

and in Belgium, during the Roman period, on an inscription, *Dûs Manibus*. It also is found on a Roman tomb in Algiers, and during the twelfth to fourteenth centuries in Belgium. On Roman altars, in Britain and in the Pyrenees alike, it accompanies a wheel. In Ireland and Scotland it is shown on Christian tombs of the sixth century A.D. The Slavs and Finns did not use it much, but in the Caucasus it marks early swords. It also is stamped on Arsacid and Sassanian coins in Persia. At Ibreez in Lycaonia it is found on a Hittite's robe on a bas-relief. It also occurs on Greco-Phœnician coins and seals, but does not appear to be a true Semitic emblem, nor is it ancient in Egypt. It is common among the Eastern Aryans of India, and taken from them by Chinese and Japanese Buddhists. It has even been found at Coomassee in Africa, perhaps on foreign articles.

In South America a calabash of the Lengua tribe is so marked, besides the instances in the Yucatan mounds on pottery. It is often connected with the sun, as at Melos, where it precedes the chariot of Apollo, or on coins of Gaul with Apollo Balenus. It was taken (probably by the Norse) to Iceland, is found also in Malta, on Etruscan vases, on the Newton stone, and on a Celtic monument at Aberdeen.

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## THE MÂDEBA MOSAIC.

By Ch. CLERMONT-GANNEAU, LL.D., Membre de l'Institut, Professeur au Collège de France.

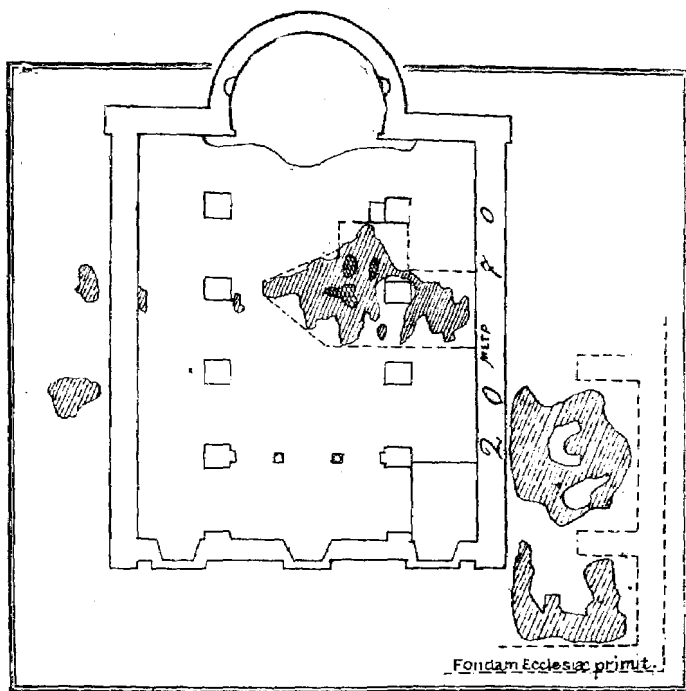
*Translated by permission from his "Recueil d'Archéologie Orientale,"  
Tom. II, p. 161, 1897.*

### I.

AT the meeting of the Academy on March 9th, 1897, M. Héron de Villefosse read a first note by Father Lagrange on the discovery of this unique relic. At this meeting I also read several passages from a letter dated March 2nd, which Father Paul de St. Aignan, of the Franciscan Convent at Jerusalem, wrote to me on this subject, containing some interesting notes upon this discovery and upon what had been done to make use of it for the improvement of our archæological knowledge. I think that I had better reprint these passages in the place :—

“ . . . You have, no doubt, heard of the discovery made at Mâdeba in December, a fifth century mosaic map of Christian Palestine and Egypt. The discoverer, Father Cleopas, librarian to the Greek Patriarch, has sent us his description of it, a very full one, though incomplete on certain points. Our printing press will undertake to publish it; I have already begun to translate the MS. into French, and will send it to you when I have finished it.

“But the essential point, in my opinion, is the accurate restoration of the fragments of the map to their places, for unluckily the mosaic is greatly mutilated. By order of the Greek Patriarch, M. George Arvanitaki, a member of the Astronomical Society of France and geometer to the Patriarch, went to Mâdeba. Before the map was finished the Patriarch died, and the poor geometer then saw himself on the point of losing the fruit of his labour. We encouraged him, and on the 5th of this month he will send us the Mâdeba map in twelve sheets of half a metre square. I already have his promise to do this, and



PLAN OF THE CHURCH AT MÂDEBA, SHOWING POSITION OF MOSAIC.

barring unforeseen accidents, this map will be sent off to you by the next mail on March 9th. It is, I think, important that this document should be published by photo-lithography as soon as possible, so as to give a general idea of this piece of evidence, which is of the greatest value to the student of Biblical and Gospel tradition.

