

## CAMBRIDGE LIBRARY COLLECTION

*Books of enduring scholarly value*

### **Egyptology**

The large-scale scientific investigation of Egyptian antiquities by Western scholars began as an unintended consequence of Napoleon's invasion of Egypt during which, in 1799, the Rosetta Stone was discovered. The military expedition was accompanied by French scholars, whose reports prompted a wave of enthusiasm that swept across Europe and North America resulting in the Egyptian Revival style in art and architecture. Increasing numbers of tourists visited Egypt, eager to see the marvels being revealed by archaeological excavation. Writers and booksellers responded to this growing interest with publications ranging from technical site reports to tourist guidebooks and from children's histories to theories identifying the pyramids as repositories of esoteric knowledge. This series reissues a wide selection of such books. They reveal the gradual change from the 'tomb-robbing' approach of early excavators to the highly organised and systematic approach of Flinders Petrie, the 'father of Egyptology', and include early accounts of the decipherment of the hieroglyphic script.

### **Researches in Sinai**

A pioneering Egyptologist, dedicated to careful, methodical and economical research, Sir William Matthew Flinders Petrie (1853–1942) made Near Eastern archaeology a much more rigorous and scientific discipline. This 1906 publication covers Petrie's work in the Sinai Peninsula, investigating the historical and biblical significance of the region, especially as it related to the Exodus. Copiously illustrated with photographs, the book depicts the region's climate, geography and antiquities, recording the logistical and archaeological processes that characterised Petrie's approach. Notable is the material on ancient turquoise mines and a Middle Kingdom temple at Serabit el-Khadim, where inscriptions in the previously unknown Proto-Sinaitic script were discovered. Several chapters by Charles T. Currelly (1876–1957) record additional travels and observations. Petrie wrote prolifically throughout his long career, and a great many of his other publications are also reissued in this series.

Cambridge University Press  
978-1-108-06575-7 - Researches in Sinai  
W. M. Flinders Petrie  
Frontmatter  
[More information](#)

---

Cambridge University Press has long been a pioneer in the reissuing of out-of-print titles from its own backlist, producing digital reprints of books that are still sought after by scholars and students but could not be reprinted economically using traditional technology. The Cambridge Library Collection extends this activity to a wider range of books which are still of importance to researchers and professionals, either for the source material they contain, or as landmarks in the history of their academic discipline.

Drawing from the world-renowned collections in the Cambridge University Library and other partner libraries, and guided by the advice of experts in each subject area, Cambridge University Press is using state-of-the-art scanning machines in its own Printing House to capture the content of each book selected for inclusion. The files are processed to give a consistently clear, crisp image, and the books finished to the high quality standard for which the Press is recognised around the world. The latest print-on-demand technology ensures that the books will remain available indefinitely, and that orders for single or multiple copies can quickly be supplied.

The Cambridge Library Collection brings back to life books of enduring scholarly value (including out-of-copyright works originally issued by other publishers) across a wide range of disciplines in the humanities and social sciences and in science and technology.

Cambridge University Press  
978-1-108-06575-7 - Researches in Sinai  
W. M. Flinders Petrie  
Frontmatter  
[More information](#)

---

# Researches in Sinai

W.M. FLINDERS PETRIE



CAMBRIDGE  
UNIVERSITY PRESS

Cambridge University Press  
978-1-108-06575-7 - Researches in Sinai  
W. M. Flinders Petrie  
Frontmatter  
[More information](#)

---

**CAMBRIDGE**  
UNIVERSITY PRESS

University Printing House, Cambridge, CB2 8BS, United Kingdom

Published in the United States of America by Cambridge University Press, New York

Cambridge University Press is part of the University of Cambridge.  
It furthers the University's mission by disseminating knowledge in the pursuit of  
education, learning and research at the highest international levels of excellence.

[www.cambridge.org](http://www.cambridge.org)

Information on this title: [www.cambridge.org/9781108065757](http://www.cambridge.org/9781108065757)

