l

182
250

THE PENETRATION OF ARABIA

THE STORY OF EXPLORATION

THE PENETRATION OF ARABIA

A RECORD OF

THE DEVELOPMENT OF WESTERN KNOWLEDGE CONCERNING THE ARABIAN PENINSULA

BY

DAVID GEORGE HOGARTH, M.A., F.R.G.S., F.S.A.

FELLOW OF MAGDALEN, OXFORD

WITH ILLUSTRATIONS FROM DRAWINGS, PHOTOGRAPHS AND MAPS

AND MAPS BY J. G. BARTHOLOMEW

NEW YORK

FREDERICK A. STOKES COMPANY

PUBLISHERS

LIBRARY of CONGRESS
Two Copies Received
MAR 22 1904
Copyright Entry
Jan. 30 504
CLASS XXc No.
78216
COPY B
78216

IS204
H71

Copyright, 1904,
By Frederick A. Stokes Company

Published in April, 1904

THE UNIVERSITY PRESS, CAMBRIDGE, U.S.A.

PREFATORY NOTE

THE purpose of this volume is to describe the exploration of inland Arabia. Little, therefore, will be found in it concerning coast-surveys, or travellers who visited ports only. The author feels it incumbent on him to state that he is not among those who have penetrated the Arabian Peninsula, and that his personal acquaintance with its inhabitants and their language is small. His sole qualification for writing the story of Arabian exploration rests on a study of the literature of Arabian travel, which the fascination of the subject has led him to pursue for some years. His book must be regarded therefore as a mere essay in the polarization, appreciation, and introduction to the public of other men's first-hand work.

Unlike the first volume in this Series, the second cannot pretend to relate the achievement of a Quest. Arabia is still in great part withdrawn from western eyes. But the present moment, which occurs during a marked pause in its exploration, is not an unfitting one for taking stock of knowledge. When the actual political changes and convulsions, which are due in large measure to the constant advance of Ottoman power in the peninsula, have ceased to disturb

its society, Europeans will doubtless complete the penetration of Arabia. Many obligations are acknowledged either in the following pages or under the titles of the illustrations. The Index is due to the author's wife.

D. G. HOGARTH.

LONDON, 1904.

NOTE ON ORTHOGRAPHY

THE orthography of geographical place-names in this volume (with the exception of a few too familiar to be changed) follows the system adopted by the Royal Geographical Society. It is only necessary to remind readers that there are no mute letters: that *j* has its English value; and that *au* is to be sounded *ow*, as in German.

Other Arabic names and words are transliterated for the most part on a scientific system, for which I have to thank my friend, the learned Arabist, Mr. Guy Lestrange. A few, which have passed into the English language under unscientific forms, retain their familiar spelling in special cases, e. g. the names of the Meccan Prophet, his son-in-law, and the founder of the present Egyptian dynasty. Thus, among other inconsistencies, *Mahomet*, *Mehemet*, and *Muḥammad*; *Ali* and *'Alī*; *Wahabi* and *Wahhāb*, will be found in the text. I use *Bedawin*, *Bedawins*, rather than the French form *Bedouin*. Neither one nor the other, of course, is Arabic.

When quoting other writers, I always use their orthography, however inconsistent with that of my own text.

D. G. H.

CONTENTS

PART I. THE PIONEERS

Chapter		Page
I.	Before Exploration	1
II.	Niebuhr in Yemen	39
III.	Pilgrims in Hijaz	64
IV.	The Egyptians in Nejd	98
V.	The Egyptians in the Southwest	120
VI.	The Unknown South	133
VII.	The Unknown North	155

PART II. THE SUCCESSORS

VIII.	Western Borderlands	176
IX.	Southern Borderlands	206
X.	Eastern Borderlands	226
XI.	The Central North	242
XII.	The Centre	265
XIII.	The Central South	296
XIV.	Unknown Arabia	323
XV.	Summary	338

Index 349

LIST OF ILLUSTRATIONS

Medina . . . . . *Frontispiece*

Ptolemy's Map according to Sprenger . . . *To face page* 17

Berthelot's Map of Arabia (1635) . . . . . " 33

D'Anville's Map of Arabia (1755) . . . . . " 36

La Roque's Map of Yemen (1716) . . . . . " 45

Carsten Niebuhr . . . . . " 51

Baurenfeind's Sketch of the Coffee Hills, Yemen (1763) . . . . . " 53

Niebuhr's Plan of Sana (1763) . . . . . " 55

Niebuhr's Map of Yemen (1763) . . . . . " 60

Mecca. Pilgrims at Prayer in the Great Mosque-Precinct . . . . . " 64

Mecca Pilgrims . . . . . " 68

Mecca Pilgrims at the Tomb of Sittana Metmunah . . . . . " 76

Burton's Plan of Medina (1854) . . . . . " 79

The Ka'bah, Mecca . . . . . " 81

Ulrich Jaspar Seetzen . . . . . " 83

Johann Ludwig Burckhardt . . . . . " 88

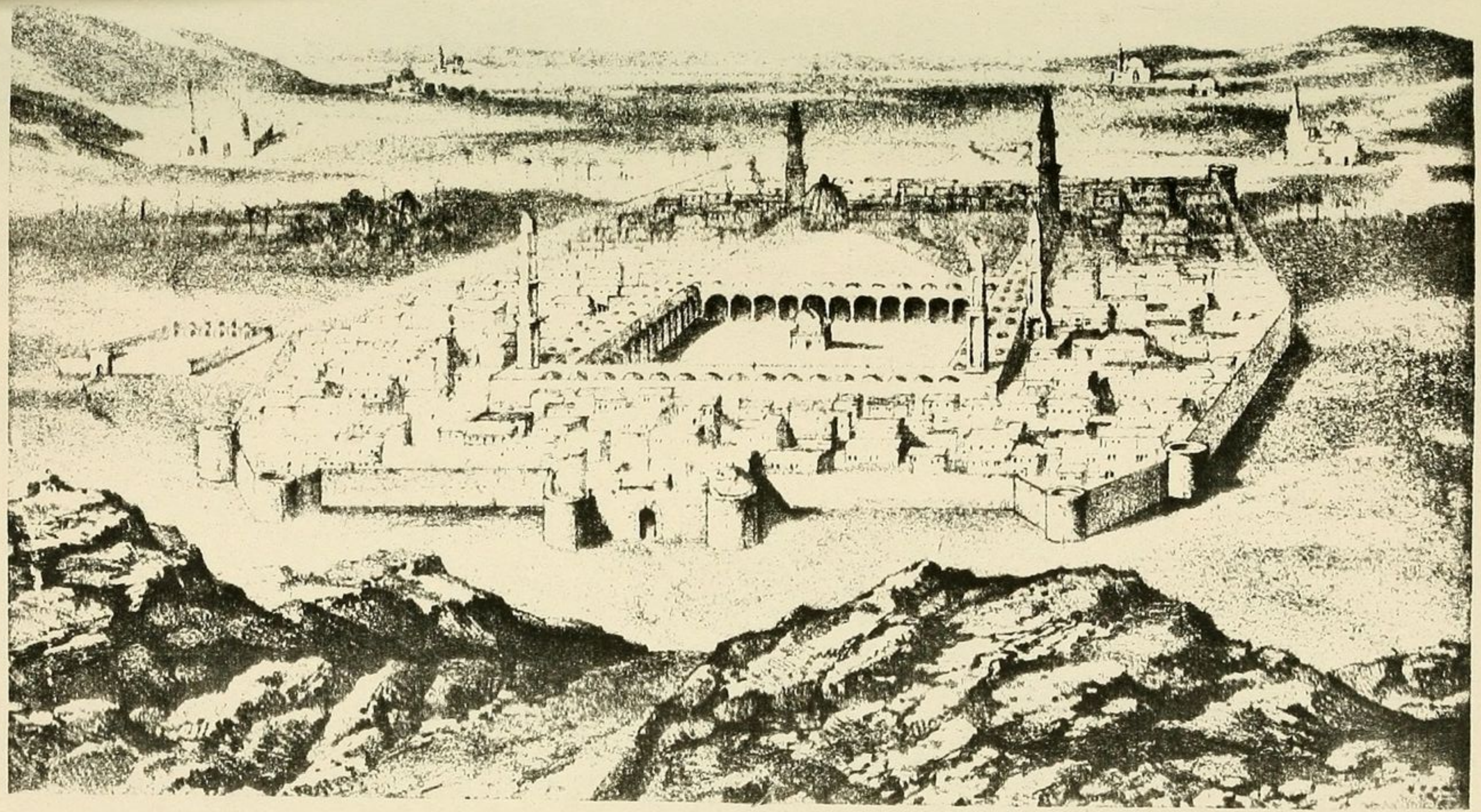
Burckhardt's Plan of Mecca (1814) . . . . . " 90

Mecca Pilgrims in Camp outside the City . . " 92

The Tomb-Mosque of the Prophet at Medina " 94

The Wahabi Emir 'Abd-Allah Ibn Sa'ūd . *To face page* 103
Medina . . . . . " 111
Sadlier's Route . . . . . " 117
Jomard's Map of Asir and S. Hijaz (1839) . " 124
Struys' Sketch of Maskat (about 1655) . . . " 134
Wellsted's Map of Oman (1838) . . . . . " 143
The First Published Himyaritic Inscriptions . " 145
Von Maltzan's Map of Von Wrede's Routes . " 151
George Augustus Wallin . . . . . " 161
Wallin's Routes . . . . . " 169
Ritter's Map of Arabia (1852) . . . . . " 171
Richard Burton . . . . . " 178
J. Snouck Hurgronje . . . . . " 190
Mecca . . . . . " 192
Houses in Sana . . . . . " 198
Manzoni's Plan of Sana (1879) . . . . . " 200
Joseph Halévy . . . . . " 202
Imam Sharīf's Survey of Hadramaut (1893) . " 221
Maskat . . . . . " 229
Palgrave's Plan of Hofuf (1862) . . . . . " 237
William Gifford Palgrave . . . . . " 245
Wilfrid Scawen Blunt . . . . . " 254
Lady Anne Blunt . . . . . " 256
Charles Huber . . . . . " 258
Julius Euting . . . . . " 260
Charles Montague Doughty . . . . . " 271
Sketch by Doughty of a Tomb Façade at El Hejr " 273
The Teima Stone . . . . . " 282

Doughty's Sketch of Kheibar (1877) . . *To face page* 285
Palgrave's Plan of Hail (1862) . . . . . " 287
Palgrave's Map of Arabia (1862) . . . . . " 308
Palgrave's Plan of Riad (1862) . . . . . " 313
Jidda . . . . . " 345



Medina

Sketch by a native, published by Burton

ARABIA

PART I. THE PIONEERS

CHAPTER I

BEFORE EXPLORATION

ARABIA, a land larger than peninsular India, lies in the heart of the Old World, and beside its main road of commerce, but we know much of it hardly better than the Antarctic continent. It is so lean a territory that international trade has little or no concern with it, and so difficult that the long circuit by sea is preferred to any cross route by land. Nevertheless, few regions of the world have played a greater part in the history of mankind.

This Arabian peninsula, which, if restricted to its smallest dimensions by the thirtieth parallel of latitude, contains near a million and a quarter square miles, is physically one with the continental region from which it depends; for, rising abruptly from the Western Sea, and falling eastward by a long and easy decline, it continues the land shelf of Syria. The slope of the Arabian portion of the shelf is rather to north

of east, and the elevation of the whole tends to rise towards the south. The surface is generally of sandstone formation, thinly imposed on limestones, but disordered in many places by intrusive plutonic rocks, or masked by eruptive matter; and this peculiar superficial structure combines with certain accidents of its position to produce the general barrenness for which the peninsula is notorious.

Arabia is placed between seas east and west; but these are so narrow as hardly to break climatic continuity with the Asian and African continental masses, both of which are exceptionally rainless in these latitudes. While even Syria is parched by the interception of much of the Mediterranean vapour and its precipitation on high western steeps, Arabia is in worse case. The little the western sea has to give is dissipated before reaching the long eastward slopes of the peninsula. The southern ocean might, and does, bring rains; but the monsoon strikes Arabia just where the land face is highest and most abrupt; and, accordingly, while twice in the year it does much for the short seaward slopes of Yemen and Asir (though not with absolute regularity, owing to the proximity of the high African lands), very little moisture survives for the inland slopes, and the last sprinklings are exhausted in the southern half of the peninsula. Oman obtains enough rain; but the mass of Central Arabia has to depend on such uncertain vapours as may come off the narrow Persian Gulf, or ride on northern and easterly air currents,

which, after crossing other lands, themselves thirsty enough, have to encounter the dilating influence of superheated sands. Arabia, therefore, cannot escape being among the most rainless countries on earth, and, further, through its low latitude, one of the hottest. The isothermal line of highest August temperature passes right across it. These, however, are not all its physical disadvantages. Most of the little moisture that the higher shelf does obtain is absorbed into its limestones and lost, to reappear at the foot of the eastward slope, in the hot Hasa and Katif sources, or actually under the sea surface at Bahrein. Nor is the volume of these coastward springs sufficient to maintain a single stream perennial as far as the sea. Despite Ptolemy, Arabia has not, and probably never had, a true river in all its immense area.

It follows that settled life is sporadic over almost all the peninsula, maintained in such isolated spots as collect a little ground water from wide surrounding areas. In other words, Arabia has no continuously cultivated regions, except in the most favoured southern coastal tracts, but only oases of small extent, divided one from another by deserts of greater area, which, thanks to the nature of the surface formation, are often of peculiarly prohibitive character. Travellers not only must encounter there immense stretches of dusty limestone steppe, such as Arabs call *hāmid* (Hamad), where water is to be obtained only from very deep wells, to make or maintain which there is hardly any population; but, in order to reach the

interior at almost all points, they must face two varieties of desert even more formidable.

The first variety is represented by those immense lava tracts, named *ḥarrah,* most painful for man and beast, owing to their broken and rugged sterility and their radiant heat, which, with but few intervals, form a wide barrier on the west from Midian to Mecca; the second variety by the high dune regions of wasted sandstone, wind-borne from the west (*nafūd, dahnā,* or *aḥḳāf*), which form an inner ring round the heart of Arabia. On both the north and the south these sand belts are continuous and of great breadth. The northern Nafūd can be crossed only with great labour and circumspection, as we shall see hereafter, and has been crossed, in fact, by not more than half a score of Europeans. The southern sand desert has yet to be tried by a stranger, and we have no absolute assurance that even a native has ever crossed the heart of it. It is a name of terror throughout Arabia. These two fearful tracts are joined on the east by a desert belt narrowest on the northeast, where, owing to the intrusion of granites and basalts in Jabal Shammar, the supply of sand fails for a brief space, and the caravans may pass to Koweit and Basra over ill-watered but comparatively firm ground. Similarly, on the western side of the peninsula where the *ḥarrahs* lie, erupted lavas have protected so much of the superficial sandstone from denuding influences that the material for dunes is but scanty, and hereabout the Persian pilgrims may march down to Medina or

Mecca, meeting with no worse country than the thirsty limestone steppe.

These characteristics of the land, reacting on the inhabitants, render them in great part of unsettled predatory habit, intensely individualist, jealous of the secrets of water and pasture which barely make life possible, and proud of an exclusive liberty, which has never been long infringed. Moreover influences, racial, climatic, topographical, which we cannot hope now to analyse, have caused them, as far back as we may know anything of their history, to express themselves in fanatical deistic creeds, and to enforce these by the sword. When the Beni Israel were moving from well to well of northern Arabia in the strength of Yahveh, North Arabia can have been no better place for a stranger, Egyptian or other, than it was during the century following the rival preachings of Mahomet and Musaylamah, or the epoch of Carmathian conquest, or that more recent era, which saw Sheikh Makramī propagate his creed from Nejran to Hasa, and the Wahabite emirs sweep the peninsula in the name of Allah indivisible.

Therefore it is not wonderful that the roll of European explorers in Arabia is short, that its earliest names are recent, and that it contains very few representatives of certain categories of pioneers which have opened out most dark places of earth. Such categories are the soldier adventurer, the Christian missionary, and the trader. In the first category, below the remote name of Ælius Gallus, we may only place doubtfully

one or two renegade janissaries and mamelukes, and the French and Italian officers attached to Egyptian armies between 1812 and 1840, all of whom, taken together, have not greatly informed us. In the second category, since the Jesuit, Gifford Palgrave, seems to have travelled neither ostensibly nor covertly for a genuine religious purpose, there is no famous name to record. Nor do I know of a single European merchant, pure and simple, who has contributed to our science in this land; for those travellers, for example, who have visited Nejd with an eye to the Arab horse, were either, like Wallin, Palgrave, and Guarmani, political emissaries of foreign princes and bearers of wide commissions, or, like the Blunts and Nolde, not traders at all, but enthusiastic amateurs of the breed. Almost all Arabian explorers may be said to have been impelled to the peninsula by their own curiosity or that of foreign princes and associations, whether as pilgrims to its holy places, or archæologists, confessed and disguised, or passing observers of its actual societies.

But short as the roll is, a reader might well wonder that it shows so many names as in fact it does, and among them an unusual tale of men of varied and great gifts, — men like Niebuhr, Seetzen, Burckhardt, Wallin, Burton, Palgrave, Halévy, Doughty, Blunt, Huber, Euting, Hurgronje, Glaser, — men of too serious mind to have been tempted by mere love of adventure or the forbidden thing. Why did such as these hazard themselves in a land so naked that none

covets it; rendered so monotonous by the disastrous action of natural influences that it cannot be supposed to hide any sensational secret; inhabited thinly by so uniform and poor a population? In comparison of other lands, how should Arabia have mattered to them?

Yet it has mattered not only to them, but to all men even beyond other lands. Had the Arabs propagated Islam only, — had they only known that single period of marvellous expansion wherein they assimilated to their creed, speech, and even physical type, more aliens than any stock before or since, not excepting the Hellenic, the Roman, the Anglo-Saxon, or the Russian, — even so the Arabs would still make a paramount claim on western interest. But when we remember that, not only as the head and fount of pure Semitism they originated Judaism, and largely determined both its character and that of Christianity, but also that the expansion of the Arabian conception of the relation of man to God and man to man (the Arabian social system, in a word) is still proceeding faster and farther than any other propagandism, can we wonder that men of serious mind and imaginative temperament have braved much to study this folk in its home?

It would lead one too far into speculation to try here to account for the social force of Arabia. I do but suggest that, if race be the main determinant, the geographical conditions of the land must claim some responsibility. The blood and the social life of this race, which all travellers, who have seen it at its best,

assert to be physically the finest of the Caucasian type, owes to the natural barriers set about the "Island of the Arabs" an immunity from alien contamination which those of no other race above the savage state have enjoyed; and, further, the Arab owes in part at least to singular climatic conditions his strong and simple intelligence which has formulated again and again a conception of God simple and strong enough to convince alien myriads of mankind.

This singular land probably has never been wholly unknown to the West since civilisation has been sufficiently developed there, to have become curious of its environment. Arabia has been discovered by Europe, forgotten again in great part, and discovered once more. The Mediterranean Semites had certainly at an early period some knowledge of Arabia. Phœnicians seem to have told Herodotus that their race came originally from the "Ruddy Sea," by which term he understood what we know as the Persian Gulf. He tells us that these same Phœnicians were carriers of South Arabian products in the Red Sea, but herein may be speaking unwittingly of the Jews who, having a port on the Gulf of Akaba, early in the history of their kingdom, were in communication with the southern part of the peninsula. As for the Egyptians, how much they knew of the eastern shore of the Red Sea the learned in hieroglyphic place-names dispute; but it is hard to believe that their spice-land of "Punt" was not, in part at least, Arabian.

Phœnician, Hebrew, and Egyptian knowledge, however, enters into our inquiry only in so far as it affected the West; that is to say, only in so far as it was communicated to Greek geographers, and by them made public in Europe. For us the History of Herodotus, written in the latter part of the fifth century before Christ, must be the starting-point. It has been held that though this author knew the whole length of one coast of Arabia, which he calls the most southerly of all lands, and described products which were procured from the south of it only, his "Arabia" lay north of the true peninsula altogether. This is an error due to a needless interpretation of one passage, wherein, ignoring the Persian Gulf, the author made Arabia continuous with Persia. But at that moment he was expressing a broad view of the continental land masses, not expecting to be charged with ignorance of a gulf up which he himself had stated that Scylax sailed, or of the southward extension of Arabia. In the same connection, as his phrase proves, he had almost disregarded the "Arabian Gulf" also, well as he knew both its existence and extent. For he did not hold these narrow and all but land-locked inlets necessarily to affect the continental arrangement. Probably Herodotus knew the true shape and penetration of the Eastern Sea as imperfectly as the true form and size of Arabia; but surely when he spoke of the Spice-land he meant some part of the peninsula which we still call Arabia, and not the southern Hamad.

In all likelihood it was not till a century later that any Greek saw Arabia. The first land sighted was the towering crag of Ras Musandam, which loomed up before Nearchus and his crews as they crept into the mouth of the Persian Gulf late in the year 325. We hear that Alexander's admiral was on the point of standing across and ignoring the bay which opened on his right hand; and though he repented, and kept to his own shore, his report of a coast trending southward beyond the Gulf served to promise Alexander a new world to conquer, or a new way of return to the Old World. In the last year of his life the Emperor despatched exploring vessels down the Gulf, probably to make sure there was this continuous mainland on its southwest hand. His commanders seem to have reached Bahrein or some of the islands off the Pirate Coast, and to have visited Gerra, already a prosperous trading-station; and on their report Alexander conceived the impracticable plan of a coastal march round the peninsula to Egypt in order to subdue this Arabian people which had sent him no submission; but he did not live to experience the terrible suffering and ultimate failure that would have ensued.

Since, however, for nearly ten years ere this, Egypt had been in European hands, the Greek had begun to learn through Arabian trade the secrets of Arabia. How much the Red Sea skippers, some of them Greeks, and the Nabathæan and Sabæan caravaners had to tell in Alexandria, we may guess from the knowledge shown by that great scientific geographer, Eratos-

thenes, within a century of the Macedonian Conquest. To his knowledge but imperfect justice can now be done, for his original work is lost, and we have but a few extracts and summaries of its chapters by Strabo; but among these are passages relating particularly to Arabia. The Alexandrian librarian had learned facts about the general character of the southern Hamad near Petra (though he exaggerated its breadth in common with all west to east measurements); and he knew the length of the vast peninsula within a hundred miles. He was aware of an immense dreary tract, south of the Hamad, largely sandy, with thorny desert vegetation, and a few wells and palm oases, inhabited by tenting camel-breeders, — a tract which at last merged into a region of greater plenty. Here dwelt a large *fauna,* but not the horse. And he knew something, too, of the nations, of the Sabæan and Minæan tribes, and their civilisation in the Yemen, of the incense-land of Hadramaut, and of the caravan routes which led thence to Gerra on the Persian Gulf, and through the Tehama to the head of the Gulf of Akaba.

The Red Sea, at any rate, was soon to become almost as well known to the Egyptian Greeks as the Euxine to the Byzantines. Agatharchides and Artemidorus seem, by the report of later writers, to have had detailed knowledge of both its shores. But the Egyptian skippers for many years hesitated to visit any part of the Arabian coast beyond Bab el-Mandeb; and the Greek traders who lived on the Persian Gulf, espe-

cially at Gerra, habitually despatched their wares to Petra overland. The ocean trade with Somaliland and further Africa, with India and with Ceylon, remained long in the hands of the Yemen and Hadramaut Arabs; and southwest Arabia was still, at the Christian era, the paramount emporium of those precious stones and metals, gums and spices, which represented to the ancient world the last word of fastidious luxury. The fame of Araby the Blest spread far and wide, till it awoke the cupidity of Rome. The Arabs of that day, like other Semites since, were regarded as the blood-suckers of the west, and public opinion supported Augustus in his resolve to investigate their rich land, and, if need were, to lay hands on their trade and their hoards of gold.

Under the command of Ælius Gallus, Eparch of Egypt, who perhaps himself advised the venture, the Emperor sent the first, and indeed the last, considerable military force that a European power has ever despatched to the conquest of inland Arabia. Once more we have to thank Strabo, a friend of the leader, for an account of this expedition. After wasting time and money on building a war fleet, Gallus set sail from Suez, and was directed by the Nabathæan emir, with whom his plan had been concerted, towards a port, Levke, on the eastern coast of the Red Sea. Long delay and much sickness ensued in the pestilential Tehama air, as at the outset of the next Egyptian expedition, that of Tussun Pasha in 1811; and thereafter a toilsome march was made through ill-watered

lands to the fertile region of *Negrana.* This was easily captured. After six days more a battle took place on a river, and the ill-armed Arabs, utterly defeated, were forced to open passage to certain well built cities, of which Mariaba was chief. From another of these, Caripeta, it was reported but two days' journey to the Incense Land itself. But the Roman had been on the march six months, suffered much, found little of the wealth he came to seek, and lost his illusions about Araby the Blest. He turned again to Negrana, marched thence in sixty days to *Hegra,* within the friendly Nabathæan border, ferried his troops in eleven days to Myos Hormos, on the Egyptian shore, and left Arabia for ever, cursing all who had induced him to invade, and all who had guided him in that land. Strabo repeats uncritically his friend's plaint of Nabathæan treachery; but the truth seems to be that the Roman, having set out with a wholly false idea of the character of the land, saw it as it really was and is, and had to make the best of a failure; and if he, or the authorities at Rome, still continued to believe that there was an Eldorado in Arabia, from which false guides had seduced him, neither he nor any other Roman ever tried again to find it.

The question by which way and exactly whither Ælius Gallus went, has been much discussed. In a land of changeless names the synonymity of his *Negrana* with the fertile oasis of Nejran, and of his *Mariaba* with Marib, the actual site of the Sabæan

Mariaba;[1] and the correspondence of that reported two days' march to the Incense Land with the distance which in fact separates the vale of Marib from the uppermost valleys of Hadramaut, are almost conclusive that the Roman's goal was Yemen; and this is accepted as the case by the only European traveller who has been in both Marib and Nejran, the learned Joseph Halévy, and by his follower, Glaser. *Hegra,* then, must not be placed anywhere near the site usually found for *Levke,* i. e., on the twenty-fifth parallel, and in face of Myos Hormos; for no army could have reached it in so little as sixty days from Nejran, marching nearly a thousand miles in such a land as Arabia; but it must be understood to have been at Haura, the port of inland *Hejr,* whence eleven days are not too little or too much to allow for the voyage to Myos Hormos.

The report of this campaign must have given much precision to the vague contemporary views about western Arabia, for it supplied a sound criterion of distance. Now, for the first time, caravan hours could be compared with hours of Roman military marching. At the same time the eastern side of the peninsula had become better known, thanks to a maritime expedition, ascribed by Pliny to "Epiphanes," probably King Antiochus IV of Syria. Already the Græco-Egyptian navigators were venturing out of the Red Sea and coasting towards India, along the south shore of the peninsula; and presently Hippalus was to make the straight run

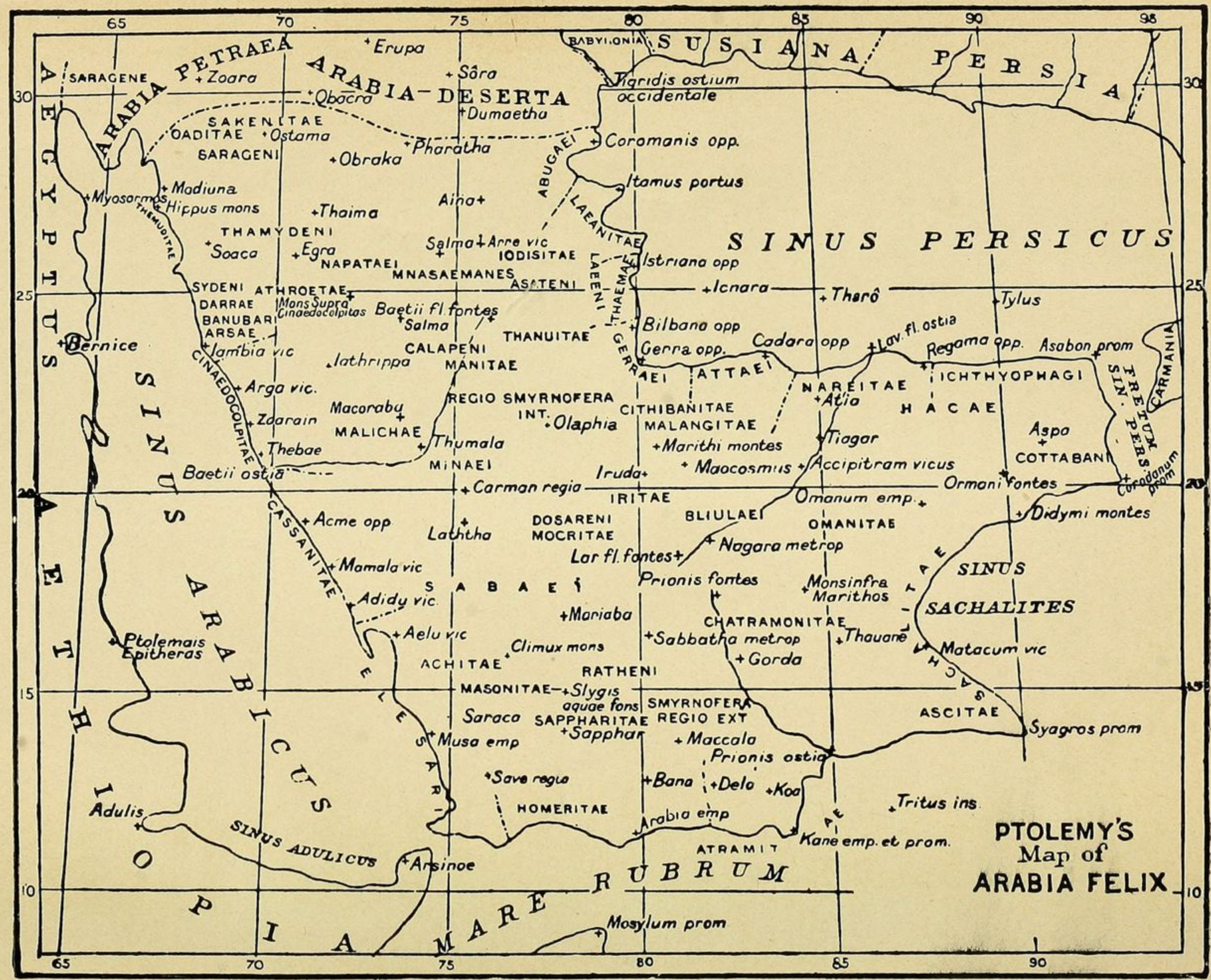
[1] Pliny expressly identifies this with Gallus' Mariaba.

from Socotra to the Indus. The unknown geographer, who wrote the "Periplus of the Red Sea" late in the first century of our era, knew all that it was useful to know of the west Arabian coast. News of the caravan routes and stations between Petra, Gerra, and the Sabæan land and between Gerra and Oman and Hadramaut, accumulated apace during this century. Even in Pliny we find lists of inland tribes, and a few names of Central Arabian towns and villages, together with a juster view both of the nomad and the settled Arabs; but the Roman geographer wrote so shortly before the final ancient authority, and drew so much on the same sources, that we may pass on to the work of Claudius Ptolemy, whose projection of the known world was to determine the geographical ideas of both Europeans and Asiatics for many centuries to come.

Ptolemy of Alexandria, mathematician and astronomer, flourishing about a century after Pliny, while the Roman Empire was stretched to its utmost terms under the Antonine dynasty, undertook to make an atlas of the habitable world. He was not a descriptive geographer, and his book was intended to be no more than a commentary on his maps. These we have neither from his hand, nor from any hand nearly contemporary; but his commentary has survived, and from it they have been reconstructed. Following the lead of Hipparchus and Eratosthenes, but improving on their methods, Ptolemy divided the world by parallels of latitude, reckoned from the Equator, and parallels of longitude, reckoned from a meridian which he drew

through the extreme point of land known to him in the western ocean, namely, the island of Ferrol. Following also a more recent geographer, Marinus of Tyre, whose work is now lost, he aimed further at giving to all important points about which he had information, some definite relation to these parallels. In short, using what evidence was available in his time, whether statements and calculations of earlier geographers, or logs of ships' captains, or route records of armies, merchants, explorers, and caravaners, or estimates based on observations of the duration of sunshine, and the relative positions of stars in certain cardinal localities, he placed his stock of geographical names on his charts, and noted afterwards in tabular form the mathematical equivalents of their assigned positions. He did neither more nor less than do cartographers to-day, who name definite points in unsurveyed territories, give conventional contours to land-relief, and delineate the curves of rivers whose precise courses are not known.

Since, however, Ptolemy added a tabular commentary, he has often been accused in modern days of a fraudulent precision; as though his tables were intended to imply that an astronomical observation had been taken for every position. So, for example, Bunbury has charged him with the imposture of filling empty spaces on the sixth or Arabian sheet of his atlas with purely fictitious names, assigned with a vain parade of science to imaginary situations. This charge, a blot on Bunbury's classic work, was due



Ptolemy's Map according to Sprenger

equally to his misapprehension of the real nature of Ptolemy's book, as set forth above, and to his ignorance of what had recently been learned about inland Arabia by means of the Egyptian expeditions made in the first part of the nineteenth century. No one familiar with the information derived by Mengin and Jomard from the Europeans who accompanied those expeditions, from the itinerary of Sadlier, and from trustworthy native report, could have written: —

"No fixed settlements ever existed in a large part of the territories to which they (i. e. Ptolemy's Arabian inland place-names) are assigned. If this enumeration of names is really based upon any definite foundation at all, the localities so designated could have been merely wells which formed halting places for the Bedouins, or fertile spots in the *Wadies,* where they pitched their tents and pastured their flocks." [1]

Very far from baseless was Ptolemy's enumeration of one hundred and fourteen cities or villages in Arabia Felix, as Sprenger was to demonstrate conclusively in 1875 by his masterly treatise on the "Ancient Geography of Arabia." To this scholar belongs the merit of restoring, in our century of wider knowledge, the credit that Ptolemy enjoyed in the Middle Ages. For not only did he show the Alexandrian to have been indeed aware of the peninsular character of Arabia, and the rough outline of its coasts, including those of the southeastern projection, of which Pliny had been ignorant; but that he had ob-

[1] *Hist. of Anc. Geogr.*, ii. p. 610.

tained from his predecessors or the caravaners authentic lists of stations, many of which he placed with such approximate accuracy on his chart that they can be identified with existing oasis settlements. In several cases the persistence of name makes assurance doubly sure. For example, Dumætha, placed by Ptolemy just outside the northern boundary of Arabia Felix, must be the mediæval Arabian *Daumet,* which is to-day the chief village of the great oasis of Jauf. Hejr, famous in the "times of ignorance" as the seat of a kingdom, and now Medayin Salih, is Ptolemy's *Egra.* His *Thaim* is Teima, now known from its inscriptions to have had temples and some sort of civilisation as far back as 500 B. C. It is the *Tema* of Job. In *Lathrippa,* placed inland from *Iambia* (Yambo), we recognise the *Iathrippa* of Stephen of Byzantium, the *Yathrib* of the early Arab traditions, now honoured as El Medina, the City of Cities. Where so many certain identifications are possible, what reasonable critic will deny that Ptolemy's map of inland Arabia both was made in good faith, and represented approximately the facts of his time? Nor need any reasonable critic condemn it for its obvious imperfections. If geographers to-day find that travellers' route-tracks, laid down with prismatic compass and watch, are subject to such errors of excess and defect as to be almost valueless for exact cartography, how should we expect precision in a map based on estimates of camel marches, measured and directed by the sun? Wonderful enough if any localities were

so fixed with a variation of less than fifty miles from their true positions.

Ptolemy, like his predecessors, started with a general excess in his longitudinal estimate of the continental land-mass of Europe and Asia; and we must expect, therefore, the east and west measurement of the divers sections to be overstated. We find, in fact, too much space allowed between the Egyptian coast and the Carmanian; and while in the north, where the Petra caravaners had roughly ascertained the breadth of the land, the excess was met by widening the less known eastern sea, in the south, where it had been notorious to mariners ever since Nearchus' day that the Erythræan Gulf contracted to a strait, Ptolemy had to broaden out the less known land. This large error, added to such uncertainty in the matter of coastal outline as a modern map-maker would experience, had he no Admiralty surveys to guide him, distorted the shape of the peninsula in Ptolemy's map, and led to inevitable error in the relative location of the inland stations. A certain conventionality in the disposition of these was inevitable. Where localities have to be fixed on hearsay by a criterion of measurement, which is rendered uncertain not only by the varying capacities and circumstances of different marchers, but by the fact that the land relief often does not admit of direct march from point to point, there is much room for subjective adjustment, and for indulging the instinctive love of symmetry and distaste of empty spaces. When we

reflect that in the very latest maps of Arabia these tendencies have been but partially overcome, we shall not be severe on Ptolemy for narrowing the northern desert (a fault corrected within our own generation), and for pushing Nejran too far to the south.

Moreover, a map, made from such material as was at Ptolemy's disposal, and in his epoch, will contain few physical details. Caravaners know stations and their intervals, but little of the mountains which they naturally avoid or of the source and ultimate direction of the wadys that they cross. Ptolemy's notes mention certain mountains in Arabia, but for lack of his maps we are in doubt how he represented their direction or extent. In common with earlier geographers, he conceived the peninsula as bounded on the north by a chain, in which we may reasonably see the bold granite range of Jabal Aja. The mountains, of which he speaks on the west of the central space, justify us in supposing that he rightly placed a series of ranges trending from north-northwest to south-southeast behind the Red Sea coastland, from Mt. *Hippus* in Midian to Mt. *Climax*, which is in Yemen. His informants further led him to place a mountainous district on the contrary side of the centre, more or less exactly where occurs, indeed, the tabular mass of Jabal Tueik. He has a range behind Oman, where the peaks of Jabal Akhdar shut off the inner desert; and a coastal range to east of Aden, where the southern buttresses of the coastal plateau do really assume their most mountainous elevation and form.

In fine, when we have said of Ptolemy that in the second century A. D. he indicated the existence of all the main coastal ranges of the peninsula and of its two most marked inland chains, without inserting any non-existent hill-systems, we have said more for his Arabian orography than can justly be said for that of any subsequent cartographer for about sixteen centuries.

As for rivers, Ptolemy indicated the sources of five and the mouths of three. Therefore he has been condemned by the critics, who rightly object that Arabia has no true rivers at all. But it were fitter to have praised him, on the one hand for not indicating more in a land of great wadys, which at certain seasons run deep and full, and on the other for having in all five cases indicated undoubtedly certain wadys which do carry more water than others in Arabia. If his *Bætius* is the Wady Hamd, his caravan authorities were right to derive it from the bounteous springs of the Kheibar *ḥarrah*. His *Lar*, flowing by Nagara, represents unquestionably the waters which collect from Asir and Nejran into the Wady Dauasir, and run northeast to a destination still uncertain. If he continued this channel right across to the Persian Gulf, he showed even in error some just appreciation of the general land-fall, and probably a knowledge of the great Wady Hanifa in Ared, and of those still obscure eastward outflows from the Nejdean plateau, which till lately were combined in all our maps into a perennial river Aftan. Indeed, the

Ptolemaic theory of a continuous superficial drainage across Arabia, from the head of Wady Dauasir to the Gulf, is not yet abandoned by all geographers.

In Ptolemy's fountains of *Styx*, to which he assigned no outfall on the coast, we recognise the perennial waters of the Sabæan country, where Ælius Gallus encountered a river. Here, too, both Arnaud and Halévy have recorded the discovery of running streams, which, once gathered into a reservoir behind the great dam of Marib, are now dissipated in the southeastern sands. Ptolemy's *Prion*, falling out on the south coast, is undoubtedly the Wady Hadramaut, whose main stream is reported by both Hirsch and the Bents to be perennial in the upper parts of its channel. Its lower course is unknown; but if its waters do not reach the sea the great depression of its valley certainly does so. The head springs of the *Prion* are rightly placed by Ptolemy near to those of the *Lar*, but too far east and north, owing to the longitudinal error indicated above, which has pushed Nejran into the Great Desert. Lastly, the springs of *Omanum*, which Ptolemy does not represent as surviving to the sea, stand for some one of the several fine fountains of Oman, which actually rise in Jabal Akhdar, but reach the coast only under the wady beds: such, for example, are the intermittent streams of the Wadys Semail and Tyin.

More than enough has been said to prove that Ptolemy's map really represented the caravaners' best knowledge, whether collected by himself, by mari-

ners, or by earlier geographers during a period when caravans were passing more freely through the deserts and oases of the Arabian peninsula than they were to pass again for very many centuries; and that, with all the imperfections of his maps admitted, he must be allowed to have made an enormous scientific advance on the knowledge of his predecessors, or at least their statement of their knowledge. If Ptolemy's method did not indicate inland stations, mountains, and wadys absolutely in their right positions, it served to show their relative positions; or, at worst, what precisely was Ptolemy's own idea of those positions. Had these been much more erroneous than in fact they were, we should still find it infinitely more useful to see them so defined than to have to deal with them, on the authority of a descriptive treatise in the manner of Pliny, at large within the vast borders of Arabia.

Beyond Ptolemy the Greek and Roman geographers of later date, whose references to Arabia have been preserved, do not carry us. Had the "Periplus" of Marcian met with better fortune, we had perhaps been able to fill more detail into the Alexandrian's map. But not half a score of names have survived of those fifty-four tribes, those hundred and sixty-four towns and villages, those fifteen mountain ranges, those four chief rivers, and so forth, which the fifth-century geographer claimed to place in Arabia Felix. Nor did Stephen of Byzantium, who cited many Arabian names, rarely with any indication but the vaguest of

their localities, advance science. This first compiler of a geographical dictionary — dreary task in which he had many Moslem followers—hardly rendered any service to Arabian topography beyond the correction of Ptolemy's *Lathrippa* to a form which places its identification with Yathrib-Medina beyond cavil. But we gather from Stephen that there was written information about the peninsula in his day which has not survived to us, notably the book of Glaucus on "Arabian Matters."

The historians of the later Empire contribute nothing. In Ptolemy's day the Roman administration had been pushed as far into the peninsula of Arabia as it was ever to go. When Trajan made a province of the Nabathæan realm, he did not include its doubtful and distant dependencies south of the Hamad, except on the coast of the Red Sea. There for fiscal purposes a port was maintained on the twenty-fifth parallel, and not abandoned till Justinian's time. For the rest, Arabia remained outside the sphere of Roman arms, and, except very rarely and indirectly, outside that also of Roman diplomacy. The Byzantine government, however, had some direct concern with the northern Arab powers. Native poets of the "Ignorance" speak of relations with the Roman in Bostra and Damascus; and at one epoch the Empire interested itself in the affairs of the southwest, when it moved the Abyssinian monarch to interfere on behalf of the Christians of Yemen. But Procopius could state the fact that an Abyssinian expedition advanced

from the mysterious land of the Himyarites even to Mecca, and that the peninsula was overrun by Chosroes Nushirvan, without letting in a ray of light on the geographical ignorance of the time. He tells us nothing of Arabia because he himself knew nothing more than that it was the land of gold and incense and winged serpents,—nothing more than Ammianus and Dionysius the Periegete and Herodotus had known. Chroniclers of a civilisation incurious of its environment, the later Byzantine writers were never more barren than when treating of the outer world.

In the seventh century the heirs of Roman civilisation in the east as well as the west of the Empire were concerned with nothing less than Arabia; when, lo! equally unexpected and unwelcome, Arabia began to concern herself with them. The first result of this turning of tables was not to increase our knowledge. Though startled Europe for the first time learned Arabian names and saw Arabian faces, her new knowledge was more than counterbalanced by the withdrawal of the peninsula from all European access. With the expulsion of most of the Christians and Jews from Arabia, the conversion or isolation of the residue in the far southwest, and the passing of Egypt to Moslem rule, communication with Europe was cut, and Arabian commerce wholly fell into native hands for the space of a thousand years. Moreover, for a while at least, great part of the peninsula became less accessible even to easterns than it had been

during the "Ignorance." The focus of Moslem civilisation, by the action of that law which decrees that Semites, like Hellenes, shall conceive ideas, but others shall realise them in practical systems, passed almost at once from the birthland of Islam. Arabia, left free to conceive anew, lost her momentary unity in a chaos of tribal warfare, fostered now in Nejd, now in Carmathian Hasa, now in Oman, now in Yemen; and her interior lands lapsed to obscurity. If a strong caliph opened a route across the peninsula for pilgrims, this fell again into utter disuse, were his successor weaker or less pious. The caravans that had once passed with assured regularity from the Gulf shore to Yemen and to Egypt ceased as completely as the skilful Greek navigation of the Arabian seas. The old resorts of the *negotiatores* who had informed Pliny, fell to ruin. Gerra became a memory, and Petra a name, destined to have no known local habitation, till Burckhardt should happen on its desolate valley after a dozen centuries.

At the same time, however, Arabia had become such an object of the world's attention as she was never before; and when her expansion had begotten a new civilisation and a new demand for science, it was to her that eyes, curious of the knowledge of the earth, turned first from piety and practical necessity. The capture of the repositories of Greek learning put the work of Ptolemy, and perhaps other geographical treatises now lost, into Moslem hands. Pilgrims passing annually up and down the Meccan ways from Syria,

Egypt, and Yemen, and less regularly from the Gulf shores and Irak, with great following of merchants, spread knowledge of the peninsula over the East. Works, written before 1000 A. D., by Hamdānī, Ibn Ḥauḳal, Iṣṭakhrī, and Muḳaddassi, which deal with Arabian topography and geography, have come down to us; and in the next half-dozen centuries they were to be followed by many others, which, based for the most part on Ptolemy's system, filled detail into his outlines, and owed greater precision to the testimony of pilgrims and travellers. Few of their authors had seen much of the peninsula, but most had made the obligatory pilgrimage to the holy Arabian cities from north or west once, if not more often; and one, Ibn Baṭūṭah, who, after his visit to Mecca, in 1328, was in Yemen, Dofar, and Oman, may almost be reckoned the first explorer of Arabia, the first to test geographical traditions with his eyes, or by the examination of local native witnesses.

But since it is the progress of the western, not the eastern, knowledge of Arabia which is the subject of our inquiry, we can only take account of the Moslem works at a later date, — at a date, in fact, long subsequent to the composition of almost all of them. And further, we must bear in mind that they were then become authorities rather for the ancient than the actual geography of the peninsula. Though Idrīsī wrote his "Book of Climates," wherein Arabia with the rest of the known world was described on a Ptolemaic system, in Sicily in the twelfth century, he does not

appear to have affected western ignorance till far into the sixteenth. The learned D'Herbelot, who by his "Bibliothèque Orientale" first made the west acquainted, in 1697, with most of the Moslem authors that it was to know in the succeeding age, stated, when he wrote his preface, that Arabic studies in Europe were then about a century old. It was, in fact, in 1592 that the first Arabic geography had been issued from the Medicean Press. This was the abridgment of Idrīsī, which was thereafter translated into Latin by two Maronites, and published in 1619 at Paris, under the title, "Geographia Nubiensis." Abu-l-Fidā was printed first in translation; and not till early in the eighteenth century could his work be studied as a printed whole even in its original tongue. Those dependent on translations had still longer to wait. Gibbon, when dealing with Arabian geography in his famous fiftieth chapter, could only refer at first hand to the abridged renderings of Idrīsī and Abu-l-Fidā, already mentioned, and for the rest, had to depend on the few extracts from Yāḳūt, Ibn Khaldūn, and Ḥājji Khalfah, given by D'Herbelot. Full translations of the earliest known Moslem geographers did not appear till near the middle of the nineteenth century. Ḥājji Khalfah's "Jihān Numā" was issued in Latin as early as 1818, but Iṣṭakhrī and Ibn Baṭūṭah remained in their original Arabic many years longer. Ibn Khaldūn had to wait till less than ten years ago; only a small part of the writings of Muḳaddassi and Yāḳūt has ever been rendered into a western tongue; and

the book of Hamdānī, the most valuable of the Moslem authorities on Arabia, has not yet been translated at all.

Through the labours, however, of a few Arabists like D'Herbelot, certain of the Moslem geographers had ended by modifying considerably western ignorance of Arabia before western scientific exploration of the land was instituted. La Roque, who had translated into French as much of Abu-l-Fidā's work as referred to Syria and Arabia, used it, early in the eighteenth century, as a touchstone in editing the narrative of the journey of De la Grelaudière and Barbier in Yemen in 1712; and both Abu-l-Fidā and Idrīsī were largely responsible for the detail found in D'Anville's map of the peninsula, issued in the middle of the eighteenth century. To confirm or correct their accounts was the chief object of Niebuhr's party in 1763. On their statements Michaelis of Göttingen drew largely in proposing questions for investigation, and to them Niebuhr frequently alludes, as though Abu-l-Fidā's book at any rate had been his principal guide in the country itself.

A word, therefore, should be said here as to the knowledge possessed by Idrīsī and Abu-l-Fidā. The other Moslem authorities need not be taken into serious account till after Niebuhr, since the works of several — for example, of Hamdānī, Iṣṭakhrī, and Muḳaddassi — were certainly unknown in his day; while with others, the "Jihān Numā," for instance, long ago printed in Turkish, he showed no acquaint-

ance, and of the rest, those existing only in manuscript, he evidently knew but a few extracts.

Taken one with the other, Idrīsī and Abu-l-Fidā may be said to have given topographical, rather than geographical, information on all the west and southwest of Arabia, which not only was far in advance of what might have been learned from Ptolemy, but is on the whole, so far as it goes, in accordance with our present knowledge. But for the other coastal districts, even for the important province of Oman, their contribution hardly amounted to more than the bringing of Ptolemy's nomenclature up to their own time; while for the greater part of the interior of the peninsula, equal to fully three-quarters of the whole of Arabia, their data were of the scantiest. Not only had they themselves never crossed the peninsula by any of the tracks whose stations and wells they enumerated, but we may reasonably doubt if they had ever examined at first hand any witnesses who had done so, — nay, any who had been even in Hadramaut, much less in the great desert country of the south or in the Sabæan valleys at the back of Yemen; who had visited any part of Nejd, or of the Persian Gulf lands, north of Oman, or the northern Nafūd country. Even of places lying off the great pilgrim routes, but so near as Teima and Kheibar, Idrīsī and Abu-l-Fidā venture on none but the baldest description. When they come to speak of Central Arabia they do little more than slightly amplify the vague hearsay notes of Iṣṭakhrī. Idrīsī despatches the Hadramaut in one sentence and

the southern desert in another, and can only say of Nejd that there lies the palm oasis of Yemama, watered by the Wady Aftan, with a capital Hadrama, and three other towns; and thence it is one day to "Ardh," where are villages, and such and such a number of marches to Basra, Bahrein, Oman, and Mecca. There is no mention of half-a-dozen other important oases which we know to exist in Nejd, and to have been inhabited from very early times.

Abu-l-Fidā seems to have felt the need of more independent authority. He repeats from one "Hadytsa, son of Issa, who had lived in those lands," a summary description of Ared and Jabal Shammar, bringing Aflaj and the Wady Yabrin to our knowledge; he says something of the great northern oasis of Jauf (Daumet al-Jandal), and adds a little, but very little, to what his predecessors had to say of Yemama and Faid and the southern desert. But of the Wady Dauasir, of Harik, of Woshm, of Sedeir, of Kasim, nothing, and little in detail of the western chain of oases from Tebuk and Teima to Nejran and the southern Jauf. Half habitable Arabia was left by Abu-l-Fidā for the Europeans to discover.

In the event they began to discover it before they knew his book. As early as 1487 one Peter de Couillan, commissioned by King John of Portugal, found his way overland to the Red Sea, and skirted its coasts, calling thrice at Aden;[1] while, sixteen years later, the Bolognese adventurer, Ludovico di Varthema, accom-

[1] I. e., Pero de Couilhā. See Galvano, *Discoveries*, p. 77. (Hakluyt Ser., 1862.)

panied the Syrian pilgrims to Medina and Mecca as a mameluke voluntary, and visited Yemen. These were forerunners of a more serious invasion. In 1508 the new-found sea-way round the Cape brought Portuguese ships to the Arabian shores, provided with charts made by Moslems.[1] On his way to Ormuz Afonso d'Alboquerque descended on the coast of Oman, and threw garrisons into half a dozen ports, whence they were not all expelled till after 1650; and soon afterwards he was seen in the Red Sea also, meditating the seizure of Mecca for the glory of God and the Most Christian King. But a check before Jidda in 1514 determined the Portuguese to abandon all idea of establishing themselves on the Arabian coast of the Red Sea; and thenceforward they contented themselves with intermittent occupations of Aden or its islets (e. g., in 1516 and after 1550), and with exploratory voyages to Suez, initiated by Lopez Suares in 1516, in quest of trade and an overland route. We have the itinerary of such a voyage compiled in 1541 by John de Castro, pilot of the Governor of Goa, Stephen de Gama; but, like the rest, it but enumerates anchorages and daily runs more baldly and less completely than the scantiest ancient "Periplus."[2]

Though the Portuguese remained in Oman for a century and a half, their chroniclers did nothing to enlighten European ignorance of the country. No one,

[1] E. g., that of the "Pilot Omar," used by D'Alboquerque.

[2] *Cf.* Suleiman Ghazi's itinerary, given by a Venetian skipper in his fleet (1538), and that of L. de Marol, which contains a description of Jidda.

Berthelot's Map of Arabia (1635)

indeed, tells us as much as the first conqueror, who, besides giving in his Commentaries some description, though very brief, of the coast towns, reported also a little hearsay concerning the interior. There dwell the half-naked Badens, said he (herein sharing credit with Varthema for first mention of Bedawins), ruled by a king, Benjabar, whose dominion embraced all the Island of Arabia up to the frontier of the "Xeque" of Aden. D'Alboquerque had misunderstood a correct information. For Beni Jabar is the name of a tribe still found divided into two sections, one ranging in southern Oman, the other in eastern Yemen.[1]

We should blame the Portuguese kings, their advisers and their representatives, rather than the chroniclers. The occupation of Oman was the most miserable of Portuguese imperial operations. D'Alboquerque's work was never seriously followed up. The littoral was retained for the sake of its custom-houses and its convenience for convoys on the voyage to Ormuz and India; but, with the exception of four ports, Sohar, Matra, Maskat, and Kiryat, it was left in the hands of client but unruly sheikhs. No effort was ever made either to master or even to explore the interior of the land. There the sultans of Rastak ruled supreme, gradually forcing the infidels to confine themselves to their forts and to pay tribute even for those. Part of their wretched history may be read from the Christian point of view in the Jesuit

[1] When Stern was in Sana in 1856 this tribe was holding the westward passes.

Maffei's "Historiæ Indicæ," and more of it from the Moslem side in Arabic works, of which the most informing is that translated in the Hakluyt Series, under the title "Imams and Seyyids of Oman." But the clearest light thrown on a miserable chapter of European history in Arabia is owed to certain letters, written from Ormuz in the middle of the sixteenth century by a Belgian Jesuit, Gasparis, full of missionary zeal for this "lone and destitute" colony of Christendom.[1] He landed at Maskat in 1549, and found the Portuguese colony without even a priest. The city was become an asylum for Arab fugitives from justice and outlaws of all sorts, for whom many Portuguese were now serving in the fields, having apostatised these ten years back, and renounced all hope of salvation. The good Gasparis preached to them under their palm-shelters, and induced them to return to the faith; but being on his way to Ormuz he might not stay. Arrived there, he received an appeal from the Governor of Maskat, who told him that two natives had come a long journey seeking baptism, and that all the city was prone to believe and even to die for the faith. But he could not leave his college in Ormuz, whence presently he was transferred to become Rector at Goa; and we search the published Jesuit records in vain for evidence that he found a substitute, or that the tide of apostasy in Oman was stemmed. In the second quarter of the seventeenth century all had been lost to Sultan Nāsir except the fort of Maskat;

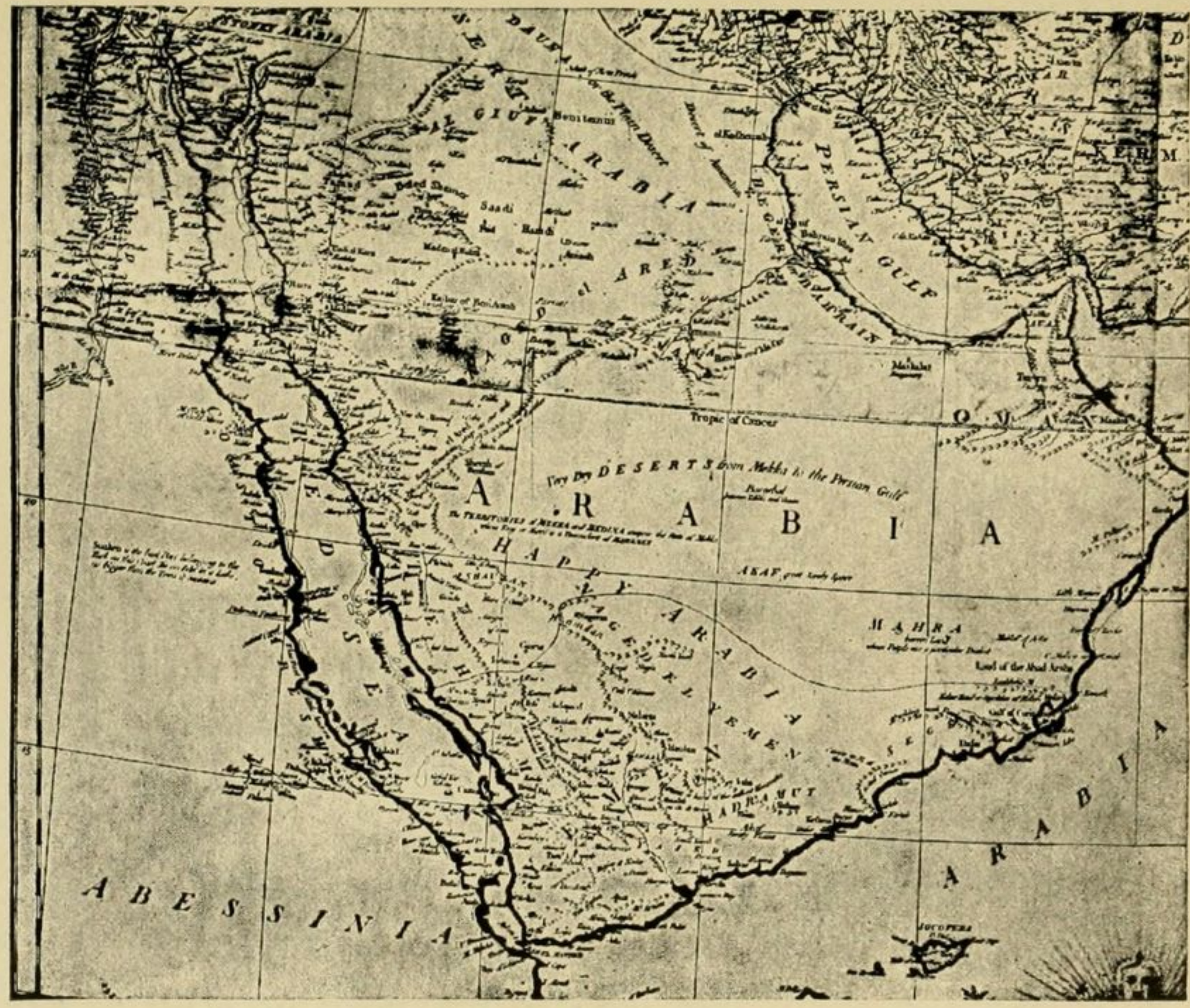
[1] See *Epistolæ Indicæ*, pp. 27, 95, 110, 124 ff.

and to his successor even this succumbed at last through the lust and folly of its commander.

The little which the Portuguese mariners and the Dutch, British, and French, who quickly followed them to the Red Sea, and established relations where the pioneers had failed, had added to Ptolemy's information on Arabia and that of the Moslem geographers may be gauged by the first sheet of D'Anville's map of Asia, issued in a revised form in 1755. On the eve of Niebuhr's arrival in Arabia we may pause to take stock of the sum of knowledge expressed by the greatest geographer of the eighteenth century.

