



THE ORIENTAL INSTITUTE

OF

THE UNIVERSITY OF
CHICAGO

August 1928

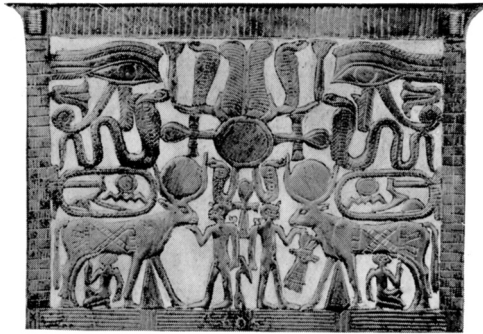
GENERAL CIRCULAR NO. 2

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THE ORIENTAL INSTITUTE

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*Golden Pectoral of an Unknown Palestinian
King of about 1800 B.C., the Age
of the Hebrew Patriarchs*

GENERAL CIRCULAR NO. 2

AUGUST 1928

DESCRIPTION OF GOLDEN PECTORAL SHOWN ON
COVER OF THIS CIRCULAR

The picture shows the elaborately tooled and engraved sheet-gold back of the openwork design; the front was incrustated with semiprecious stones which have now fallen out. In the lower half the design shows a scene in duplicate: the sacred Hathor cow at right and left fondled by the Pharaoh, whose tiny standing figure is twice shown in the center immediately in front of the cow. The king appears again kneeling under the cow, receiving nourishment; his name, Amenemhet III (about 1800 B.C.), is inserted in two cartouches over the two cows.

This Egyptian cow-goddess was the "golden calf" of the Old Testament. Parts of a golden statuette of this sacred cow, literally a "golden calf" like that in the Mosaic story, were found with the above and other fine examples of the goldsmith's art. They were buried in the tomb of an unknown Palestinian king, who must have been a vassal of the Pharaoh, and are now in the collections of the Oriental Institute.

THE ORIENTAL INSTITUTE

By

JAMES HENRY BREASTED

Director

THE Oriental Institute is a research laboratory for the investigation of the early human career, especially the transition from savagery to enlightened life; of the emergence of civilized societies; and of the Oriental background of European and American civilization. The action of 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.; and the subsequent growth of the Institute has likewise been due largely to the same generous donor, but also to several appropriations by the General Education Board and gifts by Mr. Julius Rosenwald and others. This support has made it possible to transform the Department of Oriental Languages into an investigative body—a research group to whose ranks have been added other specialized groups of 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 human life has been built up. Geographically, this field is the ancient Near East, where the Institute has dispatched six expeditions and is now still maintaining five (see map, p. 4). The Institute's permanent headquarters building in Egypt is at Luxor (see Figs. 7 and 8). In Asia its headquarters building is at Armageddon in Palestine (see Fig. 17). The administrative center of the Institute in America is Haskell Oriental Museum at the University of Chicago (Fig. 25), where the original monuments and documents from the field are housed and studied and home research projects are carried on (see pp. 29-34).

The purpose of the Oriental Institute is to contribute to the understanding of human life by furnishing a fuller knowledge of the processes and stages of the long development by which we have become what we are. This purpose involves us in the task of recovering a great group of lost civilizations in the Near East, which contributed the fundamentals of civilization to the Western World.

The following brief pages can do little more than suggest the series of field operations in the Near East, by which the Oriental Institute is beginning the task of recovering the lost sources indispensable to our purpose. At the same time these pages offer some indication of the function of the American headquarters as the focus and clearing house on which all the incoming new evidences from the field converge, that they may be studied and incorporated into our new body of knowledge. The ultimate result of such researches as these should be a new account of human beginnings and a history of the origins of civilization and the creative progress of the earliest civilized societies, based on fuller knowledge than has been available before.

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THE FIELD OF OPERATIONS OF THE ORIENTAL INSTITUTE

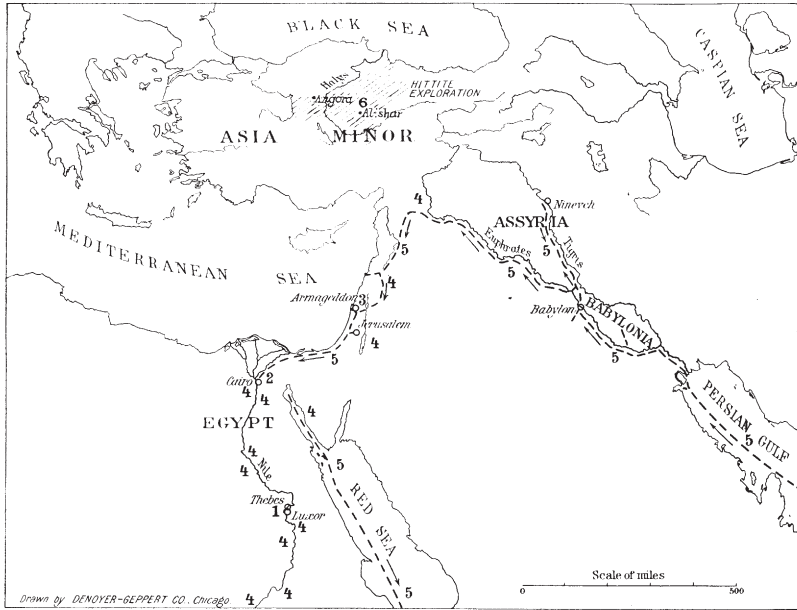


FIG. 1.—MAP SHOWING FIELD OPERATIONS OF THE ORIENTAL INSTITUTE FROM THE BLACK SEA TO THE UPPER NILE AND FROM THE MEDITERRANEAN TO THE PERSIAN GULF.

The figures (1-6) indicate the situation or range of the six expeditions listed below.

1. The Egyptian Headquarters at Luxor (see Fig. 7, p. 10), housing the Epigraphic and Architectural Survey (see pp. 10-15) and the Prehistoric Survey (see pp. 6-9).
2. The Coffin Text Project. Copying the texts in the National Museum at Cairo (see p. 16) and in the museums of Europe and America.
3. Asiatic Headquarters in Palestine housing the Megiddo (Armageddon) Expedition (see pp. 18-24) and the Prehistoric Survey (see pp. 6-9).
4. The Prehistoric Survey collecting the geological and cultural evidences of Stone Age man in Egypt and Western Asia (see pp. 6-9).
5. The Mesopotamian Expedition of 1919-20. Its route is marked by a broken line (see p. 5).
6. The Hittite Expedition. The shaded portion has been explored, and the number "6" marks the site of Alishar, the mound now being excavated by this Expedition (see pp. 25-28).

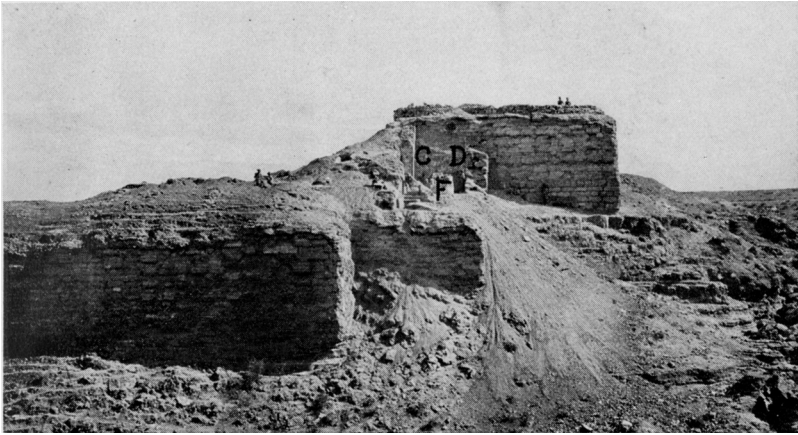


FIG. 2.—BASTION OF THE GREAT PARTHIAN FORTRESS OF DURA-EUROPUS ON THE EUPHRATES, WITH WALL PAINTINGS EXCAVATED AND RECORDED BY THE ORIENTAL INSTITUTE.

A POST-WAR RECONNAISSANCE ALONG THE TIGRIS AND EUPHRATES

THE MESOPOTAMIAN EXPEDITION

The first venture of the Oriental Institute, immediately after its foundation, was a preliminary survey of the Near East, beginning in Egypt and extending through Western Asia, especially Mesopotamia, with the purpose of developing plans for undertaking field work. On its hazardous return from Baghdad to Aleppo, across the Syrian Desert, in the spring of 1920 (see map, Fig. 1), the Expedition was able to excavate further and make a record of a remarkable series of ancient wall paintings first disclosed by British military digging in a vast and little known fortress on the Middle Euphrates. Here, within a massive bastion (Fig. 2), was a small temple with a holy of holies containing a shrine (F) and the paintings (chiefly on the wall C-D). The rubbish from the excavations may be seen thrown down into the valley on the right. The Expedition's work identified this lost fortress city as the ancient Dura-Europos; it is now known to the Arabs as Ṣalihiyeh. The extraordinary paintings, having since been destroyed by the Arabs, have survived only in the records of the Oriental Institute. The oldest of them, dating from the first century of our era, have turned out to be the sole surviving Oriental ancestry of Byzantine painting. They have been published by the Institute as the first volume of its researches (see "Oriental Institute Publications," I, *infra*, p. 34.)



