

THE
ORIENTAL INSTITUTE
OF
THE UNIVERSITY OF
CHICAGO



FOURTH EDITION OF THE HANDBOOK
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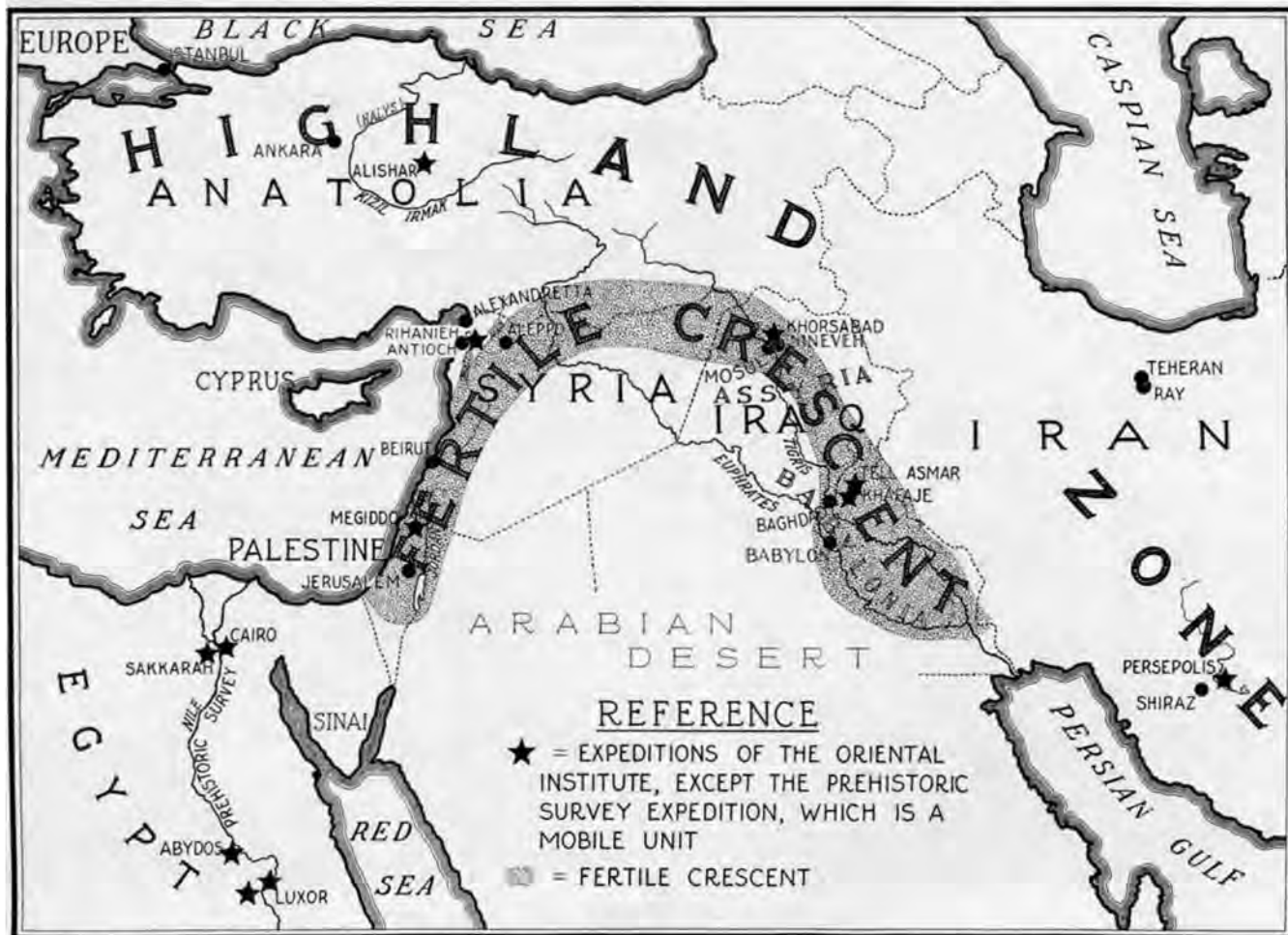
THE ORIENTAL INSTITUTE BUILDING, SEEN FROM THE NORTHWEST

The results of the Institute's field operations, extending from Turkey through Syria, Palestine, Iraq, Iran, and Egypt, are gathered for exhibition, study, and publication at this scientific and administrative head-

quarters building. Five exhibition halls and a lecture hall occupy the ground floor. The other floors are devoted to administration, teaching, and research. The basement contains shops, photographic laboratories, and storage.

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MAP SHOWING THE FIELD OPERATIONS OF THE ORIENTAL INSTITUTE IN THE NEAR EAST

The entire region comprises the *Highland Zone* in the north, the *Desert* and the *Nile Valley* in the south, and the *Fertile Crescent* lying between the Desert and the Highland Zone. Stars indicate the locations of the Institute's field expeditions or other scientific projects. These comprise a total of twelve undertakings, of which eleven are still in progress. Because it

is a mobile unit, the Prehistoric Survey cannot be indicated by a star. It will be seen that the expeditions have been strategically distributed, with six expeditions in Asia—one at each end of the Highland Zone and others at four points along the Fertile Crescent—and likewise six expeditions in Egypt and Northeast Africa.

I

THE PURPOSE AND HISTORY OF THE
ORIENTAL INSTITUTE*The Rise of Man: A Challenge*

The Oriental Institute is a research laboratory for the investigation of the early human career. It endeavors to trace the course of human development from the merely physical man disclosed by the paleontologist to the rise and early advance of civilized societies, the product of a social and material evolution culminating in social idealism.

A generation of archeological research has dispelled all doubts as to the scene of this evolution, which is now recognized as having been the ancient Near East, the region folded like a horseshoe around the eastern end of the Mediterranean. The ancient lands of this region today constitute an almost inexhaustible storehouse filled with perishing and still unsalvaged evidences disclosing early human development. Heretofore no comprehensive and systematic effort has been made to save and study *as a whole* these enormous bodies of perishing evidence. Fully recognized, this situation has formed a challenge to modern science and has laid upon it a twofold responsibility: first, the task of salvaging this evidence by scientifically organized and well equipped field expeditions; and second, the study, the constructive interpretation, and the correlation of the great bodies of evidence which may thus be gathered.

The Oriental Institute of the University of Chicago was organized to meet this challenge and to aid in enriching modern knowledge with a fuller vision of the rise of man, which in itself constitutes the greatest event in the history of the universe as far as it is known to us.

Rescuing the Original Evidence

In endeavoring to fulfil its purpose, the Institute operates from its American headquarters at the University of Chicago, where it carries on a series of researches continually fed by the foreign investigations of its field expeditions, which have operated along a front of some thirty-five hundred miles, from the southern shores of the Black Sea on the north, eastward to southern Iran (Persepolis and vicinity), thence to Northeast Africa on the west and the Upper Nile on the south (see map). Since it began field work in 1919, the Institute has dispatched or maintained some twenty-six scientific missions,

THE ORIENTAL INSTITUTE

reconnaissance surveys, or expeditions carrying on long-continued field operations. Of these undertakings, eleven are still operating as more or less permanent projects which must be continued for years to come. In these operations the Institute is endeavoring gradually to salvage the original evidence for the compilation of a new and fuller history of civilization. It is slowly recovering the fragments of the world's greatest epic, the Conquest of Civilization. In the Oriental Institute's quest for the lost books of that epic there is something of high romance which imbues the Institute's staff both at home and abroad with an eagerness to discern more fully the causes and the nature of that mysterious and persistent buoyancy of the human spirit which, in spite of declining intervals, has made the direction of the human movement from the beginning—probably for several hundred thousand years—a rising line.

These operations involve adequate housing in the field and complete equipment with modern mechanical devices, the machinery and inventions of modern man, brought to bear upon a quest for the true story of man's rise from a dim past, discernible only in part. Frequently these modern devices have resulted in bringing to light the ingenuity of ancient man, who had already anticipated, however crudely, many of the mechanical and even intellectual developments of our present age.

This fourth edition of the *Oriental Institute Handbook* is intended to summarize briefly the progress of Institute activities, as seen in the various scientific projects which it is now carrying on both in America and in the Near East.

The Creation of the Oriental Institute

The action by the Trustees of the University of Chicago creating the Oriental Institute in the spring of 1919 was made possible by the generosity of Mr. John D. Rockefeller, Jr. The subsequent growth of the Institute has likewise been due not only to further support from the same generous donor but also to substantial appropriations by the General Education Board and the International Education Board, as well as to gifts from Mr. Julius Rosenwald, Mr. Theodore W. Robinson, the Hon. Robert P. Lamont, Mr. Henry J. Patten, and others, including one anonymous donor.

This support has made it possible to transform what was once a university department of oriental languages and literatures into an investigative body—a research group, to whose ranks have been added other specializing investigators having no teaching duties and appointed solely to carry on a series of related research projects in the vast field of early human development upon which modern life has been built up. Geographically considered, this field, as we have already indicated, is the ancient Near East. Its permanent Egyptian headquarters are at Luxor (see Figs. 20–21); its three headquarters in

PURPOSE AND HISTORY

Asia—one for Palestine, one for Syria, and one for Iraq (Babylonia and Assyria)—are shown in Figures 30, 31, and 37. Its administrative headquarters, where the control of all field projects is centralized, are in the Oriental Institute building (frontispiece) on the quadrangles of the University of Chicago. Here also original monuments and documents from the field are studied and displayed, and the home research projects are carried on. The Oriental Institute is an integral part of the University, and its funds are intrusted to and administered by the University's Board of Trustees.



FIG. 1.—THE RECONNAISSANCE EXPEDITION OF 1919/20 MEETS SHEIKH SUWAN OF THE SABKHAH ARABS ABOVE DEIR EZ-ZOR ON THE MIDDLE EUPHRATES

Sheikh Suwan, the second figure from the left, was the head of a powerful group of Arabs. At that time he was basing great hopes on President Wilson and the Fourteen Points, knowledge of which had reached him even in this far-away Arab wilderness.

The first venture of the new Institute immediately after its foundation in 1919 was a preliminary survey of the Near East, beginning in Egypt and extending through Western Asia, especially Mesopotamia (Fig. 1), with the purpose of developing plans for excavation and field research. This survey, involving a hazardous journey of twenty thousand miles through regions at that time still fraught with active warfare, revealed unparalleled opportunities for archeological field work of many kinds. The story of this fruitful venture appeared under the title *The Oriental Institute—a Beginning and a Program* (now out of print), which formed No. 1 in the Oriental Institute's "Communications" series. The projects which have grown out of this preliminary reconnaissance and from subsequent explorations are described in

THE ORIENTAL INSTITUTE

the following pages. A fuller account of the background and history of the Institute up to the beginning of 1933 is given by the Director, James Henry Breasted, in *The Oriental Institute* (Volume XII of "The University of Chicago Survey"), on sale in the lobby of the Oriental Institute building.

"The Human Adventure"

In 1934 the Oriental Institute released an eight-reel talking picture called "The Human Adventure" (screening time, 72 minutes). This film represents



FIG. 2.—THE GREAT COLUMNS IN THE TEMPLE OF KARNAK

A scene from the Institute's talking picture, "The Human Adventure."

an altogether new type of educational endeavor. It sketches the rise of man from savagery to civilization in terms of the Institute's researches.

The picture was produced under the scientific supervision of Dr. Breasted, who appears on the screen and contributes a portion of the introduction. The story was written by Mr. Charles Breasted, who directed the production and whose voice narrates the story from the screen.

"The Human Adventure" is distributed solely by Mr. Wendell G. Shields, 1270 Sixth Avenue, Rockefeller Center, New York City, to whom all inquiries regarding rental should be addressed. For the time being, the film is available *only* in 35-millimeter size. For those not having sound-picture reproducing equipment, the distributor will provide

the finest available sound equipment and will be responsible for all details of exhibition.

II

THE FIELD EXPEDITIONS

EGYPT AND NORTHEAST AFRICA

THE PREHISTORIC SURVEY

It is obvious that the study of earliest man must carry the investigator back into the geological ages; hence the Institute's investigations in the Near East have been extensively concerned with the problems of natural science, especially geology. Under Dr. Kenneth S. Sandford of Oxford University as field director the Institute organized a Prehistoric Survey which undertook the first detailed investigation of the geological history of the Nile Valley in connection with a careful search for the earliest evidences of the appearance of man. That expedition has now completed an archeological survey of the earliest geologically dated evidences of man in Northeast Africa, extending for more than seventeen hundred miles inland from the mouths of the Nile (Fig. 3).

Back in Oligocene times, millions of years ago, the Nile began as a colossal stream carrying northward the drainage of all Northeast Africa across the North African Plateau (now the Sahara) to the predecessor of the Mediterranean Sea. It transported enormous masses of gravel, which now lie spread over vast areas of the Sahara. Here and there lie also silicified or petrified tree trunks as much as seventy feet long, brought down on the waters of this mighty Oligocene river. There is no evidence of man's presence along this earliest Nile.

Earliest Evidences of Man Yet Discovered in the Near East

Somewhat east of its earliest course this drainage began to cut a channel which finally deepened and expanded into the present Nile Valley. Along this later Nile the Survey discovered a stretch of over sixty miles of former Nile bed (now dry) some sixty feet in depth, and at the bottom of this gravel bed they found stone implements wrought by the hands of man and marking for us the advent of man in Egypt. The age of these implements is early Pleistocene. That is, in terms of European geological history they go far back into the European Ice Age, although there was, of course, no Ice Age in North Africa. These implements are therefore the oldest human artifacts yet found in the Near East. The American data for establishing the length of the Ice Age are better than those available in Europe. The general verdict of

FIELD EXPEDITIONS

American geologists is that the Ice Age began about a million years ago. In that case the earliest stone implements of Egypt are a million years old. Most European geologists and archeologists favor a much later date.

The Desiccation of North Africa and the Age of the Sahara

Even more important than this new observation is a group of very instructive discoveries made by the Prehistoric Survey in the Faiyum Lake depres-



FIG. 3.—THE PREHISTORIC SURVEY IN CAMP AMONG THE GRAVEL HILLS AND SAND DRIFTS IN THE SAHARA DESERT WEST OF THE NILE BETWEEN SAKKARAH AND THE FAIYUM

sion in the Sahara Plateau on the west side of the Nile, sixty miles above Cairo. Here successive lake terraces, discovered by the Survey, disclose the stages of the shrinking lake. These terraces, like the sinking sand in an hour-glass, mark off the falling waters of the lake (Fig. 4) and the advancing desiccation of North Africa.

This piece of research has for the first time disclosed the date of the desiccation which created the Sahara Desert. It began in the middle of the Paleolithic or Old Stone Age. Such a tremendous change completely transformed the life of man on the North African Plateau. The discovery that Paleolithic man was exposed to this change is one of far-reaching importance. We have long known that Paleolithic man on the *north* side of the Mediterranean was exposed to the advance of ice and the rigors of the Ice Age; now we see that on the *south* side of the Mediterranean Paleolithic man was exposed to desicca-

THE PREHISTORIC SURVEY

tion that transformed his fertile North African home into the Sahara Desert. What was to be the result?