Compared with the most accurate modern map, that issued as the sixtieth sheet of the revised Hand-Atlas of Stieler (1902), D'Anville's chart will be seen to place the peninsula, as a whole, within its true parallels of latitude 12° and 30°, but not quite within the true degrees of longitude, as reckoned from the meridian of Ferrol. For Cape Had lies at least a degree further east than in his projection. Both the Red Sea and the Persian Gulf are represented as of too small area. The first is too narrow, and the southern bay of the second is not produced to within a degree of its actual innermost recess. The details of coast outline are indicated very summarily and inaccurately. To remark but a very few of the most salient faults: the forked head of the Gulf of Akaba, the uniform southerly trend of the coast from its mouth, the deep bay shown south of Jidda, the want of prominence of Cape Matraka, the total omis-

sion of Katar, the insertion of a deep estuary opposite the isles of Bahrein, the omission of the Bay of Koweit, — these imaginary features will show how much the British Admiralty surveyors would have to correct in the next century. When we look to the interior of the peninsula we see the chief villages of the northern Jauf lying a degree too far south, and its district extended widely and vaguely still further south again. The existence of the Nafūd desert between Jauf and Jabal Shammar is not realised; the latter region with Faid is altogether out of place, jostling Teima; and the relation of Kheibar to Medina is wholly wrong. Nejd is devoid of any detail except what is false. While the Southern Desert is left commendably blank, the presentation of Hadramaut is very faulty. There is no sign of its great wady; Terim lies on the wrong side of Shibam, and both these towns are placed some hundreds of miles to west of their true position. Oman is diversified with rivers and towns which we cannot now identify, and, as we have seen, the gulf coastal lands beyond Cape Musandam are merely sketched. In a word, there is no certain knowledge displayed except at a few points on the west, south, and southeast coasts and in their near *hinterland;* while D'Anville could make only the vaguest surmise as to what lay beyond the border ranges. The one important point placed by him with accuracy in near a million square miles of inland Arabia, and that doubtless at hazard, is the town of Anizeh (Aneiza). Almost every other one of his few



D'Anville's Map of Arabia (1755)

recognisable names or features varies from its true position by at least the space of a degree. Nevertheless his map of Arabia remained the best for more than half a century, being, what some of its pretentious successors were not, the work of a geographer who knew how much he knew not, and made no effort to hide an ignorance which was at the level of the best science of his day.

BIBLIOGRAPHY

A. Sprenger, *Die Alte Geographie Arabiens* (Bern, 1875).

A. Zehme, *Arabien und die Araber seit 100 Jahren* (Halle, 1875).

H. Berger, *Geschichte der wiss. Erdkunde der Griechen* (2d ed., Leipzig, 1903).

E. H. Bunbury, *Hist. of Anc. Geography* (2d ed., London, 1883), and his classical authorities on Arabia, from Herodotus to Marcian and Procopius.

H. F. Tozer, *Hist. of Anc. Geography* (Cambridge, 1897). I have not found Foster's *Anc. Geography of Arabia* of much use.

The translated Moslem authorities are these: *Muḳaddassi*, by G. Lestrange, in *Pal. Pilg. Text Soc.*, iii. (London, 1886); *Iṣṭakhri*, by H. O. Mordtmann (Hamburg, 1845); *Idrīsī*, by P. A. Jaubert (Paris, 1836); *Abu-l-Fidā*, by M. Reinaud (Paris, 1848); *Ibn Baṭūṭah*, by C. Defreney and B. R. Sanguinetti (Paris, 1853–1859); *Ibn Khaldūn*, by H. C. Kay (London, 1892); *Jihān Numā*, by C. Norberg (Gotha, 1818).

My Portuguese authorities are: Afonso d'Alboquerque, *Commentaries* (Hakluyt Ser., London, 1875–1884); Lafitau, *Conquêtes des Portugais* (Paris, 1733); Galvano, *Discoveries* (Hakluyt Ser., London, 1862). *Cf. Imams and Seyyids of Oman* (Hakluyt Ser., London, 1871); *Historiæ Indicæ*, by P. Maffei (Cologne, 1589); *Epistolæ Indicæ*, etc., by various Jesuits (Louvain, 1566).

The Red Sea itineraries are given by A. Matthæus in *Veteris Ævi Analecta* (Hague, 1738).

Abdûl-Kerym, *Voyage de l'Inde à la Mekke*, tr. by L. Langlès (Colln. Portative des Voyages, vol. i., Paris, 1797).

CHAPTER II

NIEBUHR IN YEMEN

IT was in or about the year 1759 that the despatch of a party of scientific pioneers to Arabia was mooted in Europe. The first suggestion seems to have come from the learned Hebraist, Michaelis of Göttingen, who expressed to Count Bernstorff, minister of Frederick V of Denmark, an earnest wish that steps might be taken to resolve the biblical and geographical questions which concerned Arabia. Had our Hanoverian monarch, to whom Michaelis was officially attached, and his chief minister been men of different kidney, this suggestion had perhaps been made earlier to Great Britain. The Danish court received it favourably. The king himself showed his interest in the realisation of the scheme by drawing up an elaborate instruction for the explorers, which at a later date was published together with the list of questions and problems propounded by Michaelis. A ship of war was detailed, and five individuals, all expert in some science, were despatched therein to the Levant on Jan. 7, 1761. Peter Forskall, a Swede by

birth and a pupil of the great Linnæus, was a physician with special knowledge of botany; Christian Charles Cramer, a surgeon and zoölogist; Frederick Christian von Haven, a philologist and Oriental scholar; George William Baurenfeind, an artist; and, lastly, Carsten Niebuhr, lieutenant of engineers, a mathematician and practical surveyor. With them went an ex-hussar, the Swede Berggren, as servant.

In this party of explorers, singularly well qualified and equipped, none was to be before or after other, according to the royal instruction. If any preference was expressed by the king it was for Forskall and Von Haven, on the ground of their greater proficiency in Arabic. Each member was to help his fellow, but each to have his own sphere of work, and report thereon on return. Return, however, was reserved for only one. Two of the party died in Yemen, one (and the Swedish servant) at sea on the voyage to India, and one on arrival there; none by violence, but all by the poison of the Yemen air. Niebuhr alone brought his report and the incomplete notes of his comrades to Denmark again. If to some extent he has inherited other men's fame, to a far greater extent has he earned fame for himself. If he was not the most brilliant of the party, if any of his fellows surpassed him in energy, courage, and endurance, in intelligence, or in his measure of that scientific temper which is equally free from prejudice and from laxity, then a more remarkable mission was never despatched to any land.

The immediate goal proposed to the party was Yemen. This was as inevitable as fitting. In western eyes this part of Arabia had long stood for the whole; its fertility secured the epithet "Happy" to the whole peninsula;[1] and it was now the best known. The last land in Arabia to lose Christianity, Yemen had been the first to renew friendly relations with European Christians; and concerning it there was more reliable information extant than concerning any other province. The book of Ludovico di Varthema, who had reached Yemen two hundred and sixty years before Niebuhr's day, had had a singular vogue. Published in Italian at Rome in 1510, it was rendered at once into monkish Latin, thence, before 1520, into German and Spanish, and into French, Dutch, and English ere the end of the century. Incorporated in several popular miscellanies of travel, it was well known to Niebuhr, who seems to have had a just appreciation of its merit.

Varthema arrived in Yemen when neither the Portuguese nor the Turks had as yet set foot there,[2] and native sultans ruled undisturbed. He coasted down from Jidda by way of Kamaran and Jezan to Aden,

[1] The restriction of the name *Felix* to Southwest Arabia is not in accordance with Strabo, Pliny, or Ptolemy, but a mediæval error, confirmed by D'Anville, and often repeated in the present day. *Felix* was really applied by the ancients to the whole of the peninsula. *Petræa* was only the district of Petra, and *Deserta* the North Hamad, or "Syrian Desert."

[2] Though, according to a manuscript quoted by Badger (Varth., p. 50), seven Yemen ships had already been captured and burnt by the Portuguese on the high seas. Hence, probably, the arrest of Varthema near Aden.

which was then, in a sense, the capital of the whole country, having five thousand families and five castles, which impressed the Bolognese as the most impregnable he had ever seen. Laid by the heels there for a spy, he was released after a quaint adventure, and finding no ship ready took the north road, passing through Lahej (Lagi) to El Makrana (Macarana) and Yerim (Reame), and ultimately arrived at Sana. He was minded equally "to follow out a desire after novel things," and to spend time away from dangerous Aden. No one hindered him, and he made a circuit by Tais, Zebid, and Damar, before returning to take ship.

Varthema by nature was no geographer, and more concerned with his personal adventures than with descriptions of their scene. But he let fall many a shrewd observation here and there, which served to confirm the Moslem geographers and encourage the curious to rely upon them further. Thus, for instance, he remarked on the presence and activity of Shiah sectaries in South Yemen and on the black (i. e., Abyssinian) element in the population. The high situation of Sana he thought worth notice, as well as the fair orchards and fountains of all South Yemen, the strength and splendour of Makrana, and the spice trade of Zebid. In assigning to Sana no more than four thousand hearths, he was probably more accurate than most computers. The abundance of vines and apes,[1] the fat-tailed sheep and the semi-

Cf. the accounts of Botta and Deflers.

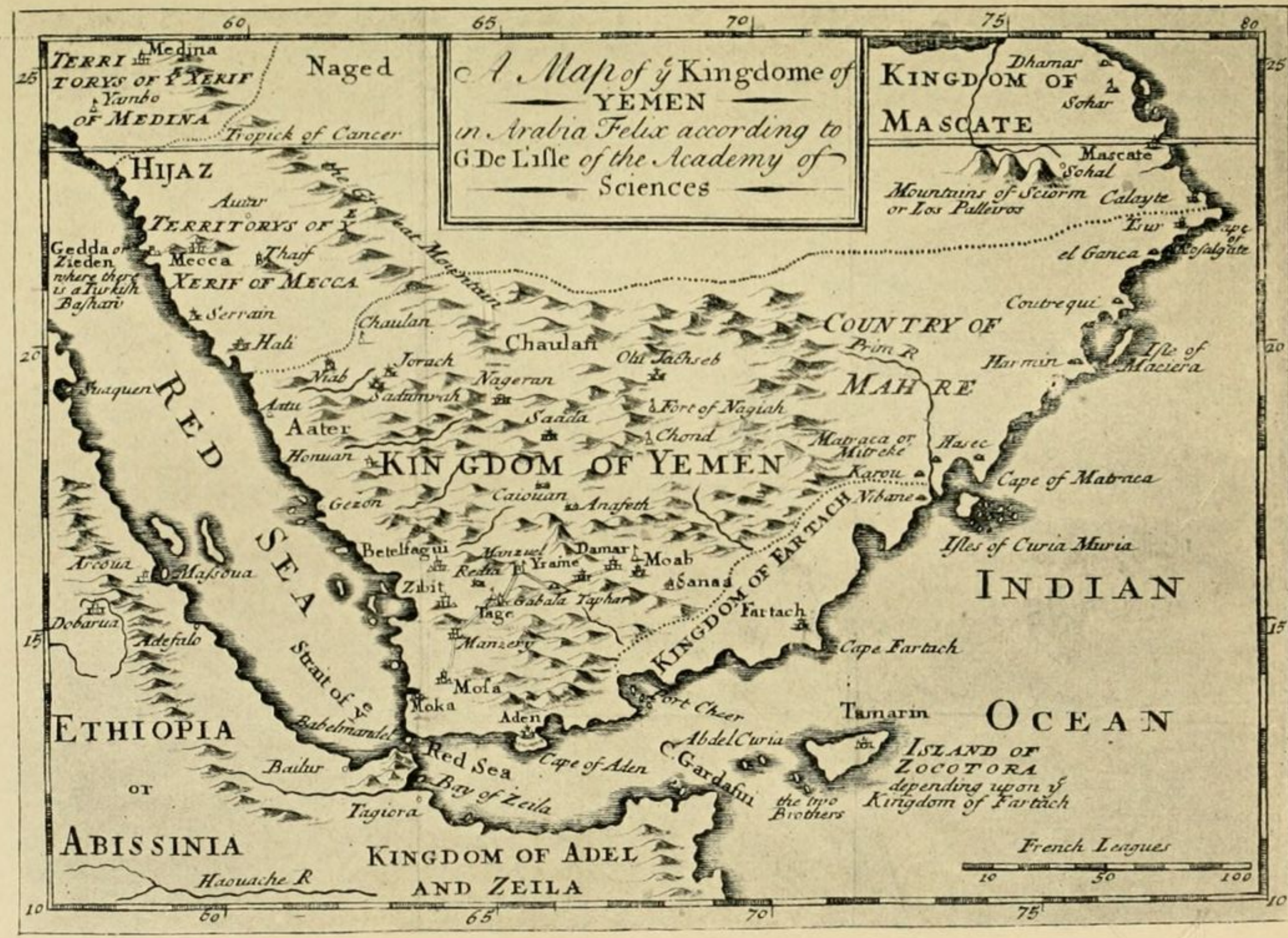
nudity of the folk in the country districts, are facts now familiar; and the "temple" which Varthema saw in "Taesa," and likened to S. Maria Rotonda in Rome, had been identified with the great mosque of Ismāīl Mulk. His is a scant record. More account, for example, might have been expected of the great buildings in Sana. But so far as it went, it proved that the ancient fertility of Yemen was no myth, and that a relatively high civilisation was still flourishing in the spice-lands.

Five years later Portuguese sails were off the coast, and within a generation Turkish as well. The secure independence of Yemen was at an end. For more than a century, however, Europeans were to affect the state of Yemen less by their guns than by their discovery of coffee, said to have remained unappreciated by the Arabs until their advent. The new berry, first mentioned by a European writer in 1592, grew so rapidly in favour that the trade of Yemen came to be desired equally with the trade of India; and a new competitor for it appeared presently in the shape of the British East India Company, which sent Captain Sharpey in the ship "Ascension" to the Red Sea in 1609. He did little but irritate the Turks, now in power in Yemen, and fearful for their monopoly of the Jidda trade; and his successor, Henry Middleton, commanding the three ships which formed the sixth expedition of the Company, paid the penalty. Calling at Aden and Mokha late in the following year, he was trapped by the Turkish governor of the latter, and informed

that the Imperial Order was to "captivate all Christians who came into these seas." On the 22d of December he was sent off with thirty-four other Englishmen to Sana, which he calls Zenan.[1] One officer, Pemberton, escaped, and a boy fell sick and apostatised; but the rest were brought to their destination in fifteen days, enduring great cold on the way. At Sana they were joined by part of the crew of the ship left at Aden. Middleton says he kept no journal, but remembers Sana as a city "somewhat larger than Bristol, well built of stone and lime." The gardens were on the west, the castle was on the east, and the valley, shut in by the Yemen hills, seemed barren and stony. Prevailed upon by bribes and influence, the pasha let the Englishmen go, after some six weeks' detention, and they returned to Damar, a "town built of stone or lime, but in five separate parts, like so many distinct villages. It stands in a spacious plain, abounding in water and producing great plenty of grain." Thence the party passed to Tais, and was back in Mokha four days later. But for more than a month thirty men were kept there in durance, till Middleton made his escape in an empty cask to his ships, and, after rescuing the rest, read the governor a lesson with his carronades, which was not soon forgotten on the coasts of Yemen. He mentions "coughe" houses, but he saw nothing of the production or trade of the coffee-bean.

The fact of Middleton's adventure was known

[1] The name of the Sana province at this day.



La Roque's Map of Yemen (1716)

to Niebuhr;[1] but the Englishman's experience was doubtless of less use to his great successor than a narrative published a century later, when Yemen had once more recovered the independence which it still maintained when the Danish project was formed. Therein was recorded the story of an expedition made by an honourable company of merchants in St. Malo, who desired to profit by the coffee trade. Their first ships had been well received two years before; and on the return of these to St. Malo, one was refitted for a second trip, and supplied with a new consort and surgeons. Arrived once more at Mokha, after nearly a year's voyage, the captains received an urgent request from the Imam of Sana that a physician be sent to cure him of a painful abscess; and anxious to cement their good relations, the Frenchmen deputed one of their surgeons, Barbier, and a certain Major de la Grelaudière, of Pondicherry, to accompany the Imam's deputies. These gentlemen carried, it seems, no instruments but those of surgical use, travelled very quickly, were kept close in the towns and villages, and were not over curious. Moreover, we have not their report at first hand, as presented to Louis XIV, but a relation put together by La Roque and published four years later. This is very bald and brief, dealing rather with social than geographical observations, except in the matter of coffee culture, and it is accompanied by a very erroneous map, in which Sana, not reached by the mission, to La Roque's regret, is placed

[1] See p. 107 of *Descr. de l'Arabie.*

far south of its real situation. None the less Grelaudière and Barbier, the first Europeans to record that they had seen the coffee-shrub growing, may claim the larger credit of being the first to penetrate inland Arabia voluntarily and with exploratory intent. Niebuhr refers to their report more than once, and seems to have derived from it his initial confidence in the friendliness and security of the Imam's dominion, and the good disposition of his deputies in the coastal towns. Here the Dutch had had friendly relations since 1614, and even the British were well established ere the Frenchmen appeared; and it was the just and prudent dealing of their representatives in Aden, Mokha, Zebid, and Beit el-Fakih, which had secured that favour to Europeans in Yemen by which Niebuhr profited.

We need not follow the Danish party to Constantinople, Alexandria, Cairo, or Sinai. On Oct. 29, 1762, they arrived off Jidda in a pilgrim ship, and were agreeably surprised by their reception. They found an Englishman long established there, trading in Taif almonds and balm of Mecca, and peculiar favour being shown to ships of his countrymen. It was two months ere they found a Maskat barque to take them on to Yemen, and they passed the time in prosecuting what inquiry they might concerning the inner country.

During their stay the Danes were not molested in a town before and since notorious for hatred of Christians. In the eighteenth century Moslem fanaticism

was everywhere chill. The nominal Caliph was discredited, and in the south of his empire disowned. Yemen had shaken off his yoke a century before, and the Meccan Sharīf would have marched against his Moslem overlord rather than a Christian. There was little of that sense of solidarity which now distinguishes Islam; and Mecca, the spiritual centre, had fallen away to the pursuit of secular wealth, and become tolerant of everything save virtuous asceticism. Though the final victory of the Christian in Moslem India was already in sight, and in Europe the infidel powers were turning the tables on the Turk, these facts were hardly realised generally in Arabia; and no such common anger had been aroused there as was to follow presently on the aggression of France, Great Britain, and Russia. Where there is no anger there is little fervour and less proselytism. The tide of Islam was, for the time, on the ebb, and the second flow, which was to carry it in the nineteenth century across the heart of Africa and to China and the isles, was not foreseen. Yet, as Niebuhr, and through him Gibbon, were presently to learn, " the visions and arms of a modern prophet " were already manifested in inner Arabia, and the Moslem world was about to be rudely revived by the same Arab race that had first inspired its life.

Niebuhr and his companions coasted, without adventure, by Gunfude to Loheia, and found the lowlands in winter pleasant enough. A strong Imam ruled in Sana, and the sheikhs, emirs, and dolas

throughout Yemen were unusually subservient to the capital. The Danes had to practise less diplomacy than subsequent Europeans have used in Arabia. They began by adopting native dress, and speaking of themselves as desirous only to pass to India; but as they stayed on and made excursions here and there into the inner Tehama, that flimsy pretence became futile. No suspicion or ill-will were shown them this side of Mokha, and they were never required to confess God and His Prophet. Travel in Yemen they found to be as little exposed to danger as in any other country in the world, and the Arabs the more civilised the further they dwelt from Egypt. Proceeding by land, the Danes reached the coffee metropolis, Beit el-Fakih, where Europeans were well known, not as foes but as buyers of the staple product of the land.

So secure and so little noticed did the party find itself there that it ventured to break up; and Niebuhr, hiring an ass and its master, set out alone to explore the Tehama, his Abu-l-Fidā in hand; while Forskall went up to the hills to collect herbs. These excursions took our travellers, now singly, now together, over pretty nearly all the Tehama as far south as Tais and Zebid, and to the lower mountains. Though the holy fast of Ramaḍān had begun, they had no adventures, but full leisure to observe the division of Yemen into lowland and highland, the contrast of mud villages in the former region with stone-built ones in the latter, the conditions under which coffee and indigo were grown,

and the social life of the industrious farmer folk. But the season was drawing on; and persisting in travelling by day in a land whose mean temperature is 85° Fahr., the members of the party began to lose their health. After a rest at Beit el-Fakih they made a push for Mokha through the now parched savannas, and reached the city late in April, 1763. Trouble ensued, and they had some difficulty in withdrawing themselves from bad hands and securing a measure of official good-will; for here Europeans were the less popular for certain energetic action taken by the French East India Company five and twenty years before.

At Mokha Von Haven died. It is pleasant to read that —

"The English sent us six Catholic sailors, who, on the evening of the 26th of May, interred the body in the European burying-place. All the English in Mokha were polite enough to attend the funeral, which was conducted as far as possible in the European manner, and with less interruption than that of Mr. Ferro, Consul at Cairo, at which we had been present."

Lessened in number, robbed of their best Arabist, and somewhat divided in counsel, the party after much delay obtained permission to move up to a higher spot, Tais, on the road to Sana, already visited from Beit el-Fakih; and there it found more refreshment, but less security and consideration than in the Tehama. Summoned back to Mokha, the Danes were saved a

weary journey in the nick of time by superior order of the Imam that they should proceed to his capital. On June 28 they set out for Sana, but had covered but half the way when they must needs halt in Yerim, for now Forskall was very sick. There, in a few days, he died, and Niebuhr mourned the ablest of his comrades, a man whom every botanist still holds in honour.

The residue continued to ascend through Damar and by Hadafa, where Niebuhr reported but did not see a Himyaritic inscription, and crossed the crown of the plateau to Sana on the 16th of July. The Imam received the Danes as graciously as his predecessor had received the Frenchmen, and they had full liberty to come and go in the city, where the large Jewish colony was of especial interest to them. But broken in health and rendered a little distrustful by experiences on the upward road, Niebuhr and his companions were unwilling to stay. In less than ten days they took their leave and descended the steep mountain road to Beit el-Fakih; and so to Zebid and Mokha again, exhausted by the great heats of August. An English merchant, Francis Scott, tended them and shipped them on a vessel of his own for Bombay; but Baurenfeind and Berggren succumbed on the voyage, and Cramer reached India only to die early in the following year.

Niebuhr landed once more in Arabia. He was at Maskat in January, 1765, but, in place of exploring inland Oman, preferred to follow the original royal

Carsten Niebuhr

From a vignette in his *Reisebeschreibung*, Vol. 3 [1837]

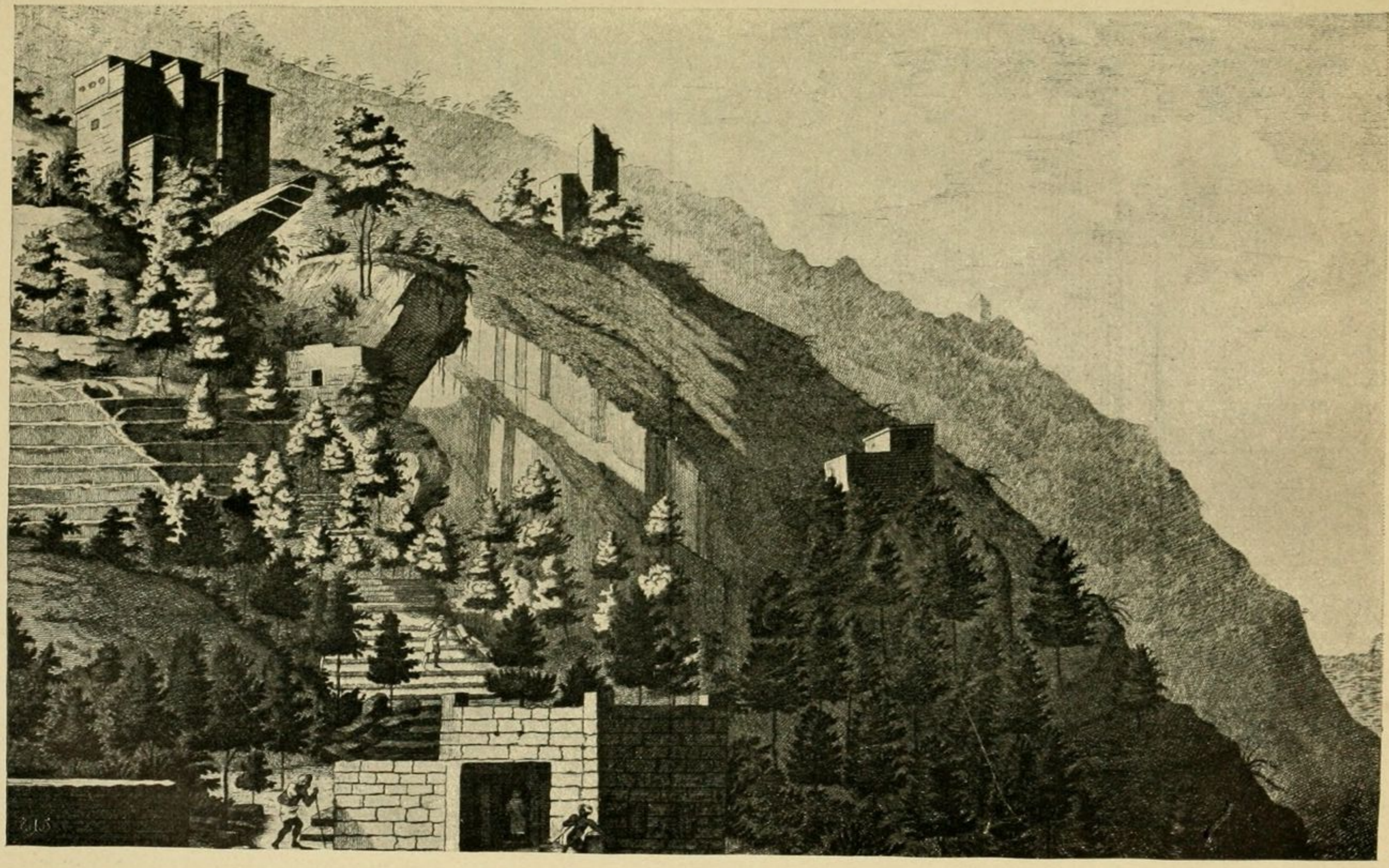
instruction by going up the Gulf and returning home overland by Persia, Mesopotamia, Syria, Cyprus, and Asia Minor. The narrative of his travels was published in German in 1772 (and in French a year later), with an appendix giving the routes of an unnamed Dutch renegade in certain parts of Yemen not reached by the Danish party. A greatly curtailed English version was issued in 1792. Forskall's notes on the flora and fauna were edited by his comrade in 1775, but it was not till 1837 that all Niebuhr's own Arabian observations were given to the public in a final edition of the latter part of his original narrative, which was prefaced by the portrait, here reproduced.

This is the sum of Niebuhr's travels in Arabia. He had passed less than a twelvemonth in the land instead of the two or three years desired by his king, and had penetrated but a very short way towards its vast and unexplored heart; for Sana, his furthest point, lies little over a hundred miles in a direct line from the Red Sea coast. The region, which he had but partially examined, is an uttermost corner of the great peninsula, a triangle whose base is about two hundred miles long, while its sides are a little more than one hundred; the whole not equal to a sixtieth of all Arabia. Moreover, this small district to which he was sent because it offered most to European advantage was, as we have said, better known already than any other. Western mariners and merchants had long been familiar with all its ports, and in the habit of going up inland to reside awhile at its summer

stations; and Niebuhr, when beyond their usual range, was often following or crossing the tracks of Varthema, Middleton, and De la Grelaudière.

Yemen, as Niebuhr himself asserts, was the easiest and safest country in Arabia to explore. It called for no exceptional courage or address, and neither promised nor afforded exciting or romantic adventure. Nor was Niebuhr of the distinctively venturesome kind. He calculated the profit and loss involved in any risky enterprise, and unless the balance were strongly to the good, refrained when he had plenary discretion. His first and last duty, as he conceived it, was to fulfil his sovereign's commission by examining as thoroughly as he might that part of Yemen which was productive, without jeopardising his own life or that of his companions, on which the accomplishment of the whole task and the rendering of an account thereof in Europe would depend. For him, therefore, there should be no masquerading in Mecca, or precarious wandering with Bedawins, no hairbreadth escapes or research for the romantic.

The primacy, however, always conceded to Niebuhr among Arabian travellers is not due to his priority in time, but to the priority of his merit. He and his party undertook a double task, — to explore the most fertile part of Arabia known to Europe, and to collect there the best possible information about all the rest of the peninsula. Both tasks were carried out in a way which, when all circumstances are considered, is beyond criticism. As to Niebuhr's fulfilment of the



Baurenfeind's Sketch of the Coffee Hills, Yemen (1763)

first task, the exploration of the Yemen littoral from Loheia to Mokha, and inland to Sana, his first scientific successor, the botanist, Botta, spoke without reserve: "L'exactitude de ce savant dans la description de ce qu'il a vu a été telle que je n'aurais pas songé à publier le résultat de mes propres observations si je n'avais eu l'occasion de visiter quelques points dont il n'a pu approcher." And the latest historian of the country says, in like spirit: "In spite of the fact that more than a century has elapsed since this expedition took place, we have never since been given a clearer or more interesting and valuable account of the Yemen. . . . No one can overestimate the value of Niebuhr's work." [1]

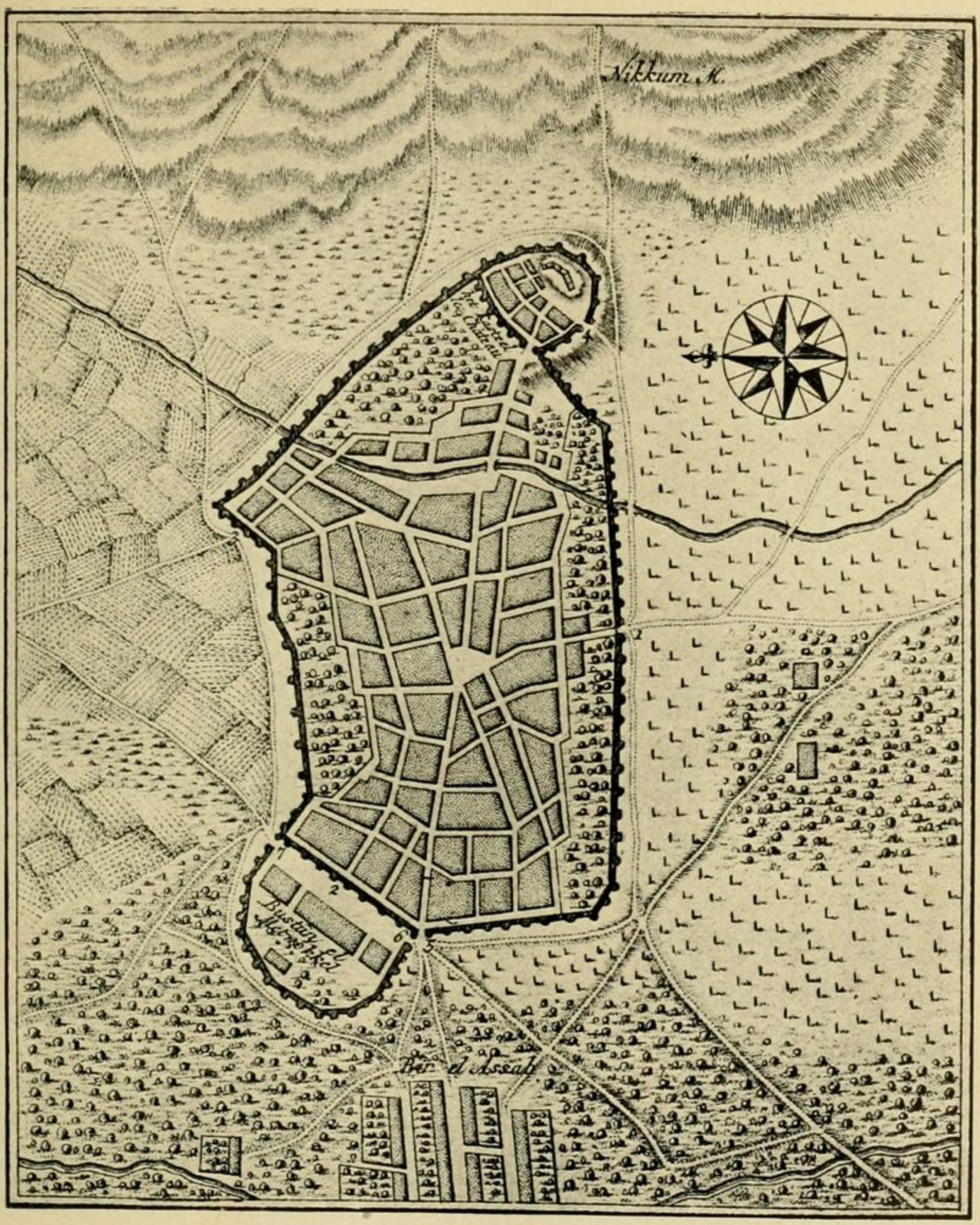
Southwestern Arabia consists of three belts. First is the low littoral strip, or Tehama, which extends from north of Loheia to south of Mokha, narrowing from about sixty miles in breadth to less than half, and finally closed by rugged hills before the actual corner of the peninsula is reached. Second is a broad parallel zone of mountainous highlands, abrupt and much broken as they rise out of the Tehama. These attain an average elevation of fully eight thousand feet, and enclose many valleys of great fertility, in which are situated most of the larger agricultural settlements, except the capital, Sana. This last lies just within the third belt, that long and uneven eastward declivity of the high lands, which is almost a true

[1] Playfair, *Yemen*, p. 61.

tableland, and merges at last into vast inland desert tracts which probably absorb all its drainage.

The first belt Niebuhr and his companions saw thoroughly. They traversed the whole of it, from north to south; and where it is broadest, behind Loheia, Beit el-Fakih, and Zebid, Niebuhr himself made a number of short zigzag journeys, which have left nothing for his successors to do. He carried a small compass and estimated distance by camel-paces. The Tehama seemed to him everywhere a dusty, barren, ill-watered tract, with no perennial streams, but many large *fiumaras,* of which the Wadys Zebid and Meitam are the chief. Only along the course of these did he see continuous cultivation, increasing towards the hills and decreasing towards the sea. The Danish party visited all the towns from Loheia and Hodeida to Has and Mokha, and enumerated all the principal villages, their products, their industries, and their society. In short, from the point of view of the topographer, the botanist, and the student of humanity, the Danes left the Yemen Tehama an exhausted field.

Less of the second belt was examined, and that not so thoroughly. The Danish area of exploration in the lower foot-hills extended from a point due east of Beit el-Fakih to Tais; that is, it comprised the space between the roads which lead to Sana fron. Hodeida and Mokha respectively. This includes the most important part of the coffee distr Yemen al-A'lā. This was visited by Niebuhr and Fo kall from Beit el-Fakih, and the terraced plantations ere traversed



Niebuhr's Plan of Sana (1763)

again by the survivors of the party on their way to and from Sana. Tais was reached twice, and so thoroughly were the upper courses of the Tehama wadys examined by Forskall that Botta found it unprofitable to go over his ground again in 1837, and betook himself to points north and south of his predecessor's range, notably to Mt. Sabor, south of Tais, which the Danish botanist had greatly desired to explore just before his death. In the upper highlands of this belt much less was done. The Danish party passed only along the high-road from Tais to Sana and that which runs from Sana to Beit el-Fakih. They travelled quickly, and under pressure; and, in consequence, while able to report with fair fulness on the towns, such as Ibb, Yerim, Damar, and Hadafa, passed on the way up, and on Suk el-Khamis and Mufhak, visited on the way down, they had little opportunity for more than a passing inspection of the intervening country.

In the third and easternmost belt Niebuhr saw little but Sana itself and its immediate environment. He gave a more accurate reading of its latitude than Middleton had given, and a much fuller description both of its buildings and its inhabitants. But this is less detailed and minute than it might have been had not the Danish party been so reduced in numbers and so sick and sorry.

The part of Yemen which Niebuhr himself explored is that which lies obvious to those who land on the Red Sea coast, and proceed to the capital

from Loheia, Hodeida, or the ports further south; and, accordingly, it is that which has been most often revisited. What he did not explore is a much larger area, comprising all the south of the highland belt from Yerim to Aden, and the extreme north of it; and also, with the exception of the district of Sana, all the inland plateau extending from the Indian Ocean northwards towards Hijaz, which was the chief seat of the ancient Sabæan civilisation. This vast area, which presents the most interesting features to an explorer of South Arabia, he was forced by circumstances to leave for others.

He learned, however, what he might of it, as of all unseen Yemen, by hearsay. In his "Description of Arabia" he was able to enumerate some thirty provinces in all, and give some brief account of their principal settlements, except in the wild northern districts of Hashid and Bekil, where, in spite of a Dutch renegade authority, he could not learn more than mere names. Nor at the present day can we do much better. Concerning the country east of Sana, he got fuller information, and described rightly the land-fall, observing the southeastern direction of the Damar waters, the nature of Nejran and the Jauf, the ancient wonders of Marib and its mighty Himyarite dam.

Comparatively little as he saw with his own eyes, Carsten Niebuhr takes high rank in that small and select group of travellers, the interest of whose narratives has survived their own age, and is confessed

by all intelligent readers of whatever race, generation, or special taste. Niebuhr may claim to be not only the first truly scientific man who has described the peninsula, but one who has seen the land and its life with vision as clear, as comprehensive, and as sane as any successor's. Among explorers of the Nearer East he takes rank with Chardin and Lane. Like them he had the philosopher's eye, which sees the universal in the particular, and the essential among the accident of circumstance. Everything was not like everything else to Niebuhr. He had a just scale of relative importance, and could distinguish the transitory from the permanent features in human life. Himself singularly devoid of individual national or social prepossessions, he recorded the trivial neither about himself nor about others. The common characteristics of humanity were what appealed to him; and while he drew somewhat apart to view them, he did not conceive himself as regarding the particular people, among whom he was sent, from above. Herein, helped somewhat by the accident of his nationality and generation, he had the advantage of more modern travellers. In a Dane of the middle of the eighteenth century the sense of western and racial superiority was not developed enough to debar him from full sympathy with an eastern people. Niebuhr did not see in the Yemen Arabs an interesting lower order of beings, nor in their creed and religious practice curious parodies of those of a Christian. To the usages of the native society he conformed at once

without a thought of impairing his personal dignity or the prestige of his nation; and he bowed to the "Imam" of Sana, as equal in that land to King Frederick in his own.

The general characteristics of the man prepare us for the particular merits of a book of travel which has held its own with more pretentious and attractive successors for a century and a half, and has supplied a basis and a standard to every subsequent inquirer about Arabia. I know no serious explorer of the peninsula who has failed to show that he had studied it before setting out, or to quote it on his return, and none that has spoken of it but with all respect. Its great excellence as an authority is due, before all things, to the author's severe suppression of himself. Not that Niebuhr used the third person when speaking of his own acts, or that he deprecated, or omitted mention of these in comparison with those of his companions. As his own he knew most about them and spoke most of them. But so slight was his interest in himself that these acts might have been those of another, so impartially and impersonally were they treated. Indeed, one might think his the pseudo-personal narration of a romancer were not all elements of romance so sternly excluded, and candour and truth so obvious.

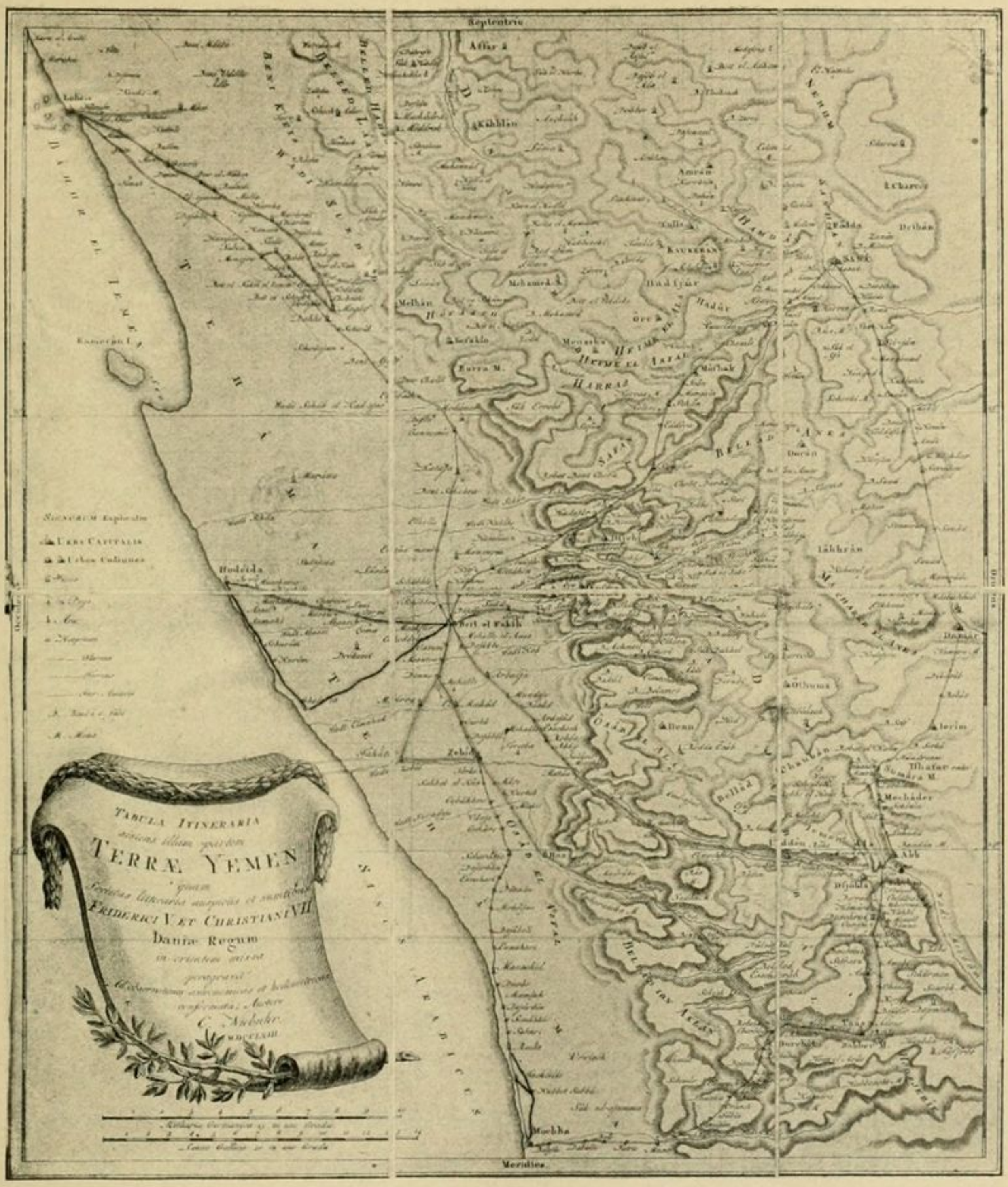
To this impersonal attitude the special circumstances of Niebuhr's case conduced not a little. Not only was he charged to make an official report, but he found himself heir of four dead comrades, the results of

whose unfinished labours he must embody with his own. In combining, condensing, and rationalising their notes, he made his work appear equally that of all five members of the party; and he seemed to relate the itineraries and incidents of travel only to account for the possession of so much knowledge. He was far from insensible to passing interests. Witness the frequent allusions to the beauty or uncomeliness of the women, and to momentary acquaintance with them, which lighten the even seriousness of his narrative; but an adventure, unless it served to illustrate a general characteristic of the people or had its origin in something essential to the society, was passed very lightly by. When he related the rudeness of a young Arab of Kahtan at Loheia, he did not expatiate on the savagery of his tribe, for he knew his conduct to be the result of mere unfamiliarity with Europeans. And similarly, in describing the riotous proceedings of students at Damar, he neglected one of his few opportunities to excite his readers with a vision of Moslem fanaticism. The deaths of his comrades were stated in the fewest words; their qualities summed in a sentence; the circumstances of their burial related to illustrate local manners; and the party moved on.

This impersonal attitude inspired from the first appearance of Niebuhr's book the greatest confidence in the candour and judiciousness of the author's observations and statements. Now, after a century and a half, we are in a position to know how well that

confidence was deserved. One scarcely knows which most to praise: the aptness and fidelity of his descriptions of what he saw, or the diligence and insight evinced in his statement of what he heard. Under all circumstances and at all moments he is thoroughly sane. An oasis entered after sultry leagues of desert is not a paradise to Niebuhr, but just a lean grove of palms set in caked mud or sand. Nor does he rise to the enthusiasm that subsequent travellers have expressed for the coffee highlands. He found them bleak and bare, and their villages in wretched poverty; and he was not more impressed by the pomp and parade of the "Imam," — gorgeous, he admitted, but disorderly.

Niebuhr was neither commissioned, as we have seen, nor of himself content to put on record either a mere narrative of his travels, or an account only of Yemen; but he aspired to inform his countrymen about all Arabia. Familiar already with Abu-l-Fidā's descriptions, he industriously questioned all who might inform him further, whether in khan, coffee-house, or bazaar, from Jidda to Sana, and combined and discounted their reports with so much judgment that the part of his book which deals with those regions of the peninsula that he did not see himself is the most valuable, and so full of fact that it may be said to have advanced Europe at once from speculation to knowledge about Arabia. I shall consider much of his information in later chapters, when dealing with the subsequent exploration of other regions;


Septentrio
Meridies
TABULA ITINERARIA
TERRÆ YEMEN
FREDERICI V ET CHRISTIANI VII
Daniæ Regum
Hodeida
Mocha
Kahlan
Amran
Sana
Dhofar
Mechader
Abb
Dhofara
Ibrim
Dhuma
Dhamar
Dorah
Lahhran
Kaukeban
Mehamed
Hadjar
Hadar
Harraz
Harrat
Belad
Sabar
Ozan
Belad Ozan
Belad Ibn Akeis
Belad Ibn Aqil
Belad Ibn Ali
Belad Ibn Ali
Belad Ibn Ali

and here, therefore, introduce only an example of his perspicacity in treating of a society which is common to all of them. Niebuhr had had no personal experience of the unsettled Bedawin life which is led over two-thirds of the interior. If he saw Bedawins, it was in foreign bazaars and not their own black booths; and in Yemen he states that he met with only one wandering family, and that probably of true Gypsies, not even Slayb Arabs. Yet who has stated the peculiar organisation of Bedawin society more justly than this?

"The Bedawins, the true Arabs, who have always rated liberty above ease and wealth, live by distinct tribes in tents, and still keep the same form of government, the same manners and customs as their remotest ancestors. They call their nobles *sheikhs* or *sheukh.* A sheikh governs his family and all its retainers; when these sheikhs are too weak to maintain themselves against their neighbours, they join others, and all choose one among them for supreme chief. Several of the greater chiefs, with the consent of the lesser, choose one still more powerful, whom they call *Sheikh el-Kebir* or *Sheikh es-Sheukh,* and his family gives its name to all the tribe. It may be said that all are born in arms and all are shepherds. . . . Among these peoples the authority is in the family of the reigning sheikh, great or small, but there is no right of primogeniture. They elect the most capable son or relation to the succession. They pay little or nothing to their chiefs. Each lesser sheikh speaks for his family and is its chief leader. The great sheikh is obliged to regard his people rather as allies than subjects; for if his government does not suit them, and

they cannot depose him, they lead their flocks into the country of another tribe, which is usually delighted to gain such an accession of strength. So too with the families of the lesser sheikhs; if not well ruled, they will depose the head or abandon him without ceremony."

And so forth with like propriety in many passages concerning Bedawin hospitality, tenderness for animal and human life, independence of spirit; concerning dress and dwellings; concerning the relation of the settled Arabs of the oases to the nomads, and of all to the Ottoman authorities. It would be tedious to quote a hundredth part of Niebuhr's judicious observations. He often omits a fact, but very seldom can he be convicted of an error.

BIBLIOGRAPHY

The quotations from Niebuhr are translated from the French edition of his *Travels and Description of Arabia* (Amsterdam, 1774–1780).

For the royal instruction see *Recueil de Questions proposées à une Société de Savants, etc.*, par Monsieur Michaelis, Conseilleur de S. M. Britannique, etc., translated from the German (Amsterdam, 1774).

Dr. Peter Forskall's two posthumous works, *Descriptiones Animalium, etc.*, and *Flora Ægyptiaco-Arabica*, appeared in Latin at Copenhagen in 1775.

Varthema is to be read best in Badger's edition made for the Hakluyt Series (London, 1863).

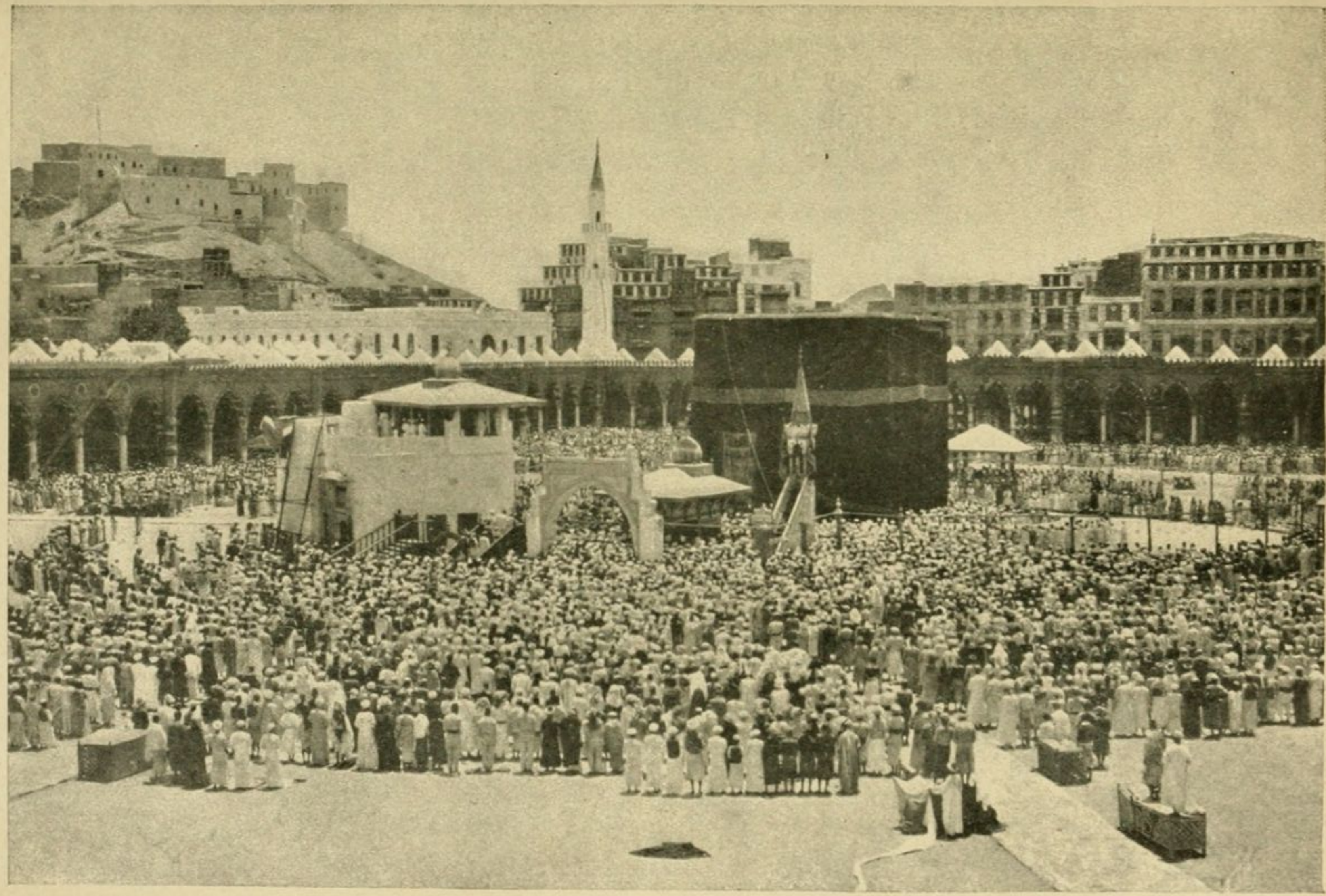
Middleton's narrative is printed in Kerr's *Voyages*, viii. p. 361, with notes by J. Astley; Grelaudière's narrative, in La Roque's *Voyage de l'Arabie Heureuse* (Amsterdam, 1716).

CHAPTER III

PILGRIMS IN HIJAZ

IF the West for a thousand years before Niebuhr's day had known more of Yemen than of any other Arabian province, it had been hearing more of Hijaz, and regarding Mecca with livelier curiosity than Sana. There is not a little irony in the relation of the Prophet's city to the exploration of Arabia. Mecca, whose influence is directed most constantly to closing the peninsula to Christians, has more than any other Arabian community caused Christian knowledge of Arabia to increase. So effective in theory has been its seclusion that no confessing adherent of any creed but that of Islam is known to have seen its sanctuary since the Hijrah and lived.[1] But this very pretension to secrecy has served to excite in many Europeans so strong a curiosity of the forbidden as to impel them to Arabia. And, in effect, great as the hardships and dangers be, and small the reward, a show of conformity has enabled nearly a score of men, who both

[1] There is a strange account in Alboquerque's *Commentaries* (Hakl. Ed., iv. c. 10, p. 49) of one Gregorio da Quadra, made captive at Zebid, who went with a "Moor" to Mecca in 1513, and proclaimed his Christian profession at Medina without taking harm. But one hardly knows what to make of this unsupported story, including as it does a narrative of Gregorio's subsequent crossing of North Arabia to the Euphrates *alone!*



Mecca. Pilgrims at Prayer in the Great Mosque-Precinct

From Dr. J. Snouck Hurgronje's *Bilder aus Mekka*

were born and died in the Christian faith, to record their adventures in the holiest places of the city, and many other Europeans to visit it, who have left no account.

In one way or another the Hijaz had already ceased to be unknown even before Niebuhr's time. Not only had authors, who had themselves been pilgrims to the Ka'bah, or having learned from pilgrims, wrote for pilgrims, published descriptions of the city, the ways to it and the land in which it lay, but the Moslem accounts of Mecca (Idrīsī's was placed within general reach by Pococke in 1650) had been confirmed and supplemented by at least three narratives of Europeans, who had seen more than the coast. Here again the honours of priority are with Varthema. All later European pilgrims, who have known his narrative, have borne witness to its succinct fidelity in so far as concerns Mecca, its great shrine and its neighbourhood. All the prospects, passes, and valleys which Varthema noted have been recognised. Both the general scheme and the detail of the Bayt-Allah and its enclosure, as he described them, agree remarkably with subsequent descriptions, allowance being made for the extensive restorations known to have been undertaken in the century succeeding his visit, when Mecca had passed under Ottoman suzerainty; and his general account of the city as an unwalled and well-built settlement in a ring of hills, containing some thirty thousand souls and great concourse of traders, is now known to have been exact

in 1503. Varthema was not indeed so full or so accurate in his descriptions of the holy places or the ceremonies performed at them as Joseph Pitts of Exeter, who, captured by Barbary corsairs while a boy, in 1678, was forced to apostatise and accompany his master to the Holy Cities some years later. He subsequently escaped in Smyrna, and published a quaint narrative. But much more account must be taken of the Italian than of his English successor, since the latter's narrative was apparently not known outside England, and so little appreciated even there that Gibbon ignored it. Still less account need be taken of Johann Wild, an Austrian captive, who had a similar experience in 1604, and published a book which better deserved the even greater obscurity into which it fell, — obscurity so great that Burton, who recalled both the other early pilgrim narratives to English readers, seems not to have been aware of its existence.[1]

Moreover, Varthema has the better claim to the credit of an explorer. Whereas the other early pilgrims went only to the Hijaz, and that under compulsion, the Bolognese journeyed voluntarily, as we have seen, to Yemen as well, and with a definite purpose to observe and record; and while Wild and Pitts tell us practically nothing of their adventures by the way, Varthema, summary though his narrative be, records several observations made on his road to

[1] Niebuhr refers to it once (*Descr. de l'Arabie*, p. 183). I ignore Le Blanc, whose narrative of an alleged journey to Mecca in 1568, included in Bergeron's *Voyages Fameux*, is almost certainly mythical.

Hijaz, which later travellers have confirmed not less signally than those he made in Mecca. His is the first pen-picture of the Hamad Bedawins, — tawny men, with long black locks, shrill voices, and long cane lances, riding bareback in their shirts, — and of their black booths "of a sad appearance." In placing Medina four days from the sea, Varthema was right, where Niebuhr, distrusting him, went wrong. In his notice of that city as a small barren place in his epoch, he is supported by Pitts, who was there about 1685; while both Burckhardt and Burton have praised his description of the Prophet's resting-place. But perhaps the Italian's most important priority consists in his mention of a deep, sandy desert, of five days' span, on the hither side of the "mountain of the Jews;" for thereby he first advised geographers of the existence of the northern Nafūd.

Although in the middle of the eighteenth century the general features of the Holy Cities may be said to have been known to Europe if somewhat inaccurately (as one may see by D'Ohsson's "Tableau de l'Empire Ottomane"), little else had been learned of the Hijaz but a string of place-names, and nothing of its geography properly so called; that is, the nature of its relief and structure, the absolute and relative position of its settlements and physical features, and the actual character of its life. Niebuhr and his party, landing at Jidda in 1762, had therefore much to learn. Unable to go beyond the walls of the port, they had to proceed exclusively by the method of

inquiry, as in regard to all other parts of Arabia except Yemen; and their success was but moderate. Niebuhr learned broadly the distinction of the Hijaz into a lowland littoral zone and a highland plateau region sloping inland; and he stated the general nature of the first very justly, — its barrenness, flatness, and lack of villages; but of the hill country he gained only a vague idea, hearing nothing of the system of wadys or of the volcanic (ḥarrah) country, and too hastily compared it to the Yemen highlands, not understanding the great difference in rainfall. Mecca he credited with being nearer Jidda by half the true interval; and he recorded the name of Taif alone among the lesser inland settlements. Mecca and the Ka'bah he described with general accuracy, and without fabulous details, the latter partly with the help of Moslem paintings obtained in Cairo; and of the pilgrim routes he spoke correctly. But he had nothing to tell of the ceremonies. Medina, like Mecca, he fancied was but a day's journey inland, and he had little to say of it. It was still a small place, he heard, visited by comparatively few pilgrims. Finally he is almost silent on the Bedawin tribes, except the Harb; but he repeated, and confirmed awhile in Europe, Varthema's fable that there were still wild Jews in Kheibar, although certain prudent Moslems of his acquaintance seem to have suggested that these Hebrew harriers of the *ḥājj* were no other than Arabs of Harb and Anaze.

Mecca Pilgrims

From Dr. J. Snouck Hurgronje's *Bilder aus Mekka*

At this point western knowledge of inland Hijaz remained for a generation after Niebuhr's visit to Jidda; and the only contributions to a better understanding even of the coast during that period were made by James Bruce on his way to Abyssinia in 1769, and Eyles Irwin, who was sent by the East India Company in 1777 to explore the overland route from the Red Sea to the Mediterranean. This Englishman tells us, however, of little but his adventures in Yambo, where he was made prisoner, and in Jidda, where he was released.[1]

Niebuhr's brief and temperate account of the Holy Cities had served to dispel some of the mystery which had hung about them, and rather to damp than to stimulate the spirit of adventure; and the Prophet's country would doubtless long have remained immune from European intrusion had it never mattered more to the west than in Niebuhr's day. But the eighteenth century was not to be spent before Europe was startled by a seeming repetition of the history of eleven hundred years before. Without much warning — for few had remarked a certain forecast of Niebuhr's — Arabia was seen to be in furious ebullition; and western eyes, already attracted eastward by the projects of Napoleon and the fortunes of his Egyptian and Syrian expeditions, turned to Mecca.

[1] One can hardly take account of such slight evidence as is contained in Henry Rooke's letters written from Mokha and Jidda in 1781–82. Bruce found nine Indian merchantmen at Jidda and the British colony increased.

Since the system of Mahomet attained the limit of its extension in Europe, and Christianity began to prevail once more against it, the misfortunes of Moslem societies have never reached a certain measure without evoking a movement of religious revival in some part of the domain of Islam. This, if instituted by Arabs, has always consisted primarily in the proclamation of the infinite superiority of the one God, and the enforcement of a purely spiritual worship of Him, based on mortification of carnal desires. Such a movement is really one of return to the spirit in which the Prophet first prosecuted his mission, and involves a renunciation of the compromise which he made later with the Koreish and the popular spirit of Arabia, by recognising the materialistic Meccan cult. In moments of humiliation thoughtful Arabs have ever asked themselves if the anger of God be not stirred by the association of mortals in a graduated scale of honour with Himself, whether these be patriarchs and saints, or even His prophet Mahomet; and by the veneration of so many outward and visible objects as are offered by Mecca and by the tombs of prophets and holy men.

In our own day we have seen an impure revival of this sort in Moslem Africa follow on a Christian occupation of Egypt; and it is worth notice that this found its main support in the tribe of best Arab blood in the Sudan, the Baggara. An earlier generation of the nineteenth century saw the Sheikh ʻAlī ibn Sanūsī return from Arabia, after the French

and British invasions of the Moslem lands of the eastern Mediterranean, to found an ascetic organisation, sworn to check Christian encroachment and restore Moslem supremacy. More than fifty years earlier still Niebuhr had seen a little cloud no bigger than a man's hand rising in Arabia, — sign of appeal from Mahomet of Mecca to Mahomet of Medina, evoked by the spectacle of the Christian advance in India and the increasing Christian interference with Moslem shipping in eastern seas and with Moslem potentates in the Persian and Ottoman empires.