FIG. 3.—THE PREHISTORIC SURVEY EXPEDITION CROSSING THE RED SEA HILLS

FOLLOWING THE TRACES OF STONE AGE MAN IN THE PREHISTORIC ORIENT

THE PREHISTORIC SURVEY

From the beginning of its work the plans of the Institute contemplated the investigation of the human career from the earliest discernible stages of man's development. The prehistoric background of early civilization in Egypt and Western Asia has been but little studied. We now know that Egyptian civilization was preceded by several hundred thousand years of Stone Age savagery. Where now stretch the desolate wastes of the Sahara there were vast, well-watered forests, and the Stone Age hunters ranged far across all North Africa and deep into Asia. The desert heights which now look down upon the desolate valley cemetery of the Pharaohs and the tomb of Tutenkhamon were once occupied by the flint workshops of the North African Stone Age hunters. The fragments from their flint chipping cover the surface for a long stretch above the cemetery of the Pharaohs. The stone weapons and implements of these prehistoric men are likewise found widely scattered and still lying on the surface from Algiers to Egypt and the Red Sea. These hunters must eventually have descended into the Nile Valley as its once higher waters sank. Their stone implements are still found lying on the ancient Nile terraces, abandoned at a time long before the great river had begun to deposit the thirty feet or more of black

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soil which has since accumulated to form the present fertile floor of the Nile Valley. The traces which they left at lower levels in the Nile have since been covered by the rising accumulations of soil. Throughout all these prehistoric epochs North Africa was connected with Europe by land bridges at Gibraltar and through Sicily, permitting these prehistoric hunters to pass at will from Africa to Europe. They have likewise left their traces in Western Asia: in Sinai, Palestine, Syria, and the Euphrates Valley. The collection of such evidences in North Africa and Western Asia has heretofore always been confined to stone implements lying *on the surface* which have little value because they cannot be dated. The Oriental Institute therefore organized a Prehistoric Survey, which began work on this task in December, 1926, under Dr. K. S. Sandford as field director, assisted by Mr. W. J. Arkell. The plan of this expedition was to find human handwork *imbedded in the geological strata and therefore dated in terms of geological periods*. It was necessary also to study and elucidate the heretofore little-understood geology of the Nile Valley.



FIG. 4.—THE PREHISTORIC SURVEY AT WORK NEAR ABYDOS, UPPER EGYPT

The plane table stands on a terrace over which prehistoric man once roamed, leaving behind him flint implements now deeply imbedded.

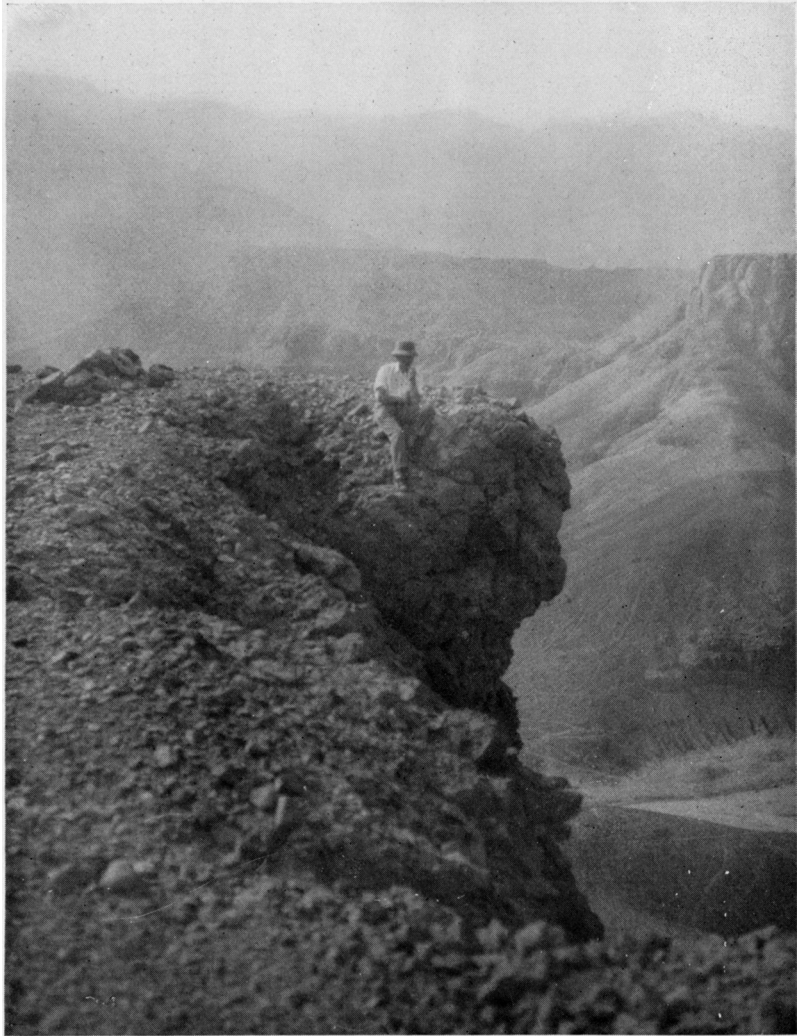


FIG. 5.—LOOKING DOWN INTO THE NORTH VALLEY, THEBES

In the foreground may be seen the top of the pre-Paleolithic deposits (about 300 feet above the Nile at this point). The hills in the middle distance are higher, and are part of the plateau limestones in which the Nile Valley is cut.

The Oriental Institute

The report of the first season's work of the Prehistoric Survey (1926-27) was published in February, 1928, and throws valuable new light on both geology and human development in the Nile Valley. The expedition first surveyed from the first cataract northward as far as Luxor, elucidating for the first time the Pliocene and Pleistocene history of the river in this region, and collecting stone implements imbedded in geological deposits still undisturbed. Outside the Nile Valley, Paleolithic implements were also discovered imbedded in geological deposits on the Red Sea Coast (Fig. 3). This is the first discovery of stratigraphically dated human handiwork on this seaboard.

During the past winter (1927-28) the geological relations of the Nile Valley to the remarkable western depression called the Faiyum have been for the first time thoroughly investigated, and flint implements of human origin have been dated in lower Pleistocene time—the earliest artifacts as yet found in the Ancient Near East. The results of this second season's work will appear in 1929 in "Oriental Institute Publications," Volume XIV.



FIG. 6.—THE PREHISTORIC SURVEY EXPEDITION MEETS AN "IMPROVED" ROAD NEAR TEMA, BETWEEN ASSIUT AND SOHAG, UPPER EGYPT, AND HALTS TO TIGHTEN NUTS AND BOLTS.

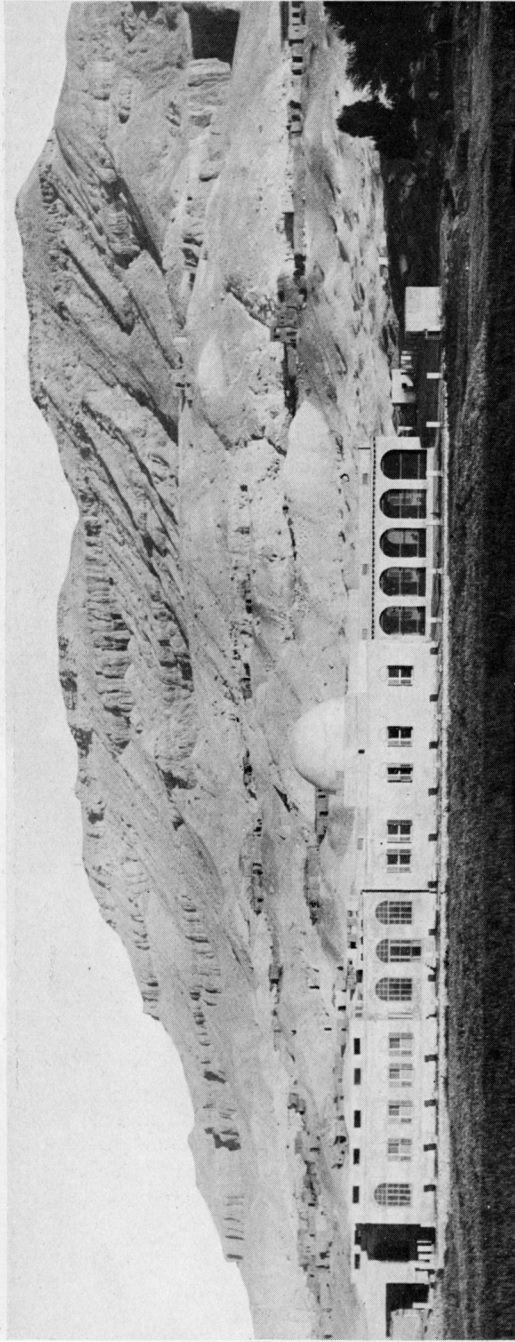


FIG. 7.—CHICAGO HOUSE, THE EGYPTIAN HEADQUARTERS OF THE ORIENTAL INSTITUTE.

