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### 492ND ORDINARY GENERAL MEETING.

MONDAY, FEBRUARY 15TH, 1909.

LIEUT.-GENERAL SIR HENRY GEARY, K.C.B. (V.P.)
IN THE CHAIR.

The Minutes of the previous Meeting were read and confirmed, and the following candidate elected as an Associate of the Institute:—

Herr Pastor Flügel, Germany.

The following paper, illustrated by lantern slides, was then read by the Author:—

DISCOVERIES IN BABYLONIA AND THE NEIGH-BOURING LANDS. By Theophilus G. Pinches, LL.D., M.R.A.S.

RADUALLY, but surely and ever more speedily. Assyriology is becoming the most important study in the domain of Oriental archæology. The language of the Babylonians and Assyrians proves to be a tongue of the most engrossing importance, whilst that of the seemingly earlier race—the Sumerians—with which it was brought into contact. is regarded by some as the coming study for those who wish to acquire renown as true archæological linguists. But besides the languages, with their dialects, a very specially interesting and important field of study is their archæology in general, their beliefs, their manners and customs, their arts and sciences, and the geography of the land. Whether we shall ever obtain information as to their original home, we do not know, but we may, by chance, acquire, ultimately, the information needed to find out where that place may have been; and in any case, we shall know all the better what influence those nations may have had in the world, to say nothing of the bearing of their records on the all-important subject of Bible history, thought. and beliefs. A number of closely-connected nations whose influence extended from Elam on the east to the Mediterranean

and Egypt on the west, and from the Caspian Sea on the north to Arabia on the south, cannot fail to have exercised considerable influence beyond those borders and boundaries—an influence of which we shall not obtain a full idea for many years to come.

Now that we have learned so much about these ancient nations, and their peculiar wedge-formed characters, we know also something of their power and the wide influence of their It is now known that the so-called Phœnician goes writing. back to 1,500 or 2,000 years before Christ, but there was a time when the cuneiform script, in one form or other, was used all over Western Asia within the limits I have indicated. addition, therefore, to Semitic Babylonian, the cuneiform script. derived from that of Babylonia, was used by the Assyrians, who spoke the same language; the Elamites, who spoke Babylonian and ancient Elamite; the Armenians, who seem to have obtained the syllabary they used from Assyria; the Palestinian states, who got their script from Babylonia; the Mitannians, who also employed the Babylonian style; the Cappadocians. who at first used ancient Babylonian, though they seem to have been an Assyrian colony; and the Hittites, who also used the Babylonian style. These are the nationalities who are known to have used some form of the Babylonian wedge-writing, and the list omits ancient Persian on account of the impossibility of tracing any sure connection between their cuneiform alphabet (for that is, perhaps, the best word to use) and the complicated characters of the Babylonians and Assyrians. It will thus be seen, that the cuneiform script, forming, as it does, the medium of communication between so many different peoples of ancient times, is of the utmost importance—indeed, attempts have been made to connect it with the ancient Phœnician, and, through that script, with our writing at the present day. This is not generally accepted, but probably offers, in some cases, satisfactory as those obtained with comparisons as Egyptian hieroglyphics through the Demotic forms. addition to the nationalities mentioned above as users of the cuneiform style of writing the inscriptions mention the languages of Su and Sub (the tongue of the Shuhites of Job ii, 11. etc.), the Kassites, and the Lulubites.

But the discovery of new languages, or dialects, or new styles of writing, is not yet over, as is shown by the French excavations at Susa. On that interesting site they have found not only a number of Elamite and Babylonian inscriptions in the wedge-formed writing, but also several in a new style, not

cuneiform, though the characters may have assumed that peculiarity, under Babylonian influence, about 3,000 years before Christ. Among the specimens which I now show we have the line-forms as seen on a stone bearing the name of Karibu-ša-Šušinak\* (the first element, karibu, is a provisional reading), and to this I add a copy in ink to show more clearly the rough forms of the characters and the careless cutting of the lines, which ought to have been ruled. The following is the suggested translation of this inscription, by Professor Scheil, the original being, as already indicated, in proto-Elamite:-

"Offerings of food, fermented drink, . . ., and dates: 20 measures of sweet drink, . . . 2 measures of date-wine, 20 measures of seed-oil, 1 measure of fermented drink, a kind of fish, 1 sixth of a measure of dates (for) food, . . ., 100 measures of , . 3 measures of fine kip-drink, 100 . sweet food (?), . 1 sixth of hal."

This inscription, if rightly rendered in the main, reminds one of the numerous tablets recording gifts or contributions of drink, food, and oil, which have been found at Lagaš (Tel-Loh), in southern Babylonia. The rendering (which I have modified from that of Scheil) is based on a likeness of certain of the characters with the line-forms of the early Babylonian script; but whether we are right in assuming that one is derived from the other or not, I do not know. Though defective, the translation may be regarded as better than none at all. inscription on the other piece, which has the advantage of being larger and clearer, is very similar to that of which a translation has been attempted, and is probably the same text, with variants.

In addition to these roughly-carved lapidary inscriptions. however, a large number of small clay tablets have been found, apparently forming part of the records of income and outlay of some institution or temple. All these texts are written in narrow columns which, like those of the line-inscriptions, also read downwards, but the style is not linear, but distinctly cuneiform. I give here a drawing of one of them, made from

<sup>\*</sup> The following is a free rendering of the inscription, which is written in the cuneiform character :-

<sup>&</sup>quot;Karibu-ša-Šušinak, viceroy of Susa, governor of the land of Elam, son of Simbišhuk, has dedicated the cedar and bronze gate-bar to Šušinak his lord. May Šušinak, Ištar, Narute (and) Nergal, remove the foundation and destroy the seed of any who takes this inscription away. The name of the gate is 'The support of this house.'" According to Scheil, the date of this ruler should be about 2500 B.C.

the photographic reproduction with the aid of M. E. Lampre's copy. Prof. Scheil's translation, somewhat modified, reads as follows:—

"Tablet of TU-KAK, 17 DA-NUN-SI, 1 AD- , . . . 2 ME, 4 BAD, 1003 and a half DUG (?)-BAD, 9 measures of grain,  $9\frac{3}{4}$  measures of grain, 2 DUG-GAL."