© in this compilation Cambridge University Press 2013

This edition first published 1906  
This digitally printed version 2013

ISBN 978-1-108-06575-7 Paperback

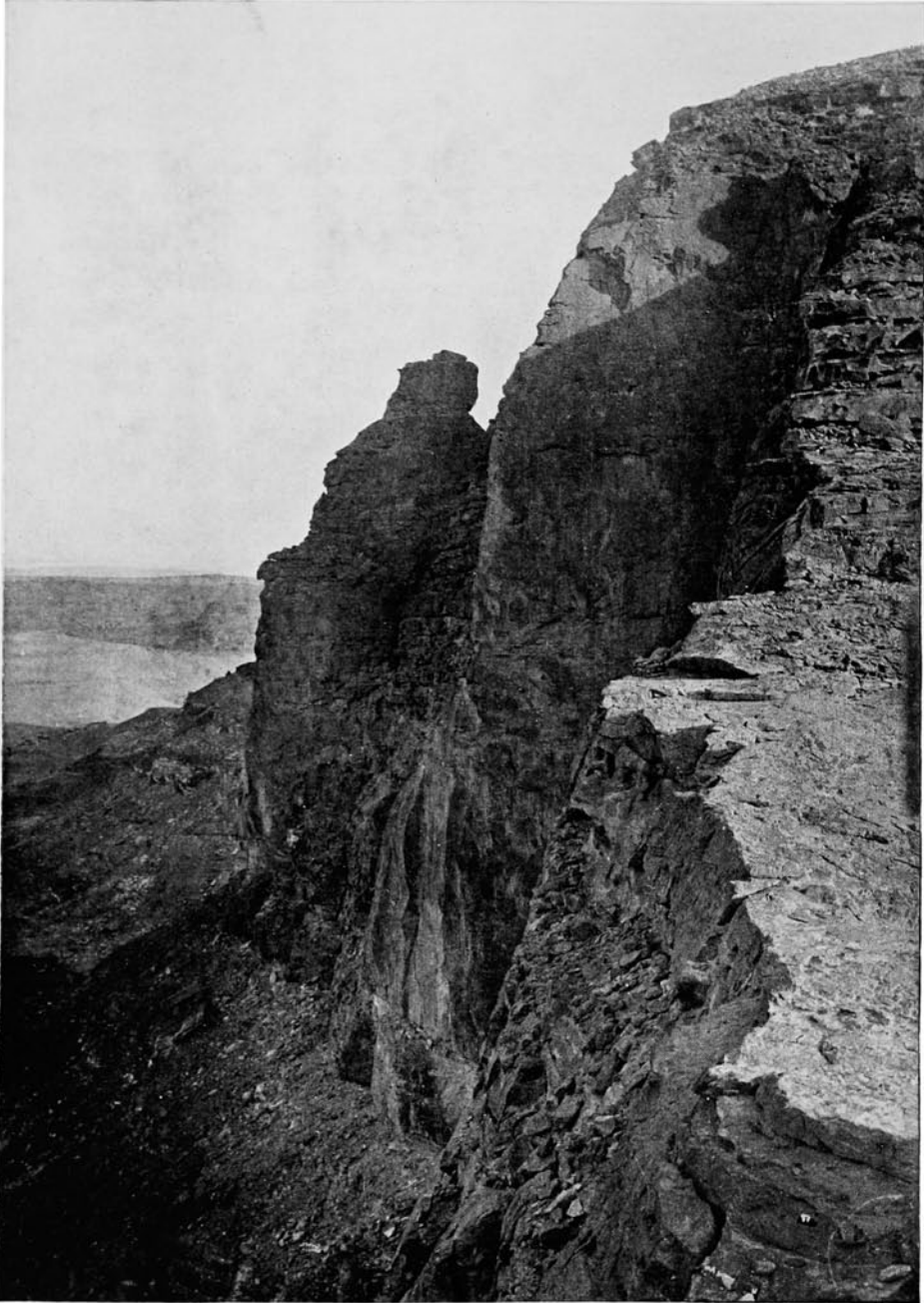
This book reproduces the text of the original edition. The content and language reflect  
the beliefs, practices and terminology of their time, and have not been updated.

Cambridge University Press wishes to make clear that the book, unless originally published  
by Cambridge, is not being republished by, in association or collaboration with, or  
with the endorsement or approval of, the original publisher or its successors in title.

Cambridge University Press  
978-1-108-06575-7 - Researches in Sinai  
W. M. Flinders Petrie  
Frontmatter  
[More information](#)

---

# RESEARCHES IN SINAI



I

THE HEIGHTS OF SERABÍ, NORTH OF THE TEMPLE.

Cambridge University Press  
978-1-108-06575-7 - Researches in Sinai  
W. M. Flinders Petrie  
Frontmatter  
[More information](#)

---

# RESEARCHES IN SINAI

BY W. M. FLINDERS PETRIE

D.C.L., LL.D., LITT.D., PH.D.,  
F.R.S., F.B.A., HON. F.S.A. SCOT.

MEMBER OF THE IMPERIAL GERMAN ARCHAEOLOGICAL INSTITUTE  
MEMBER OF THE SOCIETY OF NORTHERN ANTIQUARIES, ETC.  
EDWARDS PROFESSOR OF EGYPTOLOGY, UNIVERSITY COLLEGE, LONDON

WITH CHAPTERS BY

C. T. CURRELLY, M.A.

OFFICER OF THE IMPERIAL ORDER OF THE MEDJIDIE

WITH 186 ILLUSTRATIONS AND 4 MAPS

LONDON  
JOHN MURRAY, ALBEMARLE STREET, W.

1906

Cambridge University Press  
978-1-108-06575-7 - Researches in Sinai  
W. M. Flinders Petrie  
Frontmatter  
[More information](#)

---

PRINTED BY  
HAZELL, WATSON AND VINEY, LD.,  
LONDON AND AYLESBURY.



## PREFACE

WHEN first I went to Egypt, twenty-six years ago, I read and noted the accounts of Sinai, in the hope that I might be able to visit the monuments there; and this hope was not extinguished by all the intervening years of other work. The recent reports of monuments of the early dynasties gave additional reason for a search which might supplement the discoveries at Abydos. And the reduction of the resources for my work with the Exploration Fund made it imperative to take a site where copying was more required than excavation. Hence it came about that last winter we lived for four months in the wilderness instead of in the green plains of Egypt.

First of all, acknowledgment should be made to those previous labours which aided our work. The *Ordnance Survey of the Peninsula of Sinai*, in 1868-9, by Wilson and Palmer, is the geographical basis for all later explorers; and I have specially to thank the committee of the Palestine Exploration Fund for generously giving me copies of the map for our use. And the *Memoir on the Physical Geology and Geography*, by Dr. Hull, issued by the Palestine Fund, is a standard work which I have read with advantage. The labours of Captain Raymond Weill, during the last three years, in collating

all the copies and paper squeezes of the Egyptian inscriptions from Sinai, resulted in his publication, *Recueil des Inscriptions Égyptiennes du Sinai*, 1894. This work was of great use as indicating what inscriptions should be sought, and providing a text which we had to exceed in accuracy and completeness in our work from the original stones. Captain Weill also joined our party at first, and checked over a large part of our copies during the time he was with us.

The cost of the main expedition described here was borne by the Egypt Exploration Fund, and the expenses of three workers; while the expenses of two other workers of our party were from private means. That Fund will also publish the atlas of inscriptions and plans, which will be discussed and translated by Mr. Alan Gardiner. The present volume is a separate publication apart from the Fund, and is not, therefore, given to the subscribers. The expedition described in Mr. Currelly's chapters was undertaken for the Egyptian Research Account, in the next volume of which it will be published in detail.

