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DISCOVERIES IN ANATOLIA
1930–31

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DISCOVERIES IN ANATOLIA
1930-31

By
HANS HENNING VON DER OSTEN

WITH THE COLLABORATION OF
RICHARD A. MARTIN
AND
JOHN A. MORRISON

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FOREWORD

In 1930, after being engaged in exploration in southeastern Asia Minor during 1929, I resumed charge of the excavation of the Alişar mound. Dr. E. F. Schmidt remained in Chicago to prepare for publication a report of the excavations of 1927–29, of which he has given a preliminary account in "Oriental Institute Communications," No. 11.[1]

Ever since the finding of two cuneiform tablets in 1929, the stratum in which they occurred has been of the greatest interest; it was to the elucidation of this layer that we devoted most of our resources in 1930 and 1931. Since early in 1930 I had felt that I could no longer concur in ascribing this culture period to "foreign merchants,"[2] although I believed it contemporaneous with them; nor could I accept the hypothesis that the handmade painted pottery of what we had called "Period III" was more recent than, or could have long survived, the much more sophisticated wheelmade wares of "Period II," as the cultural remains of the "foreign merchants" had been designated. I am now confident that this confusion has been cleared up by the finds of 1930–31 at Alişar, checked and corroborated by the results of German excavations under Dr. Kurt Bittel at Boğazköy in 1931.[3] Our next most important problem was to determine the nature and extent of Neolithic remains at Alişar, the presence of which I had suspected since 1927. Our progress in solving these questions is briefly described in chapter i of this preliminary report. For aid in its preparation I am indebted to Dr. C. W. McEwan. Dr. Schmidt and I are in complete accord in our identifications of the other culture layers, except that I would now make "Period IV" later and am inclined to differentiate also a Phrygian layer and traces of the Galatian invasion.

In 1930, before starting the regular season at Alişar, we made a short test excavation at Gâvur-Kalesi. We partially cleared what ap-

[1] *Anatolia through the Ages* (Chicago, 1931), hereafter referred to as *OIC* No. 11.

[2] Cf. *OIC* No. 11, p. 70, and B. Landsberger, "Assyrische Handelskolonien in Kleinasien aus dem dritten Jahrtausend," *Der Alte Orient*, Bd. XXIV, Heft 4 (1925), there cited.

[3] Reported in *Mitteilungen der Deutschen Orient-Gesellschaft*, No. 70 (1932) pp. 1–23.

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pears to have been a Hittite place of worship and determined that the fortifications on the elevated plateau were of Phrygian origin. This part of our work is described in chapter ii. I am grateful to Mr. R. A. Martin and Dr. McEwan for help in preparing the catalogue of the principal objects found.

Though concentration on the excavations at Alişar very seriously interfered with our exploration and survey program, several interesting finds and observations were made. In 1930 Mr. J. A. Morrison had charge of the survey. I wish to express my gratitude to him for his assistance in preparing chapter iii.

To all the other members of the staff I wish to give my sincerest thanks for their co-operation. Mr. Martin was called in 1931, in the midst of his fourth year's work in Anatolia, to take charge of the Syrian Expedition of the Institute; he was succeeded by Dr. C. W. McEwan. Mr. O. S. J. Albert had charge of the recovery and preparation of the skeletal material. Mr. R. Carl Haines, as architect, made the plans and drawings. As photographers we had in 1930 Messrs. B. P. Neil and H. Schüler; in 1931, Mr. Schüler alone. Mr. J. A. Morrison in 1931 resumed his teaching duties in the Department of Geography at the University of Chicago. We had as volunteer assistants Mr. K. E. von der Osten in 1930 and Mr. R. D. Morrison in 1931. Messrs. Josef Reifenmüller and Johann Scharer continued their faithful services with the expedition for the fifth year. Alexandre Galenca, as cook, and the chauffeurs Hüseyin I and Hüseyin II completed the staff.

As government commissioners we had in 1930 Muharrem Bey, in 1931 Avni Bey, and later Professor Emin Ali Bey, to all three of whom I wish to express here our appreciation of their courtesy. Our many Turkish friends, state and local officials and private citizens, have been exceedingly helpful. I wish specially to mention our gratitude to H. E. Tevfik Bey, secretary-general to the Gazi and president of the Historical Commission, H. E. Cemal Hüsnü Bey and H. E. Esat Bey, successive Ministers of Public Instruction, H. E. Mehmet Emin Bey, the deputies Dr. Reşit Galip Bey and Rüşen Eşref Bey, and Dr. Hilmi Malik Bey. To Dr. Hamit Zübeyr Bey, Director-General of Antiquities, we are indebted for his help and interest in our work; in 1931 we had the pleasure of having him as our guest at Alişar. To the Hon.

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Joseph C. Grew, the ambassador of the United States to the Turkish Republic, and to Mr. Jefferson Patterson, Mr. G. H. Shaw, Mr. Williamson, and Mr. Julian Gillespie, of the embassy, we are further indebted for their interest and many attentions. Professor J. von Mészáros and Mr. J. Aggiman continued their friendly helpfulness.

In 1931 we had the pleasure of having two other expeditions working not far from us. The French mission under Professor Louis Delaporte excavated Has-Höyük in June and July, and we had the honor of entertaining that distinguished scholar and his two assistants for several days. In August came Dr. Kurt Bittel, who, after assisting us in clearing the gate of the citadel at Alişar, excavated at Boğazköy with two assistants on behalf of the Deutsche Orient-Gesellschaft and the Archäologisches Institut des Deutschen Reiches. The director of the latter's Abteilung İstanbul, Professor Dr. Martin Schede, visited us in 1930 and 1931. We are very grateful to him for the hospitality which he has shown members of our expedition in İstanbul.

In 1930 we enjoyed a visit from Dr. Paul Wittek, another member of the Archäologisches Institut, who kindly investigated for us the Moslem remains in the vicinity of Alişar. Dr. Gerhardt Bartsch, of the Technische Hochschule at Hannover, very kindly provided us with a geological map of the neighborhood of our mound. In 1931 Regierungsrat Professor K. O. Müller, of the Biologische Reichsanstalt in Berlin, stayed with us for some time, studying the flora.[1]

It was a source of satisfaction and great pleasure to the members of the Anatolian Expedition that in 1930 the president of the Turkish Republic, His Excellency Gazi Mustafa Kemal Paşa, came to visit our excavations at Gâvur-Kalesi while we were at work there.

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[1] Especially *Peganum harmala* L. See Professor Müller in *Berichte der Deutschen botanischen Gesellschaft* La (1932) 262–75. Cf. our p. 117.

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I

THE ALIŞAR MOUND

After three years' (1927–29) excavation work at the mound of Alişar, three questions yet remained to be answered before we could definitely claim to have established a relative chronological culture sequence or, better, pottery sequence for this mound in particular and Central Anatolia in general:

1. Do we have a Neolithic culture layer here?

2. Is it possible that the culture of a people who made their pottery by hand, painting it with elaborate designs, is on the whole later than that of another, partially contemporaneous people who made pottery on a wheel and possessed a much more sophisticated and complex culture?

3. Does this latter culture, which supposedly followed immediately the Copper Age culture, represent "foreign merchants" who came from Mesopotamia shortly before 2000 B.C. and established factories in Cappadocia?

The solution of the first two questions depended mostly on choosing a suitable excavation technique. The third question, so closely connected with the second, involved, besides clearing further remains of this period, the consideration of previous finds and of historical facts derived from ancient written sources.

A short survey of our methods may be enlightening here, before the results of the 1930 and 1931 seasons are related. When we started our excavations in 1927, we did not know what we could expect to find. We could date only Osmanli, Seljuk, Byzantine, Roman, and Hellenistic pottery and small objects. However, certain red-slipped and painted wares were regarded generally as "Hittite," and a finer ware, also painted, as Phrygian. We had no idea how many superimposed cultures we might find. Nor did we know what kind of architectural remains to expect, since no traces of buildings showed on the surface of the mound, except shallow depressions or low elevations.[1]

[1] From previous excavations of such Anatolian mounds as Orta-Höyük near Dedik by Chantre, Boz-Höyük, and a tumulus near Sereseк, we could not draw

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The main objective of this, our first, season was to find out as much as possible about the structure of such a mound and to prepare the ground for establishing a relative chronology of Anatolian pottery.

We sought to accomplish this aim by carefully excavating plots of irregular shapes determined by the topography, eventually forming

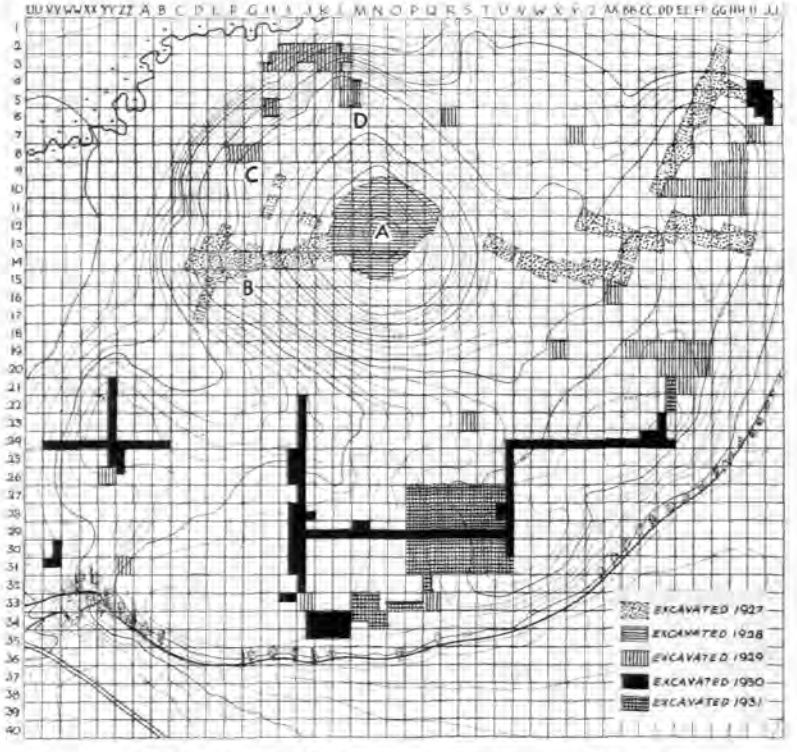

FIG. 1.—Plan of the mound, showing excavated areas

two connected trench systems, one on the citadel mound with its spurs and one on the northeast part of the city terrace (Fig. 1). We soon recognized the presence of several cultural and building

many conclusions. Previous excavations at Kültepe near Kayseri were of little value, and the results of Professor Hrozný's 1925 campaign there were as yet unavailable. That we would find a number of superimposed cultures we were sure after our 1926 investigations of many such mounds within the great bend of the Kızıl-Irmak. Cf. "Oriental Institute Publications" VI: *The Alishar Hüyük, Season of 1927*, Part I (hereafter abbreviated to *OIP* VI) chap. i.

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levels, often so close together that it was difficult to differentiate them. We did not yet dare to remove higher building remains in order to free lower ones, but left them *in situ*, going deeper in architecturally unobstructed plots only. Soon we had a large collection of pottery and numerous categories of small objects, the whole divisible at this stage into five main chronological groups. In various places we then cut down small areas 1.50×1.50 meters to check and recheck the cultural sequence. In the northeastern part of the city terrace a plot 6×6 meters was cut down in this way and the contents of each layer carefully registered.[1] It is obvious that the results of such procedure have to be taken always with a grain of salt, as in such a relatively small area one cultural layer may be missing or disturbed. It was, in fact, the results obtained in this very plot in 1927 which started us off on the dubious theory that the handmade painted pottery was later than the much finer wheelmade pottery.[2]

In excavating our irregularly shaped plots we had come in three places upon remains of large fortifications. On Mound B[3] we had found in 1927 a strong defense wall with two towers;[4] but we could not then follow it up, as it would have necessitated the removal of many structures which were superimposed upon it. Continuing from there eastward, we soon struck a large wall which undoubtedly had been, during at least one phase of the settlement of the mound, the wall of the citadel. We cleared some two-thirds of it around Mound A, but time did not permit us to clear or investigate it completely. Finally, at the northeast corner of the city terrace we unearthed part of a postern. This too the shortness of our season prevented our freeing completely.

For 1928 the Director of the Oriental Institute resolved to continue the excavations at the Alişar mound more thoroughly. Therefore we now laid out over the area a grid system of 10-meter squares and started to cut down the citadel mound itself, hoping during this season to be able to lay bare the citadel as a whole. It was, from the purely technical point of view, a very difficult piece of work. The upper layers

[1] *OIP* VI 214 ff.

[2] Fritz Schachermeyr questions this in his very instructive review of *OIP* VI in *Archiv für Orientforschung* VII (1931) 200 f.

[3] See Fig. 1.

[4] Cf. *OIP* VI 45 (Map 3) and 195–99.

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FIG. 2.—Panorama of the southern part of the terrace viewed from Mound A, showing the trenches excavated in 1930

were very thin and unexpectedly fragmentary, the edges having been for the most part washed down by the heavy spring and fall rains. Four layers were removed, entirely freeing what was apparently a village settlement of somewhere around the middle of the first millennium B.C. Then we cut down two-thirds of the area to the next stratum, which then was accepted as belonging to the New Hittite Empire fortress. The entire circumference of the citadel wall also was cleared. The plan of the interior of the fortress was very complicated and not at all clear. It was evident that frequent rebuilding had taken place within the wall, which, as we now recognized, had been built originally by the people who used handmade painted ware, then partially remodeled by later inhabitants. In the founders of the fortress we thought we recognized the ancient Hittites. A more detailed investigation and clearing of the fortification wall could not be made at the time.

In 1929, under the direction of Dr. E. F. Schmidt, 10-meter squares were excavated here and there over the mound in order to define the extent of settlement in the various cultural periods. These pits were enlarged when important architectural remains were struck and time permitted. Thus on Mound D were unearthed large parts of an imposing fortification of the early years of the first millennium B.C. to which belonged undoubtedly the defense wall found in 1927 on Mound B. But the most important finds were made on the city terrace itself, where we came upon two building complexes—one of which Dr. Schmidt called the "community storehouse"—belonging to the most important cultural period of our mound (then called "Period II"). Two fragmentary cuneiform tablets were found in this stratum. On account of them, and because of the similarity of the pottery to that found at Kültepe, this period could be accepted as contemporaneous with the merchant colony there; and Dr. Schmidt was inclined to ascribe the whole culture to such alien merchants.[1]

Complying with the instructions of the Director of the Oriental Institute, we investigated in 1930 the layers of this particular period, seeking especially more cuneiform tablets, that is, *written* historical evidence. The two cuneiform tablet fragments of 1929 had been found not *in situ* but in refuse layers. Our first objective was to find, if possible, such tablets *in situ*, in order to know definitely in which particular layer to continue our search.

It was a difficult task in view of the extent of this stratum and the practical difficulties of working through the superimposed layers of later cultural periods, which had to be conscientiously recorded before they could be removed. Hand in hand with this task had to go a renewed checking of the cultural sequence and the extent of the later cultures of the mound. For this reason a system of three north-south trenches connected with one another by one east-west trench was laid out on the southern part of the city terrace, where, up to now, the least work had been done (Fig. 2; cf. Fig. 1). The trenches were 5 meters in width, but could be enlarged to 10 meters if building remains within them or other reasons warranted. For our purposes such a trench system seemed to have advantages over the method of excavating separate plots. For it is quite possible that one may strike dis-

[1] Cf. *OIC* No. 11, p. 70.

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turbed layers or strata imperfectly defined because of destruction and partial re-use or rebuilding of wall fragments. In a limited area, such as 10×10 meters, the profile surfaces are too small to permit clear "reading"; but, if one has a profile wall approximately 100 meters long, one can easily follow a cultural layer even through obscure sections, as there are usually clearly defined foundation or destruction levels on each side of the obscure stretch.

The trenching method was used in 1930 to recheck the relation of the second handmade pottery period to the first wheelmade one, as well as to determine the spot most likely to yield further written evidence of the period dating around the beginning of the second millennium B.C., that is, to help solve the second and third questions with which we were confronted at the beginning of 1930. I may say here by anticipation that on the basis of this method we were led to clear in 1931 a 50×60-meter area on the southeastern part of the terrace, with satisfactory results. For solving our first question it seemed best to continue deepening a shaft, south of the citadel wall, which Dr. Schmidt had in 1929 carried down to a depth of 17.60.

SEASON OF 1930

After a short test excavation at Gâvur-Kalesi (see chap. ii), we reached our Alişar camp on June 1, 1930. A second barrack with a darkroom had been erected, so that for the first time all the members of the expedition had regular rooms, whereas previously some of us had had to sleep in tents. Dr. Wittek arrived soon afterward and began with Mr. Morrison a survey of the Moslem remains in the neighborhood. Dr. Şevket Aziz, of the medical faculty of the University of İstanbul, next arrived and began immediately to collect anthropometric data from our 250 workmen.[1] The rest of us were busily engaged in plotting the trench lines and supervising the start of the excavation work.

The first north-south trench extended from J 33 northward (see Fig. 1). In an unmistakably "alien" layer in this plot one of the tablets of 1929 had been found. The workmen were divided into small crews, each one receiving a 10-meter section of the trench, which was 5

[1] See his article, "Anadolu ve Rumeli Türk'lerinin Antropometrik tetkikleri," *Türk Antropoloji Mecmuası* VII (1931) No. 11, S. 3–39 (incl. summary in French on pp. 17–19).

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meters wide and eventually 135 meters long. As soon as a crew finished clearing a level, it was moved farther north, so that the cleared level could be mapped and photographed, and skeletons and sherds removed. Then the next free crew would be moved in to deepen that section to the next level. We were careful always to keep a number of plots at the same level, to enable us to check attributions to cultural periods. Soon we were able to start the other two north-south trenches and the east-west one, enlarging their width to 10 meters in several

FIG. 3.—Foundation of a Byzantine building

places where architectural remains warranted. During all this time a picked crew worked in the shaft on the citadel mound, which more and more took on the aspect of a mine. Our Décauville railroad crew had to put in many hours overtime to remove the dirt piling up along the trenches.

OSMANLI, SELJUK, AND BYZANTINE PERIODS

Barely covered by a few centimeters of soil, there appeared here and there within the trenches small sections of pavements and in the same levels Osmanli and Seljuk coins. Byzantine coins also appeared in very shallow strata. At the southeastern edge of the terrace we uncovered parts of a house with a doorway built of flat bricks with concrete binding; it was apparently Byzantine (Fig. 3).

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ROMAN PERIOD

The next layer, belonging to the late Roman period according to coin finds, showed that the Alişar settlement of that time was still important, though not as important as the one at Karaveli some 5 kilometers west. There marble fragments of columns, architraves, and

FIG. 4.—Foundation of a Roman villa

FIG. 5.—Sections and reconstruction of the Roman villa

door jambs have been found by the villagers and re-used in the walls of their houses and as headstones in their burial ground. On the Alişar mound we unearthed the complete foundation of a small villa of the late Roman period (Figs. 4 and 5), the floors of which seem to have been partly covered with mosaics. But we found only many mosaic stones of various colors, without any indication of the designs. Our survey (see chap. iii) showed that during the Roman and Byzantine

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periods several houses had existed beyond the actual limits of the mound, which seems then to have been unfortified—testimony to the *pax Romana* secured and upheld through the Roman legions.

FIRST MILLENNIUM B.C.

The next layers showed only very scanty and poor remains on the city terrace. Small one-room buildings and parts of foundations of apparently four main building periods came to light. They were the remains of settlements of the first millennium B.C. and the time just preceding it, a period during which east-west and west-east movements of peoples through Anatolia scarcely permitted the existence of stable cultures. The attribution of these layers to any particular historically known culture is still rather difficult.

The uppermost layer of this group—that is, the one following the last Roman building level—belongs somewhere in the 3d–2d century B.C., the late Hellenistic era. Bowls and fragments of the Megarian type, many of which appear here,[1] give us an approximate date. Furthermore, fragments and complete pieces of Galatian ware also appear.[2]

For the next layer we have no clue whatever, but probably it belongs around the middle of the first millennium B.C.

The third layer must be called Phrygian on account of the resemblance of the pottery prevailing there to that of Gordium.[3] It was during this period that the fortress on the citadel mound was elaborately restored and the western spurs were inclosed within a strong wall.[4]

A definite change has to be made in the attribution of the next and last main building level of this group, which we formerly called "Period IV" and attributed, on account of the frequent occurrence of seals with "Hittite" hieroglyphs, to the time of the New Hittite Empire (about 1500–1200 B.C.). This change is due especially to the investigations of Dr. Kurt Bittel at Boğazköy. We know that Boğazköy was the capital of the first Hittite Empire in its later years

[1] E.g., *OIC* No. 11, Fig. 206 (No. b 1352); but it is here called Aretine ware.

[2] Cf. *OIC* No. 11, Fig. 180 (No. 184).

[3] See G. and A. Körte, *Gordion* (K. Deutsches Archäologisches Institut, *Jahrbuch*. Ergänzungsheft V [Berlin, 1904]).

[4] Cf. *OIC* No. 11, Figs. 172–76.

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as well as of the New Hittite Empire throughout its existence. Dr. Bittel's excavations on Büyük-Kale, the citadel of Boğazköy, showed beyond possible doubt that no cultural change whatever distinguished the two empires; through the whole Hittite deposit exclusively pottery and small objects analogous to those of our "Period II" appeared. Our "Period IV" was represented by only a very shallow and unimportant layer. Furthermore, studies based on more extensive material, especially that from the 1931 season at Alişar, reveal a close affinity between our "Period IV" pottery and the later Phrygian ware of Gordium.

The appearance of the so-called "Hittite" hieroglyphs in this building level, and in this building level *only*, demands explanation. But even this does not seem to me very difficult. As I have indicated previously, the beginning of hieroglyphic writing in Asia Minor has been put much too early, and its connection with the Hittites of the two empires seems rather questionable.[1] We know, of course, that hieroglyphic inscriptions began to appear to a very limited extent with the New Hittite Empire (about 1500 B.C.); but that does not mean necessarily that with them a new culture too entered Anatolia. I think that their use at that time was limited to a rather small ruling class of Indo-Aryans who had come from the west and were very possibly related to the later Phrygians. It seems most probable that these hieroglyphic-writing people played an active part in the destruction of the Hittite Empire, perhaps in association with the Phrygians, only to be expelled by the latter very soon afterward toward the southeast; for there we find the bulk of the hieroglyphic monuments, most of them belonging to the period between about 1000 and the 7th century B.C.

Until further studies, especially an absolutely satisfactory decipherment of the hieroglyphs themselves, and/or new discoveries of written documents permit us to give the "Period IV" culture a more definite name, I wish to call its remains the "first post-Hittite level," to differentiate it from the succeeding, purely Phrygian level. To the former level belongs a very interesting building, part of which had already

[1] "Four Sculptures from Marash," *Metropolitan Museum Studies* II (1929/30) 112–32. Cf. also von Bissing, "Untersuchungen über Zeit und Stil der 'chetitischen' Reliefs," *Archiv für Orientforschung* VI (1930–31) 159–201.

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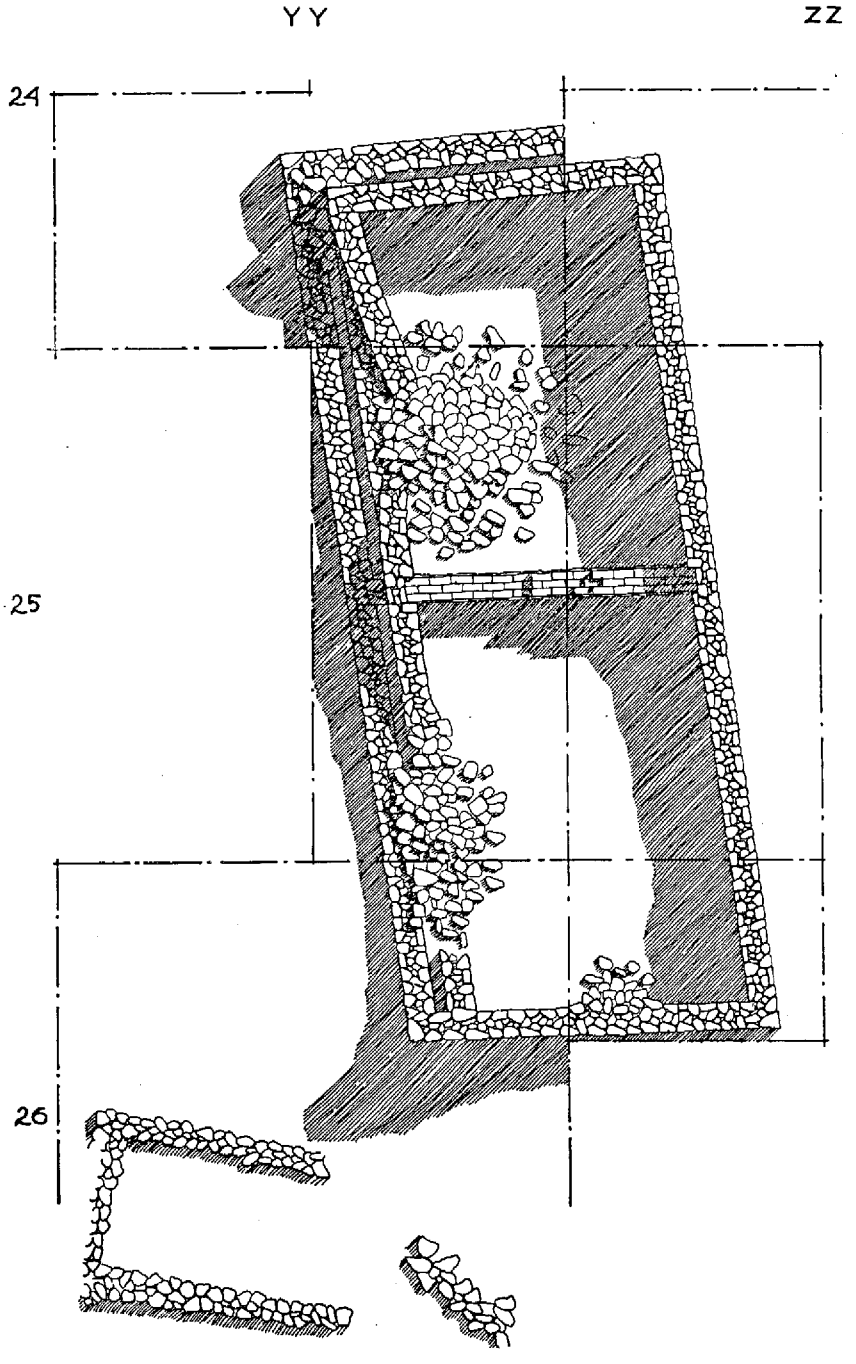

Fig. 6.—Plan of a building of the first post-Hittite period. Scale, 1:150

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been unearthed in 1929 (Figs. 6 and 7). It is nearly rectangular, its all-stone walls partially preserved to a height of 3.50, divided into two rooms by a tamped-earth wall on stone foundations. On the outer

FIG. 7.—The building sketched in Figure 6

(west) side it had had a double wall, now fallen. No remains of a doorway were visible. The most important part of this settlement, however, was on the citadel mound (Mound A), as we discovered during 1931.[1] In making a small trench there, we found that in 1928 we had

[1] See p. 42.

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reached in only a very few places the actual stratum of this culture, and that the greater part of what we had previously exposed belonged to a later, purely Phrygian period.

HITTITE PERIOD

So far we had found on the terrace no evidences of the painted handmade pottery culture which from our former observations should come next below in the series. Instead we found the alien culture of "Period II" protruding everywhere. Two distinct building periods of this culture were regularly distinguishable.[1] In extending our trench southward from J 33 toward the edge of the terrace, we struck a wall undoubtedly belonging to this period. It was by far the largest and best constructed "alien" wall yet found. We followed its course and soon had the foundations of the two towers of a gateway (Figs. 8 and 9). Not only the shape of the latter but even its dimensions corresponded well with those of the lower west gateway of Boğazköy (Fig. 10). Our east tower was poorly preserved, since in Byzantine or late Roman times a small building with a double bath had been constructed above it (Fig. 11). The discovery of this gateway affected decidedly our attribution of its period to the alien merchants of Cappadocia. Almost simultaneously there appeared in square DD 24 another strong tower of the same period (Fig. 12). Apparently the so-called "alien merchant colony" had been surrounded by a strong fortification.

A crew was put to work near the postern in GG 4–5, which had been partially cleared in 1927.[2] The foundations of two strong corner-fortifications above it could be recognized (Figs. 13–16). The earlier one belonged to the "alien" period and was, in its turn, similar to those at Boğazköy. Part of it, as well as the postern itself, had been re-used. Re-examination of Complexes I and II found in 1929[3] suggested still another analogy with Boğazköy, for each complex seems to have had an outer defense wall built double, with cross-walls at intervals, the resulting compartments being filled with tamped earth. We could recognize this especially well along the south face of Complex I of 1929 (Fig. 17). The actual rooms within these

[1] In the southwest we did not have time to go deep enough to demonstrate this.

[2] Cf. *OIP* VI 184.

[3] Cf. *OIC* No. 11, pp. 71–77.

