JOURNAL OF
THE TRANSACTIONS
OF
The Victoria Institute,
OR,
Philosophical Society of Great Britain.
EDITED BY THE SECRETARY.
VOL. XXXIII.
LONDON:
(Published by the Institute, 8, Adelphi Terrace, Charing Cross, W.C.)
DAVID NUTT, LONG ACRE.
ALL RIGHTS RESERVED.
1901.
ORDINARY MEETING.*

DAVID HOWARD, ESQ., D.L., F.C.S., IN THE CHAIR.

The Minutes of the last Meeting were read and confirmed.

The following paper was read by Mr. Theophilus G. Pinches in the absence of the Author:—

A VISIT TO THE HITTITE CITIES EYUK AND BOGHAZ KEÖY. By Rev. G. E. WHITE, Marsovan, Turkey.

FINE spring weather and fine Turkish courtesy from officials, local boys, and villagers, supplied the outward conveniences for the interesting visit named above, and made by three young Americans of the Marsovan missionary circle in March, 1898. The first night was spent at Chorum, near the junction of the three ancient provinces of Pontus, Galatia, and Cappadocia, and the 1st chapter of I Ep. of St. Peter furnished suitable devotional reading that evening.

FIG. 1.—“THE BRIDAL CHAMBER.” EXCAVATION NEAR ALAJA.

(From photograph by Rev. G. E. White.

* March 4th, 1901.
The next day, an hour before reaching Eyuk, we came to Kaloh Hissar, Castle Wall, a double peak rising 500 to 600 feet above the plain, with a village of Circassian refugees from Russia at its foot. The peak has some of the crumbling masonry so common in Turkey, but at the summit we found something different. On the topmost of four steps, cut in the rock, once sat an idol, or a human figure nearly life-sized, the feet resting on the third step and cut from the same stone that formed the step. The feet are broken off at the ankles now, and the rest of the figure is gone. The toes of the shoes are round, not sharp pointed or up-turned according to the usual Hittite custom, but the Hittites did not carve all their shoes with sharp up-turned points, and the conclusion seems natural that Kaloh Hissar also was a Hittite shrine in the times of the Old Testament.

Eyuk, meaning in Turkish, “mound,” is built upon a low level mound, in which the villagers say strange stones are sometimes found when they dig for the foundations of dwellings. At one corner of the town the stones remain exposed that once formed a temple, wonderful not for its size or beauty, but for its age and the peculiar character of the Hittite sculpture. Of the building nothing worthy the name is left save the outline of a room about 25 x 30 feet square. But the entrance is still guarded by two huge basalt stones some twelve feet high, the face of each of which is carved into the form of a sphinx, with fillet across the forehead, ear-rings, necklace, and wing-like attachments from the head to the sides of the body. There is a striking resemblance to the pictures that come from Egypt. On the inner wall of the sphinx at the right as one enters the temple, is a double-headed eagle with a hare in either talon, and a human figure above, almost or quite life-size, supported by a foot, resting on the double head of the eagle. On the left was a similar carving, now almost effaced.

The entrance is approached by a double line of huge basalt stones forming a dromos, which presently turns a sharp angle to the right and left. Two processions approaching the temple are represented on these walls. They are a series of human figures cut in bas-relief on the face of the stones about three feet high. They are mostly clad in tunics reaching to the knees, with sometimes a loose cloak draped from the shoulders to the feet, skull-cap with a horn in front reminding one of the Egyptian uræus, shoes (usually) turned up at the point, and the figures have large noses and large
ear-rings. One figure has either a long tassel on a close-fitting cap, or hair depending in a closely-tied queue; either supposition favours a Mongol origin for the Hittites, for the first resembles the custom of the Turks; the second that of Chinamen. Such customs of dressing the hair or covering the head are very persistent in the Orient.