I much regret that the increased burdens of the Exploration Fund at Deir el Bahri have resulted in that society ceasing to provide for my researches. It has, therefore, been needful for me to trust for the future to the growth of another basis of work, in the Egyptian Research Account and British School of Archaeology in Egypt. I have to thank most sincerely the large number of authorities in history, archaeology, and science who have consented to form the general committee of the

## PREFACE

vii

new school. On this basis it will now be possible for me to continue my researches without interruption, thanks mainly to the exertions of my wife.

The general results of the season's work here described fulfil most of our expectations; many new inscriptions were found at Serabít, and the whole relation of the remains is now clear. But, as is often the case, the unexpected results even exceed in value those for which we had hoped; and the arrangements of a Semitic ritual earlier than any yet known in Syria or Arabia, and the discovery of a writing peculiar to the region some centuries earlier than the Exodus, are results of the first importance.

Our camp of workers amounted to thirty-four persons, the largest number that have resided for work in this region since the old Egyptian mining expeditions. The needs of providing every mouthful of food at five days' journey from our base, and bringing every drop of water many miles' distance, have given an insight into the conditions there, which is of great importance for comprehending the life of earlier residents, Egyptian and Israelite.

In another manner, also, a knowledge of the country at present is essential to understanding the past. Perhaps no writer on the historical relation of Palestine to Egypt has ever realised the conditions on the spot. Some have argued that because Sinai belonged to the Egyptians, therefore no Israelites would have gone there; others have argued that Egypt (*Musri*) ceased at the Red Sea, and therefore nothing east of that could

bear that name. Both of these arguments are falsified by the present facts, in which the ancient conditions are evidently continued. At present the dominion of Egypt extends to the Gulf of 'Aqabah; all Sinai is under Egypt, and is part of Egypt politically. The frontier of Egypt runs from 'Aqabah to El Arish; and there was great excitement among our Bedawy friends when a rumour came that some Turkish soldiers had violated this frontier. To touch Sinai was to attack the independence of Egypt. Thus it was with *Musri* in the Old Testament. Yet, on the other hand, there is not an Egyptian to be found in Sinai, except a small guard on the pilgrim road at 'Aqabah, and the entirely modern quarantine station at Tor, which is a recent creation to disinfect pilgrims before entering at Suez. In the same manner, we see that anciently the Egyptians sent expeditions to mine during the winter; but there is no trace of any permanent garrisons, and the Israelites would find the land quite empty before them.

The study of the climate, and the indications of its ancient uniformity with the present state, are also of historical value. I may add, to the evidence mentioned in this book, that the carrying of heavy loads of copper ore long distances, to smelt it at places where fuel can be now obtained (as at the plain of El Márkha, and Wady Gharándel), shows that there were anciently no nearer supplies of fuel, and therefore, that the vegetation and rainfall were the same as at present.

These inquiries lie at the basis of an historical treatment of the Exodus questions. I fear that neither of the

## PREFACE

ix

extreme parties will be pleased with the conclusions which I have drawn from a criticism of the accounts. But these conclusions are based on a practical acquaintance with the conditions which has seldom underlain other views. One possible misunderstanding should be here guarded against. It must not be imagined that the Semitic ritual of the temple at Serabít had any direct connection with the Exodus some centuries later. I do not suppose the Israelites ever saw either the temple or the mines.

In the arrangement of this book some repetitions of facts and arguments in different forms has been tolerated, as it was not desirable for a reader to need to refer to various chapters in order to find the material on a single subject. The system of numbering all the blocks of illustration, instead of numbering plates, has been used in order to simplify references. In the spelling of names I have tried to be consistent. The use of *g* for *qaf* in the maps is misleading, as it is usual for *gim*; in this case, *q*, which is the genetic representative of that letter, is here used. The termination of Magháreh is adopted to mark that its final is not *alif*, but *hé*; and for *ye* the letter *y* is used so far as possible. The accents show the pronunciation of the names, and will, I hope, do away with the curious mistake of Serâbit instead of Serabít, which name has scarcely a clear vowel in it except the final.

As personal details are sometimes wanted for reference, it may be said that we left Suez on December 3rd; were at Magháreh, December 10th to January 11th; at

## PREFACE

Serabít, January 11th to March 18th ; and returned to Suez by March 23rd. Of our party, Mr. Button and myself were present throughout, December 3rd to March 23rd ; Mr. Currelly, December 18th to February 7th ; Miss Eckenstein, January 21st to March 23rd ; Mr. Frost, December 3rd to February 7th ; Mrs. Petrie, January 21st to March 23rd ; Mr. Porch, December 3rd to 19th ; and Captain Weill, December 3rd to January 28th. The work of copying and surveying went on continuously day by day ; and I was never an hour off work, as we had to secure our results and copy 250 inscriptions before the hot season. The last four chapters by Mr. Currelly refer to several places which I had no time to visit ; and these separate expeditions occupied him from February to May.

I have to thank those who smoothed our way. My friend the late Sir Charles Wilson, whose recent loss we mourn, gave much kindly advice and information about the practical life. A new friend, Mr. Bush, of Suez, assisted all the arrangements of our base there in the kindest manner. Messrs. Guétin & Charvaut, from their works at Tor, helped Mr. Currelly, and most politely cashed cheques and allowed us to draw on their stores when delays occurred with our own. Captain Lyons, R.E., the director of the survey of Egypt, permitted me to order copies of the unpublished government map ; but, unfortunately, it scarcely included Serabít el Khádem. For the purpose of copying and taking impressions I had obtained a quarter of a mile of *Times* printing-paper, but the roll was stolen by

## PREFACE

xi

some of the mining riff-raff at Magháreh, who are under no control ; and we owed our next stock of paper to the kindness of Dr. Nimr, the editor of the *Mokattem* in Cairo, who presented us with a large stock on hearing of our difficulty.