The Desiccation of North Africa and the Rise of Man

For ages before the desiccation set in, the entire North African Plateau was plentifully watered and was inhabited by the earliest hunters whom we know on the African continent. The evidences of their presence are distributed



FIG. 4.—THE SHORE OF THE GREAT MIDDLE PALEOLITHIC LAKE OF THE FAIYUM

The cultivated fields at the extreme right now cover what was the ancient lake bottom. Members of the Survey are seen leveling the top of the deposits laid down by the lake.

across the Sahara from the Nile to Morocco. With the advance of the desiccation (Fig. 5) these hunters were forced to take refuge in the Nile Valley, where there was plentiful water. The animals which they had been wont to pursue on the plateau followed them in great numbers to the bottom of the valley. This close association of the hunter with his quarry, due directly to the desiccation which drove them both into the Nile Valley, was obviously one of the influences which brought about the domestication of animals. In a situation otherwise completely desert, the plentiful water obtainable along the banks of the Nile contributed likewise to the earliest development of agriculture, especially after the Egyptians invented the plow. Surviving evi-

FIELD EXPEDITIONS

dences of these and further advances are buried deep under the Nile alluvium. In boring an artesian well at the Institute's Luxor headquarters the drill brought up pottery from depths of seventy-five and one hundred feet. The interpretation of this evidence is still a problem.

On the basis of these two achievements—cattle-breeding and agriculture—arose in the Nile Valley the earliest known society of several million souls, a



FIG. 5.—INCOMPLETE DESICCATION IN THE EASTERN DESERT

The western Sahara, except at oases, is absolutely devoid of vegetation; but in the eastern desert (halfway along the Cairo-Suez road) the effects of occasional rainfall were recorded by the Prehistoric Survey in this view of a great thorny acacia tree surrounded by bushes of *colocynthis* and of sweet-smelling broom, here seen growing on the floor of a desert valley (known in Arabic as a *wadi*).

social and governmental structure the emergence of which was itself the dawn of civilization.

The Prehistoric Survey has now covered the whole of Egypt and has added confirmatory data from neighboring areas of Northeast Africa. It has studied the Nile Valley up as far as Atbara and has ranged into the desert as far west as Gebel Uweinat, an oasis four hundred and fifty miles west of the Second Cataract. The river terraces in which man-made flint implements show a sequence of cultural stages have been traced and identified for almost two thousand miles, from inner Africa to the sea. When the material and infor-

THE SAKKARAH EXPEDITION

mation thus gathered have been prepared for publication, the Survey plans to move into southwestern Asia to continue its researches.

THE SAKKARAH EXPEDITION

The early society which we have seen foreshadowed by the work of the Prehistoric Survey reached a culminating point in the Old Kingdom of

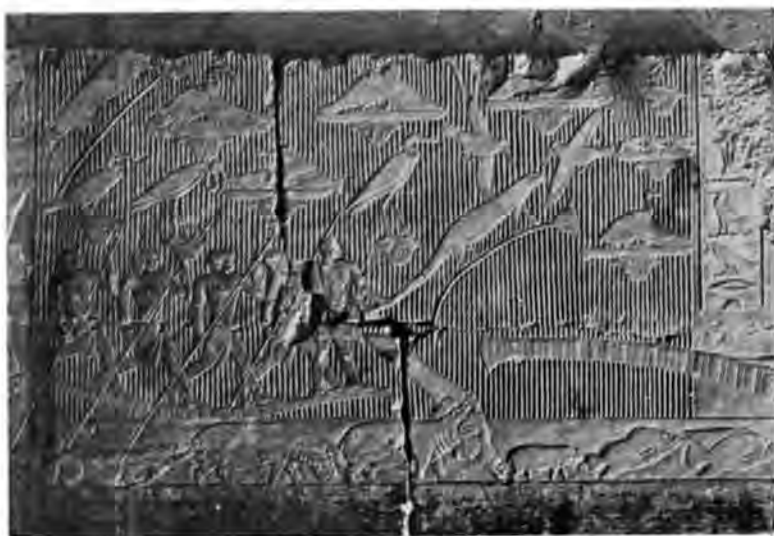


FIG. 6.—PAINTED WALL RELIEF FROM THE MASTABA TOMB OF MERERUKA AT SAKKARAH

A skiff made of bound papyrus plants is poled by four men through a dense Delta marsh. A trained ichneumon is being released from the boat to rob the nests of the swamp fowl. Rhythmic movement, balanced composition, and a careful attention to detail mark such scenes in the masonry tombs of the Pyramid Age, between 3000 and 2500 B.C.

Egypt (after 3000 B.C.). We have an elaborate picture of this stage of civilization in the magnificent colored wall reliefs of tombs at Sakkarah, the cemetery of Memphis, some fourteen miles south of Cairo on the west bank of the Nile. These extraordinary works of art have never been adequately copied or published. In form they are paintings in relief. The careful composition and the delicacy of modeling show that the Egyptians of the Pyramid Age had a fully developed artistic competence, not surpassed in the later history of their art (Figs. 6-7). Not only do these scenes represent an important early chapter in the history of painting but they constitute also a social document revealing the development of human life in agriculture, animal husbandry, industry, family life, government, and social organization.

FIELD EXPEDITIONS



FIG. 7.—THE WIFE OF THE EGYPTIAN NOBLE MERERUKA, DEPICTED ON A WALL OF HIS MASTABA TOMB AT SAKKARAH

The delicate modeling and subtle sophistication of such relief work from the Pyramid Age can be recorded only by the most careful copying. The tombs of nobles at Sakkarah are a treasury of the life and spirit of Egypt between 3000 and 2500 B.C. An accurate record of these monuments is of fundamental importance to the cultural history of the ancient Near East.

With Professor Prentice Duell as field director, the Sakkarah Expedition has embarked upon a program involving the production of some ten folio volumes of color plates and black-and-white drawings. The first volume, presenting a part of the mastaba tomb of Mereruka (see Figs. 6-7), is already in press. When the tomb of Mereruka has been completely recorded, the

THE COFFIN TEXTS PROJECT

expedition plans to apply the same methods of copying to various other mastaba tombs of the Sakkarah necropolis. The great treasury of relief paintings at Sakkarah will be adequately recorded for the first time in these facsimiles. The expedition's headquarters (Fig. 8) are at Memphis (modern Bedrashein), and the Egyptian Department of Antiquities has assigned additional workrooms in one of the mastaba tombs.



FIG. 8.—AIR VIEW OF THE HEADQUARTERS HOUSE OF THE SAKKARAH EXPEDITION AMID THE PALMS ON THE SITE OF ANCIENT MEMPHIS

THE COFFIN TEXTS PROJECT

From a social structure which could create the awe-inspiring array of ancient monuments still visible along the modern Nile, the ancient Egyptians gained profound human experience also. The futility of such purely materialistic conquests as the Great Pyramid was borne in upon them by the visible decay of the earliest pyramids after a thousand years. The Egyptians then began to discern inner values and gained a vision of social idealism and altruistic conduct. The literature that resulted had eventually a great influence on the religion of the Hebrews. Numerous important documents revealing this higher development are inscribed on the insides of beautifully painted Egyptian coffins of some four thousand years ago. About one hundred and fifty such coffins are preserved in the Cairo Museum and the museums of Europe and America. The documents themselves, known to modern scholars as the Coffin Texts, were normally written with pen and ink directly on the inner surfaces of cedar coffins used in Middle Kingdom burials. Beginning as

FIELD EXPEDITIONS

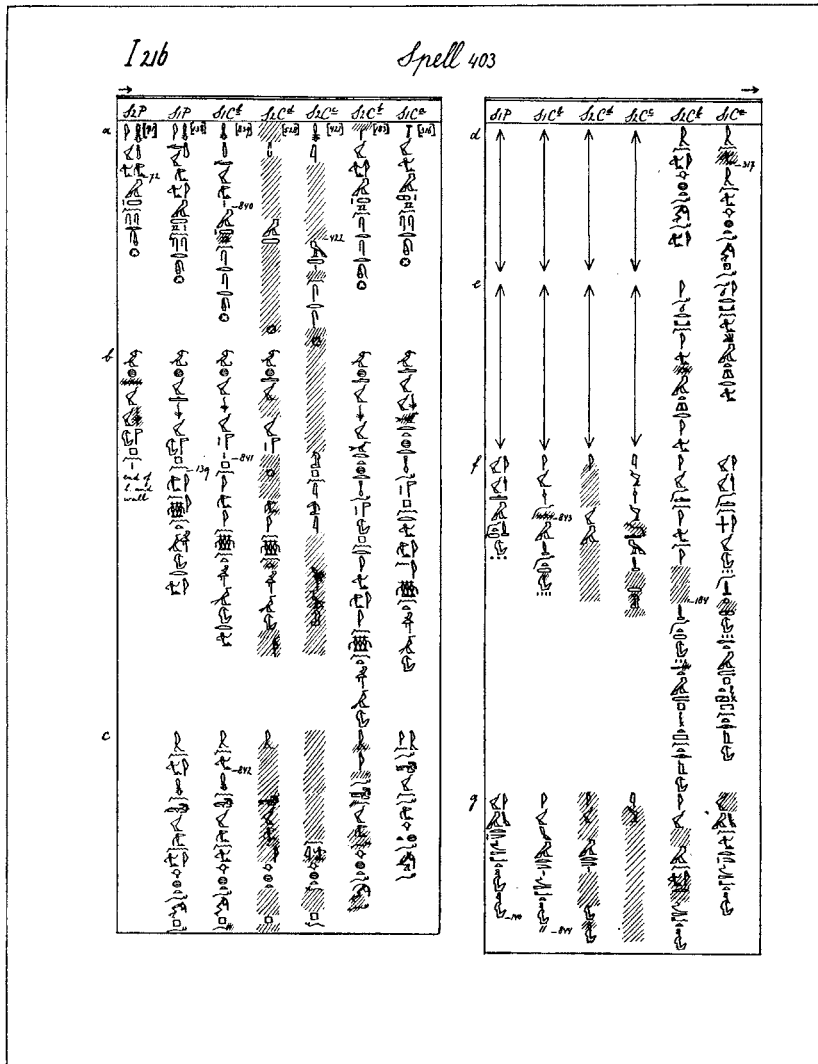


FIG. 9.—REDUCED FACSIMILE OF A COFFIN TEXTS PAGE AS IT WILL BE PUBLISHED, SHOWING ARRANGEMENT IN VERTICAL LINES

Seven versions of the same "spell" or section of the Coffin Texts are shown in parallel columns. The arrangement and orientation of the hieroglyphic signs in the original are here maintained as closely as possible. Translation, commentary, and glossary will appear in subsequent volumes.

THE ABYDOS PROJECT

far back as the twenty-third century B.C., or even earlier, and coming down into the eighteenth century B.C., these writings were afterward largely absorbed into the Book of the Dead, which cannot be understood without a thorough study of the Coffin Texts.

After twelve years' work under Dr. Alan H. Gardiner and Dr. A. de Buck, the Oriental Institute has completed the task of copying the Coffin Texts. They amount to nearly thirty thousand lines of original text. These copies are now being edited by the same able scholars and have already reached the publication stage. The first volume, autographed by the skilled hand of Dr. de Buck, is already in press (Fig. 9), and within the next few years all the Coffin Texts will be published in a series of six or more volumes. When thus accessible, these texts, until now the largest existent group of unpublished documents of ancient Egypt, will dimly reveal for the first time a new chapter in the progress of early man—the dawn of conscience.

MONUMENTS OF THE EGYPTIAN EMPIRE

After 2000 B.C. national developments all around the eastern end of the Mediterranean led to international rivalries out of which came the Imperial Age. Early in the sixteenth century B.C. Egypt gained a leading position and for four hundred years was imperial mistress of the ancient oriental world. As the first world-power, Egypt was able to create colossal monuments, many of which still survive and await rescue and study. This vast group of monuments forms the largest ancient body of evidence still left unsalvaged in the Near East. It consists chiefly of inscriptions and reliefs on the walls of the great tombs and temples of the Nile.

THE ABYDOS PROJECT

In association with the Egypt Exploration Society and under the editorship of Dr. Alan H. Gardiner, the Institute is saving the records of the beautiful temple of Seti I at Abydos (about 1300 B.C.). The reliefs of Seti I at Abydos (Fig. 10) are among the loveliest works of art surviving from the ancient world. Many of them are superbly colored. As far as possible, these reliefs are to be published in color in a series of folios of which the first two volumes have already appeared. The work is being ably carried on by Miss Amice M. Calverley and her associate, Miss Myrtle F. Broome, in the face of formidable difficulties.

THEBAN TOMB PAINTINGS

Under the direction of Dr. Alan H. Gardiner, who personally supported this work for years, Mrs. Nina M. Davies has long been occupied in copying in color the ancient paintings (Fig. 11) on the walls of tombs in the

FIELD EXPEDITIONS



FIG. 10.—SETI I PRESENTING AN IMAGE OF MAAT ("TRUTH") TO THE GODS. A FAMOUS RELIEF ON THE WALLS OF HIS TEMPLE AT ABYDOS

The Institute is co-operating with the Egypt Exploration Society of England in the production of a series of folio volumes reproducing these great works of art in color and in line drawings.

THEBAN TOMB PAINTINGS



FIG. 11.—DETAIL FROM A HUNTING SCENE, A WALL PAINTING FROM A TOMB OF ANCIENT EGYPTIAN THEBES, FIFTEENTH CENTURY B.C. (FROM A COPY IN COLOR BY MRS. DAVIES)

The hunter stands in a tiny reed boat. On the bow of the boat is a decoy duck, and over him in the papyrus thicket is a wild cat (ancestor of our domestic cat) holding three captured birds. A series of such paintings is being published in color by the Institute in two folio volumes.