The last is probably a kind of large fish.

With reference to the inscriptions of this nature, however, it is needful to say, that one has an uneasy feeling that the characters may not have been pronounced as the Babylonians read them, and that often, when we can translate the words, we do not know their phonetic values, and when we can transcribe them, we do not know their meaning. When this happens, there is no escape from leaving blanks in the renderings, or giving the apparent pronunciations of the somewhat barbarous combinations which the Babylonian syllabaries indicate. With regard to the numerals, their renderings may be looked upon as fairly certain.

Besides this small text in four columns, the other inscriptions of the series also give numerous forms comparable with those of the script of Babylonia and Assyria,—which, however, seems to have been less rich in signs—due, probably, to the abandonment of some of the original forms, for fashion existed in the domain of Babylonian letters as in other things. I give here, as examples, a few comparisons which may be made between proto-Elamite and the Babylonian styles of writing. is a group of doubtful meaning; the second is the character for "husband" or "wife"; the third stands for "lady" or "sister"; the fourth is a compound group showing the character lum, "to be luxuriant," within ak, "to make"—? "garden-produce," perhaps of some special kind; the fifth is a character for "sheep,"—apparently the picture of a sheepfold with four divisions; the sixth is the character for "grass" or "herb"; the seventh gives three forms of the character for "great"; and the eighth is a measure called the qa. It is needless to say that this list could be greatly increased, but were I to continue the comparisons, we should not reach the more interesting things to which I shall refer in this paper.

But even at Babylon itself at least one linguistic mystery came to light. In 1881 Mr. Rassam found there a contract-tablet referring to the sale, by merchants or tradesmen of that city, of a slave-woman named Ištar-Bâbîli-šimînni, to a man named Urmanû. This text I published in 1883 on account of

the strange characters with which the spaces were filled, hoping that some scholar, more versed in strange writings than I was. might find the key to its interpretation. More than a quarter of a century has passed since that publication, but we are no nearer to the finding of an explanation of these mystic signs. Is it a late form of proto-Elamite? or may it be cursive Hittite? Time alone can show.

Most of the tablets bearing these archaic Elamite accounts are small, and measure only a few inches. One of them, however, is so large that it occupies a whole page (quarto) in the great French publication where they are reproduced. The obverse has only two lines of writing, but bears, in two long rows, the impressions of a cylinder-seal, the design of which is repeated, by continuing the impression, about three times in The subject shows a bull, front-face, horned, standing erect manwise, and holding two sitting lions by the ears. A lion in the same position, but profile instead of frontface, holds, by their humps, two humped bulls, the whole making a somewhat grotesque design. The strange character in the field is probably the Babylonian sign for a vase used for offerings, with additions. As in other cases, these seal-impressions are probably from the engraved cylinder of the scribe who wrote the tablet.

Among the artistic discoveries are some excellent examples. in some cases superior even to the work produced by the Babylonians at the period. The most interesting is probably that representing the Babylonian king Narâm-Sin, ruler of Agadé, marching over the mountains in his victorious course. Naturally, there is doubt whether this is Elamite or Babylonian. but it is to be noted that the style reminds one of the Elamite bronze representing marching warriors, which would seem certainly to have been real Elamite work, and this being the case, it is not unlikely that the relief showing Narâm-Sin is Elamite too. It is known that his father, Sargani, or Sargon of Agadé, conquered Elam, but that the dominion of the country passed to his son is uncertain. Whether this monument may be regarded as evidence in favour of that probability I leave to the judgment of my audience.

Another interesting piece of artistic work is the bas-relief representing a woman spinning. She is seated tailor-wise on a large stool before a table covered with wool, whilst a servingmaid behind keeps off the flies, and fans her mistress with a large fan of square form, which she holds. This is in all probability a representation of a woman of the higher classes, and is interesting as giving a glimpse into Elamite domestic life. The style is probably late, the figures being more thick-set than in the case of the stele of Narâm-Sin and the bronze relief showing marching soldiers. The thick-set type appears in Babylonia about 1200 B.c. The marching soldiers, however, are attributed by Father Scheil to the reign of Šutruk-Nahunta, about 1116 B.c., so that it would seem doubtful whether the date can be decided from the type of the figures.

Religious subjects also occur, a good example being the small relief which has already been thrown on the screen with the proto-Elamite line-inscriptions. This shows the remains of an enormous lion's head, open-jawed, with one forepaw. Kneeling on one knee, and facing the animal, is a deity in a horned hat, holding with both hands a large cone, apparently brought as an offering. Figures similar to this, cast in bronze, in the round, have been found in Babylonia, and are sometimes called "the god with the firestick." They come from Tel-loh, the ancient Lagaš, and bear an inscription of the renowned viceroy of that city, Gudea.

It is needless to say, that all these and many other objects of great importance, found at Susa, the ancient capital of Elam, prove the power of that kingdom in ancient times, and show that such a campaign as Chedorlaomer, in the fourteenth chapter of Genesis, is represented as making about 2000 years B.C., is not only possible, but highly probable. With many vicissitudes, she maintained her power until the time of Tepti-Humban, the Teumman of the inscriptions of the Assyrian King Assur banî-âpli (about 650 B.C.), "the great and noble Asnapper," who intent on absolute supremacy in the East, attacked Elam in three great expeditions, and reduced the country, as he records, to a pitiable state. Having lost her political importance, though not her courage and energy, as still later accounts show, she ceased to attract the historian and traveller, who therefore, to all appearance, passed her over in favour of Nineveh, the capital of the power which had crushed her, and Babylon, the capital of Babylonia, her old ally and foe, by turns. It is only during the reign of the Kharacenian King Hyspasines that the cry of "the enemy, the Elamite," is once again heard in Babylonia, though this was probably only for a short time. Notwithstanding all the wonderful finds that have been made, much more material is required to complete our records, and not among the least interesting would be those referring to the latest period, but documents of every kind will, it is needless to say, be welcomed.