The house stands on the western edge of the great Theban Plain, which is behind the observer in this view. Beyond the house the amber-hued cliffs rise to the Sahara Desert Plateau, and immediately behind them is a basin in which is the famous royal cemetery of the Pharaohs, now known to all the world as the place of Tutenkhamon's tomb. Chicago House, some 220 feet long, is in two parts, divided by a little avenue. Visible in this picture are the open air veranda (right), the domed living-room (center), dining-hall (three arched windows), and

some of the living-quarters (extreme left). In a second building behind and parallel to this one are the Rosenwald Library, drafting-room, general offices, living-quarters, electric generator plant, and garage. The field director of this expedition is Dr. Harold H. Nelson.

Chicago House is especially the working and living headquarters for the Epigraphic and Architectural Survey Expedition (see pp. 11-15), but it has also served as headquarters for the Prehistoric Survey Expedition (see pp. 6-9).

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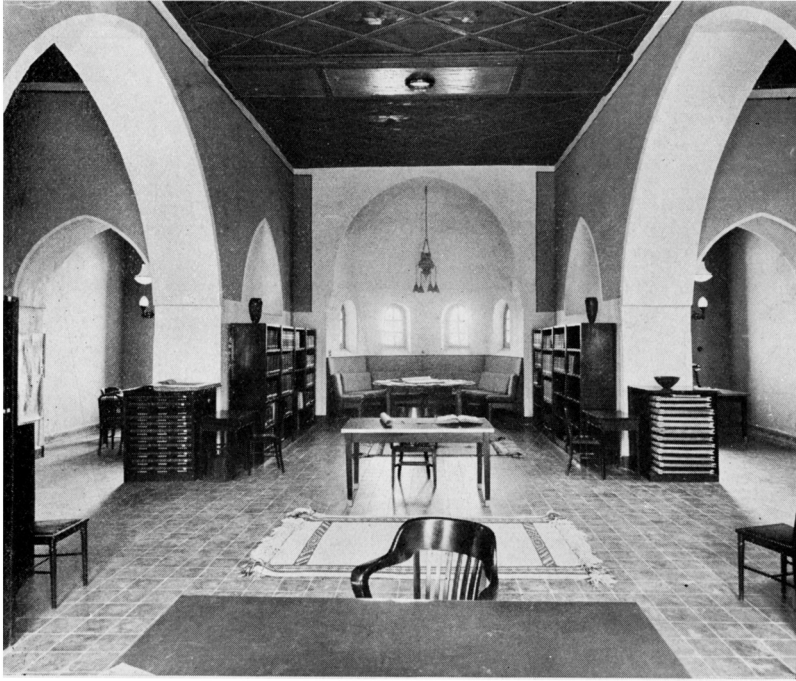


FIG. 8.—INTERIOR VIEW OF THE ROSENWALD LIBRARY OF THE ORIENTAL INSTITUTE AT CHICAGO HOUSE, LUXOR.

The funds for the building were contributed by Mr. Julius Rosenwald of Chicago; the books and a permanent endowment were the gift of the General Education Board of New York.

SAVING THE TEMPLE INSCRIPTIONS OF EGYPT THE EPIGRAPHIC AND ARCHITECTURAL SURVEY

The following view (Fig. 9) shows the large temple inclosure inside a spacious rectangle of dark sun-dried brick (adobe) wall, within which too are darker masses of ruins once forming the palace and offices of Ramses III. These darker ruins of the palace surround the temple proper, which is the lighter colored, long and narrow rectangle of stone masonry in the middle. The unroofed portion at the rear, showing many columns, was demolished to this extent two generations ago, when the stone blocks were carried away to build a sugar factory!

Covering the temple from one end to the other, the reliefs and inscriptions furnish a vast body of largely unstudied sources, especially important in the case of this temple, which was built just as the incoming Greek barbarians of the

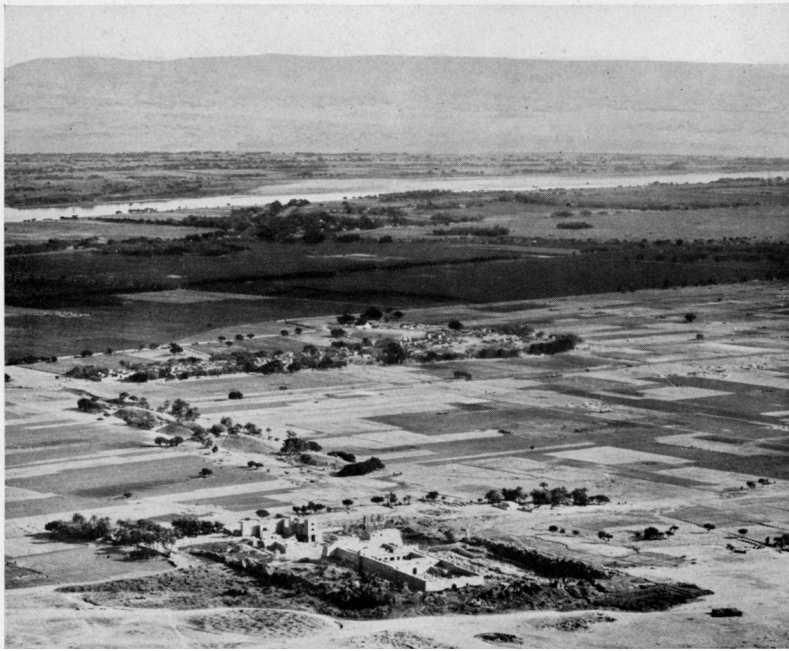


FIG. 9.—VIEW OF THE GREAT TEMPLE OF MEDINET HABU AT ANCIENT THEBES, OPPOSITE MODERN LUXOR, TAKEN FROM CLIFFS BEHIND CHICAGO HOUSE.

In the foreground are the ruins of the temple, built by Ramses III (1200 B.C.). The Oriental Institute is endeavoring to save the perishing historical records inscribed in this temple (see below and Figs. 10-12), and to survey its architecture.

twelfth century B.C. were driving out the highly civilized Aegeans, who endeavored to settle in Egypt, Palestine, and Syria. One group were the Philistines of Hebrew history. The declining Egyptian Empire under Ramses III was called upon to repel these earliest European invaders of the Orient, flying before the Greeks. It is all recorded by Ramses III in this temple of Medinet Habu, where this earliest advent of Europe in historical documents is disclosed not only in writing but also in pictures. We see the invaders thrown back by the Egyptian war fleet in the earliest naval battle of which we have any representation. Under oriental conditions no such record is safe until it has been fully and accurately published in careful facsimiles.

The first step in the practical process of saving these inscriptions is a series of many hundreds of photographs, which have been very much enlarged to the size of an artist's portable drawing board. With these the artists go to the wall (Fig. 11), where they inspect the original inscription and also do much penciling directly on the enlargement. With India-ink the artists then



FIG. 10.—RAMSES III, AS SHOWN ON THE WALLS OF THE MEDINET HABU TEMPLE, HUNTING ANTELOPES (ABOVE) AND WILD BULLS (BELOW).

The wild-bull hunt is one of the strongest and most impressive drawings that have survived from ancient Egypt. The river shore, with its touches of landscape, is almost unique in an art so ancient. All such records will be saved by the Epigraphic Expedition.

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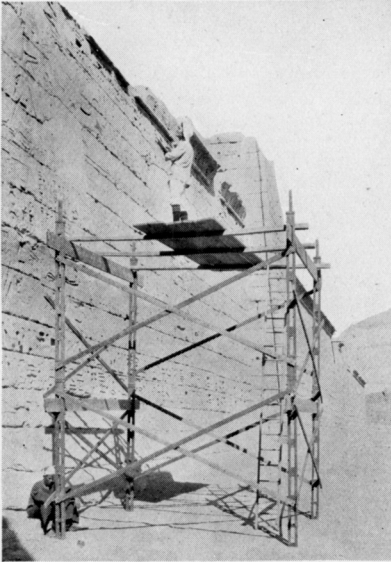


FIG. 11.—ONE OF THE INSTITUTE ARTISTS ON THE SCAFFOLDING BEFORE THE TEMPLE WALL.

He is tracing on the face of an enlarged photograph the same inscription which he has before him on the original wall, producing a preliminary facsimile ready for correction.

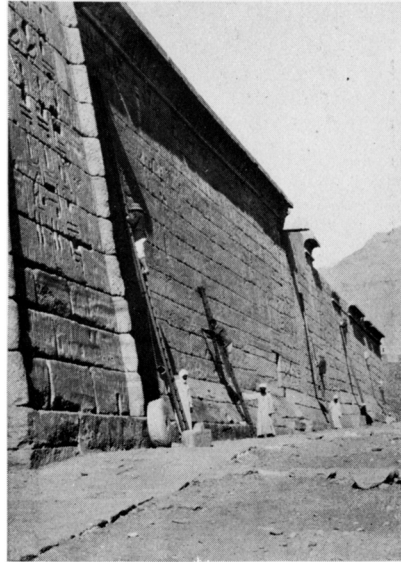


FIG. 12.—THE EPIGRAPHERS PROOF-READING AND CORRECTING THE ARTIST'S INDIA-INK TRACING BEING MADE IN FIG. 11.