A note of the current prices in the peninsula at present may be useful to future travellers. Camel hire is the great item of expense. Abu Qudéyl's terms are 20 piastres, or 4s., a day for camel and man. Contract terms for pilgrims were 16 piastres, as I heard. We succeeded in bargains at having work done at about 12 piastres a day. And the bottom price in contracts with Sheykh Mudakhel at Tor is 10 piastres. All of these are without any back fare, if only going one way and not returning for the sender. For attendance and security we paid Sheykh Abu Ghanéym £4 a month. He offered to do this duty for 10 piastres a day at first, but rose when it came to an official contract at Suez ; and as he or his brother lived over at Serabít, far from all their concerns, I tolerated the extra. For an excellent and sturdy guard I gave Sheykh Mudakhel 4 piastres a day. All these charges are more or less blackmail ; yet as the time and attention of responsible people is given in return, it is really no more unfitting than police-rates at home. The prices of grain at Suez and Tor are about half as much again as in England ; and hence it is cheaper to have out all flour from England. Moreover, it is thus secured in boxes, which prevent camel-men feeding on it by the way ; and much better quality can be obtained, the brown-meal flour being greatly preferred

xii

## PREFACE

to the white flour of Suez, both by Egyptians and by ourselves. All stores are of better quality and cheaper direct from England than bought in Cairo. Only lentils and petroleum should be provided from Egypt.

To any one who has a moderate stock of spoken Arabic, and who knows which sheykhs to agree with beforehand, there is no difficulty about travelling in Sinai; and the points of precaution mentioned in this account will show how to accommodate European ideas to the actualities of life under such conditions. I would sooner go with my Sinai friends than travel in most countries of Europe.

W. M. FLINDERS PETRIE.

UNIVERSITY COLLEGE, LONDON, W.C.

## ERRATA

Map 1, Detail, *for* *Nagh read Naqb.*  
*Add "Maghareh" at "Mines."*



## LIST OF KINGS NAMED IN THIS VOLUME

<i>Ist Dynasty.</i>		<i>XIIth Dynasty—continued.</i>	
SEMERKHET . . .	5291—5273 B.C.	SENUST III . . .	3341—3303 B.C.
<i>IIIrd Dynasty.</i>		AMENEMHAT III	3303—3259
SA·NEKHT . . .	4945—4917	AMENEMHAT IV	3259—3250
ZESER . . .	4917—4888	<i>XVIIIth Dynasty.</i>	
SNEFERU . . .	4787—4757	AMENHOTEP I . . .	1562—1541
<i>IVth Dynasty.</i>		TAHUTMES I . . .	1541—1516
KHUFU . . .	4702—4639	TAHUTMES II . . .	1516—1503
<i>Vth Dynasty.</i>		HATSHEPSUT . . .	1503—1481
SAHURA . . .	4426—4413	TAHUTMES III . . .	1481—1449
MEN·KAU·HOR . . .	4292—4283	AMENHOTEP II . . .	1449—1423
ASSA . . . . .	4283—4239	TAHUTMES IV . . .	1423—1414
UNAS . . . . .	4239—4206	AMENHOTEP III	1414—1383
<i>VIth Dynasty.</i>		<i>XIXth Dynasty.</i>	
PEPY I . . . . .	4167—4114	RAMESSU I . . .	1328—1326
MERENRA . . . . .	4114—4107	SETY I . . . . .	1326—1300
PEPY II . . . . .	4107—4012	RAMESSU II . . .	1300—1234
<i>XIth Dynasty.</i>		MERENPTAH . . .	1234—1214
MENTUHOTEP III	3500?	SETY II . . . . .	1214—1209
<i>XIIth Dynasty.</i>		TA·USERT . . . . .	1208—1203
AMENEMHAT I . . .	3459—3429	SET·NEKHT . . .	1203—1202
SENUST I . . . . .	3439—3395	<i>XXth Dynasty.</i>	
AMENEMHAT II	3397—3362	RAMESSU III . . .	1202—1171
SENUST II . . . . .	3365—3341	RAMESSU IV . . .	1171—1165
		RAMESSU V . . . . .	1165—1161
		RAMESSU VI . . . . .	1161—1156

Cambridge University Press  
978-1-108-06575-7 - Researches in Sinai  
W. M. Flinders Petrie  
Frontmatter  
[More information](#)

---

## CONTENTS

### PREFACE, LIST OF KINGS NAMED IN THIS VOLUME, CONTENTS, LIST OF ILLUSTRATIONS

#### CHAPTER I.—ON THE SINAI ROAD

Conditions of the journey, 1—Preliminaries at Suez, 4—The start, 5—Camel-men, 6—Ayūn Mūsa, 8—Roman station, 9—Wady Werdán, 10—Wady Gharándeel, 12—Hisán Abu Zena, 13—Wady Uséyt, 14—Gravels, 15—Wady Tayíbeh, 16—Abu Zenýmeh, 17—Furnace at Seih Bába, 18—Naqb el Budérah, 19—Magháreh, 20

#### CHAPTER II.—THE BEDAWY AND THE DESERT

Making a contract, 21—Tribal system of service, 22—Road to Serabít, 23—Descent from Serabít, 24—Camp in the Wady Nasb, 26—Copper smelting, 27—The camel-child, 28—Return to Suez, 29—Advantages of Bedawy life, 30—Position of women, 32

#### CHAPTER III.—WADY MAGHÁREH AND ITS SCULPTURES

Mountains at Magháreh, 34—The strata, 35—The views, 37—Miners' huts and wall, 38—Sculpture of Ist dynasty, 41—Portrait of Sa'nekht, 43—Later sculptures, 44

#### CHAPTER IV.—THE MINERS OF WADY MAGHÁREH

The modern destroyers, 46—The earliest mining, 48—Later methods, 49—Use of flints, 50—Miners' huts, 51—Major Macdonald, 53