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FIG. 8.—The foundations of the southern gateway on the terrace

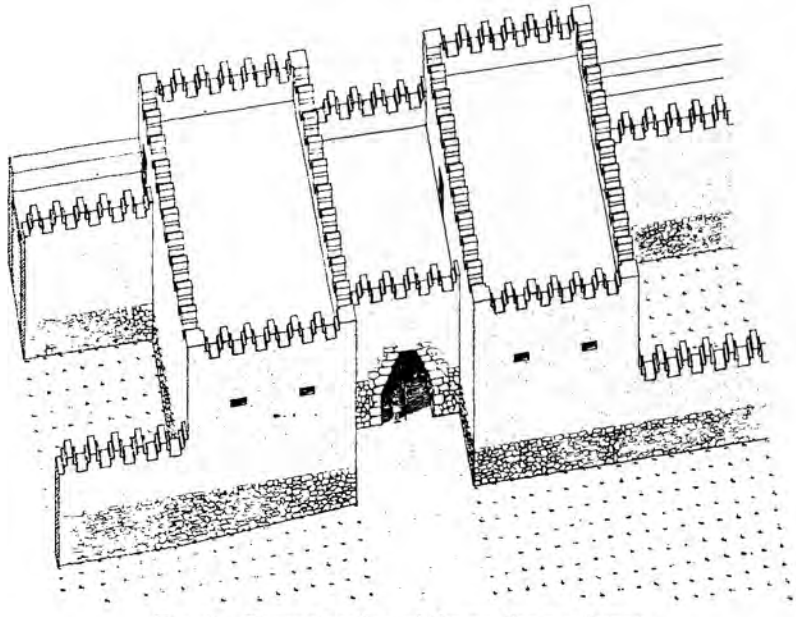

FIG. 9.—Reconstruction of the southern gateway

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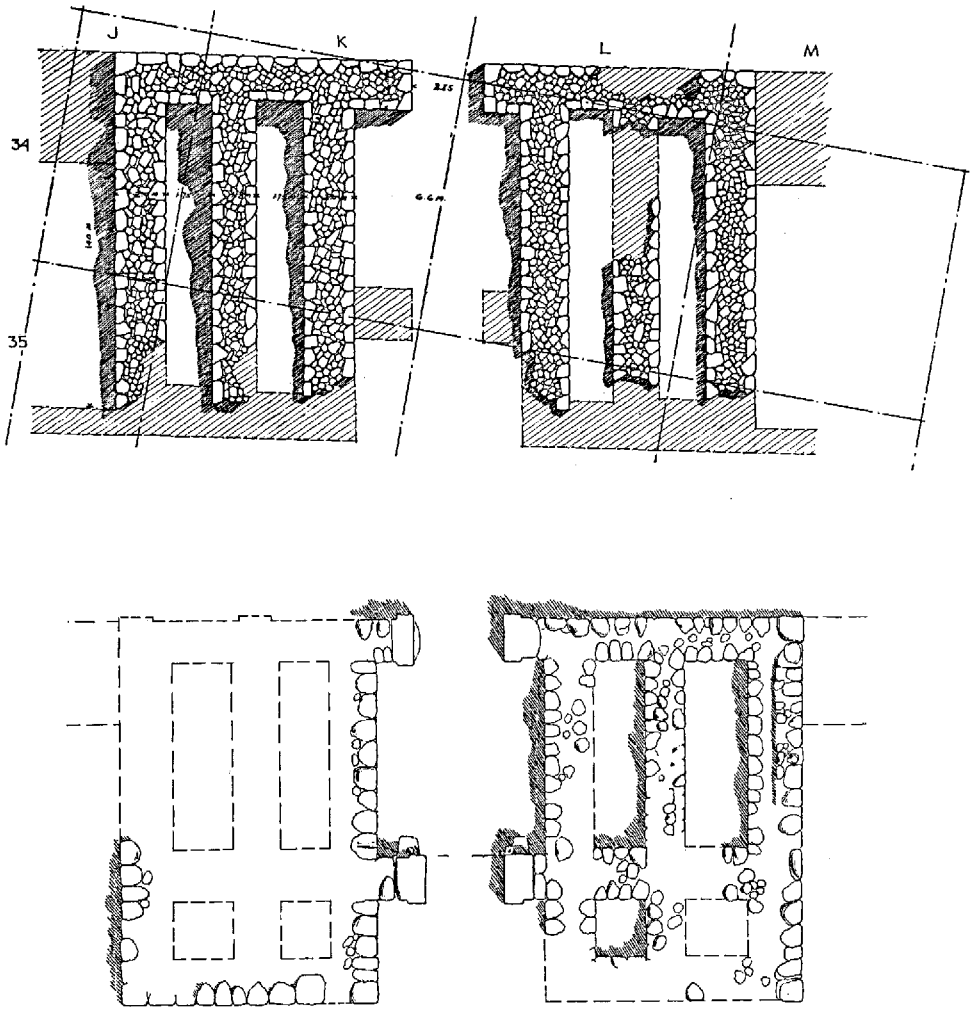

FIG. 10.—Plans of the southern gateway of Alişar and of the lower west gateway of Boğazköy, showing resemblance. Scale, 1:300. (Boğazköy after Puchstein.)

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FIG. 11.—Byzantine(?) bath built on top of the east tower of the southern gateway.

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FIG. 12.—Tower in square DD 24

FIG. 13.—Part of a postern

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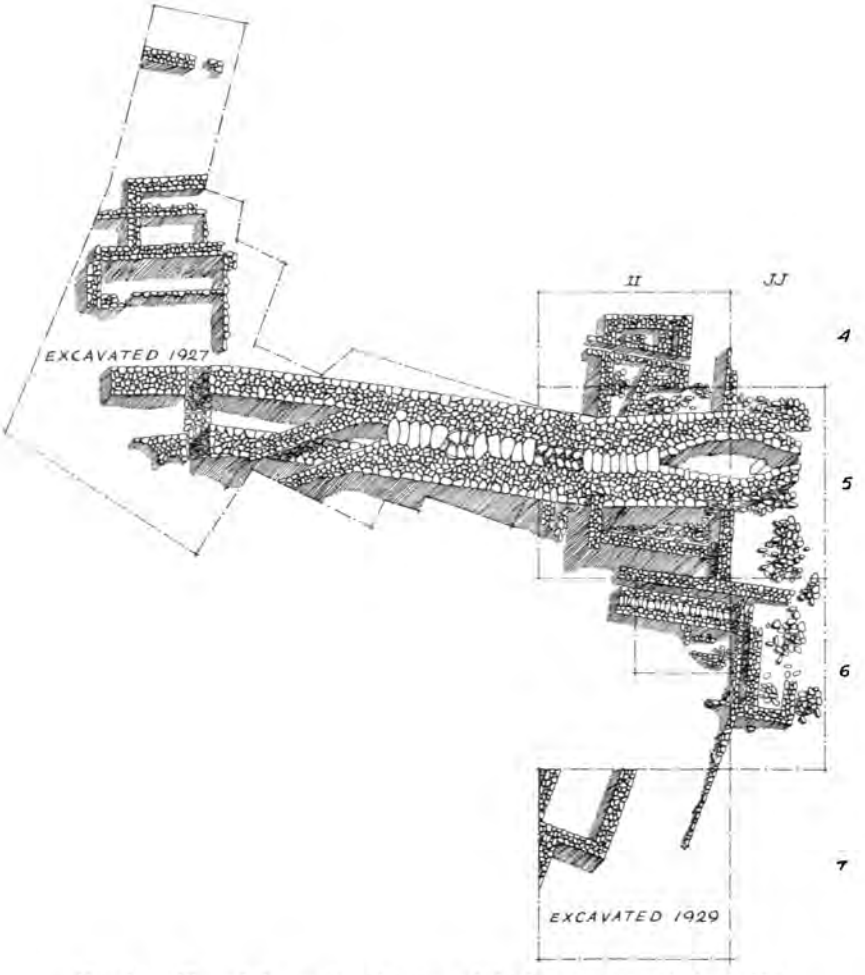

FIG. 14.—Plan of the northeast corner of the fortification. Scale, 1:400

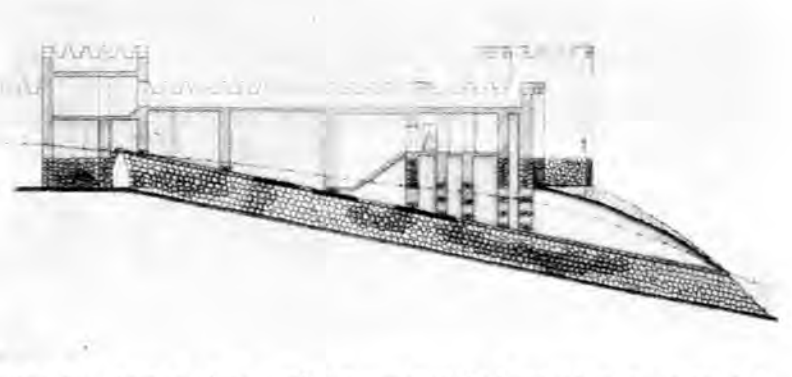

FIG. 15.—Section of the northeast corner of the fortification, reconstructed

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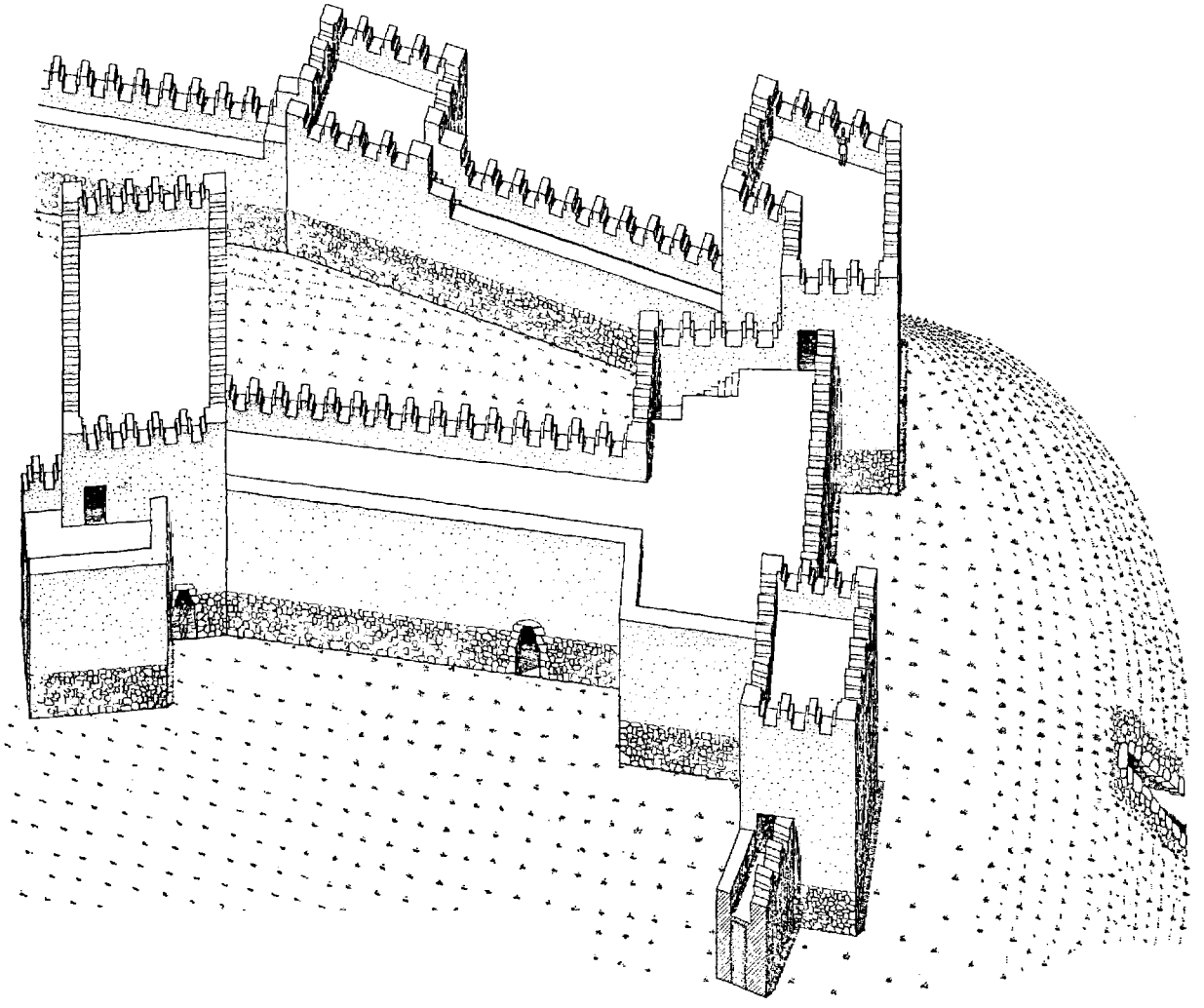

FIG. 16.—Reconstruction of the northeast corner of the fortification

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FIG. 17.—Tamped-earth core inside a double wall in Complex I of 1929

FIG. 18.—Hittite burial of a child

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complexes were possibly built later against the defense wall, a practice very common until the Middle Ages. But the exact nature of the defense walls in these two complexes still requires further study.

A little work within the citadel wall corroborated Dr. Schmidt's conclusion that no definite layer within the citadel represents the "foreign merchants." But the first layer struck below the first post-Hittite level represented the culture characterized by handmade painted ware and had a very strong admixture of "alien" sherds.

In P–R 29 some large walls similar to those of the southern gateway in breadth and orientation were of outstanding importance (cf. pp. 28 and 31–36). Within these walls, which apparently belonged to a single large building, we found on a pavement a typical pitcher of the "alien" period containing fragments of a necklace of gold, silver, bronze, and fayence. Below the pavement were several burials, some of them with fine mortuary gifts (e.g., Fig. 18). In three different places we found fragmentary cuneiform tablets, but two were in refuse layers.

EARLY BRONZE AGE

In two areas on the terrace—W 24 and I–J 24–26—we found below the "alien" stratum distinct building levels of the culture characterized by handmade painted pottery ("Period III" of *OIC* No. 11). Elsewhere we found the sherds of "Period III" mixed either with the earliest layer of "Period II" or with the uppermost layer of the handmade, plant-tempered monochrome ware of what I would now call the Copper Age (formerly "Period I"). This would indicate that "Period III" preceded "Period II." In the area excavated within the citadel we found below the first post-Hittite level ("Period IV") two architectural levels of "Period III." The later one had a profuse admixture of "Period II" pottery. The earlier level included sherds of a type intermediate between those of "Period III" and "Period I."[1] We found here the finest vessel of this type so far uncovered (Fig. 19). Such intermediate pottery appears also in the higher levels of "Period I," which we found regularly preceding the painted ware of "Period III."

Our work of 1931, especially in connection with the citadel, inci-

[1] Called "early Period III" in *OIP* XIX.

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dentally confirmed the newly determined sequence. We may assume, then, that in 1930 we already had the answer to our second question. The painted handmade ware of "Period III" was earlier than the fine wheelmade "alien" pottery of "Period II." As Dr. Schmidt has often pointed out,[1] the "Period III" ware seems typologically related to the

FIG. 19.—Chalice c 2264. Scale, 1:3

handmade plant-tempered ware of "Period I." That the bearers of the "Period III" culture were for some time contemporaneous with the "aliens" is undoubtedly true; but they were supplanted by the latter, and not vice versa. Several vessel fragments were found which showed the influence of "alien" pot forms (for example, typical V-shaped handles or, better, derivatives from them). The "alien" pot forms likewise took over elements from the "Period III" culture.

[1] E.g., in *OIC* No. 11, pp. 102 f.

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Beak-spouts, for instance, seem to have been typically Anatolian. Even yet the peasants in the mountains, where wood is not scarce, make wooden vessels with similar beak-spouts. The only question remaining concerns what happened to the "Period III" fortress after the "aliens" took possession of it. I think we found a satisfactory answer to this question during 1931; it is discussed on pages 40–42 and 46.

FIG. 20.—Walls of the Copper Age in Plots L–M 29, from east. The wall at right of center is of tamped earth. In left wall of trench (in shadow), at depth of 6.60, are two pot burials of the same period.

COPPER AGE

We reached "Period I," until 1930 our earliest cultural period, in Plots L–M 29 at a depth of 6.20. The buildings were surprisingly well preserved and especially interesting, as some walls consisted of several layers of tamped earth above stone foundations (Fig. 20).

In deepening the shaft on the south side of the citadel mound to investigate the deeper levels, we cut through five levels of "Period I" in 1929 and two more in 1930. The cultural remains of this one period had a total thickness of 7.90 here. In the lowest of the seven levels, at a depth of 21.20, we came upon a child's burial in a box made of logs

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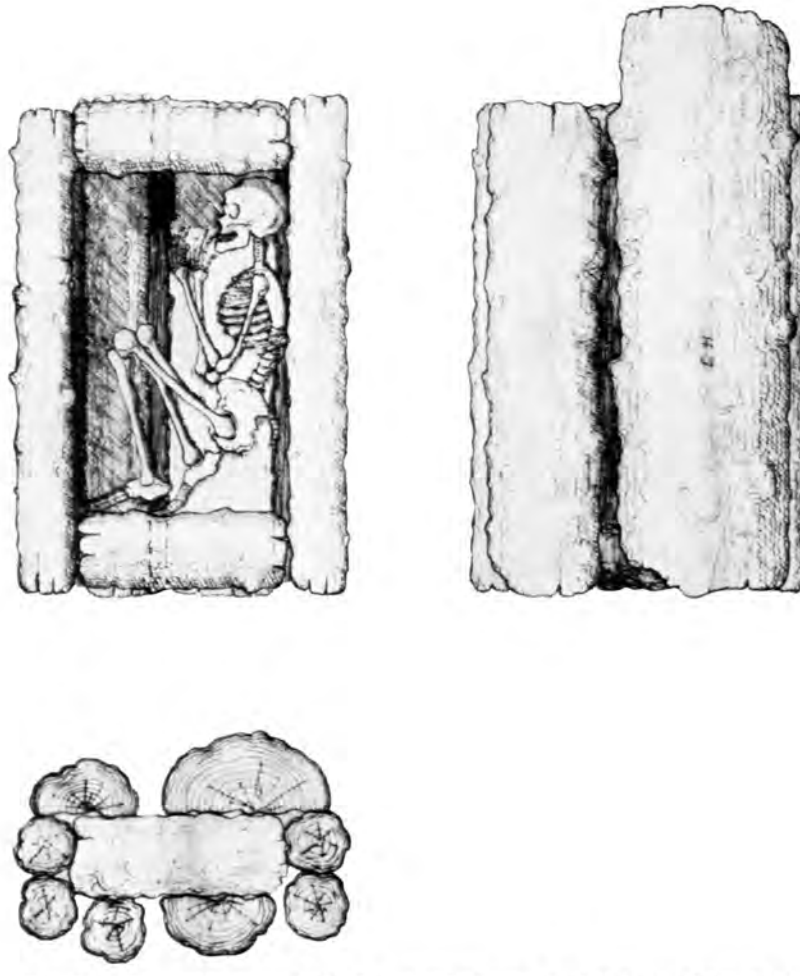

FIG. 21.—Reconstruction of child's log coffin found in Plot L 14. Scale, 1:12

FIG. 22.—Impression of lead seal No. c 576. Actual size

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(Fig. 21). The lowest piece of metal found was a fine lead stamp seal (Fig. 22).

As we went still deeper, every morning one of us had to go down and examine the walls of the shaft to be sure of their safety before the

c 2019

FIG. 23.—Standard of a "fruit-stand." Scale, 2:5

workmen were let in. Since the shaft had to be made much narrower at the bottom, the débris was hoisted by shoveling it from one setback to another, was carried out in wheelbarrows through a narrow passage excavated for the purpose, and finally was dumped on the slope of Mound A. Just below "Period I" we entered a transition level where fragments of standards (Fig. 23) of so-called "fruit-stands" similar to

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those of the Danubian Neolithic culture appeared. Below this we reached a Neolithic level.

NEOLITHIC PERIOD

The characteristic Neolithic ware was black or gray with incised ornamentation, often filled with ocher (Fig. 24). Flat bone awls and

FIG. 24.—Neolithic potsherds. Besides the typical black or gray incised ware, one piece (in lower right corner) is painted with red-brown on buff. Scale, 1:2.

numerous wooden implements appeared, and small flint and obsidian blades were not infrequent (Fig. 25). The maximum depth to which we penetrated was 25.60 below the top of Mound A. We found there parts of the foundation of a house apparently oval in plan. Two flat stones had served as bases of wooden roof-supports, one of which, charred and burned, was still preserved to a height of .50 (Fig. 26). From the little we yet know of this culture[1] we can say only that the

[1] In the process of deepening the shaft the freed area had diminished from 20×10 meters to 9×8 meters.

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Neolithic of Alişar does not resemble any other so far found in the Near East. May it be linked with Eastern European Neolithic? Painted sherds, so common in Near Eastern Neolithic layers, were rare at Alişar and very crude (cf. Fig. 24).

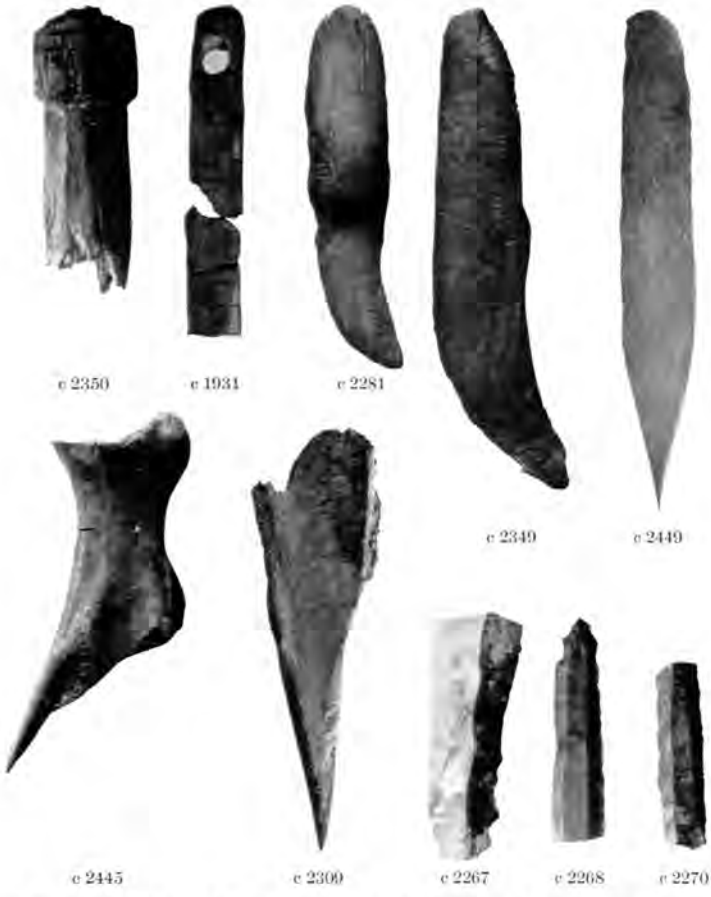

FIG. 25.—Neolithic implements of wood, bone, and stone. Scale, 1:2

But we have not yet reached the oldest settlement of our mound. According to Dr. Bartsch, who made a geological examination of the mound, virgin soil will probably not be reached for another 11 meters.

Thus we had found answers to two of our three questions in 1930. The answer to the third was already more or less clear to me, but I

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wanted more proof; this we obtained—at least to my satisfaction—in 1931.

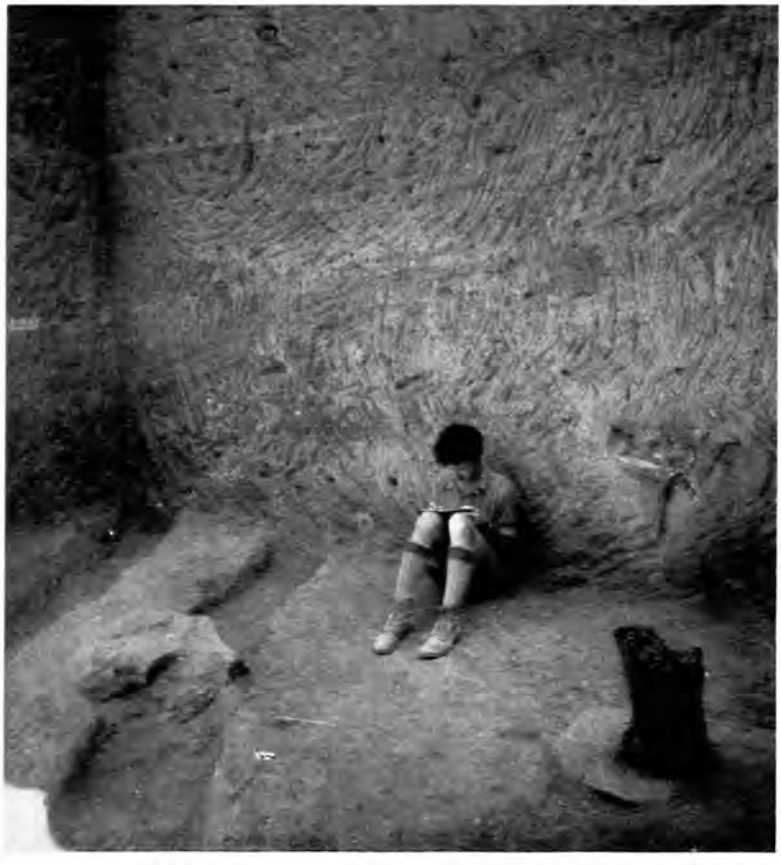

FIG. 26.—Neolithic level in L 14, showing wooden roof-support on stone base

SEASON OF 1931

Out of the many tempting possibilities offered for investigation of the various individual periods, the Director chose to have us clear first the Hittite ("Period II") building of which we had in 1930 exposed a few walls in Plots P–R 29. There we had already found some cuneiform tablet fragments and well equipped burials. We planned accordingly to excavate completely the large rectangle P–U

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27–31 (Fig. 27). Meantime in two places small crews pierced the "Period II" layer within the 1930 trenches to recheck the culture sequence, finding again handmade painted pottery and "intermediate" ware before reaching the first level of "Period I."

FIG. 27.—View of the large rectangle from the citadel mound

THE TERRACE

In the large rectangle (Fig. 28) we freed first the Roman and Byzantine layers, which were especially deep at the eastern end. They showed us again, as we had assumed since 1930, that the mound had had a prosperous settlement during this period. The complete foundations of a second house (cf. p. 8) were unearthed. But the most interesting find was the foundation of a small Byzantine church of the 7th century after Christ (Fig. 29). Its floor was paved with baked tiles, and steps led up to the altar. Behind its apse was an elaborate burial with a large tombstone bearing an incised cross. Traces of an inscription appeared, but only the word ΤΑΦΟΣ could be read. Several bathtubs were uncovered in the same layer, one especially interesting because two bodies were buried within it.

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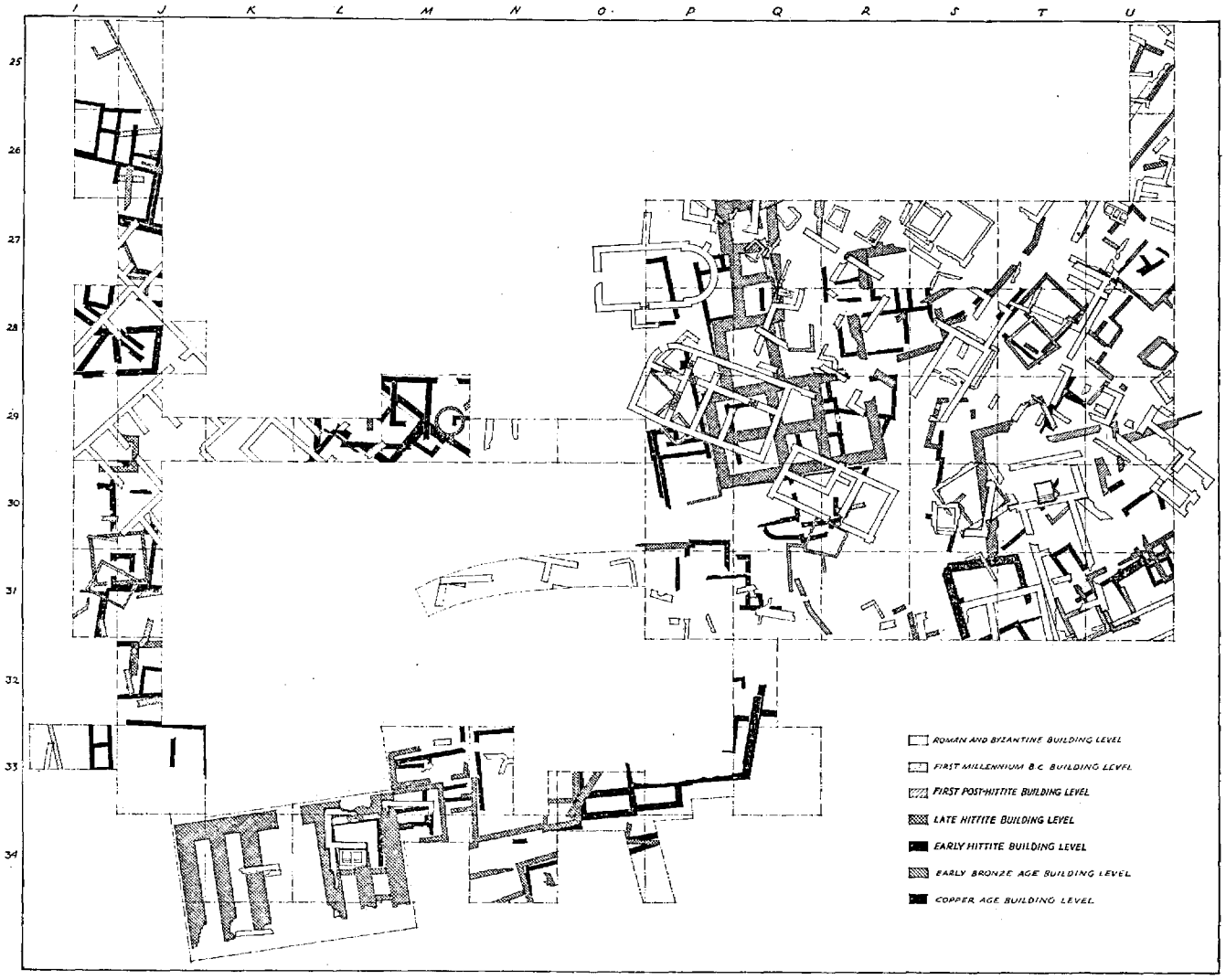

FIG. 28.—Composite plan of all building levels on south part of terrace. Scale, 1:800

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The various levels of settlements of the first millennium B.C. were again very scanty; but a few small objects are of interest (Figs. 30–31), especially an ax mold, the first of its type yet found (Fig. 32).

