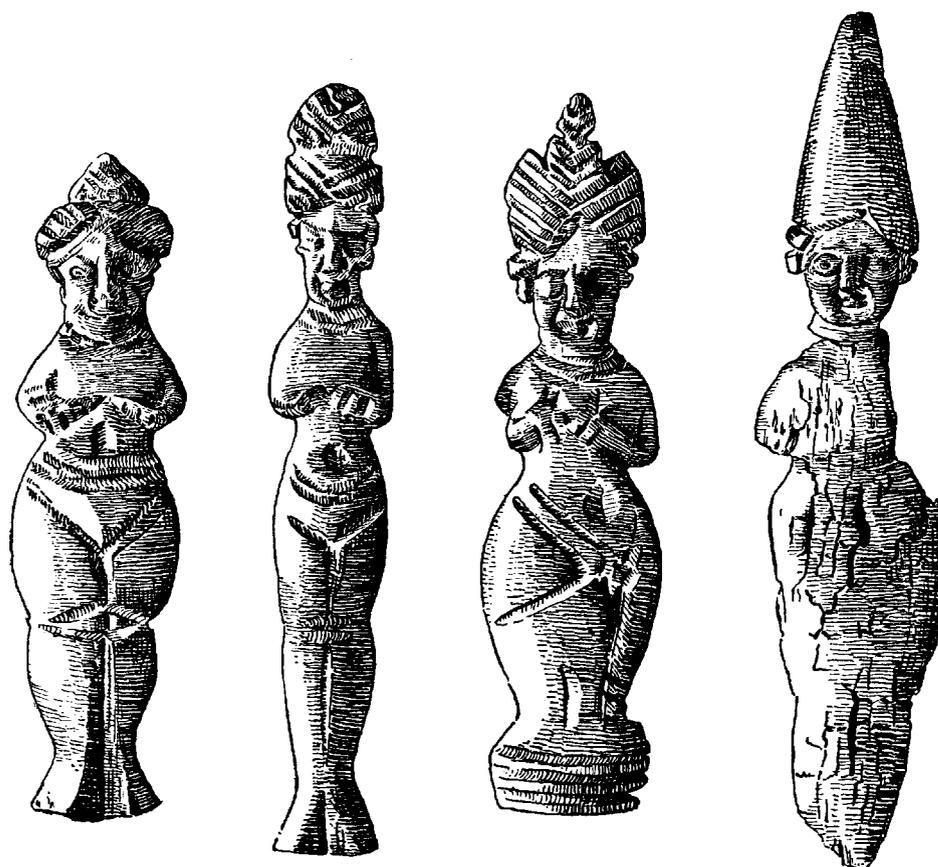


FIG. 78. Figurines, bone, carved, Sāsānian period.  
c. actual size.

century B.C., but Susa continued to be a notable city until the Sāsānian period. Shāpūr II destroyed it to punish a rebellion, but rebuilt it under the name Nīshāpūr.

In the Parthian level great funerary jars have been found (see Chapter 31 and Pl. 81 B), sometimes in pairs, but these are usually empty or hold only a few human remains. The coffins contain very badly decomposed bones, perhaps of a number of individuals. Apparently the body was first exposed to the wild beasts, then the bones were put in a jar or sarcophagus. This was evidently true in the Sāsānian period also. There are jars and sarcophagi for the children, who seem to have been buried near the houses, while the tombs of the adults, outside the city, consist of great jars with a narrow neck into which

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only skeletons could have been put. On the western edge at the Artisans' City were found four large subterranean vaults, entered by a stair. In each vault (from 13 to 8 feet 2 inches (4-2.5 metres) long and 6 feet 2 inches (2 metres) wide) were found sarcophagi, both glazed and unglazed vases, numerous lamps, a few figurines in terracotta, ivory, or bone (Fig. 78), and a few coins, seals, and counters. Not many skulls were recognizable. These are probably the *astodāns* of the Zoroastrians.



FIG. 79. Stone relief, Achaemenid period.

One important Sāsānian ruin has been uncovered (1930-3) on the summit of the Donjon, consisting of a palace measuring 119 by 164 feet (36 by 50 metres), and secondary buildings, with inner courts. The foundations of the outer walls went down 9 feet (2.75 metres) below the stones, indicating that the walls must have been very high, but nothing at all remains. The buildings had been set on a platform made by levelling off the top of the burial mound to make a rectangle about 360 feet (110 metres) on a side. The most interesting result of clearing this area was the discovery, in the stones with which the court was paved, of a quantity of debris from the Achaemenid palace and from Parthian structures, including a number of fluted plinths, bas-reliefs, a series of archers and servants mounting a stairway (Fig. 79), very similar to the Persepolis sculptures (cf. Pl. 98), fragments of Achaemenid, Seleucid, and Parthian steles, Achaemenid column bases bearing Greek or Achaemenid inscriptions, fragments of statues in marble

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and limestone, and a quantity of coins. One inscription proves that Susa was still a Greek city at the end of the first century of our era.

The pottery fragments which have been found at various times show that Susa was again a city of some wealth from the eighth to the tenth century and later, not only importing both from Egypt and the Far East expensive luxury wares, but also, as the wasters show, manufacturing on her own account.

In the twelfth century A.D. Susa was one of the important cities of Khūzistān and there remain from that epoch a number of columned portals. But during that century it was almost completely destroyed, and Gundēshāpūr and Ahvāz were also ruined. Was this the work of the Mongols? Susa seems to have had a temporary revival in the fifteenth century, only to fall the lower thereafter.