“Upon this map the tribes of Israel are marked, each tribe with its boundary and its chief towns; Biblical or Gospel events are alluded to by a word—the greater part of Jacob’s prophecy is noted thereon, with some variations from the received text (Gen. xlix, 25; Deut. xxxiii).

The administrative districts into which the country was divided in the fifth century are there also, and some hitherto unknown names of towns.

“Besides its purely historical and geographical interest, the archaeologist will find this mosaic an interesting and instructive work. Each town or holy place is represented by a building of some kind : Jerusalem, Nâblus, and Gaza are encircled by walls ; one can recognise the chief gates, and the public buildings show the outward appearance of these cities.

“From an artistic point of view the makers of the mosaic have had enormous difficulties to encounter in showing the configuration of the land ; mountains, plains, valleys, rivers, torrents, seas, roads, &c.

“Of course one must not expect to find the distances of these towns from one another, or their relative positions, shown with mathematical accuracy, but the general arrangement is displayed well enough. Indeed, it forms a very curious and very important piece of evidence in matters relating to Palestine.

“The map, which I hope to send you by the next mail, has the great advantage of offering every guarantee of accuracy that could be wished for, being made by a professional map-maker, and reproducing all the details of shape and colour that are to be found in the original. With regard to inscriptions, M. Arvanitaki is an accomplished linguist, a matter of some importance when abbreviations and contractions have to be copied.”

While awaiting the arrival of the map promised by Father Paul de St. Aignan, I have thought it right to lay before the Academy some remarks about this discovery, which I here summarise.

The old Moabite city of Medaba, or Mâdeba, which stands on the further side of the Dead Sea, between Hesbân and Dhîbân, the ancient Heshbon and Dibon, appears to have been a very flourishing Christian centre during the Byzantine period. It was the seat of one of the bishoprics of Arabia. The remains of many important churches and basilicas have already been found there, besides Christian inscriptions, and fragments of splendid mosaic pavements. Some of these fragments seem to me to have actually formed part of our great geographical mosaic, and might have foreshadowed its discovery, to judge by the nature of the inscriptions found upon them ; indeed, upon one of these fragments we read the words *Zαβουλὼν παρά(λιος κατοι)κήσει . . . καὶ παρὰρενεί ἔως Σιδῶνος*, which are clearly taken from the LXX version of Genesis xlix, 13 (Jacob's blessings) : by the side of this was drawn a ship, which some have tried to make out to be “St. Peter's boat,” the church being, according to them, dedicated to St. Peter : in this place it is clearly a mere symbolical indication of the sea. On another fragment appears the name of the seaside city of Sarephtha, which is closely connected with Sidon in the Bible, 1 Kings, xvii, 9, LXX. “Zarephath which belongeth unto Sidon.”

The opinion mentioned by my correspondent, which refers the

construction of this geographical mosaic to the fifth century, is based upon grounds with which I am not yet acquainted. It would be well to wait for more light before deciding. All that I can say is, that among the fragments of a previously discovered mosaic at Mâdeba, there is a large Byzantine inscription referring to a basilica dedicated to the Virgin. This dedication is dated, but unfortunately there is a doubt about the numerical letters which form the date, and it is possible that this date may bring us down to the sixth or even the seventh century.<sup>1</sup> If the workmanship of the geographical mosaic belongs to the same period as this mosaic, we shall have here a chronological hint which we must not neglect.

## II.

Father Paul de St. Aignan has written another letter to me, dated March 9th. This letter also I have communicated to the Academy, at its meeting on March 26th. I think it worth while to make the following extracts from it:—

“My letter of March 2nd told you of the exact drawing of the Mâdeba fragments. The Greek Patriarchate has just claimed this drawing, so I can only send you some negatives, and must put off sending a copy of the drawing till the next mail steamer, which sails on the 16th. However, the negatives which I send you will suffice till then for you to examine this really curious relic.

“In spite of all the precautions which I took, there may be a slight malformation of the lines caused by the shaking of the apparatus, which prevents a perfect picture being taken; but the plates, which are Lumière’s orthochromatic, represent the scale of colours fairly well.

“The lettering is in black on white ground, and in red on green, yellow, or black grounds. Wherever one or more letters are missing, the distance has been reproduced with mathematical accuracy.