The epigraphers, being able to read the inscription, correct the errors of the artists and by repeated checking and study of the original wall produce an accurate facsimile.

carefully trace all the lines of the original directly on the face of the photographic enlargement. The ink-traced photograph is then bleached in a chemical bath so that the photograph disappears, leaving only white paper bearing the ink lines. From this ink-drawing the darkroom assistants, native Egyptian boys, then make contact negatives, printed on brown iron-paper. Thereupon these paper negatives make very simple the production of blue prints which can be cut up into sections, pasted on convenient correspondence-sized sheets of paper, leaving ample margins for corrections. The epigraphers then take these blue-prints to the wall, where they compare the artists' work sign by sign with the original inscription (Fig. 12). This is a kind of "proofreading" which is done repeatedly with the purpose of eliminating all mistakes. When the artists have entered all these corrections on the drawings, the result is a facsimile of each inscription containing far more than a photograph can record. This facsimile combines three things: the speed and accuracy of the camera, the skill and clearness of the artist, and finally the reading ability of the epigrapher, who sees much which is not recorded by camera or artist.

When these facsimiles are published (see p. 35) and distributed among the leading libraries of the world, the temple records they contain will have been

The Oriental Institute

saved from destruction. It is expected that the records of the Medinet Habu temple will fill about six volumes, of which the first is now on the press.

The work of this Expedition is not confined to epigraphy and wall sculpture. It is extended also to architecture, for the Institute has organized an architectural branch under the immediate charge of Professor Uvo Hoelscher. During the past winter (1927-28) the excavation of the palace of Ramses III (twelfth century B.C.), connected with the Medinet Habu temple (see Fig. 13), has for the first time made clear the ground plan, and to no small extent the elevation, of such a pharaonic palace.

We may now walk through the Pharaoh's fine apartments, all of them essentially alike, for the accommodation of the sovereign, his queen, and three ladies of the harem. Each of these apartments (see Fig. 13, below) was supplied with its private bath; and the drainage arrangements and even the walls of these ancient bathrooms are still preserved. The adjoining apartments of the royal officers and clerical force, together with the administrative offices, storerooms and magazines of the palace, will be cleared next season (1928-29). They cover a large area. The whole is inclosed in two strong fortifications, an outer curtain wall surrounding a lofty and massive fortress wall. In the heart of the whole complex the five royal apartments above-mentioned were protected by a massive inner (third) wall, first disclosed by the past season's work.



FIG. 13.—THE ROYAL SUITE OF THE PHARAOH, CLEARED BY THE ARCHITECTURAL SURVEY DURING THE SEASON OF 1927-28.

This view shows (center, middle foreground) walls of three bathrooms, and general ground plan of the royal apartments. The smaller doors in the temple wall beyond are 9 feet high—a scale by which the dimensions of the foreground may be gauged.

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FIG. 14.—GALLERY IN THE CAIRO MUSEUM, SHOWING THE PAINTED PLANKS OF THE ANCIENT COFFINS, SOMETIMES OVER 4,000 YEARS OLD, DISMOUNTED AND SET UP FOR THE WORK OF MAKING THE HAND COPIES OF THE "COFFIN TEXTS."

SAVING THE FORERUNNERS OF THE BOOK OF THE DEAD

THE COFFIN TEXTS PROJECT

Another great body of documents which have been slowly perishing is the group of writings known to modern scholars as the Coffin Texts. They are written with pen and ink directly on the inner surfaces of the wooden coffins in Egyptian burials beginning as far back as the twenty-third century B.C., or even earlier, and coming down to the eighteenth century B.C. These writings were afterward largely absorbed in the Book of the Dead, which cannot be understood without a thorough study of the Coffin Texts. They are of special interest because, while still endeavoring to hold to the primitive sensual and materialistic idea of the life hereafter, the Coffin Texts disclose the beginnings of a more enlightened belief that happiness beyond the grave will be dependent upon the ethical quality of a man's earthly life. They were produced, therefore, in the first great age of spiritual conquest, an age which carries us over from advances exclusively in the world of material things to a higher progress signifying the uplift and ennobling of human character. The Coffin Texts are also of the greatest importance for an understanding of the Egyptian language.

The difficult work of copying and editing these texts has been going on since 1922, when it was begun by Dr. Alan H. Gardiner, of London, research professor in the University of Chicago, and the present writer. It has since been continued by Dr. Gardiner with the assistance of Dr. A. De Buck.



FIG. 15.—A PAGE OF THE OLDEST KNOWN SURGICAL TREATISE—THE EDWIN SMITH PAPYRUS, SEVENTEENTH CENTURY B.C. ABOUT TWO-FIFTHS THE SIZE OF THE ORIGINAL.

In publishing this oldest surviving scientific document, the Institute is investigating the dawn of man's scientific discernment and the birth of scientific methods. Such researches reveal the advance of man's intellectual power, while the Coffin Texts Project (preceding page) discloses his dawning ethical consciousness. Both of these developments were built up on the basis of the material conquests revealed by the Prehistoric Survey, while advances in later periods are likewise included in the other various research projects of the Institute. The Surgical Papyrus will appear in two volumes early in 1929 (see p. 34).



FIG. 16.—THE GREAT MOUND OF ARMAGEDDON (OR MEGIDDO), ONCE THE STRONGEST FORTRESS-CITY OF PALESTINE, COMMANDING THE MOST FAMOUS BATTLEFIELD OF THE ANCIENT WORLD.

Note the Bedouin tents in the foreground. The Expedition's headquarters are visible at the extreme left of the Mound.

ARMAGEDDON EXCAVATIONS THE MEGIDDO EXPEDITION

Passing from Egypt to Asia, a glance at the map (p. 4) discloses the fact that Palestine, the land of the Hebrews, lies directly between the great centers of oriental civilization, that is, Egypt on the one hand and Assyria and Babylonia on the other. The point at which these powers in their struggle for supremacy very commonly met was a transverse ridge in Palestine, of which the seaward end is called Mount Carmel. Guarding the pass through this ridge is the famous fortress-city of Armageddon, or Megiddo, which is the older Hebrew form of the same word. The Plain of Megiddo has been the battlefield of the ages, and the stronghold of the city itself has been the key fortress guarding the highway between two continents. This fact was dramatically illustrated in the course of the world war. When Lord Allenby advanced from Egypt into Palestine in command of the Allied Forces, he was able to push back the Turks from one position to another until he reached the ridge of Carmel. Here, protected by the same ridge which had sheltered many ancient armies, Lord Allenby pushed his cavalry through the pass, cutting the enemy's forces in two, and won on this historic battlefield the last of the battles of Armageddon, perhaps the greatest victory of the world war.

The great mound has never been investigated beyond a few trial shafts and exploratory trenches undertaken by a German expedition over a quarter of a century ago. As a whole it still awaits systematic clearance and may be expected to yield historical monuments of the greatest importance. As far as known to us, the earliest battle fought here was the combat between the Canaanites and the Egyptian army of Thutmose III in the middle of the fifteenth century B.C. The Egyptian records describe the rich spoil of the allied Asiatic kings which Thutmose captured in the city. The golden breast ornament

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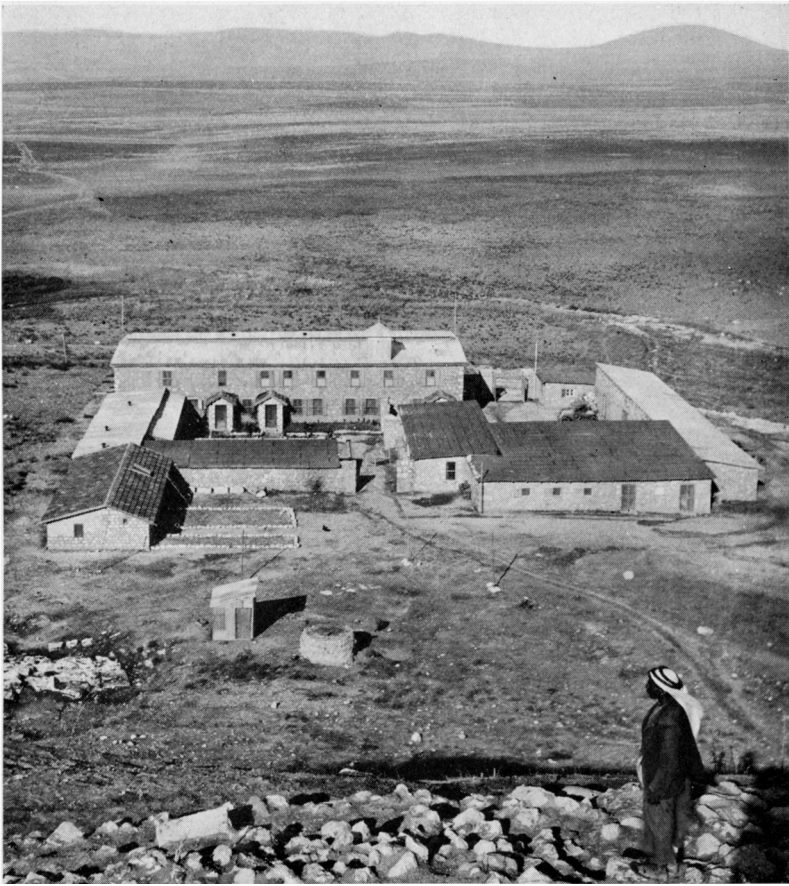


FIG. 17.—LIVING AND WORKING QUARTERS OF THE MEGIDDO EXPEDITION, THE HEADQUARTERS OF THE ORIENTAL INSTITUTE IN ASIA.