Turning to Elam's western neighbour, Babylonia, we find again that much has been done, this time by the Germans, whose discoveries on the site of Babylon practically make the city live once more, and the time is not far distant when it will be the objective of the modern tourist as much, for instance, as the cities of India with their wonderful remains. According to Delitzsch, Babylon was a comparatively small city, not larger, in his opinion, than Dresden or Munich. The outer wall is shown by the plan now on the screen. At the top is the north palace on the east of the Euphrates, which at present flows from the north-west. Some distance down begins the Arahtu-canal, which, running in a southerly direction, passed through the southern wall and entered the Euphrates again near the point where it began to resume its southern course. The wall on the left bank of the river was continued on the right bank, and has, on its north side, the middle palace, and on its south the south palace. At this point lie the ruins of the Istar-gate, near the east end of which is the temple called E-mah. Canals protected the two adjoining palaces on the north and the south, the former being called the Merodachcanal, and the latter Libil-hegala, "(the canal) 'may it bring The square some distance south of the south palace marks the position of the great temple-tower E-temen-an-ki, "the House of the foundation of Heaven and Earth," explained by the Babylonians as "the Tower of Babylon." South of that lie the ruins of the great temple E-sagila, the renowned Temple of Belus. Running parallel with the Arabtu-canal is the royal street, called, at its northern end, Aa-ibur-sabû. was used for processions, especially that of the New Year, when the gods were solemnly taken to greet their king, Merodach, as one of the inscriptions brought back from Babylonia by the late George Smith states. The ceremonies at these New Year festivities apparently symbolize the visit of the king of the heavenly host to the captive gods, whom he comforted and released, much to the discontent of Nergal, god of war and disease, and also, as we may suppose, of death—whether he was identical with Ugga, the god of death par excellence or not, we do not at present know. The gods in prison were the followers of Tiawath, the Dragon of Chaos at the beginning of the world, and when Merodach destroyed her—the Dragon her followers were placed in prison and bound. This ceremony of the release of the captive gods took place on the 8th of Nisan, the first month of the Babylonian year, corresponding partly with March and April. At the same time

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"The gods, all of them—the gods of Borsippa, Cuthah, Kiš, and the gods of the cities all, to take the hands of Kayanu (and) the great lord Merodach, shall go to Babylon, and with him at the new year's festival, in the sanctuary of the king, offer gifts before them."

It is also probable that on the same occasion the ruling king of Babylon, whoever he might be, and of whatever faith or nationality (for the Babylonians had been ruled in their time by aliens from all parts of the east), was expected to "take the hand of Bêl," though it may be doubted whether Darius Hystaspis, that stern worshipper of Hormuzd, ever consented to assist in what he must have regarded as a heathen ceremony. This street for the sacred processions in Babylon must, therefore, be regarded as having been the most noted roadway in the city, and we can imagine the long procession passing through the southern gateways, taking part in the ceremonies in the temple of Belus and at the Tower of Babylon connected therewith, crossing the Libil-hengala canal, then passing the royal palace and under the gateway of Istar, to the Chamber of Fate, which is regarded as having been situated at the eastern end of the Merodach canal. The distance from the gate of Uraš, which was the city's southern entrance to the Chamber of Fate, was a little over a mile and a quarter. Unfortunately, the remains of the Tower of Babel—that structure so renowned of old—have, within recent years, been cleared away to build the dam of the Hindiveh Canal, and instead of a great monument, the depression where its foundations were laid is now all that exists.

As might be expected, the spouse of Merodach, Zēr-panîtum, the principal goddess of the Babylonian pantheon, came in for a share of the honours. She appears to have been worshipped at the Tower of Babel along with him, but besides this she had a temple of her own on the east of the Ištar gate, and its foundations still exist in a fairly complete state. This rough photograph, made up of several smaller pictures kindly lent me by permission of the German Orient-Gesellschaft, shows the north front with the altar before one of the recesses. This is the celebrated Ê-maḥ, "the supreme temple," dedicated to Ninmaḥ, "the supreme lady," as Zēr-panîtum was also called. The larger picture on the next slide is stated to be the north-west corner of this temple—apparently the interior—with an altar and platform, and another picture shows the exterior of the

It is naturally difficult to get a good idea of these ruins from the imperfect reproductions which I am now showing, but they will probably be regarded as better than nothing. Enthusiasts will easily imagine what an interesting spot this would be to visit, with its sites from which the glory

departed so many hundred years ago.

In the plan of Babylon which has been thrown on the screen, it will have been noticed that the form of the basement of the "Tower of Babylon" is square, whilst the old representations of that structure, which many of us have seen in old family Bibles and elsewhere, show it as having been circular in form, and tapering with a spiral ascent until the top was reached. These designs, however, were probably mere creations of the artist, who wished to produce something picturesque, and copied, perhaps, some drawing or description which he had met with of similar spiral towers of later date, which actually occur in the East as minarets of certain mosques. This, however, was not the shape of the Tower of Babel, which, as we know from the remains found in the country as well as from the ancient descriptions of the structure, was square in form, though the ascent was an inclined one, and though arranged the same way, was straight instead of curved. picture now on the screen, which is taken from the boundary stone of the time of Merodach-Baladan I., who reigned about 1167 B.C. (this object was presented to the British Museum by the proprietors of the Daily Telegraph), seems to show an erection of this kind in three stages, with a shrine at the top. The horned animal or dragon in front apparently bears on its back a form of the wedge, the symbol of the god Nebo, so that it is possible that the staged tower behind may have stood for one of the emblems of that god. This would naturally form a reason for identifying the great temple-tower of Nebo at Borsippa (the Birs Nimroud) with the Tower of Babel, which is the traditional site of that erection. In all probability, however, the reason for placing the Tower of Babel in "the second Babylon," as Borsippa was called, and not in Babylon proper lies in the fact that the temple of Nebo at Borsippa was the latest shrine where the ancient Babylonian worship was carried on.