In one case a priest seems to be ministering before an altar, another priest is dragging a ram by the horn, with three more rams in the field behind and above; another pours a libation upon the foot of a seated goddess. One figure is playing a guitar, another blowing a horn, several have each a lituus, a musical instrument, depending from the hand; a man climbs a ladder half higher than himself and consisting of seventeen rounds. One of the great stone blocks exhibits six similar figures marching; two have bulls, one with something on his back, perhaps an altar; and there are two lions on blocks that have been displaced from the series—the lion is the most characteristic animal of Hittite sculpture. The whole scene seems to be clearly religious, not political or military, and is attributed by Professor Sayce to the thirteenth century before Christ.

Eyuk and Boghaz Keoy are five hours apart, and the latter was evidently a great capital. It is suggested that it was the cool summer abode of the "kings of the Hittites," who were natives of this region, but operated in Syria or elsewhere in winter. The space enclosed by a wall is over a mile long by a half mile broad, and contains remnants of

FIG. 2.—TABLET FROM BOGHAZ KELOY, SHOWING CUNEIFORM CHARACTERS.
three castles and three palaces. From the top of the wall to what was the bottom of the moat in places exceeds 150 feet in a straight line. These walls were built without mortar, the great rampart of earth being topped by a double-faced wall of large cut stones, the space between being packed with rubble. The outer upper edge of each cut stone has a little turned-up ledge, which prevents the stone laid upon it from slipping outward, while its fellows on either side and the rubble behind kept it from moving in those directions. The outer slope of the walls is in some places paved with flat stones, which both held the earth and would place invaders at the mercy of defenders. The principal palace was of the form of an Oriental inn, with a series of rooms about a large central court. Near by is an overturned chair or throne mounted upon and between two lions.

Boghaz Keoy has but one inscription, Nishan Tash, a lettered stone face six feet by eighteen in size, but, sad to say, this is defaced beyond decipherment. We were fortunate however in securing some fragments of cuneiform tablets (Fig. 2) and seals, probably Hittite or Mycenean. One of these last had a figure 4 in the centre, surrounded by rope-work and with a loop at the back for passing a cord through. We found also a whorl of the sort found in such numbers by Dr. Schliemann at Troy.

One of the spots we found most interesting is an abrupt rock called "School Rock," two slopes of which have been hewn into the shape of bowling floors. The larger, about 18 by 30 feet, and as nearly semi-circular as the configuration of the rock permits, forms quite an auditorium. The rock faces are cut down eight feet, and decorated with striated lines, and the floor is a series of low broad tiers or stairs. At the focal point the rock has been drilled with several holes, where the platform of players or the bench of a judge might easily have been erected. The whole is a rough but distinct form of a theatre, and the query at once arose, Have we not here a copy of the original of that famous structure, the Greek theatre? If the Hittites of Cappadocia could make sphinxes like those of Egypt, correspond in cuneiform characters with the people of Mesopotamia, and amuse themselves with playthings of a kind more abundantly used at Troy, how natural for them to pass on to the Greeks anything of their own worth while copying, for the Greeks to improve upon? Here is a small rough assembly hall, within the walls of a capital and near
the throne, why not a model to the Greek? The suggestion is made for what it may be worth.

The most important sculptures at Boghaz Keoy are those of Yazili Kaza, two miles from the ancient town. Here again the design is devotional, not military. The larger of two rock galleries contains on its sides a double procession meeting in the middle. The figures are like those at Eyuk, but more in number and of greater variety. The skull-cap gives place to high and flat-topped, or high and conical caps, the peak sometimes drawn forward in the "Phrygian" style. Lions, tigers, and double-headed eagles support various human forms. Others stand on mountain summits, or on the heads of men. At the head of the two processions, which contain more than three score figures, a priest and a priestess of gigantic size meet each other with peculiar symbols in their hands. Would that the key to all this were known to us; that we understood what were the thoughts in the minds of the men who carved these images in the rocks long before the time of our Lord! The Hittites faded from history 700 B.C.