“This is the true story of how the discovery was made:—

“Thirteen years ago Monsignor Nicodemus, the Greek Patriarch of Jerusalem, received a letter from one of his monks who was dwelling beyond Jordan. The monk said that at Mâdeba there was a large and fine mosaic pavement covered with the names of cities, such as Jerusalem, Gaza, Nicopolis, Neapolis, &c., and asked for instructions as to what steps he was to take in the matter. The Patriarch made no answer.

<sup>1</sup> (1) With regard to this subject, see my “*Études d’Archéol.-Orient*,” vol. ii, s. 18, note 4. The geographical origin of the mosaic being now proved, the interpretation of the legend by Σάρεφθα, Μακρὰ Κω[μή], which I had put forward, gains fresh force; indeed, it may well be that in the fifth century Sarephtha bore the name of “Long Village.” In this case the actual reading in the Syriac text of the “Life of Peter the Iberian” ought to stand, as also should the geographical identification which I have there proposed.

(2) See, on this subject, the present volume, p. 52, s. 24, “The Mâdeba Mosaic.”

Subsequently he was exiled to Constantinople, and Monsignor Gerasimos put in his place. Gerasimos found the letter from the Mâdeba monk in 1890; he guessed that this was an important archæological discovery, and straightway sent off a master-mason graced with the title of *architect*, with orders, if the mosaic were a fine one, to include it in the church which was about to be built at Mâdeba for the use of the Greek population.

"Alas! the intentions of Monsignor Gerasimos were quite misunderstood. The mosaic, which by the testimony of four monks was until then *almost complete*, was partly destroyed in order to lay the foundations of the church, sacristy, and outbuildings of the mission. The church itself was built without symmetry, that it might agree with the original one. The border of the mosaic, with its Biblical decorations, is now *outside* it. God knows what these workmen may have destroyed, when we see by the ground-plan of the church that they broke the mosaic to set up a pilaster! The mischief is done. The *architect* came back and reported that the mosaic did not possess the importance which had been attributed to it.

"*Last December* Father Cléopas, the librarian of the Greek Patriarchate, went to spend a few days at Jericho. Monsignor Gerasimos, who had never lost his interest in this mosaic, prevailed upon him to push on as far as Mâdeba. This librarian is an intelligent man, a student, and a lover of antiquities; his judgment is to be trusted. He returned at the beginning of January, bringing back with him a sketch of the map and some notes, which are now being printed in our press.

"Monsignor Gerasimos, who at last had received proper information, sent M. Arvanitaki to make a drawing of the map. You know the rest.

"All that I now have to do to finish these details is to send you by the next post a copy of this map. I can answer for its minute accuracy."

The nine negatives which Father Paul de St. Aignan said that he sent to me were unluckily broken on the journey. However, I have managed to print from them after a fashion, and have laid the results before the members of the Academy with a few words of explanation. I also informed Father Paul de St. Aignan by telegraph about the accident which had befallen his negatives, and he has answered that by the next mail steamer he will send me some new works which will make good this loss.

### III.

In the meantime Father Lagrange has published a short pamphlet<sup>1</sup> about our mosaic, together with a faithful sketch made by Father Vincent. This dissertation, in spite of the limits within which it is confined, nevertheless contains the root of the matter and does honour to

<sup>1</sup> "La mosaïque géographique de Madaba," by the Rev. Fathers Cléopas and Lagrange.

the learning of its writer. Without affecting to make a thorough study of it, and reserving to myself the liberty to refer to it again on future occasions, I shall now venture to set forth some brief remarks upon certain points which have been somewhat neglected.

It should be noticed that the orientation of the churches represented at each place in the map agrees with the orientation of the map itself—the map is meant to be looked at towards the east, and all the churches are set at an angle so as to show their west front, their chancel, which is not seen, being supposed to be on the side toward the east, it is really toward the south-east, owing to an arrangement which this device renders necessary. The only exception is an important building at Jerusalem in which one is tempted to see a representation of the sanctuary of the Holy Sepulchre.

In order to find one's way through the confused mass of legends and of localities shown on the map we must bear in mind the general principle that the geographical names are regularly written *above* the places, whether large or small, to which they refer. It is the explanatory legends alone, when they occur, which can be inscribed below or beside the place.

The position given to **KOPEOYC**, on the banks of the Jordan, definitely establishes the identity of Josephus's *Kopéau* with *Kerâwa*, a hypothesis in support of which I had given some new arguments, and it utterly demolishes the old notion that it was at *Kuriyût*, in the midst of the hill country.

