

791ST ORDINARY GENERAL MEETING

HELD IN COMMITTEE ROOM B, THE CENTRAL HALL,
WESTMINSTER, S.W.1, ON MONDAY, MAY 13TH, 1935,
AT 5.30 P.M.

ERNEST W. G. MASTERMAN, Esq., M.D., F.R.C.S., IN THE CHAIR.

The Minutes of the previous Meeting were read, confirmed and signed, and the HON. SECRETARY announced the election of the Rev. P. Marr Davies, M.A., F.I.C., H.C.F., as an Associate.

The CHAIRMAN then called on Lieut.-Col. F. A. Molony, O.B.E., to read Mr. George B. Michell's paper entitled "The Land of Goshen and the Exodus," as the author of the paper was unable to be present.

THE LAND OF GOSHEN AND THE EXODUS.

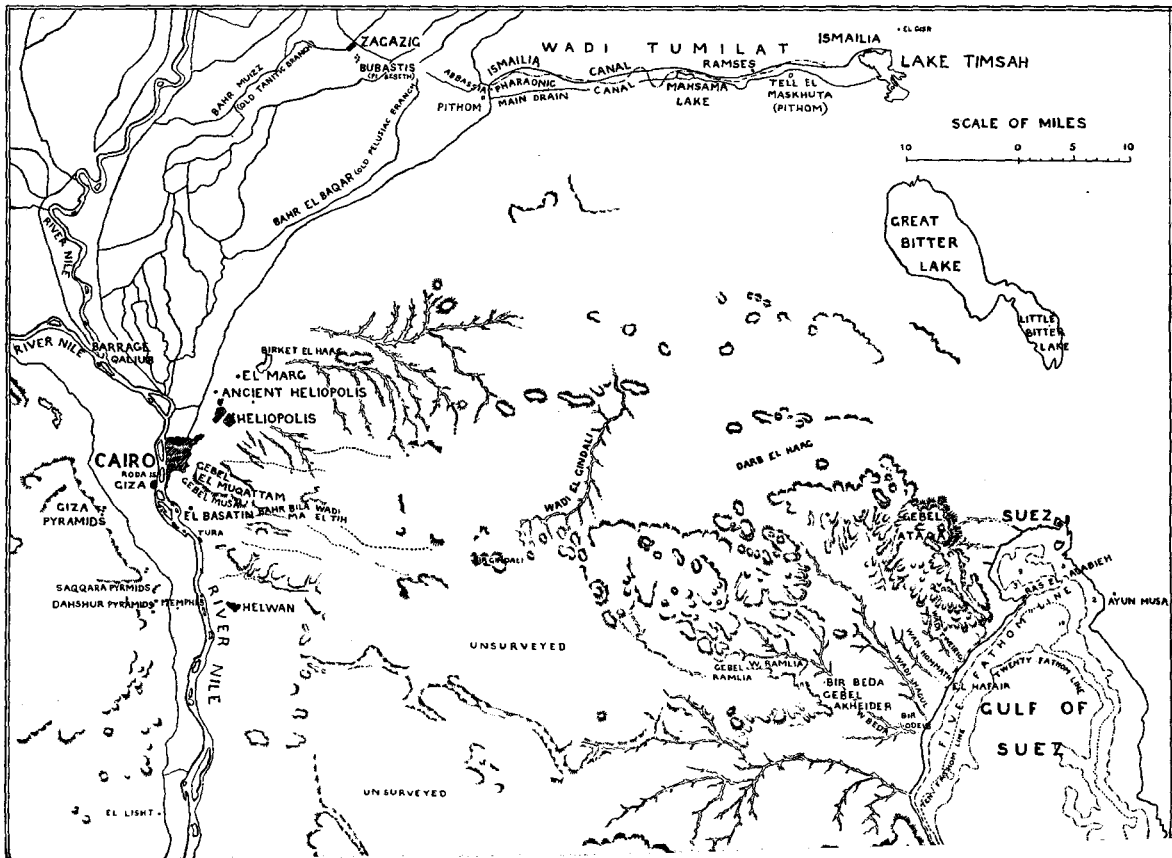
By GEORGE B. MICHELL, O.B.E.