The form of temple-tower suggested by Perrot and Chipiez, in their History of Art in Antiquity, was either with sloping stages, as in the case now shown, or with a double ascent and level stages, as in their alternative design. It is doubtful, however, whether the Babylonian architects, notwithstanding

their skill, had ever hit upon so elegant a form. The description published by the late G. Smith in the Athenaum of February 12th, 1876, however, makes the lowest stage to be the greatest in height. Doubt may be expressed as to the outside inclined ascent, with its step-gradines, but some sort of protection would be needed against the accident of falling over the edge, and it is not at all improbable that such a thing existed, as in the case of the temple-tower at Dûr-Sargina (Khorsabad), where the French excavations which preceded Layard's were According to Sir H. Layard, moreover, a temple-tower somewhat of this form existed in the city of Calah (Nimroud), and is depicted in the somewhat fanciful restoration prefixed to his Monuments of Ninevel. A modification of my original design would, however, in all probability, be desirable; there was probably no ascent clinging, as it were, to the first stage, the top of which would be reached by a central staircase at right angles. Similar erections are described as existing in Chinese Turkestan by the traveller, Dr. von Le Cog.

It is a great pity that we cannot appeal to the remains of the monument itself to settle the above question, as well as that of the existence of chambers within. According to Dr. Weissbach. however, the structure measured about 309 feet each way, and the height was about the same. Though this is only a third of the height of the Eiffel Tower in Paris, it is still sufficiently imposing as a high monument. As will be seen from the picture, the lowest stage was much higher than any of the others. The topmost stage was the upper temple or sanctuary of the god Bel or Merodach, 80 feet long, 70 feet broad and 50 feet high—a hall of considerable size. Full details concerning the structure were inscribed on a tablet which the late G. Smith had in his hands about thirty-five years ago, and which has apparently not been seen since. From the description of its contents which that scholar gave, it would seem to have been a document of the first importance, and it is needless to say, that we should all like to come across it again. Comparatively little publicity has as yet been given to the fact that it is wanting, and it is hoped that if the present owner should hear that inquiries have been made, he will be so kind as to produce it so that it may be studied and the results given to the world. Mr. G. Smith, at the time he published his description of the document, was about to start for the East, and it seems probable, therefore, that he saw it in this country. It may, indeed, have been offered for sale by a dealer and been sold by that dealer to its present possessor. It seems to have been

a moderately large and fairly complete document, divided into

paragraphs, probably by ruled lines.

Cylinders with inscriptions of Nabopolassar are said to have been found on the site when the remains of the Tower of Babylon were carted away some years ago, and in the interesting text which they bear the king seems to say that it was not until after he had overthrown the power of Subartu (probably Assyria), which took place in the year 606 B.C., that he turned his attention to the rebuilding of  $\hat{E}$ -temen-an-ki, "the House of the Foundation of Heaven and Earth," which he further describes, as does also his son Nebuchadnezzar later on as "the tower of Babylon." Nabopolassar died two years later, so that the rebuilding during his reign is reduced to within exceedingly narrow limits. The implements used in the rebuilding of the structure were of an exceedingly costly nature—nothing was too good for the reconstruction of the great temple-tower dedicated to Merodach. It is worthy of note, also, that the tower was to rival the heavens in height, whilst its foundations were regarded as having been placed "on the breast of the underworld." The "stages" seem to be referred to, and at the rear were apparently sanctuaries to Samaš, Hadad and Merodach (these are not mentioned in G. Smith's description, though it is implied therein that the couch and golden throne of Merodach, referred to by Herodotus, were in the temple buildings on the western side of the tower). The gold, silver and other precious things which Nabopolassar states that he deposited in the foundations must have disappeared many centuries ago, together with the figure of the king carrying a workman's basket similar. in all probability, to those in the British Museum, representing Aššur-banî-apli and his brother Šamaš-šum-ukîn doing the same thing. These were carved to commemorate the restoration, by those rulers, of the temple of Nebo within Babylon, possibly one of the shrines on the eastern side of the tower.

Besides Nabopolassar, Nebuchadnezzar, his eldest son (who, two years later, succeeded him on the throne of Babylon), took earth, with offerings of wine, sesame-oil, and produce in (it may be supposed) one of the golden baskets which are referred to in the inscription, whilst his brother, Nabû-šum-líšir, took a rope and a wagon, in which Nabopolassar had placed a basket of gold and silver, and offered it—or him, his darling (dudua)—to the god Merodach. Was this a case of the redemption of the firstborn, and the substitution of his brother, with a gift, in his place? We do not know, and, to say the truth, it seems unlikely, as the kingly office did not prevent him who held it from becoming priest as well as king—indeed, the "great king" was often, at the same time, the great high priest.

Nebuchadnezzar also added to the splendour of this great fane, the type and token of Babylon's greatness. All kinds of precious things were offered by him in È-sagila, the great temple of Belus adjoining on the south. He also "raised the head" of È-temen-an-ki with burnt brick and white-mottled lapis. After relating all he had done for the adornment of Babylon, the great king goes on to say, that "from Du-azaga, the place of the Fates, the shrine of the Fates, as far as Aa-ibur-šabum, the causeway of Babylon, before the gate of my lady (probably Zēr-panîtum), with small decorated tiles as the procession-street of Merodach he had decorated the path."