For nothing does Niebuhr deserve greater credit than his chapter on "The New Religion of a Part of Nejed." It may be remarked that he was always singularly happy in his notes on the essential features of Arabian religion. He had grasped the purer principles which underlie the surface of Islam. He knew, for instance, that its system is not naturally aggressive; "Mussulmans," he said, "in general do not persecute men of other religions when they have nothing to fear;" and further, he knew that the Prophet preached a far simpler faith than his modern disciples profess, and that its superstitious elements, for instance, its saint worship, are not from the Founder. Abdul Wahab, therefore (as Niebuhr called the new Prophet), who taught that "God is the only proper object of worship, . . . and forbade the invocation of saints and the very mentioning of Mahomet or any other Prophet in prayer as practices savour-

ing of idolatry, . . . denying that any book had ever been written by divine inspiration or brought down from heaven by the angel Gabriel" and the like, the Dane held should be regarded as a reformer of "Mahometism, reducing it to its original simplicity." Nor did he think even that "imposture of Sheikh Mecrami," the zealot of Nejran, about whose origination of a movement similar to Wahabism we also hear, "inconsistent with the spirit of reformation." The importance of the Central Arabian religious movement Niebuhr appreciated with the most singular justice, and its future he foretold with equal sagacity. It had, he said, "already produced a revolution in the government of Arabia, and will probably hereafter influence the state of this country still further;" but "experience will show whether a religion so stripped of everything that might serve to strike the senses can maintain its ground among so rude and ignorant a people as the Arabs." Though it said nothing concerning the Sa'ūd dynasty of Deraiye, whose identification with the religious teacher was to be of so great importance, Niebuhr's account of early Wahabism contained no positive error, and was sufficiently just to warn those, who, like Gibbon, were watching the East, of a religious revival ominous enough to be mentioned in the same breath with the movements instituted by Mahomet and Musaylamah.

The man whose preaching caused a movement which, short-lived as its strength may have been, nevertheless marked the turn of Moslem fortunes

after their mediæval decline, was in reality one Muhammad ibn 'Abd al-Wahhāb, born at Ayane[1] of Nejd about 1696, and educated at Basra and Damascus to perceive the decay of Islam. He returned to his native oases a pilgrim who had seen the profane abominations of the Hijaz, and was convinced that all the Meccan element in the practice of Moslems was revolting to God, and that the divine face would be turned away until men should worship once again in the spirit of the earlier precepts of the Koran. He held that no one may receive religious veneration but God alone, Who delegates His honour to nothing animate or inanimate. No bargain shall be struck with Him through any intermediary, but absolute submission must be made, and the unceasing confession of it. Utter surrender of self, together with the rigid observance of such a simple code of morals, as that on which the earliest Moslem society in Medina had been based, alone is pleasing. All temptations to materialism, be they offered by tombs, commemorative monuments, relics or the like, should be obviated by the destruction of these things; and presumptuous and wayward man must be chastened and reinforced by an ascetic rule of life, the better to sustain his pursuit of the higher ideal.

This rule, as Niebuhr saw, was too severely spiritual to be followed long in all its purity by any large body of primitive folk. The submitting of body and soul to an abstraction of God, stripped of concrete

[1] Some, e. g. Palgrave, say at the neighboring town of Horeimle.

emblems, and approached through neither priest nor prophet, but by each spirit for itself, would hardly be possible in the first place or satisfying in the second to any race in the world. Little wonder, then, that the mass of the Nejdean disciples fell far short of their master's ideal, and came either to make a religion of the outward forms and observances of their sect, or lapsed, little by little, into those "superstitious customs which are the support, the consolation, and the hope of the weak, ignorant, and unhappy," as a very able European eye-witness of their worship prophesied they would.[1] But the severest critic of Wahabism has never impugned the motives or the conduct of its founder. Unlike the earlier Prophet, the later seems never to have compromised for a moment with popular materialism in the interests of the establishment of his creed. He claimed neither divine inspiration nor prophetic dignity; still less did he aim at temporal power. He saw those whom he had persuaded force his conception of God and life on almost all the vast peninsula of Arabia; but he died at a patriarchal age, a teacher, not a king.

The temporal success of his revival was rapid and immense. At the age of about fifty he made an enthusiastic convert of the Sheikh of Deraiye, a town of Wady Hanifa near his own birthplace. Muḥammad ibn Sa'ūd was a man of great parts and energy, and (hardly less important in Arabia) of very ancient and honourable lineage. By the swords of this man

[1] 'Alī Bey.

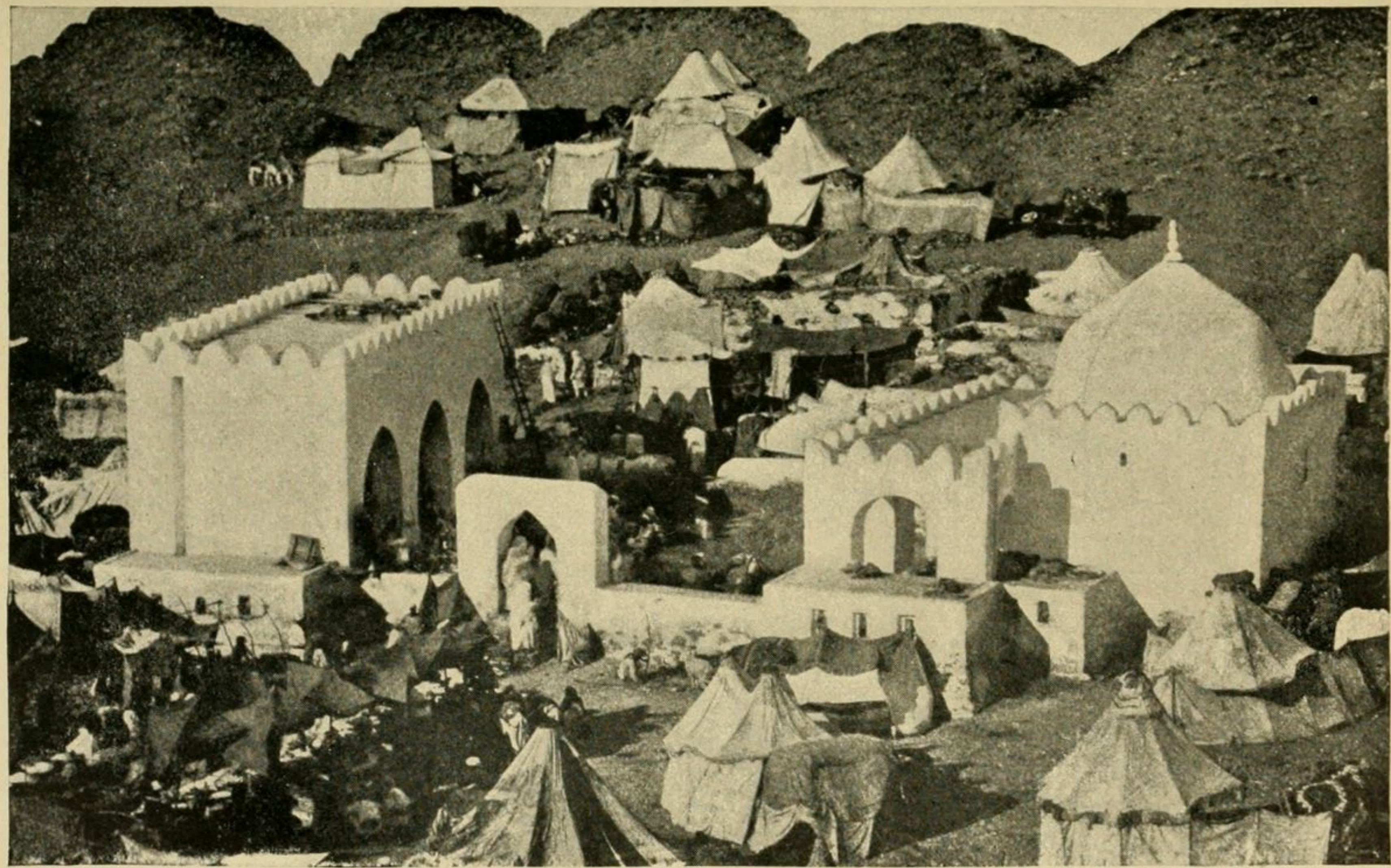
and his house the reformed creed was to be spread. In all the history of Arabia small bands of vigorous zealots have effected marvels among the loose-knit and light-brained population; and religious ideas, originally driven home by force, have remained as convictions of the conquered. Ere the Sheikh of Deraiye died, in 1765, he had impressed his own temporal supremacy and the spiritual supremacy of his teacher on almost all High Nejd, and welded its local chiefs into a confederacy, inspired by religious exaltation, eager to proselytise, and dominated by himself. His son, 'Abd al-Aziz, a mighty man of war,[1] crushed the last dissentients at home, and turning his arms against the surrounding sheikhs, saw Kasim and Dauasir accept the new doctrine, and Jabal Shammar confess itself half convinced. But he left further conquest to his son, Sa'ūd, already associated in the supreme power, and the latter proceeded to show the world that a new scourge of God was manifest in Arabia.

The Sharīf of Mecca was already alarmed, and the Ottoman government heard nervously of his defeat in Kasim. Having buried with great honour the aged teacher of his house, Sa'ūd descended on the Persian Gulf, where Reinaud was witness of the cruelty of his zealots near Koweit, and the Pasha of Bagdad tried in vain to arrest his conquest of Hasa. When the nineteenth century opened, the Wahabi was strong enough to inaugurate the reform of the holy places.

[1] Reinaud, the only European known to have seen 'Abd al-Aziz, said of him in 1799 that he was a "lank haggard man and for a wild Arab, very civilly mannered." See Von Zach's *Monat. Correspondenz*, xi. p. 241 (1805).

He began with Kerbela, the wealthy and corrupt seat of Shiah idolatry of Ali's house, and to the amazement of its overlord in Stambul, left it a pillaged and smoking ruin. In the next year, 1802, his half naked hordes appeared before Mecca itself. The centre of Islam could only submit and be purged. All the local ceremonies, which implied worship, or even commemoration, of mortals, from Abraham to Mahomet, and all traffic in holy things were forbidden; but, significantly enough, such usages as seemed to imply honour to God alone, for example, the lapidation of the Devil at Muna, or the kissing of the Black Stone of the Ka'bah, might still be observed, however superstitiously. Would such concessions to vulgar weakness have been sanctioned by the original teacher?

Holding on their fierce course, the Wahabis reached the Red Sea, but failed to master Jidda, and had no better success for the moment with Medina. The old Emir 'Abd al-Aziz fell by the hand of a fanatic avenger of Ali, but Sa'ūd returned to the charge. Jidda yielded to his second attack, and Medina was purged even more drastically than Mecca ere five more years had passed. The Wahabi took Ras el-Kheima and laid Oman under tribute. By 1804 all Arabia acknowledged his supremacy, and the whole Moslem world had to reckon with, and conform to, his stern creed, if it would make interest with heaven at the Holy Cities. Where next would the purge be applied? Men reflected aghast that the logical outcome of such a creed was ceaseless proselytism till



Mecca Pilgrims at the Tomb of Sittana Metmunah

From Dr. J. Snouck Hurgronje's *Bilder aus Mekka*

all Moslems should come into the better way, and that its life was war.

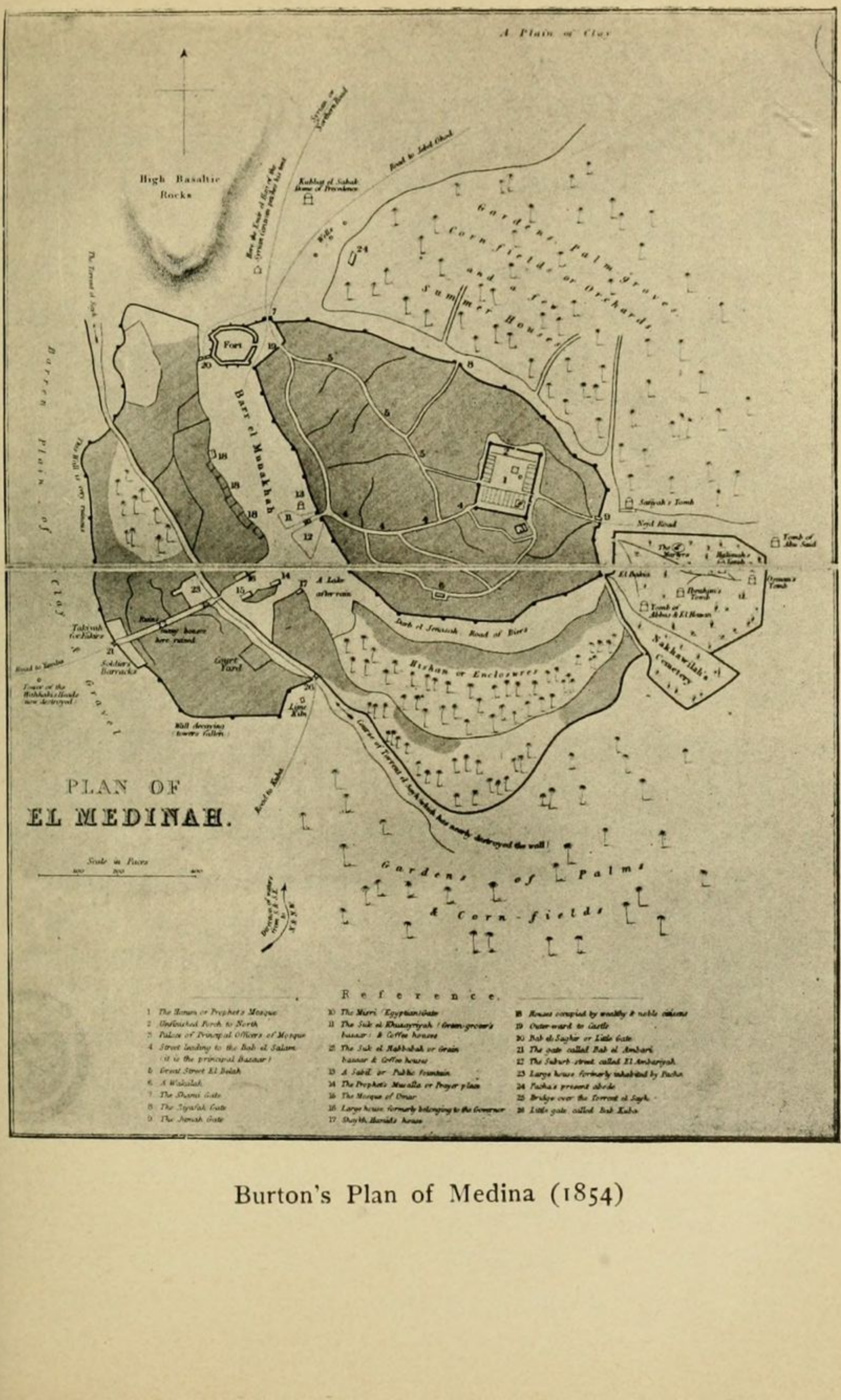
With the spiritual success of the Wahabi movement we are less concerned. It is easy to see that Muhammad ibn 'Abd al-Wahhāb enjoined both a theory and a practice which contained seeds of evil as well as good, and by less pure and thoughtful souls would inevitably be perverted to shallow sectarianism. The fatalistic irresponsibility of man would follow on this doctrine of unconditional submission to God; and conviction of it would survive in eastern minds the sense of moral obligation. The peculiar asceticism which the Teacher inculcated as a means of grace would breed self-righteousness and that fanatical exclusiveness by whose assertion all men are prone to imagine they focus the eye of God peculiarly on themselves; and with the mass the means to uniformly moral conduct would come to be regarded as means to immune indulgence of occasional immorality. In the latter days of Wahabism, when a century had passed since its first propagation, and the early hopes of its confessors had been discounted by misfortune and defeat, the evil consequences of the reform were doubtless more prominent than the good; and Palgrave had some ground for his contempt and condemnation of the hypocritical and futile sectarianism which prevailed at Riad in 1863. But that adventurer, as we shall see in the sequel, had an interest, which he was not the man to disregard, in making the worst of the matter. In any case

let this be said. Despite the state of moribund decay in which Palgrave represented it to be forty years ago, Wahabism is, nevertheless, not yet dead, but a force with whose possible recrudescence wise observers of the Near Eastern question reckon still.

Those Europeans who came in contact with the Wahabis in the great days of the movement unanimously recognised in their doctrine a true reform, and in the men, however rude and fanatical, devotees of better purpose and purer conduct than the mass of Moslems, or the official teachers and professors of Islam in its holiest and most official centres. Of the competence of these Europeans we shall treat presently. For the moment it is enough to note that the learned and able Spaniard who, calling himself 'Alī Bey, saw the Nejdean pilgrim horde, in 1807, fighting for access to the Black Stone, and devastating the precinct in its savage tumult, saw also some commendable qualities in its members.

"They never rob either by force or stratagem except when they know the object belongs to an enemy or an infidel. They pay with their money all their purchases, and every service that is rendered them. Being blindly subservient to their chief, they support in silence every fatigue, and would allow themselves to be led to the opposite side of the globe."

Untainted by the whoredom and sodomy of the Meccans, they were respecters of chastity. Burckhardt, an even more accurate and impartial observer than the Spaniard, who made close inquiry in and



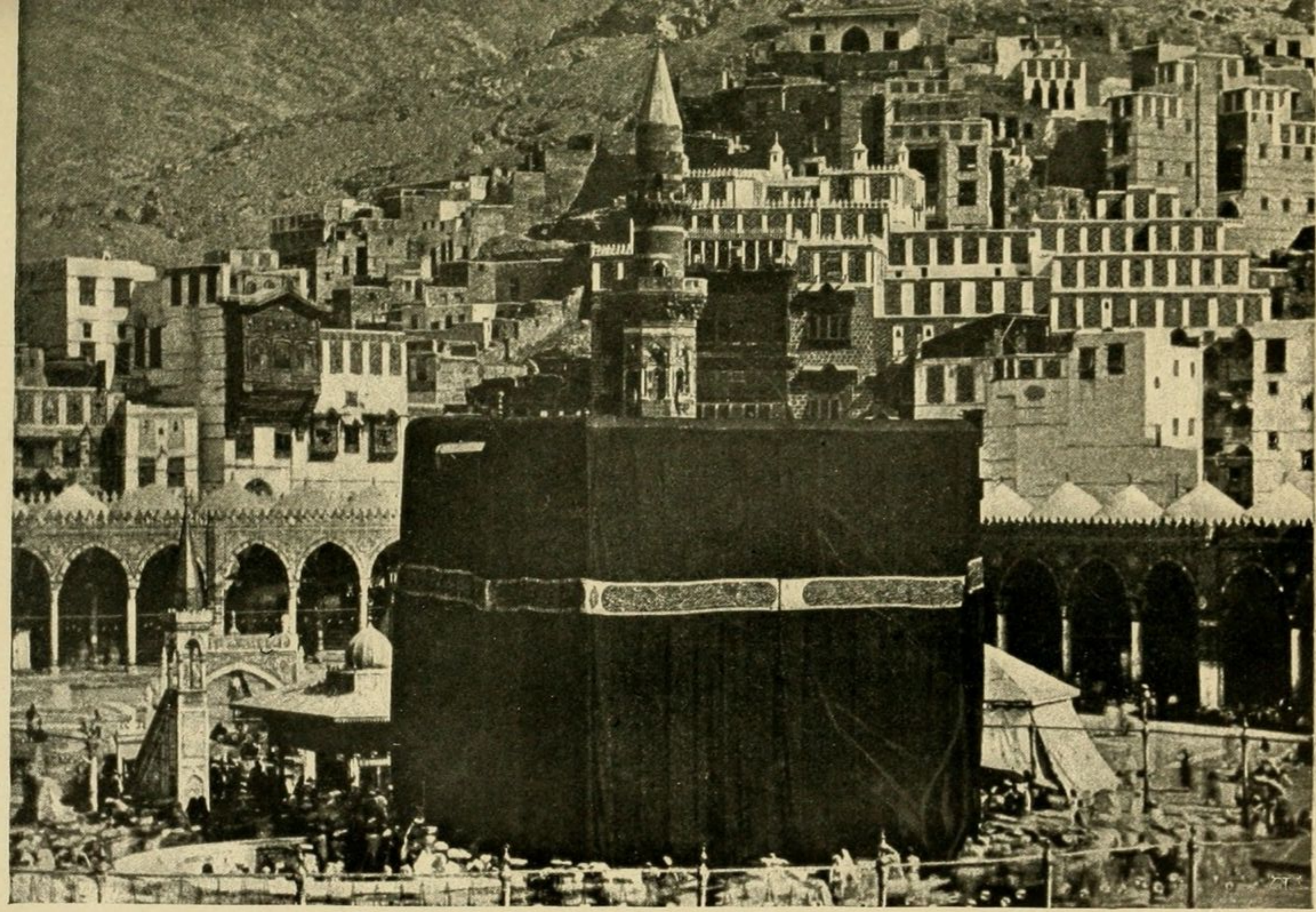
Burton's Plan of Medina (1854)

about Mecca in 1814, testifies that the Wahabi action there was dictated by sincere desire to put an end to abominable practices; that the Wahabi's promise was always observed to however treacherous a foe; and, in short, that "to describe the Wahabi religion would be to recapitulate the Mussulman faith, and to show in what points this sect differs from the Turks would be to give a list of all the abuses of which the latter are guilty."

Such were the exploits of Sa'ūd which recalled to Arabia the attention of many who had long forgotten it. While the Wahabi emirs were pressing unity on Nejd, few regarded them. When the smoke of Kerbela went up, Constantinople and Teheran were troubled. But when Mecca was taken and held, not only did the Caliph bestir himself for the safety of his religious supremacy and the integrity of his precarious empire, but Christian Europe began to speculate on a new convulsion of the east, which might gravely affect itself.

Early in 1807 there landed at Jidda a princely pilgrim from the west with great train of servants, scientific instruments, and such other apparatus of learning as recalled the liberal days of the Moors. He called himself 'Alī Bey al-'Abbāsī, and as the last of the caliphial house of his name, made the obligatory visit to Mecca in state, and tried, after taking ship for Yambo, to go up to Medina also; but he was turned back by the Wahabis. He returned to Egypt, and, having journeyed thence by way of

Syria and Turkey to Europe, reported himself in Paris in 1813. A year later a narrative of travels, translated from his Spanish manuscript, was published at Paris. For this man was in reality one Domingo Badia y Leblich, who had set out from Cadiz in 1803 after consultation with various eminent persons in Paris and London, and been "spoken" at Alexandria three years later by Chateaubriand. His professed object was scientific observation, and for that task he was singularly well qualified by knowledge of Arabic, of instruments, and of geology and botany. But much remains mysterious about him. He came from and returned to obscurity in his oriental guise. Bankes, publishing the narrative of his successor, Finati, in 1830, suggested that 'Alī Bey was a Jew, and claimed positive knowledge that he was a spy of Napoleon. Nor is it improbable that the emperor, who, even when foiled in his hope of oriental dominion, still retained hope and sometimes avowed himself a Moslem, did despatch this man through Morocco and Tripoli to Mecca in order to gather information about the attitude of the eastern world to the new Moslem movement; and to see if this could not be guided in any way to the furtherance of his own designs on Egypt, Syria, and the east. Badia seems to have been no mere pretender to Islam, but to have confessed that creed both before and after he was in Mecca, and while he was there, to have been proved so genuine a Mussulman, and so thoroughly worthy of his illus-



The Ka'bah, Mecca

From Dr. J. Snouck Hurgronje's *Bilder Atlas zu Mekka*

trious pretension in speech and conduct, that he was accorded not only unusual honour and privileges, but full liberty to use instruments and take notes. The Meccans at any rate, while recognising him as a master of European science, cannot have suspected him for a European renegade.

That part of his curious narrative which is devoted to Arabia is occupied for the most part with Mecca itself, and especially with the Ka'bah and its precinct, and with the rites and ceremonies of the *ḥājj*. He had greater opportunities than his predecessors, being permitted even the high but costly privilege of sweeping out the house of God; and his account accordingly served to correct small errors in theirs (of which he showed no knowledge), while it left new ones for Burckhardt to set right. But the tale of the doors and pillars of the holy precinct falls hardly more within the province of our inquiry than the minutiæ of ritual observed at Muna and Arafat; and we hasten to say that 'Alī Bey has other claims to a niche in the temple of geography. He was the first to determine the position of Mecca by astronomical observations, — the first, that is, so to fix any inland point in Arabia; and he can claim priority for his notes on the geology, botany, and meteorology of the Hijaz. Before him, moreover, no European had offered any description of the roads leading from Mecca and Medina to the coast. 'Alī Bey, first of modern travellers, mentioned the *Ḥarrahs* or lava fields in West Arabia, on which Burckhardt was

presently to add information; and he first gave some account of Wahabite Nejd and its capital, Deraiye, though he placed the town far north of its actual position. Historically his book is very valuable, in that it contains the only record penned by an eye-witness of the Hijaz under Wahabite rule and before Egyptian intervention. It is interesting to know that the immediate result of the establishment of the reformed faith was that all Europeans left Jidda.

Three years later, while the Wahabi still ruled in Mecca, appeared another European, who falls into the same category as Badia, but was perhaps less of a political agent than he, and certainly a man of greater science. This was Ulrich Jaspar Seetzen, styled "conseiller d'ambassade" in the Russian service, who for twenty years had trained himself in Germany to be an eastern explorer. He was a botanist of European reputation, a profound observer of things and men, and a most learned Arabist, who had already spent some seven years in eastern lands, — in short, Seetzen was in many respects the best qualified European traveller who had yet come to Arabia. On this account, and because his pilgrimage to Mecca and Medina was intended by him to further much more extensive projects of travel, he may be regarded more properly as Burckhardt's predecessor than as the successor of 'Alī Bey. Like the former, he was certainly only a temporary Moslem, — he seems not to have assumed the character before landing in Arabia, — and he was qualifying as a *dervish* for adventure

Ulrich Jaspar Seetzen

From a portrait in the *Herzogl. Bibliothek, Gotha*, of which a photograph was kindly supplied by Dr. R. Ehwald

in Moslem lands even less accessible than the Hijaz; namely, those Central Asian Khanates, which were of peculiar interest to his Russian imperial patron. Like many since his day, he formed the project of crossing inland Arabia on his way to the farther east; and to that end, after performing his pilgrimage, and visiting Sana and Aden, he set out again from the coast towards the Yemen highlands, with many camels, in the character of Ḥājji Musa, a physician; but he had not passed Tais before he was murdered. Who killed him, and why, it has never been known; but there seems to have been a contemporary impression that not mere pillage, but fanatic suspicion led to the murder. In any case, Seetzen, who had been suspected in Mecca and cross-questioned by the Wahabi emir, committed a capital error by returning on his own tracks. Some of his effects were recovered; but neither his last diaries, nor all his books; and twenty-five years later the missionary, Joseph Wolff, saw one of these in Zebid. The tragedy which has robbed us of the fruits of this great scholar's exploration of the Hijaz and Yemen, robbed him probably of some of the fame which has since fallen to the share of Burckhardt.

If most of Europe was content merely to observe from afar what was now passing at Mecca, one power could hardly avoid intervention. This was the Ottoman. Very weak at this epoch, the Caliph of Islam had everything to fear from the substitution of an-

other supremacy for his own in Mecca, and from the victorious intrusion of a religious rule in the Sunni world, other than that which he followed himself. Long experience of the perils of the Damascus *ḥājj*, and the recent fortunes of the expedition sent from Basra against the Wahabite so strongly dissuaded from any attempt to throw an army into Arabia from the land side or from the east, that the Sultan had no choice but to make Egypt the base of his operations. Here ruled a new pasha who, by determination and energy, had gained real control over the whole country, and was at the same time in a peculiar sense the creature of his master by the circumstances of his origin and appointment. He was engaged in breaking up the alien military aristocracy which had long lorded it in the Nile valley, and, that done, would have legions of servile conscripts at his disposal.

Order upon order to invade Arabia was sent to Mehemet Ali, but disregarded by the harassed pasha. At last the supreme danger which the Porte had foreseen manifested itself. In 1810 a Wahabi army emerged from Arabia, ravaged the lands beyond Jordan, and all but attained Damascus, while another attack was barely repelled from Kerbela and Meshed Ali. The Caliphate could hardly survive further insults, driven thus near home; and Mehemet Ali was given to understand that he must save his master or be destroyed by him. If Egypt could be trusted to remain at peace its viceroy was not wholly averse

to the Arabian venture. He had obscure but ambitious projects, and to be liberator of Mecca was to loom large in Moslem eyes. He yielded at last, and constructed a fleet at Suez, but not daring as yet to leave Egypt, where the Mamelukes were still strong, sent off his second son, Tussun, in the autumn of 1811.

The period of the Egyptian expeditions to Arabia is marked by most important progress in European knowledge of the peninsula; but they contributed to it indirectly rather than directly. About half a score of Europeans in official stations accompanied the expeditions openly, to whom is to be added an unknown number of others who by apostasy or otherwise had become orientals; for example, that Aghā of Mamelukes, sometime Thomas Keith, private in the Seventy-second Highlanders, who for a short time in 1815 held the strangest office to which surely even a Scot has attained, — the governorship of the Holy City of Medina; or the Englishman, Atkins, whom Tamisier found in charge of a Congreve rocket battery in the Asir campaign of 1834. The only one of these converted Europeans whose record has come to hand has nothing to tell which is much to our purpose. This is Giovanni Finati, of Ferrara, who in Dalmatia had deserted from the French army to the Turkish, and afterwards enlisted at Cairo in the Egyptian. He served as a renegade with Tussun, was in the force which was sent to besiege Gunfude in 1814, stayed awhile in Mecca, took part in the disaster of Taraba, and long afterwards told his

adventures, as far as he could remember them, when serving in Syria as dragoman to William John Bankes, an Englishman. His narrative is moderately entertaining, and the light he throws, often unconsciously, on the condition of the Egyptian forces is instructive; but the geographical information he gives is of no value whatever. Nor have the Europeans who served openly and were men of education, given much more account of themselves. With the exception of some French surgeons, who followed the later operations of the war, none of the western officers, to my knowledge, published his experiences.

The occupation of a large part of Arabia, however, at one time or another by the forces of a semi-western Moslem power, conspicuous for its laxity, enabled one European of singular talents to make a leisurely survey in the forbidden land, and led to another making undisguised the first crossing of the whole peninsula. Moreover, as we shall see, it brought inhabitants of the unknown centre into relation with other Europeans, who, from their reports and those of members of the Egyptian forces, were enabled to compile geographical descriptions of certain regions theretofore unexplored. In short, we have to thank Mehemet Ali for the treatises of Mengin and Jomard on Nejd and Asir, for the journal of Sadlier, and for the pilgrimage of Burckhardt.

The tedious recapitulation of the disasters and successes of the Egyptian campaigns may be foregone. The curious can find them set forth in detail in Félix

Mengin's history of Egypt under Mehemet Ali. For our purpose it will be enough to sketch their general result and to mark certain particular events to which the explorations and inquiries of the European travellers just mentioned were related. Mehemet Ali's expeditions were badly manned, badly equipped, and, especially in the earlier campaigns, often very badly directed. But so false did the different sections of the western Arabs prove to one another, so ready were all to renounce the stern regimen of the Wahabis, and so ill armed were the latter in comparison even of the Egyptian conscripts, that the invading forces were able to recover from disaster after disaster, to maintain themselves in the country, and to advance painfully from point to point towards their goal in Nejd. Tussun, who landed at Yambo, and forthwith lost half his army, was nearly two years in taking Medina, and then succeeded only by grace of the Harb Bedawins; but with the co-operation of the Sharīf he arrived at Mecca with much less pain in 1813. There his forces rotted, plague-stricken, till his father arrived upon the scene, and sent them eastward and southward to clear the Hijaz of the bold raiders of Nejd and Asir. The Egyptians suffered signal disasters in both quarters, and had to thank the fever which carried off Sa'ūd, the great Wahabi, early in 1814, rather than their own skill or valour for present deliverance and ultimate success. There was breathing space while Mehemet Ali sat down in Mecca and Taif to give the Bedawins time and occasion to betray one another, and himself

the opportunity of posing as a devout and punctilious Moslem.

At this juncture there landed at Jidda one Ibrahim ibn 'Abd-Allah, already known to Mehemet Ali in Cairo for an English renegade or pseudo-renegade, and looked on with some favour by the free-thinking pasha. But he was really a Switzer of Basle, Johann Ludwig Burckhardt by name, who, after studies in England, had been sent to the east by the British African Association. In the course of a residence of above two years at Aleppo and much wandering in Syria and Nubia, he had gradually assumed an eastern character, and become famous for the discovery of Petra. He now desired information on Arabia, and the title of *ḥajji,* which might serve his ultimate design of penetrating from Morocco to the Niger lands.

By the world of scholars, and especially by the best of his own successors, no name of an Arabian explorer has been held in higher esteem than Burckhardt's; not, indeed (although he claims priority in many matters), for the magnitude or moment of his discoveries; for his travels covered a less area even than Niebuhr's. Burckhardt braved no great dangers, surmounted no unexampled difficulties, and passed through no amazing adventures. He was of that small company of profoundly wise and foreseeing travellers who go with ease where others may not go even with pain, and know no stirring moments in a land wherein to some every hour brings peril. He testifies that he was never more at peace than in Mecca, and nowhere

Johann Ludwig Burckhardt

From a sketch made in Cairo by Mr. Consul Salt in 1817

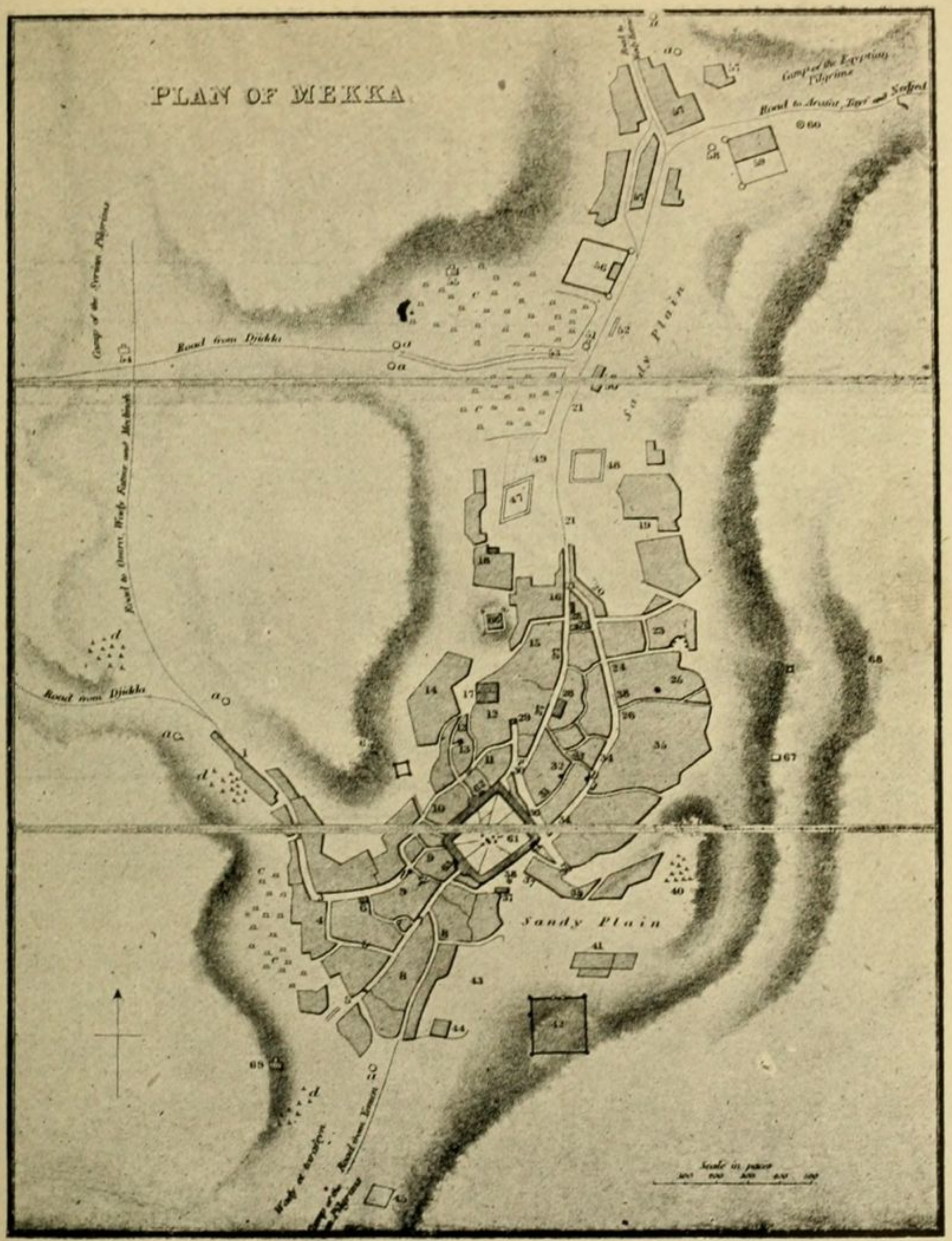
in Arabia suffered any hap more inconvenient than falls to the ordinary lot of wayfarers and pilgrims in Hijaz. Were it not for the many infirmities of his body, he had had hardly a moving accident to record. Thoroughly versed in the law and custom of Islam, not denying that he was a European, but claiming with reason to be a Moslem proselyte of some years' standing, doing in his daily life neither more nor less than any learned and enlightened gentleman of the faith might well have done, fluent and correct in Arabic speech, Burckhardt never gave occasion to the shrewd Egyptian pasha, the watchful townsmen of the Holy Cities, the fanatics assembled for the pilgrimage, or the rude Bedawins encountered by the way.

The credit due to Burckhardt is not for seeing many things in much of Arabia, but for seeing much in a little of it, thanks to his clear vision and the careful preparation of his mind by the study of native authorities. His glory is to have described not so much that was new to western science, as so much that was true then and is true still. He was the first of Arabian travellers to realise fully the explorer's obligation to serve all sorts and kinds of inquiry; and few travellers have left so little for the man who may come after them. Burckhardt's descriptions of Jidda and Mecca are truly encyclopædic, — the patient harvest of an observant, leisurely eye, for which nothing human lacked interest. When Burton had to give account of his own visit to the religious capital forty years later, he could do no better than quote Burck-

hardt; and if he found somewhat to add to his predecessor's description of Medina, it was because the latter sickened there of the malady which was to kill him within two years.

Of Burckhardt's actual journeys in Arabia little more need be said. He went straight up from Jidda to Taif, passing through a corner of Mecca, and over Jabal Kora; and after making all right with Mehemet Ali, returned with due piety to the Holy City to await the coming of the pilgrim caravans. With the assembled faithful he went through the full ritual in November and December, but missed his chance of leaving Mecca with the Syrian *ḥajj* through the defection of his camelmen. Finding, however, a smaller company starting for Medina in January, 1815, he accompanied them by the coast road, and performed his duties at the Prophet's tomb ere taking to his bed till April. On his convalescence he shrank from the overland march to Egypt, much as he wished to visit the rock monuments of el-Hejr (Medayin Salih), and came down to Yambo, and there took ship. The manuscripts of his journal, and his notes on the Wahabis, written in English, reached his patrons in London shortly before untimely death overtook him at Cairo, and they were, in part, revised by Martin Leake; but they were slow to appear, owing to the necessity under which the African Association lay to issue first his earlier journals of travel in Syria and Nubia.

The "Arabian Journal" was published at last in



Burckhardt's Plan of Mecca (1814)

1829 by Sir William Ouseley, and the "Notes on the Bedouins and Wahabis" saw the light two years later, making in all four volumes on Arabia. Both in quantity and quality these books form a most remarkable memorial of a sojourn which lasted not nine months, and was spent in part on a sick-bed; and the more remarkable since they were written in twelve months of precarious health, ended by death. Comparatively voluminous, they contain little or nothing that can be called superfluous, and are filled out in very small proportion by personal adventure. A better testimonial of industry, conscientiousness, and sobriety has been left by no explorer.

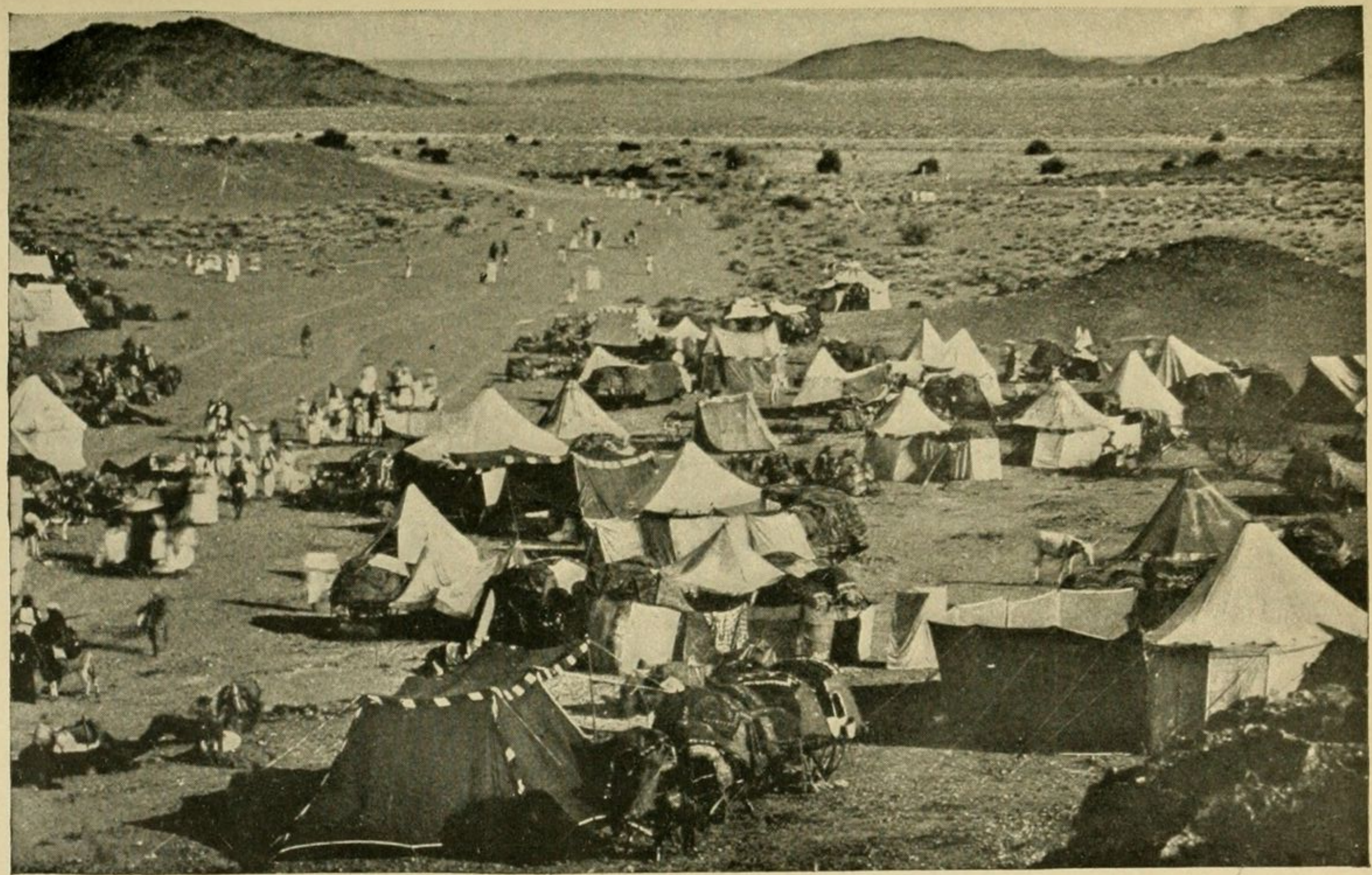
Burckhardt's Journal may be said to have satisfied all the curiosity felt at the date of its publication concerning the Holy Cities and their neighbourhood by students of religion, politics, social custom, and local history, by topographers and by economists and merchants. There is much in it too for students of the natural sciences, especially for geologists, although, unlike Seetzen, Burckhardt was not primarily a naturalist. The extraordinary minuteness and accuracy of his description of the Ka'bah and its precinct left, as we have said, nothing for Burton to add or subtract, and to Snouck Hurgronje, in our own generation, little but the task of noting changes that had taken place in seventy years, and amplifying and co-ordinating facts of past history. In the great gathering to hear the sermon on Arafat, in the ceremony of devil-stoning, and in the wild orgie of sacrifice at Muna

and tumultuous return to Mecca, there will always be fresh matter for an observant eye, and scope for novelty of description. But Burckhardt's judicious pen-pictures of these scenes of the pilgrimage have not been bettered; and no one who has witnessed them has proved himself more sensitive to their ancient mystery and actual human interest. Survey with him the thousands standing on the granite blocks of Arafat about the preacher, who ostentatiously wipes away the tears which attest God's special grace.

"Some of them, mostly foreigners, were crying loudly and weeping, beating their breasts and denouncing themselves to be great sinners before the Lord; others (but by far the smaller number) stood in silent reflection and adoration with tears in their eyes. Many natives of the Hedjaz and many soldiers of the Turkish army were meanwhile conversing and joking; and whenever the others were waving the *ihram*,[1] made violent gesticulations, as if to ridicule that ceremony. Behind, on the hill, I observed several parties of the Arab soldiers, who were quietly smoking their nargyles; and in a caravan just by sat a common woman, who sold coffee, and whose visitors, by their laughter and riotous conduct, often interrupted the fervent devotions of the hadjys near them."

It was with the philosopher's eye that Burckhardt looked on the arcana of Islam; and without straining at effect he reveals them to us. The splendours of the Prophet's mosque at Medina he thought were not what they might well have been: —

[1] *I. e.*, the scant garment obligatory during the pilgrim's sojourn.



Mecca Pilgrims in Camp outside the City

From Dr. J. Snouck Hurgronje's *Bilder aus Mekka*

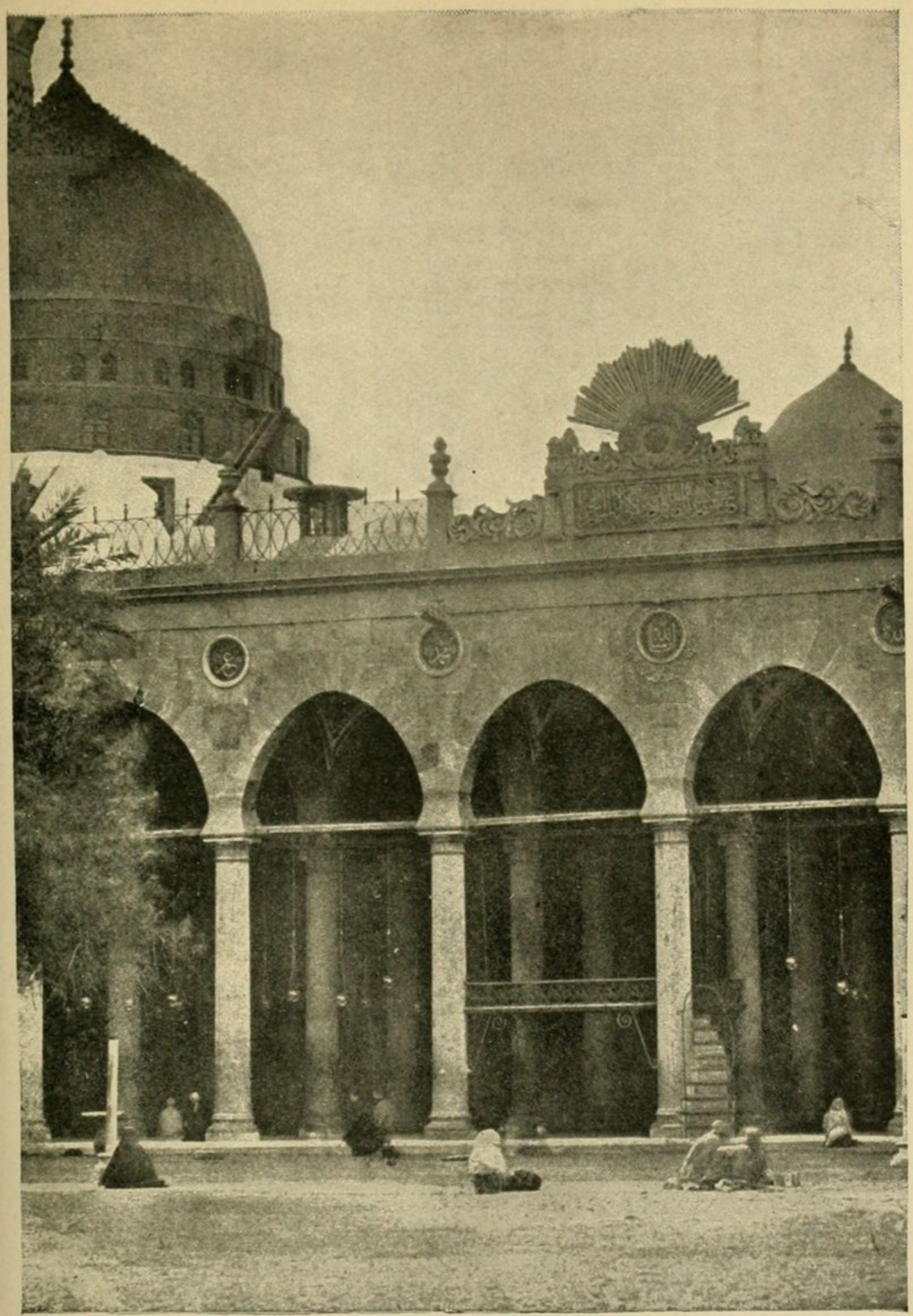
"The gaudy colours displayed on every side, the glazed columns, fine carpets, rich pavement, the gilt inscriptions on the wall to the south, and the glittering veil of the Hedjra in the background, dazzle the sight at first; but after a short pause, it becomes evident that this is a display of tinsel decoration and not of real riches. When we recollect that this spot is one of the holiest of the Mohammedan world, and celebrated for its splendour, magnificence, and costly ornaments, and that it is decorated with the united pious donations of all the devotees of that religion, we are still more forcibly struck with its paltry appearance. . . . Whatever may be their superstition and fanaticism, Mohammedans are never inclined to make as many pecuniary sacrifices for their religious establishments as Catholic and even Protestant Christians do for theirs."

With the social customs, humane and bestial, of the Hijazis, and especially the Meccans, Burckhardt deals fully, and with much appreciation as well as condemnation: neither does he dwell on the darker sides, nor is he more prudishly reticent than a man might be expected to be who, writing for Britons in the thick of the antislavery agitation, calmly stated that he brought a Shendy slave to Jidda, but was compelled by stress of poverty to realise forty-eight dollars on him in the market of that town. His pictures of daily scenes in house and bazaar at Jidda and Mecca are elaborated with minute detail; and this serene slave-owner convinces us that he lived the life he describes, and saw below the surface of things. For history he relied not only on local informants, but on manuscripts picked

up in Cairo and Mecca. In prosecuting an inquiry he must have been no less diligent and judicious than Niebuhr; in capacity for studying Arab books he was greatly superior to his predecessor.

On no point is Burckhardt so observant and enlightening as on trade. Doubtless to investigate the actual state and the future possibilities of commerce was his special mission in whatever land he might be. He went, accordingly, with extraordinary minuteness into the economic state of Jidda and Mecca, making in the first town an exhaustive catalogue of trades, occupations, and commodities. It was not his fault that the imminent opening of the Suez overland route was so greatly to modify the conditions of Red Sea commerce within a few years that his labour was largely lost. Indeed, he foresaw that this might happen should Egyptian obstruction give way, and he was not blind to the detrimental effect which foreign competition was already exercising on the native products. If any illusions still survived in Europe concerning the wealth of the Arabian peninsula he hastened to remove them by showing how little of all that appeared in the bazaars of Jidda and Mecca was of Arabia's producing, and how barren the indolent and backward population. Even at that date he could foretell the collapse of the commerce in Yemen coffee, in face of American and Indian importation, fine as was and is the quality of the Mokha bean.

After Burckhardt there was little but minor detail left to glean about either the society or the topography



The Tomb-Mosque of the Prophet at Medina

From an unpublished photograph, taken by a Turkish officer about 1880, and kindly lent by Mr. Wilfrid Blunt

of the chief centres of population in Hijaz, Mecca, Taif, and Jidda. Medina and Yambo had severally been described sufficiently, together with the roads connecting them; and the Swiss observer had laid the foundation of an ethnological science of the complicated tribal society which prevailed over all the land. But neither he nor his predecessors found themselves in a position to deal satisfactorily with the broader geographical features. They had seen, all considered, no more of Hijaz than is visible from the most direct paths which lead from the sea to the Holy Cities and Taif, and on the coastal Mecca-Medina road. Not only did all to south of Mecca and to north of Medina remain unexplored, but also the hill tracts between the cities, the intricate wady system, and the plateau which stretches behind towards Central Arabia. That there was such a plateau Burckhardt seems to have been the first to make known; that its western fringe was largely volcanic, a fact known to Yāḳūt, had been learned by 'Alī Bey. But neither of these explorers gave information upon the hydrography of the West Arabian highlands, seeming indeed to have regarded such matters as of no importance. Mountain structure, relative elevation, water-partings, and the direction of drainage hardly filled, in the science of geography a hundred years ago, the place that is their due now. 'Alī Bey had been provided with instruments for astronomical observation, but his explorations were confined to Mecca and Jidda. Burckhardt, with wider opportunities, used but a

ship's compass during part of his stay. Their combined observations in Hijaz, therefore, while supplying abundant material for descriptive treatises, made it little easier to map the land after their visits than before.

We should do scant justice, however, to Burckhardt at least, if we connected him with Hijaz only. Like Niebuhr, he used not only keen vision, but rare judgment in inquiry; and in the appendices to his "Journal" and his "Notes on the Bedouins" he was eventually able to give an immense amount of new and valuable information concerning all West Central Arabia, derived from the caravaners, pilgrims, and traders, who resorted to the Holy Cities. Whereof more shall be said in the sequel.

NOTE. 'ALĪ BEY. Since the above has been in type, I have referred to the Catalan edition of his Travels, the preface to which gives much additional detail of his life. I must modify what is said on page 80 in certain respects. He definitely substituted a political for a scientific purpose after being some time in Morocco: he was received by Napoleon on his return to Europe, and entered the service of Joseph Buonaparte, whose fortunes he followed. He set out once more for Mecca via Damascus in 1818, but died on the road, two marches from Mzerib, of dysentery (but a malicious suggestion was made subsequently that there had been foul play, prompted by British intrigue). As a cross was found under his vest, he was denied burial, and must be accounted a genuine Christian throughout. His effects and papers were stolen, but in part redeemed by the "English lady Ester Stenoff" (= Hester Stanhope?). See *Viatjes di Ali Bey*, etc. Barcelona, 1888.

BIBLIOGRAPHY

Pococke, *Specimen Hist. Arabum* (London, 1650); Varthema, see ch. i.; Wild, *Neue Reysbeschreibung eines gefangenen Christen* (Nurnberg, 1623). *Cf.* also *Itiner. Benj. Tudelensis* (Helmstadt, 1636); Pitts, *True and Faithfull Account, etc.* (Exeter, 1704).

'Alī Bey, *Travels*, (Paris, 1814, London, 1816); U. J. Seetzen, *Reisen durch Syrien, etc.*, ed. by F. Kruse (Berlin, 1854); G. Finati, *Travels*, ed. by W. J. Bankes (London, 1830); J. L. Burckhardt, *Travels in Arabia*, 2 vols. (London, 1829), and *Notes on the Bedouins and Wahabis* (London, 1831); James Bruce, *Travels* (Edinburgh, 1813); Eyles Irwin, *Series of Adventures in the . . . Red Sea* (London, 1790).

On the history of Wahabism see also Appendix I. vol. 2, of F. Mengin's *Histoire de l'Egypte sous le Gouvernement de Mohammed-Aly* (Paris, 1823); L. A. Corancez, *Histoire des Wahabis* (Paris, 1810).

CHAPTER IV

THE EGYPTIANS IN NEJD

FROM Taif, Mecca, and Medina Burckhardt had looked with insatiate curiosity towards the unexplored source of the new spirit of Islam. We have seen how little Idrīsī had to say of Nejd, and how little more Abu-l-Fidā or any Moslem writer before the end of the sixteenth century. Within the next fifty years, however, a better informed treatise was composed, and about a century later it was printed in Stambul. This was the "Jihān Numā" of Mustafā ibn 'Abd-Allah, commonly called Ḥājji Khalfah or Katīb Chelebī, author of the great encyclopædic work on which D'Herbelot based his "Bibliothèque Orientale."

The learned Turk improved on his predecessors in several respects. He had a clearer general idea of the broad divisions into which nature divides Central Arabia. Proceeding in his description from south to north, he placed in the first belt a great desert region which he named Aḥḳāf, below a fringe of fertile oases, — Nejran, Dauasir, and Yabrin, — and the whole he called "Nejd al-Yemen." The second belt he understood as being "Nejd al-Ared," with numerous wadys;

the third as the low valley region of Kasim "in parte inferiori vallis Vadi Essem";[1] and the fourth as the plateau of "Schemr," with its ranges of hills. Of the character of these belts he gave a fairly correct idea; a very much better one of "Nejd al-Ared," for example, than Abu-l-Fidā's. He mentions Daraeia (Deraiye), Rajad (Riad), and all its principal settlements, allots it a round number of three thousand villages, and enumerates its main products. His brief description of the main valley could not be bettered "vallis . . . a Beni Hanifa vocata silvestris palmifera pagisque in seriem positis frequens." And it is evident that he had had recourse to eye-witnesses; for no second-hand authority would have led him to mention the white cliffs of a range (Jabal Tueik) rising to east of Nejd, and falling on the far side into sands.

This account, existent only in a rare Turkish book, was probably unknown to Niebuhr; or, if known, it was not allowed to dethrone Abu-l-Fidā's authority: for the Dane still spoke of two provinces only in Nejd, — Ared and Kharj, — and of "Imam" (Yemama) as its one considerable settlement. He knew apparently far less about the different oases of Ared, their towns and villages, than Ḥājji Khalfah, and had a much hazier idea of the north country, where he failed to realise that great geographical feature, the Nafūd, — the "Raml Dah," which the Turk placed in "Belad el-Gyuf." Burckhardt either had more trust in the

L. of C.

[1] Norberg's translation.

"Jihān Numā," or was better served by his pilgrim and merchant informants, for he displayed a remarkably comprehensive and accurate conception of northern Nejd, and described Kasim, the districts of Sedeir and Hasa, and Jabal Shammar and the Nafūd (whose width he estimated correctly) without any serious sin of commission. It must have been owing to the closing of the Wahabite country to Hijazis that he could speak so much less fully and accurately on Woshm, Harik, Yemama, and the oases fringing the southern desert. Concerning Ared, his interest in Wahabism led him to make very particular inquiry; and the same authorities who informed him so well on the history and actual state of Wahabism were doubtless responsible for his full description of the city of Deraiye.