The smaller of the Yazili Kaya rock galleries contains other figures like those in the larger. One interesting series of twelve men seem to be reapers, each with his sickle over his shoulder, but they may be soldiers marching with swords. Many places in the region were described to us by the villagers as having "idols and writing," or "lions and dogs," etc., some that we were able to examine yielding nothing interesting. Rock-hewn tombs with Doric columns, and a spiral stairway cut through solid rock down to a river, but with no trace of a castle above, aroused our curiosity.

One place, however, the village of Eski Yapar, one hour west of Alaja, deserves special mention. It is built like Eyuk on a flat mound in an open plain, and discovers peculiar stones to the inhabitants when they dig. Apparently the débris of an Oriental village occupied for generations had lifted the very site of the place up to the height of a man above the plain. Here we found several Greek inscriptions on stones used as tombstones, perhaps a thousand years ago. A round column inverted and half buried proved to be a Roman milestone with the name Cæsar plainly to be read on it. Apparently it was a milestone of Antoninus Pius, well nigh two thousand years ago, set up to guide travellers on roads long since forgotten. Then a villager invited us to look at a queer stone built into the corner of
his house, and there we found cut in red sandstone rock another figure of a lion. This one had lost its head, and being set up on its tail occupied an awkward and uncomfortable position for so noble an animal and so valuable an archaeological specimen. For what can it be but another Hittite lion made and left more than three thousand years ago?

That little village of Redhead, *i.e.*, "Shiite" Turks, with its relics of three other peoples with their mighty governments, their races, languages, customs, and civilizations distinct one from another, and a thousand years apart, and with Doric and Ionic capitals in the near vicinity, is an example of what is waiting for the spade of the explorer, and the genius of the archæologist in the soil of Asia Minor.

Note.—Two plaster casts, and a photograph of one of them will be exhibited. They are now in the hands of Mr. Theophilus G. Pinches, who has kindly undertaken to give his views of the language at the meeting of the Institute to be held on the 4th of March.—E. H.

Then there is this letter from Mr. White which has been received by the Institute:

> "Anatolia College,
> "Marsovan, Turkey in Asia.
> "February 19th, 1901.
> "Professor Dr. Edward Hull,
> "Secretary, the Victoria Institute, London.
> "My dear Sir,—Since writing my paper on the Hittite cities Eyuk and Boghaz Keoy, scheduled to be read before the Institute March 4th, I have had the opportunity of another visit to Kaleh Hissar. On the top of the sharp peak mentioned in my paper, and near the staircase and broken feet, I saw a seat or saddle mounted between two lions which are looking upward. The whole is worn with time and moss-covered, but the two lions' heads, with nose, nostrils, mouth, cheeks, forehead, mane, and ears, finished in square corners were unmistakable. Near by are two mounds, apparently artificial and believed by the natives to contain buried antiquities. Many coins are found in the fields about. These lions' heads can hardly be other than Hittite. It was the throne of a Hittite prince.

"I send you this item thinking that you might like to give it a place along with my paper, which I trust may draw out interesting information from some of the able scholars connected with the
Institute. I should be very glad to know of any other important facts brought out in connection with the subject on March 4th.

"Sincerely yours,

"G. E. White."

Dr. Pinches continued.—Here are two casts of the fragment of a tablet found by the writer on the spot. Some of the audience may like to see a drawing, which has been made by somebody in America, giving the characters as he saw them. Professor Hull, our Secretary, was kind enough to lend me this photograph, which shows better what a fragment of a tablet is like, and from that and the casts (principally the casts) I have been able to make a copy of the inscription. I have also written a few notes on it which I will read. By the kindness of our Secretary I received a photograph of the small fragment of tablet referred to rather more than a fortnight ago. The width is about 2¾ by 2 inches, and it has remains of ten lines of writing, in a style resembling the Babylonian of the tablets of Cappadocia and certain of the tablets of Tel-el-Amarna, especially those which are regarded as having been sent from Mesopotamia and the districts to the north of Syria. The following is a reproduction of my copy:—
In the above transcription it has been found impossible to reproduce the words as they ought to be read, and it must therefore be regarded as in every respect provisional, and simply indicating, therefore, the way in which the characters have been identified. It goes, therefore, without saying, that if the language is not Semitic, the words *šarru*, "king"; *alu*, "city"; and *mar šar bit*, "son of the king of the house of . . ." (line 8); are not properly transcribed, for the simple reason that the native equivalents in this case are not known. The transcription of the third word in line 2 (*gištin*) being Akkadian, is also probably incorrect.