Here Nebuchadnezzar describes the building and restoration

of the walls of the city, and then continues:

"Aa-ibur-šabu", the causeway of Babylon, for the procession street of the great Lord Merodach as a high terrace I filled in, and with small decorated tiles and blocks from a mountain-quarry I perfected Aa-ibur šabu<sup>m</sup> from the Holy Gate as far as Ištar-sakipat-têbi-ša Street, for the procession-street of his godhead. And I connected (it) with what my father had made, and beautified the road Ištar-sakipat-têbi-ša."

Though Nebuchadnezzar's description of his many works at Babylon is somewhat tedious to read, it is really very interesting when taken in connection with the ruins themselves, and there is no doubt that the German explorers of the site of the city will procure for students much more material for comparison as time goes on.

Although we, in this country, have not done much—at least no account of British excavations has, of late years, been published, as far as my knowledge goes—our kinsmen over the sea, the Americans, have made some most successful researches in Babylonia. The site which they have more especially explored is that known as Niffer (they say that the word is at present pronounced Noufar), the ancient Nippur (Niffur). This site the Rabbins identified with the Calneh of the tenth chapter of Genesis, which is mentioned after Babel, Erech, and Akkad, as one of the first cities of Nimrod's (i.e., Merodach's) kingdom.

Niffer lies on the eastern bank of the Euphrates, but at a distance of about 30 miles from the present course of that river, on the now waterless canal known as the Shatt-en-Nil, which divides it into two parts. Layard and Loftus give interesting descriptions of the ruin-mounds of this great Babylonian city. It is in the north-east corner of its extensive

ruins that the remains of the great tower, resembling that of Babylon, arise. The old Sumerian name of this structure was E-kura, probably meaning "the temple of the land," though "Temple of the mountain" (or "Mountain-Temple") is also a possible rendering. It was dedicated to Enlila, who was called "the older Bêl," i.e., not Bel-Merodach, but his divine grand-The antiquity of this town and temple was regarded by the Babylonians as being as great as that of the world itself, for the tradition was that Merodach built or created both in the beginning, when Babylon, Erech, and Éridu also came into existence. Professor Hilprecht describes this structure as attaining even now a height of 96 feet above the level of the plain on which the city stood, and around lie the fallen walls and buried houses which originally occupied its precincts. erections here are of various dates, and extend back as far as 2800 years B.C. or earlier.

What the original height of the tower may have been we have no means of ascertaining, but in form it was a tower in stages, like those at Babylon, Borsippa, and elsewhere. of three platforms were laid bare, and Professor Hilprecht says that no remains of a fourth could be detected, and that the accumulations of rubbish on the top were not sufficient to warrant the supposition that there had been ever more than that number. This, however, is naturally a point which is open It is needless to say that, in the days of to discussion. Babylonia's prosperity, the kings each vied with their predecessors in restoring and perfecting the structure, and changes in its form—slight ones, in all probability—seem to have been made from time to time, the kings who effected them having been Sargon of Agadé, Narâm-Sin, his son, Sur-Engur (2800 B.C.), Dungi, Sur-Ninib, Bûr-Sin, Išmê-Dagan, Kuri-galzu (1400 B.C.), Addu-sum-usur (about 900 B.C.), Esar-haddon (681 B.C.), and others, down to an unknown restorer of the structure 500 B.C. or later.

And here it is worthy of note, that though in the tenth chapter of Genesis the ancient Babylonians are represented as proposing to make brick, and burn them thoroughly, this latter precaution against decay was not always taken, not only here, but also in other places, for the whole seems to have been constructed of small crude bricks, except on the S.E. side of the lowest stage, which was faced with burnt brick of the same size. On each side of the structure, however, were channels of burnt brick to carry off the rain-water, and all four sides were plastered with bitumen in such a way that they sloped gradually outwards towards a gutter which carried the water away. The corners were adjusted roughly to the four cardinal points. The entrance was on the S.E. side, between two walls of burnt brick of the time of Sur-Engur, which led up, apparently by an inclined plain, to the courtyard, which was a large raised platform. It is stated by the explorers that this platform assumed the form of a cross, by the addition of long extensions resembling buttresses. Many parts are curiously irregular in shape, and the angles of both enclosure and ziqqurat (as these templetowers were called) are not correctly placed, the northern corner of the latter pointing six degrees E. of the magnetic north.

Besides this great structure so closely connected with their religion, many other noteworthy constructions were found walls, defences, towers, and courts—but not the least interesting were the remains of the houses of the people. A picture from a sketch by Mr. Meyer, published by the Rev. J. P. Peters, the originator of the explorations on the site, shows, in perspective, one of the streets of the city. It looks towards the S.S.W., and runs along the S.E. buttress of the temple-tower. In the middle of the unpaved street is a well-made gutter of burned brick, showing that some provision had been made to free the street of water. As to keeping the street clean, however, that was another matter, and accumulations of rubbish seem to have been allowed to such an extent, that at last, instead of going up a step to enter a house, they had to make a little stairway to enable it to be entered from above. probability, therefore, little or no scavenging took place in this ancient city. Notwithstanding that there was much, from our point of view, which was sordid in the cities of Babylonia, the people of the land thought a great deal of them, and found them to be full of poetry and charm. The reason of this was, that they were in many cases the centres of worship which had existed from of old, and they had therefore endeared themselves in this way to the inhabitants. Many cities of the modern East, however, are similar to those of ancient Babylonia in that respect.

In addition to Niffer, the Americans have also been excavating at the ruins known as Bismya, the ancient Adab, according to the tablets. It lies in a sand-swept belt of ancient Babylonia, in a region dangerous and deserted because far from water—a disadvantage which probably did not anciently exist. The discovery of the site seems to have been due to the Rev. J. P. Peters, the first really serious explorer of Niffer. The

ruins have but a slight elevation above the surrounding soil, nowhere exceeding 40 feet, and the Head of the expedition to Adab, Dr. Edgar J. Banks, describes them as a series of parallel ridges, about a mile and a half wide, divided into two parts by the bed of an old canal—the source of the city's ancient habitability.