In the next stratum, that of the first post-Hittite period, a line of dado slabs 21 meters long appeared—the south façade of the "alien" building we had planned to unearth (Fig. 33). Soon the west façade also could be traced. Some post-Hittite buildings had been erected

FIG. 29.—The Byzantine church

directly on top of the dado slabs. But the remains of this period also were poor and fragmentary. Only one large wall, consisting of huge boulders evidently re-used from earlier structures, appeared at the eastern border of the "alien" complex.

And then we reached the "alien" stratum. Within the huge outer walls of the large building appeared partition walls and paved floors. Fine small objects were unearthed. We soon found that not all of the building could be cleared this year, as it extends farther northward than we had expected. Although its south and west sides (Figs. 34 and 35) were fairly well preserved, the east side was difficult to determine. The building seems to have been inclosed by a wall of large boulders.

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d 1813 d 2447 d 1812 c 2170

FIG. 30.—Small objects from settlements of the first millennium B.C. Scale, 2:5 No. c 2170 is an iron weapon with bone handle.

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In freeing the west wall and its foundations we found at the next deeper building level of the same period (and at that level only) many unbaked cuneiform tablets (Fig. 36). All were on the floor, covered by

c 2581

d 1527

d 400

FIG. 31.—Small objects from settlements of the first millennium B.C. Actual size. The upper figure shows modern impressions of the four sides of a seal.

débris of the building itself. Their removal was extremely difficult. We could neither take them from the surrounding dirt nor clean them while within it. We had to cut out the earth in blocks wherever they appeared and pack them on the spot in cotton and boxes for shipment to the Oriental Institute headquarters in Chicago. There they were baked, cleaned, and studied, after which they were returned to the

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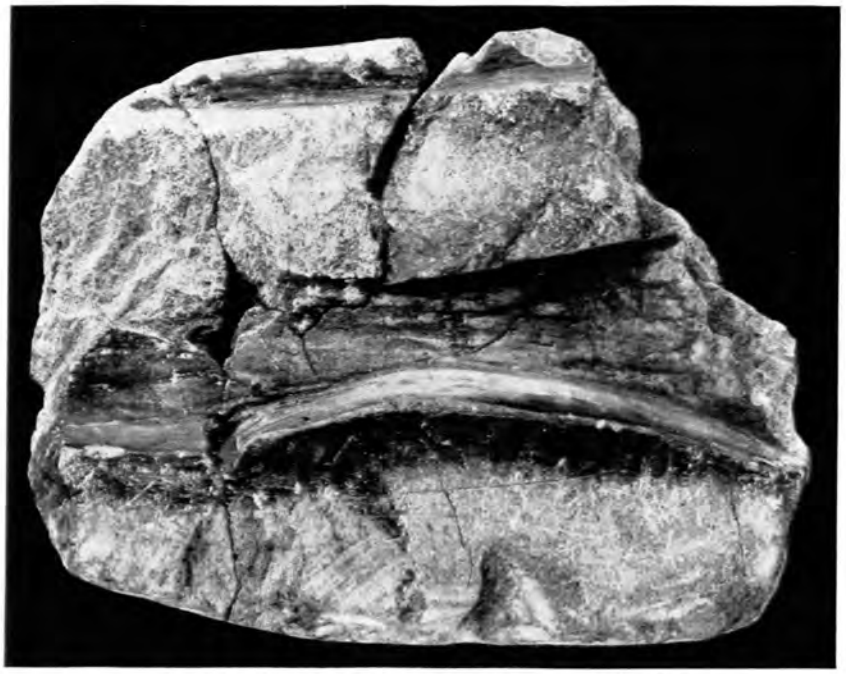

FIG. 32.—Stone mold for an ax with lugs. Scale, 3:4

FIG. 33.—Row of Hittite dado slabs appearing in the first post-Hittite stratum

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FIG. 34.—The Hittite mansion. General view from south

FIG. 35.—The Hittite mansion. Western part, showing earlier street which lies partly beneath it.

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Turkish government. I wish to express here my gratitude to the Ministry of Public Instruction in Ankara for its helpfulness in granting permission for immediate shipment of the tablets without any check-

FIG. 36.—Cuneiform tablets as found

ing or formalities, so as to avoid handling them while unbaked. This mark of confidence we appreciate highly.

The first two building levels of the complex slope slightly upward toward the east. A third building level appeared in its western part only; buildings of "Period I" were found at the east. The third building level revealed a small street, above which part of the large later

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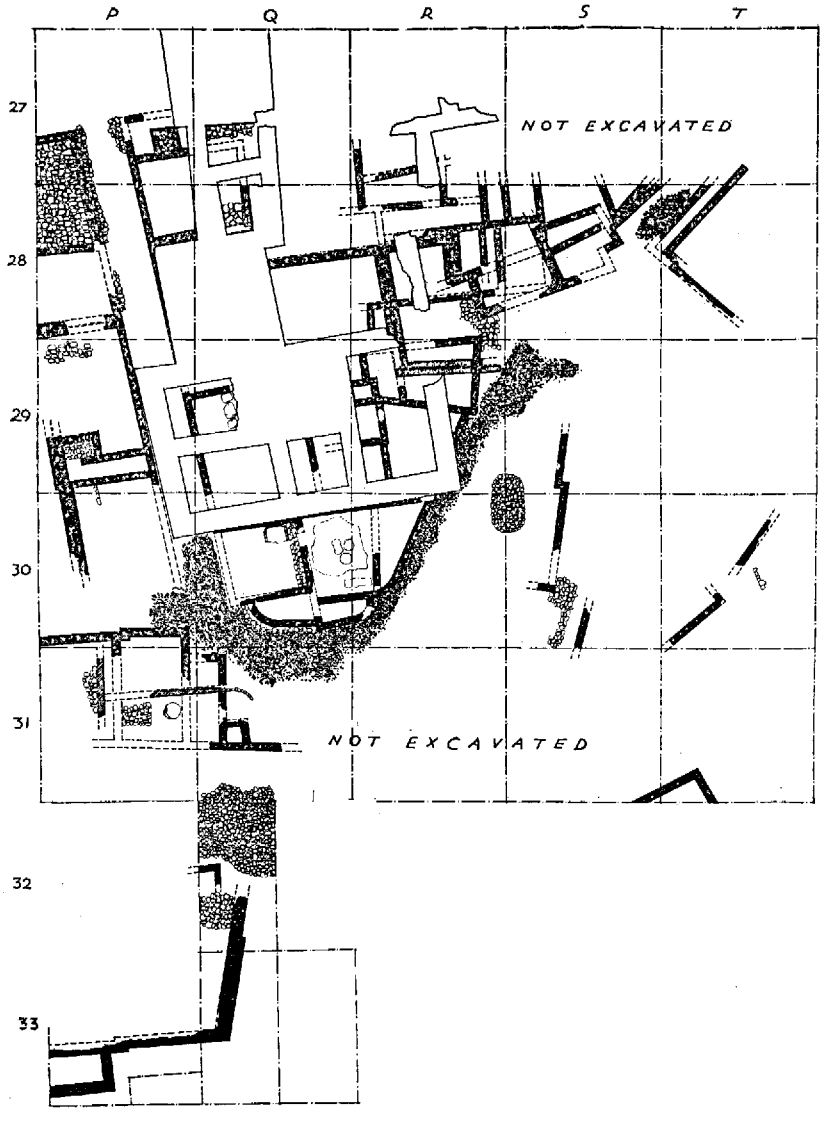

FIG. 37.—Plan of part of the early (third) Hittite building level. Scale, 1:500

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building had been erected. The street followed a southerly course almost to the south edge of Plot Q 30, then curved and turned northeastward between large building complexes (Fig. 37; cf. Fig. 35).

Plot Q 33, south of our large rectangle, had been excavated in 1929 to a depth of 3 meters through a sterile, seemingly filled-in layer with no stratification whatever. Not even potsherds had been found after the thin humus layer had been pierced. Such a filling, but never so deep, we had found nearly everywhere as we approached the rim of the terrace. Since we had some difficulty in disposing of our dump soil from the large rectangle, we planned eventually to refill this plot. But before doing so, we had, of course, to determine whether it still concealed any architectural remains. After the removal of another .50 we reached a refuse layer. One meter lower (i.e., 5 meters below the surface) we discovered part of a large wall built of good-sized boulders, seemingly an outer defense wall belonging to one of the three building levels of the "alien" period. When we excavated a strip to connect this plot with the large rectangle, we found a slightly ascending pavement leading toward the paved street of the third (lowest) building level of the "alien" period (Fig. 38; cf. Fig. 37 and p. 36). Because of their great difference in level, this defense wall and the walls of the gateway unearthed in 1930 could not belong together. We followed the wall westward as far as time permitted, but the season was too far advanced for complete clearance. The wall here too was double, with cross-walls (cf. p. 13); its sections projected irregularly (Fig. 39; cf. Fig. 28). In following it we ran into the second building level again, where in two more places cuneiform tablets were found lying on the floors of buildings.

With the exception of the two deepenings of 1930 trenches (cf. p. 29), we reached "Period I" in only the eastern part of the large rectangle and below the foundations of the early Hittite ("Period II") outer defense wall (cf. Figs. 28 and 38). The house remains of this period in the large rectangle were almost on a level with those of the early Hittite period. They were unusually well preserved. The presence of several floor levels proved successive occupations. These had caused at this point on the terrace a slight elevation which the "alien" people leveled to a certain extent. Since the remains of "Period I" below the outer defense wall of "Period II" themselves

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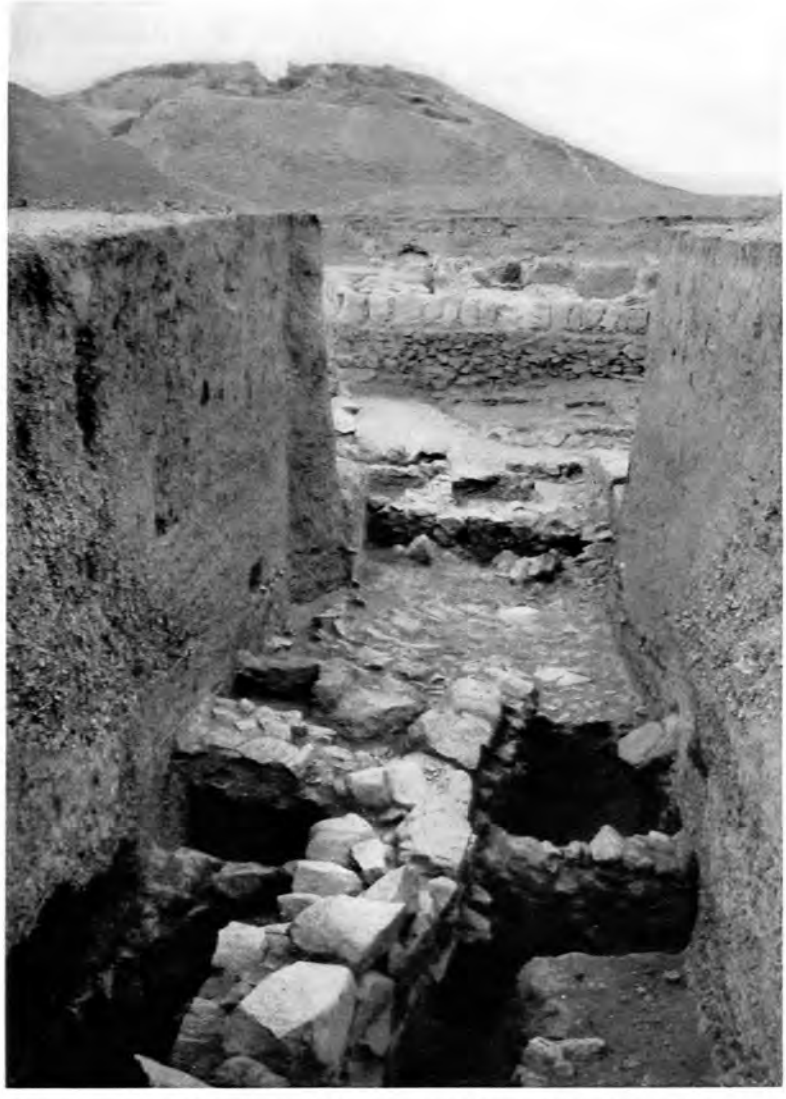

FIG. 38.—Part of the outer defense wall of the early Hittite building level, built above a Copper Age wall. In the middle distance, part of the Hittite mansion is seen; in the background, the citadel mound.

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belonged to a strong outer defense wall, it is evident that the settlement on the terrace, even at that time, was strongly fortified.

THE CITADEL

Dr. Kurt Bittel, who visited us before he went to take charge of the German excavations at Boğazköy, kindly offered to supervise the clearing of a part of the citadel wall where a gateway was suspected.

FIG. 39.—Part of the outer defense wall of the early Hittite level in Plot O 33, seen from northwest.

His experience and ability permitted him in a short time to free the gateway and to reconstruct to some extent the history of this part of the wall.

In M–O 14–15 a large stone heap showing several wall faces had been unearthed in 1928. Its clearance stone by stone with a small picked crew under constant supervision revealed after several weeks that four building levels were represented here. The earliest two (Fig. 40) belonged to the Early Bronze Age ("Period III"). The gateway had at first consisted simply of a paved opening flanked by two towers. After it was destroyed by fire, a new gateway was erected on its foun-

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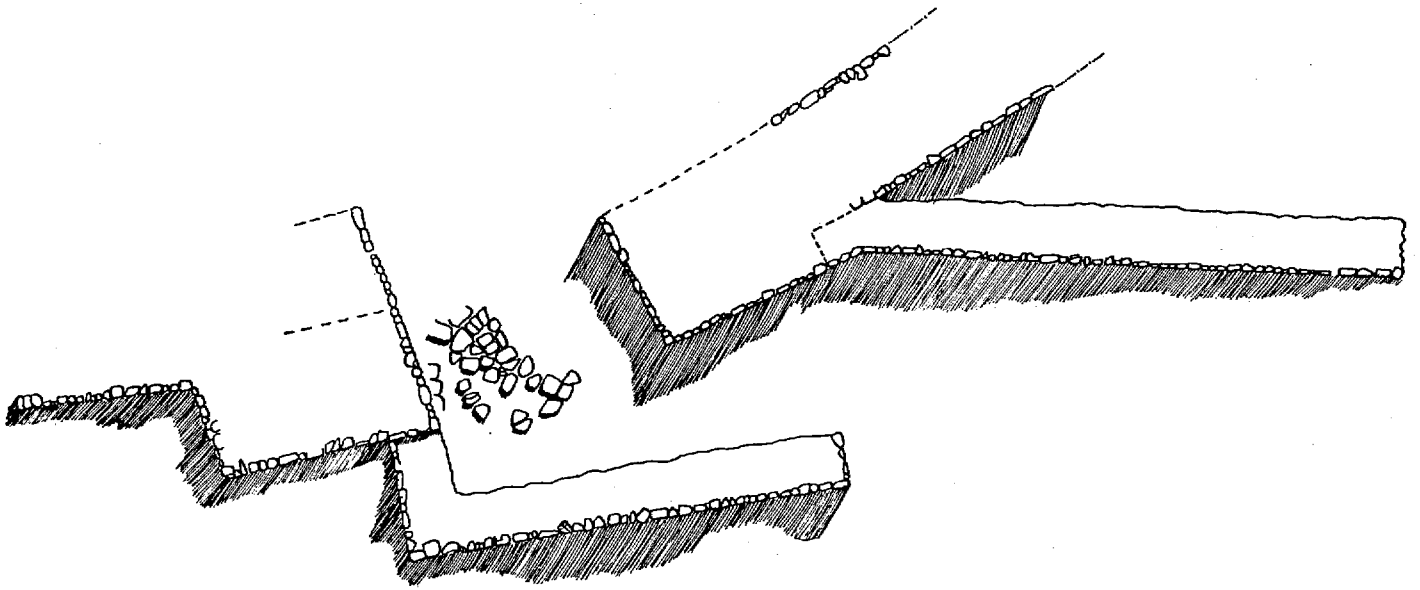

FIG. 40.—Plan of the Early Bronze Age and Hittite building levels at the southern gateway of the citadel. Scale, 1:250

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dations, with reinforcement of the inner side of the western tower. A ramp leading up to the gate was added (Fig. 41), and the level of the gateway itself was raised. At this new level handmade painted ware with a strong admixture of "alien" potsherds was found, corroborating our find of 1930 within the citadel.

The next building phase at the gateway (Fig. 42, above) belongs to the post-Hittite and Phrygian periods. After the destruction of the

FIG. 41.—The southern gateway of the citadel as it was during the second building period.

Hittite citadel (that is, the level where handmade painted pottery occurred intermingled with "Period II" sherds) the citadel was thoroughly reinforced and rebuilt by the Phrygians, probably in connection with the fortification of the western extensions of the citadel. Directly north of the gateway, perhaps where their fortification inclosing the lower fortress on Mounds B, C, and D abutted, they constructed another tower. Then the gateway was closed by a wall with an adjoining room. Finally, still later, two large towers were built above it (Fig. 42, below).

Little has yet been done on other parts of the citadel wall. A small section 5 meters wide was cut through the north side. The same build-

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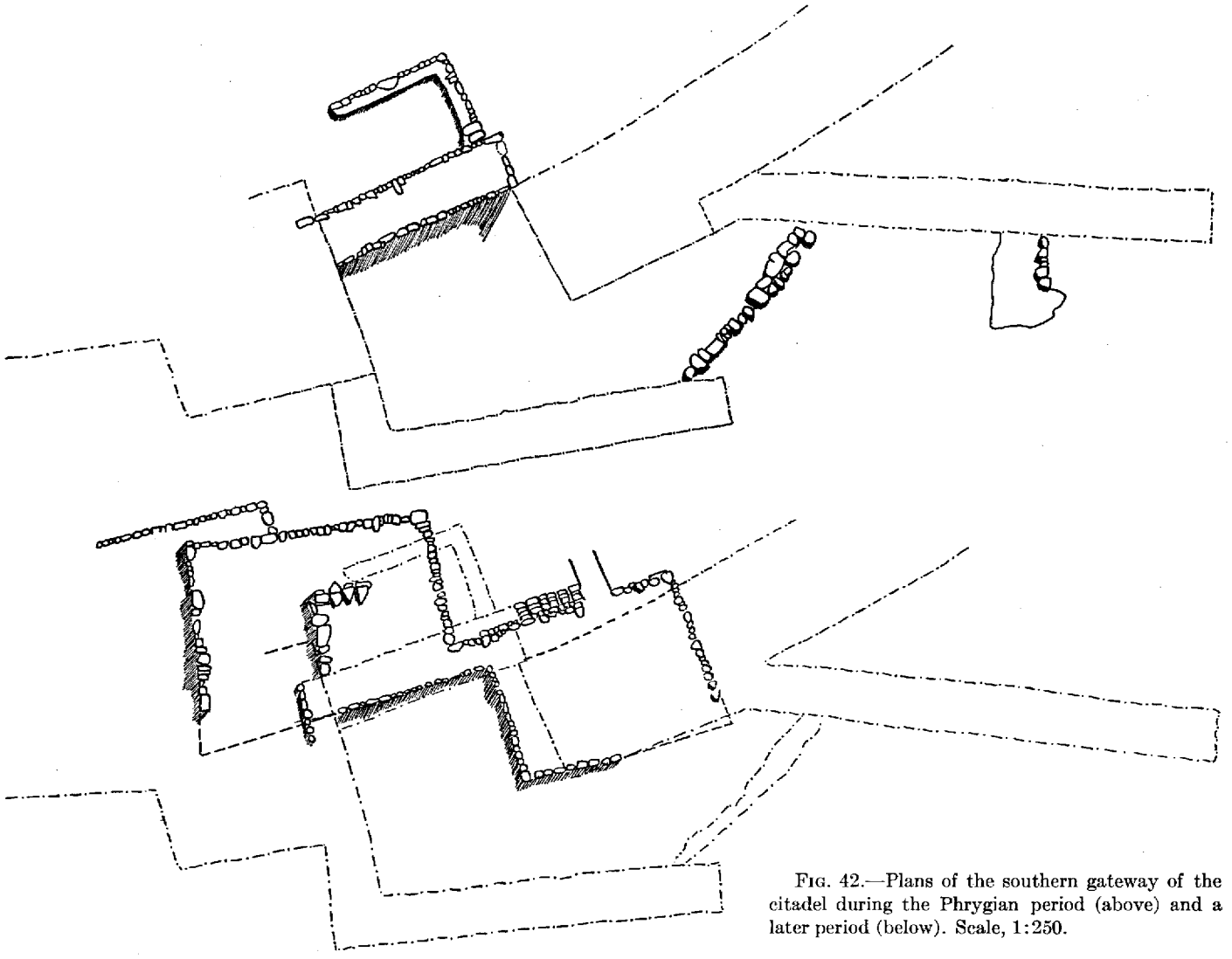

FIG. 42.—Plans of the southern gateway of the citadel during the Phrygian period (above) and a later period (below). Scale, 1:250.

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ing phases were recognized there as at the gate. Below them appeared part of an exceedingly strong fortification wall of "Period I."

THE "ALIENS"

We turn now to our third, most difficult, and also most important question: "Were the bearers of the 'alien' culture of 'Period II' Mesopotamian merchants who came to Cappadocia about the end of the third millennium B.C.?" Nearly everywhere on the site, except on Mound A, we have found more abundant traces of this culture than of any other except that of the Copper Age ("Period I"). On the citadel mound (Mound A) we have now found within the latest building level of the Early Bronze Age—formerly called "Period III" and ascribed to the "Early Hittites"—many sherds and small objects of "Period II." Although for some time contemporaneous, there can no longer be doubt that this "alien" period was in general later than "Period III." On the other hand, "Period III" shows definite cultural associations with the Copper Age ("Period I") both in its handmade pottery forms and in its burial customs (Figs. 43 and 44).

The similarity between the cuneiform tablets found at Alişar and those from the merchant colony at Kültepe dates our "alien" culture around 2000 B.C. Our observations of 1931 indicate, however, that the merchant colony was not contemporaneous with the whole of our "Period II," for the Alişar tablets, though all found in that stratum, occurred in its middle layer only.

The presence of our "Period II" culture at Boğazköy is evidenced both by sherds from there, now in the archeological seminar of the University of Berlin, and by the architectural remains. Our terrace gateway of 1930 (cf. p. 13) closely resembles the lower west gateway of Boğazköy. The German excavations of 1931 have proved that the main cultural deposit and fortifications on the citadel mound at Boğazköy belong to this period. Now the "Period II" fortifications at Alişar belong to the latest and earliest levels, not to the level where the cuneiform tablets were found. I am convinced, then, that the "aliens" of Alişar were not Mesopotamian merchants, but were rather the original Hittites themselves.[1]

[1] Cf. my statement in Schede, "Archäologische Funde: Türkei," *Archäologischer Anzeiger, Beiblatt zum Jahrbuch des Deutschen archäologischen Instituts*, 1930, cols. 467–71.

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FIG. 43.—An Early Bronze Age burial

FIG. 44.—A Copper Age burial

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We know that the Hittites were alien invaders who toward the end of the third millennium B.C. began their conquest of Anatolia, a process culminating in the capture of Ḫattushash (Boğazköy), which then became their capital. A little later Mesopotamian merchants began to establish factories in Cappadocia. Even if they had been backed by a strong military power in their homeland, they would hardly have been permitted to fortify their factories as the Alişar settlement on the terrace was fortified, and especially around the citadel of a seemingly independent prince, as the situation at Alişar would have been if we ascribe its "alien" culture to the Mesopotamian merchants.

Furthermore, if this "alien" culture in Alişar had been due to them, we should have found more Mesopotamian importations, and the "alien" pottery would show at least some relation to Mesopotamian forms, which it decidedly does not. Instead, this culture at Alişar appears to be quite independent. Its only imported elements appear in the cuneiform tablets, one cylinder seal of the 3d dynasty of Ur and another of the Hammurabi period, a few glazed sherds, and a fragmentary Ishtar figure. Otherwise the objects show a style which has always been called Hittite. Undoubtedly the merchants had a factory at Alişar. The Hittite inhabitants probably corresponded with them, using Assyrian scribes just as we know that the natives of Nuzi[1] did. But the cultural remains of this period belonged to the Hittites, not to the merchants, if Boğazköy is Ḫattushash, which I think no one now wishes to challenge.

The apparent absence of a building layer of "Period II" on the citadel mound at Alişar may be explained by considering first of all that in only three spots, none of them inside the citadel, have we reached a depth where we could expect this stratum. In these plots we have, as a matter of fact, regularly found large numbers of "Period II" potsherds. The ramp at the south gateway of the citadel (p. 42) may belong to this period. The fortress, when taken over by the Hittites, was not necessarily destroyed completely; its walls may have needed very little reconstruction or reinforcement.

The duration of this Hittite culture is still uncertain. Its beginning may be accepted as the end of the third millennium B.C. It surely

[1] In the Zagros Mountains east of the Tigris.

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continues until the end of the New Hittite Empire. I consider the New Hittite Empire in Anatolia a political more than a cultural phase. Its people probably constituted a ruling class which never really settled the land and had no special cultural peculiarities except the

FIG. 45.—Seals and impressions of seals found in the Hittite layers. Actual size

now sporadically appearing hieroglyphic writing, but only occupied strategically important points, including citadels dominating cities in which the real Hittites still lived, but now as subjects of the newcomers. Probably the last of the Hittites shared the fate of their rulers when the New Hittite Empire was destroyed.

HISTORICAL SUMMARY

The attribution of the other culture periods to historically known peoples was more or less certain in 1929. Now our work of 1930–31

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permits a more complete reconstruction of the history of the Alişar mound.

During the Neolithic period the shallow Pliocene valley, with a thin alluvial stratum in the middle through which the Alişar stream

FIG. 46.—Hittite rhytons. Scale, 1:2?

now flows and near the upper end of which the Alişar mound is situated, was either a swamp or a lake, as shown by the investigations of Dr. Bartsch in 1930. Toward one side of it, and surrounded entirely by it, was a Neolithic settlement of uncertain extent, perhaps like the similarly situated refuge fortresses of that time in Europe.

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FIG. 47.—Neck of a Hittite vase with reliefs, reconstructed from four fragments by Mr. P. M. J. Bardin. Scale, about 3:5.

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Next came several successive settlements of the Copper Age, primarily on the citadel mound, then, probably on account of the gradual drying-out of the lake or swamp, extending from it to what later became the city terrace as distinct from the citadel mound.

During the Early Bronze Age which followed, the citadel mound was strongly fortified. Those who settled around it were apparently

FIG. 48.—Hittite pottery. Pitchers, 1:10; bowl, 1:20

intermingled with Copper Age population. The second settlement of this period was conquered by the Hittites.

Here we reach a culture which, with the help of our cuneiform tablets, we have been able to date around the end of the third millennium B.C. The Alişar settlement now reached its climax. At least three building layers, with a total thickness averaging 3 meters, prove its long duration; and the quantities of fine small objects and pottery (Figs. 45–49) prove its relative prosperity and importance. Strong fortifications guarded it against enemy inroads. The Early Bronze Age fortress on the citadel was reinforced; and on the terrace a large build-

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ing, either palace or temple, was erected. During the middle of its career the settlement had relations with the Mesopotamian merchants and perhaps even possessed a factory of theirs within its walls.

After the overthrow of the New Hittite Empire, at which time both Alişar and Boğazköy (Ḫattushash) were probably destroyed,

FIG. 49.—Various Hittite objects. Scale, 2:3

the citadel was slightly restored. But the city had lost its importance. Only a village seems to have surrounded its mound. Most of the building activities of this time seem to have taken place in the southwest part of the terrace. For objects of the period see Figures 50 and 51.

The Phrygians then thoroughly rebuilt and reinforced the citadel, uniting with it the lower fortified town on Mounds B, C, and D. On the terrace itself we find again only a small, unimportant village. Objects of this period are shown in Figure 52.

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At least three more settlements, of no importance on either the terrace or the citadel mound, followed before the site was again intensively settled during late Roman and Byzantine times. Pottery fragments prove that the Gauls occupied the mound for a short time during the second or third of these episodes.

FIG. 50.—Post-Hittite seals, with impressions. Actual size

After the Byzantine settlement, the mound was not occupied again to any important extent. Seljuk coins and a few fragments of Rakka ware have been found. But the Seljuks never really dominated this part of the country, which had become the roaming ground of nomads who had accompanied or followed them from Turkestan.

A number of small farmhouses and a burial ground of the Osmanli

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c 1692

c 1694

FIG. 51.—Post-Hittite painted pottery

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period have been found on the terrace. The latest settlement in the vicinity was a small farm on the other side of the Alişar-Özü, Mansuroğlu, founded in 1847 by Mansur Bey from Sungur. In 1912 it was deserted and has now disintegrated completely.

FIG. 52.—Objects of the Phrygian period. Scale, 4:15

The importance of ancient Alişar was due to its situation on the south-north road connecting Sinope and Amisus with Kayseri and the Mediterranean. With the advent of the Seljuks this road lost its importance, and the Alişar mound (Fig. 53) became of archeological significance only.