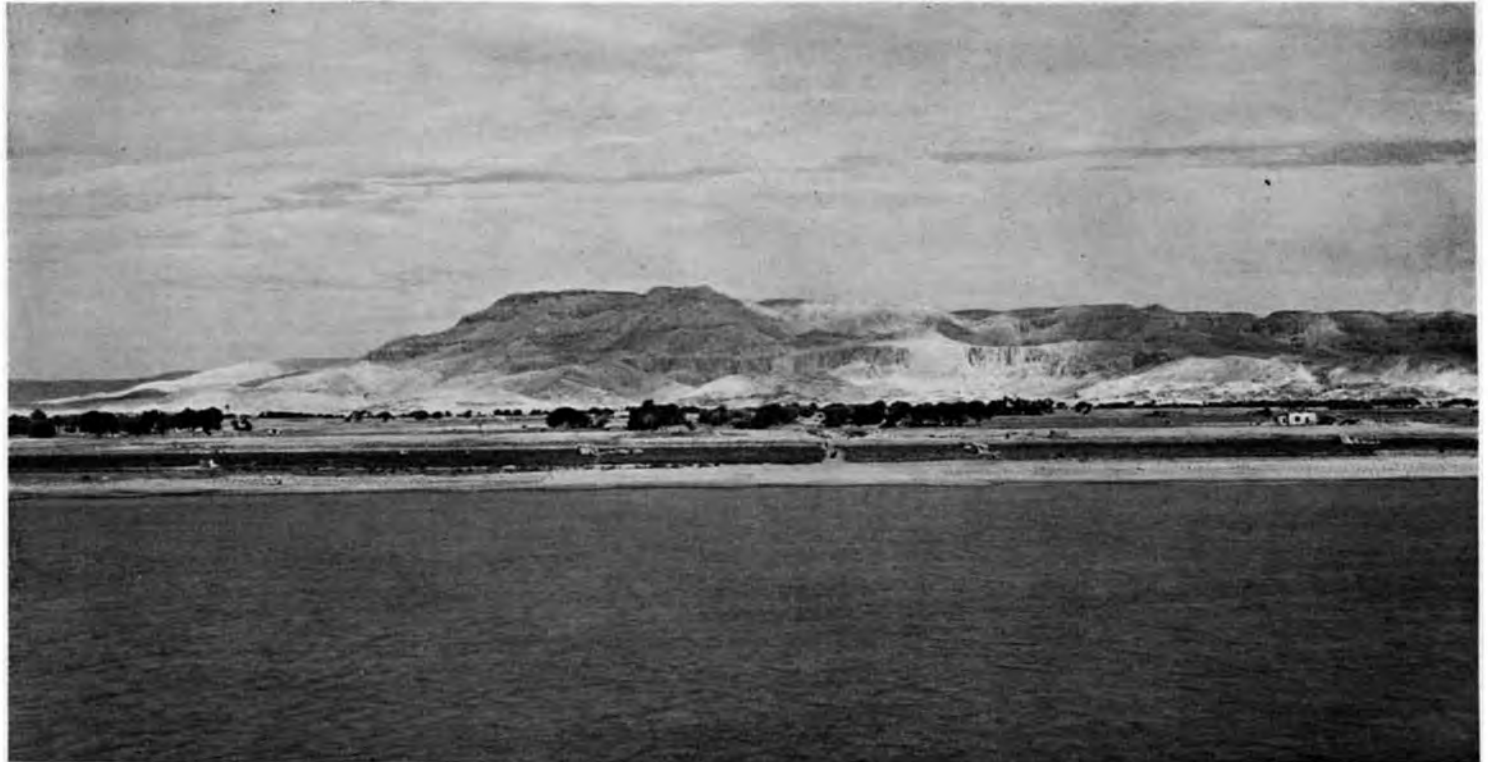


FIG. 12.—VIEW ACROSS THE NILE TO THE WESTERN CLIFFS OF THEBES

The narrow strip of cultivation is characterized by the trees in the middle distance. Beyond lie the desolate sandstone cliffs in which the ancient Thebans hewed their tombs. Medinet Habu is behind the trees at the extreme left. The photograph was taken from the roof of the Institute's expedition house at Luxor.

THE EPIGRAPHIC AND ARCHITECTURAL SURVEY

great Theban cemetery (Fig. 12). Mrs. Davies has now completed for the Institute colored copies of a group of additional paintings, including a few from the Old and Middle Kingdoms. These copies, combined with those already made for Dr. Gardiner, will be published by the Institute under his editorship in one hundred and fifteen color plates forming two folio volumes. The first volume will appear in 1935.



FIG. 13.—THE TEMPLE OF MEDINET HABU SEEN FROM THE AIR

The great stone temple of Ramses III is the largest building visible. Structures of mud brick uncovered by the excavations of the Oriental Institute lie around it. In the right foreground, outside the great inclosure wall, is the mortuary temple of kings Eye and Harmhab, discovered by the Oriental Institute. The distinction between the black land, made fertile by the annual inundation, and the red land of the desert is very clear on the left.

THE EPIGRAPHIC AND ARCHITECTURAL SURVEY

At ancient Thebes (see Fig. 12), known more widely to the general public as Luxor, the Institute maintains its largest undertaking in the Near East, the Epigraphic and Architectural Survey Expedition, with which are combined the Institute's Egyptian headquarters (Figs. 20-21). Since 1924 the Institute has been working at the colossal temple of Medinet Habu and associated structures (Fig. 13). Under the field directorship of Professor Harold H. Nelson it has already issued three volumes of a series of folios which will save to historical science the enormous body of inscribed and sculptured records covering the walls of the Medinet Habu temples (Figs. 14-15). These records, dating from about 1200 B.C., are of fundamental im-

FIELD EXPEDITIONS

portance for a number of reasons. Together with the cuneiform tablets of Asia Minor, they disclose Europe for the first time entering the arena of oriental history and reveal to us something of those migratory movements which carried the Etruscans from Asia Minor to Italy. Furthermore, the great temple of Ramses III at Medinet Habu is the only temple of the Eyp-



FIG. 14.—THE WILD BULL HUNT, ONE OF THE GREAT WORKS OF ART AT MEDINET HABU

The wild bulls have taken refuge in a thicket along the river, where the Pharaoh has slain two of them and is just urging on his horses in order to dispatch a third. The movement of the bodyguard below, the dying bull above, the eager figure of the king, and the sense of landscape make very powerful this composition of the early twelfth century B.C.

tians which has reached us in a fair state of preservation capable of revealing very fully the art and architecture of such a Ramessid structure.

The same expedition has therefore conducted extensive excavations (Figs. 16-18) in order to recover the architecture of the great Theban temples and their connected buildings. This project has been under the immediate leadership of Professor Uvo Hölscher. At Medinet Habu has been laid bare for the first time, in remarkable completeness, the architecture of a pharaoh's royal palace (Fig. 17). Professor Hölscher's excavations and penetrating observations have, to our surprise, disclosed quite clearly that the largest halls of this pharaoh's palace had vaulted ceilings and were not, as we had formerly supposed, flat-roofed like Egyptian temples. This unexpected discovery is of great importance in the history of architecture; for undoubtedly these palace halls (Fig. 18), with high vaults over the central axis and lower vaults on

THE EPIGRAPHIC AND ARCHITECTURAL SURVEY

either side, are among the ancestors of the clerestory architecture of Europe, with its high nave and lower side aisles.

In order to gain the fullest understanding of the Medinet Habu complex, it was also necessary to work just outside the great inclosure wall built by Ramses III. North of this wall Professor Hölscher discovered the mortuary temple of Eye and Harmhab, the next two pharaohs after Tutenkhamon. This structure fills a gap in our knowledge of the mortuary temples of the late eighteenth and early nineteenth dynasties. The most important objects found in this excavation were two colossal statues in red quartzite portraying the features of Tutenkhamon. These had been usurped by Eye and later by Harmhab, whose names they bear. In the division of antiquities one of them was taken by the Egyptian government, while the other was allotted to the Oriental Institute and now stands in the Egyptian Hall of its museum (Fig. 19).

The Luxor staff had at first been housed in a sun-baked brick, and therefore temporary, structure on the west side of the Nile. Meantime the Institute's work of salvaging the historical records and other evidence from the temples and tombs of the Nile had developed so rapidly that in 1929 it was decided to establish permanent headquarters on the east side of the Nile at Luxor. On the northern fringes of the modern town of Luxor, near the great Karnak temple, the Institute erected a group of buildings in an adaptation of California-Spanish architecture suitable to a semitropical climate (Figs. 20-21). With a river frontage of three hundred and fifty feet, the site looks across the Nile toward the stately panorama of the western cliffs behind which lies the Valley of the Tombs of the Kings (see Fig. 12). The Institute's former headquarters on the west bank of the Nile will be retained in modified form until the work of publishing the records of Medinet Habu has been completed.



FIG. 15.—RECORDING THE RELIEF SCENES AND INSCRIPTIONS CARVED ON THE GREAT TEMPLE OF RAMSES III AT MEDINET HABU

Two artists and three epigraphers are engaged in copying, checking, and counterchecking the ancient records of the victory of Ramses III over the Northerners, one of the earliest chapters in the history of Europe.

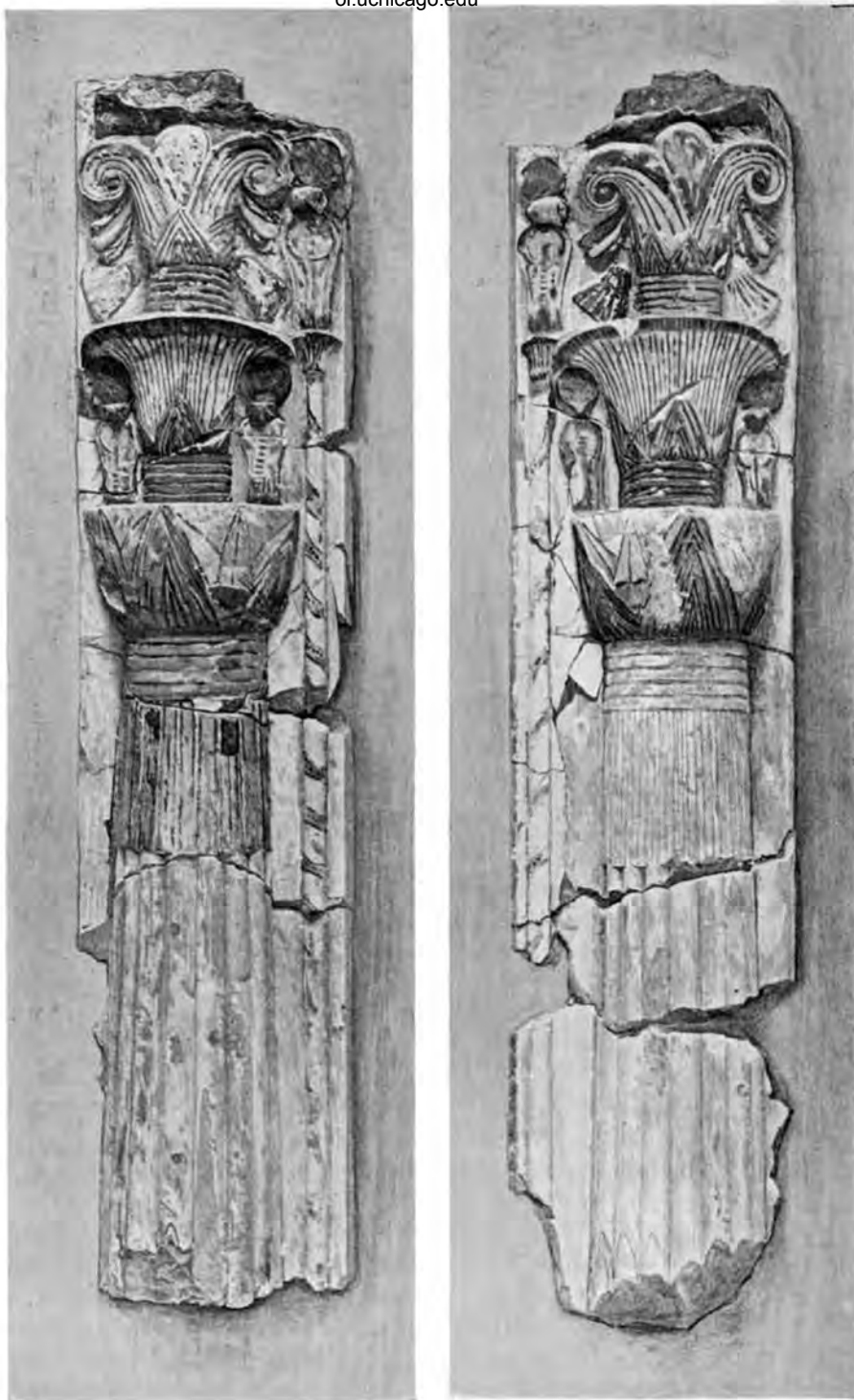


FIG. 16. -CLUSTER-COLUMNS FROM ONE OF THE FORTIFIED GATES OF THE GREAT INCLOSURE WALL AT MEDINET HABU

These engaged columns of painted limestone framed a niche at one of the gateways leading into the great inclosure of Ramses III. The columns, which are well over three feet in height, represent formal bouquets of tightly bound flowers, a lily at the top, a papyrus in the center, and a lotus below. Such columns are often shown in mural decoration, but these are the first plastic representations known.



FIG. 17.—THE PALACE OF RAMSES III AT MEDINET HABU AS RESTORED BY THE ORIENTAL INSTITUTE

The walls have been partially rebuilt on their original foundations to reveal the plan of the building. Pharaoh's apartments are in the center. At the rear of the building are three identical suites for ladies of the royal harem.

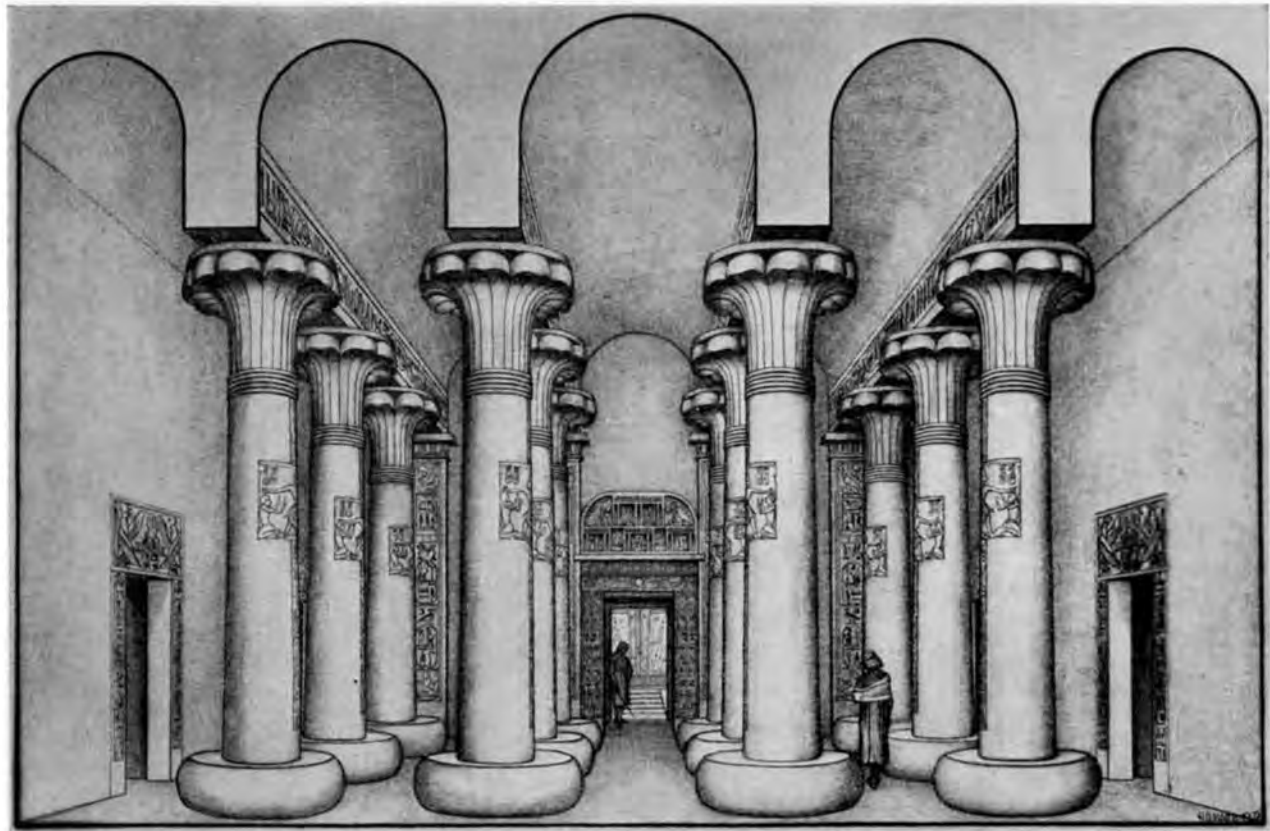


FIG. 18.—HÖLSCHER'S RECONSTRUCTION OF A VAULTED HALL IN THE PALACE AT MEDINET HABU

This audience hall of Ramses III, built early in the twelfth century B.C., disclosed for the first time the fact that such a palace hall had a vaulted roof, with a higher vault over the central nave and lower vaults on each side—the fundamental roof type in later basilica and cathedral architecture.