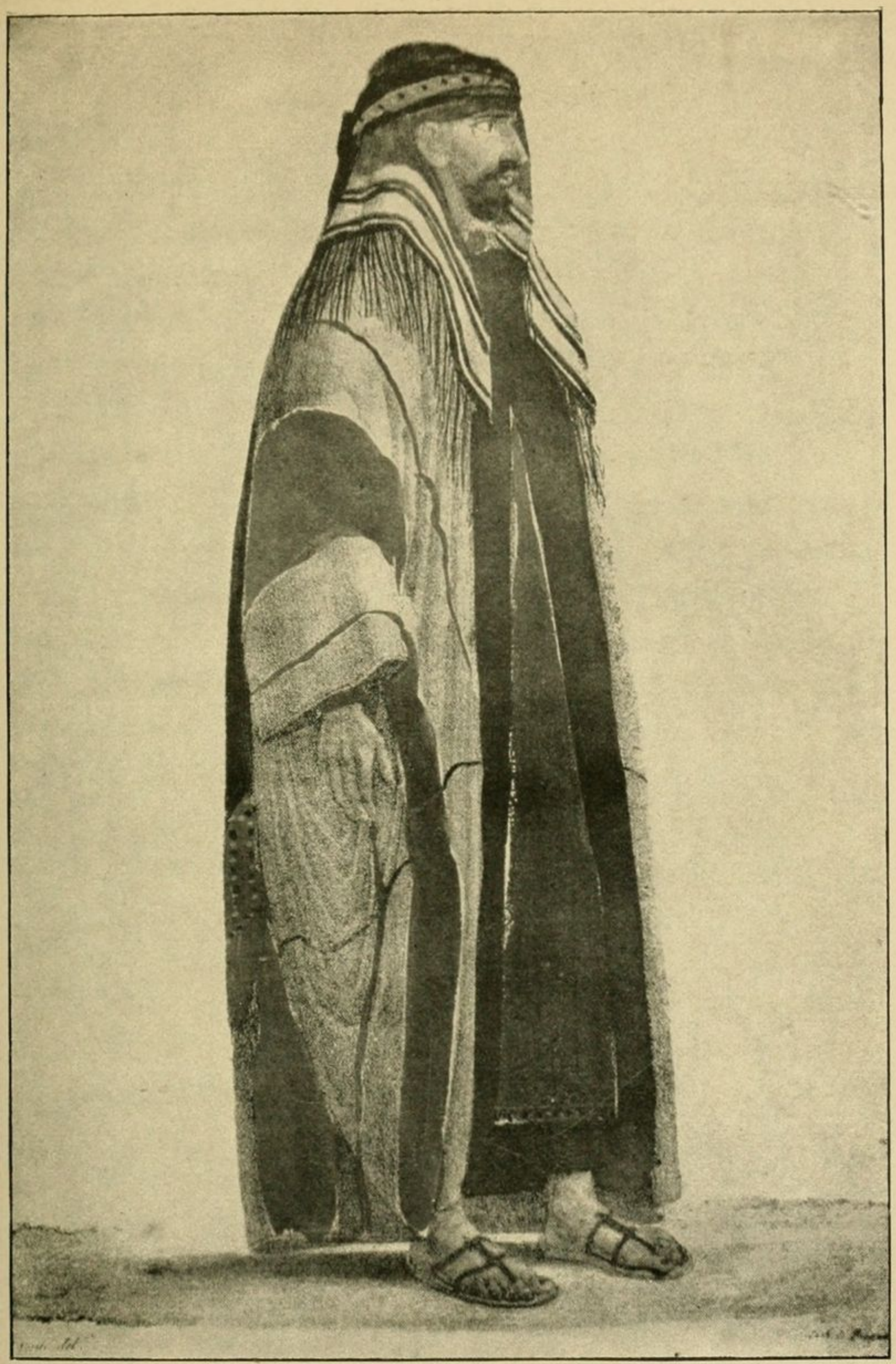
For a mere outline sketch these hearsay descriptions of Nejd served in 1815, but the result sadly lacked both detail and precision. On the main problems of relief and structure there was no evidence yet; and it was not known how many even of those superficial features were omitted for which native testimony can be trusted. Burckhardt recognised as clearly as any critic how imperfect was his own knowledge of Nejdean life, and on that account especially recommended the exploration of Central Arabia to scientific men. The hope, however, which the Swiss traveller had based on an Egyptian advance inland waxed fainter every day. Napoleon's escape from Elba recalled Mehemet Ali from Taif to look to the defence

of his own house against the universal storm expected; and his son, who was left in charge at the end of the year 1815, having touched Kasim without serious purpose, concluded an easy peace, and followed his father, to die presently of plague or folly. But Mehemet Ali was distinguished for nothing so much as tenacity. Once formed, his purpose held through good fortune and ill. Knowing that his tenure of the Holy Cities would outlast neither the sojourn of his forces within their walls, nor the reappearance of a powerful foe, he had determined not to stop at Taif; and having found Europe, and especially England, too well occupied after all to threaten Egypt, he equipped a new force in the spring of 1816, and despatched it in charge of a worse man but better soldier than Tussun.

Ibrahim, his eldest son, or the son born of the widow who became his wife, had many of his putative father's characteristics, bad and good. Cruel and unscrupulous, vain and jealous, an indifferent organiser and an ignorant strategist, he was indomitably tenacious, inexhaustibly patient, and of very stout heart, as Europe was to know in due time. Also, like his father, he was a very liberal Moslem, if a Moslem at all, and addicted to flirtation with such *giaur* influences or inventions as might further his immediate purpose. He carried with him to Arabia a French engineer, Vaissière, as aide-de-camp, and four Italians of medical skill, — Scoto, Gentili, Todeschini, and Socio. But let not their names rouse

hope. These officers have left no first-hand record of their experiences in the peninsula.

Ibrahim's motto was his father's, — "Slow but Sure;" his plan, in the famous anecdote of him, to "roll up the carpet" of Arabia and reach the prize at its centre without venturing on ground not first made his own; his actual policy to win at all costs the sheikhs of the great Bedawin tribes, which held the roads to the Wahabi oases. When he was sure of the Harb and Meteir, had tried his cavalry by a series of short raids into Kasim and western Jabal Shammar, and was instructed in the ways of desert warfare, then, and not till then, did he strike his camps about Medina and set forth for the heart of the peninsula. He fell on Rass, the first important town of Kasim, in July, 1817, and needed all his dogged temper to remedy the defects of his generalship. He lost three thousand men, and spent above four futile months before those mean mud walls; and the discretion of surrender was with the townsmen at the last. The spectacle, however, of his obstinacy and his resources determined the speedier submission of greater towns, Aneiza and Bereida, and what was still more important, the adhesion of two great Bedawin tribes of South Nejd, the Ateiba and the Beni Khalid; while bitter experience forced the general henceforward to repose more confidence in his French adviser. With Shakra Woshm fell, and the way lay open to the Wahabi capital in Wady Hanifa of Ared. In April, 1818, the Egyptian sat down before Deraiye itself.



The Wahabi Emir 'Abd Allah Ibn Sa'ūd

Sketched in Cairo during his captivity

Here again it was his dogged determination that turned failure to success. Hardly able by every resource of persuasion and coercion to supply his force with bare necessaries, Ibrahim learned why theretofore only Arabs had been able to invade Central Arabia. His Bedawin allies were faint-hearted, if not false; and by the crowning disaster of fire he lost in a moment all his reserve of ammunition. But he held on till more powder and lead were brought up from Medina, and, piqued in his jealous temper by a report that his father had sent a commander to replace him, he so battered the Wahabi forts that the Emir 'Abd-Allah had no choice but surrender on September 9, after standing a siege of five months. The cruelty and treachery with which both the deposed ruler and the vanquished Wahabi rank and file were treated should be laid rather at Mehemet Ali's door than Ibrahim's. The former was not in the least concerned to conciliate Nejd, for he had no idea of holding it as an effective province of his Egyptian realm. He required that it be raided and stripped, as he required that any other aspirant to supremacy over the Holy Cities be broken and crushed. Ibrahim was bidden carry fire and sword into all adjacent territories, — into Jabal Shammar, Harik, Hasa, and the borders of Oman, — to raze all forts and dismantle every fenced town, and, that done, to leave Central Arabia to be torn asunder, as of old, by its own tribal enmities and brigandage. By the summer of 1819 this sinister state of things was in a fair way to be real-

ised, and Ibrahim began to withdraw his columns and garrisons.

On this matter, however, one contemporary European government, never conspicuous for a right understanding of Mehemet Ali's policy, was led into a total misconception, which proved prejudicial to its own prestige, but of fortunate issue for geographical science. The British administrators of India had long desired to extend their influence in the Persian Gulf, and to crush the piracy, which was strangling commerce and fatally affecting the pearl-fisheries; and to this end they had been pressing their friendship and advice ever more insistently on the "Imam" of Maskat.[1] In the Egyptian pasha they now scented a new co-operator. His troops had reached the Gulf and harried the pirates of Ras el-Kheima. What Ibrahim had conquered with such effort they made sure his father meant to hold. Nejd and Hasa would remain provinces of Egypt, and the enlightened pasha, who in spite of unfriendly action in the matter of the Suez overland route was obstinately credited by British optimism with a paramount interest in the promotion of trade, would see at once that his advantage lay in the assurance of the Arabian seas.

Without consultation direct or indirect with the Egyptians, a British ship of war was sent from Bombay to the Gulf in the summer of 1819, and upon it went a special emissary, Captain George For-

[1] They had even made overtures to the Wahabi Emir. Reinaud was sent on a mission of conciliation to Deraiye by Manesty, the British Resident in Basra, in 1799, and was apparently successful for the time.

ster Sadlier, of His Majesty's Forty-seventh Regiment, commissioned "to congratulate Ibrahim on the reduction of Deriah," and "to concert the necessary arrangements with His Excellency with a view to the complete reduction of the Wahabee power. If," continued this officer's instructions, "as most probably will be the case, His Excellency Ibrahim Pasha should be desirous of availing himself of the aid of the British government," an adequate naval and military force would be sent as soon as possible, and "the Turks" put in possession of Ras el-Kheimah. The envoy, however, was not to pledge his government "to secure to His Excellency the possession of any such conquests," but was to sound him as to his plans "without showing any material interest in the subject," and, by the way, to question the "Imam" of Maskat as to the help he also would be willing to give.

There have been few confidential missions more certainly foredoomed to futility. The "Imam" of Maskat (for so it is convenient, if incorrect, to call him) was one of the Arabian potentates whom Mehemet Ali had instructed Ibrahim to reduce to impotence. Already grievously harmed, and well knowing, if the Indian government did not know, the precise value of the notorious Egyptian oath, this ruler was now invited to offer himself and his forces to the executioner of Nejd. Needless to say, Sadlier left Maskat somewhat wiser than he came. A new surprise awaited him on the shore of the inner Gulf. He found a representative of Ibrahim in Katif, but the man was for

all practical purposes wholly in the hands of the local sheikh of the Beni Khalid, and about to withdraw himself and his handful of troops. More than this, the British envoy was informed that Deraiye had been destroyed, and that the evacuation was to be general. No one was sure where Ibrahim actually was; but wherever in Nejd he might be, he would not long remain.

Sadlier was in sore perplexity. The main object of his mission was frustrated already by the retirement of the Egyptians from Nejd. Had he known all, had he known even that Ibrahim had already started for Medina, he would doubtless have re-embarked for India. As it was, he bethought him of the minor counts in his mandate, of the congratulation and the sword of honour to be offered to the pasha and the soundings to be taken "without showing any material interest in the subject"; and to his great credit, his lasting fame, and our profit he determined to go up into Arabia. He conceived himself simply bound to perform an unpleasing duty as expeditiously as might be. In his narrative (not published *in extenso* till nearly fifty years later, when Palgrave had drawn attention to Nejd) he betrays very little interest in the prospect, the course, or the retrospect of his journey. He seems to have been as ignorant as his superiors of Arabic, Arabian history, and what to expect in Arabia, and to have had no previous knowledge of Bedawins and their ways. To him, as to most British soldiers, all "natives" were

equally unimportant and distasteful. The Arabs said of him afterwards that he passed through Arabia "like a bale of goods," consigned on the one coast, delivered on the other; but go through Arabia he did, with his motley suite of Persians, Indians, Portuguese, and Armenians, the first European to cross the peninsula, and the first to put on record what he saw in Nejd. For certain things he did see in his stiffnecked way.

Sadlier started on June 28, went up to the camp of the sheikh of the Beni Khalid, and reached "Foof" (Hofuf), in the Hasa oasis, after a fortnight's ceaseless trouble with the "turbulent barbarians," who, serving him for guides and escort, comported themselves as the natives, to whom he had been accustomed, did not behave to sahibs. Had he known at starting a few elementary rules observed by his successors, — for example, never to pay in advance for service, but always to stand by a bargain and exact punishment when deserved, — he had perhaps suffered less at the hands of the desert men. To Hofuf Sadlier came as the second European Christian of whom we have any knowledge, and almost the last. The height of the mud walls and the tale of fighting men are about all the details concerning the towns that he gives; but of the Hasa he tells us it had lakes and springs, but no river.

Sadlier found the Egyptian Kashif of Hasa preparing for departure, and though shrewd enough to realise that the Bedawins were the true masters of the local situation, he felt bound, in view of his mis-

sion, to wait for and accompany Ibrahim's garrison, which was under orders to rejoin the main body in Sedeir. The slow march of six hundred camels began on July 21; and stage by stage through the deserts the British envoy, in some uncertainty of his ultimate fate, pursued the retreating rumour of Ibrahim. The route lay by the wells of Rema, and Sadlier notes how easily the filling of them and of a few other such would render Nejd unapproachable on the east side. As it was, his party had too much water, for, strange to say, it rained heavily and repeatedly that summer. He entered Nejd by the province of Yemama, once so fertile and important as to be the single district of Central Arabia commonly known to Moslem geographers, but now a place of little importance, unknown to the Turks; and so to Manfuha, whose inhabitants, notwithstanding their wretched state, at first "made a show of resistance, appearing armed on the flat roofs," and then spoiled the Egyptians at the rate of a piastre for three eggs, and four dollars for a sheep. Sadlier noted cotton, *durra,* wheat, and barley fields, good stone houses and large date groves, irrigated from deep wells. What he says of the "Wady Aftan," concerning which he made inquiry, is worth quotation: —

"Of the course of a river inserted in many of the modern maps, and made to run close to Al-Ahsa, I have to remark that there are many torrents formed by the winter rains . . . ; but as they are only periodical they ought not to be magnified into a river. It is probable

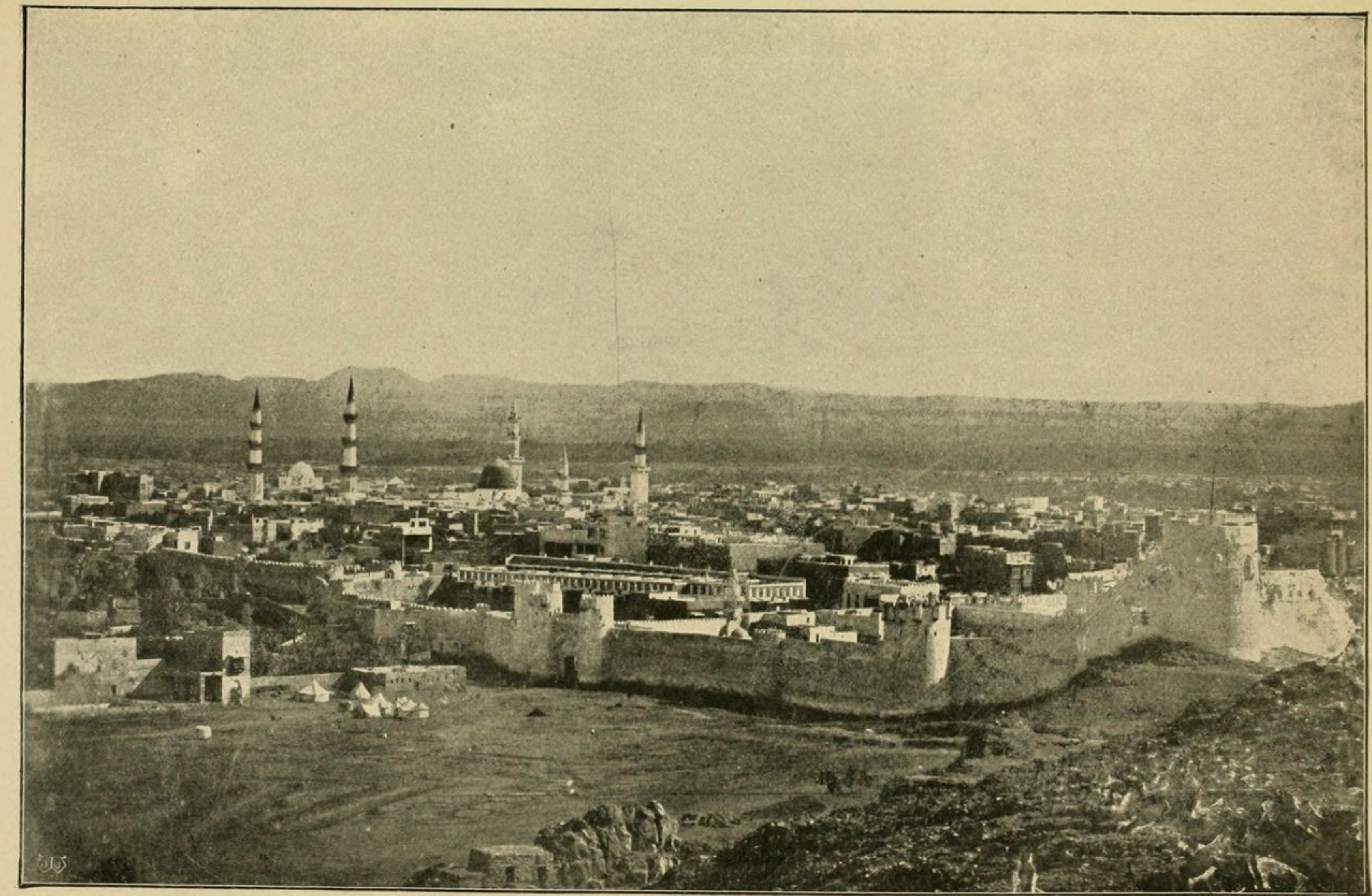
that the incidental collection of water in those valleys at a certain season, and the great abundance of water near Al-Ahsa, . . . have given rise to the idea of a river or torrent having at some former period forced its way to the sea. The Arabs at this moment insist that there is a river which passes under ground, the stream of which has never been seen by any human being."

He noted also the main direction of the Ared mountain ranges as running from northwest to southeast, while an outer chain appeared trending northeast. This observation probably led to the undue northward extension of Jabal Tueik, which Jomard subsequently showed on his map. Leaving Riad a little to the north, Sadlier passed on to the ruins and devastated gardens of Deraiye. After his narrative begins to deal with Nejd, the Englishman wastes less space in recording squabbles with his guides, and devotes more to details of crops and commodities, the waters, the state of the country. Everywhere he saw the hand of the Egyptian spoiler, — in the ruined towns, the wasted gardens, the lowered morality, and the dejected and hostile attitude of the people, — and in Manfuha he was delayed by the necessity of rescuing a detachment which had long been beleaguered in Kharj by the avengers of four sheikhs, treacherously assassinated by Ibrahim's orders. The Ateiba Bedawins had now thrown off all allegiance, and the Meteir and Beni Khalid were hardly less hostile.

Four days' march down the Wady Hanifa and over a sand and gravel steppe brought the cumbrous party

to the low-lying Shakra, capital of Woshm; and it is a pity that Sadlier said so little of a place which no other European has described. It seems to be a singularly rich oasis of sweeter waters and denser date plantations than ordinary in Nejd. Having dragged their Beni Khalid cameleers thus far into the bowels of an enemy's land, the Egyptians, after their manner, impounded their beasts, dismissed the drivers to their fate, and marched over the South Kasim *Nafūd* to the half-ruined Aneiza.

Here Sadlier had reached mid-Arabia, and he showed himself duly sensible of the fact by noting the commercial advantages of the town's position, and giving a sketch of the distribution of Bedawins in the heart of the peninsula; but still he hurried on, for Ibrahim was said to have halted at Rass two days westward. But he only found that though most of the army lay there, the pasha himself was already far on his way to Medina. The British envoy had reached the end of his patience. Ibrahim had evidently no particular desire to see him, nor had he himself any ambition to be the first to cross Arabia. He was only anxious to find convoy back to the district of Basra, where arrangements for his safety had been made by the local consul with the Muntefik Arabs. In this, however, he failed. The pasha's deputy in Rass bowed, smiled, and lied, but would not take on himself the responsibility of sending the Englishman back through the angry tribes. To Medina he must go; and to Medina he did go most unwillingly,



Medina

From an unpublished photograph, taken a Turkish officer about 1880, and kindly lent by Mr. Wilfrid Blunt

"dragged a reluctant witness of the devastation of the pasha's army." With a large and confused detachment of the evacuating force, Sadlier reached Henakie in seven uneventful days, and after two more very hard stages saw the suburbs of Medina, but was not suffered to enter the Holy City. The Egyptians, who cared nothing for the laws of Islam in Nejd, were the strictest of Moslems in Hijaz, and Sadlier found himself banished to Bir Ali, where was Scoto, the Italian harem doctor, who had been through the campaign.

There at last, on September 8 and the following day, the envoy had the audiences of Ibrahim, which he had come so far to obtain. The pasha was courteous but wholly non-committal. He wished in his vanity to be taken for "a very affable soldier," but he pleaded he was no more than an instrument of his father, even as his father was no more than an instrument of Imperial Majesty at Stambul; and the British envoy could neither bind the Egyptian to anything, nor learn his plans. A convoy was promised to Jidda, but directed eventually to Yambo, whither, with Ibrahim's ladies, Sadlier set out after a four days' stay. He had seen the Damascus pilgrims arrive, and had a distant glimpse of the holy walls and whitewashed minarets and domes. On September 20 the party straggled down to the Red Sea, and Arabia was crossed at last.

Sadlier went on by boat to Jidda, encountered Ibrahim again before his final departure for Egypt,

and concluded his mission with a ridiculous squabble over some second-hand horse furniture, palmed off by way of gift to the Governor-General of India. This extinguished the last hope that the mission might yet bear fruit. Ibrahim may not have been responsible in the first place for the slight put on the British envoy, but he made no effort to redress it. He had done with Nejd, and never at any time cared a piastre for the Persian Gulf. The victim of official British optimism was detained in Jidda four months, and only escaped from Arabia in January, 1820. Ill consoled by the unsought fame of a geographical pioneer, he was sent on a further mission to Sindh. The first report of his experiences was given to the world in a paper read, in his absence, to the Literary Society of Bombay in April of the following year, but, as we have said above, the fuller story had to wait till 1866 to be disinterred from the records of the Bombay government. Meanwhile the Honourable East India Company seems to have crowned its fatuity by duly sending its contingent to the Gulf in September, 1819, and landing four thousand men at Katif. These had only to learn that the pasha had definitely evacuated Nejd, and to re-embark after enduring a severe epidemic of dysenteric fever.

Sadlier was not the first European (even excepting Ibrahim's aides) to reach Nejd. A certain Reinaud, who seems to have resided for some years at Basra and Koweit, and to have been in the service of Manesty, the British Resident at the former town, was

sent by his employer, in 1799, to arrange a reconciliation with the Wahabi Emir, aggrieved by recent action of a British warship in firing on Wahabis near Koweit. He took ship to Katif, and thence, under escort of a foster-brother of the Emir, made his way to Hofuf in seven days, and to Deraiye in eight more. He stayed a week, was on the whole well received, and returned in safety. The only report published was by Seetzen, in 1805, who quoted a letter from Reinaud. Therein a few words were said about Hasa, Deraiye, the scenery of the intervening country, and the character of the Wahabis. Most interesting are the remarks on the small size of Hofuf and Deraiye, the amenity of the latter's situation, the simplicity of the Emir's establishment as compared with his great power, and the *farouche* hospitality of his subjects. Reinaud seems to have found Jews in Deraiye, and altogether a less exclusive and sophisticated society than his successors were to find after the Egyptian invasions. Also a certain Count Watzlaw Rochwusky, a Pole, is said to have penetrated to Jabal Shammar in 1818, disguised as the Emir Tads el-Feshr, in quest of horses.[1] But Sadlier was certainly the first to cross Arabia from sea to sea, and the first to describe in detail any central part of the peninsula from the evidence of his own eyes. His

[1] We know nothing in detail of his journey, if it was ever made, for he has left no narrative. I owe this bare statement to the subsequent explorer of Nejd, Prof. J. Euting, writing about his own journey in *Verhandlungen der Gesellschaft für Erdkunde zu Berlin*, xiii. (1886), p. 262. He quotes from *Bes. Beilage d. Staatsanzeiger für Wurtemberg*, No. 21 (Sept. 8, 1882), which I have not been able to consult.

only instrument was a good compass, but this, he tells us, he consulted frequently, always dismounting to take the readings. He not only inquired the names of all settlements which he passed or saw (conscientiously marking a few sins of omission), but was very careful to note the time occupied on the march, and to make allowance for fast and slow travelling. A rough route-map could accordingly be compiled from his material, within as narrow limits of error as may be in a land where no intermediate points are fixed astronomically. Even the port from which Sadlier started was not laid down on the Gulf charts of his day with absolute certainty, and the Red Sea had yet to be surveyed by Moresby.

When all necessary reservations are made, Sadlier's itinerary may be said to have made a scientific description of Nejd possible; and so much is confessed by the eminent geographer, Jomard, in his essay on that region, appended to Félix Mengin's "Histoire de l'Égypte sous le Gouvernement de Mohammed Aly." The foundation of this essay was certain information gathered in Cairo from a Nejdean sheikh, Abdurrahman el Oguyeh,[1] a kinsman of the original Wahabi teacher, and supplemented by certain road-notes of Tussun's and Ibrahim's marches. These apparently were official, but not compiled by Europeans, for Jomard is careful to say that he had learned nothing from his compatriot, the engineer Vaissière. Shortly before the publication of the essay

[1] Jomard's spelling.

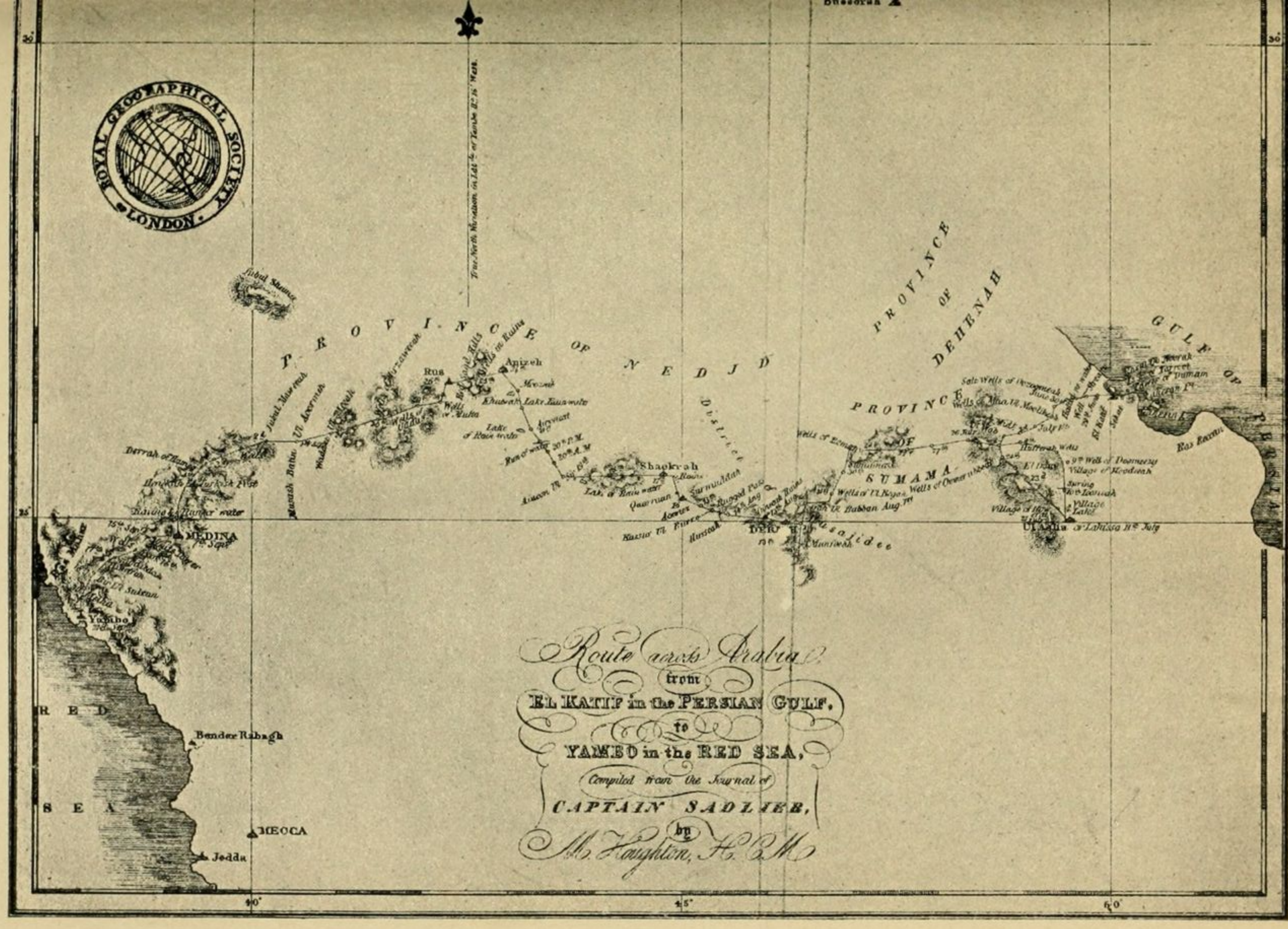
the bare facts of Sadlier's route became known in Europe, and briefly stated as they were in the Bombay Society's Transactions, proved of as much worth as all the rest of Jomard's information.

Thanks in the main to Sadlier, the longitudinal intervals between the principal points in Central Arabia could now be estimated with approximate accuracy; but since both his journey and the Egyptian marches had been made in the main from east to west, and *vice versa,* they proved of much less service in fixing the intervals of latitude. This may be judged by the fact that, though Sadlier had passed through the oases of Yemama, and Ibrahim's men had occupied Kharj, Jomard could not place the capital of that district within a degree of its true position; nor, indeed, being still under the influence of Abu-l-Fidā, was he sure what Yemama might really be, — city or district. Though Shakra no longer lies, on Jomard's map, a hundred miles out of its true situation and on the wrong side of Kasim, as Pinkerton had placed it twelve years before, the more important town of Bereida is still marked to southwest instead of to north of Aneiza. As to the regions south and north of the area covered by the Egyptian itineraries, Jomard appears hardly better informed than his predecessors. On the one hand, Jabal Ared is still a long mountain range running west-southwest from Jabal Tueik to Taif (placed too far north and in wrong relation to Mecca), and the desert of Roba el-Khali cuts off Aflaj and Wady Dauasir from Harik and

Kharj; on the other hand, Jabal Shammar is delineated in Jomard's map from no better evidence than that of the Moslem pilgrim itineraries. Its two ranges are there, but wrong both in situation and direction. Hail is west instead of north of Mestajedde, and the Nafūd interval between the Jabal and Jauf is contracted to about half its true breadth.

Jomard would not give up the surface drainage of South Arabia to the Gulf, by the Wady Hanifa-Aftan, though he owned to doubts, based rather on Abu-l-Fidā's denial of the existence of a river in Arabia than on Sadlier's objections. It is hardly necessary to say that neither Jomard nor any one else knew yet the relative elevation of the different parts of the peninsula or the true direction of the Central Arabian slope.

The large facts of relief in a new country are scarcely to be established either by the reports of passing strangers or by the evidence of resident natives unless questioned with a patience and understanding given to few travellers; but, as Niebuhr and Burckhardt found, information upon social features is more easily and more surely gathered. Jomard, who had access to such military reports as were compiled by the Egyptian officers, was able to give tables of the settled populations of southern Nejd, and of the Bedawin tribes, as estimated from the contingents which both classes of inhabitants supplied, or were expected to supply, to their Egyptian allies and masters. His statistics, so far as they went, were fairly accurate, and not disfigured by the exaggeration which was to



Sadlier's Route

mark the figures of the next European who should penetrate to the south Wahabi country, — Gifford Palgrave. From Egyptian tax-lists, possibly, but more probably from his native authority, Jomard was also able to sketch the products and food of the country, its industries, commerce, climate, and fauna, and the outlines of its law and custom.

The statement of these facts was naturally summary, and hardly to be amplified from the brief paper which Sadlier published at first. It was only from his full report that a just idea was obtained of the proportion of settled to nomad life in southern Nejd, the character of the settlements, the circumstances under which cultivation was carried on, the conditions of trade and transit, and the general state of the society during the Egyptian occupation. If the Englishman saw with somewhat unsympathetic eyes, he saw what was; and, as it was, he recorded it. Other Europeans, more scientific and observant, were to come after him to Nejd, but none on whose report we may more surely rely.

The accompanying chart of Sadlier's route is enough to show how little he saw of Nejd, and what vast territories still lay unexplored to north and south of that single line drawn across the great peninsula by a man neither over-well equipped for observation nor travelling under conditions the best suited to a geographical pioneer. But, such as it was, his exploration of Nejd remained for very nearly a generation the only experimental test of mediæval information on

that immense region; and that although Mehemet Ali found he had not done with Nejd. The broken power of Deraiye revived in Riad, and, to secure the safety of the Holy Cities, Egyptian columns had to be sent inland again in 1824 and 1836, from which latter date the occupation of Nejd was resumed for half a dozen years. But no western officer who accompanied these expeditions (if any there was) has left a record of himself; nor is another European[1] known to have seen anything that Sadlier saw between the Persian Gulf and Medina till forty-four years had passed away.

[1] In using this term I exclude both renegades in the Egyptian service and Oriental Christians, e. g., Greeks, of whom Burckhardt tells us there were several with the Egyptian columns. These never inform us of their experiences.

BIBLIOGRAPHY

Jihān Numā, see chap. i.

Félix Mengin, *Histoire de l'Égypte sous le Gouvernement de Mohammed-Aly*. 2 vols. (Paris, 1823).

Reinaud in article by Seetzen in Von Zach's *Monatl. Corresp.*, xi. p. 234 (1805). He is apparently the person to whom Leake alluded under the name *Renaud*, as having risen eventually to be agent of the East India Company at Basra (*Northern Greece*, i. p. 308).

G. Forster Sadlier, *Diary of a Journey across Arabia, etc.* (Bombay, 1866). *Cf.* Trans. Lit. Soc. of Bombay, iii. p. 449 (1821).

Jomard, Appendix to Mengin, *cit. supra*.

CHAPTER V

THE EGYPTIANS IN THE SOUTHWEST

THE indirect service rendered to geographical knowledge by the Egyptian occupation of Arabian territories did not come wholly to an end with Sadlier's mission to Nejd. We have to thank Mehemet Ali also for the single opportunity enjoyed by European eyes up to the present day of seeing a region of the peninsula on which Niebuhr obtained almost no information of any value.

This region lies south of Mecca and Taif, and north of Yemen. Arab geographers, who set the Holy Cities and all that lies between and about them apart as *Ḥaramein,* call most of it Hijaz, drawing the southern boundary very vaguely and variously. Modern map-makers, who are accustomed to extend Hijaz even to the country north of Medina and Yambo, often use for the southern country the name Asir, which really belongs only to its southern half. Niebuhr seems never to have heard of Asir at all, but only of a very primitive society dwelling north of the "Amasia desert," which limited in his view that uttermost district of the Yemen highlands, the territory of the Hashid and the Bekil tribes, wherein he

could learn only names. This society, he said, consisted almost wholly of tent-dwellers, circumcised but not true Moslems, of whom even the heretical Yemenites made a mock. He reported, however, the existence of a finer and more civilised race in the south of the region, dwelling in and about the settlement of Sade, monogamist, and engaged in the transit trade between Mecca, Nejran, and Yemen. He might indeed have derived better information from Idrīsī, who added certain notes on this country to his enumeration of the twenty stations between Sana and Mecca, which appear to have formed a basis for the inquiries made in the latter town by Burckhardt. The Swiss learned better the nature of the country and its society, but made the mistake of confounding "Asyr," which really designates a large district, with the name of a single tribe. How little, nevertheless, even he added, may be seen by a glance at Berghaus's map, published in 1835, whereon the district of Asir remains almost blank.

The southern part of this region, Asir proper, was the single coastal district of Arabia, which accepted Wahabism with a whole heart, and under the lead of Sheikh Abū Nuḳṭah co-operated energetically with the Emir Sa'ūd against the Egyptian pasha. Its motive was more probably religious than political, although the men of southern Hijaz and Asir may well have had temporal enmities of old standing with the corrupt and oppressive Meccans, and, on the appearance of the Egyptians, have seen more cause than

others to fear for lands which, for Arabia, are rich. It should be recalled, however, that the southwest, the most fertile part of the peninsula, had never really surrendered old beliefs to the Mahometan system. After a reluctant acceptance of Islam it subscribed to the Carmathian doctrine when that came westward from Hasa, and never lost a taint of Iranism, which suited certain local traditions of naturalistic cult, inherited from the Sabæan civilisation of the south. Since the focus of this heretical tendency, the great oasis of Nejran, an old seat of Collyridian Christianity, was the scene in the middle of the eighteenth century of the religious revolt of Sheikh Makramī, who comported himself much as did the Wahabi, and seems to have had some sympathetic connection with the Wahabi emir, it is not surprising that Asir, lying contiguous on the north, joined the latter's successor when he appeared, spear in hand. What Asir did Yemen would doubtless have done also, had it lain equally open to Nejd and equally sheltered from other foreign influences.

Be the cause what it may, Asir proved a thorn in the Egyptian side. To cover Mecca against its warriors and those of Nejd, Mehemet Ali had to make a strong outpost of Taif, and from time to time to raid in force to Taraba, and to the hill country lying between that point and Gunfude. We have heard of such a raid in connection with Giovanni Finati; and another of a more fortunate sort, made in 1815, was the pasha's last personal exploit in Arabia. None of

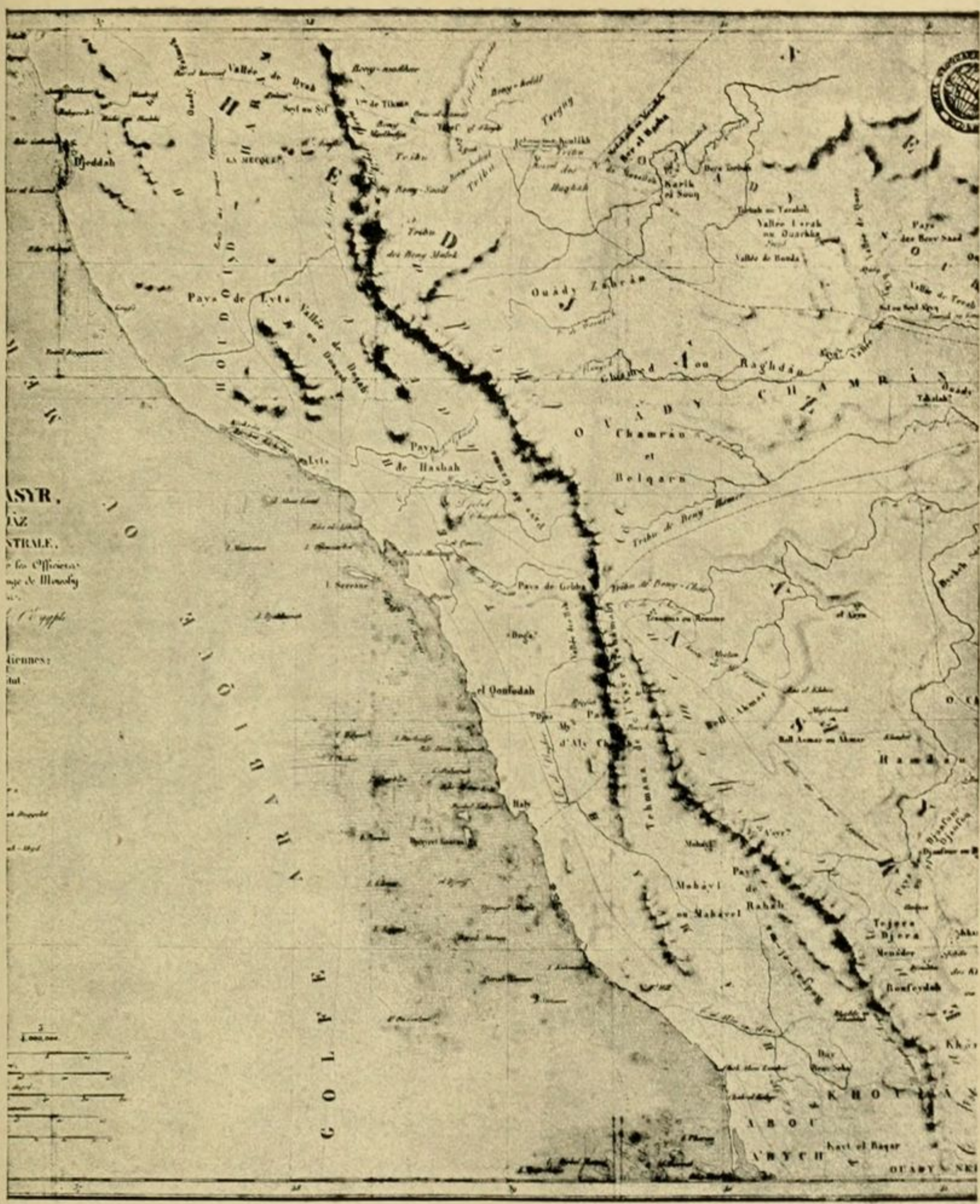
these expeditions, however, secured the country; and after the mutiny of the occupying troops under "Turkja Bilmez" in 1832, the Asir tribesmen, excited by the retreat of the latter through their country, so seriously threatened Egyptian communications and even Mecca, that Mehemet Ali was constrained, full as his hands were in Syria, to scrape together new regiments of conscripts; and by raising his lieutenant Ahmed's army to eighteen thousand men he enabled him to march on Asir. The new expedition was accompanied by at least six Europeans, five being Frenchmen, — Vaissière again, Chedufau,[1] Planat, Tamisier, and Mary, — and one Italian, Gatti. Incidentally we hear of other westerns, e. g., Atkins the Englishman, already mentioned, in charge of a Congreve rocket battery, and a Piedmontese; but our concern is with the Frenchmen; for, unlike Ibrahim's aides, these did something to advance geographical knowledge. Planat supplied a sketch-map of the seat of war to Fulgence Fresnel, French Consul in Jidda; Tamisier published, in 1840, a journal of his experience during the first campaign; and Chedufau, who remained for eight years in Arabia and saw other campaigns, made, in co-operation with Mary, certain notes which MM. Galinier and Ferret edited. By these Jomard was able to check two reports which Fresnel had obtained from one Sheikh A'ūs, a follower of Abū Nuḳṭah, and to publish a map and an

[1] The name is spelt thus in *Bull. Soc. Géog.*, ii. série, p. 106; but Jomard writes *Chedufault*, and others (e. g., Zehme) *Chedufeau*.

essay on the country. This last consisted mainly of lists of place-names gathered from the report of Sheikh A'ūs, and supplemented from Fresnel's chart and Tamisier's journal.

Jomard's map of Asir is shown by his commentary to be more conjectural than its appearance might suggest, the water-courses, for example, being rather general indications than exact delineations of the drainage system. Further notes from Chedufau appeared in 1843 in the publication of the Geographical Society of Paris. The observations made by these Frenchmen constitute our first and last European evidence concerning Asir, for no explorer has ventured into its mountains since Mehemet Ali concluded an inglorious peace in 1841, and withdrew his troops after making no less than eleven expeditions into the country.

Asir consists, like the territory of Mecca, of a hot and barren coastal strip, behind which rises a continuous escarpment, defining rather the broad raised rim of an internal plateau than a mountain system. This high land both approaches nearer to the shore and is more elevated than in the region of the Holy Cities, and it has the supreme advantage of lying within the fringe of the monsoon rains. Since its eastward incline is at first slight, and always long, the catchment area is wide, and the highlands are able to send inland streams more full and persistent than the north can boast. These streams have a general northeasterly direction, and the larger of them, such


Djeddah
Ouady Zebrân
Ouady Chamrân et Belqarn
Ouady Raghdân
Pays de Lyte
Pays de Hashah
Pays de Gelda
el Qonfodah
Rab
Mahâyl
Pays de Rahah
Tajura
Djura
Rosfeydah
Pays des Beny Saad
Vallée de Tenda
Vallée de Tenda
Vallée de Tenda
Vallée de Dawah
Vallée de Dawah
Vallée de Dawah

as Wady Bishe, on whose importance Jomard insisted, after creating oases along their banks, were seen by Chedufau to be flowing still towards the internal steppes. The Frenchman satisfied himself on native testimony that they were collected at last in the Wady Dauasir, and discharged into a perennial lake called Bahr Salume, which, accordingly, has found a place in most subsequent maps and treatises on Arabian geography, despite the fact that a perennial lake is not a very credible feature in the scenery of the peninsula.[1] The outflow of this lake Chedufau believed to pass by the "Wady Aftan" to the Persian Gulf, and to this Jomard agreed, setting aside Sadlier's objections, as based on summer observations only. The intervals between the main wadys were reported by Tamisier waterless and desolate, and the whole country eastward of the watershed appears to be fertile in comparison of the Hijaz rather than of Yemen. The Egyptian columns had that same difficulty in obtaining supplies which had disgusted Ælius Gallus, if, indeed, it was by an inland route that the latter marched to Nejran; but they succeeded, despite disasters, in penetrating to the southern confines of Asir, the farthest points on the inland road being Menader and Khamis-Misheit, situated near the head of the Wady Shahran, which is the southern fork of Wady Bishe. Chedufau mentions oases of many thousand palm-trees, producing also fine wheat and a super-

[1] Tamisier (p. 123) heard that these Asir waters flowed northeast "to Baghdad," — not so absurd a story if they really drain into the great Wady er-Rumma.

fine sort of coffee, of which Mary collected sample cuttings.

This information, with which we have to be content, serves to correct Niebuhr's. Asir is evidently far more like Yemen than he supposed, and probably quite as fertile and prosperous a region as Halévy in 1870 found the neighbouring Nejran to be. Its inhabitants seem to have been then, and still to be, brave highland farmers of sturdy independence, considerable well-being, and more capacity for cohesion than is usual in Arabia. Their autonomy, which the Egyptians were unable to impair, has since been maintained against the Ottomans, although these hold the country both to south and north. Asir, together with its prolongation towards Nejd by the Wadys Dauasir and Rumma, remains the district in Arabia which would probably best repay further exploration; and one can only regret that illness and want of means prevented Charles Doughty, in 1878, from accepting the offer of the Sharīf of Mecca to show him Wady Bishe.

Finally the Egyptians may claim some small credit for the first advances made in our knowledge of Yemen since Niebuhr. Mehemet Ali's troops, which first entered that country in 1826, continued to occupy some part of the Tehama and the lower highlands till about 1845; and though the friction was great between them and the independent Yemenites of the plateau, and the local hatred rendered their area of occupation very unsafe, the fact that they were in possession attracted certain Europeans to the ports, who

succeeded in penetrating inland. Most of these had nothing new of importance to tell. Ehrenberg and Hemprich, naturalists, kept to the coast of Abu Arish in 1825, and Combes saw only that part of the Tehama between Hodeida and Has, which Niebuhr had explored most thoroughly. The fantastic narrative of Joseph Wolff, evangelist to the Jews, who succeeded in passing the inland frontier in 1836, and reaching Sana, contains nothing of geographical interest except the fact of an encounter with armed "Wahabis"[1] in the neighbourhood of the capital. Nor can much more be said for the English naval lieutenant, Charles Cruttenden. His expedition from Mokha to Sana was undertaken in 1835 in the company of Dr. Hulton, also of the Indian surveying ship, "Palinurus." Hulton died shortly after regaining the ship of a malady similar to that fatal to Niebuhr's party, and Cruttenden had, it appears, kept hardly any road notes. The main result to science consisted in copies of four Himyaritic inscriptions from Sana, the first gleaned in Yemen proper. It was not a favourable moment in the Yemenite capital. The Imam was a weak debauchee, and prone to suspect all Europeans of being Frenchmen in the Egyptian service.

The French botanist, Paul Émile Botta, physician to Mehemet Ali, and commissioned by the Museum of Natural History of Paris, did more than these.

[1] These were undoubtedly sectaries, not of the Wahabi, but of Sheikh Makramī of Nejran. W. B. Harris (*Yemen*, p. 348) states that "Makarama" sectaries are still found between Sana and Hodeida.

Arrived at Hodeida in September, 1836, he succeeded in establishing good relations with the semi-independent chief of the district between Has and Tais, and under his protection pushed his researches further into the western highlands than Forskall had done. His main achievement was the first ascent of the greatest buttress which these highlands push westward into southern Yemen, Mt. Sabor behind Tais, of great repute for its wealth of vegetation, and for the independence of its pastoral society. Failure to obtain permission to visit it had been Forskall's last disappointment.

The most remarkable exploration came last. Early in 1843 a Frenchman presented himself to Fulgence Fresnel at Jidda, and, stating that he was Louis Arnaud, sometime in the Egyptian service in Yemen, but now passed over to the Sultan of Sana, handed to the learned consul a sheaf of notes. Fresnel talked to him about Himyaritic things, and Arnaud promised to return to Sana and, if possible, travel eastward to the ancient Sabæan capital, Marib, and thence northward to el-Hejr. He vanished in the suite of an envoy of the Governor of Jidda. Fresnel heard no more of him till the following year, when first a budget of fifty Himyaritic transcriptions came to hand, and, at last, Arnaud himself, nearly blinded by ophthalmia.

He had detached himself from the Turks on reaching Sana in July, 1843, and, thanks to a native friend, had found safe conduct with a man of Marib, and

a Bedawin, accustomed to conveying *durra* and salt between the capital and the east country. At that time what lies beyond the plateau which rises to east of the vale of Sana was for all practical purposes independent of the ruling power in Yemen and obedient only to its own sharīfs and sheikhs; and so, indeed, it is still. Arnaud's venture was therefore of very doubtful issue, and he had to take all precaution not to be known for a European. He found anarchy begin within twenty miles, and his small caravan, often stopped by Bedawin "blackmailers," passed the plateau in great fear. At Khariba Sabæan ruins were discovered, and the party, after making a long gradual descent into an extensive well-watered plain with streams running to southward and eastward, reached the famous dam of Marib, the fabled work of Solomon's Sheban queen, Balkis. Here Arnaud found more than enough to do among rock-inscriptions and sculptures, which his Bedawin guide, whether jealous of buried gold or really solicitous for his charge's life, would scarcely allow him to study. In the village itself he was well received at first by the sharīf, and heard much of interest; among other things a tale of a white man from Hadramaut, who had "written the stones" some years before and vanished as mysteriously as he came. Later he had word of another in Hadramaut itself who "knew no more Arabic than the Moslem profession of faith," and this Arnaud afterwards gathered was Von Wrede. But the curiosity and hostility of the Bedawins soon awoke. The

stranger, though a professed Mughrabī, neither prayed nor knew the desert ways, and must, they thought, be an Englishman from Aden, come to spy out the land. But in the end no great harm came to Arnaud. The sharīf's own son showed him the sights of Marib; and when the caravan was ready to return he was allowed to depart. He lingered to copy the texts of Khariba, and regained Sana in safety, having endured no worse hap on the road than the quips and scorns of Bedawin boors.

One may refuse to follow Albrecht Zehme in reckoning Arnaud among the half-dozen greatest pioneers of Arabian exploration. Such company is too high for one who penetrated but two days' journey into unknown regions, and showed little sense of the geographical interests which he had opportunity to further.[1] But it must be allowed that the Frenchman, pushing thus alone into a land without settled government, himself neither disguised nor abjuring Christianity, took greater risk of evil than any earlier European traveller in the Peninsula. The conduct of the Bedawins whom he met, though perhaps threatening less serious danger than he feared, was wellnigh intolerable to a highly nervous man, new to desert life. It was such conduct as the nomads seldom fail to show on the confines of settled government towards

[1] I am aware that Arnaud's veracity has been doubted. The use made of his notes in the fabulous narrative of Du Couret (by Alexandre Dumas?) may have created a false impression. I note that an editorial note on Glaser's visit to Marib in *Petermann's Mittheilungen*, 1887, p. 27, ignores Arnaud, speaking of Halévy as Glaser's only predecessor. But the testimony in Arnaud's favour is overwhelming.

any stranger not strongly protected, — conduct such as Sadlier, Wrede, Hirsch, and Doughty have all had to endure from suspicious savages; and if Arnaud shows himself in his narrative more querulously preoccupied with it than does his successor in the same region, Joseph Halévy, who certainly suffered not less contumely, it should be remembered that he wrote his report for Fresnel when hardly recovered from terrible months of sickness and semi-blindness.

BIBLIOGRAPHY

E. F. Jomard, in Appendix to F. Mengin, *Histoire Sommaire de l'Égypte* (Paris, 1839); Chedufau, in *Bull. Soc. Géogr.*, 2d série, p. 106.

M. O. Tamisier, *Voyage en Arabie* (Paris, 1840).

C. G. Ehrenberg and W. F. Hemprich, *Naturgeschichtliche Reisen durch Nord-Afrika und West-Asien, etc.* (Berlin, 1828). See also *Bombay Asiatic Soc.*, 1841, pp. 72, 129, 322, 390.

M. J. Wolff, *Missionary Journal* (London, 1839); C. Cruttenden, in *Journ. R. Geog. Soc.*, 1838, p. 267; *Trans. R. G. S. of Bombay*, i. p. 39; E. Combes and M. O. Tamisier, *Voyage en Abyssinie et l'Arabie Heureuse* (Paris, 1851); P. E. Botta, *Relation d'un Voyage dans l'Yemen* (Paris, 1841); L. Arnaud, in *Journal Asiatique*, 4me série, v. (Paris, 1845).

CHAPTER VI

THE UNKNOWN SOUTH

AFTER the Egyptian occupation a belt of comparatively well-known territory lay across the central blank of Arabian maps. Its western end filled the interval between the twenty-seventh and the thirteenth parallels; but eastward it was contracted to the space of a single degree. Of the immense areas which stretched unexplored on either hand of this wedge-shaped belt, that on the south was equal to about half the peninsula. Much of it had been reported desert both by the Moslem geographers and by the informants of Niebuhr and Burckhardt; but certain parts were known to have been, and still to be, the abode of settled societies, — for example, the Hadramaut, long famous for spices, and Oman, first scene of European settlement in Arabia. Even the coasts of these territories were but imperfectly known. The Indian surveying ship "Palinurus," whose cruises in the Red Sea, under Moresby, Carless, and Haines, had resulted in the western outline of the peninsula being laid down with tolerable accuracy, had made only a rapid reconnaissance of the southeastern coast; and though Captain Haines made valuable notes upon it, which were

published in 1839 and 1845 by the Royal Geographical Society, and ten years later were supplemented by Captain Owen of the "Leven," the chart of the shore from Misena to Ras el-Had remained a sketch; and that of the coast of Oman itself, though surveyed at various periods since 1780, was found to be none too precisely drawn in the middle of the succeeding century.

Certain parts of Oman had been in western hands, as we have seen, up to the middle of the seventeenth century without our knowledge of the land being sensibly improved. Shortly after the Portuguese evacuation, the Dutchman, Struys, called at Maskat, and found it a flourishing town, of which he has left an interesting drawing; but for a century after his day Oman seems to have remained unvisited by Europeans. In 1765 came Niebuhr. He did not proceed inland, but during his short stay at Maskat succeeded in fixing the position of the town and making some inquiry about the province. The information he got was vague. The land was all mountain to the sea, and had two perennial streams, the Wadys Sib and Massora. In the interior lay a strong town, Rastak, on which depended another strong inland place, Nezwa, and the coast from Borka to Sib; and somewhere, in undefined relation to these places, rose a high range, Jabal Akhdar, rich in vines and cane. This scanty knowledge was not materially improved by the East Indian expeditions which operated on the coast against the Yass and Jauasmi pirates after 1807, twice penetrated inland in the south to chastise

Struys' Sketch of Maskat (about 1655)

the Abu Ali tribesmen, and finally brought all under the "Pax Britannica" by the truce of 1820. Nor again was much learned from the book of Vincenzo Maurizi, who, under the name Sheikh Manṣūr, acted as surgeon and naval commander to Sayyid Sa'īd of Maskat for some half-dozen years prior to 1813. His supplementary letters, the publication of which was promised in this book, have never appeared, — the more is the pity, for Maurizi seems to have gone inland at least as far as Rastak.

The East Indian authorities had obvious and strong reason for desiring fuller knowledge of a territory so intimately related to their lucrative interests in the Persian Gulf; and they were specially concerned to gauge the effective power exercised in interior Oman by the ruler of Maskat, who had thrown in his lot with them against the rival Dutch and French since 1798, and been saved from the Wahabi in 1809. It was accordingly with an Indian commission that, towards the close of 1835, a naval lieutenant, James Wellsted, late of the "Palinurus," landed at Maskat from a Bombay schooner, and solicited permission of the Imam to visit the interior of his territories. Wellsted had been long engaged on the survey of the west and south coasts of the peninsula, had explored Socotra, and, in the spring of this same year, made in Cruttenden's company from Ba'l-Haf a short but venturesome excursion, the first attempted by a European, into the southern interior, which resulted in the discovery of the famous ruins of Nakab

al-Hajar. Rumours of the hidden valleys of Hadramaut, which he heard thereabout, fired Wellsted's ready imagination, and failing to overcome native opposition on the south coast, he obtained the leave of the Indian government to join the Asir expedition of 1835, and explore a way to Hadramaut overland. But when news arrived that a great disaster had befallen the Egyptians in that spring, he bethought him of Oman and its friendly ruler, and went to Maskat instead, hoping he might reach his ultimate goal from the eastern or northeastern side. The Imam, anxious to stand well in the eyes of the Indian government, and knowing, doubtless, that the fate of Wellsted's project would be decided in the interior by another authority than his, offered facilities, so long as the Englishman should be within his sphere of protection.

Wellsted, therefore, made his exploration of Oman under very favourable circumstances and without serious risk until he tried to enter the northern territory, where the Wahabi's writ ran more strongly than the Imam's. In the first instance he took ship to Sur and visited the extreme southwest of Oman, — a lean, featureless land on the fringe of the great central southern desert, which was then rather in the hands of Bedawins than of the Imam. Since these same Bedawins of Abu Ali and Abu Hasan, who had embraced Wahabism, had been attacked not above half a generation before by British Sepoy expeditions, acting in the interest of the Imam, this hardly seemed a wise excursion for a British officer to make; but

the remnant of the tribes left after Sir Lionel Smith's massacre of their braves had learned their lesson, and now looked for British favour. They entertained Wellsted hospitably, and conducted him two days' journey eastward into the steppe, where he met with wandering families of the Jeneba, who live on the rare habitable spots of the southern littoral as far west as Mahra, half shepherds, half fishermen, and wholly pirates on occasion.

These families offered to take the stranger forward, if so minded, to their western confines; but, having set his heart on Nejd, Wellsted returned to the camp of his hosts, and turned northwestward up the long Wady Betha towards the central mountains, amazed at the artificial fertility of oases here and there. The method of obtaining water struck him "as more Chinese than Arabian" (evidently he knew nothing of Persian *Kanats*):—

"I saw several [shafts] which had been sunk o a depth of forty feet. A channel from this fountainhead is then, with a very slight descent, bored in the direction in which it is to be conveyed, leaving apertures at regular distances, to afford light and air to those who are occasionally sent to keep it clean. In this manner water is frequently conducted from a distance of six or eight miles."

Oman must have learned from Persia, with which it had had intimate relations since its conquest by Nushirvan, the secret of this elaborate engineering. One may doubt if it was known to the Arabians of

antiquity. For, if the lower oases of Oman were half so luxuriant then, as Wellsted and subsequently Miles have found them to be, Yemen had hardly enjoyed so great a fame as the one fertile Arabian region. The larger settlements in this region are quite urban. In Ibra, —

"to avoid the damp, and catch an occasional beam of the sun above the trees, [the houses] are usually very lofty. A parapet encircling the upper part is turreted; and on some of the largest houses guns are mounted. The windows and doors have the Saracenic arch, and every part of the building is profusely decorated with ornaments of stucco in bas-relief, some in very good taste. The doors are also cased with brass, and have rings and other massive ornaments of the same metal."

In Semed Wellsted was surprised by another Englishman, Lieutenant Whitelock, who had come up through the rugged hill country immediately west of Maskat, probably by the Wady Semail; and in his company he turned due east along the southern base of the high mountains, now well known as the main range of Oman, Jabal Akhdar. The travellers saw with admiration the paradise created by its drainage: —

"'Is this Arabia,' we said, 'this the country we have looked on heretofore as a desert?' Verdant fields of grain and sugarcane, stretching along for miles, are before us; streams of water, flowing in all directions, intersect our path; and the happy and contented appearance of the peasants agreeably helps to fill up the

smiling picture. The atmosphere was delightfully clear and pure." (December 21st.)

In this region there is even marsh, and the plants, which make the modern wealth of Egypt, the cotton shrub and the sugarcane, grow abundantly. After reaching Nezwa, heard of by Niebuhr and now found to be the chief ultramontane stronghold of Oman, the Englishmen made a circular tour in the hill country, finding the ridges bare and chill, but the valleys very fertile and well planted with vine and almond. Wellsted made out that this "granite" range (really conglomerate with cretaceous crest) stretches for about thirty miles east to west, and has a maximum breadth of fourteen miles with very steep declivities north and south. From a boiling-point observation taken at Shiraizi, he computed the average summit height at seven thousand feet, considerably below the true mark. The inhabitants (Beni Riyam) were few, pagan, and independent. Indeed, everywhere in the interior of Oman, Wellsted found the Imam to exercise a purely nominal suzerainty, and to command neither money nor men.

Having returned to Nezwa, the Englishmen parted. Whitelock went back to Maskat, and Wellsted made an excursion eastward to the edge of the great central desert. He never entered it, nor has any one else from that side. Two months later he had a wider prospect: —

"From the summit of the Jebel Akhdar I had an opportunity during a clear day to obtain an extensive

view of the Desert to the southwest of Oman. Vast plains of loose drift-sand, across which even the hardy Bedouin scarcely dares to venture, spread out as far as the eye can reach. Not a hill nor even a change of colouring in the plains occurs to break the unvarying and desolate appearance of the scene."