The bridge or wooden footbridge (perhaps with a ferry boat attached), which crosses the Jordan above Koreous, must correspond pretty nearly with the position of the old Arab bridge of *Dâmieh*. The small isolated hill shown close by it on the west side is probably the *Kûrn Sûrtûbeh*.

—[. . . **ANA** . . . ought probably to be restored by [Θ]ava[θα] rather than by [Θ]ava, because there is room for two more letters after the second *alpha*. This form also corresponds more nearly to the original Hebrew form *Taanat*.

—[**AK**]PABITT[**INH**] instead of *Ἀκραβάρρινη*, agrees exactly with the Samaritan form *Akrabit* (עקרביִת).

—**ΘEPACΠIC** corresponds well enough, both in name and in position, with the ruins of *Deir 'Asfla*, to the south-west of, and not far from, *Kulunsawah*. We know that the Arabic word *deir* is borrowed from the Aramaic; there is, therefore, no ground for surprise at its occurrence in Syrian toponymy before the Arab conquest.

—**BETOMEATEZIC** is very hard to settle. From its place on the map, between *Theraspis* and *Aditha*, it seems as though it ought to be somewhere in the neighbourhood of *Mejdel Yâba*. The name is singularly like that of a Crusading casal, *Bethmelchi* or *Bethmelchis*, which has not hitherto been identified, but which seems to have been situated just about where we want to find it. I may be allowed to go into some details on this subject.

A Bull of Gregory IX, in 1227,<sup>1</sup> confirming the privileges of the church at Bethlehem, mentions among the possessions of this church "eight carucates of land in the casal of St. Mary, and the casals of *Bethmelchi*, Heberre, and Luban." The document speaks just before this of the country of Ramleh, and just after it of Jaffa and of the River Eleutherus.<sup>2</sup>

It is a mistake to try to identify the *Bethmelchi* of the Middle Ages with *Kafr Mâlek*, to the south of Sinjil,<sup>3</sup> which is quite a different village, and was well known to the Crusaders under its proper name (*Cafarmelic*, *Cafarmelech*).

Here is the technical proof that the Casal of St. Mary was indeed in the country of which I have just made mention. By a deed dated 1617,<sup>4</sup> Baldwin of Mirabel sold *the Casal of St. Mary*, which adjoins the territory of Belfort,<sup>5</sup> to Gilbert D'Assailly, Grand Master of the Hospitallers, for three thousand byzants. There can be no doubt that this refers to our casal, for the document contains this instructive reservation—"with the exception of the land belonging to St. Mary of Bethlehem which lies within the territory of the aforesaid casal." We have, indeed, just seen, in Gregory IX's Bull, that the church at Bethlehem actually owned an estate which formed part of this Casal of St. Mary.

In another document<sup>6</sup> St. Mary's casal is mentioned, together with that of Caphaer, which, as we learn from other sources,<sup>7</sup> was a dependency of the Lordship of Ramleh, and is, perhaps, *El-Kefr*, to the north of 'Aboûd.

All these pieces of evidence agree, as I have said, in leading us in the direction of Mejdél Yâba. On examining this country I find a group of places whose names agree very well with those which we want. First of all, there is *el Lubban* = *Luban*, to the north of and quite close to Rentis. Next comes Kh. *el Bîreh* = *Heberre*, to the south-west of Rentis. South of El Bîreh there is a ruin named Kh. 'Aly *Malkîna*,

<sup>1</sup> Riant, "Études sur l'histoire de l'église de Bethléem," vol. i, p. 144: "In casale Sancte Marie, octo carrucatas terre, casalia Bethmelchi, Heberre, et Luban."

<sup>2</sup> The 'Audjâ. The Crusaders, when they gave it the name of Eleutherus, seem to have been influenced both by inexact reminiscences of classical antiquity and also by the name of an ancient Arab city, now swept away, which stood on the banks of the 'Audjâ, *El Aoutariyé*. I shall discuss this matter in detail in another place.

<sup>3</sup> Röhrich, "Studien zur Mittelalterl. Geogr.," p. 227.

<sup>4</sup> "Cartulaire Général de l'ordre des Hospitaliers," ed. Delaville Le Roulx, vol. i, No. 371, p. 255.

<sup>5</sup> "Casale quod appellatur S. Marie, contiguum territorio Bellifortis." One of the signatures of the deed is that of Isaac de Naalein, who was born in one of the casals of that district, *Na' lein*, to the north of and close to Medié (Modin). For the ratification of this sale by King Amaury, see *ib.*, No. 388.