THE accompanying map has been compiled from many sources. It represents the conditions just before the Suez Canal was dug.

The various irrigations of Egypt, some dating from the times of the early dynasties of Pharaohs, have cut up and altered the surface of the Delta so much that it is not always possible now to trace exactly the original water-courses, natural and artificial. Some of the ancient branches of the Nile have been canalized, diverted, silted or stopped up, or have run dry. Still, the general geology of the country has not altered more in historical times than can be accounted for by known causes, and certain features suffice to show the ancient conditions.

Briefly, my purpose is to show (*a*) that the Wadi Tumilat was always a waterless and uninhabitable desert, and (*b*) that the popular identification of the Wadi with the Land of Goshen and the initial part of the route of the Exodus is completely erroneous and unjustifiable.

A glance at the map is sufficient to show that the whole of the country lying east of the Nile Valley and the Delta is



a wilderness divided by a horizontal line from Cairo to Suez into two distinct parts. That to the south of this line is broken by high hills and broad valleys, and is known as the Arabian Desert. But it is not a desert in the strict sense of the term. For there is some little rainfall which supplies wells, and causes verdure enough to support herds of camels and their breeders. Indeed, it is the principal breeding ground of that animal in Egypt, and the only part of Egypt where there is any appreciable rainfall.

On the other hand, the country north of the Cairo-Suez line is the typical desert, flat, sandy, waterless, shadeless, and consequently entirely barren.

Through the middle of this uniform desert, and about forty miles north of the Cairo-Suez line, runs the Wadi Tumilat, due east and west, from Abbasa to near Ismailia. The length of the actual Wadi is just thirty-one miles. Its present width varies from one mile in its eastern half to about six miles in its western half.

None of the scanty water from the southern hills reaches the Wadi Tumilat. The wadis marked on the map as running north and then westwards from the hills are invisible except for the sparse desert vegetation that marks the occasional flow of water beneath the surface. And this whole system drains into the Birket el-Hagg, near El Marg, thirty miles south-west from the Wadi Tumilat.

Along the Wadi run: (a) the Ismailia Canal, (b) the modern drain, and (c) the railway from Cairo to Ismailia, and thence to Suez, to Port Said, and to Palestine.

It is in no sense a valley, or nullah, but a shallow and narrow flat space between parallel ranges of low stony hills on the north and on the south, in the general eastern desert that extends all the way to Palestine. Let not the present air of moderate prosperity in the Wadi Tumilat delude the traveller on the railway line into supposing that this is either natural or ancient. It is due entirely to the high-level Ismailia Canal and the constant drainage operations necessary to carry off the harmful salts in the soil, working in co-operation. Without the canal water, the Wadi would be dry. Without the drainage system, the canal water would do more harm than good.

The reason for both these positions is that the desert in question is above the level of the neighbouring branches of the

Nile, even at the height of the annual inundation. The water that now enters the Wadi is led off from the Nile (a) by the Ismailia Canal at *Cairo*, well above the Nile Barrage near Qaliub, and (b) to a lesser extent, by a cross canal from the Bahr Muizz (the old Tanitic branch), and the Bahr el-Baqar (the old Pelusiac branch), which both take off also from the Nile *above the barrage*. Before the construction of the barrage it was impossible for the waters of these two latter sources to climb upwards to the Wadi.

The cause of the poisoning of the soil with salt is that under the whole of the soil of Egypt lies a bed of salt, left there by the pre-historic sea that once covered it and extended to above *Cairo*. "At the height of 220 feet—the height of the Mosque of Mehemet Ali at *Cairo*—there is an old sea beach, which anyone can see for himself, running along the limestone cliff" (Professor Hull, *Vict. Inst. Trans.*, vol. xxviii, p. 278). Fresh canal water, percolating through the porous soil, dissolves this salt, and if sufficiently abundant brings it to the surface. It is *this* salt, not that of the Red Sea, that is found in many places, and that causes the "bitterness" of the Bitter Lakes.