FIG. 19.—COLOSSAL STATUE OF TUTANKHAMON, FOUND BY THE ORIENTAL INSTITUTE AT MEDINET HABU

This colossal statue of red quartzite bears the features of Tutankhamon, whose tomb is one of the wonders of Egypt. It was later usurped by his successors Eye and Harmhab and bears their names. The statue was found by the Institute in the mortuary temple of Eye and Harmhab at Medinet Habu, with a companion piece, now in the Cairo Museum. This statue has been restored by the staff of the Institute Museum and stands in the Egyptian Hall.

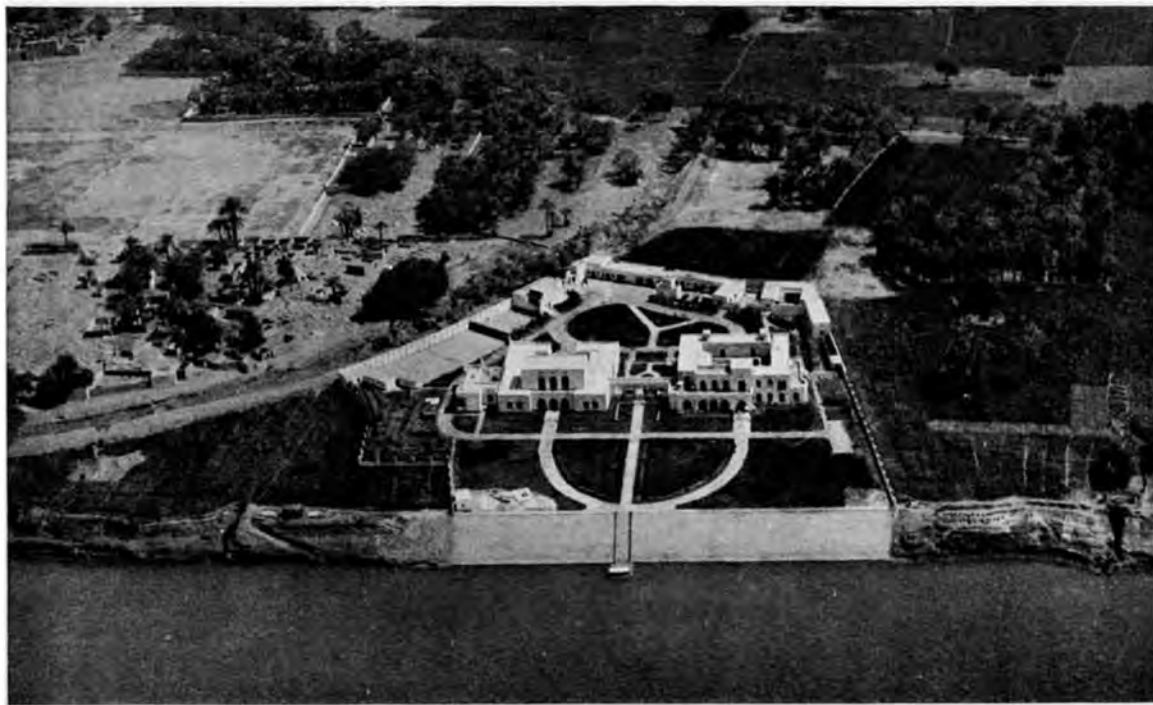


FIG. 20.—THE PERMANENT EGYPTIAN HEADQUARTERS OF THE ORIENTAL INSTITUTE AT LUXOR, SEEN FROM THE AIR

This group of buildings fronts on the east bank of the Nile, just north of the modern town of Luxor. The living-quarters are in the structure on the right. The building on the left contains the library, drafting-rooms, and offices.

THE EPIGRAPHIC AND ARCHITECTURAL SURVEY

The expedition has extended its efforts to those portions of the temple area of Karnak allotted to it by the Egyptian Department of Antiquities. The small temple of Ramses III within the great temple of Amon at Karnak has been copied and is now in course of publication (Fig. 22).

It will thus be seen that, as far as the early human career in Northeast Africa is concerned, the Institute is salvaging and studying the evidence along a chronological series of periods extending from the geological ages down to the emergence of Europe in the history of the East.



FIG. 21.—THE PHOTOGRAPHIC LABORATORY IN THE COMPOUND OF THE ORIENTAL INSTITUTE HEADQUARTERS AT LUXOR

WESTERN ASIA

The Highland Zone and the Fertile Crescent

In Western Asia the genetic and chronological sequence in the development of civilization is not yet as clear as in Northeast Africa. We now discern that in large terms there is in the northern part of Western Asia what may be called a "Highland civilization," occupying a "Highland Zone" extending from the Aegean eastward and southeastward to Iran. South of that zone lies the great Semitic world; between are smaller groups of adjacent cultures. Within this area south of the Highland Zone lies a great desert bay the cultivable shores or fringes of which form a "Fertile Crescent" (see map) where all these cultures met and commingled. The once teeming cities and towns of the ancient peoples who at various times occupied the hills and valleys of Western Asia from Anatolia to Iran are now reduced to silent mounds beneath which are buried, among other treasures, great archives of



FIG. 22.—THE FORECOURT OF THE GREAT TEMPLE OF AMON AT KARNAK

The first task of the Oriental Institute at Karnak was the recording of the small temple of Ramses III, shown here in the center of the picture, its main entrance guarded by two statues of the Pharaoh. (Infra-red photograph.)

THE MEGIDDO (PALESTINE) EXPEDITION

cuneiform tablets. Due to the climatic conditions and the character of the monuments, certain kinds of written evidence are better preserved in Asia than in rainless Egypt, especially cuneiform tablets when they have been fired in an oven so that they become pottery. The process of salvaging these Asiatic materials is still in its early stages. The Oriental Institute has therefore undertaken a program of excavation. In Palestine, Syria, Anatolia, Assyria, Babylonia, and Iran it has selected historically significant or promising points at which to plant expeditions, each of which is investigating a particular civilization together with its related cultures.

We must bear in mind, however, that behind this historic age of writing represented by cuneiform records there lies a period of many thousands of years of prehistoric development which must be investigated by the Prehistoric Survey. In the near future, therefore, the Institute will shift that expedition from the Nile to southwestern Asia. Except for Palestine, study of the human career in Western Asia has not yet progressed far enough to disclose any geologically dated sequence of development such as the Prehistoric Survey has found in Northeast Africa.

THE MEGIDDO (PALESTINE) EXPEDITION

At the western end of the Fertile Crescent the Oriental Institute has been conducting excavations in Palestine, the scene of the extraordinary history of the Hebrews. Perennially involved in the colorful history of the East during the Imperial Age is the famous battlefield of Armageddon, or Megiddo, in Palestine. This plain, lying inland from Haifa, received its name from the strong fortress city of Megiddo commanding the pass over the Carmel Ridge which flanks the plain on the south. It was through this very pass that Allenby advanced to his great victory on the plain of Armageddon at the close of the World War. The Institute has acquired control of the entire site of the historic city, an area of more than thirteen acres, and is now stripping off stratum after stratum of the débris which was deposited by the successive cities built one above another on this ancient site.

An interesting innovation at this excavation has been the use of a small captive balloon (Fig. 23) for securing air photographs, which are of great value to the archeologist. A balloon large enough to carry a camera controlled from the ground makes possible a series of very useful air photographs (Fig. 24) forming a regular part of the record of the Megiddo excavations and showing the varying ground plan of the city as the clearance proceeds and descends from one chronological level to another.

Thus far the excavation has descended to the level of the twelfth century B.C., a period of great interest in the development of Palestine, as it must have been the time of the Judges, when the Hebrews were attempting to consoli-

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FIG. 23.—BALLOON FOR ARCHEOLOGICAL PHOTOGRAPHY FROM THE AIR

The balloon is of a type used for meteorological observation but has been adapted for making an archeological record. The reel on the left carries several hundred feet of strong cord. The reel on the right carries a similar amount of electric cable, through which the shutter release on the camera is operated from the ground. An example of the work of this device is shown in Figure 24.



FIG. 24.—MOSAIC PHOTOGRAPH OF THE STREETS AND HOUSES OF ANCIENT ARMAGEDDON

This photograph is put together from a large number of sections photographed from the air by means of a camera carried by a meteorological balloon (see Fig. 23). The original mosaic measures about four feet two inches across. In the upper right-hand corner may be seen the oblong rectangular Stables of Solomon (see Figs. 25-26). The dark trench cutting across the right end of the mound is the result of a previous excavation, made before the World War.

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date their position in the land. The expedition has uncovered stables (Figs. 25-26) in which Solomon kept his blooded horses, imported from Egypt for sale to the Hittites. A portion of a monumental record of the Pharaoh Shishak, who captured Jerusalem under Solomon's son Rehoboam, has been discovered also.

In the southwest section of the city the excavations have revealed an ancient water system (Figs. 27-28) dating back to the Canaanite kings of pre-Hebrew days. This consists of a huge square shaft, its upper part lined with stone masonry, the rest of its depth cut into the native rock, penetrating one hundred and twenty feet below the top of the mound to the level of the ground water which still runs in at the bottom. A winding stairway descended all the way from the top. At the bottom a horizontal tunnel (Fig. 28) leads for more than one hundred and sixty feet toward the city wall, then expands into a huge chamber some seventy-five feet long, twenty-five feet high, and fifteen feet wide, a large natural cave beneath the city. This was apparently connected with a postern gate, for a niche at the end of the great chamber contained the bones of a sentry who had died at his post. His spear lay beside him, and the wall is still blackened by the smoke of the torch which lighted his post in the pitch-black chamber. The cave opened on the slope of the hill outside the city wall. This water system, which is to be dated to the twelfth century B.C., was inherited by Solomon and probably was expanded by him in his development of the city. It would appear to be the greatest piece of pre-Hebrew engineering yet found in Palestine.

An important recent find was a bronze base for a statuette of the Egyptian Pharaoh Ramses VI (about 1150 B.C.), which lay between Strata VII and VIII and thus dated these strata. The base as found was badly corroded but responded well to treatment in the workshops at Chicago, so that the names of the king, written in Egyptian hieroglyphs, are easily legible (Fig. 29). The presence of a figure of this Pharaoh in Palestine is a new and important historical fact.

For the study of the early periods before written records were common it is necessary to establish sequences of objects in order to date successive cultures. The most useful indices of cultural sequences may be set up on the basis of pottery shapes, wares, and techniques, as pottery is common in every age and shows a constant, clearly recognizable change. A valuable result of the systematic excavation of the east slope of the Megiddo mound was the discovery of a number of early strata. Careful study of the pottery from this series of occupation levels by two members of the expedition, Mr. Engberg and Mr. Shipton, provided them with a working index of the forms and techniques of the Early Bronze Age and of the period of transition from the preceding Stone Age. Such a reference index is a valuable key for dating other tombs, dwellings, or sites.



FIG. 25.—THE STABLES OF SOLOMON, AS EXCAVATED BY THE MEGIDDO EXPEDITION

The pillars of the stables, with their hitching-holes, and the mangers are clearly visible. Compare the reconstruction in Figure 26.

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The systematic clearance of such a city mound, revealing for the first time in stratum after stratum the successive ground plans and the age-long growth of a Palestinian city, is a task of many years and requires an extensive expedition house. The Institute has the first adequate archeological field headquarters (Fig. 30) yet erected in Palestine.



FIG. 26.—MODEL OF THE STABLES OF SOLOMON DISCOVERED BY THE MEGIDDO EXPEDITION

The condition of the ancient building as found is reproduced to scale at the right-hand end. The adjoining cross-section of one of the stables discloses their interior disposition. Rows of horses faced each other on either side of a central passage used by the grooms for feeding the horses. Two completely reconstructed stables are seen at the left. Part of Solomon's income was derived from his large-scale operations in horse-trading. These were of sufficient interest to lead the Hebrew historians to refer to them in the Old Testament (I Kings 9:15-19; II Chron. 1:14-17).

THE SYRIAN-HITTITE EXPEDITION

Though the ancient Hittite Empire centered in what is today Asia Minor or modern Turkey, it extended also southward into Syria, at present a French mandate. We therefore find in North Syria numerous ancient city mounds once inhabited by Hittite peoples of the same general culture as those investigated by the Institute's Anatolian Expedition. When the great Hittite Empire of Asia Minor went to pieces in the twelfth century B.C., it left behind many small city-states which played brief independent rôles until the rise of the Assyrian Empire in the eighth century B.C. Among the city-states which flourished during this imperial interlude were the many Syrian-Hittite principalities of the North Syrian plain. Being on the southern periphery of the ancient Hittite Empire, these mounds may be expected to furnish inscribed monuments and cuneiform records of the greatest value in reflecting the social, commercial, and political intercourse between the Hittite Empire and its neighbors in the Imperial Age.

About halfway between Aleppo and Alexandretta, at the edge of the great plain of the Lake of Antioch, the Institute has established its Syrian headquarters for the excavation and investigation of the ancient mounds of the neighboring country (Fig. 31). Two large mounds were selected as promis-

THE SYRIAN-HITTITE EXPEDITION



FIG. 27.—EXCAVATION OF THE WATER SYSTEM OF ANCIENT ARMAGEDDON

An enormous pit, entirely filled with rubbish when discovered, descends to a depth of about one hundred and twenty feet below the top of the mound. The ancient staircase down which the women of antiquity went to draw water is faintly visible at the right, alongside a staircase cut by the expedition's workmen. This water system is the largest ancient work of engineering as yet found in Palestine. It is dated to the twelfth century B.C.

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FIG. 28.—THE UNDERGROUND TUNNEL OF THE MEGIDDO WATER SYSTEM

The length of the tunnel from its entrance shaft to the cavern and its spring is more than 160 feet. It is high enough for a woman to walk with a water-jar on her head. The bend in the wall is due to a slight miscalculation made by the ancient engineer, whose gangs of workmen cut toward each other from the two ends of the tunnel.

ing, Chatal Hüyük and Tell Jedeideh near the modern village of Rihanieh and the Afrin River. The expedition is engaged in the systematic stripping-off of the successive culture deposits of these sites. The material remains already brought to light (e.g., Fig. 32) show an interesting combination of motives such as we should indeed expect to find here, for the cultures of Anatolia, the Aegean world, Mesopotamia, and Syria-Palestine met at this

THE ANATOLIAN-HITTITE EXPEDITION

common crossroads. The area is little known, and the Institute's work will fill in important information at a needed point.

In the spring of 1935 a brief trial excavation was made at a mound about ten miles northeast of Antioch called Taīnat, where surface indications gave promise of interesting royal Hittite remains. A building which was tentatively identified as a palace of the later Hittite period (about ninth century B.C.) suggested that Taīnat may once have been an important city of North Syria. The most striking find was a column base in the form of two crouching lions, a form new to Hittite art (Fig. 33). The Institute hopes to resume operations at this site in the season of 1935/36.