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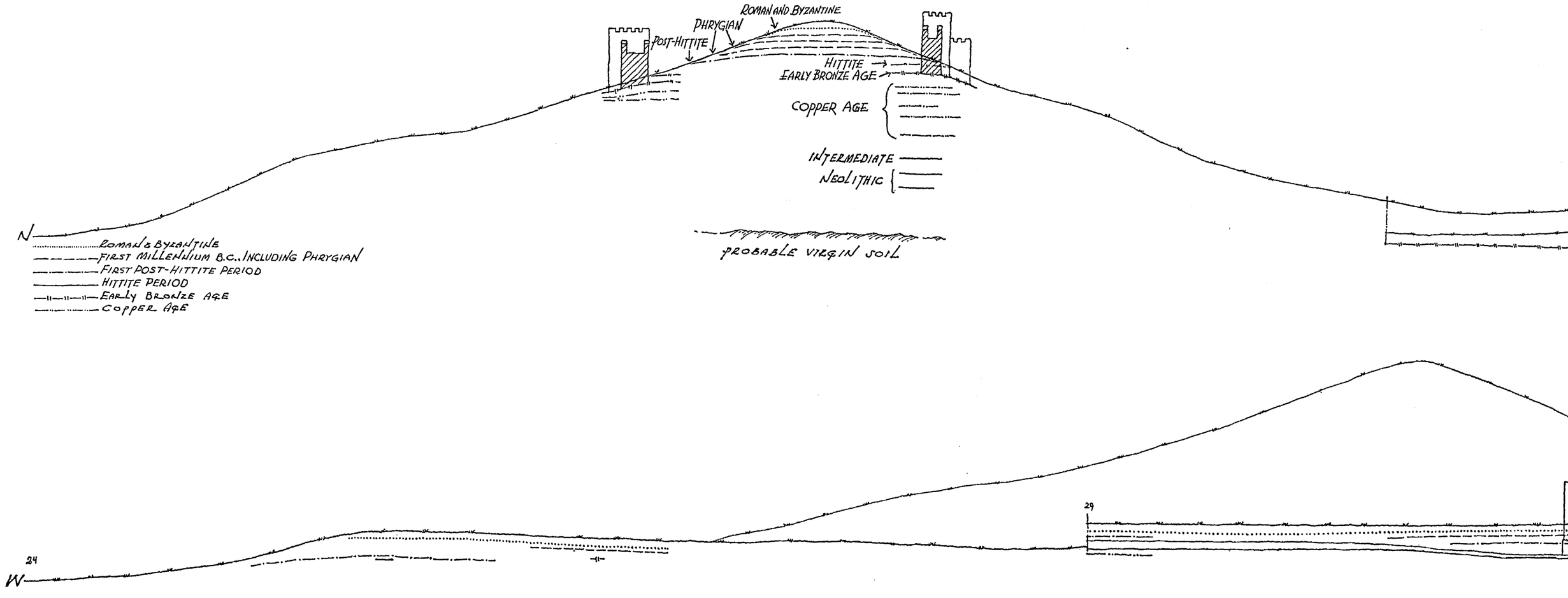

FIG. 53.—Sections showing distribution of settlements at the Alişar

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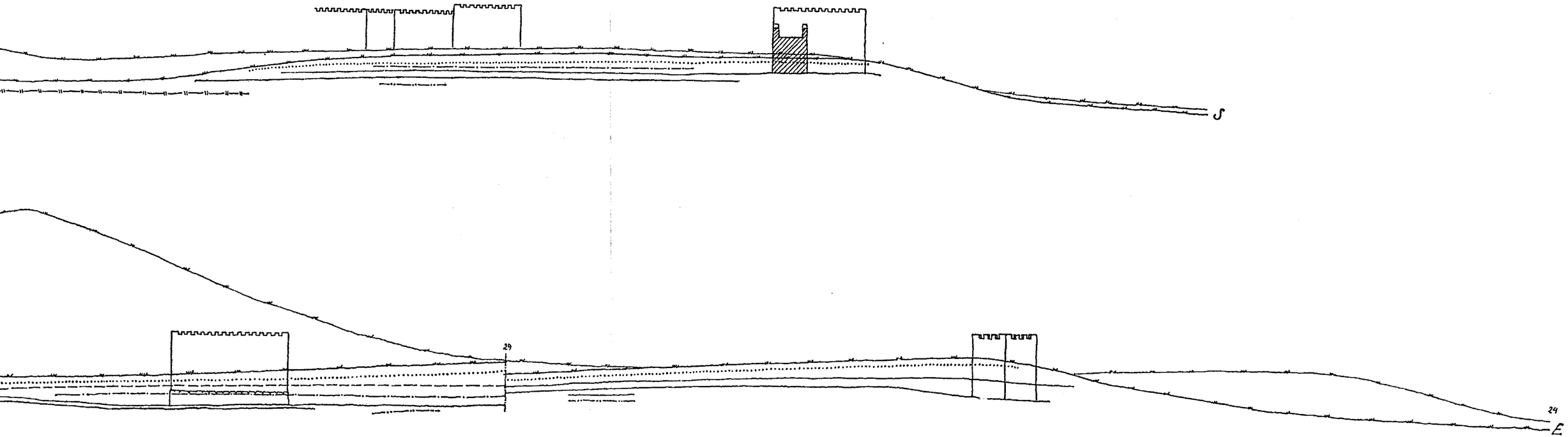

; distribution of settlements at the Alişar mound. Scale, 1:500

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DESIGNATIONS OF PERIODS

Approximate Date	1931 (*OIC* No. 14)	1929 (*OIC* No. 11)	1927 (*OIP* VI)
Before 3500 B.C.*	Neolithic		
Before 2400 B.C.†	Copper Age	I (Early Anatolians)	I
	Early Bronze Age	III ("Early Hittites")	Early III
2100–1200 B.C.	Hittite empires‡	II (aliens)	II
	First post-Hittite§	IV (Hittite Empire)	Middle III
1000–700 B.C.	Phrygian Medo-Persian‖	V (post-Empire: Phrygian–Medo-Persian)	Late III
	Hellenistic Galatian invasion Roman Byzantine	VI (Hellenistic, Roman, and Byzantine)	Hellenistic,†† Roman, and Byzantine
	Seljuk** Osmanli	VII (Seljuk and Osmanli)	Seljuk and Osmanli

* Cf. Danubian Neolithic (see our p. 26) and Assur Stratum H (W. Andrae, *Die archaischen Ischtar-Tempel in Assur* [Leipzig, 1922] pp. 5–7).

† Cf. Troy I.

‡ At the beginning contemporaneous for some time with the preceding culture, then for some time with Mesopotamian merchants in Cappadocia.

§ Using "Hittite" hieroglyphic writing.

‖ It has not been thought necessary to insert the dates of this and the following better known periods.

** No settlement.

†† See *OIP* VI 231–32.

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II

GÂVUR-KALESI

When I arrived in Ankara May 16, 1930, to make the final preparations and to procure the necessary official papers for our work in Anatolia, I was notified by Dr. Hilmi Malik Bey, of the American embassy, that the president of the Turkish Republic, Gazi Mustafa Kemal Paşa, had inquired several times during the winter and spring about the extensive projects of the Oriental Institute and particularly about its Anatolian Expedition. On May 17 I was informed by Hilmi Malik that the president wished to see me that evening.

Upon arriving at his villa, I was directed to the office of the Gazi's secretary-general, Tevfik Bey, who speaks several European languages fluently and with whom I was later to enjoy many delightful hours. Being deeply and sincerely interested in the history of the Turks and of Anatolia, he became a valuable helper and friend of the expedition. I felt great pleasure upon learning that he had been selected as head of the Historical Commission, a semi-official organization.

Tevfik Bey escorted me to the library, where the president with several deputies and scholars awaited me. Throughout my interview, and later at the dinner table, I was impressed by the utter modesty and simplicity of the president. There is no sign of the autocrat about Gazi Mustafa Kemal Paşa, but indomitable will and energy are given expression in his steel-blue eyes. The whole conversation took place in French, which the president speaks very easily. After a few introductory remarks about the work of our Institute, he gave us his theory of the origin and history of the Turanian races. As he talked, I was astonished at his vast knowledge of these very difficult subjects.

After two hours of interesting conversation we descended to the dining-room, where the greater part of the cabinet members and several deputies had assembled. The conversation became more general; and the president, smiling amiably, said he realized that the new government had not been very active in encouraging scientific research into the past of Anatolia. But, as he remarked, so many more important things had needed his attention that the time had only just

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arrived when he could devote himself to this very interesting phase of the education of his people. From our conversation I inferred that the president prefers the adoption of American, rather than European, methods.

I was impressed by the immense energy with which this man, assisted by relatively few helpers, is trying to accomplish an almost impossible task—the Westernization of an Eastern people. One of the Gazi's most difficult problems, the one to which he devotes the most attention, is that of trying to make his people understand that the government exists not to oppress but to protect them. In short, he is endeavoring to secure the co-operation of every Anatolian. One can readily imagine the difficulties of his work; for this reason, what has already been accomplished deserves the highest admiration. It is very easy for the outsider to criticize and belittle achievements. Many unfair judgments have been and will be passed on energetic measures resorted to by the government which in themselves seem to be brutal and tyrannical acts. However, one must not forget that Turkey is a part of the East and that great achievements are not reached without great sacrifices. In looking over the history of the Turkish Republic, which was established almost ten years ago, one can see how the rigid and severe measures first used in combatting opposition and revolt have slowly but surely given way to milder ones in proportion to the advancing education of the people. Another remarkable fact in the renovation of Anatolia by the Gazi is that he wishes not to take over American or European civilization as a whole but to adopt only what can reasonably be applied to the special needs and psychological attitudes of his people.

Foreigners who try to compare what has been accomplished in Anatolia by the new government with reforms which have taken place within other nations in Europe should bear in mind that the European dictators and reformers had something with which to work. Their people had been trained in scientifically conducted schools and were at least halfway educated; whereas the Anatolian, although of excellent lineage, had been systematically kept in ignorance for many years until Gazi Mustafa Kemal Paşa came into power. At that time the land was occupied for the greater part by enemies and infested with bandits. The people had been almost blotted out by a period

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of warfare which had lasted nearly thirty-five years, and those who were left were very tired. With few exceptions, Anatolia had for centuries been taken advantage of, notwithstanding the fact that the Anatolians were the ones who had bled in defending the vast Ottoman Empire. Wherever a Turkish army fought—in Tripoli, Arabia, Mesopotamia, or the Caucasus—Anatolian regiments were its backbone. With iron will and energy the Gazi is now at work to give these people a chance to do something for themselves. He wishes especially to give Anatolia peace and rest. The many political and racial complications arising from its geographical situation make this task exceedingly difficult. But I am convinced that if it is possible at all, he, with the help of his aids, will accomplish it.

The Gazi expressed a desire to see our expedition at work. Regretting that this year he could not come out to Alişar, which is 300 kilometers from Ankara, he asked whether we could possibly make a small test excavation in the neighborhood of Ankara, and suggested the site of Gâvur-Kalesi.[1] Our work in Alişar was scheduled to begin June 1. Mr. Martin, the assistant field director, having finished the purchase of supplies for the season, had reached İstanbul on the day of the Gazi's request. Messrs. Albert, Haines, and Neil were to arrive in Ankara May 25. Our chauffeurs and cook were there at the time. Messrs. Reifenmüller and Scharer had already gone to Alişar to supervise the construction of new barracks and to put the camp in order; but Reifenmüller's latest reports had informed me that work was being held up indefinitely by rain, which had made the roads almost impassable.

Considering the sincere interest of the Gazi and the great advisability of making at least a test excavation at Gâvur-Kalesi, I did not hesitate to comply with his wish. I summoned Martin, Reifenmüller, and fifteen chosen workmen. Mr. J. Aggiman, who had long been particularly interested in our work, kindly consented to lend us picks and shovels and took upon himself the hiring of additional workers for us. On May 19 a surveying party went to Gâvur-Kalesi to make a topographical plan of the site. By May 21 we had established a small camp (Fig. 54) and work had begun.

We had visitors from Ankara almost every day, most of them

[1] For location see Fig. 90.

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FIG. 54.—Our camp at Gâvur-Kalesi

FIG. 55.—The Gazi's visit at Gâvur-Kalesi

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Turkish officials or members of the diplomatic corps. On May 29 the Gazi himself with his suite spent two hours inspecting our progress (Fig. 55). The results of our ten days' work are tentatively described in the following pages. It should, of course, be understood that we are not yet able to make a final statement. However, even this short period proved to us the great importance of Gâvur-Kalesi, and it is hoped that we shall soon be able to do more extensive work there.

THE EXCAVATIONS

Gâvur-Kalesi, "the castle of the infidel" (Fig. 56), is about 60 kilometers south-southwest of Ankara in a deep valley with barren slopes from which whitish limestone bed rock protrudes at intervals (cf. Fig. 54). The elevation on which it stands is connected by a saddle with the mountain range on the north side of the valley (Fig. 57). It rises about 60 meters above the general valley level and forms a roughly triangular plateau. With the exception of the northern side, to which the saddle is attached, the slopes are very steep. From a knoll at the south end of the plateau protrudes a large limestone cliff which drops almost vertically 16 meters.

The famous explorer Georges Perrot and his companion Guillaume discovered the site during their explorations in Galatia and Cappadocia in 1861. Impressive cyclopic wall remains seemingly surrounded the knoll, and what were apparently vestiges of a fortification were discovered elsewhere on the plateau. The most interesting discovery, however, was the finding of two more than life-size figures carved upon the rock protruding from the eastern end of the steep southern slope. After the publication of this discovery[1] Gâvur-Kalesi became an important factor in the Hittite problem as well as in the general historical geography of Asia Minor. Until 1930 the site was thought to have been a strong fortress erected probably during the Hittite rule in Asia Minor. Perrot and Guillaume supposed these reliefs to rep-

[1] G. Perrot et E. Guillaume, "Ghiaour-Kalé-si, ses murailles cyclopéennes, ses bas-reliefs taillés dans le roc," *Revue archéologique* n.s. VI[2] (1865) 1–14 and Pl. XII; G. Perrot, E. Guillaume, et J. Delbet, *Exploration archéologique de la Galatie et de la Bithynie, d'une partie de la Mysie, de la Phrygie, de la Cappadoce et du Pont, exécutée en 1861 et publiée sous les auspices du Ministère de l'état* (Paris, 1872); G. Perrot et Ch. Chipiez, *Histoire de l'art dans l'antiquité* IV (Paris, 1887) 714–21.

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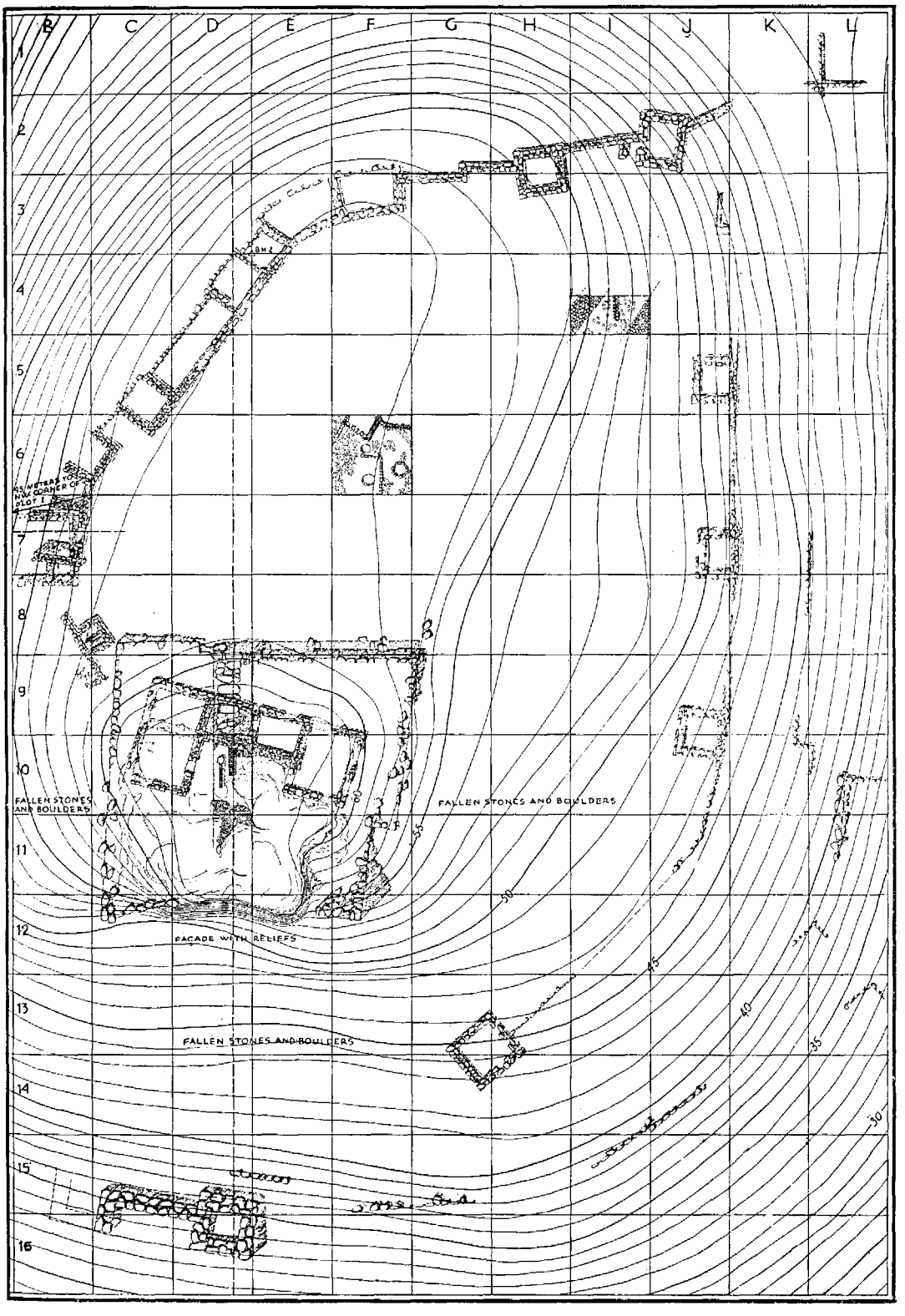

FIG. 56.—Plan of Gâvur-Kalesi. Scale, 1:800. Contour interval, 1 meter

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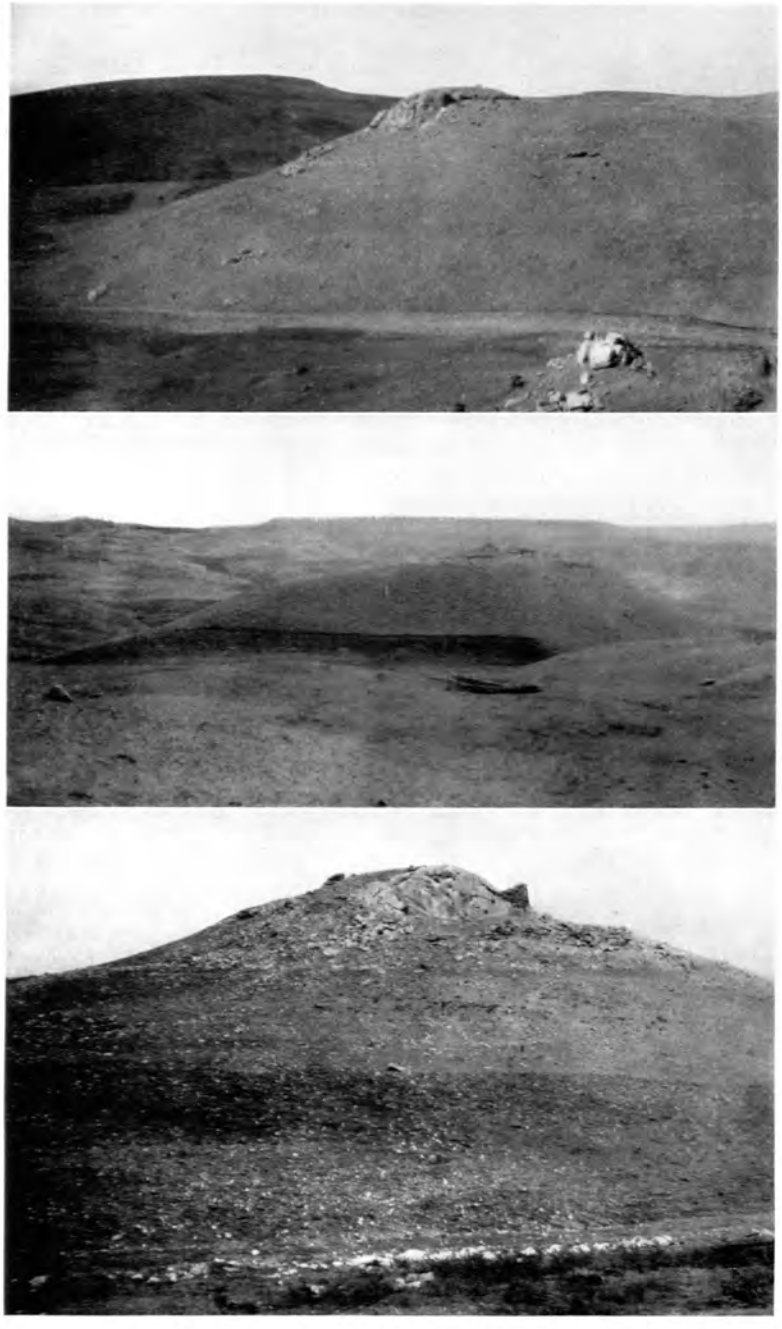

FIG. 57.—Gâvur-Kalesi from east, west, and south

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resent a Hittite king and his son, whereas Professors Garstang[1] and Meyer[2] have rightly preferred to regard these large figures as gods rather than kings.

The reliefs, as well as the architectural remains, are generally believed to date sometime before the middle of the second millennium B.C. The location of this Hittite[3] site west of the Kızıl-Irmak, the ancient Halys River, is very important, since, except for a single line of similar monuments reaching from the Kızıl-Irmak to Kara-Bel, almost at the coast of the Aegean,[4] we have so far found no such monuments in the western part of Anatolia. As a result, this site has played an important rôle in attempts to trace the Persian "royal" road, which most probably followed routes of much older highways. I shall not, however, at this time go into the details of this very interesting problem and the many questions arising from it.

In 1926, when the Anatolian Expedition of the Oriental Institute first visited Ankara, an excursion was made to this site. With Professor Paul Weigand and Dr. Emil Forrer we arrived there in the late afternoon. After a hard climb from the valley level up the steep slope covered with dry and slippery steppe grass, we reached the base of the natural rock façade. The setting sun brought into sharp relief in the very center of the façade the figure of a seated goddess[5] facing the two previously discovered carvings. This third figure, not observed by Perrot, had, as I heard three years later, been discovered but not published by Professor A. T. Olmstead during his travels in the Near East. The presence of the third figure led us to conclude that the carvings on the rock façade represent either two gods or a prince accompanied by a god approaching the seated mother-goddess of ancient Anatolia. Our time for examining these finds was very limited. A swiftly sketched plan of the remains showed nothing of special im-

[1] J. Garstang, *The Land of the Hittites* (London, 1910) pp. 163–64, and *The Hittite Empire* (London, 1929) pp. 145–47.

[2] Eduard Meyer, *Reich und Kultur der Chetiter* (Berlin, 1914) p. 74, and *Geschichte des Altertums*, Bd. II, 1. Abt. (2 Aufl., Stuttgart, 1928) pp. 528 and 544.

[3] This designation seems justified by the costumes and style of the rock-cut figures.

[4] See Fig. 90.

[5] *OIP* V 142 and Pl. XXIV and Forrer in *Mitteilungen der Deutschen Orient-Gesellschaft*, No. 65 (1927) p. 38 and Fig. 22.

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portance when compared later with that made by Perrot. It was definitely recognized, however, that a city had at one time surrounded this acropolis. In spite of the evident differences in construction and material between the wall remains which seemingly surrounded the rocky knoll and the remains upon the plateau, we did not then suppose that they were of different periods. Since 1926 the site had been visited several times by members of the expedition, and its uncovering had become more and more desirable.

Our test excavation undertaken in 1930 proved that the remains of the huge cyclopic walls which have so far been unearthed belonged definitely to the oldest cultural period at Gâvur-Kalesi and that the huge rock carvings on the southern façade belonged almost certainly to the same period. These carvings, together with the walls, probably formed an imposing center of worship with a processional road leading up to it. Vestiges of two later periods were found, to the second of which belonged the fortifications surrounding the plateau; these, according to the pottery finds, we are able to call Phrygian. A few Roman sherds scattered over the surface of the plateau make possible the theory that a small garrison was situated on the plateau during the Roman period. This would be not at all astonishing, since Gâvur-Kalesi dominated far to east and west an important road which passed through the valley.

The Earliest Period

The large limestone cliff at the south end of the plateau with its nearly vertical drop of 16 meters forms a slightly concave façade (Fig. 58) 24 meters long. In the middle of the façade, 4 meters above the original surface, appears a flat rock-carving, 2.35 high and 1.05 wide, of a seated goddess (Fig. 59) facing east and wearing a high conical headdress. The surface of the relatively soft whitish limestone is so disintegrated and cracked from exposure that no other details are recognizable. The goddess faces two large figures (Fig. 60), 3.50–3.70 high, who appear to be approaching her. These are the figures of kings or gods which were first discovered by Perrot. The clothing of each consists of a pointed cap, a tunic, a broad belt to which a long sword is attached, a short skirt, and shoes with upturned toes. The bottom of the cap of the second figure shows an element which has been inter-

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preted as either an Egyptian uraeus or a poor representation of horns similar to those attached to the headdresses of Mesopotamian deities. This figure is bearded. The legs of both figures were covered halfway up with earth. When the earth was cleared away, an artificial offset was revealed on which the two carved figures appear to be walking. Sixty centimeters deeper the rock was found to be roughly leveled off

FIG. 58.—The cliff façade with the three rock-carved figures

at what must have been the original surface, as a large boulder which had evidently fallen out of the cyclopic wall was resting upon it (Fig. 61). West of the seated goddess the face of the cliff has been smoothed over an area of 6.00×4.20, below which appears another offset, about 2 meters above the original surface (Fig. 62).

East of the façade the remains of a corner of the huge wall which once surrounded the knoll are preserved to a height of 4 meters (cf. Figs. 58 and 63). The corner is constructed of large, roughly shaped volcanic boulders, some of them niched so as to fit into one another with-

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FIG. 59.—The seated goddess

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out the use of mortar. Since there is no outcrop of basalt in the neighborhood, these boulders must have been brought from a quarry some 15 kilometers away—a not inconsiderable achievement in this rough

FIG. 60.—The two male figures approaching the goddess. The fallen boulder in the foreground enabled us to determine the original surface.

country in view of the size of the boulders. The wall seems originally to have extended westward to the corner of the cliff. At that point, however, the wall has evidently been washed away, and huge quantities of earth from above have been washed down through the gap. Northward from the same corner the fairly well preserved wall runs straight for 12 meters. Though its foundation is buried under masses

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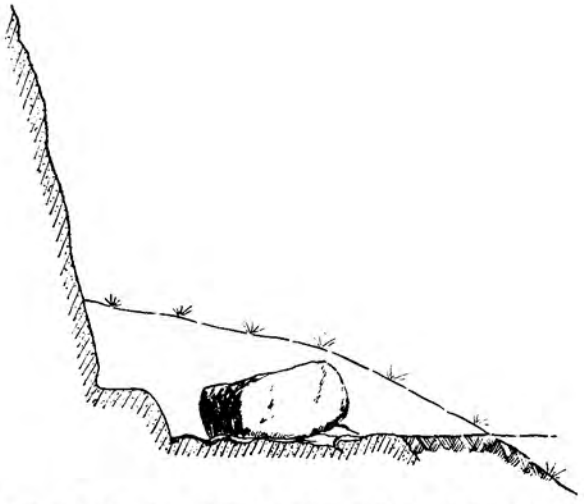

FIG. 61.—Sketch showing original surface in front of the male figures. Scale, 1:100.

FIG. 62.—The smoothed area west of the seated goddess

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of earth and dislodged boulders, we were able to clear it far enough to verify right-angled turns to the east and (after 3 meters) back to the north already noticed by Perrot (Fig. 63). The wall then continues for 20 meters to what appears to be the northeastern corner of the knoll inclosure. This part of the wall was very poorly preserved, and tracing its course among the loose boulders and stones was slow work.

The west end of the southern rock façade does not descend as steeply as its east end, but slopes gradually. On top of it a few cyclopic blocks still lie *in situ;* the niches cut into it are probably the places

FIG. 63.—Clearing the jog in the east wall of the knoll inclosure

where other boulders fitted (cf. Fig. 69). It was very hard to locate definitely the corner here among the mass of fallen boulders which covered the steep slopes. However, the industry of our workmen permitted us soon to trace the whole length of the west wall and to determine its thickness as about 2.50–3 meters. Its cross-section (Fig. 64) showed two rows of large boulders, occasionally interlocked, with intervening spaces filled with smaller stones. After 35 meters we reached the well preserved northwest corner (Fig. 65).

The north wall, extending eastward from this corner, was by far the most difficult to determine, as only a few half-buried boulders were visible. Yet here we made the most interesting discovery. About 10 meters from the northwest corner begins a rectangular recess 1.50 deep and 8 meters long (Fig. 66). In the face of this recess we un-

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FIG. 64.—Mr. Aggiman at the cross-section of the west wall

FIG. 65.—The northwest corner of the knoll inclosure wall

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covered a small doorway (Fig. 67) constructed by placing two large stone slabs upright on a large stone sill (2.50×1.70×.75). The shorter

FIG. 66.—The knoll as seen from the north before the inclosure wall was cleared, but with the doorway already unearthed.