Though the transcription of the words above quoted may not be right, their translation, on the other hand, is more certain than that of any other word which the fragment contains. It will be seen from this that there is a reference to "the house . . . of wine" (or, possibly, "to the house of the vine"), whilst the third line seems to have the word for king and also, probably, for "sceptre" (*šad*, *giš šad*). The fifth line has the name of a city which seems to be fairly certain, namely, Neriqqa.

The division-line probably indicates a fresh paragraph, with a more or less decided change of subject. If the last character of the sixth line be correctly read, we have either the phonetic complement of the word for "three," or the ending *šu*, indicating the adverbial numeral, "thrice." Line 8 has apparently the mutilated name of "the son of the king," which, if the broken
wedge following the ו, a, be the determinative prefix for the name of a man, is probably to be completed ו חי, A-zi. To all appearance the name of the district over which his father ruled was Bit-tahhi, though the reading of the first component (bit) is doubtful on account of the uncertainty as to what the language of the fragment is, and the last syllable is in the same case on account of the mutilation of the inscription.

It will thus be seen that there is every probability that the fragment is historical, and its arrangement would suggest that it was in the form of annals.

With regard to the language there is considerable doubt. Besides the words transcribed as if they were Semitic, but which may, as has been already stated, have been pronounced in an entirely different way, there are several others, phonetically written, which are not impossibly Semitic. These are ittabzi (resembling a verbal form with inserted i), iszi (which may be a noun or an adjective), taššia (which resembles an Assyro-Babylonian noun with the suffixed possessive pronoun of the first person), šerru, and hara (both of which resemble nouns). Besides this, etenit and išin might also be Semitic (verbal forms). Concerning the numeral “three” or “third” in line 6 I have already spoken.

On the other hand, na-a, an da pa, the combination of characters at the beginning of line 6, and the greater part of line 7, if not the whole, have a non-Semitic look. A comparison of the letter in the language of Arzapi or Arzawa from Tel-el-Amarna shows an inscription written in a precisely similar style of writing, and containing words which have some likeness to Semitic expressions, but which are certainly not Semitic, and are to all appearance not by any means so numerous. There is little or nothing, however, in the inscription from Arzapi which throws light upon the fragment now under consideration, though this may be simply due to the fact that the former is a letter, whilst the latter is apparently historical, and on that account would naturally contain entirely different words and phrases.*

* An examination of the copies published by M. Chantre from the pens of Boissier, Delitzsch, and Scheil shows that in the other tablets found at Boghaz Keoy there are not only Semitic words (one, in an inscription which seems to contain forecasts, seems to be the Assyro-Babylonian word ḫūti, “pregnant women”), but words having a Semitic
After writing the above, I went this afternoon to the British Museum to consult a book by Ernest Chantre, entitled *Mission en Cappadoce*. Unfortunately the Museum reading-room was closed; but Mr. Fortescue, the Keeper of the Department of Printed Books, at once took me into the large room at the back of the reading-room, and after some delay, as the book was in the possession of one of my former colleagues in the Department of Assyrian and Egyptian Antiquities, I obtained it; but unfortunately the waiting consumed the amount of time I thought to devote to that book. I did, however, what I could in the time at my disposal, and compared the copy I had made with the fragments (which are rather numerous) described by M. Chantre. Those fragments contained, as far as I could see in a short time, the same kind of inscriptions, and there were also remarks on them by M. Boissier, the Swiss Assyriologist, and Professor Delitzsch, and copies of the inscriptions. Some of them were by Professor Delitzsch, and his copies I found to be by far the best. The texts differ much in character, and the opinion expressed seemed to be that they were not historical and not contracts; nor were they letters, but religious texts. If that be the case, we have something here which differs from the known documents, because this inscription seems to be, on account of its mentioning the name of a son of a king, historical, more or less, or it may be part of a letter.