<sup>6</sup> Cartulary, &c., No. 494.

<sup>7</sup> *Id.*, *ib.*, Nos 487, 488, 489.

whose name perhaps has retained a part of *Bethmalchi*; perhaps it is here also that we may agree to place the Betomelgezis of the Mádeba mosaic. As for St. Mary's casal itself, it is not easy to discover it, since this purely Christian name has naturally disappeared, together with the Crusaders. It may be Rentís, or rather 'Abúd, where one may see the remains of a church built in the Frankish fashion, and known even at this day under the name of the Virgin.

The "ancien name" which lurks under the letters **ΑΛΩΝΑΤΑΘ Η ΝΥΝ ΒΗΘΑΓΓΑ**, which has baffled Father Lagrange, is nothing more than "Αλων 'Ατάθ = "Αλων ("Αλωσ) 'Ατάθ, "the threshing-floor of Atad," Gen. v, 10, LXX. The mosaic-worker has but followed a tradition which is indeed omitted by Eusebius, but which is literally reproduced by St. Jerome in his version of the Onomasticon (*see* the words Area Atad), a strange tradition which would make this famous Biblical locality actually the same as *Bethagla*.

—**ΒΕΘΗΛ, ΓΟΦΝΑ, ΓΑΒΑΩΝ, ΑΡΜΑΘΕΜ**, from their relative position, clearly represent *Bethin*, *Jufna*, *Sibia*, and *Bett Ritma*. As for **PAMA**, which forms part of the same group, I have not succeeded in determining its place.

—**ΒΗΤΟΜΑΡΣΕΑ Η ΚΑΙ ΜΑΙΟΥΜΑΚ**.—The suggested identification with the *Μάρσσσα* or *Μάρρσσσα* of Josephus ("Antiq." J., XIV, i, 4) must be received with some caution, especially since, according to another passage of the same author (XIII, xv, 4) this place, which is connected with Adora and Samareia, must have been, not in Moab, but in Idumæa.

—The sanctuary of St. L . . . ? perhaps is the present *Meched* (= *Ματρώπιον*), near Mōta.

—**ZOOPA**.—This evidence of a plantation of palm trees on the traditional site of Seegor is of great interest, since this palm grove gives the reason for the name of *villa Palmarum* and *Palmer*, which was given to the place during the period of the Crusades.<sup>1</sup>

—**AIA** can be nothing else than the 'Αίη of Eusebius, which he places to the east of Areopolis.

—Can **ΘΑΡΑΙΚ** be the present *Kh. Talha*, between Kerak and the Dead Sea? The name reminds one of 'Ain Ten'ain, but the situation seems to be too far to the south.

—If we are to read (**Z)APE(Δ)**, the brook Zared, one would be tempted from a purely topographical point of view to identify the valley of the mosaic with that of Wād Karak, rather than with Wād el Ahsa: it should be noted that the last letter looks more like an *alpha* than a *delta*, and that the middle part of Wād Karak bears the very name of *Wād Dhrá'a*.

—**KA . . . ΕΡΟΥΤΑ**, both in name and position would agree well enough with *Kh. Kefr Rát* (otherwise *Kefr Lut*) near Beit-'Ur et Tahta, to the west north west.

<sup>1</sup> "William of Tyre," xxii, 30. Compare also "Fulcher of Chartres."



—**ΑΔΙΑΘΙΜ.**—M. Arvanitaki's copy has the correct reading which one would expect instead of **ΑΔΙΑΕΙΜ.**

—Modin.—With regard to the extremely interesting reading **ΜΩΔΙΘΑ**, see my remarks on **CAΦΙΘΑ**, further on.

—Gath.—The position attributed to the famous city of the Philistines agrees well enough with the Jewish tradition which places it at Ramleh.

—Gedour, Gidirtha.—The place on the map suits that of Gezer well enough: the likeness of the names may have produced confusion between them. Nevertheless, if this be so I cannot account for the existence of the Aramaic form *Gidirtha*. Moreover, the Onomasticon mentions a Gedrous, ten miles south of Lydda, which it identifies with *Τέδοῦρ*, the Gedor of the Bible, which it mentions as quite distinct from Gezer.

—**ΕΝΕΤΑΒΑ.**—Compare the **נב ט** of the Talmud, mentioned in connection with Yabné.