Looking northward from the top of the Mound, with the hills of Nazareth in the distance and Mount Tabor on the horizon at the right.

reproduced on the cover of this circular belonged to such a Palestinian king. Somewhere on the slopes of the mound or on the neighboring hills must be the tombs of these same kings, containing similar art treasures.

Through the generosity of Mr. John D. Rockefeller, Jr., in 1925, the Oriental Institute was able to expand its work in Asia and to undertake the systematic exploration and excavation of the mound of ancient Armageddon. The expedition, with Dr. Clarence S. Fisher then as field director, arrived on the site in the autumn of 1925. The task of building the headquarters was more or less of a

The Oriental Institute

race with the on-coming autumn and winter rains, and members of the expedition were more than once driven from their tents by the drenching rains of October before they were able to shift to the welcome shelter of the new house. The neighboring marshes, long undrained, also exposed the expedition to attacks of malarial mosquitoes; and all the members of the expedition have, at one time or another, been laid low by these insidious enemies.

The house is built of heavy stone masonry and has a double roof. The long building on the far side of the court (Fig. 17), as viewed from the summit of the mound, contains the living and working quarters, drafting-rooms, and photographic dark rooms. In the nearer buildings are workshops, kitchen and provision magazines, storage for antiquities, and a garage for three automobiles.



FIG. 18.—LOOKING EASTWARD TO MOUNT GILBOA ACROSS A CORNER OF THE EXCAVATIONS IN THE HIGHEST STRATA OF THE MOUND OF ARMAGEDDON.

Like Chicago House at Luxor, this Asiatic headquarters of the Oriental Institute is furnishing an opportunity for the training of young orientalists. Unlike Luxor, it is possible for the Staff to live here all the year round. Although very hot, the warm season from April to October is free from rain and permits a campaign of some six months of excavation.

Built each upon the ruins of its predecessor, any ancient city of the Orient usually rose in the form of a hill; and when such a city was destroyed for the last time by some catastrophe of war, its mound lay like a series of stratified geological deposits. Such is the present condition of the historic mound of Armageddon. In modern excavation the entire area to be cleared is carefully surveyed and laid out in a series of small squares, each of which is numbered, so that the exact position of everything discovered may be accurately marked in these squares. The particular level at which each object is found is also accurately

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FIG. 19.—MENDING ANCIENT POTS AND JARS, IN ORDER BY THEIR SHAPE AND CHARACTER TO DETERMINE THE AGE OF THE LEVEL IN WHICH THEY WERE FOUND.

Pottery is for the archaeologist what "index fossils" are for the geologist.

noted. For it will be obvious that the latest remains are on the top and, as the excavation proceeds downward, each successive level is older than the one above it.

In order to remove the rubbish, it is carried by the native workmen in baskets on their heads and loaded into modern steel dump cars running on the tracks which we see in the center of the excavation (Fig. 18), where one of these cars is in process of being filled and will presently be trundled off down the track to the slope of the mound and dumped. The rubbish it contains is shot down the steep slope of the mound, away from the ancient buildings (see Figs. 20 and 21).

Far below these workmen, in stratum upon stratum, lie the streets and buildings of the older cities, without doubt containing important monuments and records which it is the object of the Oriental Institute to discover. Thousands of years ago the Stone Age men settled on this hill of Armageddon. Our excavations along the slopes have disclosed their stone implements. Above this earliest settlement will be that of the first metal-users in Palestine, some 5000 years old; and over these levels will lie the strata of successive historic ages, culminating in the wealthy city captured by Thutmose III of Egypt in the early fifteenth century B.C. The city remained in Egyptian hands for centuries and must be filled with monuments of the Pharaohs, as well as with

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FIG. 20.—WOODEN DÉBRIS CHUTE DOWN SIDE OF MOUND BEING REPLACED WITH STEEL TUBING.

Note men letting sections into place. Fig. 21 on the following page shows new chute completed and in operation. Débris from excavations is dumped into top of chute, down which it tumbles into waiting Decauville dump-car at bottom.

those of the great kings of Western Asia. One such monument has already been found (Fig. 22).

Among the many evidences of Egyptian occupation already found is a cylinder seal not yet definitely dated but evidently in regular use in the administration of a temple in the ancient city. It is engraved with a representation showing an Egyptian Pharaoh reclining in a palanquin carried on the shoulders of his bearers and preceded by two religious standards: one Egyptian, surmounted by the image of the god Anubis; the other Asiatic, bearing a symbol of the Asiatic moon god. This seal points clearly to a long-continued early Egyptian occupation and to the periodic appearance of an Egyptian sovereign in the temple ceremonies in Palestine long before the erection of a Hebrew temple there.



FIG. 21.—NEW TUBULAR STEEL CHUTE IN OPERATION ON THE MOUND OF MEGIDDO

Débris from car in foreground, after passing down the chute, falls into a similar car at the bottom and is carried out and thrown over end of "dump" seen in distance (see Fig. 20).

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"And it came to pass in the fifth year of king Rehoboam, that Shishak king of Egypt came up against Jerusalem; and he took away the treasures of the house of Jehovah and the treasures of the king's house; he even took away all: and he took away all the shields of gold that Solomon had made" (I Kings 14: 25-26).



FIG. 22.—READING THE SHISHAK FRAGMENT
AT ARMAGEDDON (1926).

It was to us an experience of no little interest when one of our Egyptian foremen brought down from one of the rubbish heaps of our predecessors at Armageddon a stone which he had noticed was inscribed with Egyptian hieroglyphs. A gray day and complete lack of sunshine made the reading difficult, but a little later an hour of sunshine made it quite clear that the ancient block bore the name of Shishak, whom the Egyptians themselves called Sheshonk, who invaded Palestine and captured Jerusalem in the tenth century before Christ. Scholars had been inclined to doubt that he captured the massive fortress of Armageddon, which Shishak's inscriptions on the temple at Karnak claim that he had taken; but here before us was the evidence which he had left on the spot—an impressive monument the approximate size

of which we could restore as a great slab of stone some ten feet high and five feet wide, with a rounded top, which the Egyptian king had erected at Armageddon in the tenth century B.C. The turkey which is also solemnly contemplating the ancient stone was a household pet of the Armageddon staff.

As this circular goes to press (August, 1928), Mr. P. L. O. Guy, formerly acting director of the Antiquities Department of the Palestine Government, who last year succeeded Dr. Fisher as field director at Megiddo owing to the latter's recurrent ill health, reports the discovery of the famous stables of Solomon, whose name is synonymous with the magnificence of ancient oriental autocracy. Stabling space for some 150 horses, arranged in twelve double rows of twelve stalls each, one row facing another, with the original hitching posts containing tie-holes still standing in place between stone mangers, vividly corroborates I Kings 9:15-19 and other Old Testament passages, to which Mr. Guy's discovery lends new meaning.

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FIG. 23.—BOGGED IN THE LAND OF THE ANCIENT HITTITES: MR. VON DER OSTEN AND PARTY ENDEAVORING TO EXTRICATE THEIR FORD MACHINE WHILE ON THE ORIENTAL INSTITUTE EXPEDITION IN THE SUMMER OF 1926.

SCOUTING IN THE HITTITE COUNTRY OF ASIA MINOR

THE HITTITE EXPEDITION

The recent decipherment of the Hittite documents written in cuneiform on clay tablets, accomplished by Hrozny and especially by Forrer, has revealed a totally new world. It has disclosed to us the prehistoric Greeks centuries before they possessed any writing. We see them pushing over from the Greek mainland into Asia Minor—the irresistible prehistoric Greek expansion, likewise revealed to us in the records of the Medinet Habu temple (Fig. 9, p. 12). Some of the hero kings of the Homeric songs are disclosed in these cuneiform tablets as historical characters, and even the name of Troy is found in these documents for the first time in a contemporary written source. Here then is the astonishing emergence of the Trojan wars, revealed as historical events in *contemporary documents*.