Professor Hull said that the whole of Lower Egypt was covered by the waters of the sea "in very recent geological times." But this "very recent" must have been long before the building of the Pyramids at Giza, of the great temples at Bubastis and Tanis contemporary with the Pyramids (Professor Edouard Naville, *Vict. Inst. Trans.*, vol. xxiii, p. 140), and of the other ancient buildings in the Delta now buried under the Nile mud, that is, before 3200 B.C., at the latest computation. For these were constructed, and still stand, on dry land well above the ancient sea-level.

Now the recession of this ancient sea was undoubtedly caused, principally if not altogether, by the general rising of the land, not necessarily uniformly everywhere or simultaneously in every part. But it must not be forgotten that, both during the existence of the sea, and during its recession, as well as ever since, the River Nile continuously poured its volume of fresh water, laden with mud and bearing its fresh water shells and other organisms, northward to the sea. The mud would be gradually deposited, and the rest carried onwards, spreading fan-wise in the lower reaches. But little or none of this mud would be deposited at an actual right angle to the course of the stream, whereas the light shells might be washed into any

part of the flood. It is thus that I account for the presence of the shells of fresh Nile water animals in the Wadi Tumilat, the Bitter Lakes and other parts of the Isthmus of Suez, though no ancient Nile mud is found there. I say no *ancient* Nile mud, for at a later date canals were dug which would carry more modern mud.

As the land rose wrinkles were formed, through which the Nile flowed, both eroding them and lining them with mud. Thus arose the seven branches of the Nile. Both east and west of the Delta lay the deserts, the dust and sand and gravel of which, blown by the winds, increased the height of the land. The soil brought down from Abyssinia to Egypt raises the level of the bed of the Nile by four inches, some authorities say four and a half inches, in a century. Consequently, the bed of the Nile, and of its ancient branches, is now about eleven feet higher than it was in the days of Seti I (1320-1300 B.C.), the author of the first known canal through the Wadi Tumilat. That is to say, the beds of the branches of the Nile which might supply water to his canal were then eleven feet below their present level. The nearest branch of the Nile was the Pelusiac (now the Bahr el-Baqar), which, at the vicinity of the Wadi Tumilat, flowed due northward, only turning a little north-eastward well beyond the Wadi. It could not, therefore, have supplied water to the Wadi, except through an artificial channel, even assuming that the level of the Wadi was then somewhat lower than it is now. The fact that Seti had to dig a canal is enough to show that there was no natural watercourse in the Wadi. That is to say, during the times of the Ancient and Middle Kingdoms of Egypt, the Hyksos, the Restoration and the XVIIIth Dynasty, and down to the time of Seti I, there was no fresh water flowing in the Wadi Tumilat, nor means of bringing it there.

But if, as it seems to be agreed by geologists, at his time, and, of course, still more so at earlier times, the height of the Isthmus of Suez above the sea was low enough at El Gisir to allow the Red Sea to penetrate so far, it is easy to see that Seti could dig a *sea water* canal along the Wadi Tumilat, which was what he required for navigation purposes, as far as Bubastis, near the modern Zagazig. If this sea-water canal was deep enough to communicate with the Pelusiac and Tanitic branches, no doubt the latter would deliver, at exceptionally high states of the Nile, a certain amount of their fresh water into the canal. This

would account for the deposits of Nile mud in the actual course of the Wadi Tumilat.

But it is out of the question that any Nile water could ever have been used for *irrigation* purposes in the Wadi. It would have been necessary to raise it by shadufs, water-wheels, etc. And it was far too precious and necessary for the cultivable parts of the Delta to be wasted on this uninhabitable desert—not to mention that there is no trace of Nile mud outside the site of the old Pharaonic canal. Interesting particulars may be found in Mr. A. Lucas' "Report on the Soil and Water of the Wadi Tumilat Lands under Reclamation" (Cairo, 1903 ?).

As it is, at a distance of a few yards from the present Canal and drain, dig as deep as you will, you will find *salt*, but no water, unless it be the seepings from the canal and the drain, and that will be brackish. The cultivation of the Wadi is strictly confined, therefore, to the fields on the surface of which the canal water can be distributed by irrigation methods.