—**CAΦΙΘΑ** seems to me both in name and in position to answer to the Tell *es-Sâfié* of the present day. The name is more commonly pronounced Tell *es-Sâfi*; but the existence of the primitive feminine form is proved by the testimony of ancient Arab writers. Hence we can deduce a general rule of considerable importance for the student of place-names: it is, that the Aramaic termination *itha* becomes regularly *îé*<sup>1</sup> in Arabic, and consequently that this termination (which must not be confounded with *iyé*), so common in the place-names of Arabian Palestine, is a mark of Aramaic origin and a proof of comparative antiquity in the place-name. This forms an additional argument, and one not to be despised, for the identity of *Modin* with the Arab *Medié*; indeed, we have already seen that this is the name applied by the mosaic to the famous birth-place of the Maccabees: *ἡ νῦν Μωδιθά* "which at this day is called *Moditha*"; now, according to the rule which I have just stated, *Μωδιθά* implies *a priori* an Arabic equivalent *Medié*.<sup>2</sup>

This reasoning also applies to an identification which I once suggested—and which has since been completely established—of the *Sásttha* of the Talmud (*Hippos* in Decapolis) with *Sâsié*. It will, I think, be found applicable in numbers of other cases—*Ἀδιθά* = the Arabic *Haditha* is only in appearance an exception to this rule, since the *th* is here a radical letter which forms part of the word itself (from the root *hadath*) and is not the terminal *th*.

—Before the name of Ascalon stand two mutilated lines, of which Father Lagrange could at first make nothing, but in which he afterwards

<sup>1</sup> The Aramaic termination *itha* sometimes remains unaltered in Arabic. A notable instance of this is afforded by a place of the same name in Upper Syria, *es-Safita*, the White Castle (*Chastel Blanc*) of the Crusaders, the *Argyrokastron* of the Byzantines. This *Argyrokastron* is mentioned by Cedrenus and Cantacuzène, together with another castle in the same district, *Μενίκος*, which I propose to identify with *El-Meniqa*, one of the fortresses of the Assassins, often mentioned by Arab historians.

<sup>2</sup> Pronounce *Meüdié*, the *ω* of the Greek transliteration corresponds to the same sound in *Λῶδ* = *Leud(d)* = *Lydda*.

(in a MS. correction in his copy of the dissertation) recognised the letters **ΝΑΙΓΥ[Π]ΤΙΩΝ**. But to what can these letters refer? I have no doubt that they allude to a famous sanctuary at Ascalon which I have had occasion to mention elsewhere,<sup>1</sup> that of the *three Egyptian martyrs* (τῶν τριῶν μαρτύρων Ἀιγυπτίων). Perhaps also the three obelisks shown on the mosaic in the midst of a large rectangular open space may represent the monuments which commemorated these three martyrs, and may be the sanctuary to which Antoninus Martyr<sup>2</sup> tells us he went in A.D. 570 to pay his devotions.

—**ΠΡΑΣΙΔΙΝ**.—What can this mysterious place be, whose name is written beside those of *Θαμαρά* and *Μάψις*, both well known from the Onomasticon? I propose to read *Πρα(ε)σιδ(ε)ον* = Præsidium; the stone-cutter perhaps forgot to put in the first *iota*; the absence of the second one is regular, for the termination *ιον* is always contracted into *ω* in the colloquial Greek of Syria. This name must owe its origin to the existence of a Roman military post, which St. Jerome mentions as being in this very district: "The Castle of Thamara is one day's journey from the town of Mampsis (= Mapsis), where now there is a Roman garrison (*præsidium*)." Eusebius in the corresponding passage has "a guard . . . of soldiers."<sup>3</sup>

—**ΜΩΔ**.—If this word is incomplete, one would be inclined to read **Μω(λ)[αδά]**; see the Onomasticon for Joshua xv, 26. If it is complete, ought we to emend it into **Μω(λ)** = Kh. el-*Milh*, to the south-west of Tell 'Arad, or perhaps Kh. el-*Muweiléh*, to the north of and close to Beersheba?<sup>4</sup>

—**ΒΗΡΟCCΑΒΑ**.—This transliteration of the Biblical name Beersheba is remarkable. One seems already to feel the (Bir(ou)'s-sab'a) advance of the Arab influence, which indeed may very well have already been making itself felt in these districts on the extreme southern border of Palestine.

—**ΓΕΡΑΡΑ**.—The position of Gerar, shown close to Beersheba<sup>5</sup> and to the west of it, does not encourage the modern identification of it with Kh. Umm *Jerrar* (near Gaza, to the south).