Fever supervened, and Wellsted, as soon as able, set out, with a very sick following, for Maskat. The way lay through Jabal Akhdar again, and along very rugged glens, watered by its northeastward outflows. A stream often twenty feet wide was found in Wady "Kher" (i. e., Wady Semail), flowing even to the sea; and this, or another like it, should be Ptolemy's river, drawn from the "Fountains of Omanum." On the coast at Sib, Wellsted learned that his chance of ever reaching Nejd was the remoter for a new Wahabite incursion into North Oman. The revival of the Central Arabian power under the Emir Faysal had begun, and despite the Egyptians, *razzias* were out again in all quarters. In the coming autumn they would sweep down behind Jabal Akhdar, and almost to the Indian Sea. The Englishman, however, would not abandon hope, and, having been rejoined by Whitelock, marched late in February northwestward through the long date groves of the Batina coast. At Sueik he turned inland, and was soon in the hills again, now rising brown and bleak above the green wadys. Anarchy and fear of the Wahabis grew as the party advanced. The Imam's letters awhile commanded respect; but at Ibri, still some fifty miles

distant from the frontier settlement, Bireima, Wahabis themselves were encountered, — men who were "in general small, and had no other clothes than a cloth round their waist. Their complexion was very dark, and they wore their hair long." The reception of the party by these zealots was such that return was inevitable; and this was effected with some difficulty, Wellsted learning from the altered demeanour of the villagers along the road the truth of the old travellers' maxim, "Return by another path in a doubtful land."

The glimpse which Wellsted had of the Batina, home of rich agriculturists exporting indigo, sugar, and dates, astonished him. "I question," says he, "if it be not the most populous [coast] in the world." After visiting Sohar, he sent up a letter to the Wahabi chief in Bireima, and, while waiting a reply in Shinas, occupied himself with collecting information about the mountainous region of Ras el-Jabal, which ends in Cape Musandam. But as no reply ever came (for the Wahabis had already started on their raid into southern Oman), Whitelock made his way across country to Sharja, and Wellsted took ship for the Makran coast and India.

So ended the first scientific exploration of Oman. The high compliment may be paid to Wellsted of comparing him in one or two respects with Carsten Niebuhr. He did for our knowledge of one rich district of Arabia almost as much as the Dane did for the other. Like Niebuhr, Wellsted neither traversed a large area nor made a journey full of adven-

ture and danger; but he both explored thoroughly the district which he visited, and he collected information about its surroundings. It must not, however, be supposed that his powers were in all or even many ways equal to Niebuhr's. He had nothing like the same wide and discerning vision, the same judgment of men, the same descriptive power. If he was better provided with instruments, and had had much longer acquaintance with Arabia and Arabs, at the same time Haines stated that he was but a poor surveyor, and Badger that his knowledge of colloquial Arabic was small. These facts Wellsted, ambitious of fame, did his best to conceal from his readers. Nor in the pursuit of notoriety was he too scrupulous to give others their due. His captain, Haines, condemned him in strong terms for forestalling the fame of his colleagues on the "Palinurus," — an accusation which the reader can verify if he look, for example, at Wellsted's accounts of the diplomatic transactions with the sultans of Kishin and Lahej. For in these, although he is known to have played a subordinate part, he has omitted all mention of his superior officer. Haines's own account of the south coast is far better than his lieutenant's; and for the exploration of Socotra, and the discovery of antiquities on the mainland shore, Cruttenden, Carter, and Hulton were entitled to at least half the credit which Wellsted secured by selfish and premature publication.

But for the work done in Oman, even if something more than Wellsted allowed be accredited to White-

Wellsted's Map of Oman (1838)

lock, the former deserves high praise. Both his map and his notes have stood the test of time, and are not yet superseded. Eloy and Miles have retraced some of his footsteps and added to his information, but they have not had to subtract from it; and where he failed to penetrate, his followers had no better success for two generations. Though Bireima was reached from the north by Miles in 1876, no one passed to south of it, or indeed ever revisited Ibri, Wellsted's furthest point towards the Dahira, till 1902; and to this day the last object of his ambition, the overland passage from Oman to Nejd, has been attained by no other explorer.

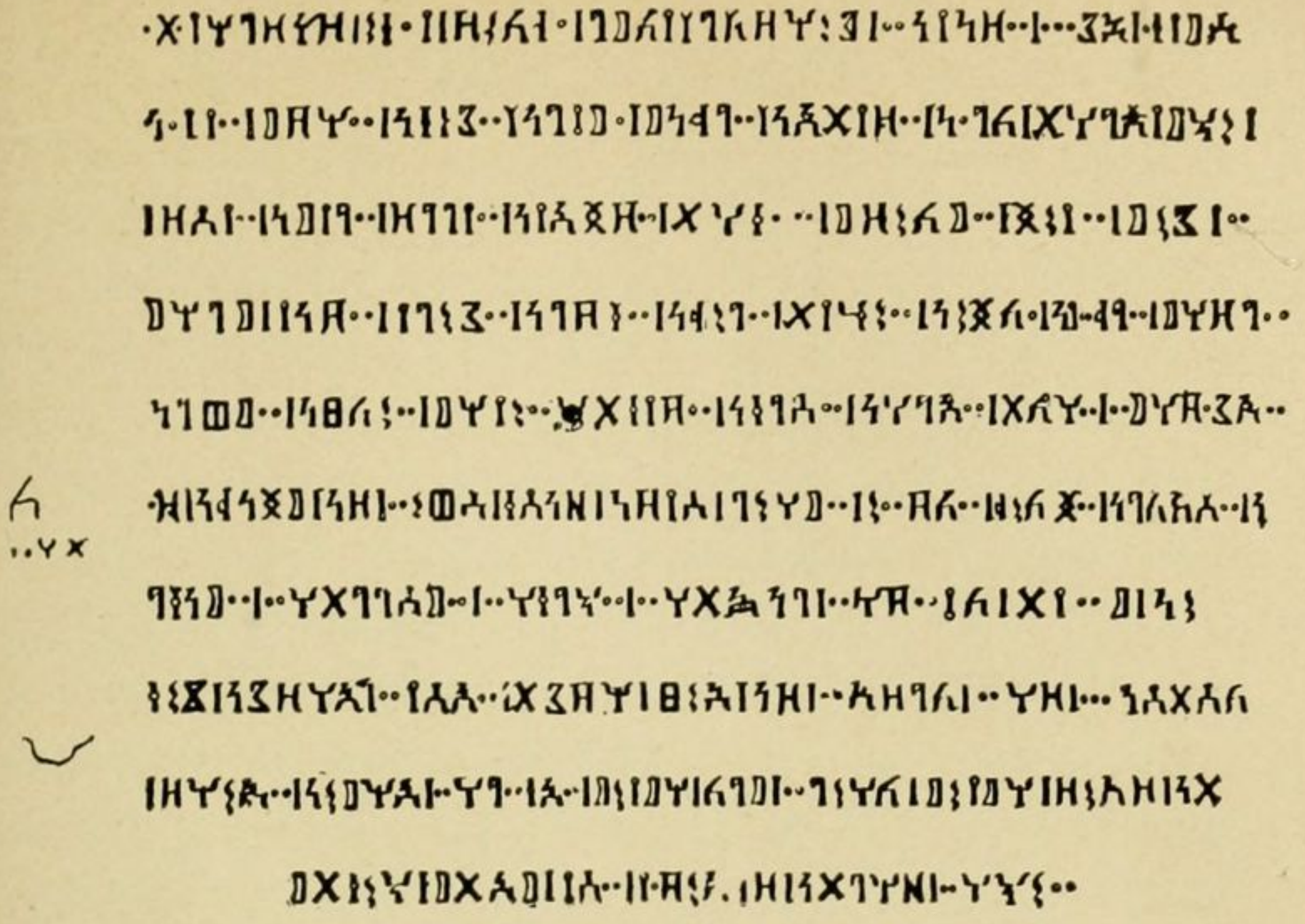
We have seen that an earlier object of Wellsted's ambition had been the Hadramaut. The curiosity of many had been excited by the secrecy of this central southern region. Niebuhr had learned vaguely but correctly enough the general character of the district, — its partition between desert uplands and deep, fertile wadys; its exclusive but highly civilised society; the prosperity of its chief settlements, maintained despite the decline of the spice trade; and the variance in type and speech between the coastal race and the inland folk. The largest town he heard to be Doan, but the most powerful to be Shibam. Concerning the road thither from Yemen, he was told only that is passed through no village after leaving Jauf, and that a caravan must march for twenty-five days from Sana to reach Doan.

Niebuhr realised and confessed that there was much more to know; but it was long ere any great addition was made. Fresnel, in 1838, from inquiries made in Jidda, corrected the Dane about Doan, — which is a district, not a town, — stated more correctly the marches from the chief settlements to the coast, and called European attention to the natural wonders of Bir Borhut, where some sort of volcanic vent was reported.

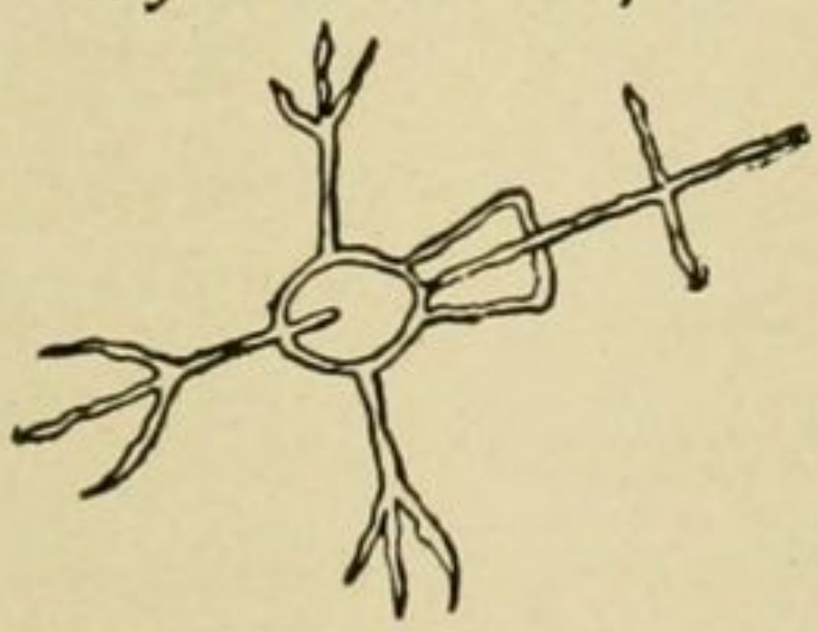
Of old, Hadramaut had been the seat of one of the four principal peoples of the peninsula known to the Greeks, and of the greatest repute for aromatic products; and since it still preserved its ancient name, it was hoped that it might preserve other ancient things also, and that its exploration would solve riddles of ancient Arabian history, from the epoch of "Ophir" onwards. But Niebuhr's recommendation of the Hadramaut to explorers remained fruitless for three parts of a century, and it was not till the "Palinurus" took up the survey of the southwest coast, in 1834, that any attempt was made by Europeans to push inland. We have alluded already to the pioneer venture made by Wellsted and Cruttenden in April, 1835, into the borderland of Yemen. Going up with Bedawin guides of the Wahadi tribe, they penetrated about fifty miles due north from the coast. Their way lay up a long wady, rich in oases and dotted with settlements. Though known for Englishmen, and none too faithfully guided, the adventurers reached their objective safely. They

Inscriptions at Hasan Ghorab in Arabia.

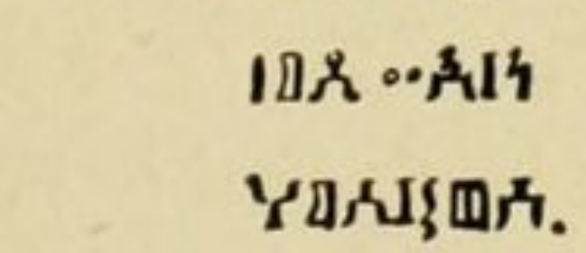
No 1 — Engraved on a smooth piece of rock forming one side of the terrace.



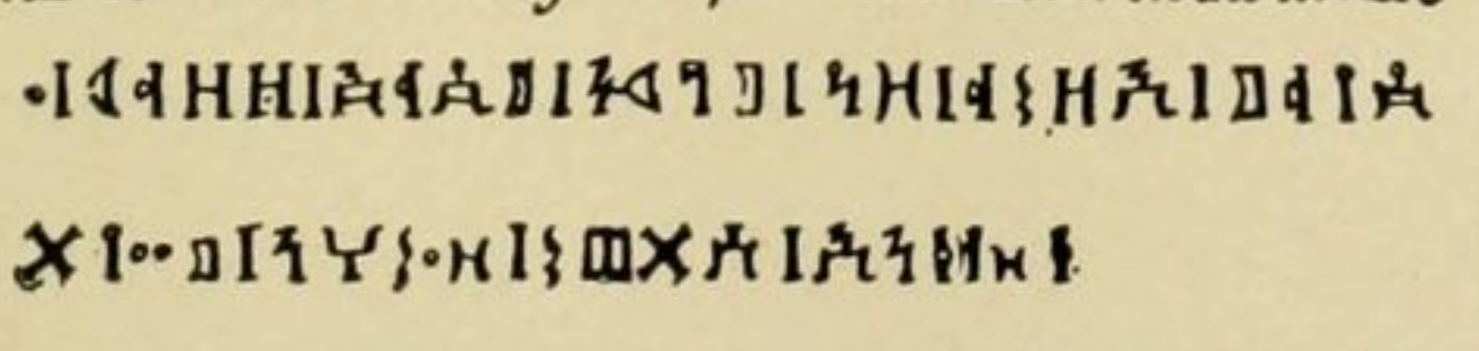
No 2. — Engraved on the upper surface of a stone close by the next short inscription



No 3 — Found on a small detached rock on the summit of the hill.



No 4. — Found near the long inscription lower down on the terrace



The First Published Himyaritic Inscriptions

From the Journal of the Royal Geographical Society, 1837

found Nakab al-Hajar as wonderful as report had said. Grey marble walls of fine masonry between thirty and forty feet high, square towers guarding the gates, a legend in letters eight inches long, and an oblong temple exactly orientated and choked with ruin of its roof, rewarded their pains. The party returned to the ship without incident, having had, however, to thank chance for their evasion of an ambush of Diyabi robbers.

The inscription of Nakab al-Hajar, together with two others[1] found by officers of the "Palinurus" in the previous year on rocks at Hisn Gorab near Makalla, furnished Europe with its first decisive proof that Himyaritic records survived from the great days of Arabian civilisation. Niebuhr had heard of more than one such text in the hill country, and apparently been shown an actual copy at Mokha in 1764; but, sick as he was then, he took it for cuneiform, and left to a later generation the fame of the first discovery of a class of inscriptions, now numbered by thousands, and of immense historical value. Himyaritic studies have had most important influence on our knowledge not only of ancient Arabia, but of modern. The present science of no land, except perhaps Asia Minor, owes more to explorers inspired by curiosity about the past. The officers of the "Palinurus" were the forerunners of Wrede, Arnaud,

[1] Published first by Carter in the *Transactions of the Asiatic Society of Bengal for* 1834, and repeated in *J. R. G. S.*, 1837. Carless had copied a Himyaritic *graffito* near Wij in 1831, but did not publish it till 1845 (*Bombay A. S.*, 1845, p. 271).

Halévy, Doughty, Huber, Euting, Glaser, Hirsch, and Bent, names with which is associated nearly all the romantic element in the history of Arabian exploration.

It was not given to Wellsted, however, to follow up his discovery. Greatly as he wished to penetrate either to the heart of the Sabæan land behind Yemen or to that of the incense country in Hadramaut, he failed, as we have seen, to pass the barriers set by nature and man. To all requests for furtherance inland the chiefs of Makalla and Sheher opposed an obstinate refusal, and Wellsted had to be content with making notes from hearsay. In these he first emphasised the importance of one main wady in the interior, which he called Hadramaut proper, and of the town of Terim, then the most populous.

Singularly fertile and self-sufficing, the settled districts of Hadramaut are so situated geographically as to hang closely together, and to be isolated as a whole from the rest of the peninsula; while at the same time they lie within reach of ports which are in constant communication with mid-eastern Africa and India. The main fertile valley of the region, carrying the drainage of the southeastward slope of the highlands of Southwest Arabia, lies for a long distance (about five hundred miles) almost parallel to the coast, but screened by a high desert plateau. The fact that its waters are absorbed in the irrigation of this long depression leaves the last hundred miles of the main wady a desert, and removes the oasis tracts

from direct contact with the sea. To north stretches unbroken the most terrible waste of sand-dunes in Arabia (*Aḥḳāf*), never, to our knowledge, crossed; and to east is the firmer but not less waterless desert of Mahra. On the west there is passage, it seems (for the roads are unexplored), across a narrow steppe to the Yemen *hinterland;* but that *hinterland,* become largely desert since the collapse of the Sabæan dams, is itself not of ready access from Yemen, thanks to the lofty and sterile mountain belt, which forms the Red Sea watershed.

The population of the Wady Hadramaut, therefore, and its tributary valleys, has had ample opportunity to develop particularism. In more frequent communication with Moslem communities outside Arabia than within it, its religious spirit is of the exclusive orthodox kind, which does not prevail in the other southern districts, Yemen and Oman. It claims to be the repository of the true tradition of the Prophet, arrogating to itself the title *Balad ad-Dīn,* "Land of the Faith," and affecting especial reverence for the present caliph. The fertility of its lands makes its farmers self-sufficient, and jealous with the jealousy of men who have much to lose; and while their relations with Africa have caused them to have unusual wealth of slaves, their relations with India, greatly enhancing their material civilisation, have at the same time made them fully aware of the nature of European rule, and the danger of conceding entrance to members of a race which condemns slavery.

With this civilised but highly exclusive society the sheikhs of the coast towns between the forty-sixth and fifty-second degrees of longitude are most closely connected, and in its interest they long succeeded in barring the inland ways not only to Europeans, but also to all foreigners whatsoever. At the epoch with which we are now concerned their jealousy had just been aroused by the cruise of the "Palinurus," and yet more by the British occupation of Aden, wherein they were not slow to see the beginning of such *kāfir* encroachment as had overwhelmed India.

Within ten years of Wellsted's failure, however, their vigilance was eluded. Adolph von Wrede, a soldier of fortune, of good Bavarian family, who is said to have been in the service of King Otho, in Greece, and to have resided subsequently in Egypt, resolved to try if Wellsted had said rightly that a man might enter Hadramaut in Moslem guise. To court local favour and to have an obvious motive for the journey, Wrede assumed the name and the character of a pilgrim to the famous tomb of the saint Hud, known to lie in the Hadramaut. He saw Fresnel at Jidda, sailed for Aden, and made his way inland from Makalla with some fifteen Akuaibere Bedawins on June 26, 1843, steering slightly west of north. At first he had to follow long valleys sloping seaward, similar to the Wady Maifat, ascended by Wellsted and Cruttenden; and thereafter to proceed up an escarpment and across a chill and barren sandstone plateau under Jebel Zahura, whose height he

overestimated at eight thousand feet. He found a well-marked track supplied with cisterns, but no settlements. On the ninth day an immense ravine opened suddenly before the party, offering a view of many settlements, and of date groves extending for miles; and, descending by a narrow paved road, Wrede found himself in the same Wady Doan whose wealth and fertility had been vaunted to Niebuhr eighty years before by a native met in Yemen.

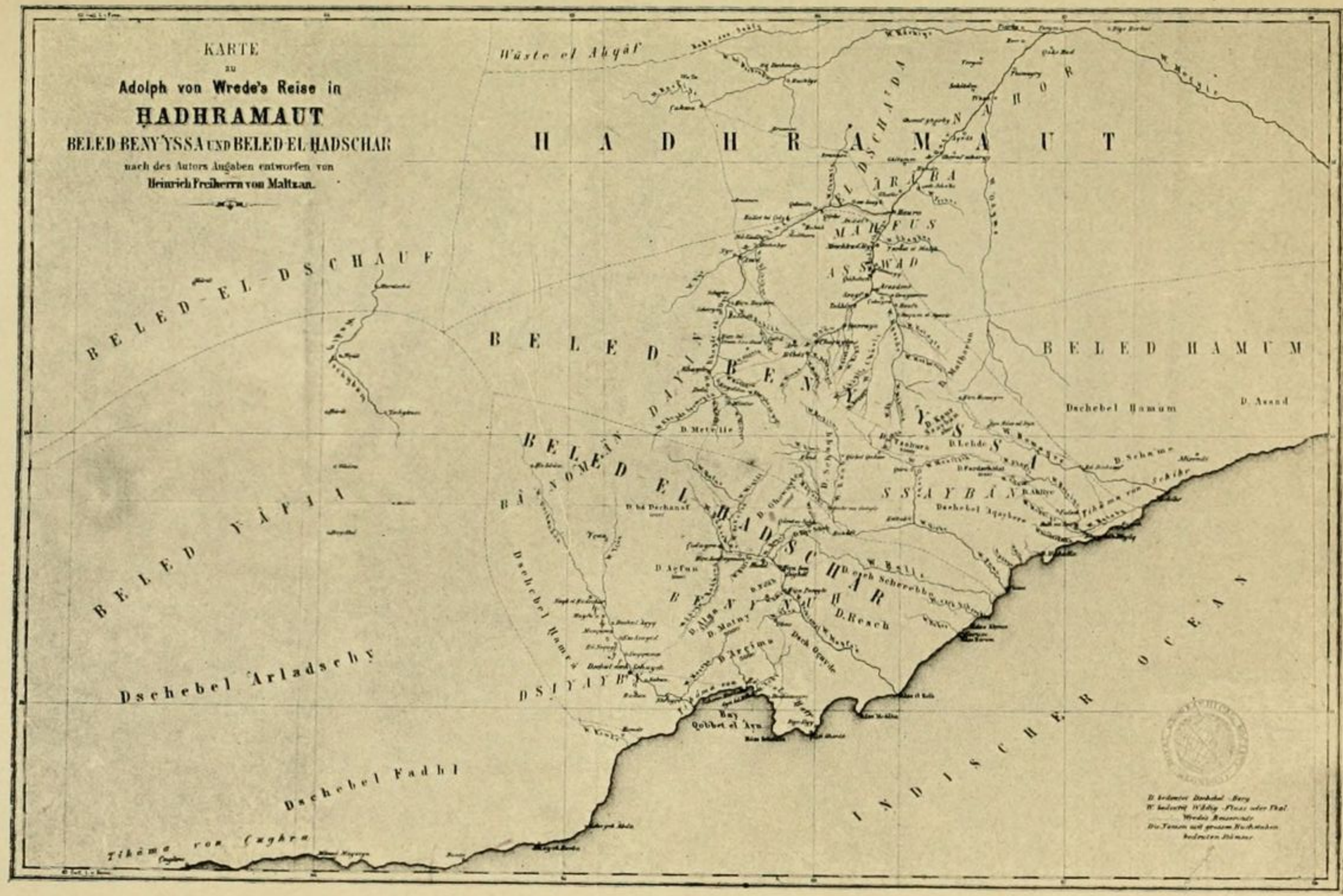
At the largest village, Khoraibe, he was well received by the chief of the Beni Issa, and furthered on excursions west and north. In the former direction he desired to revisit Wellsted's goal, Nakab el-Hajar, and penetrate to Habban; but after discovering a new Himyaritic inscription in Wady Ubne, and reaching the sea, he was turned back, and had to make his way again, not without grave peril, to Khoraibe. To northward he pushed across the plateau to the great Wady Amd, which runs parallel to Doan. There he found a sheikh who had been in India, spoke English, and possessed Scott's "Napoleon." This enlightened individual made no secret of his disbelief in Wrede's assumed character, but did not betray him. Thence the German followed the valley to Haura, where he found Wady Doan coming into Wady Amd; and turning northward over a ridge, he struck into a great half-choked wady running east-northeast. Hearing at the town of Sawa, chiefly inhabited by collectors of desert salt, that the great sands of the Aḥḳāf (here called Bahr

aṣ-Ṣāfī) lay but a day distant, he induced his Bedawins to take him to their edge. He found them raised high above even the plateau level, a vast expanse of dunes with certain white spots, said by his guides to be pits of quicksand which engulfed any heavy body. It has been suggested that these were half-choked naphtha springs. Undeterred by their alarms, Wrede marched towards one of the white patches, armed with a plumb-line of sixty fathoms.

"With the greatest caution I approached the border to examine the sand, which I found almost an impalpable powder, and I then threw the plumb-line as far as possible; it sank instantly, the velocity diminishing, and in five minutes the end of the cord had disappeared in the all-devouring tomb."

After retracing his path to Wady Doan, the pilgrim set out at last for Kabr al-Hūd. His tardiness in performing this duty possibly accounts for the fact that he was never allowed to reach the tomb of the saint. Arrived at Sif, where a fair was in progress, he was attacked by a mob, and haled before the local potentate for an English spy. After a short duress, and suffering the loss of most of his notes and baggage, he was bidden return straight to Makalla, which he reached early in September.

Captain Haines, of "Palinurus" fame, obtained a brief report from Wrede, and communicated it to the Royal Geographical Society in 1844. It was enough to establish the general character of the fertile Hadramaut country as being a system of branching val-



Von Maltzan's Map of Von Wrede's Routes

leys, deeply sunk in a high plateau and debouching into one main channel which trends east and by south to the sea near Sihut. Wrede had crossed the heads of several of its tributary valleys without reaching the main wady of Hadramaut proper, where lay the larger towns reported to Haines and Wellsted, Shibam, Saiyun, and Terim; but at Sawa he had crossed Wady Rakhiya, which must be considered the parent channel, derived from the Yemen plateau. In short, his track lay on the whole somewhat to the eastward of the true Hadramaut.

The great Prussian geographer, Karl Ritter, then finishing the Arabian volumes of his "Description of Asia," welcomed Wrede's report as an immense gain to knowledge. But neither a map nor a copy of the inscription of Wady Ubne accompanied the report. The existence of these, however, as well as of certain water-colour sketches and notes, was attested by Fresnel, who had talked with the author after his return to Cairo; and this learned Arabist, as well as Ritter, Murchison, and other authorities, made no doubt of Wrede's good faith. But the famous Humboldt, who met him after his return to Westphalia, called in grave question the account of the Bahr aṣ-Ṣāfī, quoted above, and so prevailed on scientific and public opinion that Wrede fell under general suspicion of having compiled a sensational report from hearsay; and that although Arnaud had spoken not only of knowing him before and after his exploit, but of having talked in Marib with a man of Hadramaut

who had just come from his native district and seen Wrede there. His story passed into the same category as Du Couret's "Mystères du Desert," — a fabulous concoction concerning Marib and the Hadramaut, put together from various sources, notably the narrative of Arnaud, and published in 1859.

The result was that Wrede published no more, but emigrated to Texas, and there is said to have killed himself about 1860. Ten years later Baron Heinrich von Maltzan, who had made the Mecca pilgrimage in disguise in 1860, and had since occupied himself with Arab studies, issued Wrede's journal in full, with map, inscription, notes, and a vindicatory preface, but no sketches. The words of the original report appeared here and there with a mass of new matter concerning Bedawin custom, recent history, and personal adventure. Notably the passage concerning Bahr aṣ-Ṣāfī recurred unaltered. Von Maltzan did not tell the world how Wrede's journal came into his hands; merely that, having done so, it was published at the earnest request of Dr. Karl Andree, the well-known cartographer. The map was reissued in a revised form, in 1872, in Petermann's "Mittheilungen."

Humboldt's attitude notwithstanding, there is no real doubt as to the authenticity of either Wrede's journey in Hadramaut, or his Journal. To the first an even better authority than Arnaud and Haines bears witness, namely, Van den Berg, in the masterly essay on Hadramaut (1886), which he based

on examination of numerous colonists from that country, settled in Java. He states that he himself had talked to an Arab of Hanin who was an eye-witness of the arrest of this "'Abd al-Hūd," a stranger who comported himself like a madman, and was only saved from the populace by the intervention of the sheikh.

BIBLIOGRAPHY

J. R. Wellsted, *Travels in Arabia* (London, 1838); also articles in *J. R. G. S.*, 1837, p. 102, 1835, pp. 129, 286.

V. Maurizi, *History of Seyd Said, etc.*, by Shaik Mansur (London, 1819).

J. B. Haines, in *J. R. G. S.*, 1839, p. 125, 1845, p. 104.

W. F. Owen, *Coast of Arabia Felix*, in *Naut. Mag.*, 1857, p. 180.

H. J. Carter, in *Trans. Bombay As. Soc.*, 1845, 1847, 1851, pp. 195, 224, 339.

A. von Wrede, *Reise in Hadhramut, etc.*, edited by H. Freiherr v. Maltzan (Brunswick, 1870). *Cf.* article in *J. R. G. S.*, 1844, p. 107.

CHAPTER VII

THE UNKNOWN NORTH

THAT part of the Arabian peninsula which lies nearest to Europe was left by European pioneers to the last.

It had been long known that beyond the sandy belt which bounds the hard Syrian steppe on the south, a brave and hardy Bedawin race, the Shammar, held a highland region, which Moslem geographers called the "Two Mountains," or simply "The Mountain," and included in the great division Nejd. Niebuhr had mentioned "Shomar" and enumerated four of its settlements, but he failed to learn details of it; and both Seetzen and Burckhardt, while domiciled in Syria, made inquiry, knowing that it had been for ages the seat of an independent society which had once been idolatrous,[1] but later was wont to receive and forward the Baghdad and Basra pilgrims on their way to Mecca by Queen Zobeide's road. From very early times its original capital, Faid, had been regarded as the halfway station, where *ḥājjis* might leave heavy baggage in security against their return. But Karl

[1] See Caussin de Perceval, *Les Arabes avant l'Islamisme*, vol. ii. p. 605.

Ritter was probably the first to point out (in 1845) that the importance of Jabal Shammar in the history of Arabian traffic went back not only to the "Times of Ignorance," when poets sang of its noble Tai clan and the princely hospitality of its hero, Hatim, but to the days of Ptolemy, when caravans, taking the roads from Gerra to Petra, and from Gerra and Babylonia to the Minæan and Sabæan kingdoms, must have met there. Sprenger indeed has located in Shammar territory two of Ptolemy's mid-Arabian stations, — *Aine,* which is perhaps Hail itself or Faid, and *Salma,* whose name persists in one of the twin mountains, Jabal Selma.

A century ago information about the actual condition of Jabal Shammar was far to seek. For about two hundred years the weakness of the Ottoman sultans had been permitting anarchy in all the southeastern part of their empire; and new northward migrations from Nejd, led by a part of this same great clan of Shammar, had disturbed the whole Syrian steppe. The Anaze tribes, themselves of Nejdean origin, to whose "nomadising" influence has been due the relapse of much fertile Syria to steppe, succeeded at last in pushing the invaders across Euphrates. But during their conflict the visits both of merchants from Syria and of the pilgrims from Basra seem to have ceased almost entirely. We read, for example, in 'Abd al-Karīm's narrative,[1] that when he wished to pass from Baghdad to Mecca in 1741,

[1] See Bibliography to chapter i.

he was warned not to attempt the cross-Arabian route, but to make the long elbow by Aleppo and Damascus; and for corroboration we have only to note the ruin into which the cisterns and shelters piously provided by Caliph Harun's queen had been long fallen.

Security increased with the consolidation of the Wahabi power, and in 1808 Seetzen, then living in Jerusalem, was able to send a Syrian, attached to his service, by way of the Hauran and the Wady Sirhan to Jauf, the last oasis in Syria or the first in Arabia. This man, by name Yūsuf al-Mālikī, found it in Wahabi hands. Jauf, Ptolemy's Dumætha, a Roman outpost, and the Daumet al-Jandal of Moslem geographers, had been reported vaguely to Niebuhr as a hilly tract of country denominated "Jof es-Sirhan." Yūsuf now reported that it was a considerable basin containing several walled villages, dependent on wells and lying near one another. A great square castle, and an "obelisk" three times as high as the highest minaret attracted his attention; whereof the latter seems to have been the ruined tower of Marid. But he stayed only a few days, by his own account, before pushing southwards with his guides, who brought him to a great desert of dunes, called Nafūd, where roamed white "wild cows," and after three days' further march, during which no water was found, to the foot of an exceeding high mountain, which seemed to him like his own Lebanon. Hence he learned it was ten days' march to Deraiye; but not persevering farther, he returned by the way he had come.

Yūsuf's great exaggeration of Jabal Aja, and his statement that, having crossed the terrible desert to a land of palms and springs, his Bedawins insisted on turning back, raise a doubt if indeed he ever went beyond Jauf, or, at most, above halfway across the desert. The character of the Nafūd, its flora, the existence of its "wild cows" (an antelope species, *Oryx beatrix,* rediscovered by later explorers), and the towering aspect which Jabal Aja presents from the distant desert, were easily learned. Four years later Burckhardt questioned the traders and caravaners in Damascus, and from their information drew up two itineraries to Jauf, one from Basra, the other from the south end of the Dead Sea; and he noted the stations from Jauf to Jabal Shammar, but baldly, as it might be in a pilgrim's way-book.

Such scant knowledge was not greatly increased by the Egyptian invasion of Nejd. The tall Shammar tribesmen had not accepted the Wahabi doctrine till after 1785, when Sa'ūd was free to manifest his terrible energy in the north. Both for its religious programme of emancipation from elaborate and superstitious ceremonies and its political programme of emancipation from Turkish dominion, Wahabism was not uncongenial to the noble Arabs of northern Nejd, who professed allegiance to the Hanbali school of Islam. But neither the spiritual fervour nor the ascetic ritual, to which it gave birth among the oasis-dwellers of the south, was natural to a pure Bedawin race. The Shammar, like their near kinsmen in Asir,

seem to have welcomed Wahabism rather for its hostility to the Meccan or "Turkish" system than for its religiosity, and to have taken little part in spreading it beyond Nejd. Sa'ūd visited the "Jabal," and passed beyond it even to Jauf, about 1790, but apparently left no governor in any town or village. For there was, as yet, no temporal organisation in an empire dependent for its existence and cohesion on a common spiritual conviction.

During the successive advances of the Egyptians the Shammar came to the help neither of them nor of the emir in Deraiye;[1] but not being for Ibrahim they were treated as being against him. After the fall of Deraiye there seems to have been an Egyptian governor and garrison awhile at Hail, but in precarious isolation, which precluded them from effecting there the devastation which had been the sad lot of southern Nejd. Soon free again, Jabal Shammar, whose proximity Sadlier considered to be a main cause of the importance of Aneiza, came under the strong hand of a native Shammar sheikh, and remained at peace during that intestine anarchy of Nejd, which was not ended till the final establishment of Fayṣal in Riad in 1842. The new supreme sheikh, 'Abd-Allah, a member of the noble family of Rashīd, which has since written its name large in the history of Arabia, owed his appointment to Fayṣal, whose succession to the emirate of Riad he had originally secured in

[1] Burckhardt records that they acted independently of the Wahabis in his time; e. g., they attacked the Syrian *ḥājj*, which had been franked by the emir.

1834 by murdering the murderer of the Emir Turkī; and he sought his confirmation in Egyptian favour. But from the moment of his secure establishment in Hail in 1835 he worked to secure independence of both these powers. Accepted lord of the most vigorous and united Bedawin clan, and during the exile of Fayṣal and the second Egyptian invasion of Nejd left in undisturbed possession of a town on the high-road of trans-Arabian trade, he had acquired, before his overlord's return to Riad, too much prestige and wealth to be more than nominally a subject; and the fame of the capital of South Nejd was already in process of eclipse by that of Jabal Shammar.

In 1842 Fayṣal was released from his prison at Cairo and sent up to Riad to resume his government in the Egyptian interest. But three years later the Viceroy of the Nile, who, since the Powers had crushed his hopes in Syria, was forming new ones in Arabia, seems to have seen fit to send a special envoy to see what the worth of Faysal's rival in Nejd might be. He chose for the purpose a Swede, George Augustus Wallin. This man was to travel in disguise as a learned Moslem sheikh, being in fact a distinguished Arabist, who ultimately became professor in the University of Helsingfors. It is usually stated that he was to buy horses for the Viceroy; but to that end the choice of a highly educated European was a singular freak on the part of a potentate who had hundreds of native horse-coopers at his beck. Nor in the event does Wallin appear to have dealt in

George Augustus Wallin

From a picture in the possession of the University of Helsingfors

horses, for he kept out of all commerce in Hail, and returned by way of Medina and Mecca. The report of his experiences on this first journey was long delayed. It was not read to the Royal Geographical Society till 1852, and when it appeared in print in 1854, two years after the traveller's death, it was found to give no preliminary explanations. In view of all the facts, one can hardly doubt that this distinguished scholar, though he had all the curiosity of an explorer who travels for the sake of pure science, was in fact commissioned by Mehemet Ali to make a report on the rising power of Jabal Shammar.

Whatever his motive, Wallin was one of the very ablest Europeans who has ever set foot in Arabia, and qualified for his task as only Seetzen or Burckhardt would have been. One recognises in him, perhaps for the first time in the history of Arabian discovery, a scientific explorer of the best modern type, thoroughly prepared, and determined to leave nothing for the man who might come after him. His assumption of an eastern character seems to have been perfect; but his observation of the scenery and society about him was in no way impaired by it; and the minute accuracy of his report, as attested by the comparison of the narratives of later travellers, argues that he took most copious notes without let or hindrance, save only in the fanatic company of the Persian pilgrims to the Holy Cities. One reservation must, however, be made: he carried no instruments.

Wallin left Cairo before the middle of April, and

made his way in a couple of months to Maan, the important pilgrim station which lies to the southeast of the Dead Sea. Thence his road lay over the stones and dust of the Hamad till he should strike the sandy depression of Wady Sirhan, by which Yūsuf al-Mālikī had gone to Jauf a generation before him. He reached the Wady at the wells of Weisit, and thence came to Jauf in forty hours, forerunning from Maan a future and more notorious traveller, Gifford Palgrave. The features and society of the oases of el-Jauf (in his orthography Algawf), where he remained about two months, Wallin described with an elaborate detail which has left very little to be said by any one coming after; but as Jauf is Syrian, rather than Arabian, we will not, like his successors, repeat him, but pass on, calling attention by the way to his guess that the Syrian Hamad culminates in the hills north of the oasis, and to his notification of the existence of a twin oasis some thirty miles to northeast, whose principal settlement, Sakaka, is not less populous than the main town of Jauf itself.

Wallin set his face southward towards the Nafūd desert at the end of August, and finding water for the last time in the six deep wells of Shakik at the end of a long day's march, noted that this supply is due to an argillaceous seam in the hard stratum which underlies the sand-dunes. The party entered the main desert on September 1, and followed a track which has always been marked by the occurrence of two rocky pyramids standing up above the undulating waste of

sand at about one-third of the way across. It was only after eighty-seven hours of marching that Wallin reached water again at Jubbe, a circular pan where the hard soil, uniform with the main part of the Syrian steppe to northward, is again exposed.

Travelling, as he did, over the dreaded passage in summer, with very weak camels and mainly by night, Wallin did not note the peculiarities which later travellers have observed in this "Nafūd." He remarked what rich pasture it afforded for part of the year; but the vast expanse of dunes of red granular sand, heaped upon a hard limestone soil, did not excite his curiosity. Nor, while he speaks of "difficult ground" necessitating deviations from the direct course, whereon the traveller must see he keep "the polar star on his left shoulder blade," does he specify the nature of it or show any consciousness of those great horse-shoe pits, the cause of whose existence has puzzled so greatly some of his successors.

At Jubbe Wallin found a small and mean settlement, but great concourse of nomad graziers; and in the course of a fortnight's sojourn he visited the rocks of its mountain, Musliman, which are scored with numerous rude drawings and inscriptions in the Kufic character. He seems to have believed himself to have been descending ever since Jauf, for he says:—

"Not only has this tract [the northern desert] but the whole peninsula of Arabia, in my opinion, a southerly or southeasterly decline. . . . I regard Syria and its adjacent desert as the highest part of the peninsula. . . .

Wherever I have been in the interior to the east of the barrier chain, I never fell in with a valley or a winter rill which did not run in a southerly or southeasterly direction. The climate seems also to prove the southeast decline of Arabia."

But, nevertheless, Arabia falls not to south but to northeast; and if Wallin, who himself quoted the confused account, taken by Yāḳūt from Haytham, of a great sinuous wady which, under various names, but most often called Rumma, runs from near Medina northeastward even to the vicinity of Kufa on Euphrates, had bethought him to verify this statement by questioning the natives of Nejd, he would have anticipated an important discovery, which is claimed by Wetzstein, Doughty, and Huber. We shall see later how similar considerations, in default of instruments, led Palgrave into similar errors.

South of the wells of Kena, Wallin found the sand give place to disintegrated granite as abruptly as it had itself succeeded to the limestone steppe on the north; and, now in a land of palm-settlements, he saw the isolated grey granite chains of Jabal Aja and Jabal Selma rise before him, brushwood clad, saline and arid. He reduced the height of the former, Yūsuf's Lebanon-like mountain, to but a thousand feet above the plateau, and estimating its length as a chain at only five days' journey stated the fact that it has a connection, though not in its own granite, with the mountains of Hijaz. Of the twin chains of Jabal Shammar he gives us our first and our most correct

account, as well as of the methods whereby their waters are raised in the plain, and the corn-fields and large vegetable gardens of the district are irrigated.

Hail, now become instead of Faid, or Kafar, the chief settlement in Jabal Shammar, Wallin reached in about twelve hours from the Nafūd limit by passing a low *col* in Jabal Aja. Like all his successors, he was impressed at once by the thriving, bustling life of this clean and well-built town, its open and thronged markets and its general air of security and well-being. Though 'Abd-Allah had been but ten years its lord, a man might go where he willed in peace on the once perilous Jabal, and all the Bedawins, even to Kasim on the south, Teima on the west, and the Euphratean marches on the east, paid tax to the Shammar sheikh and respected his order. Princely hospitality was practised daily in his hall, and patriarchal justice done in his open council for all North Central Arabia. Wallin speaks thus of the founder of the Rashīd fortunes: —

"Power and wealth alone did not procure 'Abd Allah this great authority among the Arabs; he owed it far more to his own great personal qualities, his intrepidity and manliness, his strict justice, often inclining to severity, his unflinching adherence to his word and promise, of a breach of which he was never known to have rendered himself guilty, and, above all, to his unsurpassed hospitality and benevolence towards the poor, of whom, it was a well-known thing, none ever went unhelped from his door. These virtues, the highest a Bedawy can be endowed with, 'Abd Allah was endowed with in a high degree."

Wallin examined with greater care, and recorded with more scientific precision, than any one who has followed him, the constituents of the population of Jabal Shammar; and with his wide knowledge of early Arab literature and tradition was able in great measure to trace their origin. But he failed to make clear the important point in which this society differs from that of the other chief oasis-lands of Central Arabia. This resides in the fact that its main constituent, now settled and in part of *fellah* life, has not lost the spirit or the custom of the Bedawin population from which it sprang. To take the ruling family, for example; the chiefs of the house of Rashīd are not as the chiefs of the house of Sa'ūd in Riad, rulers of settled communities with which they are at one, and surrounding tribes of Bedawins, distinct from themselves; but they are chiefs, in the first instance, of a great dominant Bedawin tribe, and in the second of the settlements which serve that tribe for markets and rallying points. Like most of their tribesmen, therefore, the lords of Hail spend large part of the year in the open, preferring black tents to stone or earthen towers; and this fact it is which, all allowance made for the exceptional vigour of the ruling family, has most made for order and well-being in Jabal Shammar. Instead of dominant oases surrounded by divers distinct tribes of Bedawins, who must be reckoned with as a potentially antagonistic, and for geographical reasons very influential, element, and can be but indifferently controlled, as is the case in southern Nejd, we find the northern oases

subject to one tribe, whose nomad members have the closest relations and community of interest with the settled members. The writ that runs in the Shammar town runs equally in the Shammar steppes and deserts; and the patriarchal organisation, the nobler code of conduct and morals, and the inspiriting tradition of an unusually fine nomad race obtain also in the settlements about which this race moves. In his misapprehension of this feature of the society Wallin was followed, as in most things, by Palgrave, and not corrected till the Blunts, who had more sympathy with nomads, came to Hail a generation later. But in all else the first visitor's accuracy has been confessed by his successors.

Concerning his pilgrimage to Medina and Mecca Wallin has left no detailed narrative, a fact the more to be regretted because not only would so learned an Arabist's observation of his Persian companions, of the ceremonial at Medina, and even of that at Mecca, well known though it be, have been most valuable, but the particular track followed by the *ḥājj* in that year was the direct one from Hail to Medina, of which we have to this day no other description. Wallin states that the interval was covered in eighty-five hours' fast marching, and that Jabal Aja ceased on the right hand after thirty-nine hours, leaving an opening through which the plain extended northwest "without interruptions of mountains or undulations as far as to the coast of the Red Sea;" thereafter, he remarked, a low chain of sand or limestone resumed promi-

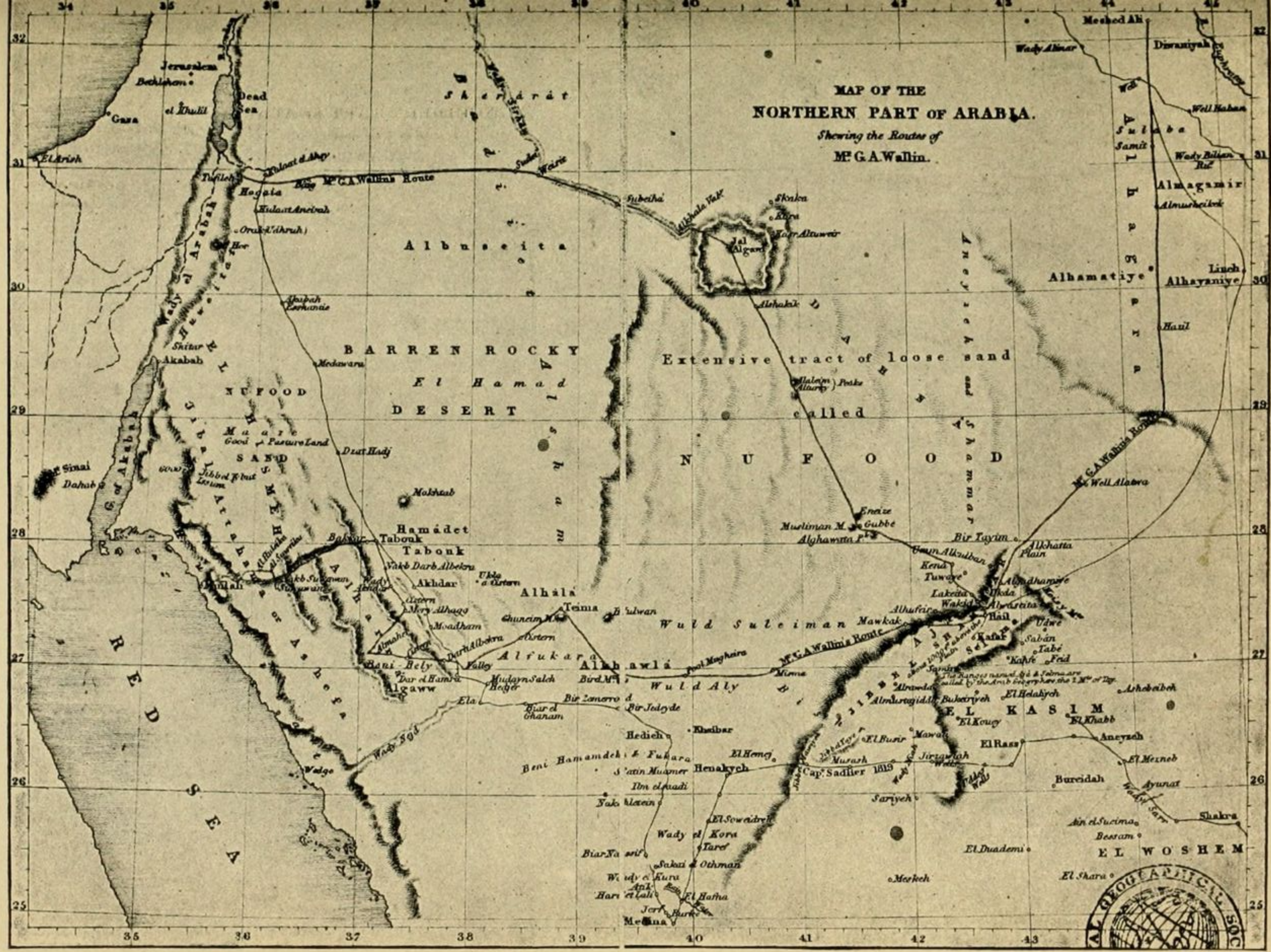
nence in the "land of Harb and the inferior parts of Alhigaz."

Wallin returned to Cairo, and ere he had given any information to Europe about his journey, was back again in Arabia. He made his way this time by sea to Muweila, on the coast of Midian, already well known from Rüppell's account (1826) and Moresby's survey; and thence, on Feb. 20, 1848, he struck inland through unexplored and unsettled granite mountains to Tebuk, a very old village on the Syrian pilgrim road. It is curious that both during this passage and an excursion which he made subsequently into the Ḥarrah Mountains Wallin did not recognise their recent volcanic character, though he spoke of crossing

"level tracts of a dark stony soil broken here and there by conical or pyramidal masses of rock. At the base of these masses the ground is thickly strewn with black porous stones of peculiar lightness. The mountains themselves here consist of red sandstone, . . . but their sides and ridges are so covered with these black fragments that the red colour of the rock beneath can only be perceived on a close examination."

To make his misapprehension clear he added in a note: —

"It is possible that the rock of these hills is ferruginous sandstone, the red colour being due to the presence of oxide of iron, which becomes a black peroxide after having imbibed more oxygen from the atmosphere; and thus small fragments become externally quite black, and,


MAP OF THE
NORTHERN PART OF ARABIA.
Shewing the Routes of
Mr. G. A. Wallin.
Mr. G. A. Wallin's Route
Jerusalem
Bethlehem
Gaza
el Khulil
Dead Sea
Elarish
Tufileh
Hogala
Hulaut Ancibah
Orukel'dhruh
Hor
Wady el Arabah
Shitar
Akabah
G. of Akabah
Sinai
Dahab
Albuseita
BARREN ROCKY
El Hamad
DESERT
NUFOOD
SAND
Good Pasture Land
Dust Hadj
Molhtab
Hamádet
Tabouk
Akhdar
Alhala
Teima
Wuld Suleiman
Alfukara
Alhawlá
Wuld Aly
Algaww
Bedieh
Khaibar
Henakyh
Wady el Kora
Medina
RED SEA
Wadge
Sharárát
Sakaka
Jubeiha
Alhala Valley
Jal Algard
Alhabak
Extensive tract of loose sand
called
NUFOOD
Muriman M.
Alghawita P.
Bir Tayim
Alkhatta Plain
Kenda
Tuwaye
Lakeita
Wakkid
Alhufair
Hail
Mawkak
Kafar
Sabán
Tabé
Feid
Kafe
Alhamatiye
Alhayaniye
Almagamir
Almurbeikeh
Hail
Well Alatera
Bir Jedyde
Cap. Sadlier 1819
Musrah
Sariyeh
Merkeh
El Duademi
El Rass
Bureidah
Ayunat
Shakra
Aneyzeh
El Mezneb
Ain el Sucina
Bessam
EL WOSHEM
El Shara
EL KASIM
El Khabb
El Kougy
El Burir
El Helaiyeh
Alkheibeh
Meshed Ali
Diraniyah
Well Habaan
Wady Bilban
Linch
Alhayaniye
Wady Alnar
Sulaba
Samit
Alhamatiye
Almagamir
Almurbeikeh
Hail
Well Alatera
Alghawita P.
Muriman M.
Gubbe
Enaize
Bir Tayim
Alkhatta Plain
Kenda
Tuwaye
Lakeita
Wakkid
Alhufair
Hail
Mawkak
Kafar
Sabán
Tabé
Feid
Kafe
Alhamatiye
Alhayaniye
Linch
Hail
Bureidah
Ayunat
Shakra
Aneyzeh
El Mezneb
Bessam
EL WOSHEM
El Shara
El Duademi
Merkeh
Sariyeh
Musrah
Cap. Sadlier 1819
El Rass
El Burir
El Kougy
El Khabb
El Helaiyeh
Alkheibeh
EL KASIM
Jirzawiah
Mawa
Henakyh
El Hemy
Khaibar
Bedieh
Bir Jedyde
Bir Zomorro
Bir el Gharam
Mimma
Alhawlá
Wuld Aly
Wuld Suleiman
Alfukara
Teima
Alhala
Tabouk
Hamádet
Akhdar
Algaww
Mulayn Salch
Bir el Hamra
Dar el Hamra
Beni Bely
Moadham
Mery Alhaqq
Darb Albeiora
Wadge
Wady Sod
Wady el Kora
Taref
Sakaka
Jubeiha
Alhala Valley
Jal Algard
Alhabak
Sharárát
Wady Sirhan
Sakaka
Khira
Tair Altawir
Alhamatiye
Almagamir
Almurbeikeh
Hail
Linch
Alhayaniye
Diraniyah
Meshed Ali
Well Habaan
Wady Bilban
Wady Alnar
Sulaba
Samit
Wady el Arabah
Hor
Orukel'dhruh
Hulaut Ancibah
Tufileh
Hogala
Hulaut el Abyd
Mr. G. A. Wallin's Route
Jerusalem
Bethlehem
Gaza
el Khulil
Dead Sea
Elarish
Sinai
Dahab
G. of Akabah
Shitar
Akabah
Wady el Arabah
Hor
Orukel'dhruh
Hulaut Ancibah
Hogala
Tufileh
Hulaut el Abyd
Mr. G. A. Wallin's Route

from the action upon their surface, have very much the appearance of cinders," —

which, indeed, they have, for they are the Ḥarrah lavas.

On the 19th of April Wallin reached the frontier of the Shammar dominion again at the oasis of Teima, which, like the fellow oasis of Kheibar, had not been visited by a European, though familiar by name to all students of Moslem literature. He found the main settlement to stand on a patch of calcareous soil almost surrounded by Nafūd, and to be mostly irrigated from one great well, famous throughout Arabia, the Bīr al-Hūdaj. Corn and the sweetest dates grew there, tended by some hundred families of professed Wahabites, in whom Wallin saw, however, only Moslems of the strict Hanbali school. Though he learned the existence of a large oasis at Ḗlah (Ala) three days to the southward, he did not hear, or was not curious enough to inquire of el-Hejr, the place of the mysterious rock-cut houses of the Prophet Sāleḥ (Medayin Salih), which lay on the road thither.

He left Teima after a week's stay, in the company of a Bishr nomad, who had guided a horse caravan on its way to the Viceroy of Egypt, and next day he encountered other men from South Nejd, in charge of horses. A negro Egyptian commissioner accompanied them. Joining forces, the parties cut across a tongue of the Nafūd to the granitic uplands, and slept, on May 2, at Kafar, and on the following night in

Hail. Wallin found the Emir 'Abd-Allah ibn Rashīd newly gathered to his fathers, and his sons Talāl and Mata'ab reigning jointly in his stead under the tutelage of their warlike uncle, 'Ubayd. The Swede stayed a month this time, but we hear nothing of his doings. Because of disturbances in Fayṣal's country and other reasons, on which he did not enlarge, he abandoned all idea of going south or east, and joined, on June 7, a small party of five tribesmen bound for Meshed Ali in quest of rice. The direct track, to west of that followed by the Persian pilgrims, was chosen as less exposed to raids. It leads at first over a corner of the Nafūd, but after two days reaches the harder calcareous soil, where water lies in the clefts even in summer. On the fourth day a ridge is surmounted, which Wallin calls Dahana, and identifies with a swell in the Nafūd seen by him three years earlier, near Jauf, about eighty miles distant. He believed it to be continued by the low coastal range of the Persian Gulf even to Ras el-Kheima. From its farther side Wallin's guides "took the pole-star between their eyebrows" and struck straight over featureless gravel ridges till, always descending, they sighted the gilt cupola of Ali's tomb on June 15th.

From Meshed Ali Wallin passed to Baghdad, and came no more to Arabia, but died in Finland, after four years. The narrative of his second journey, written in English, was communicated to the Royal Geographical Society in 1850; and, so far as we know, he left no other record except the more elaborate paper

on his first journey, which was sent to the same Society in the year of his death. One might spare something of his successors' narratives to have more of Wallin's. He was the last of the original pioneers who, since Niebuhr, had been opening up Arabia, the last to force the barriers of a great unexplored region of the first importance. Since Wallin's time every European traveller who has made any considerable journey in the interior of the peninsula has touched or crossed, if he have not followed, the track of a predecessor. There were, of course, great areas left to be explored in the fifty years that have since elapsed; and there are great areas dark at this day; but no habitable region remained any longer virgin. Only the vast Southern Desert hid its mysteries, as it hides them still.

The progress of Arabian exploration up to this moment may be seen by a glance at the revised map published by the great Prussian geographer, Karl Ritter, in 1852. In no part of the continent, whose science he made his own, did Ritter take a more personal interest than in its southwestern peninsula. It was to him what the Anatolian peninsula was to be to his worthy successor, Heinrich Kiepert, the man who has finished Ritter's work of laying the foundation of the present German interest in nearer Asia. The Arabian volumes of Ritter's great descriptive work had already appeared in 1846 and 1847, after the first narratives of Wrede and Arnaud had come to hand, but before anything

was known of Wallin. Those volumes stated the sum of the geographical evidence on Arabia, available up to 1845. Using Ptolemy and the Moslem geographers for a basis, Ritter checked their statements by the reports and narratives of all the travellers whom we have mentioned.

One may note that he has already improved on Jomard's statement of Arabian geography, not only in respect of the southern districts, explored within the past ten years, but even in that of the western and central districts, on which there was no new evidence. He no longer credits the superficial draining of Ared by the Wady Aftan to the Gulf of Bahrein. Attaching greater weight to Sadlier's observations than his French predecessor had done, he held that there was a continuous barrier of highland to the east of the Nejdean wadys, and that if Aftan existed at all its waters could only, like those of Hanifa, from which it was distinct, reach the Bay of Bahrein by underground channels. At the same time he clung to the theory of Chedufau and Tamisier that the Asir drainage, after being collected in the Bahr Saluhe, is carried on northeastward, and possibly into the Gulf at last, after making the fertility of the southernmost districts of Nejd, Aflaj, and Harik.

Thanks to the "Palinurus," the coastal outline of Arabia was now known, except for one stretch of about three hundred and fifty miles on the southeast; and, relatively to the coast, inland points up to a cer-

tain distance could be more correctly placed. Ritter was able to adjust Jomard's chart of Asir, knowing that Taif really lay where earlier geographers had placed it, well to south of the Meccan parallel, and to introduce more detail into the Frenchman's summary delineation of the mountain system. But of the important problems of slope and drainage to north of the road from Mecca to Riad, — that is, in all the northern half of Arabia, — Ritter was of course in ignorance still; nor had he any clearer idea than his predecessors of the semi-volcanic nature of the mountain system of the Red Sea littoral, or its relation to the internal chains, such as those of Jabal Shammar. For certain parts of Nejd he had as yet but mediæval Moslem evidence; and accordingly, while he could claim to be better informed on the character of the northern oases on all hands of the Nafūd than any geographer before him, he still imagined the oasis of Jauf to extend much farther south than indeed it does. He narrowed the Nafūd to an inconsiderable belt, and was obliged to scatter names on his map to northeast and east of Jabal Shammar on the old plan of assuming equidistance between the stations of pilgrim itineraries.

In short, for about one-third of the peninsula, that part lying north of latitude 25°, Ritter's knowledge was much inferior to ours at the present day. But for the remainder of Arabia the scientific advance which has been made by nearly sixty years of research since his day is not so considerable; and the fact that

a descriptive geography, written in 1845, should still be a first-rate authority for near a million square miles of the earth in 1904, illustrates equally the thoroughness of Ritter's work and the inaccessibility of Arabia to modern explorers.

BIBLIOGRAPHY

Seetzen, *Beiträge zur Geographie Arabiens* in Von Zach's *Monatl. Corresp.*, 1808, xviii. pp. 358, 383.
Burckhardt, *Travels in Arabia*, Appendix vi.
G. A. Wallin in *J. R. G. S.*, xx. p. 293, xxiv. p. 115.
K. Ritter, *Erdkunde von Asien*, Pts. xii., xiii. (Berlin, 1846, 1847).

PART II. THE SUCCESSORS

CHAPTER VIII

WESTERN BORDERLANDS

WITH the middle of the nineteenth century begins what may be called the second generation of Arabian explorers. The men, whose mission was to revise, may be considered best from the standpoint not of their time, but of our own. Their work will be more intelligible if related no longer to contemporary ignorance but to present science.