#### CHAPTER V.—SERABÍT EL KHÁDEM AND THE BETHELS

The map, 55—History of the valleys, 57—Geology, 58—The views, 59—The mines, 60—The original road, 62—The upright stones, 63—The groups of stones, 64—Stones with enclosures, 65—Enclosures without upright stones, 66—Sleeping in sacred places, 67—The Bethel custom, 68—Adoption of local worship, 70

## CONTENTS

## CHAPTER VI.—THE TEMPLE OF SERABÍT

The approach to the Temple, 72—Enclosure walls, 74—Entrance, 75—Cubicle chambers, 75—Pylon, 79—Outer steles, 82—Shrine of Kings, 84—Side door, 85—Hat·hor *hanafiyeh*, 86—Lesser *hanafiyeh*, 87—Approach of Sopdu, 88—Hall of Sopdu, 89—Sanctuary, 89—Porch, 91—Portico, 93—Cave of Hat·hor, 94

## CHAPTER VII.—THE HISTORY AND PURPOSE OF THE TEMPLE

Begun under Sneferu, 96—The XIIth dynasty builders, 97—The bed of ashes, 99—Semitic burnt sacrifices, 100—Offerings of the XVIIIth dynasty, 102—Building by Hatshepsut, 102—Change in direction of axis, 103—*Hanafiyehs*, 105—System of ablutions, 106—Later additions to temple, 108

## CHAPTER VIII.—THE MINING EXPEDITIONS

The organization, 109—The directors, 110—The controllers, 112—The Old Kingdom system, 114—The chief workmen, 115—The labourers, 117—The foreigners, 118—The system at work, 119

## CHAPTER IX.—THE LESSER AND FOREIGN MONUMENTS

Hawk of Sneferu, 122—The four kings, 123—The XIIth dynasty figures, 124—The Hat hor figures, 125—The head of Thyi, 126—Stele of Sutekh, 127—The Ramesside sculptures, 128—The inscriptions in a new alphabet, 129

## CHAPTER X.—THE ALTARS AND THE OFFERINGS

The altars, 133—Early head of Hat·hor, 135—Conical stones, 135—Alabaster vases, 137—Glazed objects, 138—Vases, 139—Menats, 141—Bracelets, 143—Wands, 144—Ring-stands, 145—Sistra, 146—Tablets of Hat·hor, 147—Tablets of cats, 148—Totals of offerings in each reign, 149—Smaller objects, 150—Polychrome vases, 151—Beads, 152

## CHAPTER XI.—THE MINES OF SERABÍT EL KHÁDEM

Main group, 154—Inscribed mines, 156—Largest cavern, 159—Stone tools, 159—Flints used, 160—Copper tools, 161

## CHAPTER XII.—THE REVISION OF CHRONOLOGY

The Sothis period, 165—Dates fixed by it, 166—Interval of the XIIIth to XVIIth dynasties, 167—Season of mining, 168—Dates given by Sinai steles, 169—Value of Manetho, 171—His agreement with the earlier date, 173—Dates in Old Kingdom, 174—List of dynasties, 175—The intervals of the *Sed* festival, 176—The *henti*, 177—List of *Sed* festivals, 178—List of chief *Sed* festivals, 180—Nature of the *Sed* festival, 181—Parallel deaths of kings, 181—Details of *Sed* festival, 183—Origin of the festival, 185

## CONTENTS

xvii

## CHAPTER XIII.—THE WORSHIP AT SERABÍT EL KHÁDEM

Burnt sacrifices, 186—Incense altars, 189—Conical stones, 189—Ablutions, 190—  
 Dreaming, 190—Hat·hor and Ishtar, 191

## CHAPTER XIV.—THE CONDITIONS OF THE EXODUS

Literary criticism, 194—Variability of Phraseology, 196—Early use of Writing, 199—  
 Misuse of the word Miracle, 201—Direction of Exodus, 203—Road to Sinai,  
 205—No change in rainfall, 206—Small population, 207—Corruption of Israelite  
 census, 209—Original form of census, 211—Tests, 212—Later numbers in the  
 desert, 214—Levites a later organization, 215—Numbers in Palestine, 217—  
 The Egyptian point of view, 221—Summary, 223

## CHAPTER XV.—TOR TO MAGHÁREH. BY C. T. CURRELLY

At Tor, 224—Bedawy travel, 225—Flints on the G'aa desert, 227

## CHAPTER XVI.—GEBEL MUSA AND THE NAWAMIS.

BY C. T. CURRELLY

The road to Gebel Musa, 229—Manna, 230—Traditions of the Bedawyn, 232—  
 Life of the Bedawyn, 233—The monastery, 237—Gebel Musa, 238—Settlement,  
 in Wady Ahmar, 239—Strayed workmen, 241—Circles and furnace in  
 Wady el Gow, 242—Nawamis in Wady Nasb, 243—Stone circles, 244

## CHAPTER XVII.—MOUNT SINAI AND GEBEL SERBÁL.

BY C. T. CURRELLY

Start from Tor, 246—The centre for defence, 247—Rephidim, 249—Water by coast,  
 249—Sinai not at Gebel Musa, 251—Mount Serbál the Mount of the Law, 252—  
 The Feirán, 255—Removing the sculptures of Magháreh, 256

## CHAPTER XVIII.—TOR TO 'AQABAH. BY C. T. CURRELLY

Bedawy tombs, 260—Ain Hudherah, 262—Pearl divers, 264—'Aqabah, 265—Turned  
 back by Turkish troops, 266—The pilgrim road, 267—Population of Sinai, 268

## INDEX

Cambridge University Press  
978-1-108-06575-7 - Researches in Sinai  
W. M. Flinders Petrie  
Frontmatter  
[More information](#)