On the summit of the temple-tower being cleared, an inscription of Dungi, 2750 B.C., was found, and this discovery was followed by that of one of the time of Sur-Engur, 2800 B.C. Still lower they came upon a crumpled piece of gold of the time of Naram-Sin, and just below that the large square bricks peculiar to the time of Sargon of Agadé became visible. At a depth of  $8\frac{1}{2}$  metres the explorers lighted on two large urns filled with ashes, and two metres lower still a smaller urn. Virgin soil was reached at 14 metres, at which depth the deposits consisted of thrown pottery of graceful design. These Dr. Banks regards as belonging to the most remote period of Babylonian civilization, namely, 10,000 years ago, or earlier.

Other noteworthy antiquities were found on the site, among them being a head with a pointed beard, of a type which the finder regards as distinctly Semitic. The face is long and thin, and eyeballs of ivory had been inserted by means of bitumen in the eye-sockets made to receive them. This type is regarded as being new to the student of Babylonian art, and clearly distinct from the round beardless head of the Sumerian statues. Another object is a vase of blue stone carved with a procession of grotesque long-nosed figures, headed by two musicians playing upon harps. The garments and jewellery, and even the foliage of the background, were originally represented by inlaid work, but with the exception of a piece of ivory which formed the dress of one of the figures, and a few fragments of lapis-lazuli in a branch of a tree, these have all disappeared. Numerous important fragments of vases were also found, and a sea-shell used as a lamp will probably shed light on the origin of the shape of early lamps.

In a trench at the western corner of the temple-tower the explorer practically dug out with his own hands an exceedingly interesting statue bearing the name of Daud, an early Sumerian king. Notwithstanding what may have been said on the subject, this is probably not an early occurrence of the name David, which, in Arabic, has that form. The statue was headless, but the head was found a month later, in company with another head, in the same trench, a hundred feet away. The temple excavated on this site bears the same name as that of the spouse of Merodach at Babylon, namely, Ê-maḥ, which, if written in the same way, means "the sublime house." Hammurabi, in the introduction to his code of laws, gives the name of one of the temples of Adab as being Ê-para-galgala, "the house of the great light," or, perhaps better, Ê-ugal-gala, "the great storm-temple." Unfortunately, it is a very imperfect account of the excavations at Bismya that I have had to use, or I should be able to give a much better description of the temples of this primitive site.

Three brick-stamps were found, all of them with the words "Narâm-Sin, builder of the temple of Ištar," testifying to the existence of a fane dedicated to the great goddess of love and war at Adab. Among other still smaller objects may be mentioned cylinder-seals of the usual Babylonian type, one of them showing the so-called Gilgameš and Enki-du—which probably represent entirely different personages—struggling with a lion and a bull respectively. This subject is very common on the engraved cylinders of Babylonia.

An interesting discovery in this site was that of an oval chamber at the south corner of the temple-tower, which, in the opinion of the explorers, had been formerly covered by a dome. At one of its ends was a 6-foot circular platform, with a pit beneath it 4 feet deep. The pit was found to contain ashes mixed with sand which had silted in to the depth of about 2 feet. Smoke marks upon the adjoining wall, and the evidences of great heat to which the brickwork had been subjected, suggested that it was a crematory. Dr. Banks' description of the probable process of burning the bodies is as follows:—

"The body to be cremated was placed upon the platform; flames from a furnace in an adjoining room, passing through a flue, consumed the bodies, and the smoke passed out through a vent above. The ashes, unmixed with the ashes of the furnace, were either gathered for burial in urns, or swept into the pit below. This crematory, which was duplicated in a second chamber near by, explains the absence of Babylonian graves"

Remains of dwelling-houses with ovens and drainage also came to light.

Concerning the excavations at Tel-loh it is not my intention to speak at length, as I described rather fully before this Institute, many years ago, certain of the finds made by the French explorer, M. Ernest de Sarzec, on that site. It lies in a rather inaccessible region fifteen hours north of Mugheir (Ur of the Chaldees) and twelve hours east of Warka (Erech).

The principal building probably had its origin at an exceedingly early date—earlier, in all probability, than the time of the viceroy Gudea, who seems to have rebuilt it. In its area of about 174 feet by 98 feet it contains an extensive series of rooms—reception rooms, sleeping places, kitchens, etc. In later times the entrances to some of the chambers seem to have been regarded as being too public, and they were accordingly partly walled up by a man named Addu-nadin-âḥi, who belongs to

a period after the date of Alexander.

The discoveries in this little place, strange to say, were much more important than its situation would lead us to expect. It has given us pictures of feats of arms, representations of conquests, and delightful things in the way of architecture, literature, and art. Though its architecture was rather massive for what we should consider to be really good, it is probably owing to this circumstance that the buildings have been preserved to us, and though its art has the same defect in many cases, it has given us the village-chief, and the lady who might well have been his consort and helpmate. There have been preserved to us likewise the god with the fire-stick (as he has been called), inscribed with Gudea's dedicatory inscription to Nin-Girsu, and the remains of the beautiful stele in which Gudea is depicted, led by a priest, into the presence of that same god, who, seated on his throne, waits to receive him. antiquity of their art is illustrated by those remarkable cylinder-seal impressions bearing the name of En-gal-gala, existing in many forms, all very similar. There will doubtless be much discussion as to what the subject may mean, but the shouting man and the silent women (if we may judge from the mouths of the figures) may have something to tell us as to the manners, customs, and beliefs of the people of that early period—probably 3,500 or 4,000 years before Christ. literature of the earliest period we have no real specimens, but if I had time, I would read you something of their national troubles, and also the accounts of the pious works of the kings of the place. The work of M. de Sarzec has been very successfully continued by his successor, Colonel Cros.