Exploration and discovery in these “Hittite” regions—especially the territory within the circuit of the Halys River (see map, Fig. 1)—are still in their beginning stages. Not a single “Hittite” city has been completely and systematically excavated. A thousand questions arise on every hand, and one of the most important of these is the problem of the racial connection of the group of peoples commonly called “Hittites.” The fact that at least one of their lan-

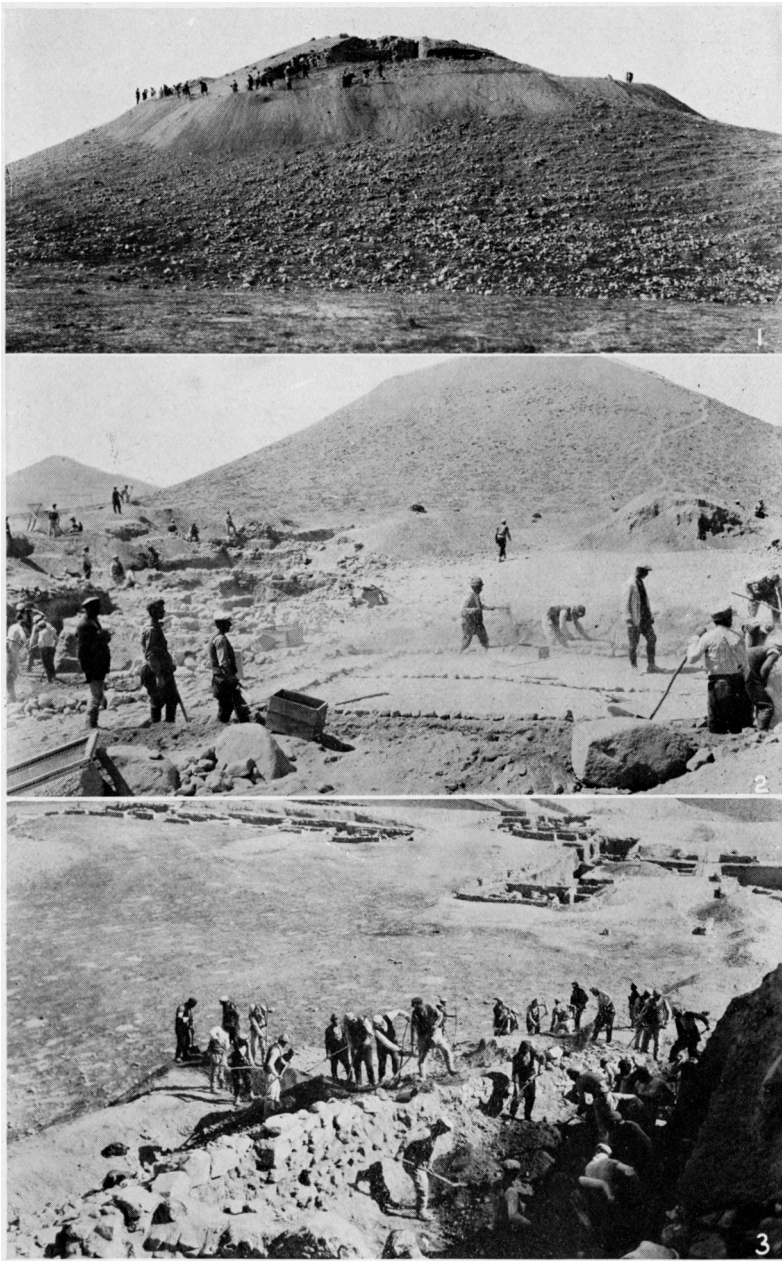


FIG. 24.—1-3, WORK ON THE MOUND OF ALISHAR, IN THE HITTITE COUNTRY.
(See legend on following page.)

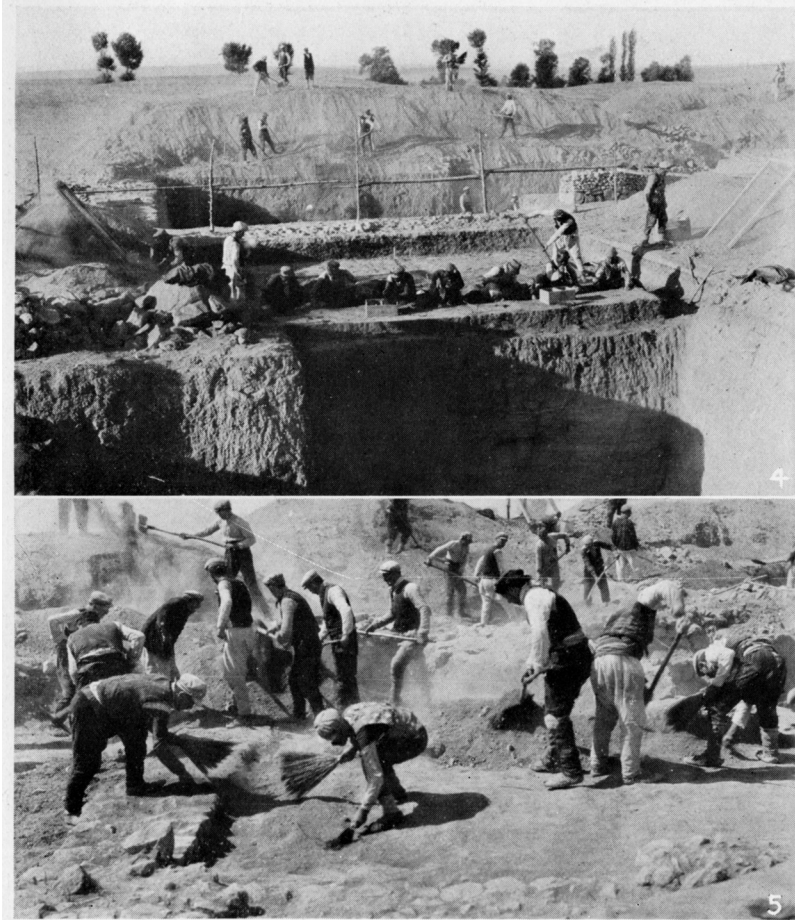
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FIG. 24.—4-5, WORK ON THE MOUND OF ALISHAR

1, on opposite page, shows a view of the citadel mound with excavations in progress. 2, a "plot" laid out and ready for excavation, stratum by stratum. 3, the excavators have set to work. Note in background sections already cleared. 4, a "plot" being systematically excavated. 5, men working with meticulous care. Note brushes in hands of two men at left and extreme right. Not so much as a bronze needle escapes the vigilant eyes of these trained workers, who are constantly superintended by a European member of the Expedition staff. By clearing a series of "plots" cross-cutting directly through the mound, the Expedition is enabled to locate the most important portion of the mound for fuller clearance.

The Oriental Institute

guages is Indo-European in character connects these ancient people with our own ancestry, a discovery which invests them with peculiar interest for us.

In the summer of 1926 the Oriental Institute undertook a preliminary exploration in the "Hittite" country, with Mr. H. H. von der Osten as field director. His work has resulted in a series of interesting and important discoveries, of which the Oriental Institute has published a preliminary report (see p. 34).

Among the numerous observations made by the Hittite Expedition, there are several deserving special mention here. First, it found no less than fifty-five new sites which could be identified as ancient "Hittite" settlements, towns, and cities heretofore unknown. Further, it discovered a line of observation posts visible one from another, which served as a line of defense; and found postern passages cut as long, inclined galleries in the rocks of the "Hittite" strongholds for the rapid debouchment of troops. The Expedition's discovery of a Middle Kingdom statue of nearly 2000 B.C., bearing an Egyptian inscription, which turned up in the ruins of Kirik Kaleh, is of the greatest interest and suggests intimate intercourse between the Hittites and the Egyptians some 4,000 years ago.

In the spring of 1927 Dr. Erich F. Schmidt was appointed joint field director of the Hittite Expedition with Mr. von der Osten. A typical and promising site was selected from among those previously found by the Expedition, namely, the mound of Alishar, or Alishar Hüyük, named after the nearest village. This is situated about 128 miles east by southeast of Angora. The first season's work has for the first time clearly established the pottery sequence and other criteria necessary for dating the successive levels in an ancient Hittite site. Having penetrated last December to the level of a citadel clearly identified as associated with the Hittite hieroglyphic people, the Expedition resumed work again in May (1928). Throughout its operations the Expedition has enjoyed the greatest courtesy and co-operation at the hands of the Angora government.

One of the most important discoveries at Alishar is that of some ancient Hittite human bodies, the first ever found, which will lead to identifying the race of this remarkable people. Several of the bodies have already reached Haskell Museum at the University of Chicago, and the Department of Anthropology is expecting to co-operate in a close examination of them.

It is hoped that Mr. von der Osten's explorations may be extended eastward to include the investigation of the eastern connections of the Hittites; and, in view of the fact that their Indo-European affinities have been demonstrated, it may be that such exploration will carry us farther back along the trail of our westward-moving ancestors. A glance at the map (p. 4) will show that this venture into the Hittite country has carried the field operations of the Oriental Institute to the northern limit of the ancient area between the Black Sea and the Upper Nile. This line of operations discloses two gaps: one in Syria, where we know the Hittites left most important remains; the other farther east in Assyria and Babylonia, where a vast treasury of untouched monuments awaits investigation if the funds can be found. These field projects are the feeders of our home researches, which are discussed in the following pages.