The western border of the Arabian Peninsula presents everywhere the same general character. A low strip of varying dimension, but nowhere above two days' march in width, makes the shore. This Tehama is a comparatively recent addition to the main mass of Arabia, having been partly washed down from the central plateau, partly built out in coralline formations into the warm Red Sea.[1] Behind this the continental mass presents to seaward the aspect of a continuous range of varying elevation, with buttresses

[1] There is a good description of the coast-line from the land side in J. F. Keane's *Hijaz*, p. 98.

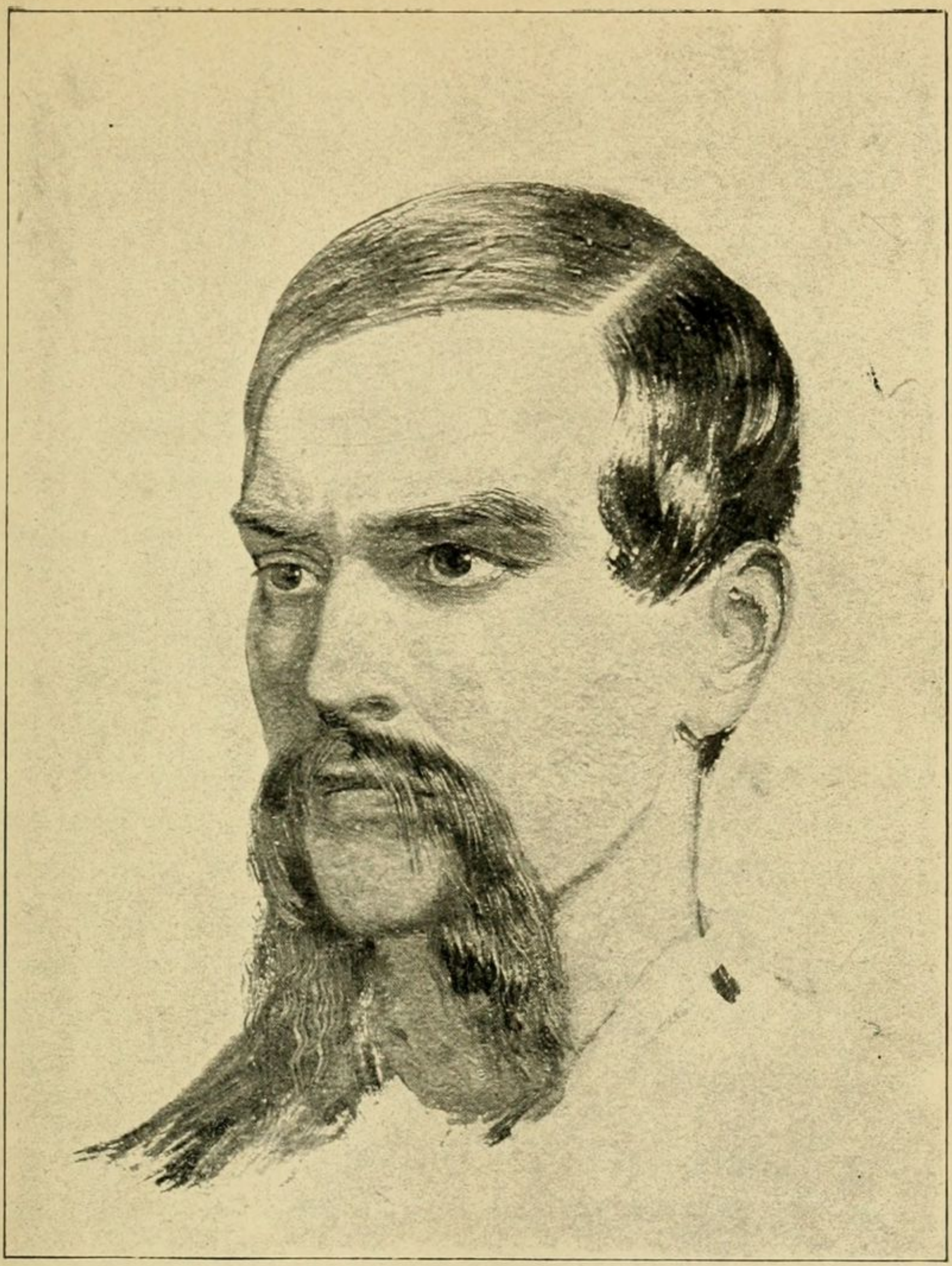
thrown forward to west. The seeming mountain system, however, is in reality the steeply tilted edge of a plateau, which, on the whole, falls away very gradually eastward or northward of east. This plateau is Central Arabia. Its short but steep seaward slope, with the recent lowlands at the foot, is the Western Borderland.

The wadys of the latter, therefore, are not main drainage channels of the peninsula, but have short courses, which in no case start above a hundred and fifty miles inland, as the crow flies; but since they carry almost all the precipitated vapours, which come from the west, down abrupt inclines of friable composition in a land subject to great and rapid variations of temperature, they have carved very deeply this face of Arabia, more especially in the south, where the monsoons swell the volume of their waters. Hence the mountainous appearance of Yemen, and in a less degree of Asir, as travellers see these lands on their way inland from the Red Sea. In Hijaz, with the failure of the monsoons, the plateau presents a smoother seaward face; but north of the twenty-sixth parallel a new geological element appears in the scenery. There has been an intrusion of ancient plutonic rocks along the westward face for a long distance; and its action has imparted a more truly mountainous character to the northwestern littoral than to any other part of the Red Sea shore.

For our knowledge of this wild granitic region, in part the ancient "Midian," and only by a faulty

use included under the term Hijaz, we have to thank in great measure the famous Richard Francis Burton. There is no record of a European having landed to explore Midian before 1826,[1] when the African traveller, Edward Rüppell, who had been in Sinai four years before, put in at its principal settlement, Muweila, and thence made his way northward along the beach, following the Egyptian pilgrim road towards Akaba. He recognised the plutonic character of the higher peaks, which here closely approach the sea; and both at Wady Deriam, a few miles from Muweila, and again at Mugair, north of the bay of Ain Une, he came upon remarkable traces of early habitation. He was followed, in 1831, by the surveying ship "Palinurus," under Moresby, with whom sailed Wellsted, afterwards the explorer of Oman. The result of their labours was a hydrographical survey of the coasts. From Wellsted's account, given in the second volume of his "Travels," it appears that, in Midian at least, no member of this surveying party ventured far inland; and it was not till Wallin chose the track from Muweila to Tebuk, in 1848, as a short cut to Nejd, that geographers obtained any certain information in regard to the country behind the huge granitic hills, which rise about a day's journey from the shore. Wallin found these to form a coastal chain distinct from the plateau, whose face stands up abruptly behind them as a continuous wall, connecting Jabal Shera far

[1] Eyles Irwin coasted up to the mouth of the Akaba Gulf in 1777, and noted prominent features; e. g., the twin-peaked mountain behind Muweila, which he called "Bullock Horns."



Richard Burton

Richard Burton

From a sketch in the possession of the Royal Geographical Society

to north with the Hijaz highlands to south. He passed rapidly through the first chain by the Wady Sadr, a principal member of the series of important sand-bottomed *fiumaras,* which he remarked descending to the coast in a general southwesterly direction; and he climbed the eastern wall behind Jabal Harb, to find himself on the great upland Hisma plain, which is the outermost threshold of Nejd.

All that he saw was reseen by Burton thirty years later. That famous adventurer, now growing old in his consulate at Trieste, had been led some years before to credit the existence of precious deposits in the Midianite rocks by the chance statement of an Egyptian *ḥājji,* who had followed the overland road to the Holy Cities. Comparing this information with Rüppell's report of ruined towns in the same region, Burton convinced himself that traces of ancient mining centres and workings must still exist, which would serve as guides to ore. It was not, however, till early in 1877 that either he had the leisure or the Egyptian government, to whom he had imparted his evidence, showed the will to investigate the matter on the spot. Put in command of a small party in that year, he was directed to proceed to Muweila, and thence make a flying reconnaissance up Rüppell's route; and in the event he diverged from the latter only to ascend the Wady Deriam and investigate the coastal range at closer quarters. The report which he rendered concerning the traces of ancient workings in that wady and at Mugair Shuaib, and of the ruins at the latter spot

(where the "Jihān Numā" states there were "tablets written with kings' names"), and his samples of ore, determined the Egyptian administration to make a wider survey; and in the latter part of the same year Burton returned to Muweila with ampler resources and a much larger following.

To summarise his results: — he explored first all that lies north of Muweila, below the wall of the plateau, as far as a point halfway up the Gulf of Akaba. Here the coastal range runs down at last to the sea, falling sheer in Mt. Taibism, and closes the littoral region which Arabs know as Arḍ Madyan, or the Land of Midian. This region is that which both Rüppell and Burton himself had seen before, and the first had mapped with an accuracy confessed by his successor. It presents no peculiarity. The actual littoral is nearly all alluvial product of the freshets which come down from the Hisma basin, laying sinuous ruin of the plateau sandstones between the granite masses of the coastal chain. The valleys, of which that called Deriam, and higher up Sadr, is the chief, produce only desert vegetation between the bare hills. There is no permanent settlement of man between Muweila and Makhna; but the *ḥājj* road, made in the sixteenth century, is provided with a succession of wells. The nomad inhabitants of the Ogba tribe claim patrimony in Muweila, which is protected, despite their tribal decay, by the inviolable Bedawin law of property; but they can make little head against the intrusive Huweitat of the higher Hisma.

All this district was mapped by Burton's Egyptian officers; and their chart, though more of a sketch than a survey, remains the best that we possess for any inland part of Arabia, except the neighbourhood of Aden. That done, the party was led back to Muweila to prepare to invade the districts of South Midian, for which the Arabs have no common name. Burton first struck inland up the Wady Sur, keeping south of Wallin's track, and passing through the coastal chain (he called it, on Indian analogy, "Ghats"), ascended to the inner plateau, whose brink is on an average some two thousand feet lower than the highest granite peaks to west. There he saw before him the vast ruddy basin of the Hisma, bounded on the east by the long swell of recent eruptive nature known as the Shefa or Aueirid Ḥarrah, on which Doughty was even then wandering. These lava masses, reaching to seven thousand five hundred feet, form the culminating point of the plateau in this region; but the true water-parting lies a little farther east; for both the Ḥarrah and Hisma waters have been found to drain to the Western Sea.

Burton, though tempted by ruins in Hisma, did not persevere on his inland course, not caring to risk trouble with the Maze Bedawins in an enterprise outside his proper commission; and to the great relief of his Egyptians, he descended again to the western valley, and made his way southward under the wall through a series of sandy upland basins, finding many traces of ancient settlement and workings. In the end

he explored both flanks of the coastal range as far south as Wady Hamd, the true north boundary of Hijaz, which interrupts the "Ghats" before their final culmination in Jabal Radwa, behind Yambo. The importance of this great wady, which comes down from the innermost Ḥarrahs, and drains all the plateau edge from Medayin Salih to a point far south of Medina, was learned then by Burton; but the precise locality of its head-waters and the geography of its tributaries were left for Doughty to determine. The Egyptian exploration ended with an ascent of the great granite mountain behind Muweila, Jabal Shar, the ancient Hippos, which was found to have an elevation lower by some two thousand five hundred feet than that with which it had long been credited.

As a prospector for gold Burton failed. Neither his samples of ore nor his report convinced experts; and no more has been heard of the Eldorado of Midian. But it is to his honour that he did not lose sight of less lucrative interests. The long paper which he communicated to the Royal Geographical Society after his return constitutes our best authority for all Midian, and our latest; for no European explorer has reported subsequently on any inland part of it, — not even Julius Euting, who states that he crossed a corner in 1884 in his flight to el-Wij from the consequences of having shed Jeheina blood near el-Ala. There is in all probability little more to know of Midian. When a party as well equipped

as Burton's, led by so learned and capable an observer, has quartered a narrow district, with full leisure and opportunity for survey, that district may be held explored. Burton did not indeed examine the granite mountains group by group; and he left contours (especially in the south country) very vague on his chart; but in view of the uniformity of local conditions which prevails all over Arabia, one can be sure that no important geographical secret lurks unsolved in Midian.

South of the Wady Hamd, the limit of Egyptian rule at that epoch, this good fortune deserts us. The nearer the Holy Cities, the less chance of effective survey. Nevertheless, we have better knowledge, both of these cities themselves, and of the northern Hijaz in general, than Ritter, for example, could show in 1852. It would be too much to say that the hydrography of the whole region is now known accurately, for our present conception of it rests on hearsay rather than actual exploration by European surveyors. But there is no practical doubt that the information concerning it, gathered from natives by Charles Doughty in 1877, is substantially correct. Burton said [1] of the Wady Hamd (or Hamz) that it was not as other wadys of the littoral, a short torrent bed, but a definite opening in the highlands, which led inland for fifteen days' march, whereof the first six brought a traveller to el-Ala, within a day of Hejr. Doughty, of whom we shall speak more fully anon, came down

[1] See *Land of Midian*, p. 219.

from the north to Hejr itself,—that is, Medayin Salih, the famous place of carved rocks of the Beni Thamud, — and there learned that the freshet bed, which descended from its little oasis, "goes out in the great Hejaz wady, el-Humth," called, where it forks north below el-Ala, the Wady Jisl. This north fork, he was told, collects from both sides of the Aueirid Ḥarrah, and falling into the great valley of "Humth" (Hamd), a wady so great as to be compared by Arabs to er-Rumma itself, is prolonged to the Red Sea between Wij and Yambo. A year later Doughty was a degree farther south, and found that the waters which rise in the north, west, and south flanks of the Ḥarrah of Kheibar also flow to Wady "Humth," joining a great south fork which comes down, under the name Wady Kora, from Medina, passing between Mt. Ohod and the city, and indeed from much farther south, — even from the Mecca country. The whole course of the longest member of this system he reported to be not less than ten degrees.

It is unfortunate for us that no European, since Varthema, has informed us concerning the Syrian pilgrim's road from el-Ala to Medina; for it seems to run wholly in this hollow land of Wady Kora. Nor again concerning the direct continuation of that road through the territory of the Beni Amr towards Mecca, which must ascend to the head of the whole Hamd system before crossing the Ḥarrah ridge to a tributary valley of Wady Fatima. But comparison of Burckhardt's and Burton's notes leaves no reasonable

doubt that the high ground of the northern Hijaz is indeed drained to the Red Sea, exactly as Doughty says, by a system of wadys which collect over the whole rim of the plateau between the twenty-seventh and the twenty-second parallels and discharge into Wady Hamd.

For confirmation of this hydrography, and for all serious addition to our knowledge of North Hijaz since Burckhardt's day, we have to thank an earlier and more famous adventure of Burton's, — over-famous, perhaps, if its purpose and actual performance be rightly apprehended. To do the great traveller justice, he did not undertake his pilgrimage to Medina and Mecca in 1854 in order to make a sensation, or because he shared popular ignorance as to the novelty and utility of the feat. He knew perfectly well that 'Alī Bey and Burckhardt had left him little or nothing to report on the Holy Cities, and that merely to pass rapidly and in disguise among the *ḥājjis* from Yambo to Jidda, by way of Medina and Mecca, was no longer worth the while of a man of his scientific pretension. But Burton went to Mecca for exactly the same reason that had influenced the best of his predecessors, Seetzen and Burckhardt. Having long desired to penetrate, and if possible to cross, the heart of southern Arabia, and thereafter to travel in other Moslem lands of Asia and Africa, he sought to win at once the name and notoriety of a ḥājji. The caravaners of the Hijaz, however, reported that the direct passage through the southern deserts

to Maskat, described in the "Jihān Numā," was now never attempted, but held impracticable even by Bedawins. And more than one event during his pilgrimage probably convinced Burton that his disguise was not so impenetrable that it would serve him in Nejd, where the natives are more jealous of European intrusion. In the end he had to some extent to cover a failure; but the vivid style and descriptive power of his narrative attracted an audience, to which Burckhardt's sober journal had remained unknown, and so greatly dominated popular fancy, that at this day those who know that any European has tried to reach Mecca for the most part believe that Burton alone succeeded.[1]

Nevertheless Burton's pilgrimage was not altogether without geographical result. Though he had nothing informing to tell of the road from Yambo

[1] The list of European visitors to Mecca is in reality a fairly long one. We can name Italians, Varthema and Finati; Germans, Wild, Seetzen, and Von Maltzan; Englishmen, Pitts, Burton, Keane; a Swiss, Burckhardt; a Spaniard, Badia; a Swede, Wallin; a Dutchman, Hurgronje; a Frenchman, Courtellemont. Huber was brought to the gates in 1884, but did not enter. Besides these we know of many renegades, and suspect more. Niebuhr heard of a French surgeon and two Englishmen; Burton quotes an unnamed pilgrim; Doughty heard of more than one Frank, and himself met an Italian, calling himself Ferrari, who was on his way to Mecca with the Persian *ḥājj;* Pitts found an Irishman in the town; Maltzan says that Leon Roches, French consul in Tunis, had made the pilgrimage, as had also an English sailor. I do not mention Levantine Greeks. Many other European renegades in the Egyptian service, besides Finati, must have been in Mecca; but the French and Italian officers, who had not forsworn Christianity, were probably restrained by superior order. Mehemet Ali, because his own devotion to Islam was suspect, seems to have been as careful as his son was at Medina not to give occasion to the fanatics. Varthema, Wild, Pitts, Seetzen, Burckhardt, Wallin, Burton, and Keane visited Medina also. Sadlier, it will be remembered, saw the place from without.

to Medina, which 'Alī Bey, Burckhardt, and Sadlier had not told before him, it is useful to have his report on Medina itself, which had increased greatly in size and importance in the five and thirty years that had elapsed since the last European visit. And on some details of the places of interest and resort in its immediate neighbourhood Burton was able to correct Burckhardt, who had been in too feeble health to go far outside the town. But concerning the great mosque and the social life of the place, he professed to add hardly more to his predecessor's account than subsequently in Mecca. Since his day Medina has been seen only by J. F. Keane, in 1878. Its growth and embellishment seem to have continued.

Going forward with the *ḥājj*, Burton was fortunate enough to be conducted over the easternmost of the four possible Meccan roads.[1] Burckhardt had followed and described the well-trodden coastal track, Darb as-Sultānī. The next path to east of this, Tarīk al-Ghabīr, leading through the hill-country of the Beni Sub, is of little importance. The third, already mentioned, leading directly up Wady Kora, would have taught Burton most about Hijaz hydrography, in regard to which he had observed already that the Medina and Mt. Ohod drainage flowed towards el-Wij; but if he was not to take that track, it was well that he followed the fourth route by the fringe of Nejd, the Darb ash-Sharkī, which is

[1] Three, according to Snouck Hurgronje, who probably omits Burton's No. 2 as a mere mountain path. He says the Harb raid them all. See also F. Wüstenfeld, *Die von Medina auslaufenden Hauptstrasse*.

part of Queen Zobeide's road from Baghdad to Mecca, but now seldom used for fear of the restless Beni Harb. This path led him over two of the lava districts (*ḥarrah*), which are the most important feature of the Hijaz inland frontier; and he was able to note that even so far east the drainage was still directed to westward. He was, in fact, crossing, one after another, the heads of the eastern *fiumaras* of the Hamd system a little below their sources in the small circular pans among the low ridges, which form the summit of the long eastward slope of Arabia. After falling in with the Persian pilgrims' road at Sufeine, Burton's caravan ascended the main ḥarrah, and came painfully over the black basalts to a tributary of Wady Fatima, and so by Arafat to Mecca, having marched some two hundred and fifty miles.

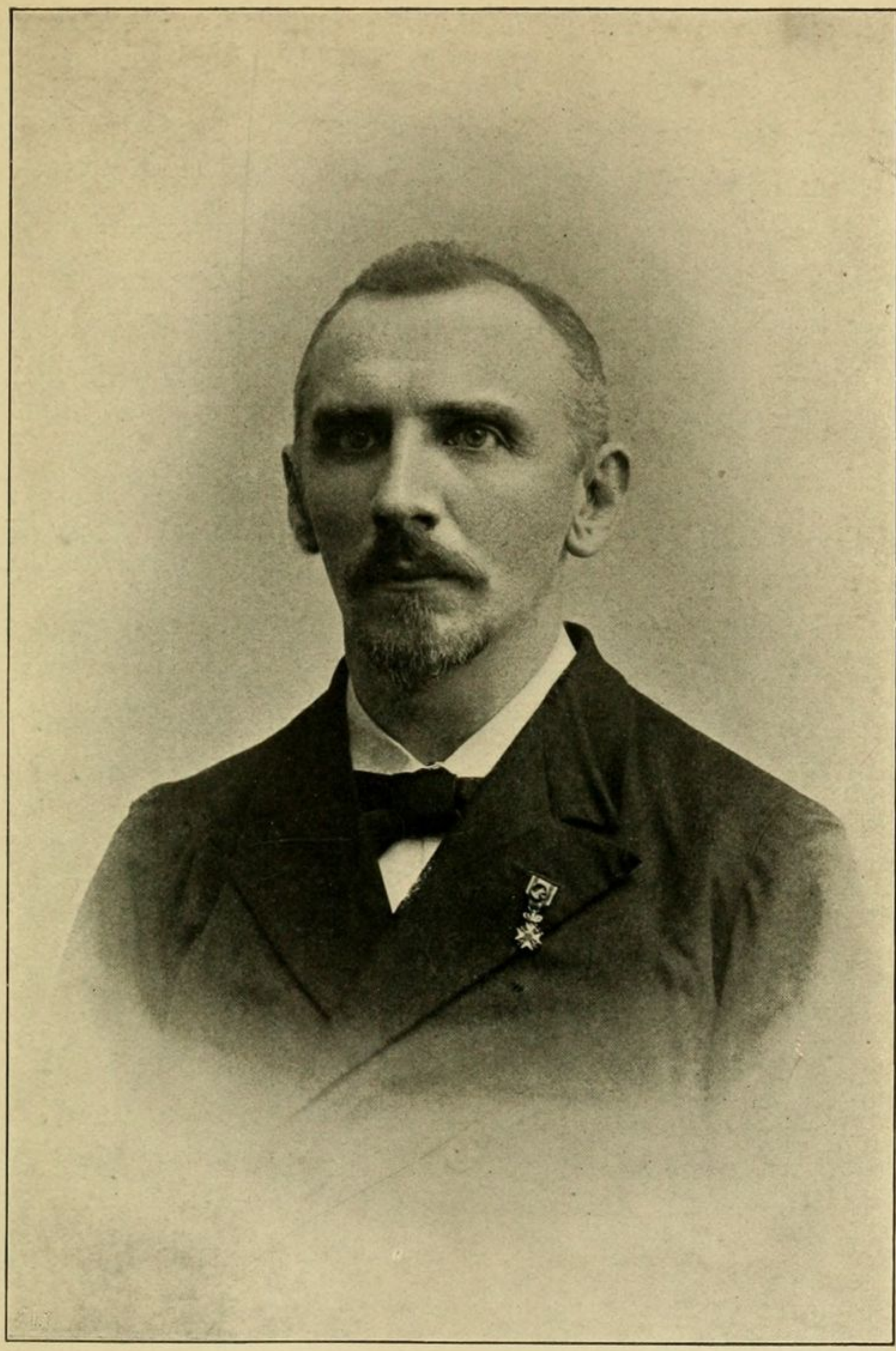
In his description of the capital of Islam, Burton has done little more than (in his own words) "pay homage to the memory of the accurate Burckhardt;" and as for the Great Mosque, he was content to reproduce the plan of 'Alī Bey. This part of his narrative was for popular, rather than scientific, consumption; and we need only note its express confirmation of the general correctness not only of his more recent predecessors, but of Varthema. To say so is to imply no slur on Burton. In a place already so well described as Mecca there was nothing for him to discover, and nothing for his successors, Von Maltzan and Keane, who likewise saw it only during the brief sojourn of the pilgrims.

The only thing still worth doing from the scientific point of view was done by the learned Dutch Arabist, J. Snouck Hurgronje, thirty years after Burton's pilgrimage. Landing at Jidda in the autumn of 1885, Hurgronje spent five months on the coast ere going up to Mecca in the character of a learned physician. In the course of other five months spent in the Holy City he studied society thoroughly during the long interval between the departure and arrival of the pilgrim caravans; and it appears he might have prolonged his stay indefinitely but for the unfriendly action of the French vice-consul in Jidda, who, for reasons to which we shall allude later in speaking of the quest of the Teima Stone, informed the Ottoman authorities and procured his expulsion before he could proceed to Medina. Hurgronje is the only European, except perhaps Burckhardt, who has seen the life of the oldest city in Arabia under normal conditions; and this fact, added to his command of Arabic and profound acquaintance with native authorities upon the history of the Hijaz, makes his book on Mecca of especial interest. He gives an elaborate description of the town, bearing witness to Burckhardt's accuracy. Little seems to have changed since the Switzer's day except the level of the residential part of the town, which is slowly rising round the great mosque and the holy houses, even as levels rose round temple enclosures on Egyptian sites. The result is to leave the Ka'bah in a deep hollow, two to three metres below the streets,

which receives all flood-waters. By far the most valuable part of Hurgronje's book, however, beside the historical half of it, is that devoted to Meccan society, — its street-markets for slaves; its holy places and their guardians; its servile and freedman elements; its houses, festivals, and guilds; its vices of turbulence, bigotry, and lust; and its virtues of easy hospitality and humanity. Hurgronje's is as minute a study of Arab urban life as could be made from the purely European point of view. It lacks only some of that sympathy which perhaps the Jewish blood in Palgrave enabled him to feel for society in Hail and Riad, and the intimacy that resulted from Doughty's complete abandonment of himself to his surroundings.

There have been other Europeans in inland Hijaz since Burton, but they have followed well known tracks. Taif has been revisited twice since it lapsed again to the Sharīf's hands,[1] first by James Hamilton and an unnamed companion in 1854, and secondly by Doughty in 1879. Neither traveller has fully echoed the rapture of the Meccans over this "bit of Syrian earth;" but the latter attests its high elevation and cool air. It lies just at the crown of the main Arabian slopes; for the flood-waters run northwestward from it to the Red Sea, and northeastward to the Wady er-Rumma, which falls to the Persian Gulf. The travellers in question avoided Mecca. Hamilton

[1] It should be said that W. Schimper, the botanist, had been there in 1836, twenty years after Burckhardt, but before the Egyptian evacuation.



J. Snouck Hurgronje

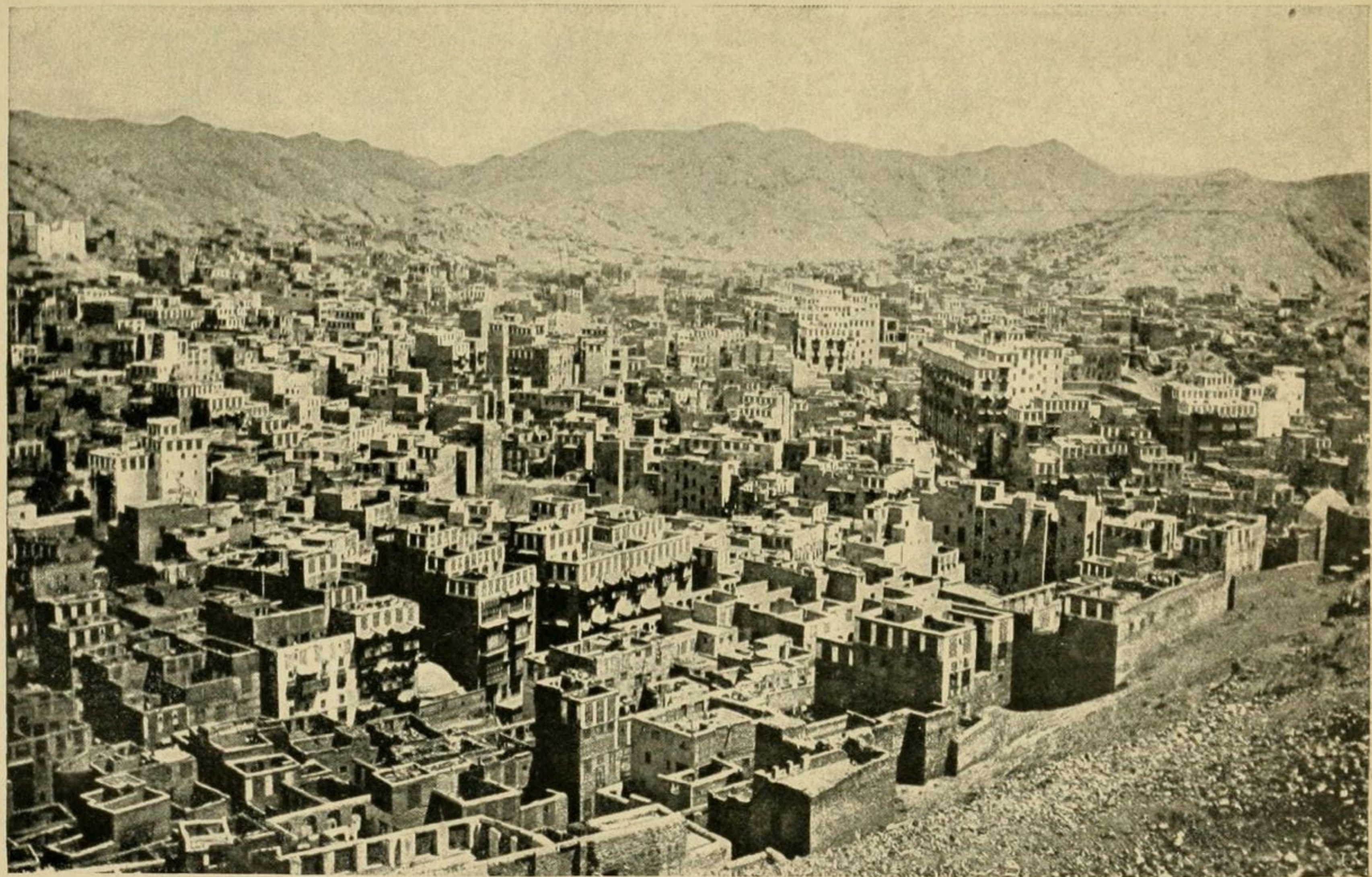
kept to the north of it in going up, skirting Arafat (as Doughty also did on his way down), and returned by a shorter cut to south. J. F. Keane went from Mecca to Medina in 1878 by Burckhardt's road, and returned by the same. Huber, on his way from Kasim, in 1884, was haled to the gates of Mecca for a camel-thief, but despatched hastily by the Sharīf under escort to Jidda.

From the latitude of Taif to the sixteenth parallel, a span of five degrees, the fringe of the plateau, both lowland and upland, remains obscure. The southern Hijaz, Asir, and the highland provinces of North Yemen have not been visited since Jomard's day. In the southern Tehama the modern traveller has only to mark the changes that time has brought about since Niebuhr, — how the decline of the coffee trade, in the face of foreign competition, is being followed by the decline of Beit el-Fakih and Zebid; and how, reinforced by the commercial rise of Aden, it has wrought the utter ruin of Mokha.[1] Upon the rest of Yemen, however, — namely, the highland belt from Aden to a point some fifty miles north of the latitude of Sana, and the upper levels of the eastern plateau, — explorers have shed much fresh light in the past half-century.

Two momentous political events occurred to modify

[1] Huber noted in Jidda, in 1884, that between 1879 and 1883 Java had replaced the Yemen as the principal purveyor of coffee for Hijaz. The £15,750 worth of coffee produced in 1883 by Yemen barely sufficed for her own consumption (Huber's *Journal*, p. 755).

the conditions of European exploration in Yemen after the date at which we last treated of it; and on the whole they modified them for the better. The first, the occupation of Aden by Great Britain, effected finally in 1839, and followed by the gradual extension of British influence, not only eastward along the southern littoral, but northward of Lahej to the foot-hills of Jabal Sabor and to Katabe, might have had more rapid and farther reaching consequences had it been the work of a power more studious to promote the general interests of science by political action. There was much truth in the complaint made in 1889 by the German botanist and explorer, Schweinfurth, that the British authorities in Aden had done almost nothing in fifty years to dispel the darkness which brooded over southern Arabia. Their policy, however, has been more liberal of late. When Aden was occupied at the first it was without thought of the land behind it. The new British post was to be an eastern Gibraltar, cut off from Arabia, — just a coaling station for the Indian traffic, having relations with the sea only. So far did the East India Company carry its irresponsibility for the *hinterland,* that a state of things ensued there that awoke unpleasant memories of the inglorious history of the last European post in Arabia, Portuguese Maskat. The native ruler of Lahej, not a day's march from Aden, despite Captain Haines' action in 1839, still insulted the British flag, promising to drive the infidels again into the sea; and it was not for some



Mecca

From Dr. J. Snouck Hurgronje's *Bilder aus Mekka*

years that measures were taken to humble him, and render even the sea safe. Meanwhile contempt and suspicion of the English spread over southern Yemen, as Arnaud learned at Marib in 1843.

Aden, therefore, which might have supplied an invaluable base for inland exploration, remained practically without influence in the matter for about a generation, except in so far as concerned its immediate vicinity, the district of Lahej, which had been visited in 1835 by a party from the "Palinurus;" and it was not till the second momentous political change took place in Yemen that science profited by the British invasion. This was the Ottoman re-conquest, consummated by Mukhtar's victories in 1872. The effect of this change was twofold. On the one hand there was an end at last to the long anarchy which the decadence of the imams of Sana had promoted; and would-be explorers felt at last assured of the dominion of a power whose relations with Europe were too intimate for it to refuse them protection. On the other hand, hatred of the new yoke disposed the Yemenites to look favourably on Europeans, and especially on the power in Aden, as possible saviours. Accordingly, since that date the exploration of Yemen, which had been interrupted for about thirty years (except for Stern's missionary journey in semi-disguise to Sana in 1856), has once more attracted Europeans. A few of these, being either in the Ottoman service, like Charles Millingen, or enjoying Ottoman favour through their Egyptian relations, like Deflers, Schwein-

furth, and Hermann Burckhardt, have ignored Aden; but the majority have used this base for collecting equipment, for gleaning preliminary information, and for forming relations with Yemenite traders and caravaners; and if they have not always succeeded in entering Ottoman territory directly from it, have all tried to do so. Nor have they been all Britons, like Haig or Harris, or Keith Falconer. An Italian, Manzoni, a Frenchman, Halévy, an Austrian, Glaser, an American, Zwemer, are also of the number.

The highland belt had been seen, it will be remembered, by Niebuhr and others, as far south as the great high-road from Mokha to Sana; while Botta had ascended Mt. Sabor and looked southward over the future Balad al-Angris ("District of the English"). Their researches left a small triangle unexplored whose apex is on the highlands at Yerim or Reda, while its base is made by the South Arabian coast from Sheikh Said (once occupied as a coaling-station, and still claimed by France) to Shukra. The western side of the triangle is formed by the chain of Sabor, which parts the Red Sea wadys from those running to the ocean; and the eastern side by that irregular swell of the land, in which rise the head-waters of the southwestern feeders of Wady Hadramaut. The whole triangle drains to the south, and is seamed with wady beds debouching on the Aden coast, up any one of which lies a natural road to the highlands of the interior. These depressions bear a natural vegetation, and are for the most part

carefully cultivated; but the intervening ridges are dusty and unproductive, until an elevation of some two thousand feet be reached, near the borders of Turkish Yemen. The vegetation extending thence to Tais and Yerim is comparatively luxuriant both on hill and valley, at any rate in the cooler months; and the wadys are perhaps the most beautiful in all Arabia.

The main north road from Aden lies up Wady Taban, and forks near Misamir, some fifty miles inland. Thence one road runs round the main mass of Jabal Sabor to reach Tais; another proceeds to Katabe, and either by Ibb or Sobe to Yerim. The first route was followed (in the reverse direction) by Seetzen in 1810 on his way from Mokha to Aden, but we know little of his journey beyond the fact of it; and the only description we have is a very brief one by S. M. Zwemer, an American missionary to the Jews, who made his way, in 1894, from Aden to Tais. At his fourth station he found himself in the highlands, where stone houses replace the mud buildings of the littoral, and the richer vegetation begins. The other route, the more important, has been described fully by Renzo Manzoni, who traversed it on his way from Aden to Sana in 1877, and retraced it on his return. On another occasion he diverged to Ibb and Tais. The direct road to Sana was taken by the Englishman, Walter Harris, in 1892, and a cross-road from Tais to Reda, cutting the apex of the triangle, by the botanist, Deflers, in 1887. Hermann Burckhardt came also to Reda from Damar in

1891. The ascent of the highland plateau is described by all with enthusiasm. Harris speaks of "rich green valleys, well timbered in places, and threaded by silvery streams of dancing water; sloping fields gay with crops and wild-flowers; terraced or jungle-covered slopes;" but not of coffee plantations. These are to be found only north of Tais, and in the eastern Yafia country. Outside the Turkish border, and even within it, the Hawashib tribes render the country unsafe; but on the higher ground the small and clean stone-built towns spread a more settled influence. Northward of Yerim and Reda the uplands are bare.

All these travellers reached Sana, as did others, coming from Hodeida, at various times; but, except to note Harris's account of the political situation there after the rebellion of 1891, we need not look further than to Manzoni's book, published eight years earlier. The Italian, a grandson of the famous Alessandro Manzoni, had proposed, after a stay in Morocco, to do pioneer work for his nationality in Abyssinia; but for lack of means and other reasons he missed his chance. Stranded at Aden in 1877, he conceived the idea of earning name and fame by the exploration of Yemen and, ultimately, of Central Arabia. In the event, being unable to obtain much support from home, unwilling to take serious risk, and somewhat ignorant of what would constitute a genuine title to fame, he did no more than make his way thrice to Sana between the years 1877 and 1880, seeing on the

way most of the southern country, of which but little was new ground. His ambitious volume, when treating of the ethnology and history of Yemen, reveals the imperfect knowledge and the inexactitude of its author, and, when making allusion to previous explorers, neither profound acquaintance with their works nor judicious equity towards them. But as regards Sana at least, Manzoni's long sojourns there (five months on one occasion) and liberty of action enabled him to study topography and society more fully and satisfactorily than Niebuhr, Crutten-den (in whose visit he disbelieved for no adequate reason), or other hastier passengers had studied them.

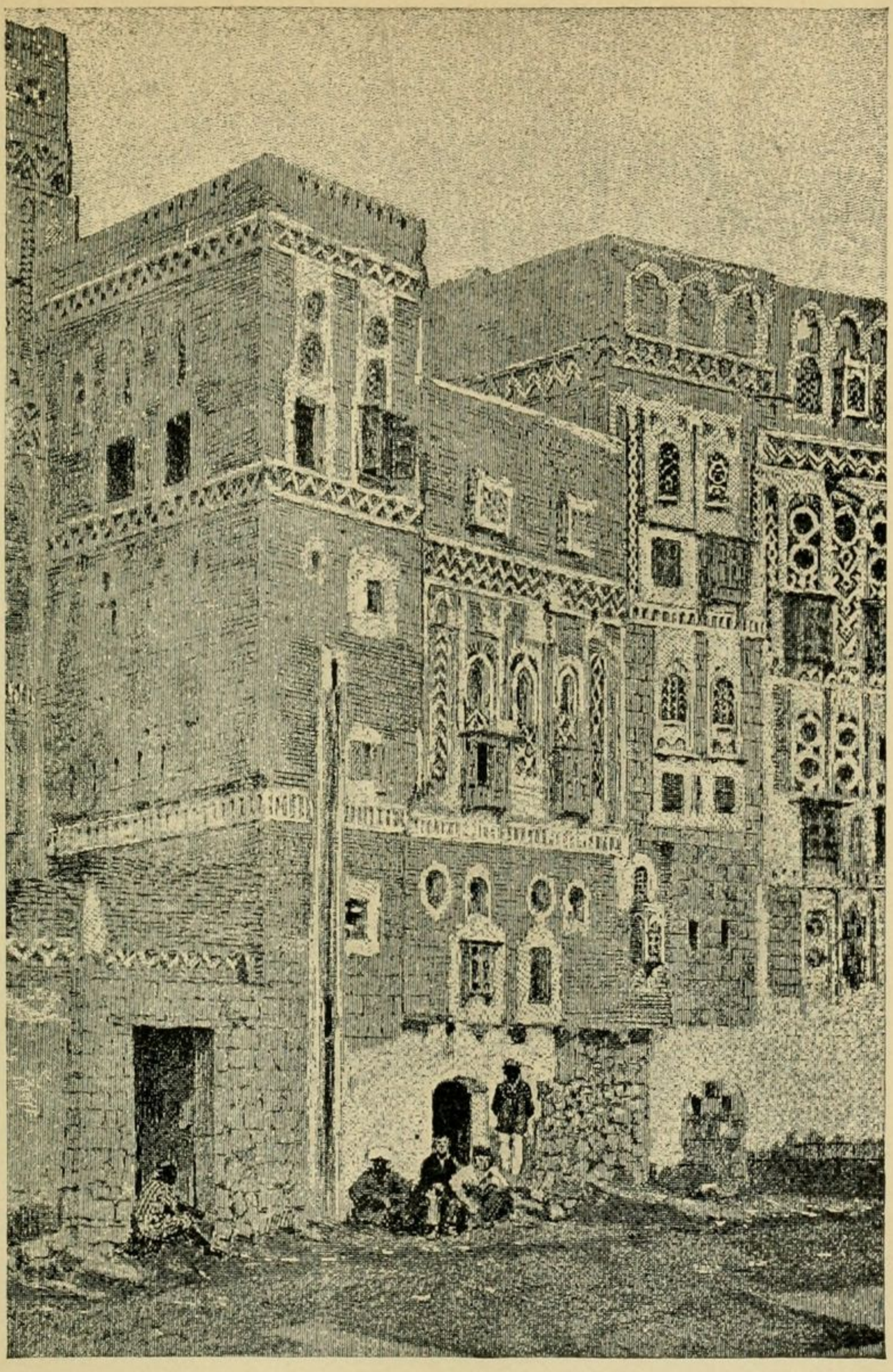
Manzoni is the first to give us any idea of the almost Moorish aspect of the Yemen capital, the rude splendour of its stuccoed architecture and alabaster windows, the propriety of its streets, and the character of its older public buildings, whereof the two palaces and the great mosque (once a Christian church, and known as a "Lesser Ka'bah") are especially remarkable. He deals fully with the climate, and tries to explain the unhealthiness which besets this cool city, elevated about seven thousand feet above the sea.[1] The Turkish occupation had resulted already in the introduction of a certain measure of European influence. Greeks, many of whom had found their way down both coasts of the Red Sea after the close of the Suez Canal works, were already trafficking in the bazaar; western commodities were becoming known;

[1] Its mean temperature is lower by 24° Fahr. than that of the Tehama.

and the Ottoman authorities had begun to construct the fine lodgings and hospital for their officials and soldiers, which, according to Zwemer, who saw the place in 1894, give a Cairene aspect to the central quarter. Manzoni's estimate of the population is half that of Harris, made after a lapse of fifteen years, and is probably still the more correct.

Into the unexplored districts, which lie to north and east of Sana, the Italian did not venture; not even into those cantons of Hamdan, Amran, and Kaukeban, which, as being part of the central plateau, and too nearly related to Sana to be left in doubtful hands, Mukhtar had set himself to conquer thoroughly in 1872. The desire of going beyond Niebuhr, however, had caused Charles Millingen, an English doctor in the Turkish service, to make a détour north of the Hodeida road in 1873; and he was followed by the French botanist, A. Deflers, in 1887, and by Hermann Burckhardt, in 1890. These cantons are on the same bleak tableland as the capital, but somewhat higher still; they are drained towards the Jauf by great wadys, Kharid and Swaba, whose broad valleys, according to Glaser, were main seats of Himyaritic civilisation, and now are well cultivated and protected by high-perched towns, which cost Mukhtar dear, and have remained covertly hostile to the Turks.

In 1884 the German archæologist, Edward Glaser, explored this same region farther eastward and northward than his predecessors. Having failed in the



Houses in Sana

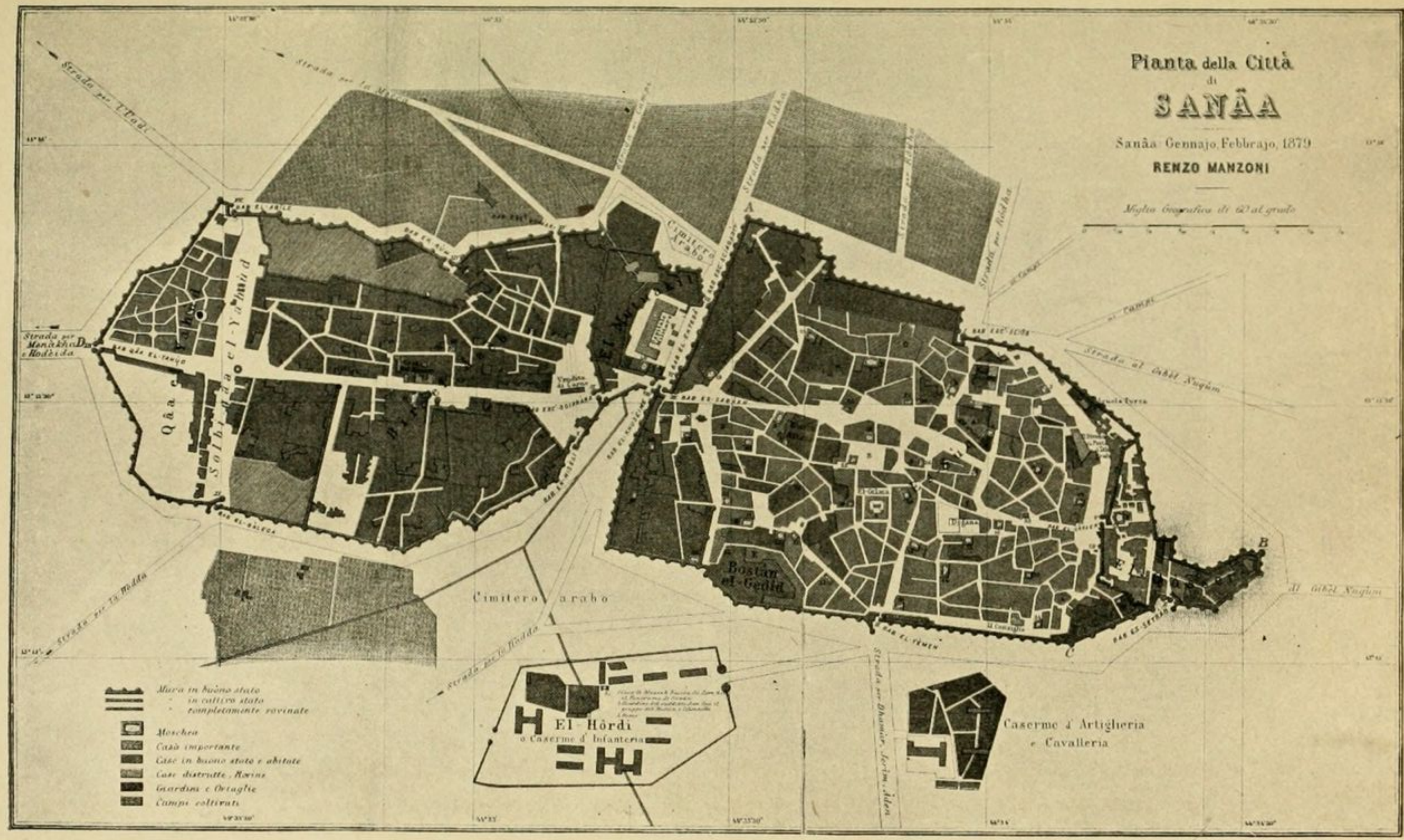
From a sketch by Manzoni

previous year to get beyond Amran, owing to the disturbed state of the great Hashid and Bekil tribes, he returned to Sana and begged the aid of the Ottoman marshal. Thanks to the latter's energetic threatening of the headmen of Arhab and Hashid, Glaser was enabled to pass through the volcanic district, which succeeds Hamdan in the space behind the two great wadys, described above, and to cross Wady Swaba into Hashid territory, but not without causing loud protest and incipient rebellion. He reached Khamr, the first important Hashid town, and the Wady Di Bin, both just north of the sixteenth parallel, and made fruitful epigraphic discoveries; but the condition of the tribes was critical, and he had to come back with all speed into the sphere of effective Turkish influence at Amran. His short journey had considerable results. For not only did it enable cartographers to fill detail into the map of Yemen over the space of a degree north of Sana, but it first gave geographers a clear conception of the nature of the Yemen "plateau," which is in reality the flattened upper part of a long inward slope, which is drained by important channels northeastward towards the Aḥḳāf sands.

But the greater increase of knowledge has been secured where there was most to learn; namely, in that Sabæan country which falls east from the crests west of Sana. The gently sloping tableland is broken eastward of the city by high dusty downs, beyond which the fall is somewhat steep to an immense hollow running from south to north. This is of steppe-

like character, except along the course of its drainage channels, and in certain pans; and it is bordered on the eastward by the high sands of the great southern desert. The southern part of this hollow land is Jauf, the old centre of Sabæan civilisation, whose capital, Marib, stood midway between the fertile districts of western Yemen and those rich wadys of Hadramaut which were the source of Arabian gums. The northern part of the great hollow, divided from Jauf by a sandy swell, is the district of Wady Nejran, famous as the last refuge of Christianity in Arabia. Its waters flow northeastward, skirting the high eastern sands, and probably fall at last into the Wady Dauasir. The streams of the Jauf, on the other hand, being directed to south of east, either are lost in the sands, or filter through to the Wady Hadramaut.

Arnaud's report on the southern Jauf, made in 1843, and his copies of Himyaritic texts, had served to dispel all doubt concerning the locality of the chief Sabæan province. But since he had seen more inscriptions than he had been able to copy, and it was certain that even he had not seen a tithe of the relics of early civilisation, more light was still keenly desired by all students of ancient Semitic history. Not for five and twenty years, however, was a scholar found stout-hearted enough to essay Arnaud's painful road again, and go beyond his furthest. In 1869 Joseph Halévy, a young and learned Jew of French nationality, went out to Aden, and, encouraged by Captain S. B. Miles, who since that date has done yeoman service for South

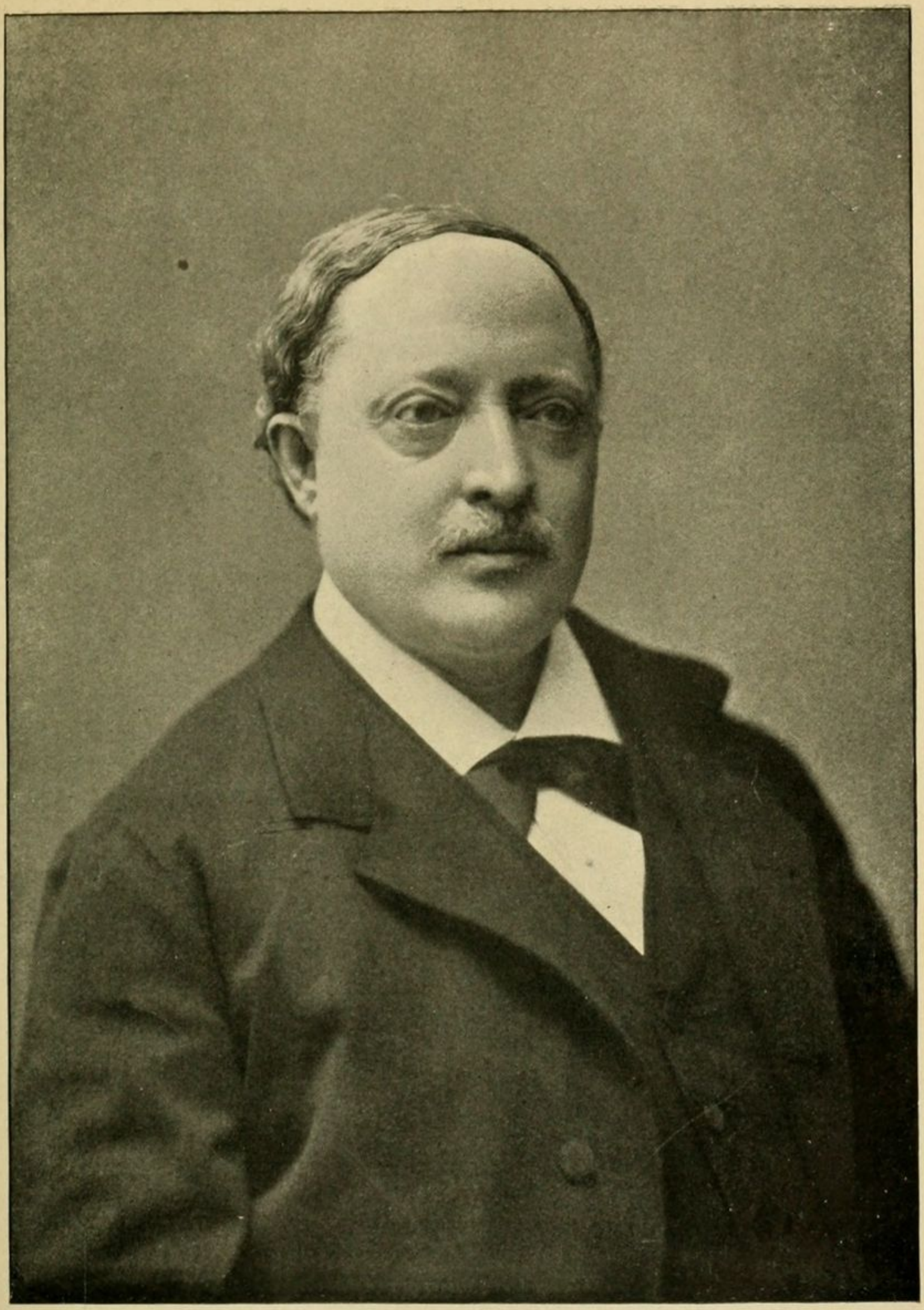


Manzoni's Plan of Sana (1879)

Arabian geography, tried to make his way northeastward in the character of a learned "Ḳudsī" or Jerusalem rabbi; but turned back from Hauta by the Sultan of Lahej, he was forced to go round by sea to the Yemen coast. Arrived at last at Sana, he was at pains to cultivate relations with the numerous but oppressed Jewish community; and by an excursion eastward into the downs of Khaulan, he obtained new inscriptions and assurance that his assumed character was a sufficient protection for life, even if it should expose him to daily insult and privation. He determined to make for Nejran. Dissuaded from following the Meccan high-road through the Hashid and Bekil country, he started in humble guise for Nehm, — an independent hill-canton on the arid eastern downs, which divide the Sana plateau from the hollow of Jauf, whose relation to Yemen proper he compared to that of the Tehama coastal strip on the west. Crossing Jabal Yam, the highest of the ridges of Yemen in absolute elevation, though east of the main water-parting, he struck one of the northeastward flowing wadys, which descend from Hamdan, and so came to el-Gail, the chief settlement of the northern or lower Jauf, situated in an oasis of palms and running waters. Here he discovered the ruins of Min, in whose name he saw a tradition of the Minæans. A second oasis, el-Khab, was passed, and thereafter a painful stretch of sand waste, the fringe of the terrible Aḥḳāf. Partly with a caravan, partly with a single Bedawin *rafīk*, in every kind of tribu-

lation, and protected only by the superstitious fear which his assumed sanctity inspired, the learned Ḳudsī skirted the desert. Eastward the sands stretched to the horizon. Nothing could he learn of what lay beyond those moving dunes, whose very name was a terror to his Bedawins. At length dense palm-groves appeared on the northern horizon, and on June 3, 1870, Halévy was consoled for sufferings of body and mind by an enthusiastic welcome at the hands of the Jews of Makhlaf in Nejran.

One could wish this "rabbi," the first European since Ælius Gallus to visit "Negrana," had described with fuller detail those interesting valleys of the Wadys Nejran and Habuna, which are the "farthest north" of any adventurer towards the vast unknown region of Southwest Nejd. Nejran, which lies in a hollow between two parallel ridges, seems to be noteworthy not only for its ancient civilisation, but for the modern well-being of its society, as well as its peculiar heterodoxy. Halévy failed to see any actual relics of Christian (Collyridian?) worship during his short stay, but the singular tolerance and even favour which he found to be shown there to Jews are not in the spirit of orthodox Islam. He attests the productiveness and fertility of the wadys, the southern of which he judged to be lost soon in the Aḥḳāf, while the northern, Habuna, sends its waters to join Wady Dauasir and the streams of Asir. He believed that he found in Medinet el-Khudud the ruins of the ancient city *Negrana* or *Nagara Metropolis;* and the



Joseph Halévy

secret of its importance, as well as that of modern Nejran, in the caravan traffic, which must pass this way from Yemen to Nejd if it would avoid the Aḥḳāf sands.

Halévy returned to Jauf by a more westerly and less desert route, which led him across more than one valley full of ruins on the eastern fringe of the Sachan plateau. It is evident that the unknown highlands, which lie to west of his route and to north of Glaser's farthest point, are, even as Amran, Arhab, and Hamdan, the first slopes of a great eastern decline, draining towards Nejran. Arrived once more at el-Gail, the intrepid explorer did not return directly to Sana, but proceeded southward along the eastern foot of the high downs of Jabal Yam till he struck Arnaud's Wady Dana, and came to the ruins of Marib and of its famous dam. Halévy thus traversed pretty nearly all the wady-land and intervening sand ridges of the Jauf; but he succeeded in doing little more there than review Arnaud's discoveries, having but little leisure or liberty in a district exceptionally intolerant of Jews. Turning west at last, in order to avoid his predecessor's road, he diverged into the unvisited region of Khaulan, which is a southern continuation of the Nehm downs, and so came again at last to Sana by way of Tinam.

Eighteen years later Glaser reached Marib, and found that his predecessors had left him much yet to do. Sojourning there some thirty days during March and April, 1889, under strong Turkish protection,

he was able not only to copy nearly four hundred Himyaritic inscriptions out of a total of over eight hundred, collected in the district, but even to make a sketch survey on a scale of one in a quarter of a million. But his protectors, who scarcely restrained the local sharīfs from violent interference with this work, were unable to procure for him the further gratification of passage to the upper Hadramaut; and the gaps left between his limit and the farthest points reached by Wrede and by Miles and Munzinger remain for future adventurers to fill.

The Ottoman authorities have closed Yemen to explorers since Glaser's day, and western science has found its only informant in an Italian merchant, the courageous and devoted Giuseppe Caprotti, survivor of two brothers, who first established themselves in Sana in 1883. His reports made to the Società d'Esplorazione Commerciale of Milan and his copies of new inscriptions have gone far, however, to render fresh expeditions unnecessary.

NOTE. I have learned recently (through the kindness of Prof. J. Euting) that in June, July, and August, 1871, Dr. Adolph Koch visited the Sharīf at Taif; but this explorer, now Pastor at Pfungstadt in Hesse (formerly Court chaplain to Alexander of Bulgaria), has published no account. The same omission must be recorded also of the latest European visitor to Mecca, the French-Algerian photographer, Gervais Courtellemont (1894). See G. Laforest in *B. S. G. de Lyon*, xiii. p. 101.

BIBLIOGRAPHY

E. Rüppell, *Reisen in Nubien, etc.* (Frankfurt, 1829).

R. F. Burton, in *J. R. G. S.*, vol. xlix. p. 1. *Cf. Gold Mines of Midian* (London, 1878) and *The Land of Midian Revisited* (London, 1879).

R. F. Burton, *A Pilgrimage to Al Medinah and Mecca* (Memorial ed., London, 1893). *Cf.* article in *J. R. G. S.*, vol. xxiv. p. 208.

J. Snouck Hurgronje, *Mekka* (Hague, 1888), with two portfolios of views. *Cf.* article in *Verhandl. der Gesellschaft für Erdkunde* (Berlin), iv. p. 140, and communication to *Münchner Allg. Zeitung*, Nov. 16, 1885.

Heinrich Freiherr von Maltzan, *Meine Wallfahrt nach Mekka* (Leipzig, 1865).

J. F. Keane, *Six Months in Meccah* (London, 1881); also *My Journey to Medinah* (London, 1881); *Six Months in the Hejaz* (London, 1887).

J. Hamilton, *Sinai, Hedjaz, and Soudan* (London, 1857); C. M. Doughty, *Arabia Deserta* (Cambridge, 1888).

R. Manzoni, *Il Yemen* (Rome, 1884); G. Schweinfurth, in *Verh. d. Ges. für Erdkunde* (Berlin, 1889), No. 7; S. M. Zwemer, *Arabia, the Cradle of Islam*, p. 62 (Edinburgh, 1900).

C. Millingen, in *J. R. G. S.*, 1874, p. 118; A. Deflers, *Voyage en Yemen* (Paris, 1889).

J. Halévy, *Rapport d'une mission archéologique, etc., Extrait II. du Journal Asiatique*, 1872. *Cf. Bull. Soc. Géographie*, VIme série, vol. vi. pp. 5, 249, 581; vol. xiii. p. 466.