Even so, the present taxable area, that is, the area which is sufficiently productive, with all the modern advantages, to produce taxes, is not more than about 112 square miles, or a square of 31 miles long by about $3\frac{1}{2}$ miles wide. This includes the canal, the drain, the railway and the Lake Mahsama. Immediately beyond these limits, both north and south, is dry, sandy and stony desert. Before the construction of the Ismailia Canal, in A.D. 1863, right back to the days of the earliest freshwater canal, this (? irrigated) belt was considerably less wide.

Yet we are asked to believe that the Sacred Books of the whole Israelitish nation—for the Samaritan text is identical with that of the Jews—in spite of their bitter internal hostility, agreed in accepting the egregious blunder of making this narrow strip in the stony waterless desert "the best of Egypt," and the home, abounding in "fish, cucumbers, melons, leeks, onions and garlic" (Num. xi, 5), for 430 years of a people who increased in that time to some two million souls, with herds of cattle, and flocks of sheep and goats. That is, more than 18,000 human beings alone to the square mile.

Not only so, we are asked to believe that these two millions, with herds and flocks, wagons and all the impedimenta of a great trek, assembled at one time and at one spot at the western end of the Wadi, and marched in a body through this strip, at no place more than six miles wide, a part of which was taken

up by the canal and by a lake, Mahsama. Then they encamped at a spot where the Wadi narrows down to *one* mile wide (less the width of the canal), at "Succoth," which, for the purposes of the theory, is identical with "Thuket," the civil name of "Pithom," which again, according to the only account extant, viz., the Book of Exodus, was a *city* (Exod. i, 11) containing store-houses. The extent of this city we are not told. But it certainly occupied a very awkward position in a constricted space of only a mile wide for the accommodation of so large a party.

The whole story is preposterous. Hardly a soul in Palestine could have been ignorant of the true condition in the Wadi Tumilat, one of the only two highways into Egypt, and in constant use both ways.

This agreement of the two sections of Israel in a blunder so easily exposed is the more inexplicable in that it cannot be attributed to religious or priestly influence. The rival priest-hoods and religious systems of the two kingdoms were always, and still are, in bitter antagonism.

The only explanation is that the *history* was true, and the "blunder" did not exist. That is, that the notoriously impossible Wadi Tumilat was not the Land of Rameses, or Goshen, and that the Israelites never did attempt to march through that part of the desert.

Now, on what evidence is the charge made of such a blunder?

One argument, and one alone, is worth discussing. All the rest are totally irrelevant—the position of Zo'an (supposed to be identical with "Tanis") (Ps. lxxviii, 12, 43), and Pi-beseth (Ezek. xxx, 4–18). Neither of these has anything to do with the site of the Land of Goshen.

A single structure has been excavated at Tel el-Maskhuta, in the Wadi Tumilat. In it have been discovered statues of Rameses II, and inscriptions which are said to show that the place was dedicated to "Atum," and consequently was named "Pi-thom." Others show that the civil name of the place was "Thuket," which is asserted to be the Hebrew "Succoth" (Exod. xii, 37). This is held to be irrefutable evidence that (a) it was also the "Land of Rameses," that is Goshen; (b) both were built by the Israelites under the orders of Rameses II, who was, therefore, "the Pharaoh of the Oppression," and consequently (c) the Exodus could not have taken place prior to

the time of that king. Further, (*d*), since Thuket in the Wadi Tumilat was Succoth, the Hebrews must have marched through this Wadi in leaving Egypt.

This argument assumes, against all likelihood, (*a*) the perfect veracity of Rameses II, a notorious robber of other men's credit; (*b*) that there was never a place in all Egypt dedicated to Atum, an aspect of the Sun God which was the ancient national deity of the country, until Rameses II thought of the Wadi Tumilat as an appropriate spot for him; (*c*) that none of the great campaigners of Egypt back and forth into Canaan, not even the Hyksos, cared for their lines of communication, or constructed a blockhouse, or a victualling station, on the high road until Rameses II.