FIG. 67.—The doorway in the recess of the north wall

of the two had been supplemented by adding a smaller stone before the lintel was set in place. Both the lintel and the two door jambs show evidences of a door which had closed the opening from the in-

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side. A little east of the doorway the wall apparently recedes .50 further (Fig. 68). This part of the wall, though constructed of large

FIG. 68.—North wall east of doorway (seen at right). Notice Phrygian palace wall above the anteroom.

FIG. 69.—Boulder showing niche cut to fit an adjoining boulder now lost

boulders, has a rough and unfinished outer surface, and the stones are very carelessly placed. Various indentations and angular incisions in

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their outer faces (cf. Fig. 69) can be explained only by supposing that the remains still standing were but the inner face of a thick wall the original front of which was artificially smoothed here as elsewhere.

In clearing this portion we encountered before it a large number of fallen boulders, some with smoothed surfaces. If 2.00–2.50 meters were added to restore the outer face of the east section of the north wall, that part would then be in line with its preserved western portion. In view of the thickness we had found for the west wall (p. 69), such a reconstruction of the north wall seems justified. The actual northeast corner of the inclosure must then have been 2 meters farther north than the apparent corner, where the stones are, indeed, not definitely corner stones.

The small doorway in the recess leads into an anteroom (Figs. 70–72) which has a corbeled roof 1.50 above the doorway. An interesting feature of the doorway is its location at the east end instead of the center of the front wall of the room. The floor, with the exception of the large stone sill, consists of protruding, roughly leveled bed rock, the cracks of which are filled with tamped earth. In the wall opposite the doorway is a narrower opening, from which at right angles an open stairway evidently led upward to the surface of the knoll (at the same level as the tops of the roof blocks).

The surface of the knoll bears many later wall remains, constructed for the most part of whitish limestone. The exposed bed rock has been roughly leveled and its many deep cracks filled with stones and tamped earth. Where we were able to dig, we found that except for the anteroom the space between the cyclopic wall and the knoll had been filled with tamped earth to form a platform. Cultural remains were found in only the upper, later level of this filling.

For some time we were unable to find a satisfactory explanation of the knoll inclosure. From its shape and the presence of only one very small doorway we were sure that it had not been a fortification. If the anteroom had been part of the donjon of a fortress, other building remains and small objects of the same period would have been found within the inclosure. Hence it may best be explained as a cult place. We came upon the strongest argument for this conclusion while making a cross-section of the site. In our survey we found that the seated goddess carved on the southern cliff was directly opposite the

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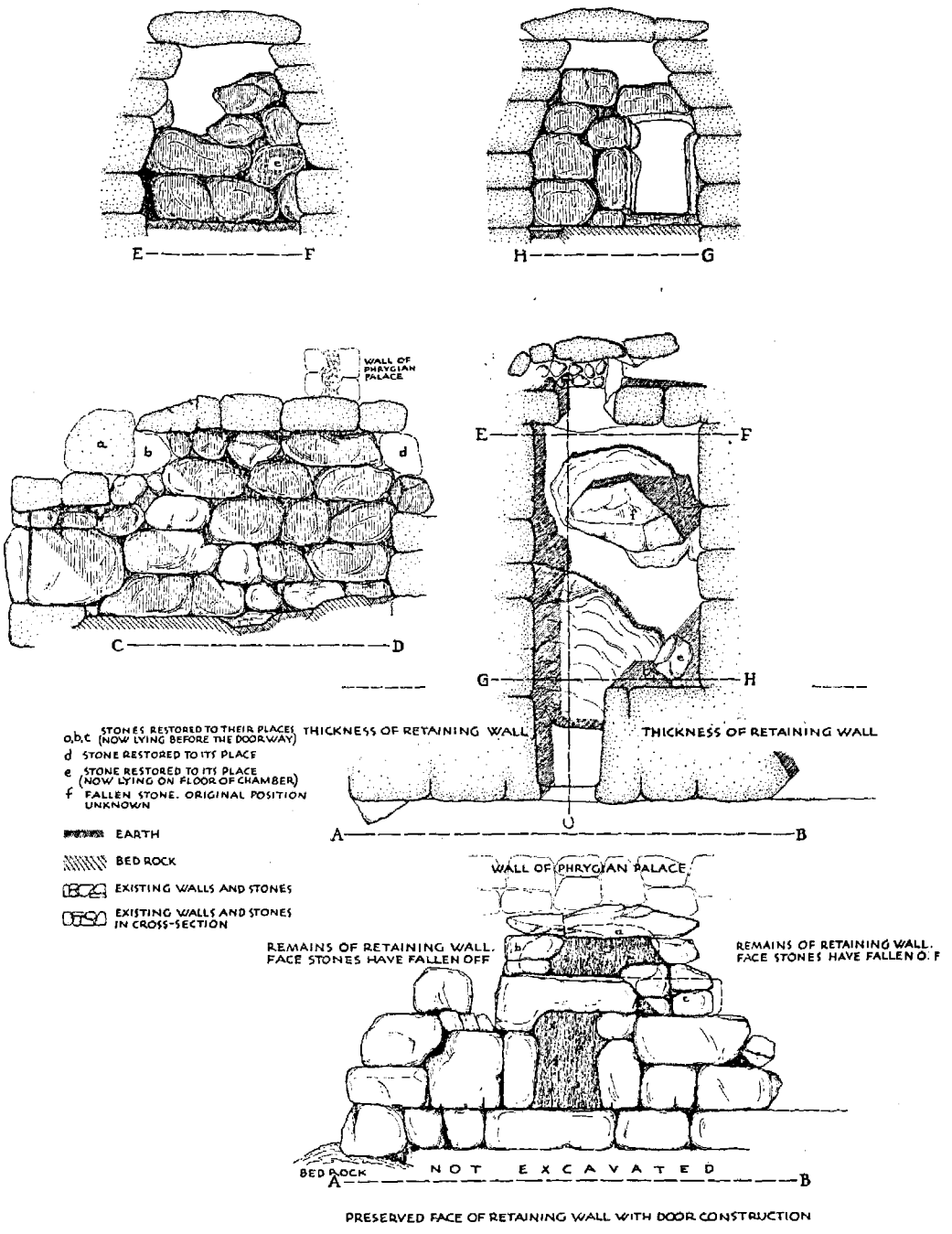

FIG. 70.—Plan and sections of the doorway in the recess. Scale, 1:125

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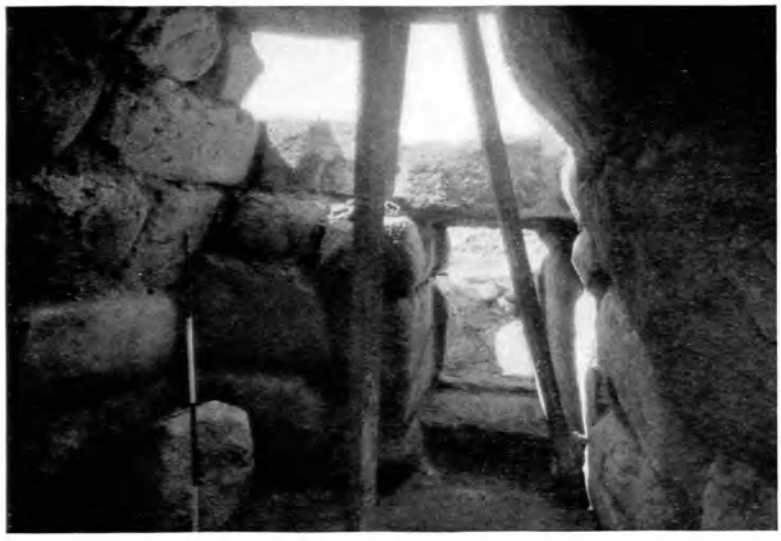

FIG. 71.—Anteroom and doorway, looking north

FIG. 72.—Anteroom, looking south

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doorway and that above her at the top of the cliff was a seat of roughly hewn rock (Fig. 73).

The most important part of this cult place was most probably the figure of the seated goddess. The whole construction seems to have

FIG. 73.—The seat above the goddess

FIG. 74.—Retaining wall of the lower ramp

been designed with the situation of the relief in mind. The ancient architect undoubtedly wanted to surround the knoll by a wall which would be high enough to make entrance to the platform impossible except by a single doorway. The jog on the east was apparently due to the desire to avoid unnecessary cutting or filling.

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Traces of other structures of this earliest period were found on the south and east slopes of the elevation. At first sight we thought them to be remains of an outer defense wall; but, after we had decided that the knoll was not then fortified, another solution was sought.

The best preserved structure (Fig. 74), located down the slope directly south of the cliff, consists of one towerlike unit, preserved at its south front to a height of 4 meters, and a wall extending 12 meters to the west, then 3.50 to the south. The abundance of fallen boulders found here suggests that the north-south part of the wall belonged to a second tower identical with the one on the east.

The slope on this side of the mound is very steep. In fact, the feet of the seated goddess are 9 meters above the top of the north wall of the east tower. The space between the cliff and the structure is filled with boulders and earth.

I felt from the beginning that a fortification as strong as this would scarcely have been built at this point. Then the idea occurred to me that this structure too was a retaining wall, in this case for a terrace before the cliff façade. We unfortunately lacked time and means to clear much of the intervening space. Meantime Figures 75 and 76 illustrate what I believe the remains might have demonstrated to be the original form of the construction. Similar wall remains appear on the east slope (Fig. 77). I would tentatively suggest that in these fragments we have again the remains of retaining walls and perhaps of a monumental entrance gateway, this time for a processional road which probably led up to the terrace (cf. Fig. 76).

All these basalt structures seem to be of Hittite origin, since they are definitely connected with the Hittite reliefs on the cliff face. Their date may be somewhere around 1700–1600 B.C. As to the possible ancient name of Gâvur-Kalesi, still less can be said. Perhaps it is one of the famous Arinnas for which many scholars have sought in vain. Or it might be Kushshar, though I am now inclined to look for the latter farther eastward.

THE SECOND PERIOD

At the west side of the plateau, where we dug beneath the foundations of the latest settlement, we found scanty remains of what seems to have been a tower of a fortification (Fig. 78). Its building technique

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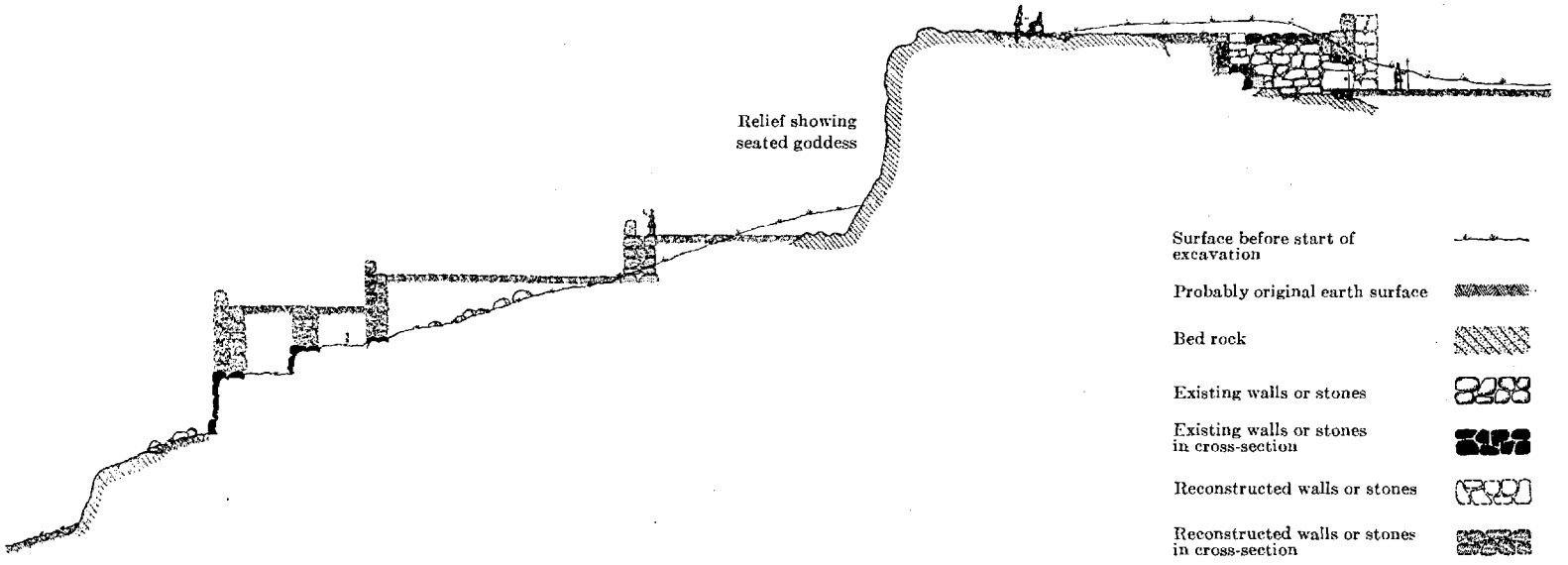

FIG. 75.—South-north section through knoll on center of doorway, showing tentative reconstruction of terrace and temple. Scale, 1:500

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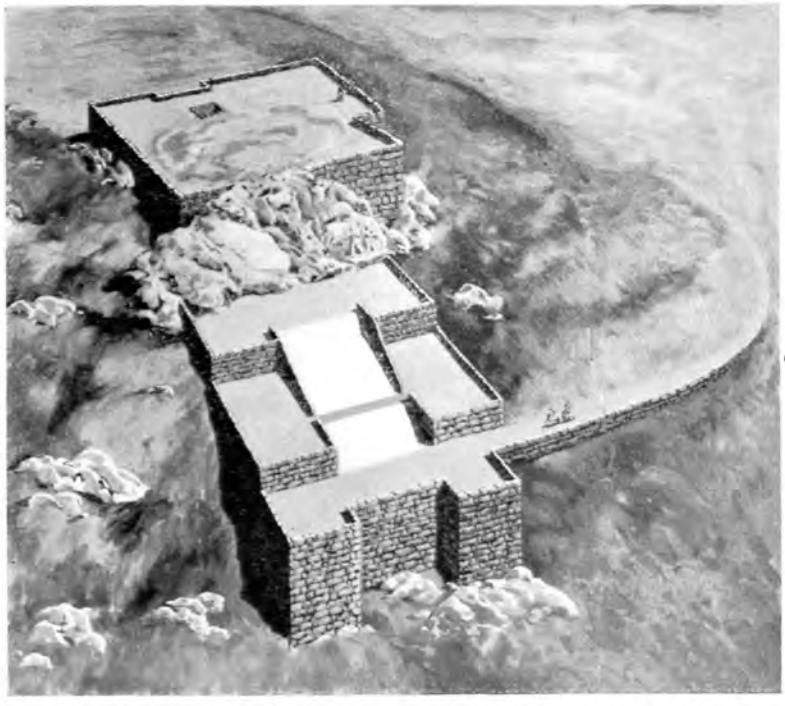

FIG. 76.—Tentative reconstruction of Gâvur-Kalesi, from southwest

FIG. 77.—Part of the retaining wall of the procession road

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differs from those of both the earliest and the latest periods. The fragments unearthed were parts of a foundation wall built with large stones on the outside and filled in with smaller stones. The actual wall above the foundation is constructed of flat limestone slabs. We were unable to find evidence as to date.

FIG. 78.—Part of a fortification of the second period

THE THIRD PERIOD

In the last important settlement at this site we found small objects and pottery similar to types best known from Gordium and commonly called "Phrygian." Time did not permit us to follow the limestone fortification of this period (Fig. 79) all around the plateau, but we unearthed enough to give us some idea of its course. In most instances large stones were used. On the west, where the slope of the plateau is steepest, the defense is formed by casemates. On the north are suggestions of an entrance gateway. The whole arrangement reminds me of Tiryns. On the east side towers alternate with walls. It seems very probable that here two defense walls were constructed, one in front of the other. Of fortifications on the south and southwest we found no evidences; but possibly remains of the ancient retaining walls were re-used for that purpose, just as the palace of this period was built upon the ancient platform.

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FIG. 79.—Part of the Phrygian fortification

FIG. 80.—Foundation of the Phrygian palace

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In orientation, construction technique, and material this palace is clearly distinguished from the earliest structures. In only two places have basalt boulders been re-used in its foundation (Fig. 80). The palace rooms (cf. Fig. 56) are arranged around three sides of a courtyard. Two small rooms in the middle are connected by a doorway.

All of the remains excavated in the three test plots on and near the plateau belong to this latest period. They consist for the most part of walls, stones, and a few refuse pits. In Plot F 6 we found a well constructed doorway built of tufalike stone cut into rectangular blocks.

CATALOGUE OF THE CHIEF OBJECTS FOUND

By Richard A. Martin

Unfortunately the paucity of potsherds, pots, and small objects of a datable character leaves much to be desired, particularly as the cultural deposit in the excavated trenches was quite shallow. No stratigraphic determination could be made, as the trenches yielded similar sherds throughout their depths. With the exception of a few Roman sherds scattered about the surface, the pottery may be classified as Alişar V[1] (Figs. 81–82). Three sherds (Nos. GK 1:1, 1:8, and 10:1) are of the early Alişar V period, the remainder being middle Alişar V. This is a medium buff ware, wheelmade, grit-tempered, with a fine buff slip, and usually decorated by horizontal banding in brownish red. We have found this type of pottery not only at Alişar but also at the city on Kerkenes-Dağı,[2] and it occurs at Boğazköy[3] and Gordium.[4] As in most excavations, a large quantity of characterless sherds was found.

Of the small objects, only a few are distinctive enough to be definitely associated with the Alişar periods. The pottery whorls, which, next to sherds, are our best chronological evidence at Alişar, are all of the Alişar V period, with the strange exception of four (GK 25, 6, 7, and 16 in Fig. 83) which are Alişar III, yet occurred here without any pottery of that period.[5] The bronze arrowhead GK 17 is typically Phryg-

[1] [Mr. Martin's period designations are based on the usage of *OIC* No. 11. Cf. table on our p. 55.—Editor.]

[2] E. F. Schmidt in *American Journal of Semitic Languages* XLV (1928/29) 265–67.

[3] From personal observation.

[4] G. and A. Körte, *Gordion*.

[5] Similar whorls, but again, so far as is yet known, without Alişar III types of pottery, are frequent at Troy. New excavations by Mr. Carl W. Blegen in 1932 will, let us hope, establish definitely the pottery sequence there.

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ian (Alişar V), as are the two bronze needles GK 2 and GK 23, the fusiform bronze drill GK 24, and the stone whorl GK 11 (Figs. 83 and 84). One fayence ring-bead (GK 1) occurred in Plot D 9; it is .004 high and .006 in diameter.

POTTERY

BOWL (FIG. 81) AND SHERDS (FIG. 82)

GK 29 from Plot F 6. Fragmentary bowl, originally with foot, wheelmade, grit-tempered, moderately fired, paste medium with buff core, highly polished buff (YR–Y 7/4–6[1]) slip, no decoration. Found in Pit 1 with fragments of many small bowls of coarser texture, all wet-smoothed. Alişar V.

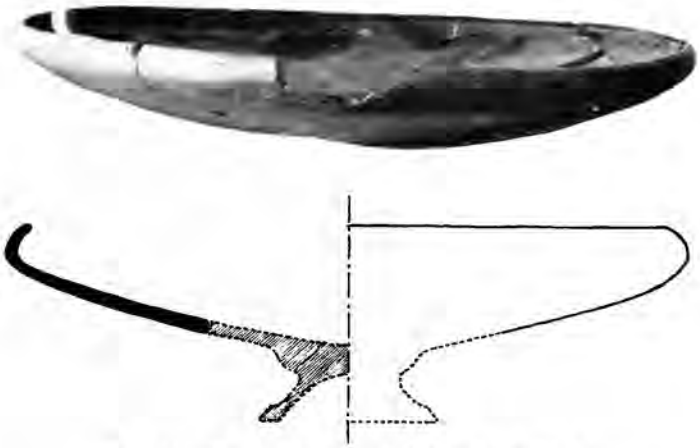

FIG. 81.—Bowl, originally with foot. Scale, 1:4

GK 1:8 from Plot D 9. Buff ware with YR 6/6 slip, concentric rings and crosshatching slightly darker and nearly obliterated. Early Alişar V.

GK 1:1 from Plot D 9. Buff ware with YR 7/4 slip, parallel bands and animal design in 7YR 3/4. Rungs in the ladder element are R 3/8, with two 7YR 3/4 bands on the inside. Early Alişar V.

GK 10:1 from Plot F 6. Buff ware with 9YR 8/4 slip; bands, dots, and crosshatching in YR 2/2, with YR 5/6 and R–YR 4/6 fill between narrow bands. Early Alişar V.

GK 1:32 from Plot D 9. Buff ware with 2YR 6/6 slip; on each side of the sherd narrow parallel bands bordered by broader ones in YR 2/2. Middle Alişar V.

[1] The hue, value, and chroma of all color descriptions of pottery of the Anatolian Expedition are based on the *Munsell Book of Color* (Baltimore, Maryland: Munsell Color Co., 1929).

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GK 10:3 from Plot F 6. Buff ware with 8YR 7/4 slip, parallel bands and scallop in R–YR 4/4. Middle Alişar V.

GK 1:10 from Plot D 9. Buff ware with YR–Y 7/4 slip, two narrow parallel bands of YR 6/2 inclosing a broader band in R 3/4. Middle Alişar V.

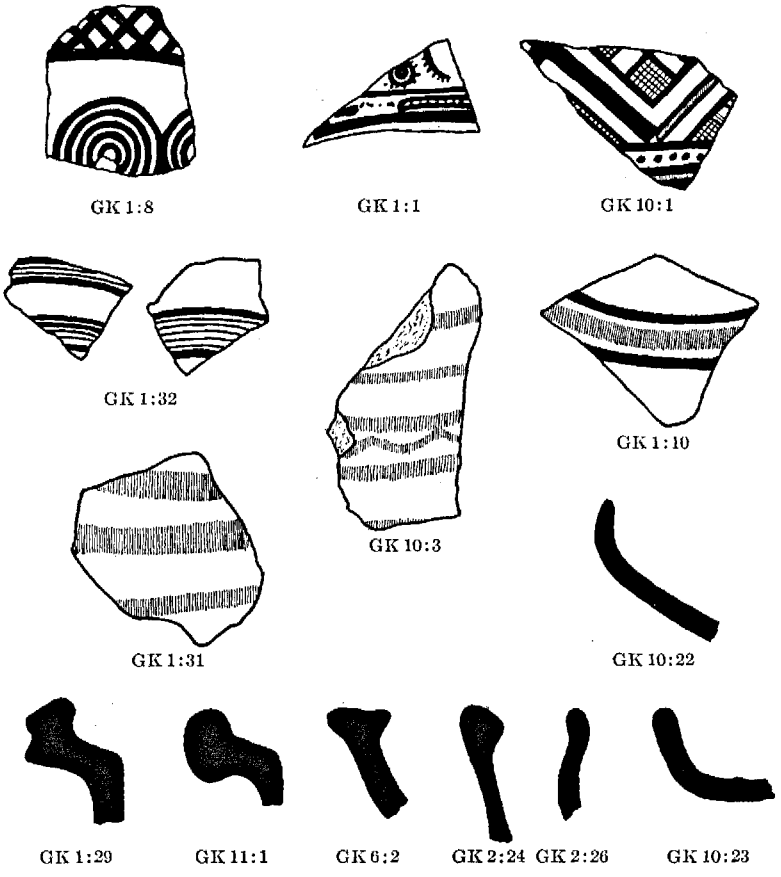

FIG. 82.—Gâvur-Kalesi potsherds: designs and rim sections. Scale, 1:2

GK 1:31 from Plot D 9. Buff ware with 8YR–Y 7/4 slip, parallel bands in R–YR 4/6. Middle Alişar V.

GK 1:17 from Plot D 9. Buff ware with YR 7/6 slip, design in R–YR 4/4. Middle Alişar V.

Although numerous decorated sherds were catalogued and drawn, those described above will suffice to illustrate the most frequently oc-

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curring types of middle Alişar V and the only sherds distinctive enough to be classified as early Alişar V. The rim fragments found show a preponderance of the simple rounded, slightly bulging or nar-

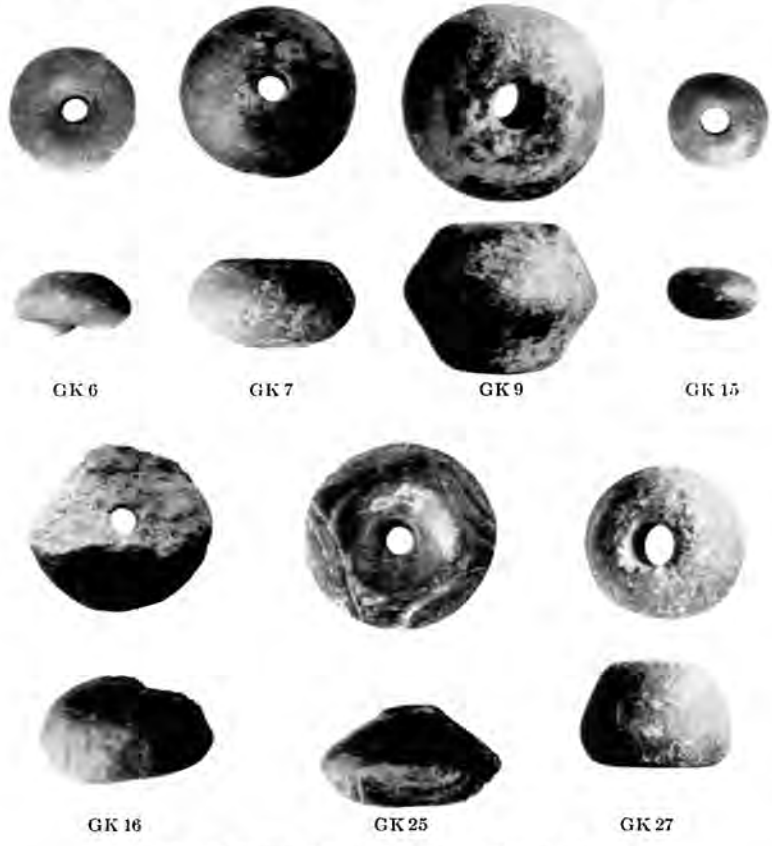

FIG. 83.—Pottery whorls from Gâvur-Kalesi. Scale, 2:3

rowed edge, though a small number of the more complex carinated and modified step rims occurred. Most of the rim pieces were from the buff wet-smoothed ware.

WHORLS (FIG. 83)

GK 6 from Plot D 9. Buff, medium paste, angular incisions on base; hemispheroid.

GK 9 from Plot B 7. Gray, coarse paste; truncated biconoid.

GK 15 from Plot E 8. Buff burnished, fine paste; flat, truncated biconoid.

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GK 25 from Plot D 8. Buff burnished, blackened by fire, medium paste, concentric semicircles incised on lower rim; truncated biconoid, maximum diameter below center of perpendicular axis, base area about aperture concave.

GK 27 from Plot B 7. Buff, medium paste; truncated, vaguely biconoid, maximum diameter below center of perpendicular axis.

GK 26 GK 20

FIG. 84.—Pottery weights(?) from Gâvur-Kalesi. Scale, 2:5

WEIGHTS? (FIG. 84)

GK 20 from Plot F 6. Weight or large whorl. Slightly conical, truncated; coarse gray ware containing coarse grit.

GK 26 from Plot D 9. Roughly rectangular, though perhaps a portion of a large pyramidal weight; coarse gray ware with medium grit.

BRONZE (FIG. 85)

GK 17 from Plot C 8. Socketed arrowhead with tubular shaft and one barb or spur.

GK 24 from Plot F 6. Point or drill, fusiform, both ends with square points.

GK 19 from Plot B 7. Ring with overlap.

GK 13 from Plot C 8. Ring with square joint, open.

GK 23 from Plot F 6. Pin with plano-convex head.

GK 2 from Plot D 8. Fragmentary needle with eye formed by bending the flattened end back against the stem; point lost.

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GK 38 from Plot B 7. Fragmentary object with a ring head(?) suggesting a pin. Three incised rings encircle an expansion below. Lower end is rectangular (cross-section, .002×.003), with a trough which may be remains of a perforation.

GK 43 from Plot D 8. Fragmentary rectangular object with conical head. Three hollow triangular protuberances, each facing in a different direction, form sockets fitted with tie pins at their outer corners. Head of scalebeam for three different weight systems. Roman or Byzantine.

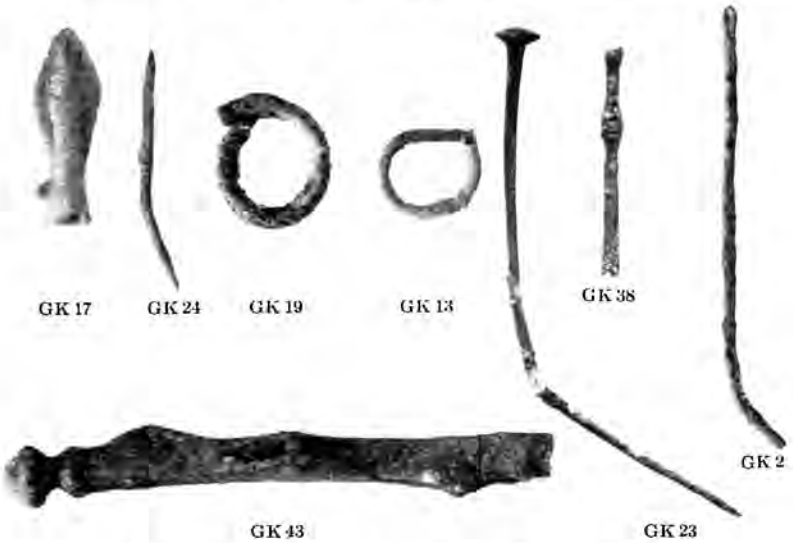

FIG. 85.—Bronze objects from Gâvur-Kalesi. Scale, 2:3

IRON (FIG. 86)

GK 3 from Plot D 9. Fragmentary point, lanceolate, with rounded haft.
GK 8 from Plot D 9. Fragmentary blade with one cutting edge.
GK 31 from Plot D 9. Blade fragments.
GK 32 from Plot D 8. Blade fragments.
GK 41 from Plot D 8. Fragmentary blade with one cutting edge.
GK 34 from Plot I. Fragmentary drill, fusiform.
GK 35 from Plot F 6. Complete drill, fusiform, set in bone handle.
GK 45 from Plot D 8. Nail with discoid head.
GK 14 from Plot C 8. Finger ring with beveled joint.
GK 39 from Plot I. Ring with beveled joint.