---

## LIST OF ILLUSTRATIONS

	PAGE
1. THE HEIGHTS OF SERABÍT, NORTH OF THE TEMPLE . . . . .	<i>Frontispiece</i>
2. IN WADY GHARÁNDEL, LOOKING NORTH. . . . .	<i>Facing</i> 12
3. IN WADY GHARÁNDEL (ELIM) . . . . .	" 12
4. PALMS IN WADY GHARÁNDEL . . . . .	" 13
5. BROOM-RAPE IN WADY GHARÁNDEL . . . . .	" 13
6. THE HEAP OF ABU ZENA. . . . .	" 14
7. TWO STONE-HEAPS BY THE WAYSIDE . . . . .	" 14
8. ROAD NORTH-WEST OF WADY USÉYT . . . . .	" 15
9. FAULTED MARL STRATA IN WADY USÉYT . . . . .	" 15
10. PALM-TREES IN WADY USÉYT . . . . .	" 18
11. CLIFFS IN WADY TAÝIBEH . . . . .	" 18
12. HEAD OF THE SEIH BÁBA . . . . .	" 18
13. NORTH FROM BUDÉRAH PASS . . . . .	" 20
14. SANDSTONE RIDGE, WADY SHELLÁL . . . . .	" 20
15. CAMELS CLIMBING THE NAQB BUDÉRAH PASS. . . . .	" 20
16, 17, 18. VIEWS IN THE WADY DHÁBA, NORTH OF TEMPLE . . . . .	" 24
19. HILL AT MOUTH OF THE WADY NASB . . . . .	" 26
20. EAST SIDE OF WADY NASB. +, TABLET OF AMENEMHAT IV . . . . .	" 26
21. WADY LAHYAN, FROM + IN VIEW 20 . . . . .	" 26
22. GARDEN IN THE WADY NASB . . . . .	" 28
23. ARAB GRAVE IN THE WADY NASB . . . . .	" 28
24. ARAB GRAVE IN ENCLOSURE, WITH DOORWAY . . . . .	" 28
25, 26, 27. CAMELS ON THE ROAD . . . . .	" 29
28, 29. CAMELS IN THE DESERT . . . . .	" 30
30. WHITE BROOM, RETAMEH . . . . .	" 30

## MAGHÁREH

31. ET TARTÍR ED DHAMI, BASALT HILL IN FRONT. TOP OF LOWER VIEW . . . . .	<i>Backing</i> 34
32. ET TARTÍR ED DHAMI, FROM MAGHÁREH . . . . .	" 34
33. TOP OF VIEW 34 . . . . .	" 35
34. MOUNTAINS NORTH-EAST OF MAGHÁREH . . . . .	" 35

xx LIST OF ILLUSTRATIONS

	PAGE
35. MOUNTAINS NORTH-EAST OF MAGHÁREH, AND WADY IQNEH . . . . .	<i>Facing</i> 36
36. CAMEL'S SKULL ON "FORT" HILL, WADY IQNEH BELOW . . . . .	" 36
37. THE EASTERN MOUNTAINS, FROM MAGHÁREH . . . . .	" 37
38. THE SOUTHERN MOUNTAINS AND SERBÁL, FROM MAGHÁREH . . . . .	" 37
39. NUMBERED POSITIONS OF INSCRIPTIONS . . . . .	" 38
40. INSCRIBED BLOCK IN VALLEY APPROACHING MAGHÁREH . . . . .	" 38
41. HUTS OF XII DYNASTY. WALL. MINE OF XII DYNASTY . . . . .	" 39
42. VALLEY. HUTS OF IV DYNASTY ON HILL IN FOREGROUND . . . . .	" 39
43. TABLETS OF SAHURA AND SNEFERU . . . . .	" 40
44. CHISEL-CUTTINGS ON ANCIENT MINE . . . . .	" 40
45. SCENE OF SEMERKHET AND GENERAL. I DYNASTY . . . . .	" 41
46. GENERAL OF SEMERKHET . . . . .	" 41
47. SCENE OF SEMERKHET SMITING THE BEDAWY CHIEF. I DYNASTY . . . . .	" 42
48. HEAD OF SA NEKHT. III DYNASTY . . . . .	" 43
49. SA'NEKHT. III DYNASTY . . . . .	<i>Backing</i> 44
50. TABLET OF SNEFERU. III DYNASTY . . . . .	" 44
51. GROUP OF FIGURES OF SNEFERU. III DYNASTY . . . . .	" 45
52. TABLET OF SAHURA. V DYNASTY . . . . .	<i>Facing</i> 45
53. TABLET OF RA'N'USER. V DYNASTY . . . . .	" 45
54. TABLET OF MEN'KAU'HOR. V DYNASTY . . . . .	" 46
55. TABLET OF AMENEMHAT III. XII DYNASTY . . . . .	" 46
56. STONE POUNDERS FOR CRUSHING SANDSTONE . . . . .	<i>Backing</i> 48
57. STONE PICKS STONE VASE GRINDER . . . . .	" 48
58. STONE MAULS AND HAMMERS FOR CRUSHING SANDSTONE . . . . .	" 49
59. SERABÍT. BLACK STONE TRIPOD, ONE LEG REMAINING . . . . .	" 49
60. FLINT TOOLS USED FOR WORK IN SANDSTONE, AND OTHERWISE . . . . .	<i>Facing</i> 50
61. POTTERY, XII DYNASTY, BURIED UNDER HUT . . . . .	" 52
62. POTTERY AND CORN-GRINDERS. XII DYNASTY . . . . .	" 52
63. MAJOR MACDONALD'S HOUSE AT MAGHÁREH . . . . .	" 54
64. TYPES OF GRAVES IN ARAB CEMETERY . . . . .	" 54
65. THE CAMP KITCHEN . . . . .	" 54