I will not dispute "Pi-thom." But the attempted identification of "Goshen" with "Kesem," and "Phacusa" and of "Thuket" with "Succoth," will not bear investigation.

But even if the solitary edifice at Tel el-Maskhuta was an ancient foundation merely restored by Rameses II, as it seems likely, it does not fit the description of the city built by the Israelites for "the king that knew not Joseph." For the latter is unmistakably a "city of places-where-people-or-things-are-taken-care-of," (*arei-misknot*), not a mere solitary structure. The two words are quite distinct. *Arei* means *cities*. It occurs 1,078 times in the Old Testament, always with that meaning. And the *mi-* in *misknôt* signifies a *place*. There can be no mistake as to what is meant.

Yet there is absolutely nothing, either in the Bible or in the Egyptian monuments, in the Wadi or elsewhere, to connect the Israelites with the edifice at Tell el-Maskhuta. For the name of "Israel," or "Hebrews," is not found in any inscription in the whole of Egypt until the time of Merneptah, the successor of Rameses II, and he recorded it in his stela as that of a people then fixed in *Canaan*.

Nor is the Bible in any way responsible for the confusion that the critics make between the two cities, Pithom and "Ra'amses," and the land of Goshen.

For "the land of Rameses," in Goshen (Gen. xlvii, 11), which the Pharaoh of Joseph's time granted to Jacob and his family to settle in, was manifestly the private demesne of the king ('*erez Ra'meses*, "the land of the son of Ra"). This was seventy years before the death of Joseph. Now it was *after* the death of

Joseph, under a *new* king that "arose up over Egypt, which knew not Joseph" (Exod. i, 8-11), that the Israelites built a *new* city at Ra'amses. This may, or may not, have been in Goshen; it may, or may not, have been in the same "land of Rameses." Apparently, from the name, it also was in a private demesne of the king, but not necessarily in the same demesne as their home. In any case, there is nothing whatever to show that it was in the same district as Pithom, wherever the latter may have been. On the contrary, it is most unlikely, for this purpose, that these two cities should be planted together in one of the most vulnerable parts of the whole country.

Yet it is only on the assumption that *Ra'meses* also was in the Wadi Tumilat (for which there is not a shadow of an iota of evidence) that the start of the Exodus from *Rameses* (Exod. xii, 37) can be located in the Wadi Tumilat—with all its absurdities.

Finally, wherever the two cities were, the account of their building in the first chapter of Exodus makes it perfectly clear that they were not built under the Pharaoh of Moses' time, but under the new king that arose over Egypt which knew not Joseph, *i.e.*, a new dynasty, and not long after the death of Joseph, at least 300 years before the Exodus. Whether this was, as I believe, the Hyksos, or the XVIIth, or the XVIIIth Dynasty, it was certainly not Rameses II, who was the third king of the XIXth Dynasty and in no sense a "new king that arose up over Egypt."

Now, I would not waste my trouble, or your time, in a merely academic refutation of a ridiculous myth if I had not concrete facts and a satisfactory alternative to offer. This alternative is not a pet theory or discovery of my own. It is the original ancient tradition in Egypt itself. This tradition connects Moses and the Exodus, not with the Wadi Tumilat, a modern invention, but with the Nile about and above the site of Cairo. The ark of bulrushes is said to have drifted ashore on the island of Roda. The cliffs on the southern face of Gebel Moqattam are called Gebel Musa to this day, with 'Ain Musa not far behind them. The oasis of El-Basatin ("the gardens") is still a holy place, and the favourite burial-ground of the Jews of Cairo. The valley that runs eastward from El-Basatin, under the Gebel Musa, bears the significant name of "Wadi et-Tih," "the wadi of the wandering," identical with the name given to the Desert of Sinai, "Badiet et-Tih."