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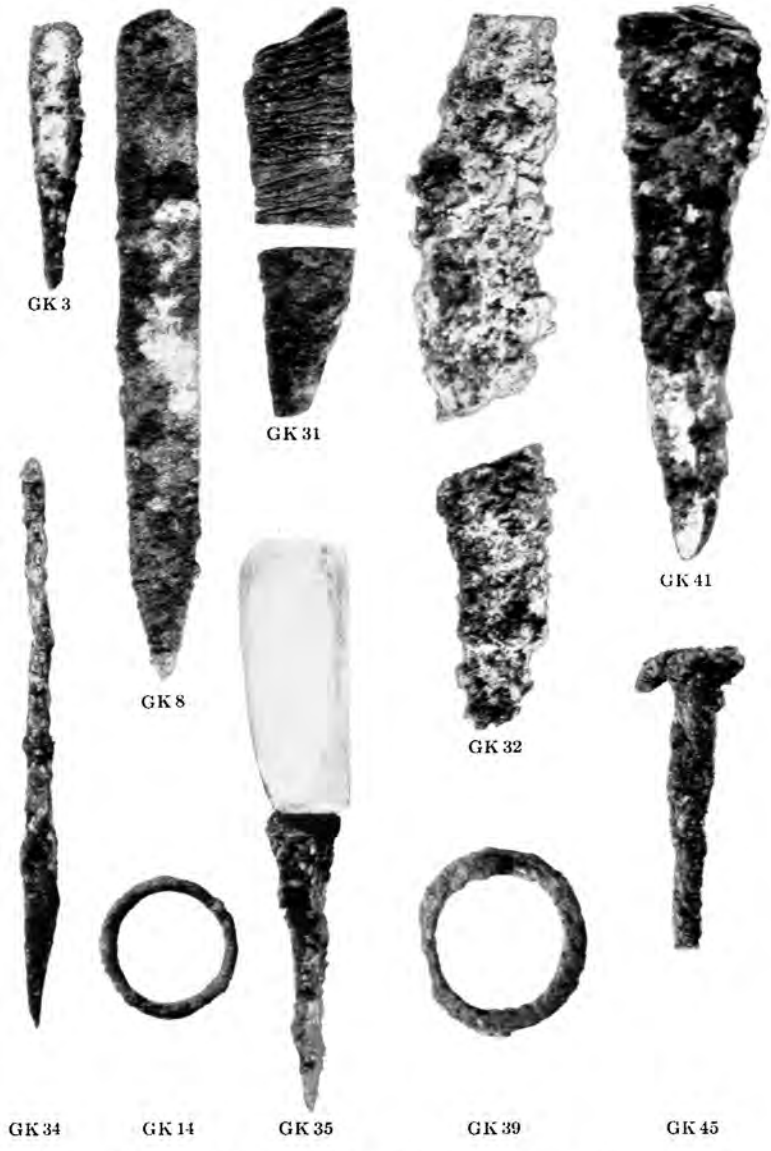

Fig. 86.—Iron objects from Gâvur-Kalesi. Scale, 2:3

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STONE (FIGS. 87–88)

GK 11 from Plot D 8. Limestone whorl.
GK 18 from Plot B 7. Serpentine whorl.
GK 5 from Plot D 9. Polished weight(?), fragmentary, cross-section .021×.013.

GK 11 GK 18 GK 5

FIG. 87.—Stone objects from Gâvur-Kalesi. Actual size

FIG. 88.—Stone mold from Gâvur-Kalesi. Scale, 2:5

GK 10 from Plot D 9. Fragmentary quadruple mold, for an ax head with lugs, perhaps a miniature pike head, and rectangular objects .18 and .11 wide respectively; depth of each mold about .008; all surfaces blackened by heat except the pike side.

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BONE (FIG. 89)

GK 12 from Plot B 7. Fragmentary awl made of a small animal bone, rounded at point, polished.

GK 30 from Plot D 9. Fragmentary awl, lenticular, polished.

GK 40 from Plot F 6. Plano-convex object, four incised concentric circles on upper surface.

GK 12 GK 30 GK 40

FIG. 89.—Bone objects from Gâvur-Kalesi. Actual size

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III

SURVEY AND EXPLORATION

The location of the Anatolian Expedition's activities of 1930–31 is shown in Figures 90 and 91.

SEASON OF 1930

By J. A. Morrison

The Survey

In this department of the expedition's activities the writer was assisted by Mr. K. E. von der Osten. The plan for the season envisaged checking the map of the Alişar square surveyed during the previous two seasons and starting the survey of a new square. On account of academic duties the writer did not arrive in the field until July 3, a month after the commencement of excavations. However, in view of the almost continuous rains during June, it is doubtful whether any considerable progress could have been made in field mapping, had the survey work been started earlier.

The recheck of the map of the Alişar square began immediately after arrival in camp, but, due to several interruptions, could not be carried on continuously throughout the season. As a result of careful triangulations, it was demonstrated that several errors had been made in surveying the original map, especially in the eastern half of the square. These errors were corrected, and the finished map will be as accurate as the limitations of time and personnel have permitted.

During the survey some rather large artificial caves (Fig. 92) not hitherto noted were discovered in an outcropping of conglomerate on the southern side of the valley of the Kanak-Su about 4 kilometers southwest of the village of Gedik-Hasan. The caves were explored, and a test dig was made in one of them in search of artifacts. The accumulation of dung encountered suggested long occupation of the caves as shelters by the flocks of sheep and Ankara goats grazed in the vicinity. No human remains were found, but an examination of the formation in which the caves had been dug disclosed many nummulite fossils, dating the strata as Eocene. This discovery was made by Dr.

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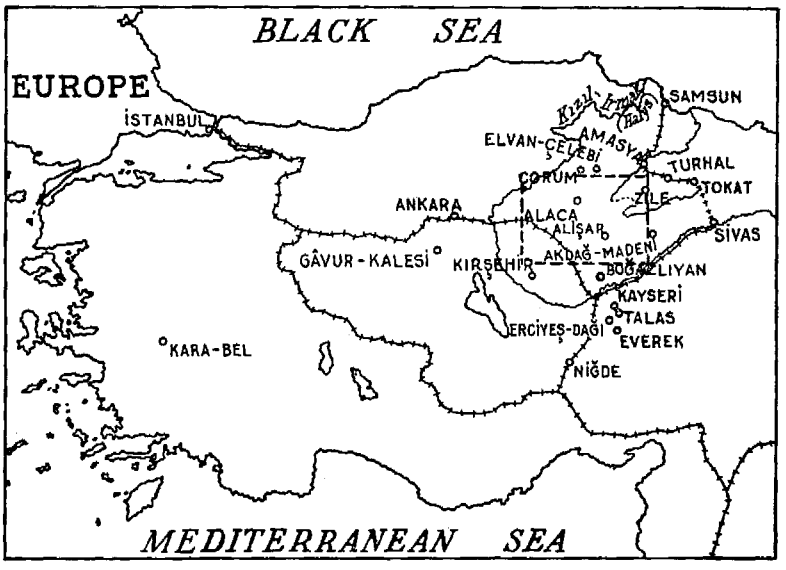

FIG. 90.—Sketch map of Anatolia (Asia Minor). The small rectangle at right shows the area covered by Figure 91.

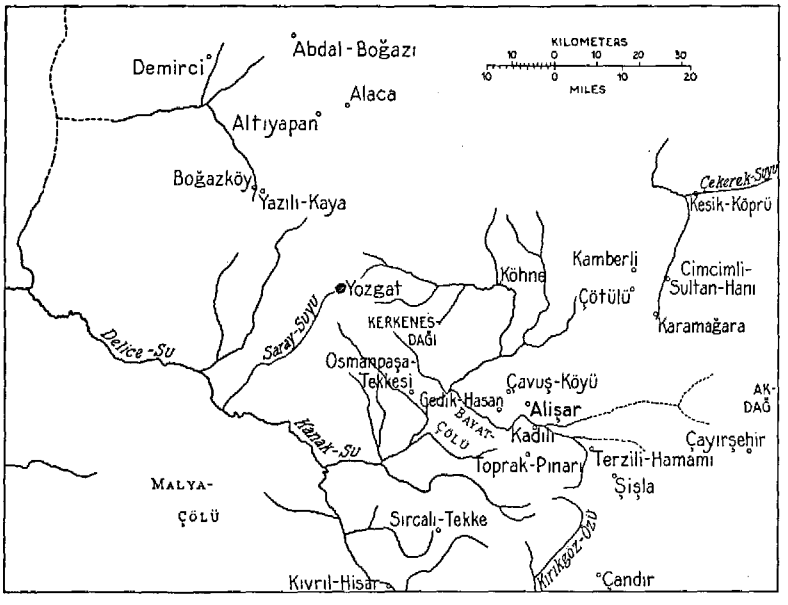

FIG. 91.—The region around Alişar

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Bartsch, who visited the expedition during the latter part of August and very kindly made a geological reconnaissance of the square. Due to his researches, the geology of our area is fairly well known. With other contributions made in previous seasons, the scientific picture of the square is now almost complete.

In the middle of July survey work on the square was temporarily abandoned in order to survey and map on a large scale the area immediately surrounding the Alişar mound. This detailed survey was

FIG. 92.—Caves near Gedik-Hasan

undertaken in compliance with the Director's request that the terrain adjoining the mound be closely examined in order to determine whether a foreign merchant colony might have existed near it as was the case at Kültepe, where such a colony was unearthed several hundred meters from the actual mound.[1]

A large-scale topographic map was deemed essential for this phase of the expedition's work. On a scale of 1:5000 and with a contour interval of 1 meter, a map was surveyed and constructed for an area centering at the mound and extending 2.1 kilometers north and south and 2.75 kilometers east and west (Fig. 93). In addition to the topographic mapping and surface examination, several test trenches were

[1] Cf. B. Hrozný in *Syria* VIII (1927) 1–12.

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excavated, but failed to produce evidence of a nature to warrant further clearing. The only preclassical remains discovered were seven small tumuli. Besides the Roman and Byzantine building remains noted in previous seasons, sherds in quantity from these periods were found on the surface at five points. These ancient cultural remains were all indicated on the map, and cultural features of the present occupation also were shown. Later in the season Dr. Bartsch very kindly made a careful geological examination of the area comprised within this detailed survey. He was able to date the uplands adjoining the Alişar-Özü as Pliocene, while the valley floor itself, on which the mound is located, is covered with deposits of recent date. The careful topographic survey gave added confirmation to the theory already advanced by Dr. von der Osten that during the earliest period of its settlement our mound was surrounded by a swamp or lake.[1]

As in the past, the work of the survey party brought its members into close contact with the village life of the region, enabling them to collect further data of ethnological interest. In this connection our good Hüseyin I was invaluable in his understanding of the peasant psychology. He seemed to know intuitively when cajolery would be most effective and when to resort to direct orders. At times we feared that his pashalike way of ordering the natives about might result in difficulties; but in his handling of the peasant, as in driving a Ford, though he delighted in venturing along the ragged edge, he never came to grief.

It was due to Hüseyin's diplomacy that the survey party was able to witness, and actually to make moving pictures of, an exhibition of dancing by a native woman in the village of Gedik-Hasan. An outsider is very rarely permitted to see dancing by native women. The lady dressed herself in her most gorgeous costume and seemed pleased to be photographed (Fig. 94). In general, women cannot be photographed without risk of serious trouble because of the almost universal belief that the "eye" of the camera is able to look right through the subject.

When one remembers that for thousands of years the Anatolian's contacts with outsiders have been with marauding hosts or invading armies sweeping through his land, pillaging and looting, and that the

[1] *OIC* No. 2, pp. 33–34.

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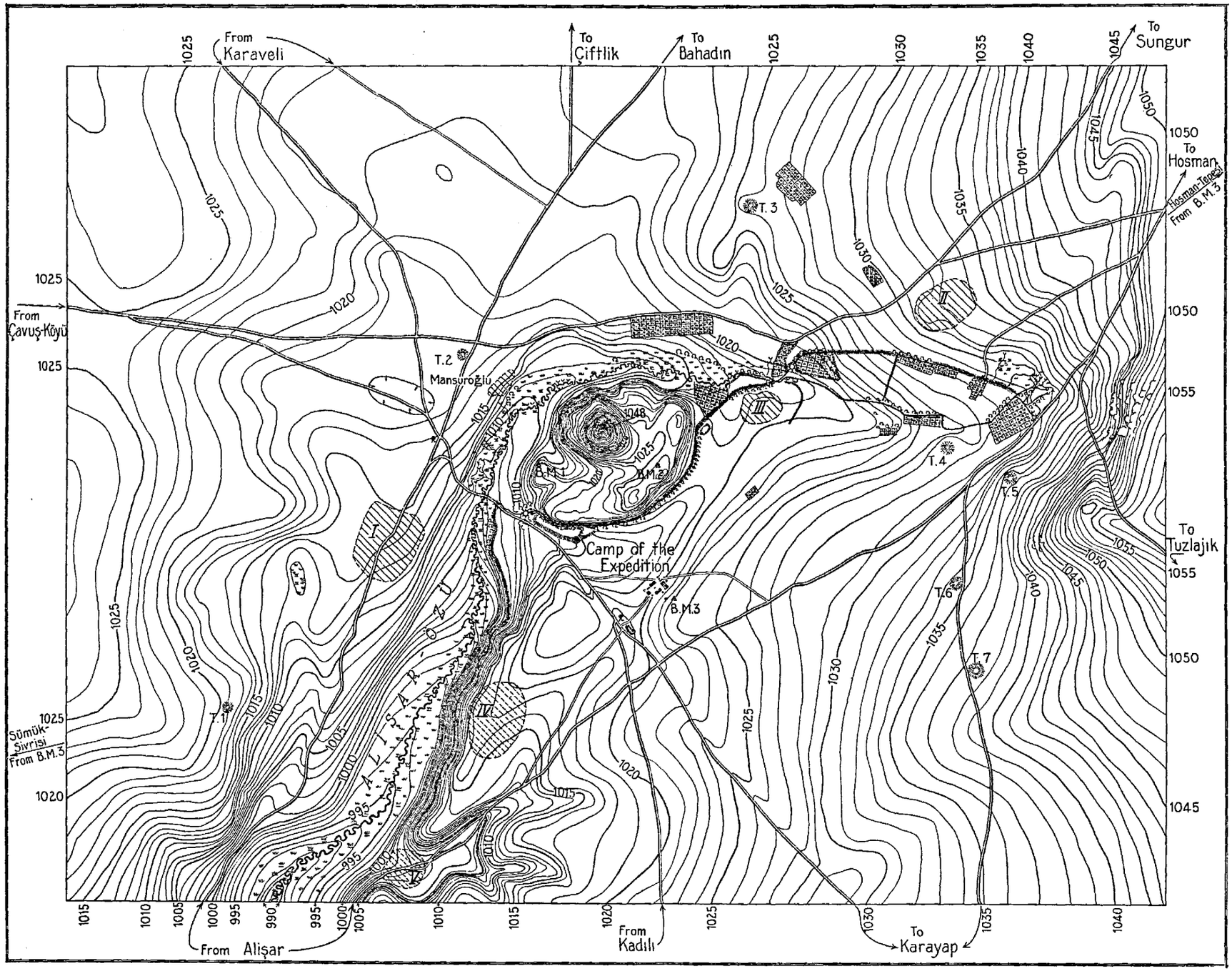

FIG. 93.—Topographic map of the immediate surroundings of the Alişar mound. Scale, 1:12,500

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representative of the government was too often a predatory tax-collector who left behind him only a bare subsistence, it is little wonder that the poor peasant regards all outsiders with suspicion, whether they come from Ankara or from America. Before any such person who inquires into his mode of living he assumes profound ignorance. The way in which he answers a simple question as to direction or distance epitomizes this instinctive form of protection. A clicking of the tongue against the palate is accompanied by a slight upward inflection of the head. It is peculiarly exasperating to the Westerner. In attempting to find out the number of head of livestock belonging to a village, I suspected that the figures given me were too low. On checking up with the help of some of our more intelligent workmen, I discovered that the villagers had admitted to ownership of only half the number they really possessed. Although they knew that I was not a tax-collector, their instinctive reaction to my question was the form of defense which had been practiced during centuries of oppression. Though today, happily, the situation is changed, the old attitudes persist.

FIG. 94.—Dancing woman in gala dress at Gedik-Hasan.

In spite of this instinctive suspicion of the outsider, we rarely encountered active hostility. It is amazing how well one can get on with these Anatolian peasants, if he only shows that he is trying to learn and respect their customs. An experience we had in Toprak-Pınarı, a village on the Bayat-Çölü settled by refugees from Dağistan (the "mountain country" or the Caucasus) is illuminating. We had stopped at the spring on the edge of the village and were regarding the latter with interest. In its ground plan, its general air of neatness and cleanliness, and the cool spaciousness given it by many tall poplars, it presented a pleasant contrast to the squalor of the neighboring villages. As we sat resting in the welcome shade of one of the tall

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poplars, a group of men, including two hojas, approached. They greeted us politely enough, but with noticeable reserve. We sensed clearly that our presence was not welcome; but we acted as though nothing were amiss and strolled through the village, accompanied by an ever growing escort of watchful inhabitants and peered at from behind walls by shy but curious women. One of the houses interested us because of a number of unusual primitive designs painted in red on the usual whitewash (Fig. 95). We wished to photograph the house, but noted several women standing on its porch. Knowing the superstition

FIG. 95.—Toprak-Pınarı. House exterior

about the "evil eye" and the reputed ability of the camera to see through clothing, we asked the older hoja if he would not have the women leave so that we could take a photograph. The change of attitude in the men about us was immediate. "Oh, you know and respect our customs, then?" And from unwillingly accepted strangers we became the respected guests of the village.

In the four or five villages nearest to our mound we are no longer regarded as foreigners. From these villages we draw the bulk of our workmen and are consequently well known. Although our manners and customs must seem to them in many ways outlandish, the villagers respect ours as we respect theirs. No longer do the women run and hide at our approach; they answer our greetings and questions freely and without objection from their men-folk. At the end of a day's work

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in some distant part of the square, it was always a pleasure to hear the cheery greetings as we passed through "our" villages on the way back to camp. Generally we drove through in a merry cloud of dust, barking dogs, and yelling children, with Hüseyin exchanging cheerful *badinage* with our workmen seated in front of their houses at the end of the day's work at the mound. But often we would be stopped with offers of baskets of golden, sun-ripened apricots or a pewter bowl of refreshing *ayran*. And then the village banquets! No words can do justice to the variety of exotically delicious dishes nor describe the feeling of complete satiety after stuffing one's self with frantic haste as course after course appeared. For the Anatolian is truly hospitable and marks his guest's approval of the feast by the amount of food he consumes and the rapidity with which he gets it down.

Although the Anatolian peasant may profess Islam, he is only rarely an orthodox Moslem. Like the Russian muzhik, his religion is made up of superstitions and tabus of varying origins, the study of which would offer rich possibilities. The antireligious bias of the present government has very largely broken the power of the priests and relieved the peasant of the necessity of rendering at least outward allegiance to Islam. But in spite of the endeavors of the central government to substitute science for superstition, there is still an enormous way to go. The peasant may take advantage of the railway, the automobile, the telegraph; he may sit for hours before the gramophone, but in a matter of life and death he falls back on the old beliefs. Take the case of İsmail.

İsmail is one of our old foremen from the neighboring village of Çavuş-Köyü; he has had, therefore, more than the average Anatolian's contact with Western culture. He will come to Reifenmüller, our camp superintendent-doctor-storekeeper and general factotum, to have cuts disinfected or to obtain an eyewash like any other workman. But when his little girl had a temporary paralysis of the leg, he asked the field director to send him with his wife and daughter by auto to the village of Şişla, some 40 kilometers distant, where resides an old priest famous for the effectiveness of his cures. We tried to persuade İsmail to take the girl to a physician in Yozgat, but he could not be moved. Apparently the inconsistency of being driven in an auto to a miracle-cure did not strike him.

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Since the route led through a corner of our square which I had not yet visited, the field director sent my assistant and myself along as escorts. The "cure" which the venerable hoja performed (Fig. 96) consisted in stroking the girl over her whole body with a smooth iron rod shaped like a walking-stick, particular attention being given to the afflicted member, at the same time mumbling some prayers. This lasted for perhaps five minutes. The second part of the "cure" consisted in filling with water a brass bowl on which verses were inscribed

FIG. 96.—The "cure" at Şişla

and in which were small circular pieces of inscribed brass. This water was then given to the child to drink. Not only were we permitted to witness the ceremony, but the hoja repeated it so that I might record it on moving-picture film, something we had hardly dared hope for. After the ceremony had been filmed, we retired to the guestroom while the village women gathered about the child's mother to congratulate her on having had her child cured by such a famous healer.

In the guestroom coffee was served again, as it had been upon our arrival, and then, whether at Hüseyin's instigation or voluntarily, the old hoja approached me and, before I knew what his intentions were, began stroking me with his wand. There was nothing to do but appear seriously appreciative, while my mind considered the possible number

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of sores and contagious diseases to which I was thus being exposed. After I had been sufficiently stroked, I too was offered a sip of the holy water. During my "cure" my assistant appeared to be in imminent danger of strangulation, so great was his mirth and so mighty his efforts to conceal it. But it was a short-lived mirth, for he was next on the program! Whether the survey staff appeared in need of a "cure," or whether the hoja was merely giving a demonstration by way of advertisement, is not at all clear. Neither of us suffered any ill effects, however, and the little girl in the case got well almost immediately! Incidentally, the iron rod which the miracle-working hoja used in performing the "cure" resembles very closely those borne by the priests in the procession depicted at Yazılı-Kaya. It is quite possible that we had again stumbled upon a survival of ancient culture.

The Westernization of Anatolia, which goes forward so rapidly today, already makes itself felt in the most remote villages. Customs and superstitions that have come down for centuries are rapidly disappearing under the impact of Western industrial civilization. It is earnestly to be hoped that before the old life has completely disappeared it will be described and recorded by trained ethnologists.

EXPLORATION

Fewer efforts were made in this department than in previous years, since it was necessary for Dr. von der Osten to concentrate on the excavations at Alişar. However, the presence as our guest of Dr. Paul Wittek, Islamist, during the first three weeks of July occasioned a few exploratory excursions into surrounding territory in order to get a more definite picture of the history of our region during Seljuk and Osmanli times. Three long explorations of several days' duration were undertaken besides several one-day excursions. The results were highly gratifying. Dr. Wittek informs us that during Seljuk times nearly the whole of the vilayet of Yozgat was inhabited by nomads, surrounded by various Seljuk principalities which seem never to have had any control whatever over this region. No Seljuk buildings or inscriptions were found within this area. To the south was the large Seljuk culture center of Kayseri, its sway extending northward over the Kızıl-Irmak as far as Boğazlıyan. But the real frontier seems not to have been the Tarla-Su valley, in which that town is situated, but

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the Bayat-Çölü, a semi-arid plateau very well fitted for nomads. The name Bayat itself is that of one of the original Turkish tribes. To the southwest was the culture center of Kırşehir, separated from our region by the Malya-Çölü. To the east the frontier is approximately marked by the old Seljuk road which led from Kayseri via Karamağara to Kesik-Köprü. To the northeast Zile seems to have been the outpost of Seljuk culture. As for the rest of the northern frontier, it was not possible to find how far southward the influence of Amasya had reached. The frontier toward the west was not investigated this year.

The first historical records after the Roman and Byzantine periods date from the beginning of the 19th century when the Çapanoğlu family founded a feudal state of which Yozgat was the seat. The energetic founder and his sons seem to have done much for the whole area over which they ruled. The nomads of the region settled down as agriculturists, and Armenians and Greeks were called in to stimulate commerce and industry. But the rule of the Çapanoğlu family was of short duration. Soon their power was broken by the central government in İstanbul, and Yozgat became a simple provincial town. In many villages, and especially in Yozgat, are mosques and remains of other pious foundations made by this family.

The first days of Dr. Wittek's visit we utilized in exploring the Moslem remains of the Alişar square. The excursions proved definitely what had already been suspected, namely, that the cultural remains of Byzantine times are followed directly by those of the Osmanli without an intervening period of Seljuk culture. On these first short trips Dr. Wittek was accompanied by our Turkish anthropologist, Dr. Şevket Aziz Bey, who was able to take several sets of anthropometric measurements in the various villages visited, and by the writer, who was thus able to get early in his stay a general idea of the Alişar square. On July 7 an excursion was made to Kadılı with return through Terzili-Hamamı. On the 8th Osmanpaşa-Tekkesi was visited, and the important Osmanli inscriptions in the *türbe* of the large mosque, the largest in our square (Figs. 97–98), were photographed and squeezed. On the 9th the city on Kerkenes-Dağı was visited.

Outside of the square we then made a five-day excursion following the general route Alişar, Köhne (Yeşil-Ova), Alaca, Çorum, Elvan-

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FIG. 97.—Osmanpaşa-Tekkesi

FIG. 98.—Osmanpaşa-Tekkesi. The *türbe*

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Çelebi, Çorum, Boğazköy, Alaca, Yozgat, Köhne, Alişar. The route had already been covered by Dr. von der Osten in 1928,[1] but Dr. Wittek desired to examine more thoroughly the Moslem monuments reported. After striking the Sivas-Yozgat highway just east of Köhne, we had improved road all the way to Çorum, the section from Alaca to Çorum having been recently completed except for the bridges. The present government is carrying through an extensive road-building program in addition to its vast railway program, so that within a very few years all the important centers of Anatolia will be connected by good all-year automobile roads. Nothing new was discovered as far as Alaca. At the junction of the Arapseyif-Suyu and a small tributary from the south, the *kale* noted by Dr. von der Osten in 1926 and again in 1928[2] was visited and sherds were collected. From Alaca a side trip of 10 kilometers to the southwest brought us to the shrine of Hüseyin-Gazi, where we hoped to find Seljuk remains. However, the place contains only Osmanli inscriptions and monuments. Returning to Alaca, we sped northward over the new highway, which climbs out of the Alaca plain and then descends the valley of the Bozbuğa-Suyu to Çorum, which we reached just as the sun was setting over the Köse-Dağı.

In the morning we explored the city, which, in spite of its being the capital of the vilayet of the same name, has a villagelike aspect. The citadel (Fig. 99), located on the edge of the modern town and overlooking the Amasya road, is relatively late. As in the citadel at Ankara, several Greek inscriptions have been used as building stones.

Leaving Çorum we followed the Amasya highway, climbing out of the plain by a series of hairpin turns. After some 23 kilometers we came to a spring fountain built of classical fragments and containing a well preserved Greek inscription. Three or four kilometers off the main road we visited the village of Elvan-Çelebi, the birthplace of the historian Aşık-Paşazade, to investigate a reputedly old mosque built over a wonder-working spring. The oldest part of the structure is a Byzantine burial chapel (Fig. 100), which shows that the place was once a Christian shrine.

Returning through Çorum, we followed for a few kilometers the Alaca highway, then turned southwest along a new road which ascends

[1] Cf. *OIC* No. 6, Fig. 27.

[2] *OIP* V 20–21 and Fig. 24; *OIC* No. 6, p. 42.

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the valley of a stream unnamed on the Kiepert map into a hilly region sparsely covered with oak scrub and with very little settlement. As

FIG. 99.—Çorum. The citadel

FIG. 100.—Elvan-Çelebi. Byzantine chapel re-used in mosque

usual, the map was found to be sadly in error. For this particular stretch it might be expected, since no European seems previously to

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have followed this road. Near the summit of a long climb the road, hitherto somewhat improved, degenerated into a very rough trail. Just beyond the summit we saw the village of Abdal-Boğazı below us to the southeast. Continuing southwesterly, we descended into a flat valley between two low ridges. Shortly before reaching the village of Demirci (Kiepert: Dimishk) we noted on the ridge to the northeast a prominent *kale*. The villagers informed us that on the *kale* are large ruins. The lateness of the day, however, made an investigation inadvisable. In the village itself we saw numerous classical and other antique fragments, then went on to Boğazköy.

The next morning we visited ancient Ḫattushash. The view over the mighty ruins from the city wall made a deep and memorable impression upon the new members of the expedition. After visiting the famous reliefs of Yazılı-Kaya, I returned to camp via Altıyapan, Alaca, and the highway to Köhne, the direct road from Boğazköy to Yozgat being reported impassable for even a Ford driven by one as resourceful as our Hüseyin.

Dr. Wittek with Dr. Şevket Aziz Bey and Mr. K. E. von der Osten reached Yozgat that same evening and spent two days in copying and photographing the many inscriptions in the main mosque (Fig. 101) and in the several smaller ones founded by the Çapanoğlu family. Dr. Wittek was extremely fortunate in being able to photograph two old manuscripts describing the gifts of and institutions built by the founder of the dynasty.