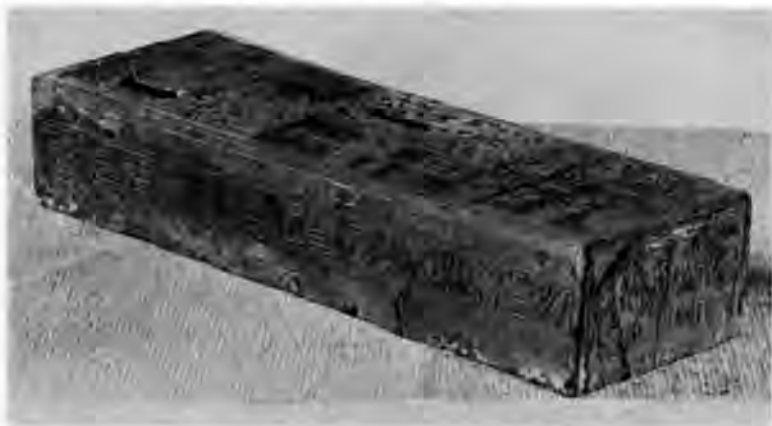


FIG. 29.—BRONZE BASE FOR A STATUETTE OF THE EGYPTIAN PHARAOH RAMSES VI, FOUND IN THE EXCAVATION OF MEGIDDO

The base is inscribed with Egyptian hieroglyphs naming Ramses VI. The holes in the top were to fasten the two feet of the statuette of Pharaoh which was once set up at Megiddo. It is a new and surprising fact that this ruler had sufficient control over Palestine in the Age of the Judges to place his figure in one of the strong cities of the country.

THE ANATOLIAN-HITTITE EXPEDITION

The Excavation of the City Mound of Alishar

One of the most important of the Highland peoples to the north was the Hittites, whose chief states and leading cities were in Anatolia. For several years the Oriental Institute has been engaged in the study of this region. The Anatolian Expedition, under the field directorship of Dr. H. H. von der Osten, first found and placed on the map scores of ancient settlements and town sites forgotten since antiquity. It then selected for excavation an exceptionally important site, a great mound (Fig. 34) near the village of Alishar, about one hundred and thirty miles southeast of Ankara.



FIG. 30.—THE MOUND OF MEGIDDO (ARMAGEDDON), WITH THE EXPEDITION HEADQUARTERS

The photograph was taken from the plain, looking southward toward the mound, with the Carmel Ridge visible in the left background.



FIG. 31.—THE SCENE OF THE WORK OF THE ORIENTAL INSTITUTE'S SYRIAN EXPEDITION

The great plain of the Lake of Antioch is dotted with the mounds of ancient settlements. The Syrian Expedition is excavating two of these mounds, Tell Jedeideh, shown in the right foreground, and Charal Hüyük, visible in the middle distance in the center of the photograph. The white building at the left is the expedition headquarters.

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FIG. 32.—CARVED STONE BOWL OF A CENSER, FOUND BY THE SYRIAN EXPEDITION AT CHATAL HÜYÜK

The piece is delicately carved in serpentine; it depicts a lion guarding the bowl in which incense was burned before the god. There was originally a long arm or pipe attached to the bowl. This type of temple equipment is well known in Egypt and may have originated there. The present example is one of the finest found in Syria.

Clay tablet records written in cuneiform had hitherto been found in only two places in Asia Minor—at the ancient Hittite capital of Hattushash (modern Boghazköy) and at a commercial settlement now known as Kültepe. The Institute's discovery between 1929 and 1932 of cuneiform tablets at the Alishar mound has therefore added a third Hittite city to those already known to have left such records. These tablets are chiefly business documents



FIG. 33.—DOUBLE LION COLUMN BASE IN A LATE HITTITE PALACE AT TAÏNAT

The base of the column may be seen on the lions' backs. This discovery was the product of a brief test excavation at Taïnat near Antioch in Syria. Such use of lions to support a column seems to be new to Hittite art. Provisionally the piece is dated to the ninth century B.C.

THE ANATOLIAN-HITTITE EXPEDITION



FIG. 34.—GENERAL VIEW OF A PORTION OF THE ANATOLIAN EXPEDITION'S EXCAVATIONS AT THE ALISHAR MOUND

The expedition's headquarters are visible in the middle distance

and letters and are written in Assyrian cuneiform. Their contents make it probable that the ancient name of Alishar was Ankuwa. Two of the tablets from Alishar contain the name of a very early Hittite king, enabling us to date these records to a stage of Hittite history close to 2000 B.C.

The Anatolian Expedition in its Alishar excavations (Fig. 35) has done pioneer work in careful plotting of all the ancient levels. It has thereby disclosed for the first time the successive stages of ancient life in Anatolia, from



FIG. 35.—EXCAVATING AT ALISHAR DURING A HEAVY WINDSTORM

These excavations sought to disclose the development of Anatolian civilization, with the special purpose of disengaging the successive stages of Hittite culture. The discovery of a group of cuneiform tablets is of great value in this task.

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the Chalcolithic period at the bottom (Fig. 36) to Osmanli Turkish remains at the top, a range of some five thousand years. Potsherds form the archeologist's index for dating the levels in an ancient city mound, just as the



FIG. 36.—WOODEN POST FROM A DEEPLY BURIED HOUSE AT ALISHAR

Some eighty feet down in the great city mound of Alishar, the Anatolian Expedition found the remains of a Chalcolithic house. The walls seen in the photograph are the solidified débris of later buildings, not the walls of the Chalcolithic house itself. The base of a fallen wall of the latter may be seen at the left. The roof of the house fell in thousands of years ago, but the stump of a wooden post which once supported the roof is shown here as it was found, still standing on its stone base.

fossils found in rocks date strata for the geologist. The Anatolian Expedition's careful identification and listing of the pottery types from Alishar now make available for the first time in Hittite territory the history of the pottery, so fundamental to further archeological investigation of the region.

THE IRAQ EXPEDITION

The excavations in Anatolia are temporarily suspended while the publication of the field results is in progress.

Studies in Anatolian Languages

In the course of his explorations of eastern Anatolia Dr. Julius von Mészáros, then director of the Ethnographical Museum at Ankara, found a village in which a few old men and women were speaking a language quite different from that of the surrounding inhabitants. By Institute appointment Dr. von Mészáros was enabled to record this almost extinct language by taking down proverbs dictated to him by these people, to analyze its grammar, and to compile a dictionary. The Institute is publishing his results. This tiny linguistic island may prove to have preserved the last surviving remnants of the tongue spoken by the ancient people preceding the Indo-European invaders who are commonly called "Hittites." If so, the investigation will bring a better understanding of the pre-Indo-European elements in the later Hittite documents and thus add largely to our knowledge of historical events.

In this connection it is of interest to note that the Institute has published three studies on the so-called Hittite hieroglyphic, which has baffled scholars for years. These studies, one by Dr. Emil Forrer and two by Dr. I. J. Gelb, carry us a long way toward the decipherment of this writing.

THE IRAQ EXPEDITION

Babylonian Excavations

The oldest centers of early civilization in Western Asia were along the east end of the Highland Zone and in Babylonia and Assyria, which now form the modern kingdom of Iraq. A short distance east and northeast of Baghdad the Oriental Institute holds a concession from the Iraq government to excavate a group of four ancient city mounds lying within a circle some fifteen miles in diameter. At Tell Asmar, the most imposing of the four, the Institute has erected extensive headquarters (Fig. 37) for all its operations in Iraq. From this one center Dr. Henri Frankfort, the field director of the Iraq Expedition, is able with the aid of modern transportation to carry on excavations at Tell Asmar, as well as at a neighboring mound called Khafaje about ten miles distant, and to make preliminary investigations at the two other sites included in the group.

The importance of these researches lies in the fact that this region beyond the Tigris stretches eastward toward the Iranian mountains—that is, toward the eastern end of what we have called the Highland Zone, where dwelt round-headed peoples like the Armenians. Among them developed cultures

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so closely related that they may as a whole be called the Highland civilization. Such Highland peoples overflowed constantly into the lowlands on the south. At Tell Asmar and Khafaje we have evidence of this overflow, the influence of which extended even as far west as the region of Baghdad. As will be seen, the cultures found in the area of the Institute's concession also show important links with areas to the southeast.

The work of the expedition was facilitated by assistance kindly contributed by the Royal Air Force when Great Britain held the mandate of



FIG. 37.—THE HEADQUARTERS OF THE IRAQ EXPEDITION IN BABYLONIA AT TELL ASMAR, SEEN FROM THE AIR

Fifty miles by road, thirty miles by air, northeast of Baghdad, this structure stands alone on the vast muddy flats bordering the Tigris. From its tower on a clear day one can easily see the Iranian mountains eighty miles distant—the Highland Zone, whose people early invaded the neighboring Fertile Crescent.

Iraq. It is a curious fact that in an air photograph of a desert surface suspected of containing ancient structures the lines of old walls may be traced quite distinctly. They are betrayed by the absence of grass. The grass of the plains is nourished by the winter rains and grows chiefly in the spring, but fortunately it never appears on the shallow soil covering the walls of an ancient site. Although the walls themselves may be invisible, their ground plan is thus revealed by an air view. The Institute itself has occasionally enjoyed opportunities to make air photographs. The expedition has recently tried the interesting experiment of flying two kites in tandem to carry a small camera. By a system of delayed exposure it is possible to take pictures from the air which give a clear idea of the ground plans exposed by excavation.

Systematic investigation of Khafaje and of Tell Asmar, which the expedition has identified as the ancient city of Eshnunna, has revealed an abundance of material for the history and prehistory of early Babylonia. Correlations



FIG. 38.—AIR VIEW OF THE EXCAVATIONS AT KHAFAJE

The great fortified oval incloses a Sumerian temple of 3000 B.C. From it extend the streets of the ancient city. The irregular holes in the left foreground were made by native thieves in search of antiquities before the official excavations began.

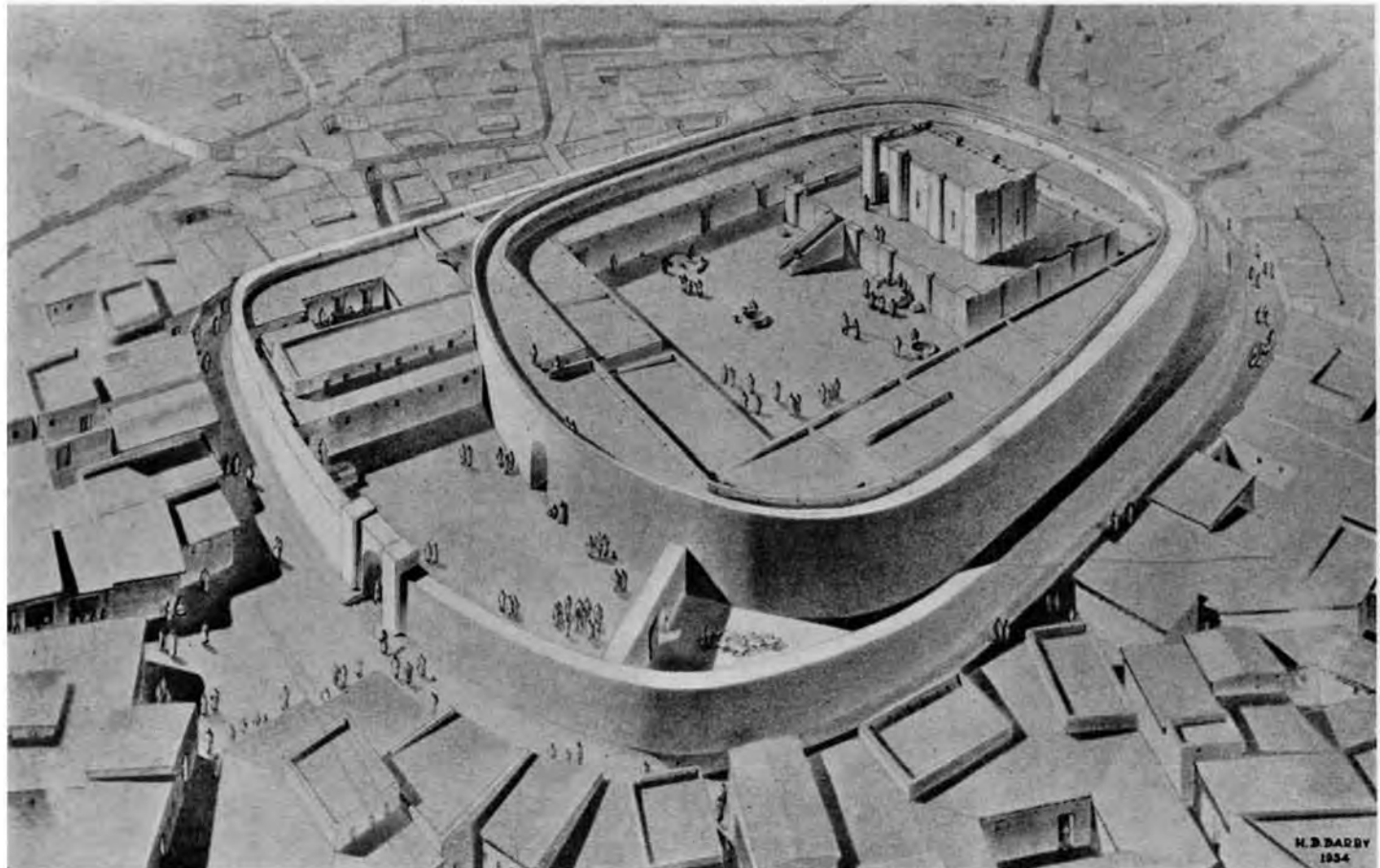


FIG. 39.—RECONSTRUCTION OF THE TEMPLE OVAL AT KHAFAJE

Although viewed from a different angle, the great oval inclosure may be easily identified as the same as that in the air view of Figure 38. The present

drawing attempts a reconstruction of the oval and its surrounding city as it may have looked in its prime.

THE IRAQ EXPEDITION



FIG. 40.—EXCAVATION OF THE PALACE OF KING URNINMAR AT TELL ASMAR (ANCIENT ESH-NUNNA)

The Iraq Expedition is just clearing a bathroom in this palace of the end of the third millennium B.C. We see in the center the baked tile floor of the bathroom plastered with bitumen. The floor is provided with drain tiles to carry off the water from the shower bath.

with other excavations in lower Mesopotamia give a fuller knowledge and control of the historical periods of the Sumerian age. Further, recent finds at the two sites provide closely knit material showing the transition from the prehistoric phase to the historic, a transition hitherto argued by analogy but not established by actual stratified remains.

It is of fundamental importance that these excavations reveal not only the official buildings such as temples and palaces but also the city plans and the houses in which the people lived (Figs. 38-39). The careful examination of

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FIG. 41.—THE ELABORATE SANITARY PROVISIONS OF A BABYLONIAN PALACE OF 4500 YEARS AGO

The vaulted sewer of the Akkadian palace at Tell Asmar runs through the center of the picture. In the foreground this vaulting has collapsed and disappeared. On the right, in front of the workman, may be seen a drain emptying into the main sewer from one of the rooms of the palace.

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domestic architecture has been extraordinarily fruitful, presenting such utterly unexpected finds as grilled windows and arched doorways dated 2700 B.C., a piece of glass dated 2500 B.C., a full thousand years before glass came into common use, and an iron knife blade dated by its level to 2700 B.C., fifteen hundred years before that metal was common. Such discoveries increase our admiration for the technical abilities of the early Babylonians. Similarly we see them as a highly civilized people when we examine the efficient sanitary provisions of their palaces (Figs. 40-41) and private houses. Discoveries of



FIG. 42.—LINKS BETWEEN BABYLONIA AND ANCIENT INDIA

The cylinder seal shown at the top was found in a dated stratum at Tell Asmar. It depicts animals unknown to the Babylonians—the elephant and the rhinoceros. Comparison with seals found at Mohenjo Daro in the Indus Valley of India (shown at the bottom of the figure) indicates that the Tell Asmar seal is an importation from India and gives a date for the Indus civilization.

high importance made in private houses of the Akkadian period (about 2500 B.C.) link Mesopotamia with a remarkable civilization found in the lower Indus Valley (Fig. 42). Thus for the first time this isolated Indian culture has been brought into demonstrable dated relationship with a civilization of the ancient Orient.