Among the most important of the discoveries in Babylonia must be noted those of Mr. Rassam, Sir Henry Layard's old lieutenant, and the discoverer of Aššur-bani-apli's splendid palace at Nineveh, whence the finest of the Assyrian reliefs in the British Museum came. It is needless to say that Assyriologists are greatly indebted to him, for the number of the inscriptions which he sent to this country was enormous—

hardly less than 100,000, if my memory serves me. Among the sites at which he worked were Kouyunjik (Nineveh); Balawat, where the famous bronze gates were found; Babylon; Borsippa, the site of the great temple of Nebo; Tel-Ibrahim, the site of the Babylonian Cutheh; Dailem, the ancient Dilmu, generally called Dilbat; and, last but not least, Abu-Habbah, the ancient Sippar, one of the great centres of the worship of the sun-god. The now venerable explorer describes this site as being an extensive series of mounds surrounded by a high wall of earth. The mound upon which the principal buildings are erected is about 1,300 feet by 400 feet, and contains, in Mr. Rassam's opinion, at least 300 chambers and halls. Of these he excavated about 130, when the work came to an end by the expiration of the firman.

According to the plan drawn up by Father Scheil, who worked there after Rassam for the Turkish Government, the city wall is an oblong rectangle, curving inwards at the northwestern end, to follow the course of the canal which formed the boundary of the city at that point. It was near that canal, to all appearance, that the ziggurat or temple-tower stood, but very little of that structure now remains. There were tablets everywhere, and notwithstanding the excavations which have been carried on since those of Rassam, the site is probably by no means exhausted. In these ruins were found the celebrated mace-head of Sargon of Agadé, and in all probability also the equally well-known cylinder-seal of Ibnî-šarru, that king's secretary. Then we have the beautiful "Sungod-stone," carved for Nabû-abla-iddina—a precious thing which, apparently for safety, they buried under the bitumen pavement. Impressions of the design were made in clay, in case the original should be destroyed, and it was placed in a terracotta box inscribed with the nature of the contents, so that people should know what it was as soon as they came upon it. Among the texts of late date is an ancient map of the then known world; and the oft-quoted cylinder of Nabonidus, which refers to his restoration of the temple of the moon-god at Harran; the date of Narâm-Sin, son of Sargon of Agade; and other important historical and archæological facts. Except the stone monument of Nabonidus giving details of the murder of Sennacherib and the downfall of Assyria at the hands of the Babylonians and the Medes. Professor Scheil has found nothing equalling in importance the discoveries of Mr. Rassam. Among Professor Scheil's finds, however, may be mentioned some interesting clay figures of animals—dogs, bears, etc.—the most interesting of them being one of the former resembling a dachshund, and inscribed with the following words:—

"To the lady Gula (or Bau) I have made and presented a dog of clay."

To all appearance the dog was sacred to Gula, hence this inscription.

We have already seen, from the excavations at Bismya, that the Babylonians burned their dead in early times, and that, after the cremation, the ashes were collected and placed in urns. Ordinary burial, however, was also practised, but instead of coffins, the custom seems to have been to enclose the body in a large jar before interment. Professor Scheil gives reproductions of some of the gigantic specimens of pottery which he

found, in which the body was apparently inserted entire.

We know that, in later days, the influence of Assyria extended as far as the Mediterranean, but we cannot say for certain at what date that influence began to make itself felt. Babylon was the pioneer country in that part of the world, however, and the Assyrians, who spoke the same language, would naturally inherit the influence when the power of Babylonia began to wane. In all probability a certain amount of light is thrown on this point by the tablets found of late years in Cappadocia, and written in cuneiform characters. These documents consist of contracts and letters, and though the script is Babylonian in style, and the envelopes of the contracts. when they have them, are covered with impressions of cylinderseals similar to those found in Babylonia, they are also, strange to say, dated by means of eponymes—that is, by inserting the name of some official chosen for a year to date by-an exclusively Assyrian custom. These documents cannot be said to be written wholly either in the Babylonian or the Assyrian style, as far as the wording of the contracts is concerned, but with a legal phraseology which seems to antedate them both. The style of the writing is that of about 2000 B.C. or earlier, and notwithstanding possible arguments to the contrary, this may be regarded as their probable date. That Assyria could have had influence as far north-west as Kaisarieh, at that early period, seems to be impossible, but perhaps, notwithstanding its seeming dependence on Babylonia, the northern kingdom may have had more power than is at present generally imagined. The great deity of the place seems to have been Asur or Asir, the wellknown head of the Assyrian pantheon, so that the influence of Assyria, and not of Babylonia, at that early date, seems to be set

beyond a doubt. The dialect, which is Semitic, is peculiar, and of considerable importance. Such of the letters as I have been able to translate are what we should expect from a community living far from its home. The impressions of a cylinder-seal on the envelope of an ancient Cappadocian letter, showing a four-wheeled chariot, drawn by horses, are of considerable interest.

After this, it is not surprising that Sam'alla, a town at present represented by the ruins of Zenjirli, should have acknowledged, in common with other places in the west, the over-lordship of the great Assyrian king. The inscriptions found at Zenjirli extend from a period preceding the time of the Biblical Tiglath-Pileser (740 B.C.) to the reign of Esarhaddon, and it is probable that the allegiance of the people of Sam'alla only ended with the downfall of Assyrian power in 606 B.C. Sam'alla was apparently the capital of an Aramaic state of some antiquity. The most important object of general interest is the stele sculptured with a representation of Esarhaddon holding, by cords attached to their lips, two prisoners, that nearer to him being Tirhakah, the well-known Ethiopian king of Egypt, whose identity is shown by the uraus ornament on his head. On the side are portraits of Panamniû, the king of Zenjirli, Esarhaddon's vassal.