With regard to the language, as I have indicated, it is similar to the idiom of the ancient city, called in the tablet I have mentioned Arzapi,* and possibly akin to Hittite; but whether it is the same as Hittite, or only akin to it, I am not in a position to say. Professor Delitzsch’s signature, I noticed, was not at the end appearance, and also (as was to be expected) ideographs which are used as in Semitic Babylonian inscriptions, and which may have been read with their Babylonian pronunciation, i.e., as words borrowed from that language. It is also worthy of note that one of the inscriptions published in M. Chantre’s book contains, as there stated, the name of Sargon (probably the Babylonian ruler of about 3800 B.C.). Another of these inscriptions, moreover, seems to refer to the sceptre-bearer of Sargon, and an official with a similar title may occur in line 3 of the fragment now published, in which case the first character would be that for “man,” not “king.” If, however, the reading of the copy and the transcription be correct, the line in question probably means “the king took (held, or something similar) the sceptre.”

* Or Arzawa, as it is generally read.
of the statement containing that section, but at the end of the
next section—but perhaps his signature covers both of them; and
his opinion was that the safer course, at present, was to say
nothing with regard to the language, and I feel, in view of the
opinion of such an eminent authority, I cannot go very far wrong
if I follow his example.

With regard to the position of Arzapi, M. Chantre says:—
"Faut-il rapprocher le nom d'Arzapi de celui d'Anazarba, ville
de Cilicie? Il est impossible de formuler autre chose que des
conjectures. Rien malheureusement ne vient encore confirmer
l'hypothèse de M. Théodore Reinach, suivant laquelle il faudrait
placer les Mitanniens (Matiènes) dans la région montagneuse de
Boghaz-Keui." The names Arzapi and Anazarba, however, are
not quite so much alike as one would wish; it is hardly likely
that the earlier form of the name of a city would be shorter than
the later form; but there may be something in it, and the sug-
genion made by M. Reinach that the language was spoken in
Cilicia.

The Chairman.—We have to thank the author of the paper for
a very interesting communication. These fragments of Hittite
literature and chronology, which are being so constantly investi-
gated, open up some very interesting points. It is a very
difficult study, and I am sure we have to thank the author
and Mr. Pinches for the contributions they have given to this
important subject, upon which we shall be very glad to hear
remarks.

The Secretary (Professor Edward Hull, LL.D.).—Before the
discussion commences, perhaps you will allow me to say a word as
regards the manner in which these very interesting inscriptions,
or casts taken from them, came under the notice of the Institute.

The Rev. Mr. White is an American missionary in Turkey in
Asia; like many missionaries scattered over those countries, he
has not confined his labours to the first object of his mission, but
he has also endeavoured, by personal observation, to add to the
sum of human knowledge of ancient times in the countries in
which he labours.

This short paper was sent to the Institute by Mr. White, and
I at once submitted it to Professor Sayce, who happened then to
be in England. I wished, before he left, to have his opinion upon
its merits as a paper to be submitted to the Institute, and he
kindly read it and sent it back saying, "Certainly; read it by all means. We are very anxious to have as much information as we possibly can on Hittite remains and inscriptions." Here it is, and we are again fortunate in having such a high authority as Mr. Pinches, who so kindly undertook to read the paper this evening, and to draw up some notes of his own regarding its character and relation to other countries, and the language in which the inscriptions are given.