In many ways the most important and striking discoveries at these two sites are the works of art produced by Sumerian sculptors. Illicit digging by natives before the Oriental Institute began work at Tell Asmar and Khafaje had already suggested a wealth of such material. In the first season the Iraq Expedition found three archaic copper statues (Fig. 43). They are votive figures in the form of offering-stands placed before the cult statue of a god. Found huddled together in a tight bundle, they had obviously been hidden away at the time of some invasion.

In the season of 1933/34 a startling number of Sumerian stone statuettes was found at Tell Asmar and at Khafaje (Fig. 44). The variety of treatment

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and the great range of artistic competence in these figures are striking. They greatly enlarge our knowledge of the artistic and technical abilities of the Sumerians of about 3000 B.C. and give us new documentation for the cult practices, physical appearance, and dress of this people. At Tell Asmar appeared the only cult figures of deities yet discovered in Babylonia, a statue (about 30 inches high) of Abu, the Lord of Fertility, and a statue of the Mother



FIG. 43.—ARCHAIC COPPER FIGURES OF ABOUT 3000 B.C., EXCAVATED AT KHAFAJE

Cast solid before hollow casting was known and before the introduction of bronze, these statues are among the most remarkable archaic works of art yet discovered in ancient Babylonia.

Goddess. The other figures show priests or private individuals in an attitude of worship. One group of statuettes found at Tell Asmar was neatly buried under the floor of the temple of Abu, with the two cult statues at the bottom (Fig. 45). These statues had once been set up in the temple as consecrated objects; they could not be thrown out when their usefulness was at an end. Instead they were piously buried within the temple and have come down to us in a remarkable state of preservation.

Artistic work of another kind is represented by jewelry, which was found in such a context and such a state of preservation that it could be restored



FIG. 44.—SUMERIAN STATUES FOUND BY THE IRAQ EXPEDITION IN THE SEASON OF 1933/34

These statues from Tell Asmar and Khafaje constitute the largest and most significant group of Sumerian works of art yet discovered. The tall figure with black beard is the Lord of Fertility. The tall female figure is the Mother Goddess. The other statues represent priests and worshipers.

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FIG. 45.—VOTIVE STATUES AS FOUND IN THE EXCAVATION OF A TEMPLE AT TELL ASMAR

In an ancient renovation of the temple of the Lord of Fertility some of the statues were discarded. As they had once been consecrated, they could not be thrown out and so were given a pious burial under the floor of the temple. Five thousand years later the Iraq Expedition found them just as they had been laid away.

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with full confidence (Fig. 46). Discoveries of this kind, taken in conjunction with the statues, the houses, and the written documents, give us a very vivid picture of the life of the early inhabitants of Babylonia.

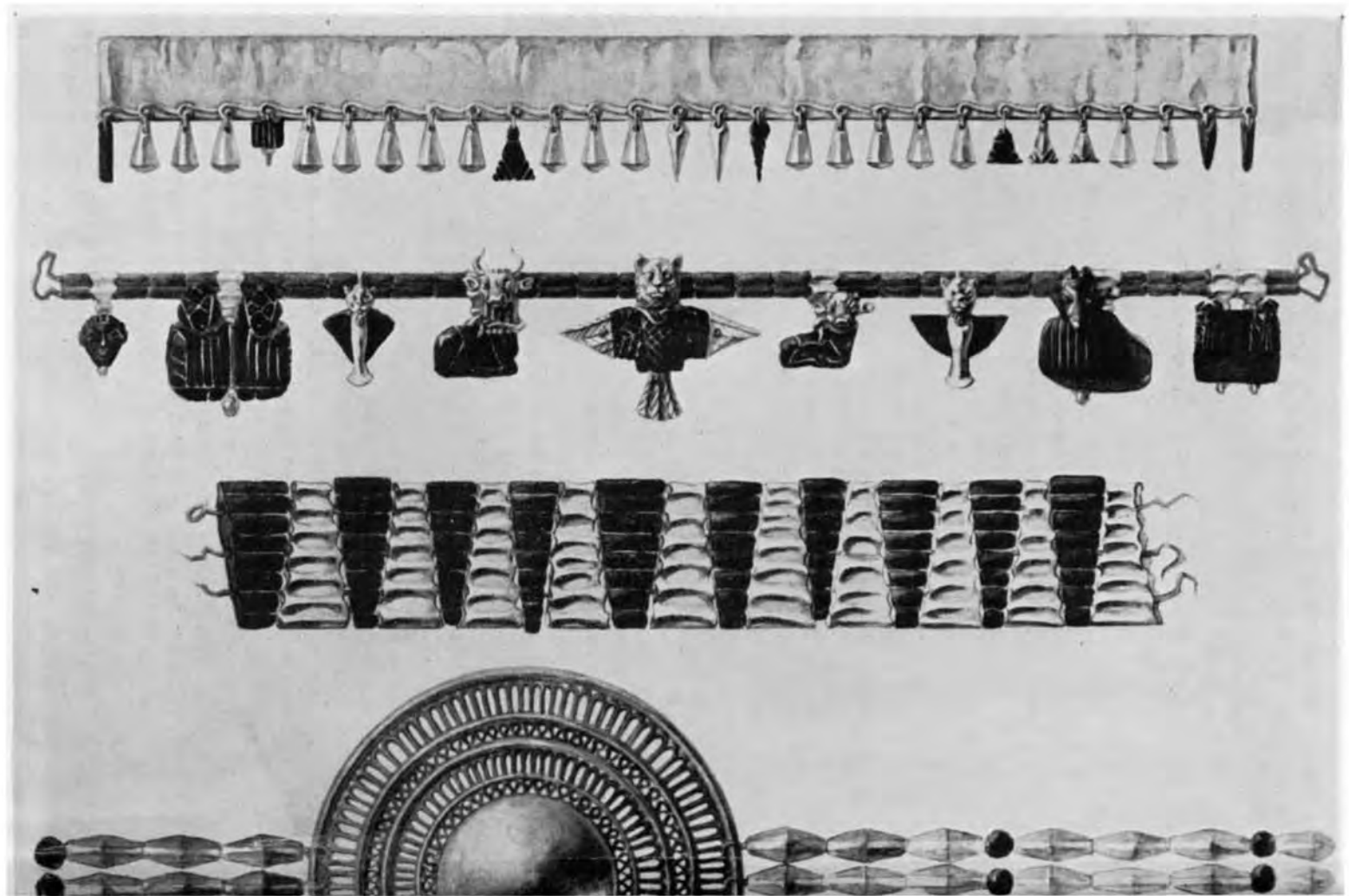
Assyrian Excavations

The entire region south of the Highland Zone, with the exception of arid desert areas, contains city mounds of the greatest importance for completing the larger picture of the civilizations of Western Asia. Assyrian civilization was a composite drawn from the lowland South and the highland North. The cities and palaces of the Assyrian emperors on the Upper Tigris therefore contribute priceless evidence on the rise of man.

At Khorsabad, about fifteen miles north of modern Mosul and ancient Nineveh, the Iraq Expedition took over and rebuilt a large native house to serve as its headquarters for the excavation of the palace of Sargon II (eighth century B.C.). The excavations of the Institute at this site were begun by Professor Edward Chiera. They resulted in the discovery of a series of relief sculptures valuable for the history of art and civilization. The most notable piece among these sculptures is a huge winged bull which once adorned an entrance of Sargon's palace. This impressive monument was removed with difficulty and has been set up to form the end of a splendid vista in the Oriental Institute Museum at the University of Chicago (Figs. 47-48).

Excavations were continued at Khorsabad by Mr. Gordon Loud, under the general supervision of Dr. Henri Frankfort. When operations are temporarily suspended at the end of the current season (1934/35) we shall have a very detailed picture of the citadel which dominated this capital of the Assyrian Empire. From a historical standpoint the most important find is a cuneiform tablet listing the kings of Assyria back into the third millennium B.C. and supplying some historical information on certain rulers (Fig. 49). Artistically the little ivory caskets and inlays (Fig. 50) are of great cultural importance. A splendid gateway with paired bulls and paired winged genii as guardian figures gives a vivid picture of the serene majesty of a city which was once the center of the world (Fig. 51).

At Jerwan, not far from Khorsabad, the Iraq Expedition identified an aqueduct (Fig. 52) built by Sennacherib, the successor of Sargon. This aqueduct was part of a stone-paved canal some thirty miles long which connected two rivers and carried water from the mountains to the capital city of Nineveh. Cuneiform inscriptions on the aqueduct at Jerwan provided the key to its identification. The aqueduct has been excavated, and the remains of Sennacherib's canal have been traced for several miles. A full description of this remarkable engineering work of about 700 B.C. has been published by the Institute.



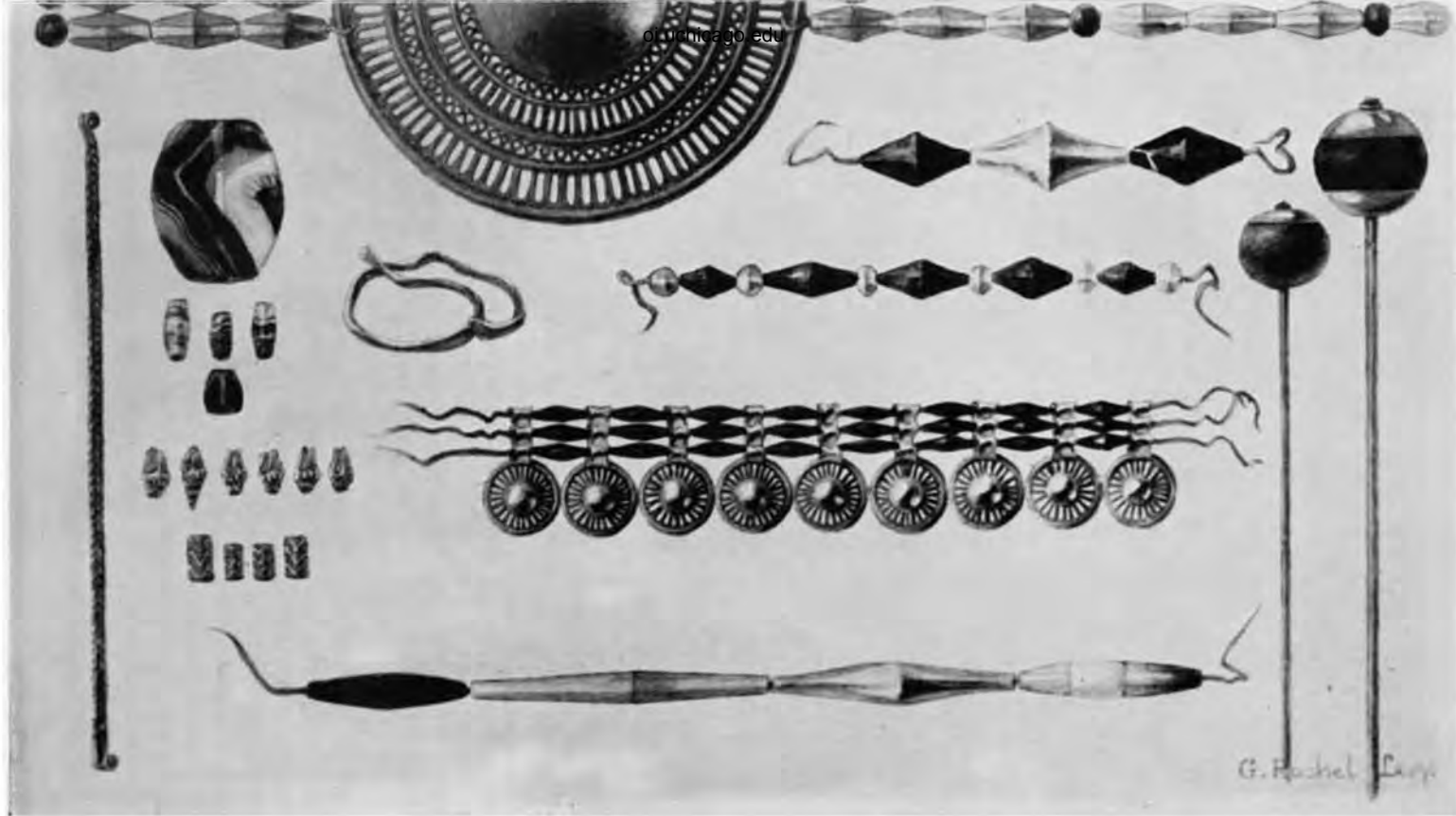


FIG. 46.—HOARD OF JEWELRY FOUND UNDER THE FLOOR OF THE AKKADIAN PALACE AT TELL ASMAR

The jewelry has been modernly restored on the basis of the abundant remains found under the floor of a palace of Akkadian times (about 2500 B.C.) at Tell Asmar.

The chief materials are silver, lapis lazuli, and carnelian. The silver and lapis lazuli animal pendants were amulets to protect the wearer against evil influences.

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Whereas the Hittites must have reached Anatolia at the west end of the Highland Zone several centuries before 2000 B.C., the Persians at the east end of the Highland Zone came into the area very late in ancient history. The pre-



FIG. 47.—THE FRONT LEGS OF THE GREAT BULL.

To Mr. Delougaz, seen here seated atop the block, belongs the credit for the successful transport of the bull from Khorsabad some twelve miles to a river steamer on the Tigris in the face of such difficulties as moving a 19-ton load on a 3-ton truck and trailer!

Persian civilization of this Highland region, known as Elam, was of great importance for its influence on early Babylonia. In the study of the rise of civilization it is indispensable to investigate the earliest discernible civilization at the east end of the Highland Zone—a culture of very remote pre-Persian days.

High on a plateau among the Iranian mountains, some forty miles from Shiraz, stands Persepolis, the magnificent residence of the Persian emperors. Its chief founders were Darius and Xerxes, the Persian emperors whom the Greeks fought at Marathon and Salamis early in the fifth century B.C. We are all familiar with the picture of Xerxes enthroned on the heights of Aegaleos and looking down upon the Bay of Salamis as his international fleet, the greatest armada the Mediterranean had ever seen, was scattered and destroyed by the little fleet of Athens and her allies.

The spacious terrace of Persepolis, where the silent colonnades of the ruined but still imperial palaces now stand, is one of the most impressive places in the world (Fig. 53). When Alexander the Great set fire to the palaces and the walls crashed down in ruins, Persepolis passed into an oblivion from which it is only now emerging as a result of scientific interest on the part of the Western world and of the annihilation of distance by the modern magic carpet, the airplane. In 1930 the Iranian Cabinet granted the Oriental Institute a concession to excavate and restore Persepolis. The funds

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FIG. 48.—THE GREAT WINGED BULL AS INSTALLED IN THE ORIENTAL INSTITUTE BUILDING AT CHICAGO

These mysterious creatures are the "cherubs" of the Old Testament, so seriously misunderstood by later Christian art. The figure adorned one side of a palace gateway in the residence of Sargon II (eighth century B.C.) at Khorsabad. It is carved in calcareous stone similar to alabaster. It is sixteen feet high and weighs forty tons.

necessary for undertaking the work were given by a donor who desires to remain anonymous.