The second excursion, begun on July 16, led in a northeasterly direction through our square to the Yozgat–Köhne–Akdağ-Madeni–Sivas highway, which we followed to Karamağara—a route already followed by Dr. von der Osten in 1927.[1] At Karamağara Dr. Wittek copied from the mosque the Seljuk inscription discovered by Dr. von der Osten in 1927. Karamağara occupies a strategic position at the southern end of the gorgelike valley of the Saray-Suyu. Instead of taking the old caravan route, which follows the valley northward, we turned into the mountain complex to the northwest and after some 12.5 kilometers of rough going with many magnificent views we came to the mountain village of Çötülü, where Dr. Wittek copied an especially well preserved Seljuk inscription discovered by Professor M. Spreng-

[1] *OIC* No. 6 p. 26.

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ling and Mr. F. H. Blackburn in 1929. About 2 kilometers northeast of the village two small hermit caves were discovered, one of which is

FIG. 101.—Yozgat. Porch of the Çapanoğlu mosque

FIG. 102.—Cave near Çötülü

shown in Figure 102. From Çötülü we drove over the upland to Kamberli and thence down a very steep gorge into the valley of the Saray-

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Suyu where we rejoined the old caravan route. After a stop at Cimcimli-Sultan-Hanı, visited by Dr. von der Osten in 1927,[1] we continued over the level valley of the Saray-Suyu to its junction with the Çekerek-Suyu, near which are the remains of an ancient bridge (called Kesik-Köprü, "Broken Bridge") over the latter stream (Fig. 103) and the remains of a large Seljuk *han*. Here our party separated, Drs. Wittek and Şevket Aziz Bey and Mr. K. E. von der Osten continuing northward to Zile, while the rest of us returned to camp by a difficult route through the mountain complex which separates the basin of the Kanak-Su from that of the Çekerek-Suyu. From Zile the first group went on to Turhal and Tokat, returning to camp via Sulusaray on the 19th.

On July 20 we followed the Yozgat–Köhne–Akdağ-Madeni–Sivas highway as far as the village of Oğul-Özü, 55.1 kilometers from camp, thence continuing northeasterly over plowed fields and meadows to Muşalım-Kale (Kiepert: Mushali Kalesi [Agriane]). The *kale* is built on a columnar mass of basalt with almost precipitous slopes on three sides (Figs. 104–5). An inscription in the wall of the village mosque at the base of the fortress indicates that it was built by the Seljuk sultan Keyhüsrev II (A.D. 1236–45). Classical column fragments in the modern village at the base of the *kale* show that there must have been an important classical settlement also in the neighborhood. It seems probable that the old highway from Tavium to Sebastia (Sivas) passed by here.

On July 21 we went southward from Alişar to Boğazlıyan. Our route led southwest across the Bayat-Çölü to the Yozgat-Kayseri highway. The Turkish village of Sırcalı-Tekke (Sirtshan Teke on the Kiepert map), which lies along a stream paralleling and not far from the highway, has a new mosque. But a fragment of a bird sculpture lying on a grave beside it aroused Dr. Wittek's curiosity. It seems that the piece is used as a rain-stone, in case of drought being carried in procession to the stream, dipped into the water, and then solemnly returned to its resting-place.

From the village the top of a high hill to the southwest looked suspiciously like a *kale*, and on inquiry we learned that there were ruins on the summit. Taking for our guide an ex-bandit chief who owned a summer pasture below the summit, we drove up to investigate. On a

[1] *OIC* No. 6, pp. 26–29.

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Fig. 103.—Kesik-Köprü. Modern wooden bridge carried on remains of ancient masonry.

Fig. 104.—Muşalım-Kale

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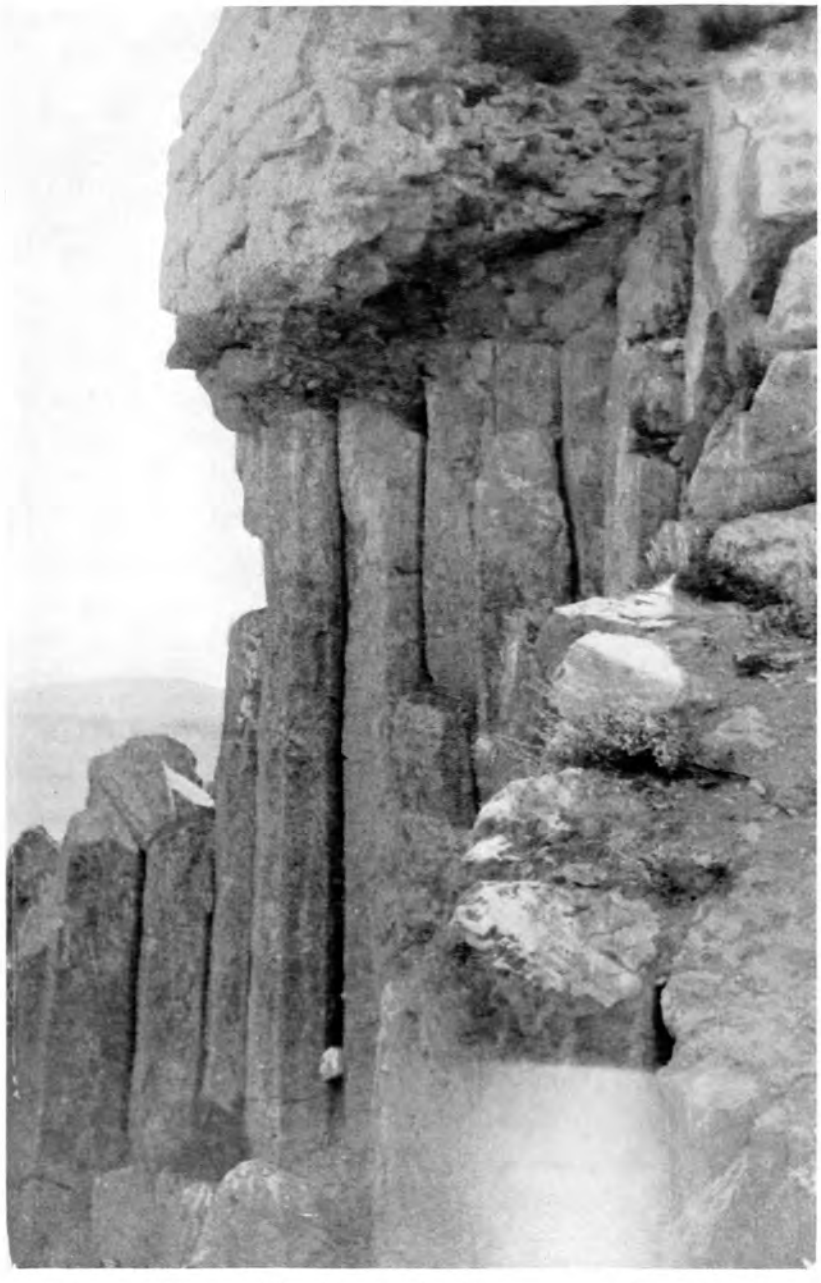

FIG. 105.—Muşalım-Kale. Base of wall resting on mass of columnar basalt

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ridge extending out to the east, at a point about 300 meters distant from, and 12–15 meters below, the summit, we discovered a flight of steps carved out of the rock and leading down some 3 meters. The space at the bottom was filled with refuse, so that digging will be necessary to determine whether the steps lead to a rock chamber or form the exit of a postern tunnel similar to those examined by Dr. von der Osten in 1926.[1] On the high point of the ridge are the remains of an old fortress with walls about 1 meter thick and still about the same in height. Toward the west end, on a slight rise, are the remains of a building complex in which quantities of Byzantine sherds and bits of glass were picked up. On the southern slope of the ridge, outside of the wall remains, we found many Roman sherds but no bricks. Southwest of the main ridge is a subordinate ridge with traces of settlement and possibly a wall. The site warrants a detailed survey and examination. In the wall of the village mosque at Boğazlıyan Dr. Wittek discovered a Seljuk inscription taken from a much older mosque which had previously occupied the site. This would seem to show that the Seljuk culture from Kayseri had penetrated thus far toward our area.

On our return a stop was made at Çandır, on the western outskirts of which is the well preserved *türbe* of the last of the Zül-Kadır dynasty, noted already in 1929.[2] The many inscriptions on the *türbe* were photographed, and Dr. Wittek made a squeeze of that on the sarcophagus.

Dr. Wittek's return to İstanbul on July 22 marked the cessation of the exploratory activities of the expedition until toward the end of the season.

During the course of the summer's survey work the members of the survey party were often tantalized by distant views of the snow-capped summit of the Erciyeş-Dağı, Mount Argaeus of the ancients, the highest peak in Asia Minor. Its white crown floating above the dusty haze of the scorching Anatolian summer seemed to be continually beckoning. However, we resisted the call of the mountain until the very end of the season, when a fortuitous circumstance made possible the long desired exploration. Dr. Bartsch, the geologist, had just spent three weeks studying the mountain and had made one attempt to reach the summit, failing only because of sickness. It being neces-

[1] Cf. *OIP* V 123–36. [2] *OIC* No. 8, p. 23.

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sary to send him back to Kayseri in one of our cars, Dr. von der Osten decided to utilize the opportunity thus presented to explore a cave with inscriptions reported to be under the very summit of the near-by mountain. Furthermore, correspondence with the Institute indicated the desirability of investigating Kıvrıl-Hisar, a site discovered by Dr. Forrer in 1926 and thought by him to be the remains of a Hittite palace.[1]

Leaving camp in two cars early on the morning of September 17, we followed the usual route to Terzili-Hamamı, then turned southeast to Çayırşehir, as had Dr. von der Osten in 1927.[2] Beyond here we followed the miserable highway into a gorge in the limestone foothills of the Ak-Dağ. Although this gorge is the only route directly connecting Çayırşehir and Çandır feasible for wheeled vehicles, we failed to find any traces of an ancient road. However, the ruins of a Seljuk *han* situated at the southern end of the gorge on an elevation above the modern road may indicate that an important trade route passed by there in early times.

In Çandır we halted for lunch, then continued westward to Boğazlıyan, where we called on the kaimakam. After considerable inquiry we learned that Kıvrıl-Hisar is situated in the wide, flat valley of the Kırıkgöz-Özü west of Boğazlıyan. In a drive of several kilometers we noted seven mounds here and there on the valley floor. The ruins discovered by Dr. Forrer (Fig. 106) are located on the broad top of a low but rather extensive mesa. The ruins are extremely surficial in character; from potsherds picked up Dr. von der Osten and Mr. Martin judged the remains to be post-Hittite, possibly of much later date. At the southern end of the mesa are the remains of a fair-sized Roman bridge.

Night had already fallen when we reached Kayseri, so we went directly to the rather primitive hotel—the best the town has to offer. During the evening Dr. Bartsch introduced us to Eşref Bey, the director of the Lyceum, and we spent a very pleasant evening in a garden restaurant in the shadow of the old Seljuk castle. The next morning we called on Mr. Paul E. Nilson at the American School in Talas and were given pointers about climbing the Erciyeş-Dağı. Mr. Nilson told

[1] *Mitteilungen der Deutschen Orient-Gesellschaft* No. 65 (1927) pp. 34–36.

[2] *OIC* No. 6, p. 31.

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us that the usual way was to climb from the northeast side, where, after crossing the moraines at the foot of the mountain, a comparatively easy ascent up the remaining part of the crater rim brings one to the summit. Dr. Bartsch, however, advised that we make the ascent from the south, since on this side we could make a nearer approach by auto and would therefore save time. Dr. Bartsch had already sent his man ahead with two horses to the mountain village of Gereme[1] where we were to leave the autos and spend the night.

Leaving Kayseri shortly after noon, we followed the Niğde highway southwest around the mountain complex across a flat salt plain

FIG. 106.—Kıvrıl-Hisar

in heat like that of a blast furnace. From the Niğde highway an unusually smooth road leads southeast through this plain to Everek, which is situated directly south of Kayseri on the opposite side of the mountain. From Everek we drove north along a trail to Gereme, where Dr. Bartsch's man was awaiting us. With the radiators of both cars boiling furiously, we reached there just as the sun was sinking behind a shoulder of the Erciyeş-Dağı.

Gereme, located at the opening of a steep gorge which leads up to a higher shoulder of the mountain, is a rather squalid village of stone huts formerly inhabited by Armenians but now abandoned except for occasional shepherds during the summer months.

After a night's rest under the stars, we arose while it was still dark. Having instructed our two Hüseyins to meet us on the road which borders the eastern foot of the mountain, we started the ascent, taking

[1] Wrongly called Geleine in *OIC* No. 8, pp. 34–35.

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turns riding the two horses. Beyond the gorge leading up from the village, we reached a broad, moraine-strewn shoulder where we came upon a group of beehive-shaped *yurts*—the camp of a group of Turkomans. This kind of *yurt* is uncommon so far west, and we would have photographed the camp, if it had not been still too dark. The Erciyeş complex is the summer pasturing-ground for the flocks from a number of surrounding villages. Climbing steadily, at about nine o'clock we reached the foot of a talus slope leading up at a steep angle without a break to the summit ridge. As from this point we should have to dispense with the horses, we instructed Dr. Bartsch's man to follow the base of the slope to the east side and wait for us there.

This last part of the ascent proved difficult and exhausting. The talus (Fig. 107) is composed mostly of fragments of andesite broken off from the ledges on the sides of the slope. Since this material had simply found its angle of rest, it was easily set in motion again, so that our slow progress, sliding back one pace out of every three forward, was marked by a number of tiny avalanches. For this reason we found it advisable to separate, keeping only within calling distance of one another. The vertical height of this slope we estimated at 1,400 meters; it took us four hours to climb it.

We reached the summit at 1:30 P.M. We had expected to see half of Anatolia spread at our feet, but were disappointed. Already during the last part of the ascent we had noted ominous clouds gathering in the south; and within a few minutes after we had sunk exhausted on the summit ridge we were surrounded by a mass of cold, damp, snow-laden clouds which completely cut off the view in all directions. To add to our disgust, it began to snow. Unprepared as we were for such cold weather, we were shortly made fully aware that at 13,000 feet even early September in Anatolia can be winterlike. Under these conditions the small glacier which hangs down the north slope from the summit (Fig. 108) failed to arouse enthusiasm.

The highest point of the mountain is a towerlike mass of loose conglomerate about 9 meters high and possibly 4 meters thick at its base. It has been climbed only once; being without ropes, we did not attempt this last struggle. This natural tower is pierced in a north-south direction by a tunnel—the "cave" the inspection of which was the main object of our ascent. In cross-section it is rectangular, about

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2 meters high and 2 meters broad. At its southern entrance are much weathered remains of Armenian and Turkish inscriptions, themselves so faint that if there had been earlier inscriptions they must surely have been destroyed.

FIG. 107.—The talus slope on the south side of the Erciyeş-Dağı

Having photographed the cave and tower with thoroughly numbed hands and written our names on a scrap of paper we found under a cairn on the ridge, we set about the descent. As the hour was rather late, we decided not to follow down the south rim of the old crater—the usual route of ascent—as we had planned, but with giant strides plunged boldly down the side of the crater. Our descent set up innu-

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merable small avalanches of talus material, necessitating separation and advance on a broad front. Even so, a dislodged rock whizzing downward very nearly broke my leg. Sliding and jumping, we reached the bottom of the 1,600-meter slope in a fraction of the time it had taken us to climb an equivalent distance.

We had expected to meet the horses at the foot of this slide, but none were to be seen. For five hours we struggled up and down through a nightmare of sliding gravel with the ever recurring fear that we were lost.

FIG. 108.—Summit ridge of the Erciyeş-Dağı with clouds sweeping over. In foreground, remnant of glacier; in right background, the summit tower.

About nine o'clock several flashes of light to the east aroused our drooping spirits. Our feet quickened at the thought that Hüseyin I was driving into the moraines in search of us. We hallooed and called, but to no avail. Not for another hour and a half did we see or hear signs of a rescue party, but the way grew easier and suddenly we came over a rise to run right into the glare of headlights! Our two Hüseyins were much relieved to see us and with much appreciated forethought had prepared steaming tea with bread and cheese in an abandoned caravansary a short distance down the old road. After a wild ride through a violent rainstorm we reached Kayseri again about midnight.

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Early the next morning Dr. von der Osten left for Alişar in one of the cars, while I lingered a few hours with Dr. Bartsch to see the ancient sites and monuments of Kayseri. The contrast between the old Seljuk mosques and the modern apartment buildings at the railway station on the edge of the town is striking, emphasizing again that Turkey of today is a land in process of transformation.

Eşref Bey, our pleasant acquaintance of the first evening in Kayseri, having accepted an invitation to visit our excavation, accompanied me to Alişar. Leaving Kayseri shortly after noon, we looked back on the Erciyeş-Dağı, its upper ramparts now sheathed in white; a day later, and the ascent would have been impossible. The return trip was made in rapid time in spite of a sudden violent downpour of rain and hail. Such short cloudbursts are characteristic of the arid and semi-arid lands and can cause considerable damage. The Kara-Su, which an hour before had been a harmless trickle, became a raging flood, spreading far out over the flat valley floor. In the distance we could see shepherds frantically pulling their sheep out of the flood. We eventually found a shelter, but not until we had been thoroughly soaked in our open car. However, Eşref Bey proved a jovial traveling companion; we made light of our involuntary bath and as soon as the height of the storm had passed resumed our way, reaching camp about sundown.

The days remaining until September 28, when the staff left, were taken up with work at camp. On September 30 I returned from Ankara and with the assistance of J. Scharer as interpreter worked for two weeks mapping the land utilization in the area immediately surrounding our mound. Due to shortness of time, rain, and other interruptions, it was impossible to complete as large an area as I had hoped. The part mapped, however, is sufficient to give an idea of the pattern of land occupancy in our area.

SEASON OF 1931

THE SURVEY

During this season several chance finds made by villagers during the preceding fall and spring were reported to us. Such finds may be of considerable significance. For example, at Küçük-Köhne there had been found a hoard consisting of some 28 silver coins from Sinope,

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Tarsus, and Amisus (Fig. 109).[1] This find is of great value in establishing one of the important ancient trade routes. We know from the Peutinger Tables that during Roman times the main Tavium-Sebastia highway (apparently followed today by the Yozgat–Akdağ-Madeni–

FIG. 109.—The Küçük-Köhne hoard

Sivas road) was crossed somewhere near the modern Yeşil-Ova (Köhne) by another road leading northward and northeastward to Zile and the Black Sea and southward to Kayseri, the ancient Caesarea Mazaca. Traces of this road have been discovered within the Alişar square at Yazılı-Taş, Karaveli, and Terzili-Hamamı, and southward in the direction of Boğazlıyan. The find at Küçük-Köhne further established its course. This road was used until Byzantine times; but during

[1] See E. T. Newell, *The Küchük Köhne Hoard* (New York, 1931).

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the Seljuk period its route was shifted farther eastward, probably because the territory about Alişar was in the hands of nomads whom the Seljuks had not succeeded in pacifying. The Seljuk route can be traced by the line of large caravansaries between Kayseri and Zile, including the imposing Cimcimli-Sultan-Ham, built by the mighty Mahperi, and the *han* at the northern opening of the Saray-Suyu gorge. Another shift in the route came at about the beginning of the 19th century. With the founding of Yozgat by the energetic Çapanoğlu, the north-south trade was diverted westward again, but crossing the Kanak-Su still farther to the west near the modern village of Paşa-Köyü. The present Yozgat-Kayseri highway crosses that river by a masonry bridge between the villages of Karabıyık and Yudan.

During the winter of 1930/31 the villagers of Karaveli had found a Byzantine burial ground while plowing for a new vineyard. The sarcophagi were of pottery in the typical shoe shape. From several other places new inscriptions were reported. All were duly copied, though they were rather uninteresting Byzantine epitaphs. From Aşa-Taşlık a number of crude bull figurines were brought to camp.

During the early part of the season Dr. K. O. Müller of Berlin studied the association of *Peganum harmala* L. with ancient sites.[1] Numerous tests within our square showed a 91 per cent correlation. During one of our trips we visited a herm uncovered by villagers at Arpa-Köyü.

EXPLORATION

In addition to one major exploration in the southeast, a few minor explorations were made in connection with visits to the German and French excavations at Boğazköy and Has-Höyük. Nothing new was noted except a fortification on the Bozluk-Dağı, not far from Has-Höyük, discovered by the French expedition under Dr. L. Delaporte.

The trips to Boğazköy were uneventful. On an excursion to Azapbaşlı Dr. Kurt Bittel, the leader of the German expedition, identified as a Roman *castra* the fortification discovered there in 1927.[2] On a

[1] This association was first mentioned, though the plant was not named but was too simply referred to as "tufts of grass of a very distinctive kind," in *OIC* No. 2 (1927) p. 19. Dr. Franz Forsteneichner dealt with *Peganum harmala* at some length in 1928 in a paper prepared for a still unfinished Oriental Institute volume on the Alişar square (see *OIC* No. 6 [1929] pp. 13 ff.). See also our p. ix, n. 1.

[2] Cf. *OIC* No. 6, p. 30.

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reconnaissance trip to Havusköy in the vilayet of Sivas to investigate the possibility of transporting to Ankara the large lion discovered in 1928,[1] a fortified city with an acropolis was found near the village of Kayadibi, not very far from the Kayseri-Sivas highway.

Toward the end of the season I was requested by the Turkish government to investigate two sites near Gazi-Ayintap where "Hittite" hieroglyphic inscriptions had been reported. Dr. Hamit Zübeyr Bey, an old friend of the expedition, accompanied Dr. McEwan and myself.

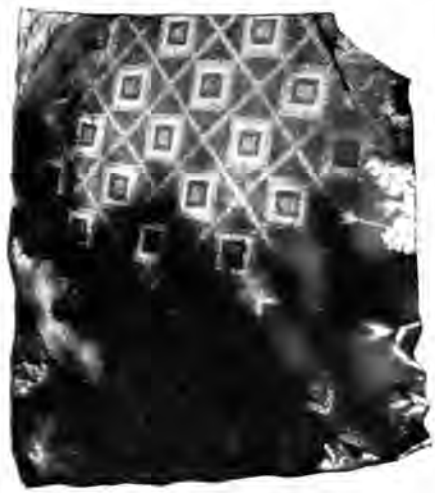

FIG. 110.—Byzantine mosaic floor near Alaca

Our friend's thorough knowledge of Turkish history and Anatolian folk lore and his genial disposition made him an especially welcome and valuable companion for such an expedition.

Before leaving for the south, we drove to Boğazköy and spent the night with our old friend Ziya Bey. The following morning we visited and studied the exemplarily conducted German excavations on the Büyük-Kale, then left for Alaca. We drove northeasterly to the northern border of the Hüseyin-Ovası, in which Alaca is situated. Here the Alaca-Suyu enters a narrow defile through which it forces its way northward to unite with the Çorum-Suyu, which flows into the Çekerek-Suyu. On a crag at the entrance to the defile are two rock tombs,

[1] Cf. *OIC* No. 6, p. 71.

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each with tunnel and steps, described by Perrot[1] as Gerdek-Kayası. At the base of this crag are the remains of a small Roman or Byzantine

FIG. 111.—Relief from Kültepe in the museum at Kayseri

bath, in one room of which a mosaic floor with a geometrical pattern in red, white, and blue (Fig. 110) had recently been discovered. After viewing it, we returned the same evening to Alişar.

[1] Perrot and Chipiez, *L'histoire de l'art* IV 686.

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Early the next morning, September 4, we left for the south, with Hüseyin I as chauffeur. In Kayseri, after calling on the vali and the director of public instruction, we visited the museum. This is installed in an old *medrese*, to which is attached the *türbe* in which Mahperi is buried. The museum is well arranged and contains a number of

FIG. 112.—Baptismal stone in the museum at Kayseri

fine specimens from all periods of Anatolian history. I was most interested in a "Hittite" relief (Fig. 111) said to have come from Kültepe and in an early Christian baptismal stone (Fig. 112).

From Kayseri we at first followed the Sivas highway, then branched off to the eastward (Fig. 113) up the valley of a small stream. On its south slope are situated the monastery of Gergeme and the thriving town of Bünyan. Here the valley has been eroded out of volcanic tufa. Near the town are many artificial caves, and numerous cascades pour over the valley rim. Bünyan has an electric power plant and

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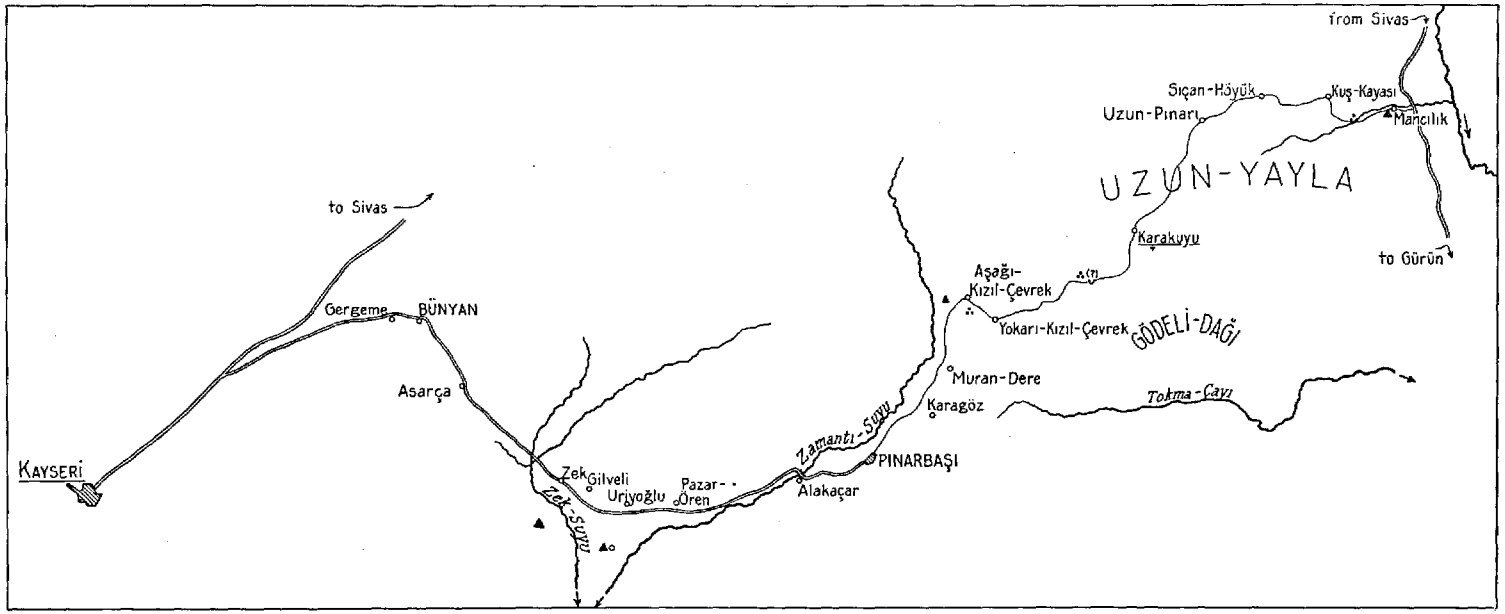

FIG. 113.—Map of our route from Kayseri to Mancılık. Scale, 1:800,000. (After Kiepert.)[1]

[1] Key to symbols is published in *OIC* No. 8, p. 20.

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several factories. After crossing a watershed we reached the northern border of the Seresek plain. With the field glasses we could recognize in the distance the ruins of Karadayı-Sultan-Hanı with two mounds near by. Just north of the village of Zek a stone slab with a peculiar relief (Fig. 114) was lying beside the road. As we continued eastward,

FIG. 114.—Relief at Zek

Dr. Hamit Zübeyr, who had been all over this region on horseback, told us about its more recent history: how it had been settled by the Avshars and Çerkes, who in never ending feud disputed the fertile grazing-grounds of the Seresek-Ovası and especially the Uzun-Yayla, and how finally Sultan Aziz had founded Aziziye (now Pınarbaşı) as a military post to subjugate them and stop the feud. We soon reached the Zamantı-Suyu, one of the main tributaries of the Seyhan, which after forcing its way through the Taurus empties into the Mediterranean near Tarsus. We spent the night in the clean and spacious

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schoolhouse at Pınarbaşı, which is magnificently situated on a valley slope with many springs, surrounded by gardens and trees.

The next morning, accompanied by a young school-teacher, Ali Rıza Bey, we left for our first objective, a "Hittite" inscription near Karakuyu. Ali Rıza, who had used his holidays in collecting data on folk lore and historical remains from the villagers, proved a great source of information to us. Most of the villages here are Çerkes. They are situated in the fertile green valleys, surrounded by many trees. Instead of the usual stone slabs on the graves, we noticed a predominance of wooden posts. Near Aşağı-Kızıl-Çevrek, where we left the Zamantı-Suyu valley to ascend to the Uzun-Yayla plateau, we found what seemed to be a Byzantine cemetery. Inscriptions on two of the protruding stones were too worn to be legible.

The ascent to the plateau is steep and long, with many hairpin curves. The slightly undulating plateau is bordered on the south by the Gödeli-Dağı and the Gürün-Dağı, from the southern slopes of which the Tokma-Çayı flows toward the Euphrates. On the other three sides the plateau rises slightly, forming a kind of border rim, with a steep drop beyond. Around a large spring noted by Naumann we found the remains of what seems to have been a late classical or Byzantine settlement. Here we left the road and struck out across the plateau. Though near its edges bed rock occasionally protrudes, its central part is covered by fertile soil which produces excellent grass when there is enough water.