E. Glaser has published several works as a result of his explorations in Yemen, notably *Skizze der Geschichte und Geographie Arabiens*, vol. ii. (Berlin, 1890); but for ordinary purposes of geography it is enough to refer to his map in *Petermann's Mittheilungen*, 1886, Taf. i., and his articles in the same periodical for 1884, pp. 170, 204, and 1886, p. 1. Notice of his third journey occurs in the same for 1888, p. 221, 1889, p. 27.

H. A. Stern, *Journal of a Missionary Journey into Arabia Felix* (London, 1858).

W. B. Harris, *A Journey through the Yemen* (London, 1893).

H. Burckhardt, in *Zeitschrift der Gesellschaft für Erdkunde*, 1902, No. 7, p. 593.

CHAPTER IX

SOUTHERN BORDERLANDS

IF the fact stated in the previous chapter concerning the general character of Arabia, that it is a huge plateau gently tilted up from east to west, be considered in connection with the uniform northeastward flow of its inland drainage, it will be inferred that the highest average level must be in the southwest part of the peninsula. The actual corner of the elevated continental oblong is situate in the Radman district of Yemen northwest of Damar and southeast of Sana. There the outer rim of the plateau returns eastward, or rather north of east, and passes out of our knowledge into the great sand desert; and as on the west, so also on the south, there is a broad outer fringe sloping seawards. The buttress range, Jabal Sabor, which falls to the Strait of Bab el-Mandeb, forms a sort of gable ridge dividing the westward and southward slopes of the Arabian roof, and from the one flank of it short wadys run to the Red Sea, from the other to the outer ocean.

The southern borderland resembles the western in being composed of a littoral belt of lowland, behind which the continental mass rises towards the rim of

the inner plateau; but for two reasons the coastal strip on the south is the less broad and continuous. Firstly, because it has not been built out seaward in coral formations to the same degree as the shore of the quieter and hotter western waters; secondly, because, on the easier slope of this outer face of the plateau, the seaward drainage has exerted a less violent denuding action. We find the outlying buttresses approaching for the most part much nearer to the sea than in Hijaz or Yemen, and at several points falling almost to the tide-mark.

The general eastward decline of the inner plateau affects to some extent the drainage of its southern face, causing the main part to flow more east than south. The most important volume of surface water is that thrown off by the highly elevated southwestern corner of the continental mass, which catches the main monsoon precipitation; and this water we find not to rush directly to the sea, but to flow for a long distance down a channel almost parallel to the rim of the plateau above it, being slow to obey the southward slope. These channels collect at last into one, the Wady Masila or Hadramaut, and reach the sea not far from the midway point of the south coast.[1] From the remotest head of this system of wadys north of Reda in Yemen to their final outfall east of Sihut, the distance is not less than five hundred miles as the crow flies, and the actual course of the longest stream

[1] Bent suggested that the lower parts of these wadys are old arms of the sea.

must be nearer eight hundred. After the main wady of Central Arabia, er-Rumma, the Wady Hadramaut is the longest and most important channel in the peninsula[1] of which we know with certainty.

In its westernmost part the southward slope of the plateau is much disturbed by hard intrusive rocks which, thrust through the calcareous mass, now stand up as short mountain chains of various direction, from which a series of short wadys falls to the coast. Eastward, however, of the fiftieth degree of longitude, such disturbances are less apparent; and the southern face of the plateau, which itself seems to become lower and lower in general elevation, slopes more evenly and gently to the ocean, masked by blown sands of the central desert, and less deeply and frequently scored by wadys. The higher ground on the southwest and the great elevation of the land in Oman to northeast both rob the littoral from Dofar to Ras el-Had of a measure of the rainfall that is its due.

No part of this borderland could have been said to be well known in the middle of the nineteenth century, and no part except the immediate vicinity of Aden can be said to be thoroughly known at the beginning of the twentieth. Before 1850 most evidence, curiously enough, was forthcoming for that central section of it which we now regard as least accessible, the Hadramaut proper; for not only had

[1] There is some question whether Wady Masila be the same as the main Hadramaut or a lateral affluent.

the Wady Meifat been cursorily explored up to Isan by Cruttenden and Wellsted, and the land east of it to the longitude of Sheher and the sixteenth parallel of latitude by Wrede, but more particular inquiry had been made on the coast by Haines, Wellsted, and others about the interior territories of Hadramaut than about those to west of them, on which even Niebuhr had gleaned but little. This comparative ignorance of the western territories persisted for about twenty years longer. We have spoken of the causes which retarded the influence of British Aden in the northern country. It need only be added here that suspicion and defiance of the intruding Christian power were even more marked in the eastern, on the threshold of which the hostile Sultan of the Beni Uthman kept guard; and the local determination to exclude Frankish travellers became all the more obstinate after a drought which, as Wrede tells us, inauspiciously followed on the discovery of Nakab el-Hajar. It was not till imperial officials had long replaced the East Indian Company's government in Aden that Great Britain began to make her arms, her gold, and her commercial influence so generally felt in south-western Arabia that Europeans could be sure of protection and tolerance east and north of Lahej.

Thirty-five years after the expedition of Cruttenden and Wellsted the Wady Meifat was at last revisited, and the further points aimed at in vain by Wrede were attained. Captain S. B. Miles resolved in 1870 to put to the proof the friendly relations which he had

formed in Aden with the chiefs of the northeastern territories, and, accompanied by the well-known scientific explorer, W. M. Munzinger, who soon after perished on the opposite coast of Africa, proceeded by sea to Bir Ali, and struck inland. On the whole, he was justified of his confidence. Though the reception of the travellers was not cordial in the larger settlements, Hauta and Habban, some chief with a wholesome respect for the British *raj,* or a lively sense of favours to come at the hands of its representatives, was always found to extend protection and hospitality; and the party ascended Wady Meifat safely almost to its head, where a narrow and not lofty ridge shuts off the source of a southerly feeder of the Hadramaut system, the Wady Nisab. Miles learned, indeed, that by way of Nisab itself, the chief settlement of that valley, and of Harib on a more westerly wady, a direct and easy road leads to Marib and the Jauf of Yemen. But British influence did not and does not extend, for however short a space, beyond the Hadramaut watershed; and Miles, holding an official position, could not risk a passage into foreign territory. He turned, therefore, southwest through the Auwalik country, and, striking the head of a southwestward valley, Wady Jeramis, returned to the Lahej coast.

The latter part of Miles's route in the Fadli territory and what lies north of it towards the Hadramaut water-parting, which is Niebuhr's "Jafa," has been seen since, notably by Theodore Bent on his last

journey with his wife in 1897. The latest attempt to review the Wady Meifat, made by the Austrian archæological expedition of that same year, which proposed to penetrate north of Habban to the unknown valleys of upper Hadramaut, was frustrated by the dissensions of the leaders. The Austrians returned to the coast after reaching Wellsted's furthest point, Isan.

From a comparison of these travellers' notes with certain information gathered in Aden and Hauta by Von Maltzan in 1873 a sufficient idea can now be formed of as much of the southwestern borderland as lies south of the ridge behind which the heads of the Hadramaut wadys rise. This ridge appears to be diversified by more than one volcanic excrescence, which attains a comparatively high altitude. The Bents assigned to two mountain masses seen to north from the Yafia and the Auwalik countries respectively, equal altitudes of ten thousand feet; but such estimates, made from a distance by observers who see ranges or the rims of plateaux from one side only, are notoriously untrustworthy. The country south of this ridge is evidently of the same character as the lower hill district of Yemen, with which it is indeed continuous. It is the home of a settled society, including no nomad element, and living in and about villages and small towns of the type met with on the roads from Mokha or Hodeida to Sana. This society cultivates a series of short southward-trending wady-beds, and has direct relations with the sea through the small ports of Shukra,

Suriya, Haura, Bir Ali, and Ba'l-Haf. The valley lands, though well planted, are not so fertile as in the better parts of Yemen, and the sandy aridity of the intervening ridges recalls the western Tehama; but equally with high Yemen this south border was once a seat of Sabæan civilisation, and contains its memorials.

This broad and fertile settled strip of mingled lowland and highland does not end eastward with Wady Meifat, but is continued for some distance beyond Makalla, where it has been crossed and recrossed by the Hadramaut explorers. Thereafter the high slopes grow barer and bleaker, and approach nearer to the sea, until (so far as we know) the productive region is narrowed to occasional ribbons of alluvial coast-land, about the outfalls of the rare wadys. The most blessed of these littoral ribbons is that of Dofar, between the fifty-fourth and fifty-fifth degrees of longitude, behind which the land rises to an exceptionally high level. Bent visited it in 1890, and as Lieutenant Smith of the "Palinurus" had done before him, succeeded in penetrating a short way up the first slopes of the higher ground. He saw a good deal of flowing and standing water, and natural vegetation; but as there is apparently no settled society except on the shore, and none but a wild type of nomad possessed of hardly any livestock on the heights, we must conclude that this fertility is not continued far inland.

It should, however, be confessed that, as yet, we know very little indeed of the borderland of Arabia be-

tween Capes Fartak and Had, which is the territory of the Mahra, Gara, and Jeneba tribes, but in great part claimed by Oman. These tribes are all of a very primitive type, and, having no commercial aptitude, unanimously repel strangers. It is probable — of the Mahra tribes it is practically certain — that all are survivors of the oldest Arabian race, forced out of richer lands in the south by the Semitic peoples, who now hold the peninsula. They speak a tongue which is at bottom not Semitic, practise animistic cults, and have all the hunted and suspicious habits of a refugee population. Carter, the surgeon of the "Palinurus," contributed valuable results of inquiries into the character of the Mahra and Gara to the Asiatic Society of Bombay between 1845 and 1847; and some further study of the Mahra has been made in the island of Socotra, which pertains to their sultan, and in his capital of Kishin itself.[1] The facts about their proto-Arabic speech are now ascertained, but of their mainland home no more has been learned, for they have allowed no European eye to see beyond its uttermost fringe. Since, however, they would hardly have been left in undisturbed possession, or have reached their present state of degradation if their valleys were such as characterise the southwestern borderland, we may be almost sure their territories are all sandy steppes of the kind that Wellsted looked on in 1835, when brought to the eastern frontier of the Jeneba.

[1] Most recently by Herr W. Hein and his wife. See *Zeitschrift d. Ges. für Erdkunde*, 1902, No. 9.

The most important part of the borderland remains to be considered, — the ill known inner region of the centre. The Hadramaut which, properly speaking, is that land of wadys carved almost horizontally in the upper part of the southern face of the continental mass, from west of the forty-fifth degree of longitude to east of the fifty-first, long remained the despair of the curious in the history and geography of Arabia. Wrede had seen only a narrow section of it in 1843, and of that no detailed account appeared for thirty years. No one dared to follow him for yet twenty more. Miles, Maltzan, and others had to be content with carrying on Haines's inquiries in Aden, Makalla, and Sihut, where they had to deal with too much local jealousy to make sensible progress.

There would indeed have been no advance in our knowledge of the Hadramaut to be signalised within that long period, had it not been for inquiries carried on under very different conditions at a great distance from the locality itself. In 1883 the Dutch Colonial Department thought it expedient, in view of the increasing Arab influx into its East Indian possessions, to obtain an authoritative report on the origin and relations of the immigrants; and it charged with the task an able Arabic scholar, L. W. C. Van den Berg, stationed in Java. He found a large proportion of the Arabs to be come from the Hadramaut, a district in whose emigrant natives Burckhardt had long ago seen the most industrious element of the Meccan population, and Botta the most prosperous of the merchants in the

Yemen Tehama. So full and interesting was the information obtained by Van den Berg from men newly come from Hadramaut, living in dependence on the Javanese government and to some degree emancipated from local prejudice, that he was able in 1885 to publish a geographical treatise on the country, which later research has seldom falsified. While taking account of Wrede, the genuineness of whose adventures he certified, and other European inquirers before and since, he kept studiously to his native authorities, and the chart which he appended was based on a sketch made by a Hadramaut *sayyid,* and already communicated to the Leyden professor De Goeje.

Other seven years passed, and independent narratives of Christian eye-witnesses were at last forthcoming, though the French botanist, Deflers, had been foiled near Makalla in 1888. Two distinct European expeditions went up into Hadramaut, under the ægis of Aden, in the course of 1893. British influence had been growing steadily on the coast. The deputy sultans of Sheher and Makalla are not only dependent for large part of their revenues on the African trade, for which Aden is the principal mart, but have intimate direct relations with India, where their suzerain resides; and their attitude towards the Power which controls the native states of India had been changed considerably by the results of the mutiny. Firmly seated there, to all appearance, and controlling the native princes with whom Hadramaut has communication, predominant east, west, and south in Oman,

Aden, and Zanzibar, and absolute mistress of the Indian Sea, Great Britain can at her will give law to the coastal chiefs who have not only hereditary dominion in the interior of Hadramaut, but are its commercial brokers.

She has need, however, to be in earnest. These sultans are naturally unwilling to strain their power and compromise their social repute by the introduction of Nazarenes into the most fanatically exclusive valleys of Arabia, or to become responsible for their safety where a religious hierarchy of *sayyids*, not to mention those knight-errants of Islam, the *sharīfs*, seriously restricts their power. The governors of Aden, therefore, have been fully justified in refusing to exert pressure on behalf of certain would-be exploring parties whose qualifications were not such as to promise the best scientific results; and when countenance was given at last in 1893, to the archæologist, Leo Hirsch, it was because he was known to be a profound Arabic scholar, expert in the law of Islam, who would conduct himself tactfully. When, shortly after, it was given also to Theodore Bent, despite his lack of this qualification, it was because his party included an Indian Moslem surveyor and his staff, who might be expected to make a solid contribution to geography.

Hirsch, who proposed to assume the native dress, but to travel as a Christian desirous to study the literature and custom of Islam, found that the letters, which he took at first, availed him not at Sheher,

Sihut, Kishin, or Makalla; and it was only after he had returned to Aden, and provided himself with more peremptory recommendations, that the sultan of the last-named town acceded to his request for escort and safe conduct to the interior. This potentate, nephew of the head of the great Amudi family, was not only at that time the sultan most involved with the British in Aden and India, but had apparently the strongest single representative in the Hadramaut. His *Jemadar*, from his castle of el-Hauta in the Wady Ain, holds the centre of the fertile inner country, controlling the numerous settlements of Wadys Doan, Amd, and Adim, and the large towns of the main valley, Shibam, Saiyun, and Terim; and thus can cut off the semi-nomadic society of the high eastern valleys from the suspicious Mahra tribes, which dominate the lower course of the main wady.

The guides conducted Hirsch through the cultivated coastal district behind Makalla into the Wady Hauaire, and so up to a bare down-land, "Jol," rising to six thousand five hundred feet, by the same route as that over which Wrede was brought back after his imprisonment; and the first settlement, reached in Hadramaut, was that small town of Sif, where the European pioneer had so nearly lost his life. Descending the Wady Doan, Hirsch touched his predecessor's route once more at Haura, but thereafter not again; for Wrede had confined himself to the easterly region without tracing any tributary valley to its outfall in the main channel. Being a Himyaritic scholar,

Hirsch was minded, before all things, to see the ruins of which Wrede had heard in the tributary Wady Gaiban (Niebuhr's Ghahbun), which falls into the Doan valley below Hajarein. He found there both buildings and inscriptions of a considerable ancient town, but not those "royal tombs" credited by Wrede. Hajarein, lying high to south, seems to have inherited the commercial advantages of this town, and the shrine of Meshed Ali to north, where is a cyclopean grave, its sanctity. Striking across a narrow ridge on the east into the parallel Wady el-Ain, the explorer passed through the rich groves and well-stocked pastures of Ajlaniya, and then bore northward over the bare plateau towards the main Hadramaut valley. On the midway summit, commanding the road and a group of great valleys, is el-Hauta.

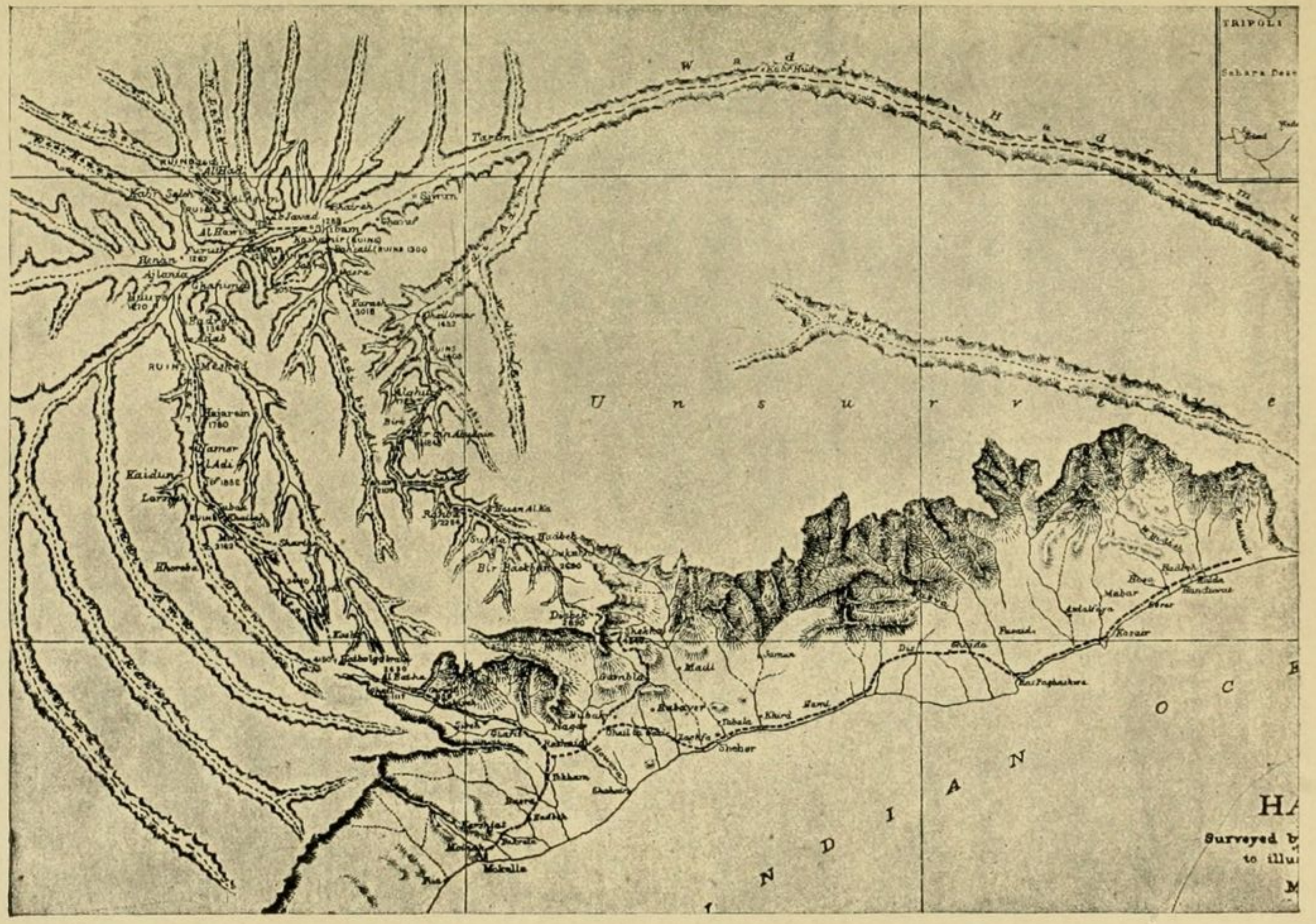
The Jemadar, head of the powerful Kaiti family, treated Hirsch much as the sultan of the neighbouring Amd had treated Wrede. Having not the slightest doubt of his visitor's European origin, and the fullest assurance that his character of a scholar and physician was assumed, he showed no care for these things, but extended the right hand of fellowship, and after hospitably entreating the *Hakīm*, forwarded him to his deputy in Shibam. There and then for the first time a European entered what we must regard as the trunk wady of the Hadramaut, the locality of its largest settlements, and the centre of its ancient and particular society.

Hirsch met with a cold reception in Shibam, but sufficient tolerance to justify him in pushing down the valley, so far as the Kaiti writ would run. For better security he procured a guide from the Kathiri tribesmen who roam the steppe to north, and set out for Saiyun and Terim. Neither in the former town nor on the road had he any misadventure, but at Terim he found intolerant *sayyids* prepared to dispute his credentials, and after but an hour or two's sojourn had to make all haste back to Shibam, and fortify his position by reference to the Jemadar. Warned not to trust himself much longer even in Shibam, he gathered what observation of things ancient and modern he might, and set out again for the coast. Being no longer under necessity to call at el-Hauta, he could strike directly up the populous Wady Bin Ali, and so into the upper part of the great valley of Adim which falls out near Terim. At the head of this he found himself once more on the downs of the Jol, a wild, arid, broken country, intersected by *fiumaras,* among which his guides strayed; but always descending, they came out at Nega, where the Amudi sultan has found indifferent coal measures, and so through the palm groves and rich fields of Gail to Makalla again.

Bent, marching inland in the winter of that same year, and under the same auspices, retraced Hirsch's route so closely, both in going and coming, that his steps need not be followed. Besides the surveyor, Imam Bahadur Sharīf, and his staff, the party included a botanist, William Lunt, sent from Kew, an Egyptian

naturalist, and the leader's wife, who may claim the distinction of being the only European woman, besides Lady Anne Blunt, to penetrate the interior of Arabia.[1] The one important deviation made from the tracks of predecessors was a short excursion from Shibam up the Wady Ser, which comes down from the north, carrying a little-used caravan path from the desert, and contains the venerated tomb of the Prophet Sāleḥ, the mythical scourge of the impious people of 'Ād. It seems to be a rude stone barrow not unlike, but smaller than, the grave of Eve near Jidda. The tomb of the other prehistoric prophet of Hadramaut, Hud, lies far down the main wady, and to visit it and the volcanic (?) district of Bir Borhut was Bent's further plan. But he had no better fortune than Wrede. The Kathiri Bedawins, a small-framed, half nude, and wholly savage race, were reported to be closing all eastern roads, and the Jemadar refused to further any project for opening negotiations with them. Bent's party met with much the same reception as Hirsch: bare tolerance, on condition it travelled neither far nor long. Much less able to enter into intimate relations with the native society than his predecessor, Bent brought back less full and exact information. But his party was the better equipped and able to use the camera and take observations. Imam Sharīf's map is a better survey than we possess of any other

[1] I am not taking account of possible Greek women in Yemen or elsewhere; or of women in Moslem seraglios, such as her of British nationality who was seen by Keane in Mecca.



Imam Sharīf's Survey of Hadramaut (1893)

part of Arabia, except of Midian or the district of Aden; and Lunt's notes on the flora served to supplement and check the valuable treatise on Hirsch's collections, contributed by Schweinfurth.

On reviewing the reports of these explorers one is struck with the small addition that they made to the information which Van den Berg had gleaned at second hand. His fourfold division of the central borderland into horizontal belts was roughly correct. Behind the lowland belt of the littoral flats and foothills rises a bleak belt of downs diversified by few upstanding peaks. Behind that again a belt of deep-cut wadys, sloping eastward; and, finally, a naked calcareous belt, which shuts off the great central sands. In the valley belt Van den Berg had apprehended rightly the relation between the trunk wady of many names, descending from Shabwa,[1] whence Wrede had set out for his Aḥḳāf trip, and the great southern wadys, Amd, Doan, Hajarein, el-Ain, which with the continuous fertility of its middle course and the subsequent tributaries Bin Ali and Adim. His contrast of the sandy upper reaches of the main valley with the continuous fertility of its middle course and southern feeders was correct; as was also his general idea of its settlements, as consisting, with the exception of a few towns, rather in scattered farms than compact villages. He was perhaps led farthest astray in the matter of the towns. Not only did he

[1] Or Sawa; the old capital of the "Atramolitæ," Sabota, where, says Pliny, were sixty temples.

place all the principal settlements of the trunk wady from Shibam to Terim too far east on his chart, but he estimated their magnitude wrongly. Shibam, which is the largest, having some six thousand inhabitants, he placed far below Terim and Saiyun, to which Hirsch assigned about four thousand and four thousand five hundred respectively. But the rivalry of these towns is such, and the changes in them are so frequent, that it is not impossible that Van den Berg was right at the moment, in regarding Saiyun as the capital of Hadramaut, with Terim for its only peer.

Except the ten-storeyed mud castles of the rulers, of a type already noticed by Wrede in Khoraibe, the chief town of Wady Doan, Hirsch saw little worthy of remark in these towns. Terim, as he described it, with its great market square and five walled quarters, certainly seems the most metropolitan; while the numerous mosques, the well ordered streets, and the immense gardens conjure up a more imposing vision of Saiyun than either he or the Bents suggest of Shibam. The latter, however, has immense palm groves, and its proximity to the seat of power in el-Hauta to account for its larger population. Neither the towns nor the wady-lands seem to differ materially from those of southern Yemen. The whole population of Hadramaut is probably not two hundred thousand, and it buys little and sells less, being in the main content to support itself in self-righteous seclusion.

The interest taken hitherto in the Hadramaut has been due rather to its ancient fame. The fact that it

retains a tribal name as old as Greek times, and that it seems to have been one of the incense districts, encouraged great hopes of archæological discovery in its hidden valleys. These have been disappointed so far. The gleanings of inscriptions brought back by Wrede, Hirsch, and Bent are meagre beside the harvest reaped by Glaser in Marib alone. It must be remembered, however, that the latter succeeded where predecessors had found but little, and that Hadramaut has yet to be visited by any one so well protected and so zealously aided in his quest. Townsmen do not yield the secret possessions of their houses to the first comer, be he even as expert in their speech as Hirsch, much less to one, like Bent, communicating in halting Arabic or through interpreters.

Interest in Hadramaut therefore should not be suffered to decline yet. About half the trunk wady remains still unexplored, and the least known part is that upon which border the ancient Mahra tribes. It is reported the only scene of actual volcanic activity on the mainland of Arabia; but an explorer has yet to see the smoke of Bir Borhut, that great well cursed by Ali, according to the "Jihān Numā." Moreover, its society seems to present peculiar features of great interest to students of Semitic life. Apart from the rest of the peninsula, and protected from invasion by the surrounding deserts, the Hadramaut would appear to have preserved a very primitive and typical form of self-governing community, wherein four orders of graduated dignity

divide the state. Two are aristocratic; one of these, that of the *sayyids*, is supreme in virtue of sacred descent; the other, the tribal class, ranks next in virtue of warlike qualities. Below these is a middle class of townsmen and cultivators, who again take precedence of a large class of slaves, mostly of African origin. But these have recognised rights as against their masters in return for service, and are in no way coerced or oppressed. These elements exist, indeed, in other parts of the Semitic world, but probably nowhere in the same Hellenic harmony. Nowhere has the unarmed *sayyid* the same assured superiority to the armed tribesman; nowhere has the slave so recognised a position in the commonwealth. This division of the Hadramaut community has been recognised by all the travellers, as well as by Van den Berg, as an institution of old standing.

BIBLIOGRAPHY

On Aden, etc., see Capt. F. M. Hunter's Monograph (London, 1877).

S. B. Miles and W. M. Münzinger, in *J. R. G. S.*, 1871, p. 210.

J. T. Bent, *On the Yafei and Fadhli Countries*, in *G. J.*, 1898, p. 411. *Cf.* *Southern Arabia*, chaps. vi.–xvii.; xviii.–xxiii.; xxxv.–xxxvii., and *G. J.*, 1894, p. 315 (Hadramaut), and 1895, Aug. p. 109 (Dofar).

C. Graf von Landberg, *Die Südarabische Expedition* (Munich, 1899). *Cf.* D. H. Müller on ditto (Vienna, 1899).

H. Freiherr von Maltzan, *Reisen in Arabien, etc.* (Brunswick, 1873).

L. W. C. Van den Berg, *Le Hadhramut et les Colonies Arabes de l'Archipel* (Batavia, 1885).

L. Hirsch, *Reise in Sud Arabien* (Leyden, 1897). *Cf.* Petermann's *Mittheil.* 1894, pp. 20, 246.

Capt. J. B. Haines gave an account of Smith's visit to the Gara in *J. R. G. S.*, xv. p. 117.

CHAPTER X

EASTERN BORDERLANDS

SOME seven hundred miles east of the mouth of Wady Hadramaut the Arabian coast returns northwestward at almost a right angle, and after a course of about four hundred miles again returns south of west for a considerable distance. Thus at the south-eastern corner a great oblong excrescence disturbs the oblong regularity of the peninsula. The structural relation of this, the territory of Oman, to the main mass of Arabia, is not certain; for, except on its coasts, the broad isthmus of connection is absolutely unexplored. We do not know if the great south desert falls towards Oman, or if it rises, or, again, if it still maintains the level it had to north of Hadramaut, seven hundred miles away. And, accordingly, it is an open question whether we should regard the main plateau as prolonged eastward to Oman, or, rather, as ended at some point much further inland, leaving a sandy hollow between itself and the distinct elevated tract of Oman. One thing is certain: though the coastal hills of Oman are not greatly different from the highland slopes upon other seaward faces of the peninsula, the great conglomerate mass lying behind them, Jabal Akhdar, is

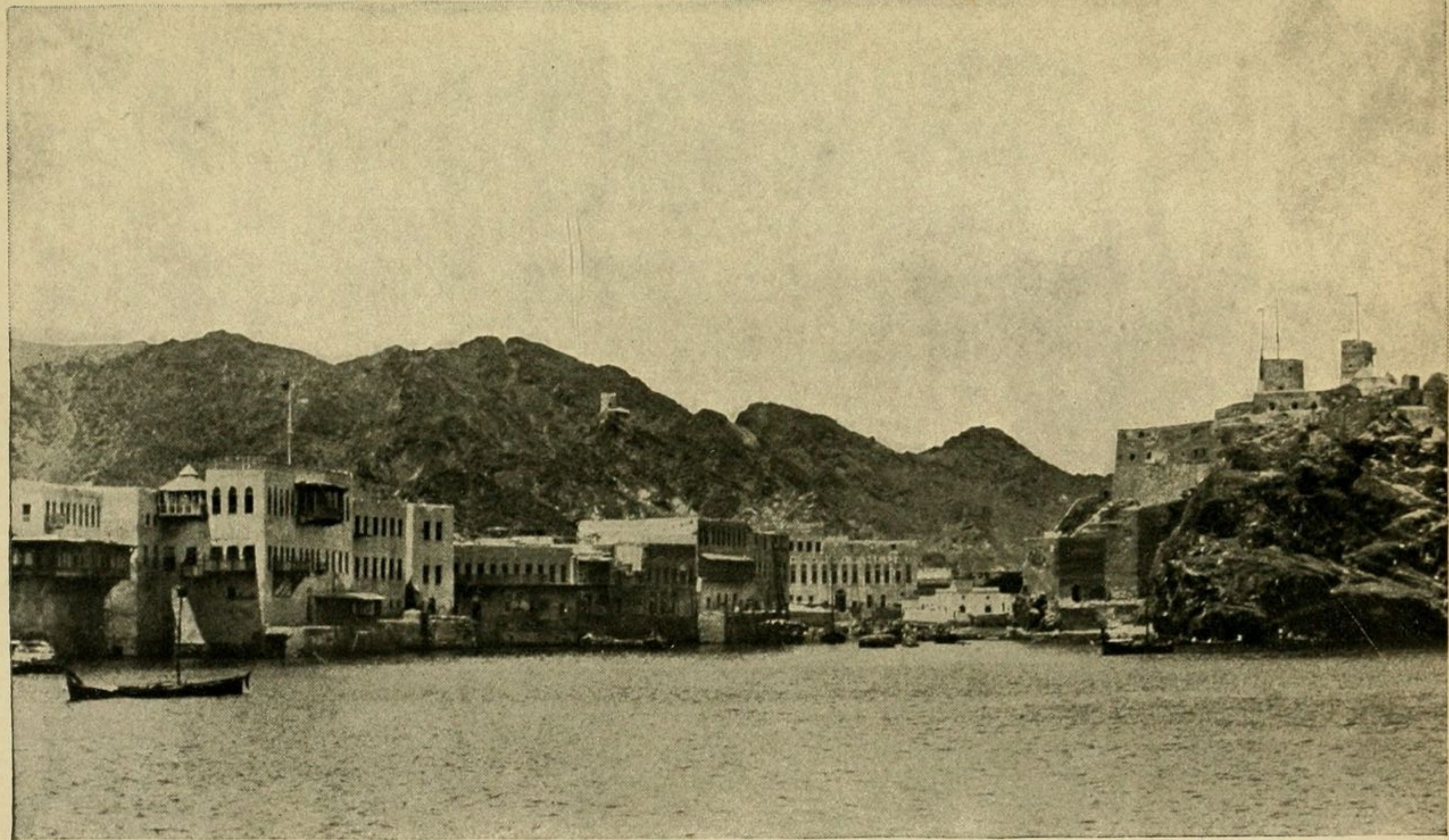
much more of a true mountain chain than exists elsewhere in the Borderlands, except where there has been volcanic action. The deviation of the range northward through Ras el-Jabal to the sea seems to suggest that it is in structural relation rather with the Persian than with the Arabian heights.

Jabal Akhdar obliquely divides habitable Oman into two parts. The first is a narrow littoral district, sloping northeastward from the crests to the Gulf of Oman, but disturbed by a subsidiary range, which in the southern district rises steep and high from the sea. The second part is much less well known. Lying behind the chain, it apparently slopes, not away from it, but towards it from a higher level to west. On the north and south it falls steeply to the Persian Gulf and the Indian Ocean respectively; on the west it merges in the great southern sands. Both these districts are most fertile in their midmost parts, which enjoy full benefit of the monsoon vapours, condensed by the higher summits of Jabal Akhdar. Both were seen at their best by Wellsted, but neither completely. In the first, the pioneer explorer avoided the tangled highlands of the subsidiary range, which stretch southeastward behind Maskat. In the second, he saw nothing of what lies north of Ibri, where the sands seem to retire far to south and west, leaving a broad typical tract of steppe and oasis, abutting on the Persian Gulf.

Wellsted's steps in midmost Oman, on both sides of Jabal Akhdar, were followed very closely within two years by the French traveller, Aucher Eloy,

who made a botanical excursion by way of Nakhl ("Naxal") to the main chain. Having crossed by Wellsted's path to Nezwa, and found the Wahabis already come down to Gabrin, Eloy turned south and rounded the southern butt of the higher chain by way of the gorge of Siki into the Wady Semail, which he followed to the coast again. His line of return was new. But the account which his letters, posthumously published, gave of any part of his route, was so summary as to add little or nothing to Wellsted's, except in the way of botany. Like Burton in Midian forty years later, the French savant found the wealth of floral genera out of all proportion to the poverty of species. The same short tour has been made since Eloy's day by Miles, when he was become colonel and British Resident in Maskat, and from his experiences in 1876 we may learn more.

The high peaks of the secondary or coastal range begin in the north, behind Maskat, with Jabal Tyin, which passes five thousand feet, and is, in a sense, connected with Jabal Akhdar through Jabal Nakhl. Between the latter and the main chain intervenes a low *col* which, approached by the broad and fertile Semail valley, carries the main road to the interior country. There are, in fact, two southerly continuations of Jabal Akhdar. This already described is one; the other forks south from Nakhl, round the head of Wady Tyin. Though warm springs are found in Oman, the formation does not appear to be volcanic.



Maskat

Jabal Akhdar itself ("Green Mountain") belies its name, for it is a bare cretaceous range with conglomerate core, rising to a supreme height of ten thousand feet, and falling abruptly on the far side. Its folds shelter a few settlements of Beni Riyam, who also hold the ultramontane valleys of Nezwa, Shiraizi, and Siki, and cultivate sugar and the vine. The larger villages are well built and fenced, and rich in orchards and palm groves. Numerous waters flow west and south, but none reach the coast perennially above ground, not even those of Wady Semail, which supply the eighteen miles of date groves and twenty thousand inhabitants that pertain to the chief settlement in the valley. Neither the cismontane nor the ultramontane wadys of inland Oman, though owning allegiance to the Imam of Maskat, are his to deal with at will. The tribal chiefs maintain their autonomy, and their suzerain has more often defended himself against their attacks than profited by their contributions.

Miles went inland again eight years later, with the object of filling the blank left between the track taken by Wellsted from Sur to the southernmost province of Jailan, and his own and Eloy's towards Jabal Akhdar. Rounding Jabal Tyin by the Kahza pass, Miles dropped down into the wady bed, which takes its name from the mountain, and supports with its underground waters a chain of thirty villages of the Beni Jabar. Bending northeastward below Gobreh, this valley reaches the coast near Kiryat by a remarkable cleft long known to sailors as the "Devil's Gap,"

and feared by caravaners for the freshets which in a few minutes may fill it from wall to wall.

About the rest of the seaward part of Oman there was not much left to learn. The low northern littoral of the Batina, which extends from Sib to Shinas, is of wondrous fertility and dense population along its shore line and wady beds, but desolate inland between the streams. Nor was much to be learned again of the extreme northern part, where the dividing ridge runs out seawards in the huge promontory of Ras al-Jabal, to end abruptly in the "Anvil Head," Ras Musandam. For this is but one lofty spine of rock fringed with coves which the British seamen explored during the first quarter of the nineteenth century in their harrying of the Jauasmi pirates. But there was, and is, much to learn of the northern part of inner Oman, south and west of the route from Shinas to Sharja, travelled by Whitelock in 1837. Its central settlement, Bireima, was not marked on Berghaus' map in 1835. Become a Wahabi stronghold, and the residence of the representative of Riad, it rejected the authority of the Sultan of Oman; and not till the temporal power of the Sa'ūd dynasty had so far declined before the rising star of Hail, that it no longer maintained its influence on the Gulf coasts, could the Maskat government assure any one's safety beyond the Batina coast.

So far, however, was the position of affairs altered by 1875 (four years after Midhat Pasha had cut communication between Nejd and Oman by occupying

Hasa), that Miles was able to make, under escort, a flying visit to Bireima in November of that year. A march of about forty miles from Sohar up wadys, with intermittent water in their beds, brought his party to the frontier of the Batina, and by a low pass (1860 feet) it crossed the dividing ridge into the ultramontane province, Dahira. There Miles found the land more elevated and steppelike, but dotted, like Nejd, with occasional oases of surprising fertility. Of these that of Bireima, lying some fifteen hundred feet above the sea, four miles long, and containing several distinct villages and some fifteen thousand souls, is chief. An intelligent and not fanatical folk cultivates its irrigated plots and orchards to the last arable inch, and pastures large flocks on the surrounding steppe, under the protection of a great mud fort. The missionary Zwemer, who was next to reach it, this time from Abu Thabi on the Gulf coast, found its society in 1901 still Wahabi in sentiment, though submissive to the heretical Maskat rule.

There is evidently a fertile oasis country to south of Bireima. Miles received a pressing invitation to visit el-Madra, one of its chief settlements, and Zwemer was informed of a series of villages lying under a ridge, Jabal Okdat, which runs parallel to the main spine of Oman, but much further inland. Although the former explorer speaks of standing at Bireima on the edge of "the inhospitable sea of sand and waste that stretches without break or interruption for nearly eight hundred miles across the peninsula,"

we may reasonably doubt if the true desert begins for many marches to south and west of his farthest point. Probably Major Cox, who, it is lately reported, has succeeded at last in traversing all Dahira from Bireima to Ibri, thus connecting the observations of Wellsted and Miles, will have better information to give us on Jabal Okdat and the desert fringe.

If geographers are but ill informed on this country south of Bireima, they remain in deeper darkness as to what may lie to west. The evil repute of the local coastal tribe, the Beni Yass, worse pirates even than the Jauasmi, has effectually deterred mariners from landing on the neighbouring Gulf shore, and travellers from essaying the land passage from Hasa to Oman. Miles was informed, at Bireima, that between that point and Hofuf stretches a level steppe-like tract which can be crossed by leisurely wayfarers in twenty-four marches; that water, brackish but drinkable, is plentiful enough, and only at one or two wells need even two days' supply be drawn. There would appear to be no permanent settlements.

This undulating gravelly steppe, roamed by a few nomads of miserable character, has, however, an interest for geographers independent of its poverty; for it seems possible that exploration of it might solve an important problem in Arabian hydrography. Miles heard that it is interrupted by a marshy saline tract which extends inland from the Gulf shore for several days' journey, and forms the boundary between Oman and Nejd. This "Sābkhah," according to his

informants, is continuous with "Wady Yabrin," an oasis in the southern desert, known to the Moslem geographers as lying equidistant from Yemama and Hasa, and now placed by cartographers as far inland as the forty-eighth degree of longitude. We shall say more of it presently. It seems to be an extensive palm tract, now too malarious for permanent habitation, but visited at the time of date harvest by Aal Morrah Bedawins, who report that they have seen ruins of habitations and, after rain, coins lying on the surface of its soil.

More than this, Miles heard that the great artery of southern Nejd, Wady Hanifa, falls into this saline tract, and so goes out, eventually, to the Gulf at Khor ed-Duan, which was perhaps once Gerra. I shall return to its hydrography in dealing with Nejd; but in the mean time call attention to the agreement between Miles's information and the persistent statements of Moslem geographers, alluded to already in the first and third chapters, to the effect that the south centre of Arabia drains to the Persian Gulf by a great wady which they called "Aftan." Their hydrography had been generally condemned on the authority of Sadlier, Palgrave, and Pelly, the only Europeans who have seen with their own eyes the lie of the land in South Nejd; but in view of Miles's report of the existence of a great receptacle of drainage to southward, one may well reopen the question, asking whether waters which cannot flow directly east to the Gulf may not drain thither all the same by

making an elbow to southward through country yet unseen? In that case it is possible that the Hanifa waters are only a tributary of a much more extensive system which drains as much of southern Arabia as the Wady er-Rumma drains of northern Arabia.

We pass out of the unknown tract at the twenty-fifth parallel. Here is a blessed interval in the undulating gravelly slopes where groups of great springs, some of them issuing at a high temperature, create the twin oases of Hasa and Katif, and certain lesser patches of verdure on the coasts of the Gulf of Bahrein and the peninsula of Katar. Those welling forth at the foot of a low escarpment, which defines not so much a ridge as the last elevated shelf of the long seaward slope of the inner plateau, at that low elevation of the hot Gulf shore, cause a tropical vegetation to surround two settlements more considerable than any in inland Oman or Hadramaut. Hofuf and Mubariz seem to have some twenty thousand inhabitants apiece, and to be seats of a comparatively high civilisation and a humane luxurious society.

The occurrence of this rich oasis of Hasa, nearly fifty miles long by fifteen in breadth and some forty miles inland, has determined the course of the main caravan track from the Gulf shore to Nejd, to which great division of the peninsula the Moslem geographers reckoned it, and it has longest been politically attached. Accordingly, through Hasa have passed the few European explorers who have either left Central Arabia on the southeast or ventured into it from that

quarter. We have followed Sadlier in his unwilling course through Hofuf. Forty-four years later we find Gifford Palgrave coming down to it from Riad. The disguised Jesuit, exulting in his escape from Puritan Nejd, had more sympathy and more leisure to spare for Hasa than his predecessor; and his narrative, nowhere more full and vivid, shows him at no pains to conceal a semi-oriental leaning towards a people whose sole effective rule of life was hedonism.

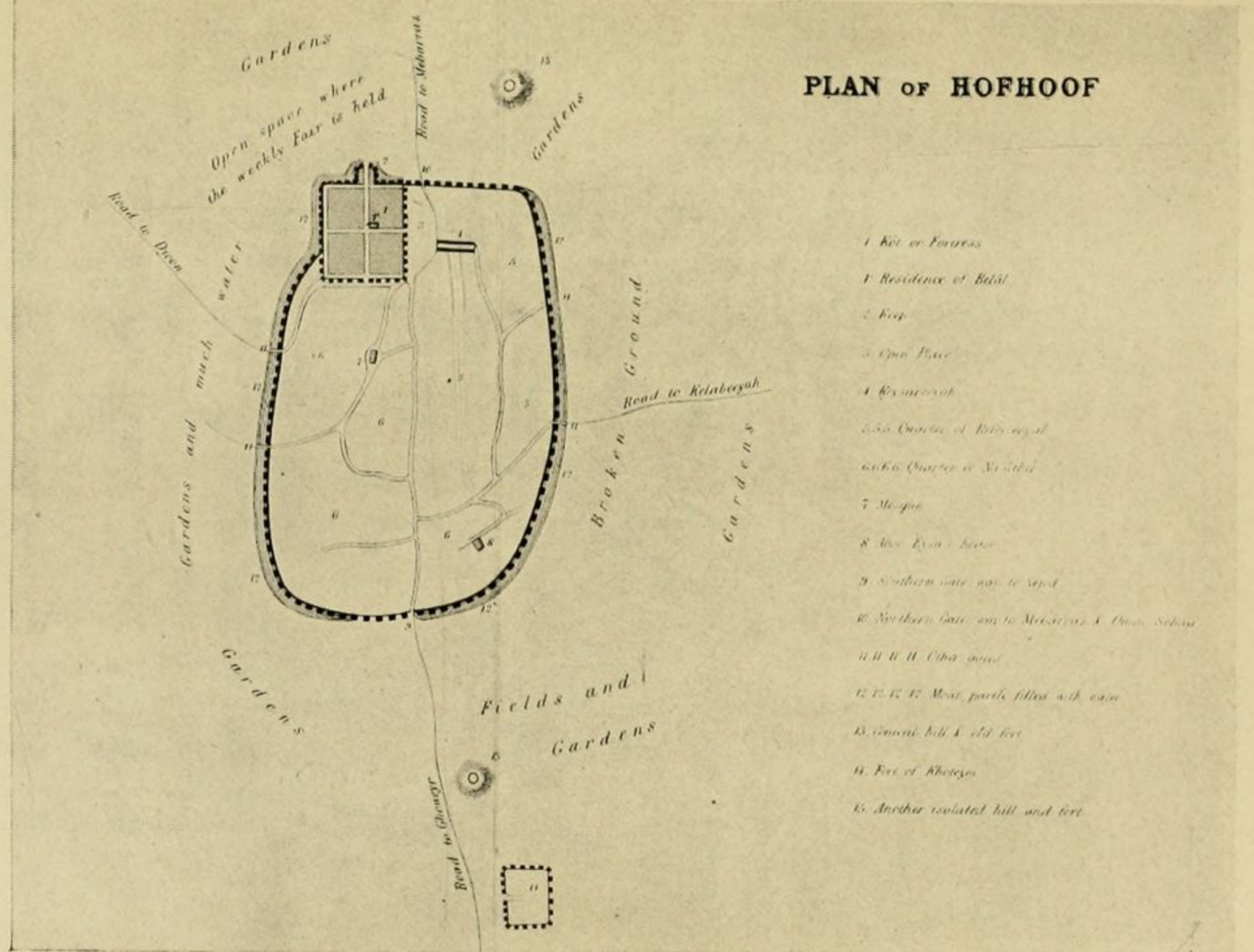
In the company of the luxurious townsmen of Hofuf and Mubariz Palgrave depicts himself quite at ease. He bathes, swims, wrestles, drinks coffee, chats, dines, smokes with them, fans their disaffection for their Wahabi lords, and glories in hoodwinking the official zealots. He joins picnic parties to points of interest; and when the cool hour of 'Asr comes "by common consent, prayers were supposed to have been said, and we remounted our side-saddles and galloped homewards." He reviews female beauty with the eye rather of Friar Tuck than "Father Michael Cohen." "In Hasa a decided improvement on this important point is agreeably evident to the traveller, . . . and he will be yet further delighted on finding his Calypsos much more conversible."

In more serious vein withal Palgrave gives detailed and admirable descriptions of both the towns and the oasis about them, with which the little recorded by his predecessor Sadlier and his successors, Pelly and Zwemer, uniformly agrees. The last named, indeed, who went up to Hasa under Turkish protection in

October, 1893, found the "Syrian's" plan of Hofuf quite accurate enough after thirty years. Palgrave ascribed to the town twenty-four thousand inhabitants, — perhaps not too much, since Pelly estimated it, two years later, to be larger than Riad itself,[1] — and twenty thousand to Mubariz, which Sadlier thought not inferior to the capital. On the details of life — houses and housekeeping, products and commerce, custom and manners — he speaks with a note of intimacy rarely attained by a European in the east. In much of southern Nejd we must use Palgrave as our authority because there is no other; in Hasa we use him in preference to all others. Were it not for him we should know so ill the character of the land and its people that its previous and subsequent history would be barely intelligible. How Hasa came to produce the rival system of al-Ḳarmaṭ, which all but prevailed against Islam; why both the Wahabi and the Ottoman rulers lusted after it, and one after the other found it a thorny possession, — to these and other questions Sadlier, Pelly, and Zwemer would supply no answer.

After a sojourn, whose duration is not stated, Palgrave and his Syrian companion resumed their way to the sea in the early winter of 1862, choosing the northern port of Katif, more distant but more considerable than Ajer. Their track must have been nearly that which Sadlier had followed, but perhaps

[1] Reinaud had thought it small in 1799, but he admits that many of the inhabitants had fled from the Wahabis; and moreover we do not know his standard of size. He thought Deraiye small also.



Palgrave's Plan of Hofuf (1862)

more easterly and direct, since they were not under his necessity to visit a camp at the Rabia wells. Between the inland and the maritime oases they traversed a sandy and gravelly country well supplied with water, and evidently once settled, but now "nomadised" and neglected; and on the fourth day, descending the last sandstone bluffs into the rank cane-brakes and heavy palm groves of Katif, they saw at last at their feet

"the dead shallow flats of the bay. How different from the bright waters of the Mediterranean, all glitter and life, when we had bidden them farewell eight months before at Gaza! Like a leaden sheet, half ooze, half sedge, the muddy sea lay in view, waveless, motionless. . . . Within this hollow rest the shallow waters of the Gulf; when full tide creeps in they present the delusive appearance of calm depth, but at ebb reveal innumerable shoals, islets, tufts of sea plants and banks of sand, with narrow winding channels between, full of mud and slime."

Two years later Colonel Lewis Pelly, British resident at Bushire, who had gone up to Riad from Koweit, followed Palgrave's track on his return as far as Hofuf, but thence made straight for the sea at the barren village of Ajer. Neither he nor Zwemer, who landed where he had embarked, added materially to their predecessor's account of Hasa. The last-named is the only western who has seen this region since the great political change of 1871. In that year Midhat, Pasha of Baghdad, was invited to invade Nejd by 'Abd-Allah, a defeated claimant to the throne

of Riad, who had been disappointed of British support. With the co-operation of the Sheikh of Koweit Midhat made his attempt by way of Hofuf, and got no farther than its oasis, not daring to enter the sand belt in the face of the Nejdean forces. The Turk contented himself with constituting a new *vilāyat*, of which he held in fact only the littoral as far south as Katar and the single inland oasis of Hasa, and conferring on 'Abd-Allah the vain title of "Ḳāimmaḳām of Nejd." So far as it went, however, his conquest has proved definitive, despite more than one revolt of Hasa. But so hated is the Turk, alike by the old Carmathian population and the remnant of the coastal Wahabis, that he has had to maintain a state of siege in the oasis ever since, and has been less willing to admit Europeans even than in Yemen. He means to stay. Small, isolated, and expensive a possession though Hasa be, it commands the best road to two districts of Arabia on which the caliph's eyes have long been fixed, Oman and Nejd.

The gravelly steppe, falling in long undulations, whose ridges run north by south to a flat uninhabited coast, reappears as the Hasa waters run dry in the sands. Very little is known about it, and there is very little to know, till the limit of Arabia be passed and the Euphratean delta reached. The only European who has seen its whole breadth at any point between Katif and Koweit is Pelly, who reported all that lay right and left of the track taken by his party in 1865 as absolutely featureless and almost waterless. In the

season of his journey, the month of February, there was to be seen a pale and rare desert herbage, due to recent rains, but neither settlement of any kind, nor tree. Hardly a tent of Bedawins, Beni Khalid, Aal Morrah, or Ajman seems to be pitched upon this no man's land, which none desires. The steppe ends on the west in certain sandstone billows, the first ridges of the narrow wasted tract, whose sands prolong those of the southern desert, and all but join the sands of the northern Nafūd.

The shores of this miserable steppe are like to it, — without well-marked outfalls of wadys, without any but scarce and brackish water, and without permanent habitations for nearly three degrees of latitude; over all the interval, that is, between Katif and Koweit. Change comes with the deep bay, on whose southern shore the latter town is built. Here a considerable palm oasis extends for some short space inland up the course of a broad but shallow wady bed, which seems to be one outfall of the great drain of North Arabia, the Wady er-Rumma. Except after the greatest storms, no water runs therein above ground, but it can always be raised sweet and good from a few feet below the surface. This abundance of well-water, the palm oasis, and the sheltered bay opening on the Gulf, all found in a healthy desert tract within a long day's march of the nearest outfall of the Mesopotamian waters, have drawn the eyes of Euphratean promoters to Koweit, ever since the first projection of trans-Asiatic railway schemes. The

prosperous little Bedawin town bids fair some day to be the scene of a notable conflict (or compromise) between western rivals in the east, and to matter more to Europe than any other spot in Arabia except, perhaps, Aden. And not only to Europe. For this oasis is the gate of Arabia on the northeast, and the possession of its key will alone give the Caliph easy access not only to his coastal province of Nejd, but to the great internal region, more properly so named, which he covets for its geographical relation to his precious Hijaz. When the Sheikh of Koweit declared for Midhat in 1871 he received a pledge that his town should enjoy administrative autonomy, but as an Ottoman *kaẓā*, in which he accepted for himself and his heirs the position of hereditary *Ḳāimmaḳām*. Turkey, therefore, is not without such rights to Koweit as in the comity of nations are usually allowed to be paramount and exclusive. It remains to be seen if she can assert them, or what price she may be able to exact for their possible cession to a Christian power.

BIBLIOGRAPHY

Aucher Eloy, *Relation de Voyages en Orient*, edited by the Comte de Jaubert (Paris, 1843).

S. B. Miles, in *G. J.*, 1896, p. 522, and 1901, p. 465, and also in *Journal of the R. Society of Bengal*, vol. xlvi., i., p. 41.

S. M. Zwemer, in *G. J.*, 1902, p. 54. On Major Cox's journey, see note in *G. J.*, 1902, p. 452.

W. G. Palgrave, *Central and Eastern Arabia*, vol. ii., chaps. xii. and foll.

Lewis Pelly, in *J. R. G. S.*, 1866, p. 169. *Cf. Proceedings*, 1864–65, p. 295, and *J. R. G. S.*, 1865, p. 178.

CHAPTER XI

THE CENTRAL NORTH

NOW to the heart of Arabia, to broader plains, and to records of adventure that have won, or deserved, more fame. We have taken no account of exploration in Nejd since 1850, but once or twice, in treating of the borderlands of the peninsula since that date, have caught a passing glimpse of travellers coming down or going up, travellers of wide renown, Palgrave, Doughty, Huber. All European explorers, since Sadlier, have attacked the centre of Arabia from the north. From the north, then, we too shall re-enter it, and passing southward, consider last of all that vast core of South Arabia which no western eye has seen, and perhaps, in great part, no foot of man has trod.

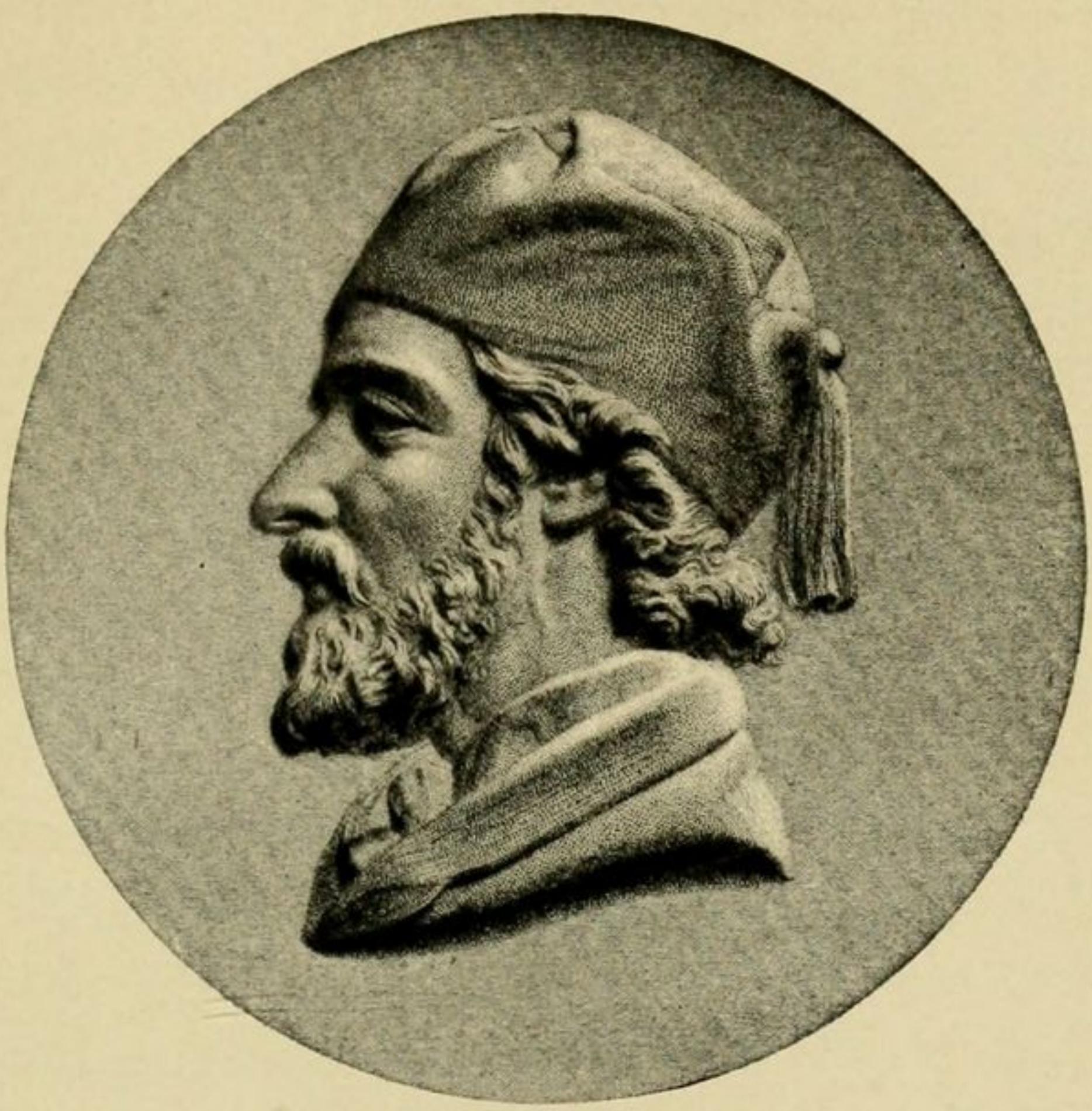
We have traced Wallin's route across the great Nafūd sands, which lie between Arabia and the continental mass of Asia, a terrible limbo guarding the landward gates. Had the Swedish pioneer told the story of his journeys more promptly, more fully, with less learning and through a medium of wider appeal, he would probably have had more immediate followers,

and certainly have robbed one follower in particular of much of his opportunity for creating a great sensation. For when Wallin left northern Nejd for the last time, he had not only proved the practicability of the Nafūd passage, but he had discovered that remarkable political organisation of Bedawin chivalry, newly constituted in Jabal Shammar, to see which has been the main inducement to the explorers of Central Arabia since Palgrave. At the death of 'Abd-Allah ibn Rashīd, in 1847, the Shammar dominion was firmly established, and only waiting for its expansion by successors worthy of the founder of the family fortunes. But while Wallin said very little of the Nafūd, the more abundant detail that he related concerning the Emirate of Hail was obscurely and unattractively expressed. Accordingly, when fifteen years later another European reached Jabal Shammar, he found (and left) more points of North Arabian geography unsettled than might have been looked for where an explorer of Wallin's calibre had already passed; and his narrative was destined to create the stir of a revelation. There is reason to think that when this man started he was not better aware of his predecessor's discoveries than the public, although he learned of them ere setting to work to write his own story. Certainly he did not go into Arabia expressly to test or enlarge them, but for reasons wholly independent of, though possibly not altogether unlike, those which led to Wallin's adventure.

Late in July, 1862, two Syrian strangers, whether merchants or leeches or of both trades, alighted before the castle of Hail, and, amid a curious throng, awaited the prince's pleasure. They were styled Salim Abū Mahmūd al-Ays and Barakāt ash-Shāmī. If their true purpose in coming thither became known eventually to Emir Talāl (as the narrative of the first-named states), to us it is not certainly known at this day. But we can assert a fact which probably was never candidly explained to the Shammar ruler; namely, that while the lesser traveller was much what he professed to be, a Damascene Syrian, the chief was an Englishman of Hebrew extraction on the father's side, William Gifford Palgrave, once an officer in the Indian army, now a Jesuit priest on the mission establishment at Zahleh in the Lebanon.