The first field director of the Iranian Expedition was Professor Ernst E. Herzfeld of the University of Berlin. His initial task was to clear and restore one of the palaces so that it might provide living-quarters for the staff and eventually serve as a museum and storehouse for the antiquities found. The building chosen, which was found to be the harem palace of the Persian emperors, has been restored faithfully in the ancient style (Fig. 54).

One of the most striking results of the excavations at Persepolis was the discovery of two magnificent royal stairways carved with exquisite reliefs, which have enormously increased the volume of known Old Persian sculp-

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ture. The more imposing of these stairways (Fig. 55) depicts the presenting of tribute by subject nations at the celebration of the New Year. Twenty-three peoples of the Old Persian Empire are carefully delineated with their characteristic offerings (Fig. 56). Up these same stairs marched the actual ceremonial processions into the great audience hall of Darius and Xerxes.



FIG. 49.—A CUNEIFORM CLAY TABLET FOUND BY THE IRAQ EXPEDITION GIVING A LIST OF ASSYRIAN KINGS

This tablet was once part of the library of Sargon II at Khorsabad. It gives a list of about one hundred Assyrian kings running back from the eighth century B.C. to the latter half of the third millennium B.C. It greatly enlarges our knowledge of the earlier history of Assyria.

The architect of the expedition, Mr. Friedrich Krefter, made a striking discovery in the autumn of 1933. Under each of two of the corners of the great audience hall he found a foundation deposit, an ancient corner-stone treasure. Each deposit consisted of a limestone box containing a gold plaque and a silver plaque, each inscribed with the same cuneiform inscription in Old Persian, Elamite, and Babylonian (Fig. 57). These texts give the limits of the mighty empire of Darius about 515 B.C.—from modern Afghanistan to the Sudan, from the Aegean Sea to the Indus River. Under each stone box lay six gold and silver coins. The four plaques excited great interest in Iran. At



FIG. 50.—IVORY PANEL FROM THE TEMPLE OF THE GOD NABU AT KHORSABAD

The artist has represented a woman looking out of a window. Such delicately carved pieces in ivory show a notably different spirit from the massive Assyrian work in stone and often betray an artistic feeling akin to that of Phoenician or Egyptian work.



FIG. 51.—ASSYRIAN SCULPTURES GUARDING A DOORWAY AT KHORSABAD

On either side of a doorway leading into the citadel of Sargon II at Khorsabad stand a winged bull and a winged genius sprinkling sacred water. These impressive figures stand just where they were erected in the eighth century B.C.

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FIG. 52.—THE AQUEDUCT OF SENNACHERIB OF ASSYRIA AT JERWAN

The photograph is taken along the axis of the aqueduct, which spanned the stream in the foreground. Remains of two of the arches of the aqueduct may be seen on the far side of the stream.

the request of the Shah they were brought to Teheran, where they will be important exhibits in the national museum.

Within the Oriental Institute's concession lie other sites which the Iranian Expedition is excavating—Istakhr, the capital of the Old Persian Empire, which played the Paris to Persepolis' Versailles, and the royal tombs of the Persian emperors at Naqsh i Rostam, where Professor Herzfeld deciphered a most remarkable inscription, a sort of moral last will and testament of



FIG. 53.—THE GREAT TERRACE OF PERSEPOLIS, SEEN FROM A RAVINE TO THE SOUTHEAST

The tall columns are those of the apadana or royal audience hall of Darius and Xerxes. In the foreground is the harem palace of the same emperors, restored by the Iranian Expedition of the Oriental Institute to serve as its living-quarters and as a museum.

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Darius the Great, which sets the religious and moral philosophy of pre-Christian times in a new light.

In the close neighborhood of the great terrace of Persepolis Professor Herzfeld discovered a small mound which proved to be a prehistoric village. Adobe houses preserved up to their little windows face narrow, winding streets. In these houses were still preserved the household utensils of the



FIG. 54.—A GENERAL VIEW OF PERSEPOLIS FROM THE NORTHEAST

At the left is the restored harem palace, now the expedition's headquarters. In the right foreground is an audience hall, the "Hall of One Hundred Columns." Between this and the tall columns on the extreme right can be seen the magnificent stairways discovered by the Institute in 1932 (see Figs. 55-56).

inhabitants of six thousand years ago. Most notable are hundreds of beautifully decorated pots, which show a range of polychrome motives and an artistic ability quite unexpected in so early a civilization (Fig. 58).

At Professor Herzfeld's desire, he was relieved of active field work in the spring of 1935 and given the freedom to publish his remarkable discoveries. Thanks to a co-operative arrangement with the University of Pennsylvania and the Boston Museum of Fine Arts, the Oriental Institute has secured the services of Dr. Erich F. Schmidt as field director of the Iranian Expedition at Persepolis. Dr. Schmidt is continuing his work for Pennsylvania and Boston at Ray near Teheran while directing the Institute's work at Persepolis. In

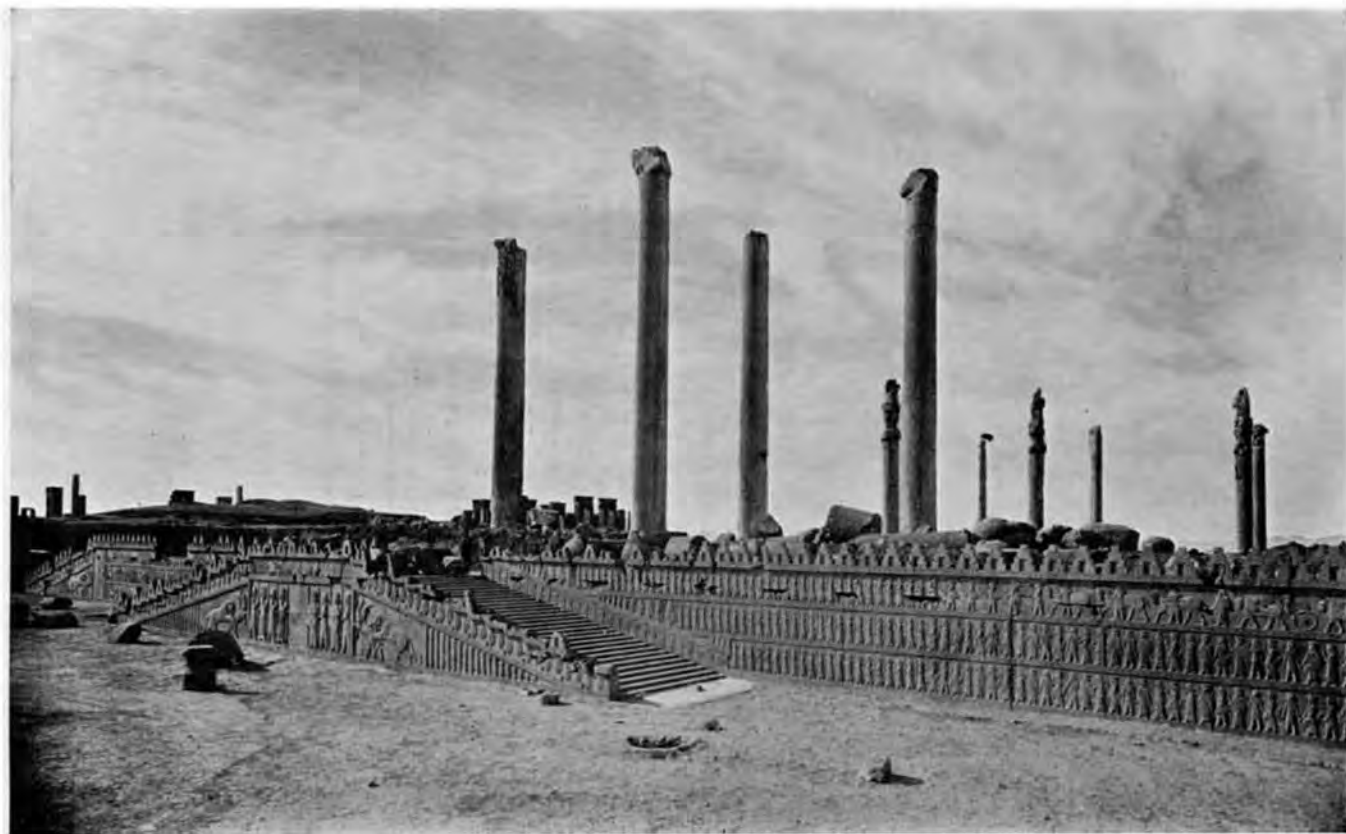


FIG. 55.—THE GREAT CEREMONIAL STAIRWAY LEADING TO THE ROYAL AUDIENCE HALL OF DARIUS AND XERXES

The relief sculptures depict a New Year's festival of the Persian emperors. On the right Susian guards are shown standing at attention; Persian and Median spectators bring up the rear. The corresponding section

on the left shows foreign peoples bringing tribute to the emperor (see Fig. 56). The panels in the center of the stairway symbolize the might of this great empire.

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FIG. 56.—MAKING A RECORD OF THE SUBJECT PEOPLES WHO BRING TRIBUTE TO THE PERSIAN EMPEROR

Mr. Joseph Lindon Smith, whose beautiful paintings of Egyptian antiquities are well known, is reproducing a detail from one of the great stairways found by the Iranian Expedition at Persepolis. The subject in this case is one of the foreign peoples who brought New Year's gifts to Xerxes.

order to facilitate his supervision of both projects, Mrs. Schmidt has donated an airplane to the co-operating expeditions, and the Iranian government is generously permitting the use of the plane between the two sites.

A glance at the map (facing p. 1) will make clearer the field operations of the Oriental Institute. Each expedition, except the Prehistoric Survey, which moves over an extensive area, is indicated by a star. The distribution of the field operations may thus be clearly seen: two expeditions in the Highland Zone, one at each end; four expeditions in the Fertile Crescent, one at each end and two near the middle; six projects on the Nile and in Northeast Africa.

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FIG. 57.—GOLD AND SILVER TABLETS FROM A FOUNDATION DEPOSIT OF DARIUS THE GREAT

Under a corner of the great audience hall of Darius and Xerxes the Iranian Expedition discovered this foundation deposit, consisting of a limestone box housing a gold and a silver tablet. Included in the deposit were six gold and silver coins. The silver tablet is here supported at the left, while the gold plaque is still in the stone box. The inscription, written in Old Persian, Elamite, and Babylonian cuneiform, gives the limits of Darius' empire about 515 B.C.



FIG. 58.—A PAINTED JAR FROM A PREHISTORIC VILLAGE NEAR PERSEPOLIS

The main design was skilfully produced with the spreading horns of two wild sheep (French *mouflons*). The animals themselves have been reduced to conventional bases for the curving horns.

III

THE AMERICAN HEADQUARTERS AND HOME RESEARCHES

THE ORIENTAL INSTITUTE BUILDING

As the activities of the Oriental Institute developed, it soon outgrew its first American headquarters in Haskell Hall. The new Oriental Institute building (see frontispiece and Figs. 59-60) was completed in the spring of 1931 and dedicated on December 5 of the same year with ceremonies at which President Robert Maynard Hutchins presided, while Dr. John H. Finley, associate editor of the *New York Times*, Mr. Raymond B. Fosdick, and Professor James H. Breasted delivered addresses. There has thus been created at the University of Chicago the first specially planned and equipped research laboratory devoted to the study of the rise of man. For the first time in the history of modern research, the synthetic study of early man *himself* has been granted a home beside the laboratories of the natural sciences in a correlated effort to reconstruct through pure research the epic of mankind's long and mysterious development.

The architects, Mayers, Murray, and Phillip, designed a building in keeping with the neighboring University Chapel. On the main floor of the building there is an unusually attractive lecture hall, named the James Henry Breasted Lecture Hall in 1935 by the Board of Trustees of the University of Chicago. The rest of the main floor is devoted to museum exhibits. On the second floor are a beautiful library, classrooms, and administrative offices. The third floor contains faculty offices, research rooms, and a suite given over to the Institute's Assyrian Dictionary project, described below.

The Oriental Institute Museum consists of five exhibition halls (see plan on pp. 80 f.) containing collections of objects from the Near Orient, some acquired by purchase but many of them drawn from the Institute's field expeditions. This museum, formerly called the Haskell Oriental Museum, is in charge of Dr. Watson Boyes as secretary. In the well lighted basement are the preparators' shops (Fig. 61), together with photographic laboratories and storerooms for housing and organizing the material from the field excavations.

THE ASSYRIAN DICTIONARY

Following in general the same methods of compilation employed by the great Oxford English Dictionary, the Dictionary of Ancient Egyptian at Berlin, and other similar projects, the Oriental Institute in 1921 began the com-

THE ARCHEOLOGICAL CORPUS

pilation of the first Babylonian-Assyrian dictionary based on all the known original documents. The project was initiated by the late Professor D. D. Luckenbill and carried on energetically by the late Professor Edward Chiera. At present Professor Arno Poebel is in charge of the work. The files of the dictionary already contain one million cards, each card recording a single occurrence of a particular word with its context. Perhaps a million more such references will be required before the actual dictionary volumes themselves can be blocked out and the word discussions finally prepared for publication. Meantime the work of preparing and actually writing word discussions has begun.

THE ARCHEOLOGICAL CORPUS

A second major project undertaken by the Oriental Institute is the compilation of an Archeological Corpus. In physical form this is a card catalogue of



FIG. 59.—THE TYMPANUM RELIEF SCULPTURE OVER THE ENTRANCE OF THE ORIENTAL INSTITUTE BUILDING AT THE UNIVERSITY OF CHICAGO

The sculptural work for the Oriental Institute building was done by Mr. Ulric H. Ellerhusen. The relief sculpture over the entrance is intended to suggest the transition of civilization from the ancient Orient to the West. On the left the East is symbolized by the tall figure of an Egyptian scribe confronting the vigorous and aggressive figure of the West. The West has just received from the East a tablet bearing a hieroglyphic inscription suggestive of the transition of writing from the Orient to the West. This inscription, which may be read "I have beheld thy beauty," is taken from a fifth dynasty temple.

Behind the East are crowded a lion, the pyramids, the sphinx, the ruins of Persepolis, and a group of six oriental leaders. Beginning with the foremost in the top row, the leaders are Zoser of Egypt, the first great builder; Hammurabi of Babylonia, the first great lawgiver; Thutmose III of Egypt, the first empire-builder; Ashurbanipal, who collected the first great library; Darius, the great organizer; and Chosroes of Persia.

Behind the West are a bison, the Parthenon, a European cathedral, a modern skyscraper tower, and six figures representing the West: Herodotus, Alexander the Great, Julius Caesar, a crusader, an excavator leaning on his spade, and an archeologist at work with his lens. In the center, over all, shines the oriental sun, its rays ending in human hands.

Other sculptures by Mr. Ellerhusen on the north face of the building symbolize the various civilizations of the ancient Orient.