Very briefly, the alternative I offer is as follows :—

Goshen was the valley of the main river Nile, extending from the entrance to the Fayum at Hawaret el-Kesab, including the "Island Nome" and up to Memphis, on the western bank, nearly opposite the modern Helwan. The Pharaoh that promoted Joseph was one of the kings, say, Khu-tai-Ra Ugafa, of the XIIIth (Memphite) Dynasty, c. 1909 B.C.—c. 1874 B.C.), whose court was at Itht-tai, a fortress a little south of Memphis, close to the modern village of El-Lisht. One of the private demesnes of the king, "Rameses," was on the east side of the Nile, at the modern Basatin. Access to this property was facilitated by the ferries ("El-Me'adi") a little north of the modern Tura. So that communications between "Rameses" and the court at Itht-tai were both short and easy.

From Basatin the route of the Exodus went up the Wadi Bila Ma, and the Wadi et-Tih, to Bir el-Gindali ("Succoth"), a distance of about 25 miles. From Bir el-Gindali, instead of following the Wadi el-Gindali and the Darb el-Hagg, east-north-eastward, the usual route (Exod. xiii, 17, 18), they continued south-eastward another 25 or 30 miles, and encamped at a spot under the Gebel Ramlia range ("Etham, in the edge of the wilderness of the Red Sea," xiii, 20; Num. xxxiii, 6). Continuing a short way in this direction they came up against the range of Gebel Akheider, through which there is no pass. They found themselves, therefore, "entangled in the land, the wilderness had shut them in" (Exod. xiv, 3). So they turned back and passed, north and east, through the pass of the Wadi Ramlia, and so to the Bir Beda, a watering-place, and the Wadi Beda.

It must not be supposed that the whole of this journey was accomplished in 72 hours. On the contrary, the people took a whole month to reach "the wilderness of Sin, which is between Elim and Sinai" (Exod. xvi, 1). The "days" are the distances covered by the headquarters of the host. The people had no need to hurry, once they had got away, with the approval of the king, and of the Egyptians (Exod. xii, 31–33), and were ostensibly going only into the Arabian Desert for a religious celebration. As in all their 40 years' wanderings, the headquarters moved from place to place, and the mass of the people followed at their leisure. The whole of this southern wilderness is still fairly well watered, and in former days, when it was well wooded, it was better still.

On hearing that the Israelites had turned back, the king, perceiving that they were no longer headed for the Arabian Desert for their rites, but had turned in a direction which would take them out of Egypt proper altogether, set out to pursue them with his chariots.

Streaming over the Wadi Hagul, the Wadi Hammath, and the Wadi Tweirig, the Israelites arrived at El-Hafair ("the holes") ("Pi-ha-Hirot," "the mouth of the caverns"), on the sea-shore, between a watch-tower ("Migdol"), or light-house, perhaps at Bir Odeib, and a shrine of Baal-Zephon ("the Baal of the North"), probably the northerly landmark, on a high point in the Gebel Ataqa, for ships coming up the Red Sea (Exod. xiv, 2, 9). There was no escape for the hunted people. For there is no practicable road beyond the Ras el-Adabieh, round the base of Gebel Ataqa between it and the sea. During the night they reached this point, and there they had to stand still and see the salvation of the LORD. And there the LORD performed the miracle for them of rolling back the waters between the $4\frac{1}{4}$ and the $3\frac{1}{4}$ fathom lines. And so they passed over on dry land to the Asiatic shore, near the 'Ayun Musa.

To the obstinate materialist this story involves the fatal objection of a definite miracle, in dividing the actual Red Sea. To the believer in GOD it is a confirmation of the Divine Word, that the ALMIGHTY did intervene with His mighty arm to deliver His people in their deadly extremity.

DISCUSSION.

Lieut.-Colonel A. KENNEY-HERBERT said: This paper has been written by one who knows Egypt and knows it well; the nature of the country, the habits of its people, its ancient history and its traditions. It therefore contains much valuable information; but as a commentary on the Bible story of the Exodus I must confess that it is not convincing.

It presents the picture of a Bedouin tribe leisurely moving eastward across the desert, but scattered because of the inadequacy of pasture and of water. A tribe, too, that could lose its way in the short distance between Cairo and Suez.

In contrast, the story we read in Exodus is one stupendous miracle. After their departure from Succoth, God directed their movement