SERABÍT

66. WADY DHÁBA, LOOKING NORTH FROM ANCIENT ROAD TO TEMPLE . . . . .	<i>Facing</i> 56
67. HEAD OF VALLEY 2, SOUTH OF TEMPLE . . . . .	" 56
68. MINE BANKS AT F. STELE OF SETY IN DISTANCE . . . . .	" 58
69. GORGE OF VALLEY 3, FROM F. RAS SUWÍQ IN DISTANCE . . . . .	" 58
70. GEBEL UMM RIGLAYN AND BRANCH OF WADY BÁTÁH . . . . .	" 59
71. CAMP AT TOP OF WADY UMM AGRÁF . . . . .	" 59
72. QUARRYING IN MINE AT L. XVIII DYNASTY . . . . .	" 60
73. INTERIOR OF MINE AT M . . . . .	" 60
74. ROCK SHRINE ON ANCIENT ROAD TO TEMPLE . . . . .	" 64
75. UPRIGHT MEMORIAL STONES AND HEAPS . . . . .	" 64
76. GROUP OF UPRIGHT STONES . . . . .	" 65
77. ENCLOSURE AND STELE OF SENUSERT I . . . . .	" 65



## LIST OF ILLUSTRATIONS

xxi

	PAGE
78. ENCLOSURE AND STELE OF SEBEK'HER'HEB, LOOKING WEST. XII DYNASTY . . . . .	<i>Backing</i> 66
79. ENCLOSURE AND STELE OF SEBEK'HER'HEB, LOOKING NORTH . . . . .	" 66
80. ALTAR AND STELE OF SEBEK'HER'HEB; AMENEMHAT III . . . . .	" 67
81. SHELTERS OF STONES ON HILL BEFORE TEMPLE . . . . .	<i>Facing</i> 68
82. SHELTER OF STONES ON HILL BEFORE TEMPLE . . . . .	" 68
83. SHELTERS OF STONES ON HILL BEFORE TEMPLE . . . . .	" 70
84. THE BEST-BUILT STONE SHELTER BEFORE TEMPLE. RAS SUWÍQ IN DISTANCE . . . . .	" 70
85. APPROACH TO TEMPLE FROM WEST. STELE OF SETY I . . . . .	" 72
86. NORTH-EAST SIDE OF TEMPLE . . . . .	" 72
87. THE TEMPLE, FROM WESTERN QUARRY. . . . .	" 73
88. THE TEMPLE, LOOKING UP AXIS . . . . .	" 73
89. THE TEMPLE, LOOKING WEST, FROM TOP OF THE KNOLL OVER THE SACRED CAVE . . . . .	<i>Backing</i> 74
90. ENCLOSURE WALLS OF TEMPLE, FROM SAME POINT AS 89 . . . . .	" 74
91. ENCLOSURE WALLS OF TEMPLE, LOOKING UP TO KNOLL OVER THE SACRED CAVE . . . . .	" 75
92. ENCLOSURE WALL AROUND THE KNOLL. HAEMATITE HILL BEHIND . . . . .	" 75
93. MODEL OF TEMPLE, FROM THE NORTH . . . . .	<i>Facing</i> 75
94. MODEL OF TEMPLE, FROM THE NORTH-WEST . . . . .	" 75
95. HAT'HOR PILLARS OF AMENHOTEP III. XVIII DYNASTY . . . . .	" 80
96. WEST FRONT OF PYLON, CARVED BY TAHUTMES III AND SETY II . . . . .	" 80
97. HATSHEPSUT'S SHRINE OF KINGS, ON NORTH OF TEMPLE . . . . .	" 84
98. FIGURES OF SOPDU AND AMENEMHAT III, SHRINE OF KINGS . . . . .	" 84
99. NORTH DOORWAY OF TEMPLE, HAT'HOR HANAFIYEH BEHIND . . . . .	" 85
100. HAT'HOR HANAFIYEH, FROM EAST SIDE . . . . .	" 85
101. HAT'HOR HANAFIYEH, FROM SOUTH-WEST . . . . .	" 86
102. HAT'HOR HANAFIYEH, FROM NORTH . . . . .	" 86
103, 104. HEADS OF PILLARS IN THE HAT'HOR HANAFIYEH, OF TAHUTMES III . . . . .	" 87
105. LESSER HANAFIYEH, LOOKING EAST . . . . .	" 88
106. LESSER HANAFIYEH, LOOKING NORTH . . . . .	" 88
107. OUTSIDE OF SANCTUARY WALL, RAMESSU IV AND AMEN . . . . .	" 90
108. INSIDE OF SANCTUARY WALL, ALTAR AND HAT'HOR . . . . .	" 90
109. NORTH-EAST CORNER OF PORTICO BEFORE SACRED CAVE . . . . .	" 94
110. HAT'HOR AND KHNUMU, EAST SIDE OF HANAFIYEH . . . . .	" 94
111. HAT'HOR HANAFIYEH, OF TAHUTMES III . . . . .	" 106
112. PILLARS OF RAMESSU VI . . . . .	" 108
113. STELE OF AMENEMHAT III . . . . .	" 108
114. STELE OF HOR'UR'RA, IN XII DYNASTY APPROACH . . . . .	" 110
115. STELE OF SÍSOPDU, AMENEMHAT IV . . . . .	" 112
116. SET STELE OF UZA'HOR'EM'SA, AMENEMHAT IV . . . . .	" 112
117. STELE OF SINEFERT . . . . .	" 114
118. STELE OF 100 NAMES, UPPER HALF. YEAR 4, AMENEMHAT III . . . . .	" 114
119. STELE OF SEBEK'HER'HEB. YEAR 40, AMENEMHAT III . . . . .	" 116