I feel sure we are all highly indebted to the author and to Mr. Pinches for what they have done in this matter.

Mr. Rous.-I feel deeply indebted on this subject, as we all do, and very grateful to the author of the paper and to Mr. Pinches for contributing so much to our knowledge of this ancient part of the world; and I should like to add a few general remarks in the nature of links with other discoveries.

First of all, when Mr. Arthur Evans brought back from the island of Crete, in the year 1894, a number of works of art which he attributed to the Caphtorim, he had, amongst those things, a jar on which there was a representation of two men, apparently nude, but with very long pointed shoes. They also wore very long hair and beards. I suppose they were fishermen who had cast off their "fishers' coats," but nevertheless kept on their shoes to guard their feet from the sharp rocks. It appears these men had been found portrayed in Egypt and were there called Caphtorim. Moreover, he showed us by the language he had found on many of these porcelain vessels in the caves of Mount Ida that the writing of that people greatly resembled the Hittite characters. Further, he observed that the Bible several times calls the Philistines Cherethim, which he reads as only another name for Cretans. He thinks that Crete was "the isle of Caphtor,"* and that in Crete, as he put it, we have the Philistines at home. Last year I had the pleasure of listening to him again at the British Association; and his researches had then raised the number of hieroglyphic signs from seventy to a hundred. A linear system of writing to a small extent founded on this prevailed more considerably at Knossos; but the hieroglyphic, with its resemblance to the Hittite, was in his judgment the alphabet of the original Cretan stock—"the Eteocretans of the

* Jer. xlvii, 4 (R.V. and Heb.).
Moreover, in the pointed shoes we seem to have a link supplied between these Caphtorim and the Hittites; in which case we have a confirmation of Holy Scripture which shows us that these people were, anciently, related to each other.

There is another curious point. We are told twice here, I think, that there has been found a double-headed eagle inscribed on the rocks. The Tell-Amarna tablets and the inscriptions found in the ancient Hittite empire show us that the Hittites spoke a language similar to Turkish—an Altai language. The Turks originally, as we know, inhabited the Altai mountains; and a vast number of people speaking a similar language to the Turks are settled round the Altai mountains, and the Turkomans of Turkestan are held to belong to the same ethnic branch. We know that the Tartars, as they have been called in later times, overran Russia in the early and middle ages, and held sway over Russia for several centuries. Must the double-headed eagle, then, which the Russians now have as their symbol, be derived from the Turko-Tartars and these Hittites, who lived on the borders of Cappadocia?

In regard to musical instruments that have been referred to, it is very interesting to find that these ancient people used musical instruments. We used to be told that the Egyptians only played the cistra, which was something like a baby’s rattle; but afterwards there were discovered harps with fourteen strings, which goes to confirm the story of Miriam and the Israelitish women praising the Lord with musical instruments. I see in the paper the lituus is called a musical instrument. I always thought it was a crook which the augurs used for divining in some way. I daresay that is merely a misprint.

There is a statement here, speaking of the figures found carved on the rock at Eyuk, “one figure has either a long tassel on a close-fitting cap, or hair depending in a closely-tied queue. Either supposition favours a Mongol origin for the Hittites, for the first resembles the custom of the Turks; the second that of Chinamen.” Of course we have not seen those pictures so we cannot hope to discriminate; but I think it is a mistake to talk of the Turks and Chinamen as if they belonged to the same race. Philologists do not, so far as I know, ever classify the Chinese language with the Turkish. So far as I know Chinamen have a still more differing type of language.
The **CHAIRMAN.**—If there are any other remarks to be made we shall be very glad to hear them.

A letter has reached us which was to be read. We rather wish it had been typed, as it is rather difficult to read without preliminary examination.

The **SECRETARY.**—The letter in question is from the Rev. Dr. Walker, who, I am sorry to say, is laid up by illness. He takes great interest in the subject, and he has sent us a long communication, but from my ignorance of this particular subject I cannot read it without great difficulty, which would take up much of your time.