—**ΑΡΑΔ**.—This name, as Father Lagrange observes, does not appear in Eusebius. But St. Jerome enables us to fill the gap (see *Arad*) and to correct in the corresponding passage of Eusebius *'Αραμά* into *'Αράδ*, besides giving us the exact position of the place.

<sup>1</sup> See vol. ii of my "Études d'Archeologie Orientale," p. 4, note 4, and the passages there quoted and discussed.

<sup>2</sup> Ch. xxxiii.

<sup>3</sup> For the common use of the word *præsidium* (garrison town) of Syria, see the Notitia dignitatum "Ala secunda Felix Valentiniana apud *Præsidium* . . . cohors quarta Phrygum *Præsidio*."

<sup>4</sup> We know that the aspirate *h* is, as a rule, omitted in the transliteration of Semitic names into Greek.

<sup>5</sup> Note that Cyril, in his commentary on Amos, identifies Gerar with Beersheba, which implies that the two places were close together.

—**ΦΩΤΙC.**—I propose to identify this with Khirbet *Futeis* or *Fetis*, which has faithfully kept its ancient name, and stands about half-way between Gaza and Beersheba.

—**ΟΡΔΑ.**—As far as position goes, this would suit Kh. Umm *Adra* (transposing the *d* and the *r*?) well enough.

—**CEANA.**—I propose to identify this with Kh. *Sihân*, about nine kilomètres south-east of Gaza.<sup>1</sup> This place-name of *Sihân* appears in several other parts of Palestine; the origin of the places so-named must consequently date from a period before the Arab invasion.

—**ΩΓΑ.**—If this name is complete, can it be *Hôj*, about eight kilometres east of Gaza?

—**ΕΔΡΑΙΝ.**—Perhaps Kh. *el-Adâr* (singular form), eight kilometres south-south-west of Gaza.

## IV.

I have received the following letter from Father Germer-Durand, who devotes himself with such praiseworthy zeal to the study of the antiquities of the Holy Land:—

“JERUSALEM, *March* 29, 1897.

“Sir,

“I send you, together with this letter, a complete photograph of the Mâdeba map. This photograph consists of ten sheets: first, a general view taken from the pulpit, on which most of the inscriptions can be read with a magnifying glass; and then a series of nine sheets giving the details, on a scale of about 0m.08. Each sheet overlaps the adjoining ones, so that it is easy to put them together with the help of the general view. We have spared no pains to obtain a result which will satisfy scientific archæologists. With the help of a light scaffolding, which could be quickly set up and taken down, we took our photographs, looking straight downwards from a height of 3m.50. By adopting this plan the inaccuracy due to the lenses becomes almost imperceptible.

“I shall be obliged if you will be so good as to lay these photographs before the members of the Institute. They will complete the communication previously made by Father Lagrange, to whom I am pleased to be able to render this fraternal service.

“I hope after Easter to be able to go in my turn as far as Petra with a large company of students, and hope to be able to bring back a series of photographs and squeezes, especially of the milestones between Dhat Ras and Petra.”

The photographs which arrived with Father Germer-Durand's letter, which I laid before the Academy at the meeting on April 9th, are done in the most satisfactory manner possible. They will do to work from to make a good phototype reproduction of the mosaic. It is to be hoped that this process may be adopted in the album of the mosaic of Mâdeba,

<sup>1</sup> Probably *سحان* Sehan, of Robinson's lists.

which, I learn, is soon to be published at Paris by the Abbé Abel, of the Augustinian Convent of the Assumption.

## V.

I have only just received (April 15th), by the kindness of Father Paul de St. Aignan, an interesting pamphlet<sup>1</sup> by Father Cléopas, to whom we are really indebted for the discovery of the Mâdeba mosaic. Without making any pretension to having solved all the problems raised by the study of this valuable and instructive relic of antiquity, the author describes it in detail, and while he describes it gives us some new lights upon it, which I think are worth mentioning.

In the first place, there is the evidence (p. 23) of trustworthy witnesses, according to Father Cléopas, who saw the mosaic some years ago, before the mutilations which it has recently undergone, and declare that they recognised the towns of Ephesus and Smyrna thereon.<sup>2</sup> If this information is true, the map must have included Asia Minor on the north, just as it does Lower Egypt on the south side.

Next, there is (p. 10) a suggestion due to the Archimandrite Photius, who has once read in one of the ancient Greek MSS. preserved at Mount Sinai a passage containing an allusion to the Mâdeba mosaic. It is greatly to be wished that this suggestion, upon the importance of which it is needless to dwell, should be verified.