The Oriental Institute

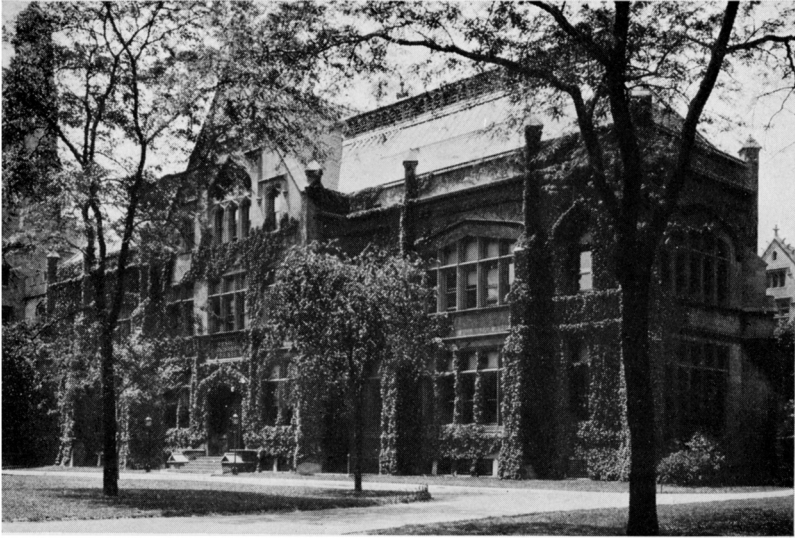


FIG. 25.—HASKELL ORIENTAL MUSEUM, THE AMERICAN HEADQUARTERS OF THE ORIENTAL INSTITUTE.

A RESEARCH LABORATORY FOR THE INVESTIGATION OF THE EARLY HUMAN CAREER

This building, presented to the University of Chicago as a memorial to Mr. Frederick Haskell in 1895, was shared by the Department of Oriental Languages with the Divinity School for thirty years; and it was not until the spring of 1926 that the Oriental Institute and the Department of Oriental Languages were able to take possession of their own building, at a stage of development so advanced that the work of the Institute has now outgrown its building; it is greatly in need of larger and more modern quarters. Administered by a home staff of twenty-one members, this American headquarters not only serves as an administrative center, but also enables the Institute to furnish all of its various projects, whether at home or in the field, with a kind of clearing house upon which all the highly varied data coming in from all sources converge.

This home office is able to aid the projects of the Institute in a number of ways. For example, the hand copies of Coffin Texts, which are now being made by Dr. Alan H. Gardiner and Dr. A. De Buck (Fig. 14, p. 16), are forwarded to the American headquarters, where they are manifolded by a photostatic process and duplicates are furnished to the European editors without any manual labor on their part. The editorial labor involved in the publications of the Institute is likewise contributed by this home office. At the same time, a group of the most important researches of the Institute are carried on here.

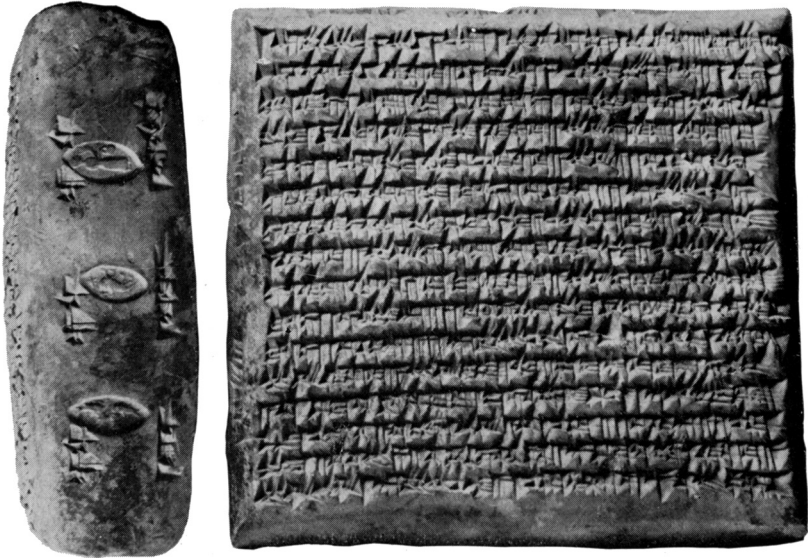


FIG. 26.—AN ANCIENT BABYLONIAN CLAY TABLET RECORDING A SALE OF LAND

The document reads: "Anuah-iddannu, whose second name is Dumki-Anu, has sold to Nur in perpetuity his garden-land, the property of the god (temple) Anu, located in the district of the Ishtar Gate of Uruk [here follows abstract of the boundaries on all four sides] for one-third mina of refined silver staters of Antiochus. If a claim about this land is made, then the seller must reimburse the purchaser twelve-fold." Names of about a dozen witnesses appear on the lower edge of the reverse side of the tablet.

AN INDEX OF ALL THE KNOWN CUNEIFORM DOCUMENTS

THE ASSYRIAN DICTIONARY

In studying ancient documents in a language which modern scholars are just beginning to read, the investigator inevitably meets new words which no scholar has ever seen before and which he does not understand. The immense volume of cuneiform documents has entirely outrun the ability of any *one* scholar to go through them and study the new words. The great Murray dictionary of the English language, at Oxford, has demonstrated the fact that all dictionaries must be written on the basis of "a series of *quotations* ranging from the first known occurrence of the word to the latest."

In undertaking a complete Assyrian dictionary, now so seriously needed, the Oriental Institute therefore planned from the start to make its "series of quotations" *complete*, that is, to file *every known example of a word* with the entire passage containing it. Begun under the direction of the late Dr. D. D. Luckenbill, aided by a staff made up chiefly of our own former students, the dictionary files now contain some 670,000 alphabetically organized cards bearing

The Oriental Institute

these quotations. The completion of the work under Dr. Edward Chiera will require a number of years; but when eventually issued as the first Babylonian-Assyrian dictionary based on all the known cuneiform documents, it will enable us to read with much greater confidence than before the vast mass of Western Asiatic sources which reveal to us the origins of much in our own life—not least the everyday forms of business procedure, including even the whole idea of credit and written certificates of value, such as the deed for the sale of land in the tablet shown in Fig. 26.

One of the most important of the original cuneiform documents is illustrated on this page. Among the original records secured by the Institute on the Mesopotamian Expedition (p. 5) was a magnificent six-sided prism bearing the annals of the great Assyrian emperor Sennacherib (Fig. 27). Among his western campaigns the great conqueror here records also his siege of Jerusalem, the expedition on which according to the Old Testament narrative he lost a large part of his army under the walls of the Holy City. It is only by the laborious compilation of such an exhaustive dictionary as the Institute is now endeavoring to produce that the fullest understanding of such records can be attained.

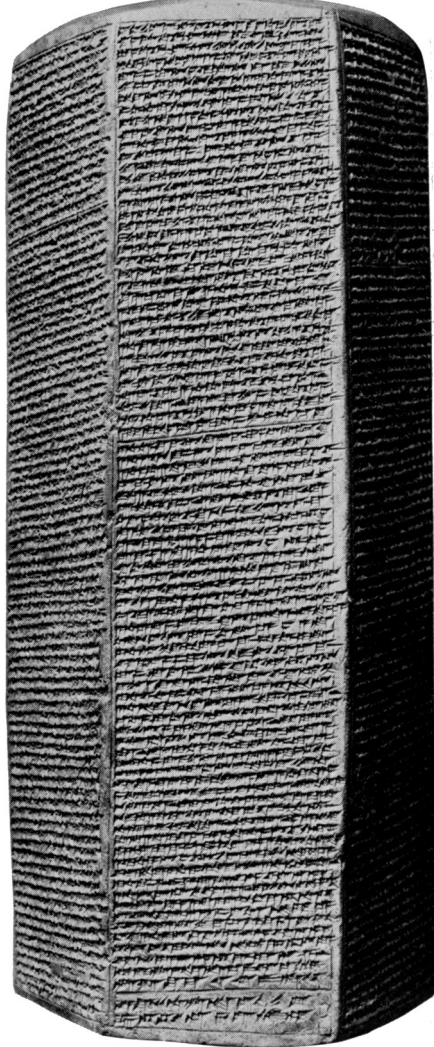


FIG. 27.—SIX-SIDED TERRA COTTA PRISM BEARING THE ANNALS OF SENNACHERIB

About one-fifth actual size. Among his western campaigns, Sennacherib of Assyria here records also the expedition on which, according to the Old Testament narrative, he lost his army under the walls of Jerusalem. Acquired by the Institute's Mesopotamian Expedition, it has been published as Volume II in "Oriental Institute Publications" (see p. 34). All such sources have been incorporated in the new Assyrian dictionary.