Snuggled in a small ravine is the Çerkes village of Karakuyu. Here, as in most of the surrounding villages, horses are raised. After a short rest we proceeded about 2 kilometers up the ravine. There we found an earthen dam (Fig. 115) faced inside with flat stones. Clambering up on it, we saw that it had formed an ancient, but now dry, storage reservoir which in general design does not differ greatly from modern reservoirs. The site had been well chosen, for two tributary ravines which during the rainy season bring down flood waters from the Gödeli-Dağı join the main ravine just above the dam. The "Hittite" hieroglyphic inscription we were seeking proved to be on a stone standing at the head of a sluice (Figs. 116–17); on an adjoining stone was another (unfinished) inscription. Both inscribed stones (Figs. 118–19) were apparently still *in situ*. The reservoir, built surely not

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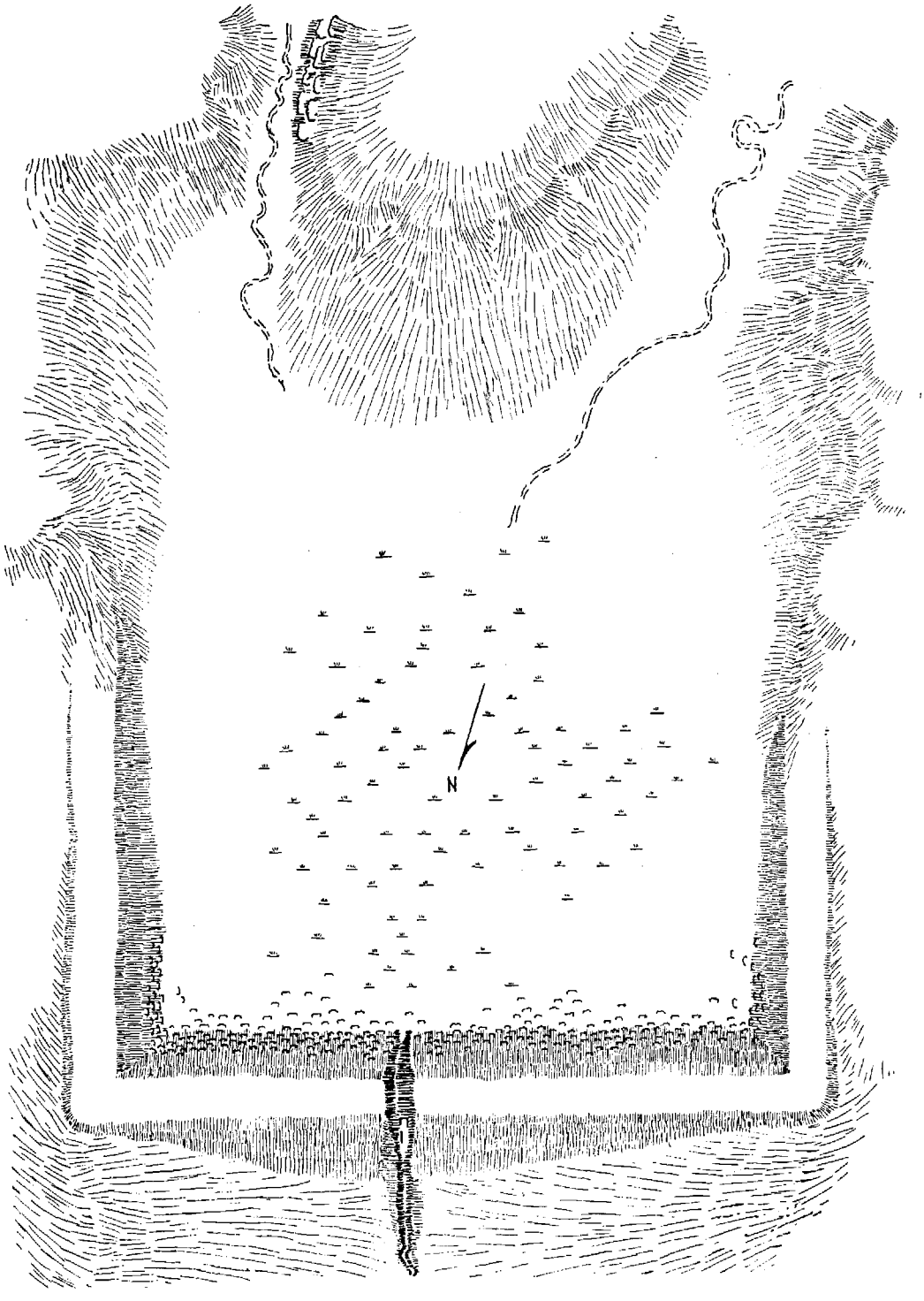

FIG. 115.—Plan of ancient reservoir near Karakuyu. Scale 1:2000

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FIG. 116.—Sluice built with inscribed blocks

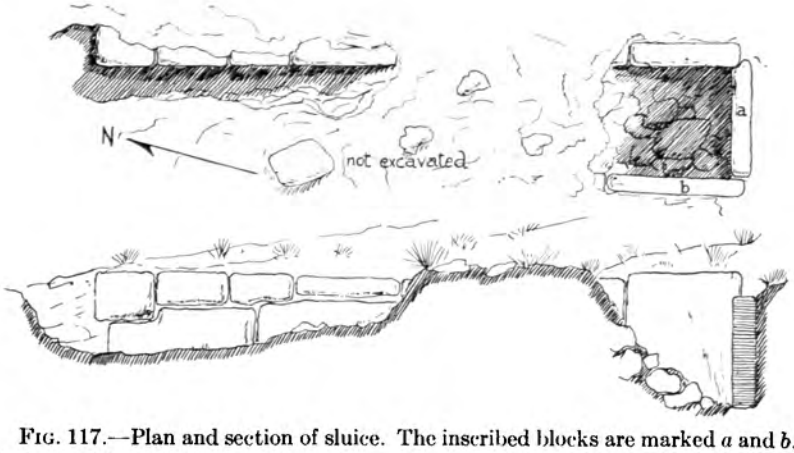

FIG. 117.—Plan and section of sluice. The inscribed blocks are marked *a* and *b*. Scale, 1:100.

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FIG. 118.—The inscription at the head of the sluice

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later than the end of the second millennium B.C., was evidently intended to safeguard the water supply for a large part of the grazing-land of the Uzun-Yayla. In Karakuyu itself we found, re-used in a house wall, a stone slab with a peculiar design (Fig. 120). Here Ali Rıza Bey left us.

At Mancılık we reached the Sivas-Gürün highway; after following it northward for a while, we turned east to Kangal, where we reached

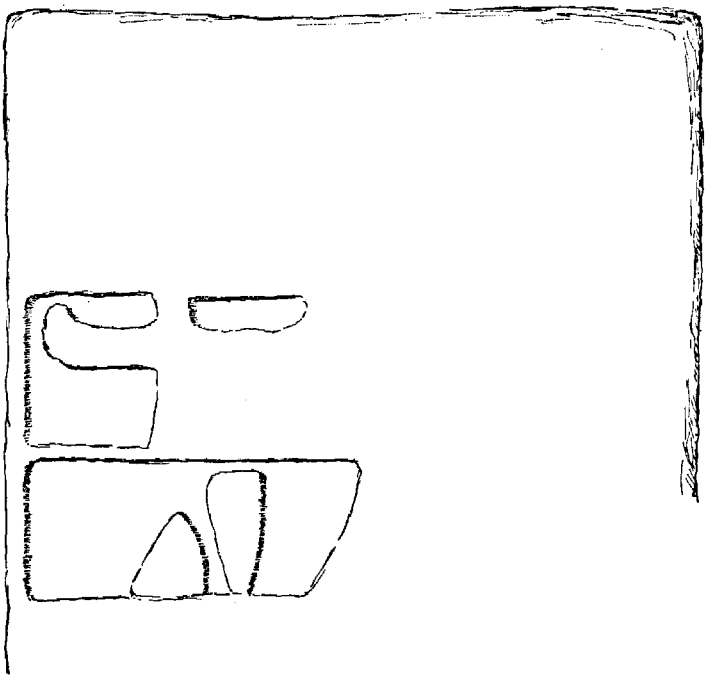

FIG. 119.—The unfinished inscription built into the sluice. Scale, 1:15

the Sivas-Malatya highway. After spending the night at Hasan-Çelebi, we reached Malatya toward noon of the 6th. Our destination was Adıyaman (Fig. 121), where a Paleolithic station had been discovered in 1928 by Professor E. Pittard. As far as Viranşehir we took the Maraş-Malatya road, which I had followed in 1929. The railroad, then under construction, is now in service, and is rapidly being extended eastward toward Elaziz and Diyarbekir.

From Viranşehir we turned eastward, following a broad, flat valley from which the mountains rise abruptly on either side, increasing in

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height as the valley narrows. Like all the valleys in this region, it is fertile and well cultivated. In spite of the straight and level road, we could make only slow progress because of the innumerable irrigation

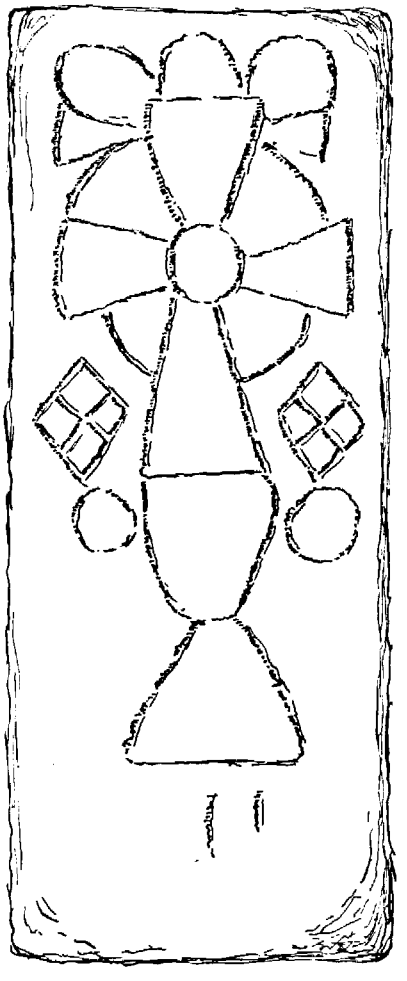

FIG. 120.—Stone in the village of Karakuyu. Scale, 1:10

ditches. The valley ended abruptly in a pocket surrounded by mountains clothed to half their height by scrub and small trees but bare on their summits (Fig. 122). The contrast between the white, red, and gray of the mountains and the soft shades of green in the valley made a

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landscape of unusual beauty. Ahead of us the road climbed out of the valley by a series of breath-taking hairpin turns. We crossed ridge after ridge before we again saw traces of human life. First we came to

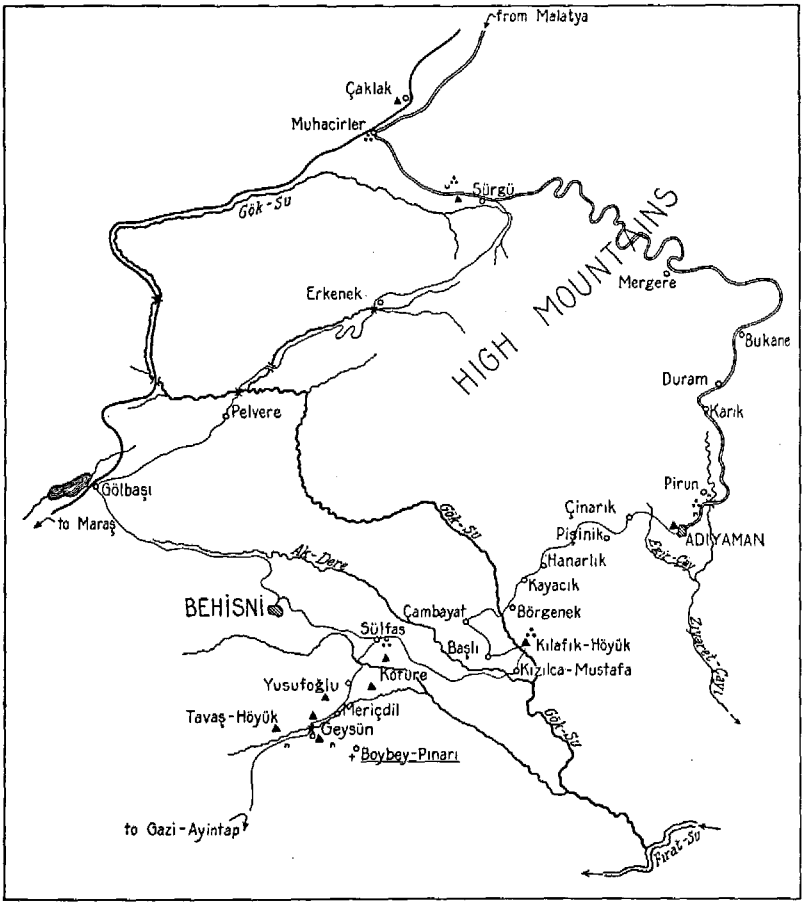

FIG. 121.—Map of the region around Adıyaman. Scale, 1:800,000. (After Kiepert.)[1]

[1] Key to symbols is published in *OIC* No. 8, p. 20.

vineyards and tobacco plantations in terraces on the sides of the valleys; then small villages appeared. All this territory is inhabited chiefly by Kurds.

Near Pirun the mountain complex gives way to a plateau which slopes toward the Euphrates and has been deeply gorged by flood

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waters from the mountains. During the summer the gorges are mostly dry. One of the few ravines with water in it was that of the Pirun-Suyu, which we crossed on a high bridge just below the ruins of an

FIG. 122.—View in the mountains dividing Anatolia from northern Mesopotamia and the Euphrates valley.

old fortification. Then in a few minutes we saw Adıyaman with its large mound silhouetted against the setting sun.

Though it was late, the heat here was still terrific. Through crowded streets we found our way to the little schoolhouse, which is situated in a well kept garden with a large playground adjoining. Everywhere

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within the school, as well as on the street corners, were posters warning us against the fly as the bearer of trachoma, that dreadful disease which here, as farther south, is the curse of the people. All over the region the new government has established medical stations with physicians who, helped by the schools and their teachers, fight relentlessly against it with gratifying results. In the evening coolness we walked up to the citadel and found that the mound consisted of many

FIG. 123.—Paleolithic station near the bridge of Pirun northeast of Adıyaman

superimposed cultural layers. Halfway up the slope we saw the remains of a large Roman or Byzantine gateway.

Early the next day we drove out to the Paleolithic station (Fig. 123) near the bridge below the ruins of Pirun. Here the river has cut three distinct terraces. On the first and second lay quantities of flint flakes, but also many scrapers and other Paleolithic implements.[1]

From Adıyaman we turned west across the almost impassable plateau toward Behisni. Near Börgenek we succeeded in fording the Gök-Su (Fig. 124). Continuing westward with some difficulty, we reached a gorge which it was obviously impossible to cross. So we traveled

[1] Cf. E. Pittard, *Le visage nouveau de la Turquie* (Paris, 1931) pp. 147–55.

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Fig. 124.—The Gök-Su at Börgenek

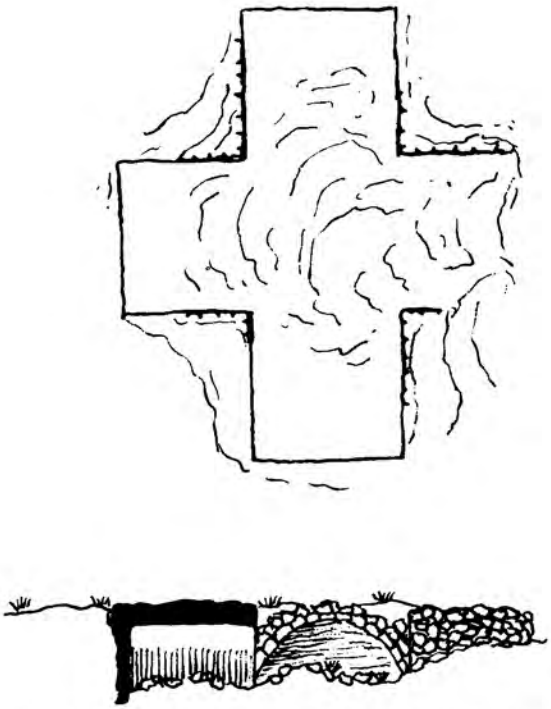

Fig. 125.—Kılafık-Höyük. Classical building remains. Scale, 1:50

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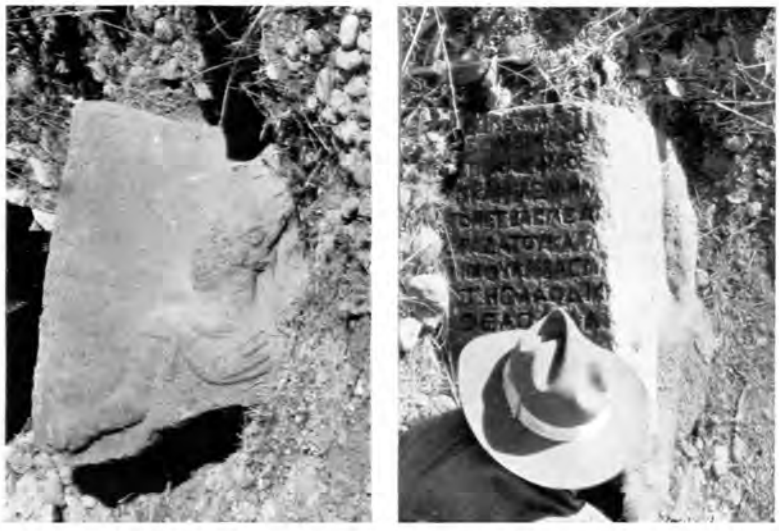

FIG. 126.—Kılafık-Höyük. Basalt relief of a king of Commagene

FIG. 127.—Boybey-Pınarı. Wall in which four basalt blocks with "Hittite" hieroglyphic inscriptions have been re-used. View from north.

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southward for some distance. After several kilometers we met a Kurdish shepherd who kindly told us that on a rather unimpressive-looking mound across the river there was an inscribed black stone. The swift

FIG. 128.—Boybey-Pınarı. Blocks with hieroglyphic inscriptions

current of the Gök-Su rolled us off our feet as we scrambled toward our goal. But the mound rewarded us. On its eastern side, near the top, we found the remains of a late classical building (Fig. 125). On the ground within lay a large basalt slab with a relief and an inscription of a king of Commagene (Fig. 126). Regaining our car, we turned

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westward, crossed the Ak-Dere, and soon reached a still incomplete highway which we followed through Sülfas to Behisni.

Behisni is situated on one side of a rocky valley with steep sides, with practically only one road leading into it. Over it towers a fortification. The air in it was like that in an oven. Most of the people do not live in the town but in the surrounding vineyards, coming to town

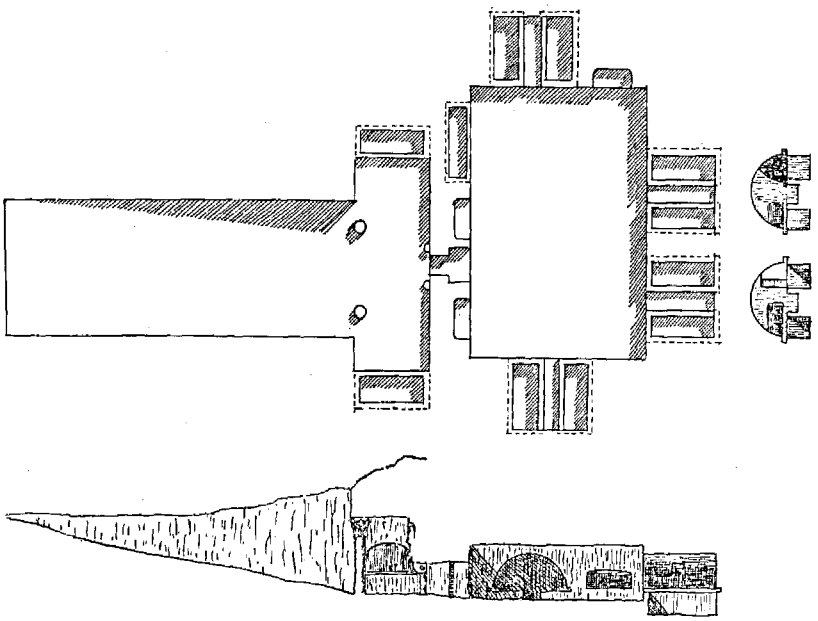

FIG. 129.—Plan and sections of one tomb within the classical necropolis near Karakuyu-Pınarı. Scale, 1:200.

for their business only. Behisni is especially famous for its grapes, which have an exceedingly fine flavor. One of the forty different varieties grown there reaches the size of a plum. The next morning we returned to Sülfas, where we saw the ruins of two fine old mosques. South of there we reached a higher valley in which are several mounds. Geysün is situated on top of one of these in the middle of the valley. In the schoolhouse there we found a fragmentary inscription of uncertain age, apparently containing part of a Koran verse. The rather low sides of the valley are covered with scrub, and bed rock outcrops

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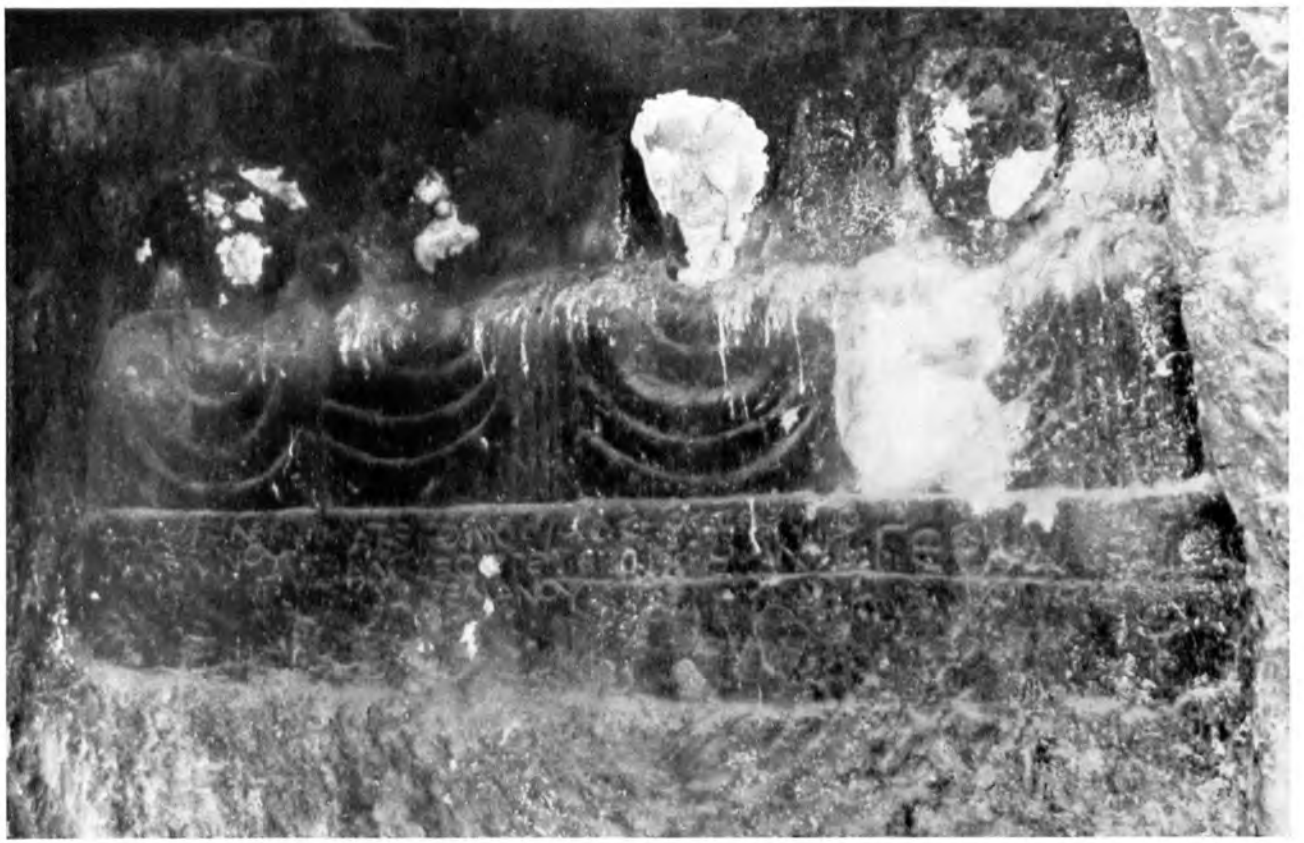

Fig. 130.—Inscription in the rock tomb of Figure 129 near Karakuyu-Pınarı

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FIG. 131.—The Sivas Lyceum, where the first national assembly of Turkey met and declared its independence from the sultanate.

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Fig. 132.—"Hittite" stela from Darende, now in the Gök-Medrese at Sivas

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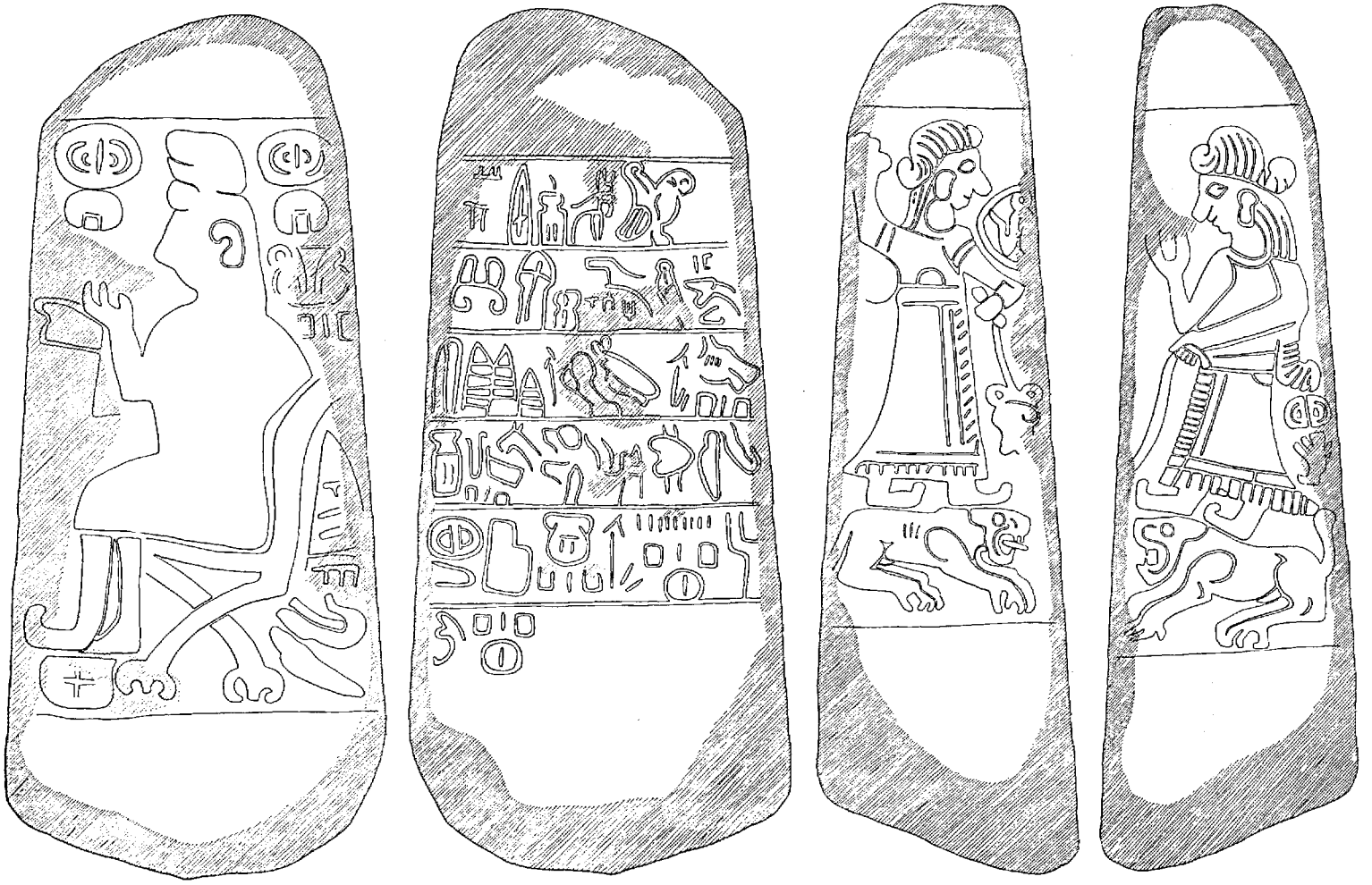

FIG. 133.—Drawings of the stela shown in Figure 132. Scale, 1:6

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everywhere. In many places we could see entrances to artificially cut caves, most of them probably tombs.

South of Geysün, on the edge of the valley, was the village of Boybey-Pınarı. There, while breaking ground for a new vineyard, the villagers had found a wall built of four basalt blocks with "Hittite" hieroglyphic inscriptions and one piece of a late classical architrave (Fig. 127). The four basalt blocks (some of them seen in Fig. 128) seem to have belonged to a large stela.

FIG. 134.—Jewelry found in a tomb at Darende. Scale, 2:3

Farther south, after crossing the Kızıl-Dağ, we reached a slightly larger valley similar to that of Geysün and likewise containing many mounds and ruins. We crossed the Kara-Dağ and reached the Merziman-Ovası. Just after starting up the last and largest range which divided us from the valley of Gazi-Ayintap, we had to stop for the night in the friendly Kurdish village of Karakuyu-Pınarı. The next morning some villagers told us of caves near by. We walked over and found a late classical necropolis, one tomb of which was especially interesting (Figs. 129–30).

In Gazi-Ayintap we found many old friends, first of all the vali, who had formerly been at Malatya, and Hüsnü Bey, whose guest I had

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been at Sivas in 1929. We passed the evening and the whole next day there visiting the citadel and various ancient remains, mostly of late classical times.

We returned to Alişar via Hasan-Çelebi and Sivas. At Sivas we visited the Lyceum (Fig. 131), in which the government has installed a museum to commemorate the declaration of independence which took place there. At the Gök-Medrese, now converted into a museum, we saw several fine pieces which had been added to the collection since my last visit—especially a fine stela from Darende (Figs. 132–33) and jewelry (Fig. 134) from a Darende tomb.

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