At the end of his work Father Cléopas reproduces several Christian inscriptions, copied by him at Mâdeba,<sup>3</sup> one of which refers to the restoration of an immense underground cistern by the Emperor Justinian. But the most important of these, because it may perhaps furnish us with a hint as to the date of the geographical mosaic, is that which Father Cléopas has copied from a mosaic which forms the pavement of a little round crypt connected with the great basilica. He reads it as follows:—

χ(ριστου)ς ὁ Θε(ός)ς τὸν οἶκον τοῦτον ἀνήγειρεν ἐπὶ Σεργίου τοῦ ὄσιω(τατου)ς ἐπισκόπου, σπουδῆ Σεργίου πρ(εσβύ)τ(ερ)ου τοῦ ἁγίου Ἀλιανού, ἐν τῷ ὡς ἔρει.

We must be cautious about the reading of the date; the numerical letters which form it appear thus in the printed copy: **ΥΣΤ**. This is

<sup>1</sup> Ὁ ἐν Μαδηβᾷ μωσαϊκὸς καὶ γεωγραφικὸς περὶ Συρίας Παλαιστίνης καὶ Ἀιγύπτου χάρτης, ὑπὸ Κλέοπα Μ. Κοικυλίδου, βιβλιοθηκαρίου τοῦ Ἱ Κοινοῦ τοῦ Τύφου. Ἐκδόσαν το πρῶτον ἐπιμελεία τῶν αἰδ. ΠΠ. φραγκισκανῶν. Ἐν Ἱεροσολύμοις, ἐκ τοῦ τυπογραφείου τῶν φραγκισκανῶν, 1897, 26 pp. 8vo. (finished printing on March 8th).

<sup>2</sup> Father Cléopas does not mention Constantinople, which is spoken of by Father Lagrange, *l.c.*, p. 181.

<sup>3</sup> I do no more than allude to certain inscriptions copied elsewhere; an inscription in Mosaic (with the formula **ΦΩC ΖΩHC** and **ΑΩ**), one from the convent at Deir el Kelt (?), a sepulchral inscription from the Viri Galilæi, and a Judæo-Greek epitaph on a sarcophagus at Sebaste.

clearly an approximation, for these numerical letters cannot appear together.  $\Sigma T$  seems to have formed a contraction, which Father Cléopas has interpreted as the siglum *fav*. If, as he thinks, we ought to read it as "the year 406," we shall then have to decide the era according to which this date is calculated; the era of Bostra, in the province of Arabia, would give us A.D. 511; Mâdeba may have had an era of its own.

(See *Note by Sir CHARLES WILSON*, p. 239.)

## THE TABERNACLE ROOF.

By PROFESSOR THEODORE F. WRIGHT.

In the *Statements* for July, 1896, and April, 1897, interesting suggestions have been made in regard to the Tabernacle, and in the latter place Mr. William Brown refers especially to Mr. Fergusson's theory of the ridge-pole and to Rev. H. Proby's theory of the ridge-cord. Have these gentlemen examined an Oriental tent? If so, did they see the ridge-pole or ridge-cord which they are making or have made the bases of their theories? Have they considered the objections which must arise against any construction which adds to the Biblical description what it borrows from purely Occidental sources?

In his little book on the Tabernacle Mr. G. W. Colton, of New York, constructs the Tabernacle without putting anything of his own into the plan. He begins with the form of an Oriental tent, and he ends with an Oriental tent. How otherwise should he begin and end? Of course he has no ridge-pole or ridge-cord. The canopy is amply supported, but has not the stiff lines which we of the West are accustomed to in tents.

Mr. Colton first places the planks as directed, and fastens them with the bars and corner-bindings, and so gets a firm structure. He omits the ropes invented by others to hold the planks in place because they are not given him by the Scripture account and are wholly unnecessary. I have tested the strength of his model and have been impressed by its stability.

Now, if the canopy of the Tabernacle were flat these planks alone would amply support it; but a flat tent roof is no more Oriental than a pitched one. We remember, therefore, the five posts of the outer veil and the four posts of the inner veil, which would give fuller support. Moreover, while the staves of the ark could not be removed, those of the table, altar, and lampstand would be very much in the way when the Tabernacle was standing, and these would be so many additional supports, and would be quite like those now used in Oriental tents to increase their height.

In such a construction as suggested here, the architect, like Mr. Colton, uses only legitimate material, and has the satisfaction of knowing that he is in touch with Oriental usage. It is unnecessary to adopt every