I would humbly suggest that those who send in communications should kindly get them typed. It is a simple and cheap process, and makes communications absolutely as legible as if they were printed.

**Mr. PINCHES.**—I do not think I have much to say in reply. Naturally, not being the author of the paper, I cannot speak of its contents as I should like to do. I have not been to the part to which he refers, and which he has visited; and unfortunately I have not had time enough to read certain books on the subject which I should have liked to do, especially that by M. Chantre, to whom I have referred, who has written a very important work upon it, but it is rather too voluminous to master in a short time, especially when one has other occupations. Then, I believe, Ramsay has been there and has written about it, but I am not quite certain on that point.

There are one or two points that have been mentioned by Mr. Rouse to which I think I might refer. First as to the double-headed eagle. It is a very remarkable thing that that eagle, which is found on a great many monuments of Hittite origin, has its counterpart on a statue which is rather far from the Turki, and which was the centre of Hittite civilization, viz., the ancient Babylonian city of Lagash. From that place a large number of very important antiquities have been, as will be remembered by many, obtained by the French Government, and on some of the sculptures the double-headed eagle is shown.

I have also been studying, for the last year or so, a very important collection of Babylonian tablets from that spot, viz., Lagash—now Tel-lo—belonging to Lord Amherst of Hackney, and I have paid special attention to the mutilated cylinder seals.
with which those documents are impressed. On several of these I have found birds of various kinds—generally in the position of the double-headed eagle, though the bird itself is probably not double-headed, and naturally that suggests a connection with the Russian, and probably, also, the Prussian eagle. On one of the tablets, instead of an eagle there is a winged dragon, and on another of the tablets one of these birds has a dragon's head, which would seem to connect these devices, viz., the double and single-headed eagles and winged dragon. Naturally these impressions are often not very well made, and there may be doubt as to some of the details; but I examined them very carefully with magnifying glasses, and I think the drawings I made of them are substantially correct.

Referring to musical instruments, a sculpture from the same place, Tel-lo (now in the Louvre), has a representation of a harp, and I believe that is the oldest representation of a musical instrument known—at least from that part of the world. The date is put down at 4,000 years B.C. (that is not my date), and the remarkable thing about this harp is that it has eleven strings. Possibly the sculptor wished to represent twelve, which would make the complete octave,* with semi-tones, which implies a certain knowledge of harmony on the part of those very ancient people, if, as seems probable, it is intended to represent twelve strings.

Mr. Rouse.—Would not it want thirteen to complete the octave?

Mr. Pinches.—Yes, it would have to be thirteen to complete the octave. However, the number is sufficiently suggestive, it seems to me.

Mr. Rouse.—Yes.

Rev. J. Tuckwell.—Could Mr. Pinches give us any information with regard to the language? I believe Professor Sayce and others have been devoting attention to that, and I believe the impression is that it is monosyllabic.

Dr. Pinches.—I would rather not pronounce an opinion as to the language at present. I know several scholars have been studying it (I mean the Hittite language), and Professor Jensen

---

* I intended to say "scale" (without repeating the first note an octave higher).—T. G. P.
has made very comprehensive and lengthy studies, and has written a considerable amount upon it. I am bound to say, however, that there is considerable difference of opinion. Professor Sayce agrees, in the main, with a great many of Professor Jensen's statements. On the other hand, Professor Hommel, some of whose attempts at decipherment I was reading a few days ago, differs from Professor Jensen considerably, and the question naturally arises, which of the two is right? That being so, I do not see how one can pronounce an opinion as to the family to which the language belongs, and for that reason I would, myself, rather not say anything about it. I am at the disadvantage of not having (I may as well frankly say so) studied the Hittite language at all. I find the study of Assyrian, with Akkadian and its dialects and possible linguistic connections, quite enough, with archaeology and other things, to fill up all my time.

[The meeting then adjourned.]