The inscription on the stele bearing the representation of Esarhaddon and his captives is noteworthy, as it shows how far Assyrian power extended. Besides the title of King of Assyria, he calls himself also King of Babylon, King of Sumer and Akkad (practically the same thing), King of Kar-Dunias (it is uncertain whether there be any distinction in this, but probably the words "all of them," which follow, explain it, and indicate that Kar-Duniaš stands for Babylonia in general). King of the kings of Egypt, Patros, and Cush or Ethiopia. He traces his descent in the usual way, namely, through Sennacherib and Sargon to Bêlibnî, son of Adasi, whom he calls the founder of Assyrian dominion (mukin šarrūti mát Aššur). He then refers to his campaign against Tirhakah (Tarqû). King of Egypt and Ethiopia, whom he defeated every day for fifteen days, and fought with personally on five occasions, taking. in the end, the city of Memphis. Among the captives were Tirhakah's women-folk, and his son Usanahuru. The usual curses against anyone who should take away or destroy this monument, and appeals to future princes to read the inscription and perform the usual ceremonies of anointing, etc., close the text.

Though the statue of the god Hadad found there is ugly, the

inscription in relief which it bears is exceedingly interesting. was written for Panammû, king of Sam'alla during the time of Tiglath-Pileser III., who began to reign in 745 B.C. Properly speaking, this statue was not found at Zenjirli, but at Gerchin, about half an hour to the north-east. As Panammû calls himself King of Yaudi, it is clear that that was the name of the district, and we shall have to be careful not to confuse it with the Assyrian mât Yaudi, which stands for the kingdom of The remaining Aramaic inscriptions give the succession of six rulers, who followed in a genealogical line, the later ones at least acknowledging the overlordship of Assyria.

And now we come to the splendid discoveries, likewise made by the Germans (to whose enterprise the world owes also those at Babylon, Aššur, Al Hibba, Ženjirli, and elsewhere) in the ruins near Boghaz Keui, the identity of which site is no longer doubtful, any more than is the nationality of the people whose

capital the ancient city was.

Boghaz Keui, upon which all eyes interested in west Asian exploration are now set, lies five days' journey west of Angora, and not far from the sculptured rocks of Yasli-kaya Two classes of tablets were found there, some of them archaic, and pointing, like those from the neighbourhood of Kaisarieh, already described, to the period of Hammurabi of Babylonia; the others in a much simpler style, sometimes in Babylonian, but often in that unknown language of which the Arzawan tablets from Tel-el-Amarna are examples, and of which provisional renderings have been made by the Scandinavian scholar Knudtzon.

About 2,500 fragments of the kind which had been expected texts like that in the Museum of the Liverpool Institute of Archæology and those brought back from that part by M. Ernest Chantre—came to light, many of them being of considerable size. Naturally it was those in the Semitic Babylonian language which occupied the attention of the explorer first, as it is always best to proceed from the known to the unknown. All these inscriptions, which are likely to become the key to the Hittite language, are described as being "Diplomatic documents," like the Tel-el-Amarna tablets.

With regard to those of the nature of letters, it is stated that most of them are from Wasmuaria, or, in full, Wasmuaria šatepua Ria Ria-mašeša mai Amana—that is, as generally read in Egyptian, User-maat-Ra setep en Ra Ra-messu mery Amen, i.e., Ramesses II., and Hattušilu, the Chetasar or Hattusir of Egyptologists. It is needless to say, that these new texts

promise to change our ideas concerning the pronunciation of Egyptian entirely, and many familiar forms with which Egyptologists have presented us will have to disappear from our histories.

The first great document found was the text of a contract between Hattušilu and Ria-mašeša mai Amana mār Mimmuaria bin-bin Min-paḥritaria, that is "Ramesses beloved of Ammon, son of Seti I., grandson of Men-peḥti-ra" (to adopt the common spelling), or Ramesses I. Both parties call themselves either "great king, king of Miṣri (Egpt)" or "king of Hatti," as the case may be, and the whole text of the contract is practically the same as that found in Egyptian at Karnak. In this new version of the celebrated treaty there is also reference to the text of the silver tablet (ša ina rikilti muḥḥi duppi ša sarpi). The list of Hittite gods, however, is unfortunately wanting. It is noteworthy that the Hittite kings, like their brothers of Egypt, called themselves "the sun."

In fulness of time we shall probably come to know not only how to translate the so-called Hittite characters, but we shall also learn the names of their deities, of which so many interesting figures exist. We may even find the identity of the so-called pseudo Sesostris, and that elegant little Hittite king from Bir (Birejik), whose relief has been so many years in the British Museum. There are also numerous Hittite seals, which ought to be of interest when we can read the strange inscriptions with

which some of them are engraved.

I have had so much to report upon that I have at present neither time nor space to say anything about the interesting discoveries made at Qal'ah Shergat (Aššur), the old capital of Assyria. All being well, however, this will serve for another occasion, should a communication thereon be desired. It is needless to say that the discoveries on that site, which the all-favoured Germans have likewise excavated, are of considerable importance. But in order to understand thoroughly the explorations made at Aššur, excavations at Nineveh in its larger sense are needed as well—that Nineveh which Jonah is described as having taken three days to traverse. points showing traces of ancient towns and cities ought to be explored, and then, perhaps, we should find something which would enable us to understand that statement. In any case, much would probably be added to our knowledge, whether excavations were made there or at any other site or sites in Babylonia and Assyria; and it is to be hoped that this country, which has done so much for Assyriology in the past, may be allowed to resume her work in that field. There is room enough for all; and we have been so liberal in former years in throwing open our treasures to the world that people cannot call us greedy simply because we wish to continue, in friendly rivalry with them, our researches with regard to the early history of civilization in the Nearer East, in which we have been engaged so long.