HOME RESEARCHES



FIG. 60.—THE LOBBY OF THE ORIENTAL INSTITUTE BUILDING, LOOKING FROM THE JAMES HENRY BREASTED LECTURE HALL TOWARD THE MAIN ENTRANCE

The lion terminals of the stairway balustrades are copied in stone from Assyrian originals.

objects found by excavation in the Near East and now housed in museums and other collections. Just as the Assyrian Dictionary files each occurrence of a word on a single card, the Archeological Corpus files a photograph or drawing of each object on its separate card. This project was proposed in 1930 and was carefully studied for some time. Under the supervision of Dr. N. C. Debevoise, a research assistant of the Institute, it has now passed its initial experimental stage with the filing of nearly one thousand cards. It will be of great value in the comparison of materials for archeological research, but it is so vast a project that its compilation will necessarily be slow.

OTHER RESEARCH PROJECTS

Professor A. T. Olmstead, author of *History of Assyria* and *History of Palestine and Syria*, is now engaged on a *History of New Testament Times in the Near East*. Although they are not among its formal projects, the Oriental Institute takes pride in these competent publications by one of its members. Two forthcoming works to which the Institute has contributed materials and which it will publish in association with the University of Chicago Press are *History*



FIG. 61.—A CORNER OF THE WORKSHOPS IN THE BASEMENT OF THE ORIENTAL INSTITUTE BUILDING

These workrooms provide adequate space for storing and organizing the materials of the Museum and adequate equipment for treating and repairing objects of all kinds.

HOME RESEARCHES

of *Early Iran* by Dr. G. G. Cameron and *A Political History of Parthia* by Dr. N. C. Debevoise.

Professor William C. Graham is engaged in a series of studies which offer a fresh approach to the religion of the Old Testament. The religion of the Hebrew people is viewed as an essential aspect of social behavior, thus fitting intimately into the dominant cultural pattern of the ancient Near East. With



"Bimeby Brer Lion git so mad he jump in de spring
headforemos"

FIG. 62.—EXPLOITS OF "BRER RABBIT" AS ILLUSTRATED IN AN ARABIC MANUSCRIPT OF THE THIRTEENTH CENTURY OF OUR ERA

the assistance of Dr. Walter G. Williams, Dr. Graham has been studying the extraordinary liturgical texts found in excavations by the French at Ras Shamra in Syria and has been relating them to this view of cultural history. As Annual Professor of the American School of Oriental Research at Jerusalem in 1936/37, he expects to enlarge this study with further illustrative material.

The Institute has acquired an important body of Arabic manuscripts, chiefly the collection of the former librarian of the Khedivial Library at Cairo, Professor B. Moritz. Professor Martin Sprengling, with the assist-

ance of his student, Dr. Nabia Abbott, has been preparing these documents for publication. Some of the early Arabic papyri are especially important for our understanding of the social and economic history of early Islam. Dr. Sprengling has also in hand a study of animal fables, the ancestors of our "Uncle Remus Stories," which have come down from a great antiquity in the Near East and appear also in Arabic literature (Fig. 62).

The recent death of Professor Wilhelm Spiegelberg, of the University of Munich, the leading demotic scholar of the present generation, left unfinished his projected *Demotic Dictionary*. In accordance with the wish of Professor Spiegelberg, Professor W. F. Edgerton of the Oriental Institute will carry this important work to completion. It will first be issued in an abridged form by the Oriental Institute; the completion of an edition in fuller form is a matter of some years' time.

"Book of the Dead" is the name given to that collection of Egyptian prayers, charms, etc., which succeeded the Coffin Texts as a means of salvation for the dead. The Institute possesses two excellent papyrus manuscripts of the Book of the Dead—Papyrus Milbank, presented by Mrs. Elizabeth Milbank Anderson, and Papyrus Ryerson. Miss Minna Roman generously donated funds for the publication of Papyrus Milbank. Dr. T. George Allen is engaged in preparing these two manuscripts for publication.

IV

THE PUBLICATIONS OF THE ORIENTAL INSTITUTE

The Oriental Institute presents the results of its researches at home and in the field in forms suitable both for specialists and for the general public. Its productions fall into five series, all published by the University of Chicago Press.

For the general reader the "Oriental Institute Communications" (*OIC*, royal 8vo, paper) offer illustrated reports describing the progress and results of various Institute activities. Another series, "Ancient Records" (royal 8vo, cloth), presents English translations of the ancient oriental documents from which our knowledge of early civilizations is drawn.

The other three series are intended rather for the specialist. The "Oriental Institute Publications" (*OIP*, 4to and folio, mostly cloth) include rigorously scientific presentations of primary sources, whether original documents or other objects; final accounts of the work of field expeditions; and linguistic or archeological compilations intended as reference works.

Interpretations of source materials are presented in two series. "Assyriological Studies" (*AS*, royal 8vo, paper) present chiefly cuneiform grammatical and lexicographical material. "Studies in Ancient Oriental Civilization" (*SAOC*, mostly royal 8vo, paper) contain monographs dealing with other culture phases of the ancient Near East.

Besides its own five series, the Institute is participating in another: "Joint Publications of the Egypt Exploration Society and the Oriental Institute."

Volumes and monographs issued in these five Oriental Institute series and in the joint series through June, 1935, number altogether seventy-one. Professor Breasted's five volumes of *Ancient Records of Egypt* were written before he had organized the Oriental Institute; otherwise, all these publications have grown directly out of the Institute's activities. Numerous additional volumes are in press, in preparation, or in prospect. Classified according to their subject matter, these publications fall into the following groups:

THE FIELD EXPEDITIONS

SURVEY OF THE NEAR EAST IN 1919/20

The Oriental Institute of the University of Chicago—A Beginning and a Program.

By James Henry Breasted (*OIC* No. 1, out of print)

PUBLICATIONS

Oriental Forerunners of Byzantine Painting. By James Henry Breasted (*OIP* Vol. I) \$4.00

An account of the expedition, with special attention to wall paintings found in a fortress at Šālihiyah (Dura-Europos) on the middle Euphrates.

EGYPT AND NORTHEAST AFRICA THE PREHISTORIC SURVEY

First Report of the Prehistoric Survey Expedition. By K. S. Sandford and W. J. Arkell (*OIC* No. 3) \$1.00

Paleolithic Man and the Nile-Faiyum Divide. By K. S. Sandford and W. J. Arkell (*OIP* Vol. X) \$5.00

Paleolithic Man and the Nile Valley in Nubia and Upper Egypt. By K. S. Sandford and W. J. Arkell (*OIP* Vol. XVII) \$6.00

Paleolithic Man and the Nile Valley in Upper and Middle Egypt. By K. S. Sandford (*OIP* Vol. XVIII; other volumes in preparation) \$7.00

THE SAKKARAH EXPEDITION

Painted Relief Sculptures of the Pyramid Age in the Tombs of Memphis. I. The Mastaba of Mereruka. Part I. By the Sakkarah Expedition, Prentice Duell, Field Director (*OIP* Vol. XXXI, in press; other large folio volumes in preparation)

THE COFFIN TEXTS PROJECT

The Egyptian Coffin Texts. I. Texts of Spells 1-75. By Adriaan de Buck (*OIP* Vol. XXXIV, in press; other volumes in preparation) \$7.00

THE ABYDOS PROJECT

JOINT PUBLICATIONS OF THE EGYPT EXPLORATION SOCIETY AND THE ORIENTAL INSTITUTE

The Temple of King Sethos I at Abydos. Copied by Amice M. Calverley, with the assistance of Myrtle F. Broome, and edited by Alan H. Gardiner. *I. The Chapels of Osiris, Isis, and Horus* \$35.00

The same: *II. The Chapels of Amen-Rē^c, Rē^c-Harakhṭi, Ptah, and King Sethos* \$35.00

The same: *III* (in press; other large folio volumes in prospect)

THEBAN TOMB PAINTINGS

Ancient Egyptian Paintings. Selected, copied, and described by Nina M. Davies with the editorial assistance of Alan H. Gardiner (2 large folio volumes, in press)

THE EPIGRAPHIC AND ARCHITECTURAL SURVEY

Medinet Habu, 1924-28. By Harold H. Nelson and Uvo Hölscher (*OIC* No. 5) \$1.00

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- Medinet Habu Studies, 1928/29.* By Uvo Hölscher and John A. Wilson (OIC No. 7) \$0.75
- Medinet Habu Reports.* By Harold H. Nelson and Uvo Hölscher (OIC No. 10) \$1.00
- Excavations at Ancient Thebes, 1930/31.* By Uvo Hölscher (OIC No. 15) \$1.00
- Work in Western Thebes, 1931-33.* By Harold H. Nelson and Uvo Hölscher, with a chapter by Siegfried Schott (OIC No. 18) \$1.50
- Medinet Habu. I. Earlier Historical Records of Ramses III.* By the Epigraphic Survey, Harold H. Nelson, Field Director (OIP Vol. VIII) \$24.00
- Medinet Habu. II. Later Historical Records of Ramses III.* By the Epigraphic Survey, Harold H. Nelson, Field Director (OIP Vol. IX) \$30.00
- Medinet Habu. III. The Calendar, the "Slaughterhouse," and Minor Records of Ramses III.* By the Epigraphic Survey, Harold H. Nelson, Field Director (OIP Vol. XXIII; other volumes of this series in preparation)
- Historical Records of Ramses III. The Texts in Medinet Habu Volumes I and II Translated with Explanatory Notes.* By William F. Edgerton and John A. Wilson (SAOC No. 12, in press) \$4.00
- Medinet Habu Graffiti. Facsimiles.* Edited by William F. Edgerton (OIP Vol. XXXVI, in press)
- Medinet Habu Graffiti. Translations, Transliterations, and Commentaries.* By William F. Edgerton (SAOC, in prospect)
- The Excavation of Medinet Habu. I. General Plans and Views.* By Uvo Hölscher (OIP Vol. XXI; other volumes in preparation) \$22.00
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- The same: *II. Ramses III's Temple within the Great Inclosure of Amon (Part II) and Ramses III's Temple in the Precinct of Mut.* By the Epigraphic Survey, Harold H. Nelson, Field Director (OIP Vol. XXXV, in press)

WESTERN ASIA

THE MEGIDDO (PALESTINE) EXPEDITION

- The Excavation of Armageddon.* By Clarence S. Fisher (OIC No. 4) \$1.00
- New Light from Armageddon.* By P. L. O. Guy, with a chapter by W. E. Staples (OIC No. 9) \$1.00
- Notes on the Chalcolithic and Early Bronze Age Pottery of Megiddo.* By Robert M. Engberg and Geoffrey M. Shipton (SAOC No. 10) \$1.50

PUBLICATIONS

- Material Remains of the Megiddo Cult.* By Herbert Gordon May, with a chapter by Robert M. Engberg (*OIP* Vol. XXVI, in press) \$6.00
- The Megiddo Water System.* By Robert S. Lamon (*OIP* Vol. XXXII) \$3.00
- Megiddo Tombs, 1925-32.* By the Megiddo Expedition. Tombs of 1927-32 described by P. L. O. Guy, recent Field Director; tombs of 1925-26 described by Robert M. Engberg from the records of Clarence S. Fisher, former Field Director (*OIP* Vol. XXXIII, in preparation)

THE ANATOLIAN-HITTITE EXPEDITION

- Explorations in Hittite Asia Minor—A Preliminary Report.* By H. H. von der Osten (*OIC* No. 2, out of print)
- Explorations in Hittite Asia Minor, 1927-28.* By H. H. von der Osten (*OIC* No. 6) \$1.50
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- A New Inscription of Xerxes from Persepolis.* By Ernst E. Herzfeld (*SAOC* No. 5) \$0.50
- Persepolis and Vicinity.* By Ernst E. Herzfeld (*OIC*, in preparation)

OTHER PROJECTS

PUBLICATIONS OF SOURCE MATERIAL

WRITTEN DOCUMENTS

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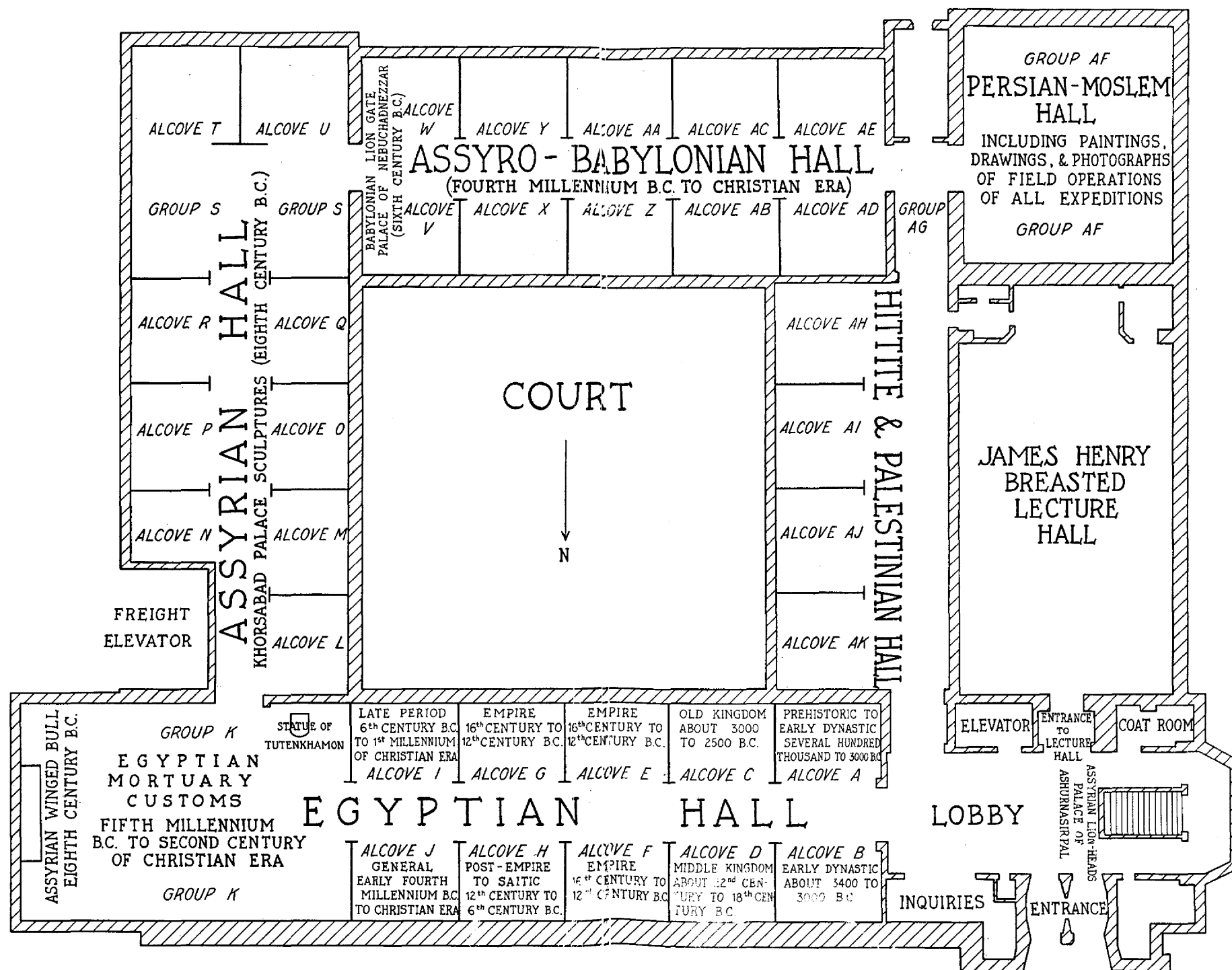
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