xxii LIST OF ILLUSTRATIONS

	PAGE
120. BASES OF STELES, FACING THE SACRED CAVE . . . . .	<i>Facing</i> 116
121. OBELISK OF THREE SEMITES, IEHANEM, B'AAASHA, AND KENI . . . . .	" 118
122. GRANITE STELE OF PTAH'SEANKH AND BEBU . . . . .	" 118
123. STELE OF YEAR 27, TAHUTMES III . . . . .	" 119
124. STELE OF YEAR II, QUEEN RANEFRU . . . . .	" 119
125. STELES OF XII DYNASTY, PARTLY RE-WORKED BY RAMESSU III . . . . .	" 120
126. GREY MARBLE HAWK OF SNEFERU, III DYNASTY. . . . .	" 122
127. BABOON IN SANDSTONE . . . . .	" 122
128. GROUP OF SENUSERT I, AMENEMHAT I, MENTUHOTEP III, AND SNEFERU . . . . .	" 124
129. BASE OF FIGURE OF SNEFERU MADE BY SENUSERT I, AND ANOTHER EARLY BASE . . . . .	" 124
130. HAT'HOR, DEDICATED BY SHIPMASTER SNEFERU, AND FIGURE OF UN- KNOWN KING . . . . .	" 125
131. UNKNOWN QUEEN, OF LOCAL WORK . . . . .	" 125
132. HAT'HOR, LIMESTONE, XII DYNASTY . . . . .	" 125
133. HEAD OF STATUETTE OF QUEEN THYL. DARK GREEN STEATITE. XVIII DYNASTY . . . . .	" 126
134. MENTU'NEKHT OFFERING TO SUTEKH . . . . .	" 127
135. STELE OF RAMESSU I, NAMING THE ATEN. XIX DYNASTY. . . . .	" 127
136. BACK OF STATUE OF RAMESSU II . . . . .	" 128
137. FIGURE OF BANTANTHA . . . . .	" 128
138. SANDSTONE FIGURE, FOREIGN WORK AND INSCRIPTION . . . . .	" 130
139. FOREIGN INSCRIPTION ON ABOVE. XVIII DYNASTY . . . . .	" 130
140. QUEEN NEFERTARI AS HAT'HOR. XIX DYNASTY. . . . .	" 132
141. SPHINX OF FOREIGN WORK AND INSCRIPTION. XVIII DYNASTY . . . . .	" 132
142. ALTARS, AND EARLY HAT'HOR CAPITAL . . . . .	<i>Backing</i> 134
143. CONICAL STONES, ALTARS, AND TANK . . . . .	" 135
144. FLINT KNIFE, XII DYNASTY. ALABASTER VASES INSCRIBED, XVIII- XIX DYNASTIES . . . . .	<i>Facing</i> 136
145. PIECES OF LOTUS CUP, AMENHOTEP III. PIECES OF ALABASTER STATUETTES . . . . .	" 138
146. PIECES OF GLAZED VASES . . . . .	" 140
147. PIECES OF GLAZED BOWLS . . . . .	" 141
148. GLAZED MENATS . . . . .	" 142
149. GLAZED BRACELETS . . . . .	" 143
150. GLAZED WANDS AND RING-STANDS . . . . .	" 144
151. GLAZED RING-STANDS AND SISTRA . . . . .	" 146
152. GLAZED PLAQUES OF HAT'HOR . . . . .	" 147
153. GLAZED HEADS OF HAT'HOR AND ANIMAL FIGURES . . . . .	" 148
154. GLAZED PLAQUES OF SERVAL CATS . . . . .	" 149
155. GLAZED FIGURES AND PIECES OF BOWLS . . . . .	" 150
156. PIECES OF GLAZED VASES WITH ANIMALS AND PLANTS . . . . .	" 151
157. PIECES OF TWO JARS WITH RELIEFS, RAMESSU III . . . . .	" 152
158. PIECES OF TALL JARS WITH COLOURED GLAZES, RAMESSU III . . . . .	" 153
159. GLAZED BEADS OF XVIII-XIX DYNASTIES . . . . .	" 154
160. COPPER CHISELS FROM TEMPLE. XIX DYNASTY . . . . .	" 162

## LIST OF ILLUSTRATIONS

xxiii

	PAGE
161. CRUCIBLE FOR MELTING COPPER, FROM TEMPLE . . . . .	<i>Facing</i> 162
162. WROUGHT FLINTS FROM GRAVELS . . . . .	" 163
163. WROUGHT FLINTS FROM THE PLATEAU . . . . .	" 163
164. THE MONASTERY OF ST. CATHARINE, FROM GEBEL MUSA . . . . .	" 238
165. THE MONASTERY GARDEN . . . . .	" 238
166. THE CHARNEL HOUSE . . . . .	" 238
167. VIEWS FROM NEAR THE TOP OF GEBEL MUSA . . . . .	" 239
168. VIEW LOOKING TOWARDS THE TOP . . . . .	" 239
169. CHAPEL OF ELIJAH . . . . .	" 239
170, 171. WORKED FLINTS FROM THE WADY AHMAR . . . . .	" 240
172. SECTION OF A FURNACE . . . . .	" 242
173. PLAN OF A TOMB CIRCLE . . . . .	" 242
174. SECTION OF A NAWAMI . . . . .	" 242
175. METHOD OF BINDING THE CHISEL-SHAPED ARROW-POINTS . . . . .	" 242
176, 177, 178. THREE VIEWS OF THE NAWAMIS NEAR THE WADY SOLAF . . . . .	" 243
179. SHELL BRACELETS AND BEADS, FLINT ARROW-HEADS, AND COPPER TOOLS FROM THE NAWAMIS . . . . .	" 244
180, 181, 182, 183. VIEWS IN THE WADY FEIRÁN . . . . .	" 254
184. AIN HUDHERAH (HAZEROTH) . . . . .	" 262
185. THE GREAT BOWL OF ROCKS AROUND AIN HUDHERAH . . . . .	" 262
186. LEAVING AIN HUDHERAH FOR THE WADY GHAZALEH . . . . .	" 262

## MAPS

1. THE SINAI PENINSULA . . . . .	<i>Facing</i> 34
2. WADY MAGHÁREH, WITH POSITIONS OF STELES AND LEVELS IN FEET . . . . .	" 38
3. VALLEYS OF SERABÍ EL KHÁDEM . . . . .	" 55
4. PLAN OF TEMPLE OF SERABÍ . . . . .	<i>At End of Book</i>