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

FIG. 28.—EXPLOITS OF "BRER RABBIT" AS ILLUSTRATED IN AN ARABIC MANUSCRIPT OF THE THIRTEENTH CENTURY OF OUR ERA.

ORIENTAL ANCESTRY OF ANIMAL FABLES

KALILA AND DIMNA STUDIES

Tales in which human life and relationships are shifted into the animal world for purposes of caricature or of instructive moralizing are of enormous age in the ancient Orient. They existed in Egypt as far back as the Empire (1580-1150 B.C.). In cuneiform literature of Assyrian age animal tales have also survived. These earlier oriental animal fables already display the "framework," which makes them more attractive to the hearer and lends weight to the moral lesson to be conveyed. The collection of such tales, known in its Arabic form under the title "Kalila and Dimna" (the names of two talking jackals), has come down to us from ancient India through many translations. Sir Thomas North, who made the translation of Plutarch's Lives used by Shakespeare, issued the earliest English translation of these animal stories in 1570. Quaint versions of these identical tales have also reached us through the slave markets of Africa in the Uncle Remus stories of our own South. In the summer of 1926 Dr. Martin Sprengling was commissioned by the Institute to follow up manuscripts of these tales in Europe and the Orient. His mission was very successful; and the Institute now possesses thousands of photographs, representing many thousand pages of such manuscripts, which are enabling Dr. Sprengling to study the history of this important literature and prepare a final Arabic text.

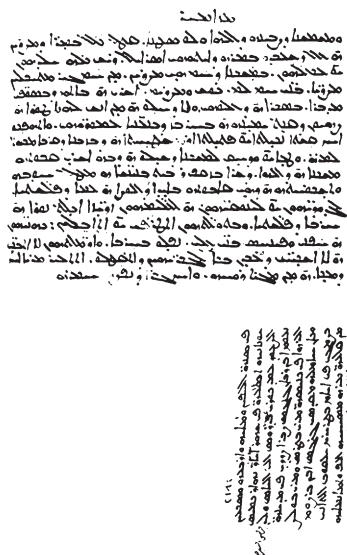


FIG. 29.—A MANUSCRIPT PAGE OF BARHEBRAEUS' COMMENTARY ON THE OLD TESTAMENT, WITH A VERTICAL DOCKET RECORDING THE IMPRISONMENT OF AN EDESSENE ECCLESIASTIC IN A.D. 1863.



FIG. 30.—FIRST PAGE OF A BEAUTIFULLY ENGROSSED GÖTTINGEN MANUSCRIPT OF BARHEBRAEUS' COMMENTARY ON THE OLD TESTAMENT, ENTITLED "STOREHOUSE OF MYSTERIES."

RESEARCHES FOR ESTABLISHING A MORE ACCURATE TEXT OF THE HEBREW OLD TESTAMENT

THE PESHITTA PROJECT

The English translations of our Old Testament are based on Hebrew manuscripts which are known to contain many ancient errors in scribal copying. One way to correct these is to study the ancient translations of the Hebrew, e.g., into Greek or Syriac. The ancient Syriac translation is called the "Peshitta." The text of the Peshitta has never been carefully determined on the basis of all existent evidence. One valuable means of establishing the text of the Peshitta is the study of a Syriac commentary on it called the "Storehouse of Mysteries," written by Barhebraeus in the thirteenth century of our era. The manuscripts of this work, some twenty in number, are now scattered over Asia, Europe, and America. The Oriental Institute is furnishing the editors (see page 36) with photographs of the needed manuscripts.

THE ARCHIVES

The ancient sources and the results of the Institute's researches are being organized into a general encyclopedic catalogue. These archives, filed in the library of the Institute, should furnish a broad basis for the production of a comprehensive history of the origin, rise, and early development of civilization, which it is the ultimate purpose of the Oriental Institute to make possible.

The Oriental Institute

LIBRARY RESEARCHES IN THE MONASTERIES OF THE NEAR EAST

EARLY SYRIAC DOCUMENTS

This new project just inaugurated has been made possible by an arrangement with His Beatitude, Mar Severius Barsaum, Archbishop of Syria, who has become a member of the staff of the Institute. His Beatitude will select from the monastic libraries in his charge the Syriac manuscripts deemed most important for publication and, with the co-operation of Dr. Martin Sprengling and Dr. William C. Graham, will edit such manuscripts for publication by the Institute. The first such document will be *The Oldest Dated Manuscript of the Karkaphensian Massora* (p. 35).

PUBLICATIONS OF THE ORIENTAL INSTITUTE

All volumes marked with * have already been issued. The others are in preparation.

FIRST SERIES—ORIENTAL INSTITUTE COMMUNICATIONS

Popular, illustrated reports of Institute projects in the form of preliminary bulletins for general readers.

No. 1. **The Oriental Institute of the University of Chicago: A Beginning and a Program*. By James H. Breasted. University of Chicago Press, 1922. 1 volume. (Out of print.)

No. 2. **Explorations in Hittite Asia Minor*. By H. H. von der Osten. 1 volume. University of Chicago Press, 1927.

No. 3. **First Report of the Prehistoric Survey Expedition*. By K. S. Sandford and W. J. Arkell. 1 volume. University of Chicago Press, 1928.

No. 4. *The Excavation of Armageddon*. By Clarence S. Fisher. 1 volume. (On the press.)

No. 5. *The Temple of Medinet Habu*. By Harold H. Nelson and Uvo Hoelscher. 1 volume. (Ready Autumn, 1928).

SECOND SERIES—ANCIENT RECORDS

English translations of the historical documents of the ancient world, especially Egypt, Babylonia, Assyria, and the Hittites, in octavo volumes.

Volumes I-V. **Ancient Records of Egypt*. By James H. Breasted. University of Chicago Press, 1906-7. 5 volumes.

Volumes VI-VII. **Ancient Records of Assyria*. By D. D. Luckenbill. University of Chicago Press, 1926. 2 volumes.

Volumes VIII-XII. *Ancient Records of Babylonia*. (To be arranged.)

THIRD SERIES—ORIENTAL INSTITUTE PUBLICATIONS

Scientific and technical results and materials, especially original sources and documents.

Volume I. **Oriental Forerunners of Byzantine Painting*. By James H. Breasted. University of Chicago Press, 1924.

Volume II. **The Annals of Sennacherib*. By D. D. Luckenbill. University of Chicago Press, 1924.

Volumes III-IV. *The Edwin Smith Surgical Papyrus*. By James H. Breasted. 2 volumes. (On the press; ready January, 1929.)

Volume V. *Researches in Anatolia. I. Explorations in Central Anatolia, Season of 1926*. By H. H. von der Osten. (On the press; ready Autumn, 1928.)

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Volumes VI-X. *The Temples of Medinet Habu*. By Harold H. Nelson and Associates. 5 volumes. Volume I, *Historical Inscriptions*. (Volume I on the press; ready Spring, 1929.)

Volumes XI-XII. *Researches in Anatolia*. II-III. *The Mishar Hüyük, Season of 1927*. 2 volumes. By H. H. von der Osten and Erich F. Schmidt. (Ready 1929.)

Volume XIII. *Ancient Oriental Seals in the Collection of Mr. E. T. Newell, of New York*. By H. H. von der Osten.

Volumes XIV-XV. *Prehistoric Survey of Egypt and Western Asia*. By K. S. Sandford and W. J. Arkell. 2 volumes. Volume I, *Egypt*. (Vol. I ready 1929.)

Volumes XVI-XVII. *The Egyptian Coffin Texts: The Ancestors of the Book of the Dead*. By Alan H. Gardiner and A. De Buck. 2 volumes.

Volume XVIII. *The Milbank Papyrus, a Hieroglyphic Manuscript of the Book of the Dead*. By T. George Allen.

Volumes XIX-XXI. *The Excavation of Armageddon: Ancient Megiddo*. 3 volumes.

Volumes XXII-XXIII. *The Babylonian Collections of Haskell Oriental Museum*. By Edward Chiera and Associates. 2 volumes.

Volumes XXIV-XXV. *The Assyrian Dictionary*. (Begun by D. D. Luckenbill.) Edward Chiera and Associates. 2 volumes.

Volume XXVI. *Sahidic Version of the Book of Proverbs*. By W. H. Worrell.

Volume XXVII. *The Oldest Dated Manuscript of the Karkaphensian Massora*. By Mar Severius Barsaüm, Martin Sprengling, and William C. Graham.

Volume XXVIII. *The Egyptian Monuments of Haskell Oriental Museum*. By T. George Allen and Associates.

Volume XXIX. *A Corpus of the Pottery Forms of Ancient Palestine*. By Clarence S. Fisher.

HASKELL ORIENTAL MUSEUM

The original monuments, photographs, and other materials accruing from the operations of the Oriental Institute, both in the field and at home, are preserved and filed for study in Haskell Oriental Museum (see p. 26). Some of these are installed as museum exhibits which serve both to illustrate the work of the Institute for interested visitors and at the same time as instructional and research material for students and the Institute staff. The personnel of the Museum is as follows:

JAMES HENRY BREASTED, Director	WATSON BOYES, Secretary
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