Why was he come to Hail? Before telling the most sensational story of Arabian adventure ever told, he himself made a statement on the matter: —

"Readers may perhaps be desirous to learn what was the special object and what the determining circumstance of the journey now before them. The hope of doing something towards the permanent social good of these wide regions; the desire of bringing the stagnant waters of Eastern life into contact with the quickening stream of European progress; perhaps a natural curiosity to know the yet unknown, and the restlessness of enterprise not rare in Englishmen, — these were the principal motives. The author may add that at the time of the undertaking he was in connection with the Order of Jesuits, — an Order well known in the annals of



William Gifford Palgrave

Medallion by Woolner

philanthropic daring; he has also gratefully to acknowledge that the necessary funds were furnished by the liberality of the present Emperor of the French."

But Palgrave was not unaccustomed to use words to conceal thought. We may be sure that when he gave to Talāl and his chief henchman in Hail "a brief but clear account of the circumstances and object of the journey, whence and whither, what we desired and expected," he said nothing about quickening the stagnant waters of Orientalism. The Shammar Emir finally replied, "Return in whatever fashion you may, . . . your word shall pass here as law; and whatever you may wish to see done shall be exactly complied with throughout the limits of my government;" and his henchman, Zāmil, declared himself "an enthusiastic participator" in the strangers' views. Were those Wahabi leaders pledging themselves to the support of Jesuit missions in Nejd from motives of philanthropy? And why did the Emperor of the French so liberally supply the necessary funds?

We may not hope to read the secrets of either the Jesuit College or the Tuileries, but we may recall certain facts which suggest a working hypothesis. The great massacres in the Lebanon and Damascus took place in 1860, and they were followed by European intervention on behalf of the Syrian Christians, in which the Emperor, Napoleon III., contrived to have the only practical share by despatching an expeditionary force to Beirut without waiting for

his colleagues. Vigorous measures taken by the Ottoman government, under French and British pressure, quickly removed all further danger of outbreak; but the Emperor's troops showed no sign of withdrawing until Lord Palmerston adopted an attitude which showed clearly that he at any rate believed their stay to have another purpose than the protection of Christian life and property. Indeed, it is now no longer questioned that Napoleon hoped at that time either to establish an effective French occupation of Syria, or to secure the country for his client, the Egyptian Viceroy, in whose differences with the suzerain Ottoman power he was not unconcerned.

On the morrow of the Damascene massacres Napoleon summoned to Paris the Jesuit Palgrave, who had been resident for some years in Syria, under the style and title of "Father Michael," to which Cohen, the original Hebrew surname of his family, seems to have been commonly added. Closely connected ever since his conversion with the French branch of the Society of Jesus, and being of singularly Protean disposition, Palgrave had been conspicuous for sympathies not those of his particular nationality. Endowed with all the linguistic facility of a Jew, and a considerable share of the Near Eastern character, he presented himself to the Emperor as a likely envoy to Arab societies. He was sent back to Damascus in 1862, chose one of the native teachers at the Zahleh college, Barakāt Jurayjuray, for a trusty comrade, went with him into Galilee, and there as-

sumed disguise. The pair passed on by Gaza to Maan, and set their faces for Jauf and Hail.

Their mission was probably religious only inasmuch as the interests of the Jesuit College in the east were at this period bound up with the political fortunes of France. "Father Michael" had little in him of the apostolic nature, and we can hardly credit one who renounced his Order and his Church almost immediately after his return from Arabia, and within five years was writing of both in virulent scorn,[1] with daring all things as a purely spiritual pioneer. It is much more probable that his main commission was to further some political plan. As we have seen in considering Wallin's object, the Egyptian policy had already concerned itself with Nejd; nor were Palgrave's the first overtures to be made to a Nejdean prince on behalf of France, as Colonel Pelly would learn presently from the Emir Fayṣal. By 1862 the certainty that the Suez Canal would be made was increasing immensely the interest of France and Egypt in Arabia;[2] and to secure the exclusive friendship of the one effective power in the lands on the east of the Red Sea had become almost as obviously desirable to Napoleon as to establish a French or French-Egyptian domination in Syria.

[1] See his *Essays on Eastern Questions* (1870), wherein he takes occasion to rail at the Pope, the Seminarists of St. Sulpice, and the "colossal hagiolatry of Catholic Christians." He says of Protestantism that "it shocks Mahometan taste less than the tawdry finery and pious sensuality of the Catholic system"!

[2] See Euting, *Tagbuch, etc.*, p. 169, for Emir Talāl's relations with Egypt about this time.

Beyond this suggestion we can hardly go. The precise terms of Palgrave's commission will perhaps never be known. It led to nothing in the end; for the Suez Canal was hardly opened to shipping ere the German guns had rudely altered the weight of France in the world's balance. But of the general nature of his mission we need not doubt more than his contemporaries doubted. On his return Palgrave met with a cold reception from his countrymen; and the British Geographical Society, while it listened to his story, left its sister association in Paris to vote honours to the first man who had crossed Central Arabia from north to south.

I have dealt thus at length with Palgrave's commission to prepare readers for the adoption of a critical attitude towards his narrative. It is necessary to make it clear that this explorer did not go to Arabia in the interests of science, nor with that scientific conscience which would have made him note all that he saw and heard, and esteem accuracy of statement his first obligation. But he did go in another interest, which was bound to give him a certain bias. Palgrave stated that he lost many papers through his shipwreck on the coast of Oman at the end of his journey; but we may doubt if among the budget were many of scientific nature. In default of notes he was quite content with recollections of impressions, and not concerned to inform his readers of the precise basis on which any assertion or inference might rest. Indeed, his book strikes a reader as not

having been contemplated at starting by its author any more than by the Society of Jesus, which subsequently protested against its appearance without official sanction.[1]

An obvious alternative explanation of his many exaggerations, omissions, and misstatements, which has found some favour with the "Higher Critics," is certainly wrong. Palgrave without doubt made the journey which he described. Of his successors in Nejd, none has expressed any misgiving as to the authenticity of his visit, and more than one has borne express testimony that the accuracy of his record on certain points is such that none but an eye-witness could have penned it. Thus the latest of all, Baron Nolde, mentions the calumny, only to refute it as an "unberichtigt so doch haüfig vorgebrachter Einwand." An explorer of much greater authority, C. M. Doughty, in a letter to the present writer, implied that he had no doubt of his predecessor, and that he understood certain remarks made to himself in Hail to refer probably to Palgrave.[2] He adds: "El Khennayny said to me in Aneyza something like this: 'How can you go about in such a lawless land calling yourself openly a Nasrany and Ingleysy? Such a one, [name I cannot recall], did not so when he

1 This view, at which I arrived independently, I find to be also substantially Mr. Wilfrid Blunt's, who in a letter to me speaks strongly of the absurdity of Palgrave's account of the Arab breeds of horses, in which he professed particular interest. Mr. Blunt adds: "Palgrave's chapter on horses is just such as might have been written as an afterthought to supply an important omission in his account of the country."

2 See *Arabia Deserta*, i. pp. 589, 604.

journeyed through the country.' " Lastly, Mr. Wilfrid Blunt writes: "I cannot doubt that Palgrave really made the journey narrated in his book. . . . I can bear testimony to his description of social life in Nejd as being a faithful picture of what I saw." It need only be added that the correspondence of Palgrave's description of Nejdean oasis society with Doughty's is of the closest. And so let all doubt be dismissed.

The pair of Syrian leeches had come from Maan by Wallin's route, halting some three weeks in Jauf for the practice of their assumed profession. Palgrave's account of the main features of the oasis tallies with his predecessor's, but is designed to be more descriptive and more impressive. He seems determined to make the most and the best of everything. The oasis lengthens itself to seventy miles, and its population exceeds the highest estimate of any other traveller by as much again. The gardens, which would strike the Blunts as small and mean, are in his eyes famous, superior to any in Nejd or Hijaz; the inhabitants, condemned by Wallin for evil-looking churls,[1] are fine men in aspect and bearing. We shall find the same "megalomania" when Palgrave has passed the Nafūd — nay, in the Nafūd itself, his "vast sea of fire," whose "red-hot waves," running north by south, he states, swell two hundred or three hundred feet in average height. So on entering Jabal Shammar our traveller allows two thousand

[1] The latest visitor, the missionary Forder, bears out Wallin.

four hundred inhabitants to Lakeita, where Wallin saw but one hundred and twenty houses; and twenty thousand to Hail, which has at this day scarcely more than the half, and in the second year after Palgrave's visit was reported by Guarmani to hold but seven thousand five hundred souls.

Fanciful though it be, Palgrave's description of the Nafūd is, however, not without its value, if only because he was the first European to remark the horseshoe pits, which form the most famous, but worst understood, feature of these deep sands. These his Bedawins called by the name *falj*, the word commonly used for the shafts sunk, as already described in Oman, to meet those subterranean galleries, along which streams are conducted for purposes of irrigation, after the Persian manner. But as these Nafūd pits have been investigated better by Palgrave's successors, we must introduce other explorers before discussing the problems of the Nafūd, or passing on with the "Syrians" to Jabal Shammar.

Of Palgrave's immediate follower, Carlo Guarmani, we need say no more at present than that, though he returned across the Nafūd from Jubbe to Jauf in 1864, it is not of that final stage of his journey in Nejd that he has left a detailed account. Travelling very fast, with a string of horses, mainly by night, and in ignorance of his predecessor's experiences, he seems to have failed to see anything worth note on the sands. Fourteen years later came witnesses more observant. Within the space of a few months the

Nafūd was crossed on Palgrave's line by two European parties bound for Hail, where the Emir Talāl was now dead and a stronger than he sat in the seat of power, — Muḥammad, his nephew, perhaps the ablest Arab of his century. The fame of the stern peace which this prince maintained in all North Arabia, and of his liberality of opinion, encouraged two Europeans to venture into his territories in thin disguise, and three others in no disguise at all.

The first was the French Alsatian, Charles Huber, of tragic memory. Inured to the ways of Arabs by residence in Syria, and evidently congenial to their society, he was commissioned by the Ministry of Public Instruction to explore Nejd, so far as he might go, in the general interests of science, and doubtless the particular interests of his nationality. By training a naturalist, circumstances made of him an archæologist. He came down to Jauf from Damascus by way of Bosra and Kaf late in May, 1878, and on June 1 set out for Hail. The sand passage from the Shakik wells to Jubbe was made, despite the great heat of the season, in seventy-six hours, eleven less than Wallin spent on the same track with his weak beasts. Palgrave had crossed in eighty-five hours; Guarmani in no more than fifty.

Huber found Muḥammad ibn Rashīd in camp at Umm el-Dulbhan on the desert edge, was received into his friendship after a flimsy pretence of repeating the Moslem profession of faith, and retained his

confidence to the bitter end. The Alsatian was to cross the Nafūd again in the unusually rainy October of 1883, this time in the company of the Strasburg Orientalist, Julius Euting, who had been encouraged to join his fellow-provincial by the King of Würtemberg and General von Manteuffel, in order that the ancient inscribed monuments, seen by Huber on his first journey, might be recorded by a scholar more expert in Semitic epigraphy. Concerning this passage we have only rough notes by Huber, edited by others after his murder in the following year; but Euting has published a connected account.

The other party, which ventured across the Nafūd a few months later than Huber's first crossing, remains unique among exploring parties in Arabia; for not only did it contain a European lady, but it journeyed for no express scientific, commercial, or political end, but rather from a romantic curiosity and imaginative sympathy with Bedawin society. Wilfrid Scawen Blunt, diplomatist and poet, and his wife, granddaughter of the poet Byron, both of whom had been initiated into desert life four years earlier among the Anaze and Shammar tribesmen of the Hamad and Mesopotamian steppes, conceived a desire to see the head and centre of the purest Arab breeds of humanity and horseflesh. By the help of a certain chivalrous relation, formed with a noble Arab family of the Palmyrene oasis which was sprung originally from Hasa, the journey was made possible; and in quest of a bride for his blood-brother, a young

scion of the Tadmor house, Blunt came to Jauf about the New Year 1879.

The betrothal took place there, but nevertheless the party held on south across the sands, and the Blunts boldly approached the Emir of the Shammar under their true colours, as persons of noble quality in Europe desirous to greet the noble house of Rashīd. Muḥammad, not irresponsive, extended a somewhat embarrassed and uncertain courtesy. He had to reckon with the Chauvinism and latent Wahabism of a section of his townsmen, excited by successive intrusions of Franks within their inviolate walls,[1] and the novel spectacle of a Frankish woman. Fortunately the visit was not prolonged, and the last farewells were exchanged with sufficient good-will.

Romantic as were the conception and accomplishment of this adventure, and unscientific as may have been the pretensions of the adventurers, their actual narrative will bear comparison with any other, concerned with the same ground, for sobriety and accuracy, as well as for observation and sympathy. Both the journal written by Lady Anne Blunt, and the notes added by her husband, are much more valuable contributions to geographical science than they claim to be, and cannot be neglected even where such close observers of Arab life as Palgrave, Guarmani, and Doughty have recorded their experiences, or explorers

1 They had lately seen Doughty as well as Huber, and it is an open question if they had not by this time learned the true character of both Palgrave and Guarmani.

Wilfrid Scawen Blunt

From an original oil painting by Molony

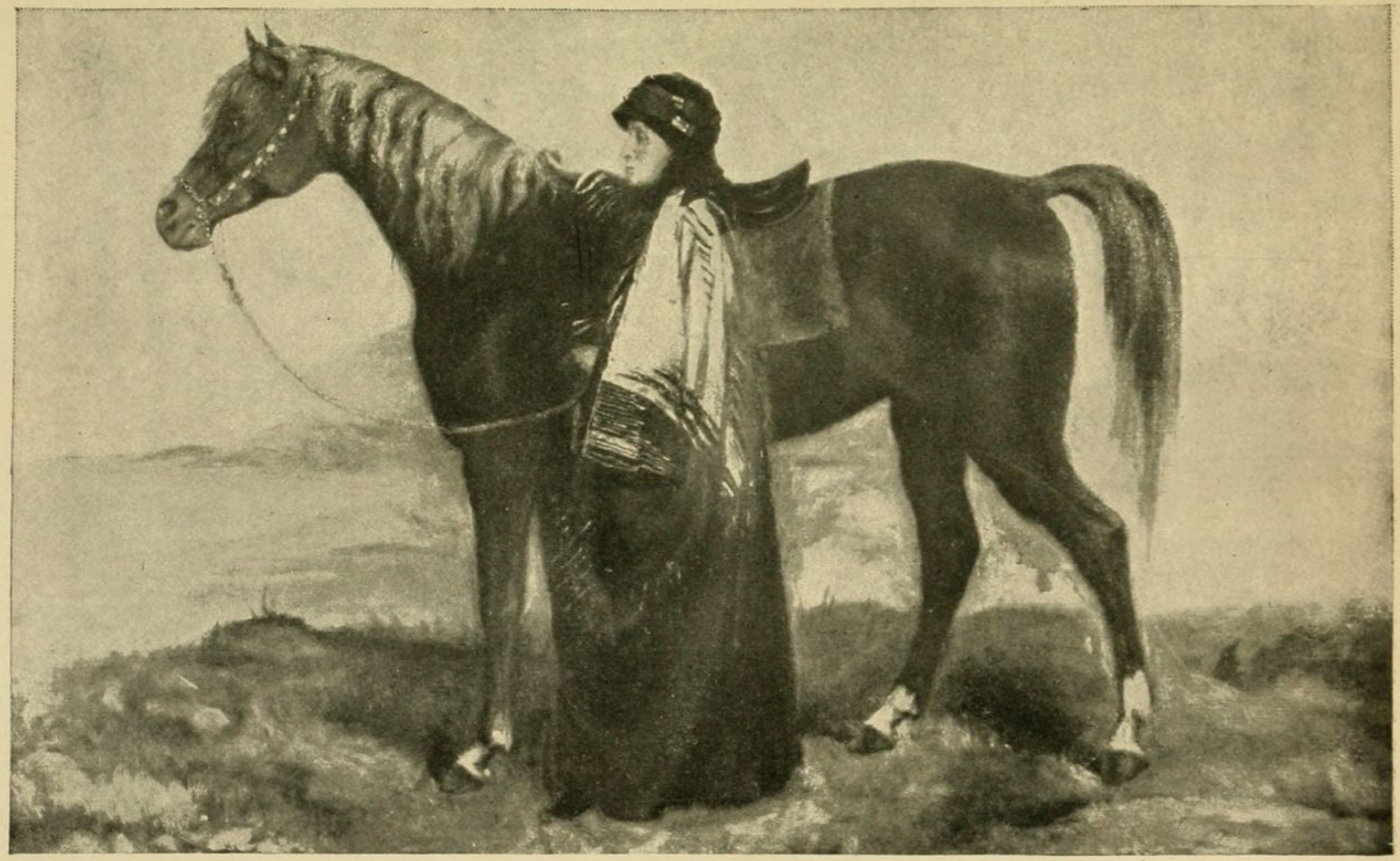
have passed as well equipped as Wallin, Huber, and Euting.

Since 1883 only one European has crossed the northern sands to our knowledge;[1] namely, a German, Edward Nolde, who set out from Damascus with a great retinue in January, 1893, to visit the Emir Muḥammad. He seems to have been a restless, somewhat fantastic soldier of fortune, who sought one excitement after another, till the end came by his own hand in London in 1895; and his power and his will to observe what geographers desire, were not great. The interest of his posthumous narrative lies mainly in its historical record of political changes that had come to pass in the Emir's kingdom, especially in the latter's relations to divers great Bedawin stocks, and the power of Riad. Since Nolde penetrated a little way even into South Nejd, beyond Kasim, we shall speak of him again; but here make note that he alone crossed the Nafūd by a track other than that which makes for Jubbe. His way diverged to eastward after entering the sands, and held more directly southeastward for Hail, reaching water again, after about one hundred and eighty miles, at Haiyanie, a desert fort of the Emir's, where ancient wells have been sunk to great depths through solid rock. This fort is now a centre for the protection and control of the tributary Bedawins, who drive their herds on the Nafūd in springtime.

[1] A. Forder, a Kerak missionary, went to Jauf in 1901, but no farther (*G. J.*, December, 1902. *Cf. With the Arabs, etc.*, London, 1902).

These are all the eye-witnesses that we can call for the Nafūd, and they testify at first hand to no more than the waist of it. Other tracks strike across it, notably a direct one from Jauf to the oasis of Teima, whereon Doughty gives the stations; but this neither he nor any other European has followed. We have no choice but to infer the nature of nine-tenths of this great sand tract, which covers about seven degrees of longitude by four of latitude, from the one-tenth seen.

When approached either from north or south, the Nafūd sands appear to rise abruptly above the harder bordering steppes, whose calcareous floor is continued beneath them. Blunt was clear that this floor slopes upward all the way from Jauf to Jabal Shammar, though the sandy mass upon it may fall away again slightly from the centre of the Nafūd. Euting reckoned the highest dune at nine hundred and sixty metres above sea-level. Doughty saw the Nafūd edge stand up like a range of white hummocky hills from the steppe to east of Teima. Whether there be also a rise from east to west is not ascertained, but it is probable there is. The deepest beds of sand, between two hundred and three hundred feet thick, are in the southern and western parts. Nolde testifies that farther eastward the dunes become less high, and the whole surface more plain, an observation which is supported by the witness of those who have skirted the eastern limit on their way from Jabal Shammar to the Euphrates valley, and found the sandy tracts very thin and intermittent.



Lady Anne Blunt

From an original oil painting by Molony

As to the general relief of the sand surface testimony in the main agrees. All travellers have been aware of long undulations, whose axes lie north by south; but they have varied much as to the average interval between trough and ridge. Perhaps one hundred feet is nearly the normal difference of level. The nature of the sand is not the same in all parts. While everywhere singularly pure from argillaceous or calcareous admixture, it is much heavier and ruddier in the centre than on the northern or southern fringes. Euting says the northern Nafūd is like a snow-field; and Doughty saw the southern dunes white under the sun. Unlike the border sands, the central particles appear to drift but little. It is not a rainless tract. Huber saw pools in October, and Nolde experienced even a snowfall on February 2d; but there is no running surface water, and no water-worn channels are visible. Nevertheless the sand, especially the heavier red variety, must retain a good deal of moisture, for it is fairly well clothed with desert vegetation, not all of merely annual growth. Huber, after reading Palgrave's lurid description, was agreeably surprised by its greenness even in June; while Blunt, who observed that the *falj* sides were generally better clad than most other parts, says of the Nafūd as a whole that it

"solved for him the mystery of horse-breeding in Central Arabia. In the hard desert there is nothing a horse can eat, but here there is plenty. The Nefud accounts for everything. Instead of being the terrible place it

has been described by the few travellers who have seen it, it is in reality the home of the Bedouins during a great part of the year."

Nolde found enormous herds, tended by Syrian Roala, ranging about Haiyanie, and other explorers have been surprised by the sight of Bedawin parties moving about the waste, and evidently for the nonce resident within it. Their milch camels are said to go without water for some three weeks when the desert herbage is fresh, as against the four or five days, which is their extreme period of abstinence, when the herbage is withered; and this fact explains the confidence of Bedawins in passing this desert at all points and remaining at great distance from wells. Doughty expressed his belief that even the Southern Desert of Arabia might be crossed after their manner with camels in full milk. The presence of a considerable fauna, ranging from antelopes to rats, in the midway sands has been already mentioned. Most travellers have recorded, and Doughty with full agreement, the Bedawin statement that these animals never drink.

Two questions have been much debated in regard to the Nafūd. The first regards the origin of its vast accumulation of sands; the second that of the *falj* pits, which occur in its deeper tracts. These problems are perhaps not altogether unconnected.

The distinction of the two kinds of sand observed in the Nafūd must be recalled. The light yellowish-white particles, which drift easily, may have come

Charles Huber

From a photograph kindly supplied by the *Société de Géographie de Paris*

from a much greater distance than the heavy red ones. When it is noted that these last seem to form a uniform tract in the centre of the Nafūd, almost motionless, and interrupted on the one well-known track by two jutting crags of sandstone so dark and red as to have been miscalled granite by Palgrave, the natural inference suggests itself that the red grains are the perished remnant of a bed of sandstone which overlies the limestones in the Nafūd region itself; and it is probable that further exploration will confirm Euting's statement that this stratum is not infrequently emergent in the form of flat-topped hills. Whence the lighter grains have come seems to be indicated by Doughty's observations in the sandstone region to west and southwest, which has been partly overflowed by lavas. He has stated [1] that the eruptive matter now forms great platforms, whose core is of sandstone continuous with that on the surface of the lower plains between and around the lava tracts. That is to say, the lava caps have preserved from denudation a part of the sandstone plains, and by maintaining those parts at the level they had at the epoch of the eruption, supplied a remarkable proof of the immense wasting that has taken place elsewhere. A sufficient bulk of sand particles has evidently been set free from this quarter, and similarly from all sandstone surfaces of the Arabian peninsula, by the disintegrating forces of nature, to account for all its moving deserts.

[1] Both in his book and in the paper read to the Geographical Society on Nov. 26, 1883.

A large sandstone tract occurs to west of the Nafūd, where rise the rounded hills of Jabal Shera. The prevailing winds (despite Blunt's authority, here for once at fault) are stated by the majority of travellers in North Arabia to blow from west and southwest;[1] and it has been observed already that the sands lie thinner on the north and east of the Nafūd than on its west and south. Jabal Shera, then, whose rocks, says Doughty, "resemble the wasting sandstone mountains of Sinai," with its southward continuation, is in all likelihood the parent of the moving sands of the Nafūd.

Remains the *falj* problem. Much of the mystery that has been made of these great horseshoe pits, which in a few, but very rare cases, descend to the hard underlying floor of the Nafūd, has been due to imperfect observation and hasty generalisation from a few of the more conspicuous examples seen. They are not peculiar to this desert, but appear to be found in all Arabian sands of considerable depth. There is reason to think single pits are not necessarily stationary in one place, or permanent; for Huber says, despite what the Bedawins asserted to himself, to Euting, and to Blunt, that he saw with his own eyes the sites of filled-up pits, and other pits in process of being filled. Nor are they always disposed in the irregular strings observed by Blunt. They do, how-

[1] *Cf.* Mr. E. A. Floyer's letter to Mr. Vaughan Cornish on the sand movements near El Arish (*G. J.*, May, 1898). He notes that the Suez Canal has caused a belt of about ten miles' breadth to be clear of drift-sand.

عبد الوهاب ابن فرنس الشوابي

Julius Euting

ever, usually present an abrupt slope to west and an easy slope to east; and they have an invariable and significant companion on the crest of their steeps, acutely remarked by the Blunts; namely, a mound or dune, larger or smaller, but of *white* complexion, whatever the general colour of the particles be in the particular part of the Nafūd. Consideration of this feature carries irresistible conviction that the cause of the *falj* is, after all, wind, as the Blunts thought at first;[1] and that we are confronted by extraordinary effects of the ordinary drifting process, which works a sand surface into dunes alternating with hollows, scooped by eddies of wind. The two theories previously put forward, which both ascribed the phenomenon to the slipping of bottom-sand, as in an hourglass, whether through the action of ground-water (according to Blunt), or the step-like inequality of the floor (in the opinion of Euting), are rendered less probable than they seemed at one time to be by the observations above enumerated, which show that the pits are neither peculiar to the locality nor invariable and regular in their disposition. These theories moreover do not account in any way for the attendant dune.

To wind, then, we look, and with Walther hold that "die Fuldjes im grunde genommen nicht anderes sind als gekrummte Dünen." In the first instance westerly winds have scooped sand, and, wherever

[1] See J. Walther, *Die Denudation in der Wuste*, in *Abhandl. der math. phys. Classe der K. Sächs. Gesellschaft der Wissenschaften*, xvi. p. 509.

checked by such an obstacle as a large bush, piled it into a mound which, according to the invariable rule demonstrated lately by Mr. Vaughan Cornish to the Royal Geographical Society, had a long slope on the windward side, while its lee side was abrupt. Beyond it the scooping process began afresh, and if a new obstacle was met with and a second dune formed, a horseshoe pit half excavated, and further deepened in appearance by its comparative relation to the two dunes on each hand of it, came into being. The dune thereafter tended to diminish or move forward, according to a well known law of sand drift; but the scour of the wind round its sides may long have kept the hollow clear, and even deepened it.

Winds of ordinary force, however, could hardly have piled up the heavier particles of the central Nafūd, or scoured the lee hollows to the great depth occasionally observed. It is probable, therefore, that, where these dunes and pits occur in the red sand, they have been formed by electric storms of exceptional violence, such as occur but rarely. Once made, these pits would not be sensibly affected by the ordinary winds of normal seasons, and might long remain with so little apparent change as to be regarded by the short memories of Bedawins as having always existed, and to come to be used for camping-grounds by several generations. But the lighter white sands, which always blow thinly over the surface of the heavier red ground, would cloak the dunes on their windward side, while being scoured out of the lee hollows, and

so justify the Blunts in their observation that a white mound accompanies a red *falj*.

Such seems to be the explanation generally applicable to this phenomenon of the Nafūd. The peculiarities of the wind action in certain of its localities will be better understood some day (as Walther remarks) when the movement of heavy grains has been subjected to the same study as has been devoted to that of lighter sands; and (we may add) when more study has been given also to the electrical forces, which seem to play a part in the movement of all kinds of sand alike.

BIBLIOGRAPHY

W. G. Palgrave, *Central and Eastern Arabia*, 2 vols. (London, 1865). *Cf. J. R. G. S.*, xxxiv. p. 111, and *Proceedings*, viii. pp. 63, 97, 103; also *Encyclopædia Britannica*, 9th ed., s. v. *Arabia*. For Burton's view of Palgrave, see Preface to 3d ed., *Personal Narrative of a Pilgrimage to Al-Medinah and Meccah*.

C. Huber, *Voyage dans l'Arabie Centrale* in *Bulletin de la Société de Géographie*, viime série, vol. 5, pp. 304, 468; vol. 6, p. 92, and *Journal d'un Voyage en Arabie*, published by the Asiatic and Geographical Societies of Paris in 1891.

J. Euting, *Tagbuch einer Reise in Inner-arabien*, th. i. (Leyden, 1896). The second part has not appeared.

Lady Anne Blunt, *A Pilgrimage to Nejd*, 2 vols. (London, 1881), with appendices by W. S. Blunt.

E. Nolde, *Reise nach Innerarabien, etc.* (Brunswick, 1895).

CHAPTER XII

THE CENTRE

THESE adventurers came through the Nafūd unscathed; and all but one found relief near the southern edge of the sands at the oasis of Jubbe, where a ridge of hard sandstone to south and west shelters a small calcareous depression from the drifting sands, and collects enough rainfall to supply wells. A long march to south of it the sand gives place abruptly to granitic gravel, and the traveller sees before him the high plateau of Jabal Shammar, with the serrated granites of Aja in the foreground.

Two other Europeans had come to Jabal Shammar by other roads before any of those whose course we have already traced, except Wallin and Palgrave. Of this pair one is to be rated first among adventurers in Arabia, by reason of the daring of his feat, the quality of his observation, and the pregnant fidelity of his narrative; but the earlier and less remarkable has left a name worthy of high honour. His journey followed closely on Palgrave's, and was undoubtedly, to some extent, an outcome of it, though the traveller himself seems to have known little or nothing of his predecessor.

What impression in regard to other matters Palgrave made on his imperial patron is uncertain; but, at any rate, his report on the Nejdean horse, fanciful though it was, led to immediate action. In September, 1863, a Levantine Italian, Carlo Guarmani, then or formerly consular agent for the King of Prussia at Jerusalem, and known, since his expedition to Jauf in 1851, to be able and willing to assume disguise in Arab lands, received a summons to Paris. This was followed by a further mandate to Turin; and, in the event he returned to Jerusalem, intrusted with a mission to buy stallions in Nejd for their French and Sardinian majesties.

The envoy set out late in January, 1864, consoled, he says, amid the tears and dismal prognostications of his family, by the glorious hope of inscribing his name on the roll of explorers. Thanks to intimate relations with the Ȧnaze Bedawins, and especially the Roala chief, he was passed quickly through the territories of the Beni Sokhr and Sherarat, and without incident reached Teima on February 11th, by a line of wells sunk on the skirts of the Nafūd to east of the Syrian pilgrim road. As soon as parted from the Bedawins, to whom he was known, Guarmani thought fit to style himself Khalīl Aghā, and pose as a Moslem and Master of the Horse to Fuad Pasha, Governor of Damascus. Unwelcome though a Turk might be in Nejd, the Italian held (probably on Palgrave's advice) that in this character he would arouse less suspicion than if he avowed himself a European.

Guarmani proved successful in his quest of horses, but not so in avoiding the imputation of a wider and more important commission. Ranging the steppe and the basalt Ḥarrah, south of Teima (which oasis seemed to him more populous and important than to Wallin), he found himself, the first European, in the ancient and famous oasis of Kheibar,[1] so entirely inhabited by blacks as to seem a bit of the Sudan. It was at that time held for the Shammar emir by an Abyssinian governor who received Guarmani well; but the latter made only a short stay, finding no horses, and passed on in the company of two Heteim tribesmen to the Ateiba country. All this part of Arabia, a calcareous steppe, affords good pasture, and is full of Bedawins, against whom at that moment 'Abd-Allah, who, as we shall see, had been Palgrave's foe in Riad, was waging war from his base in conquered Aneiza. To Kasim, in the hopes of reaching southern Nejd, Guarmani now took his way, but was soon in trouble. 'Abd-Allah would have none of the "Turkish spy" in his camp, and sent him, a prisoner, to Aneiza, where, however, the local emir, Zāmil, then a young man, but destined to great fame in Arabia, was not unwilling to help one whom he suspected to be contrary to 'Abd-Allah's interests. Accordingly he sent the "Turk," at his own request, to Jabal Shammar.

[1] I cannot understand why Zehme should doubt this visit to Kheibar (*Arabien seit hundert Jahren*, p. 302). He always treats Guarmani as thoroughly credible, and yet questions this, his express statement that he entered Kheibar on Feb. 29, 1864 (*Il Neged*, p. 58).

During the six weeks that followed, Guarmani did his best work for science. The Emir, Talāl, was gracious to the late prisoner of his suzerain, and cared little were he Turk or no, so he bought horses. The "Agha" had free range of all his territory, went in and out of Hail, even to Teima and back again, and visited the mountain stronghold of "Eked" and nearly all the main oases of the Jabal ere he could depart, with his tale of stallions complete, across the Nafūd, by the route of Wallin and Palgrave. The itineraries, therefore, which form the second part of the book issued for Guarmani by the Franciscans in Jerusalem, and the route maps appended thereto, constituted a most valuable supplement to Wallin's and Palgrave's accounts of Jabal Shammar. For while these explorers saw little but the capital and the townsfolk, Guarmani saw also the villages and the Bedawins. From him we first learn the large westward and southwestward extent of the oases and wells on which the Shammar depend; and in reading his book we realise at once the basis of the power of Hail and its reality. The Italian seems to have found travelling over the wide steppes safer than in his fatherland. He could leave his purchases to graze at a hundred miles distance, with a single attendant, and find them on his return, or send for them to meet him in Hail.

Guarmani does not allude to Palgrave, probably in deference to superior order, but (doubtless unwittingly) he corrects him on many points; for instance, the population of the capital and principal villages, the quality

of the market in Hail, the appearance of Talāl, and the age of his son. The Emir he found to be a short, stout man of forty, brown of skin, black and quick of eye, with a true Semite's nose. The only predecessor whom Guarmani mentions is an unfortunate Persian Jew who, feigning Islam, had come out of Syria shortly before to buy horses for the Shah, but was unmasked and massacred by the mob. The news of his death, spreading to Jerusalem, was supposed to refer to Guarmani's; but it did not disturb the stout "Turk" in Hail.

"In the best of health and appetite I ate my rice and regularly made my rikats to God with my heart, but with my lips to Mahomet in all due reverence; and recalling the Sermon on the Mount of Beatitudes, not to mention the stench of that rotting Israelite corpse, I resolved not to be included among the poor in spirit and pass into Paradise with the fools."

And in the end he got away safe enough: crossed the Nafūd with his string of horses, bade adieu to Talāl in Jauf, and encountered his worst hap when well within the borders of Syria, for he had to run from a *razzia* of Roala in the Wady Sirhan.

The sobriety of his descriptions, and his evident familiarity with all things Arab, inspire the reader with great confidence in Guarmani, and support his evidence against that of others; as, for example, when he testifies that there was no pronounced Wahabism in Jabal Shammar in his day, though a strong natural hostility to materialism. Long a student of Arab

nomads, he shows a knowledge of Bedawin tribes and sub-tribes almost on a par with Doughty's. His frequent passages through northern Nejd gave him a better idea of its orography than either of his predecessors possessed; and, being provided with a good compass, he was able to take the direction of the various ranges with sufficient precision for rough charts to be made afterwards. Indeed Guarmani gives us so many compass-bearings and precise intervals in Jabal Shammar that he can claim the distinction not only of being the first to render scientific cartography of Central Arabia possible, but of having done more for the map-makers than any successor except Huber.

A greater adventurer came to Nejd thirteen years later from the same quarter, and by almost the same route. Charles Montague Doughty, a young Englishman of great parts, wandering in 1875, with Bedawin guides, in the country beyond Jordan, came down to Maan, and there heard much talk of the ancient monuments of Medayin Salih or Hejr, Ptolemy's *Hegra,* some three hundred miles farther on the Pilgrim Road. His imagination was fired by these tales of the rock houses of the Beni Thamud, famous in Moslem fable, desired in vain by the eyes of Burckhardt and Burton, and seen only by Varthema and his early pilgrim followers. Unwilling to forswear his faith, even in pretence, Doughty yet thought to go thus far down the *ḥājj* road without fatal peril, for Hejr, though a holy spot, is not reckoned in the forbidden Hijaz;

Charles Montague Doughty

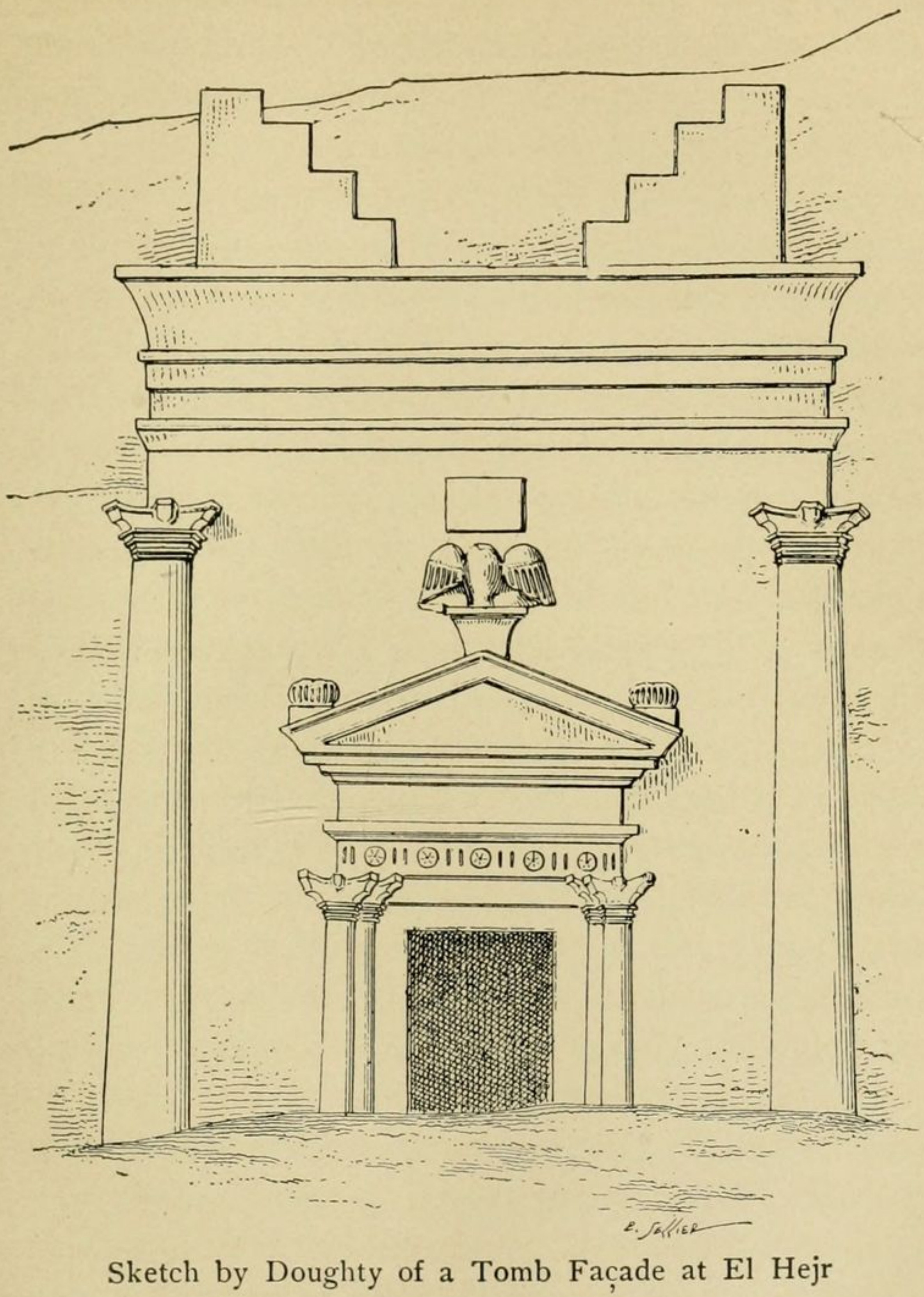
but to try to pass the tribesmen, who beset the Syrian marches, alone and without some support was to court certain failure and probable death. Therefore he returned to Damascus and made interest with his consul and the Ottoman authorities. The first repudiated him, the second discouraged. But, trusting to the friendliness of the Kurdish pasha of the Pilgrim caravan, and the Turk's respect for a western man thrown on his protection, Doughty determined to venture; and, quietly joining himself to the Syrian *ḥājj,* rode covertly to Arabia with the connivance of friends.

The brave old pasha recognised the accomplished fact of Doughty's arrival at Medayin Salih by commending him to the Moorish captain of the local fort, and to the Bedawins, who range the steppes and receive subsidy for the pilgrims' passage; and there Doughty, under the name Khalīl, remained till the pilgrims came again, living the life of the wild crew in the blockhouse, and making excursions, under Bedawin guidance, to the monuments, as far south as the palm oasis of el-Ala, which is accounted the gate of Hijaz. Perhaps those hewn tombs with Nabathæan inscriptions of the early Christian era and façades in the manner of Petra, and the *graffiti* in Nabathæan and Himyaritic scripts proved somewhat below his expectation. But for their great rarity they were worth his risk; and the copies and drawings which he sent from the spot to Renan and De Vogüé in Paris have earned him fame with all Semitic scholars.

Living and roaming thus, Doughty caught the fever of further discovery, and, above all, would push southward to the oasis of Kheibar, an old seat of the Jews, visited (though possibly he did not then know it) by Guarmani. But he could not find guidance over the direct road, and must hope to attain by some circuitous way in Bedawin company. When the *ḥājj* returned, therefore, Doughty let it pass, begging a farewell commendation of the pasha, and some drugs and instructions in their use from his physician, for he was almost without money, and must live henceforward on the scanty earnings of a wandering leech and the hospitality that, to one of his craft, the tent-dwellers rarely deny. Thus slenderly endowed, he committed himself to a Fejir sheikh, and began, an avowed Christian [1] and "Ingleysy," those strange wanderings over Central Arabia which were to last nearly two years, to give him unequalled knowledge of Bedawin society, and to lead to the writing of one of the most extraordinary narratives in the literature of travel.

There is no space here to follow his vagrant tracks. He went to Teima and found inscriptions, — among them (but he did not copy it) the old Aramæan text, since famous as the "Teima Stone;" and it was his report that brought Huber to the spot two years later. After an experience of Ibn Rashīd's far-reaching hand

[1] One who had lived in Mecca, Dr. J. Snouck Hurgronje, when reviewing Doughty's book with enthusiastic admiration in the *Revue de l'Histoire des Religions* (xx. p. 82), took the traveller to task for having always called himself by the name of most contempt, *Nasrany*. He would have fared better, and been not less honest, says Hurgronje, had he avowed himself instead a *Messihi*.



Sketch by Doughty of a Tomb Façade at El Hejr

From *Arabia Deserta*, by kind permission of the Syndics of the Cambridge University Press

he wandered back to the Hejr fort, and out awhile on the black lavas of the Ḥarrah, in the spring of the year, with the Moahib tents, learning the secret sources of Wady Hamd. In the summer he doubled back to Teima, and, passing on to Hail, abode for a season in the Emir's shadow, a not welcome, but a suffered guest. Here at last he found furtherance, such as it was, to Kheibar, and thither came across the steppe and the *ḥarrah* country, despite treacherous guidance of the nomads. Kheibar, then in Ottoman keeping, was to be long his prison; but he found a steady friend to withstand the black governor, and endured till reference had been made to Medina, and word came that he might go in peace; and in the meanwhile he had found in the Kheibar *ḥarrah* the sources of the great Wady er-Rumma. Later on, after a visit to Kasim, he was able to confirm and elucidate Wetzstein's solution of the hydrography of mid-Nejd.

Unwillingly he found himself once more bound for Hail, and unwelcome was he again seen there. The Emir was out in the field, and, at the hands of his deputy, fearful for the public peace, Doughty met the fate that later was to threaten Nolde. He was expelled ignominiously, and suffering much indignity on the Shammar steppes came at last to Bereida in Kasim. Persecuted thence, he found better treatment in the rival town Aneiza; and though sometimes in great peril, and once driven away, he held on for many months by grace of certain enlightened merchant-folk and of Zāmil the famous champion of

the town's independence, till the annual "butter-caravan" set forth for Mecca, and he could journey with it across the Ateiba steppes to the last station before the Holy City. There the end all but came at the hands of a fanatic *sharīf,* eager for the blood and the goods of the sacrilegious stranger, and hardly did Doughty, plundered and beaten, prevail with his tormentors to appeal to the prince in Taif. That humane potentate, mindful of his commerce with India, and of the price that Christian guns had exacted for Christian lives in Jidda once on a time, was better disposed to hang the captors than their captive. He clothed and fed the stranger, exacted restitution of his loss, and even offered furtherance to the southern parts about Wady Bishe. But Doughty, sick and penniless, asked only for convoy to 'Jidda, and was honourably escorted down Wady Fatima to the end of his long wandering in Arabia.

No one has looked so narrowly at the land and the life of Arabia as Doughty, and no one has painted them in literature with a touch so sensitive, so sincere, and so sure. And not only Bedawin life, of whose hardships he suffered the last, wandering as one poorer than the poorest, but also the life of the oasis towns of Nejd. For even of Palgrave, who had a sympathy with town Arabs which he denied to Bedawins, the best one may say is this: that his vivid picture of Hail is only less convincing than Doughty's, and that his account of life in Riad is worthy to be compared with his successor's description of life in Aneiza. Of the

tenting society in steppes and deserts, which is of one character all the world over, and changes as little with the procession of centuries as anything human, Doughty's presentment may well be held final; for not only did he see it whole, and, despite a certain prejudice against all things Semitic, with a sympathy that has never been excelled, but he has described it in language which with all its untimely elaboration has the precision and inevitableness of supreme style. One may wish, for the sake of the appeal that his great book might have made to a wider audience than the few who feel enthusiasm for Arab things and are not over-preoccupied with the strangeness of his stately Elizabethan, that he had condensed his narrative and accepted the literary language of his own day. But at the same time it must be allowed that the archaistic effort, sustained by Doughty's quixotic genius through more than a thousand pages of his "Arabia Deserta," is curiously in keeping not only with the quixotism of this "Nasrany's" adventure in the Lions' Den of Islam, but with the primeval society he set himself to describe.

Right Elizabethan or not, no word of Doughty's best descriptions of the desert and the desert folk can be spared. Each falls inevitable and indispensable to its place as in all great style; and each strikes full and true on every reader who has seen, be it ever so little, the dusty steppe and the black booths of hair. One can do Doughty's pregnant pages no justice by quotation; but, for an example, lest I seem to praise him overmuch without book, let me

offer this to anyone who has had experience of the camel: —

"If after some shower the great drinkless cattle find rain-water lodged in any hollow rocks, I have seen them slow to put down their heavy long necks; so they snuff to it, and bathing but the borders of their flaggy lips, blow them out and shake the head again, as it were with loathing. The nomad camels are strong and frolic in these fat weeks of the spring pasture. Now it is they lay up flesh and grease in their humps for the languor of the desert summer and the long year. Driven home full-bellied at sunset, they come hugely bouncing in before their herdsmen; the householders, going forth from the booths, lure to them as they run lurching by with loud *Wollo-wollo-wollo!* and to stay them, *Woh-ho, woh-ho, woh-ho!* They chide any that strikes a tent cord with *hutch!* The camels are couched every troop beside, about, and the more of them before, the booth of their household; there all night they lie ruckling and chawing their huge cuds till the light of the morrow. The Arabs say that their camels never sleep; the weary brute may stretch down his long neck upon the ground, closing awhile his great liquid eyes, but after a space he will right again the great languid carcase and fall to chawing."

Yet this is no better a picture than a hundred others you may find in that Georgic of the Desert. Therein one sees not so much particular scenes as types; even as, on reading Doughty's personal adventures, one feels him to be less an individual than a type of all his kind undergoing a certain trial of spirit. His book belongs to that rare and supreme class in which

the author speaks not for himself but for all who might find themselves in like case.

Such is the whole array of our witness for the centre of Arabia. All the explorers mentioned have been in Hail, and the central Shammar district of the Twin Mountains, Aja and Selma. Palgrave, the Blunts, and Nolde may be said to have seen that only. The rest have all passed through the western steppes on various tracks; and, again, all but Wallin, the Blunts, and Euting have entered Kasim.

The three hundred miles' breadth of gravelly steppe, varied by strips of sand, which divides Jabal Shammar from the Persian Gulf, has not been traversed by any European; but it is habitually passed by Ibn Rashīd's grooms on their way to Koweit with horses for the Bombay market. These strike outwards from the wells of Shaiba, where the road from South Nejd, taken by Nolde on his return from Muḥammad's war-camp near Bereida, comes in on the right to join the northward pilgrim track to Meshed Ali, which forks on the left. After crossing a hard calcareous tract in a due easterly direction for something less than a hundred and fifty miles, the horse caravans come into the lower course of Wady er-Rumma, and drink from a series of wells in its bed, as far as Koweit. Since Pelly, who followed a line not above a hundred miles southeast of this on his way to Riad, and Wallin, Huber, the Blunts, and Nolde, who took tracks to Meshed Ali not much farther to northwest, all alike

report their passage through featureless and uniform steppe-deserts, such as are normal on the plateau, we may safely dismiss the region east of Hail as being without special geographical interest, except for one fact: it is bisected by the main channel of North Arabian drainage, a chart of whose exact course and gradations would be well worth the making.

Central Jabal Shammar consists of a plateau of intrusive granites, upon which stand up two parallel ridges, running from northeast to southwest. The more northerly, Aja, is the higher and bolder and more extensive. Rising abruptly out of the plain on the twenty-eighth parallel of latitude, its granite crags are hardly interrupted for about one hundred miles, and are continued still further, with a slight deflection towards the true west, by a sandstone swell, which runs under the lavas of the Hejr *ḥarrah*. Being in its granite section some twenty miles broad, this system is the one important ridge in north Central Arabia, and as such was reported to Ptolemy. Its southern fellow is much less noteworthy. Jabal Selma, neither so high nor so broad, dies away into the plateau after a course of less than fifty miles. The broad vale between these two ridges, deriving ground water from the drainage of both, is the best part of Jabal Shammar, a tract of oases interrupted by granitic steppe. The capital, Hail, and the large villages, of which the chief is Kafar, lie under the northern wall; the older capital, Faid, and other lesser villages, face them from below the southern wall. But both in the folds of the hills

and along tneir outward flanks lie other patches of fertility, with isolated settlements. These are specially numerous to southwest and west of the low tail of Jabal Selma, from which start many feeders of the upper course of Wady er-Rumma. Here are Mestajedde and other small pastoral settlements, first visited by Guarmani in search of horseflesh.

As for what lies to north of Jabal Aja and south of the great sands, — a rolling plateau, granitic in the east and calcareous or sandy in the west, — we have had already the descriptions given by Nafūd travellers. Such small palm oases as they passed on their route from Jubbe to Hail reappear at the southern butt of Jabal Aja, near the mouth of a remarkable cleft which affords direct passage through the ridge to Hail. Thus Doughty described it: —

"Riding over a last mile of the plain, with blue and red granite rocks to the steep sides of Ajja, I saw a passage before us in a cleft which opens through the midst of the mountain, eighteen long miles to the plain beyond; this strait is named Ria es-Self. The way at first is steep and rugged; about nine o'clock we went by a cold spring which tumbled from the cliff above. I have not seen another falling water in the waterless Arabia. There we filled our girby, and the Arabs, slipping off their clothing, ran to wash themselves; — the nomads at every opportunity of water will plash like sparrows. Not much further are rude ground walls of an ancient dam, and in a bay of the mountain unhusbanded palms of the Bedawins; there was some tillage in time past. At the highest of the *ria* I found five thousand one hundred feet."

The land, which about Gofeife affords good pasture, shelves away northwestward into "a high and open plain, — three thousand eight hundred feet . . . all strewed with shales, as it were, of iron-stone," and this, with intervals of sand, — tongues put forth from the near Nafūd, — continues all the way to Teima and Hejr. Much the best description of it is Doughty's, who wandered all about the steppes to east and south of Teima with his Fukara hosts; but it has been passed often, since it lies on the direct road from Hail to Teima.

This last-named oasis, sunk in the southwest corner of the Nafūd, and described already by Wallin, has attracted more attention from explorers than would be warranted by its small circuit and its productivity (though Doughty thought this great compared to that of the rest of North Nejd). The lure has been ancient *Tema*. The first considerable oasis in Arabia proper beyond the sands, Teima was evidently of old a more important road station than it now is, and probably was a dividing point of roads from Petra to Gerra in the east and Sheba in the south. Hence many relics of antiquity are found there, and among them certain which, pertaining not to the Arabian civilisation, but to the Syrian of four to five centuries B. C., and likely to throw light on biblical history, have excited singular interest among scholars. The existence of inscriptions there, not only Nabathæan or Himyaritic, but Aramæan, was first established by Doughty, who heard of, but did not see,

a long text, inscribed on one of the stones which had been used to wall up the great *hūdaj*, or well pit, then in collapse. Huber had better fortune on his first visit; and when he returned, in 1883, with Euting, he succeeded in buying the stone and packing it on a camel to Hail, where, after much international jealousy, an emissary from the French consul in Jidda secured it.[1] It is a record of the introduction of a

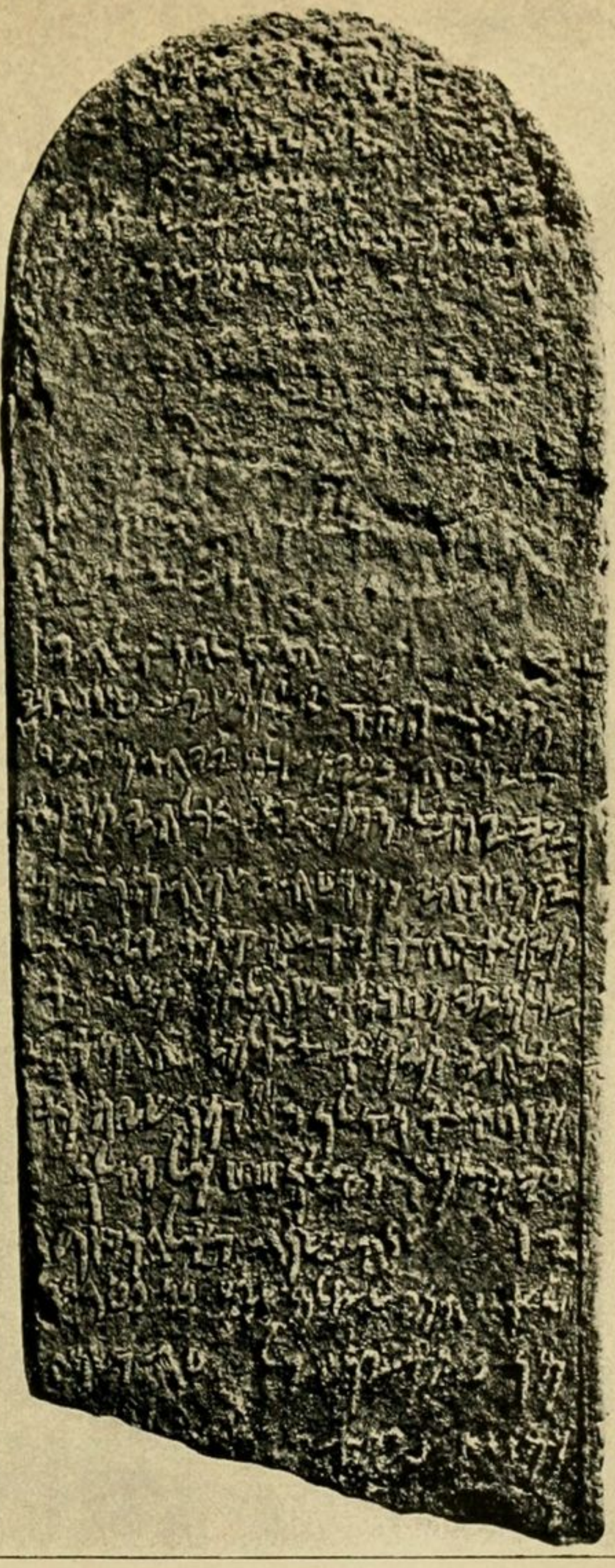
[1] The phrase "international jealousy" requires explanation. The story of the stone after its discovery is strange and obscure, and as it has some bearing on the movements of three explorers, Huber, Euting, and Snouck Hurgronje, it may be briefly told here. Huber first saw the stone in 1879, but was able to decipher only a few lines on its much damaged surface, and it appears that he accepted Euting's company in 1883 expressly that a better copy might be made by one of the first Semitic experts in Europe. The two travellers seem not to have been in very good accord, and their accounts of matters in Hail are singularly discrepant. For example, Huber never mentions Euting in his posthumous diary (as published), and speaks of having ordered everything of his own motion. Euting, on the other hand, mentions his companion frequently, but as a subordinate. Nevertheless they went on to Teima together. The stone was copied by Euting, and impressions were taken by both travellers. It was then found possible to purchase, and in this transaction probably Huber had the larger share, thanks to his greater familiarity with the place and people. The package was sent to Hail, and the pair of travellers went on to el-Ala. There they parted, "*sehr freundlich*," says Euting. The latter soon after was attacked by Jeheina Bedawins, killed two, and fled for his life to el-Wij, whence he reached Jerusalem. Huber returned to Hail, and presently set out for Jidda. Arrived there, by way of Mecca (see p. 192), he sent his "squeezes" home, and then set out against advice to return to Hail. His guides murdered him somewhere near Rabig on July 29, 1884, — it is said for plunder; but he is known to have fallen out before this with the Ateiba tribe, and perhaps he had incurred a blood-feud.

Meanwhile Nöldeke had received in Berlin a letter written by Euting from Jerusalem on June 12, 1884, saying that he had "discovered" on February 17th the stone seen by Huber four years before, and that it was on its way to Germany. He enclosed copy and squeeze, from which Nöldeke promptly made a provisional publication. On July 3d Renan received Huber's squeeze from Jidda, and wrote bitterly that Huber had been "privé du fruit de son travail par suite de circonstances que, pour ma part, je trouve très regrettables." Then came news of Huber's death.

foreign worship into Tema, and shows the new god standing before his priest, who erected the *stela*. After some three others, of which the "Moabite stone" is one, this Teima Stela is reckoned the most valuable of inscribed Semitic monuments.

The other considerable western oasis lies three days' journey to southward. It is divided from Teima by a sandy tract and a broad elevated patch of corrugated lavas, which forms a summit of the plateau, and a parting ground of waters that run from one flank to the Red Sea, from another to the Persian Gulf. It contains, in fact, the heads of both the great northern wadys, Hamd and Rumma. In the westward valleys, which are sunk, says Doughty, "like a palm-leaf," in the mass of the Ḥarrah, nestle the teeming ill-drained plantations of Kheibar, Varthema's "Mountain of the

The stone and many effects of both travellers had remained in Hail, in the custody of the Emir, who sent a messenger to Mecca and Jidda to learn to whom he should deliver them. Shortly afterwards Snouck Hurgronje landed in Jidda, and found that Euting's claim to the stone was being disputed by the French. He warned him thereof as an old friend, but says he took no further part in the matter, except to supply to a small extent the needs of the emissary whom Lostalot, the French vice-consul, finally sent to Hail. Lostalot, however, reported that Hurgronje was in league with Berlin and had suborned his envoy; and he ended by delating the Dutchman to the Ottoman authorities and procuring his expulsion from Mecca. The stone was loyally delivered with all other effects by the Emir. It is now in the Louvre, and rightfully, since the enterprise and trouble expended in recovering it constitute the only valid title to its possession. But when one recalls Huber's subordinate relation to Euting in matters of archæology, one must doubt whether the original purchase was not really made at Teima for Berlin rather than Paris. (See Nöldeke, *Altaramäische Inschriften aus Teima* in *Sitz. d. K. Pr. Akad.*, 1884, p. 83; Berger, *L'Arabie avant Mahomet, extr. du Bull. hebd. de l'Ass. Scient.*, No. 271, p. 22; Hurgronje, in *Münch. Allg. Zeitung*, Nov. 16, 1885; Lostalot's Report in the *Temps*, July 5, 1885, as well as Euting's in *Verh. d. Ges. f. Erdkunde*, Berlin, xiv. p. 140, and *Globus*, 46, p. 107; Huber's *Journal*.)



The Teima Stone

Face and one side

Jews." Owing to a certain sourness of the soil this oasis seems to be less productive than Teima, in spite of surface waters, which form small tarns, rare sight in Arabia; and, almost surrounded as it is by sharp lavas, it is avoided by the main caravan tracks. Moreover, the proximity of the powerful and dangerous Harb Bedawins, who range all the calcareous steppe to east and south, renders it particularly insecure, and completes that tale of disadvantages, which may account for its lack of ancient monuments and its abandonment of old to Jews, and to a half-bred negro population at the present day. The Ottoman government, which took possession of the place in 1874, and the Emir of Hail dispute not very keenly its small revenues. Doughty remained there many months in semi-captivity, and Huber came to the place in 1880. Both claim to have discovered the hydrographic importance of its watershed, but Doughty's priority, secured by communications to "Globus," in 1879,[1] is surely incontestable.

The latter's account of Kheibar is, of course, by far the most full, but the shorter description by its first European visitor, Guarmani, is worth quoting:—

"Keibar is a village of two thousand five hundred souls, scattered like Teime in an immense palm plantation, and divided into seven quarters, each of which occupies one of the seven valleys of Jebel-Harre, which here gives birth to many springs of purest water. The valleys are commanded from the high rock which is marked

[1] *Globus*, xxxix. p. 25; xl. p. 38.

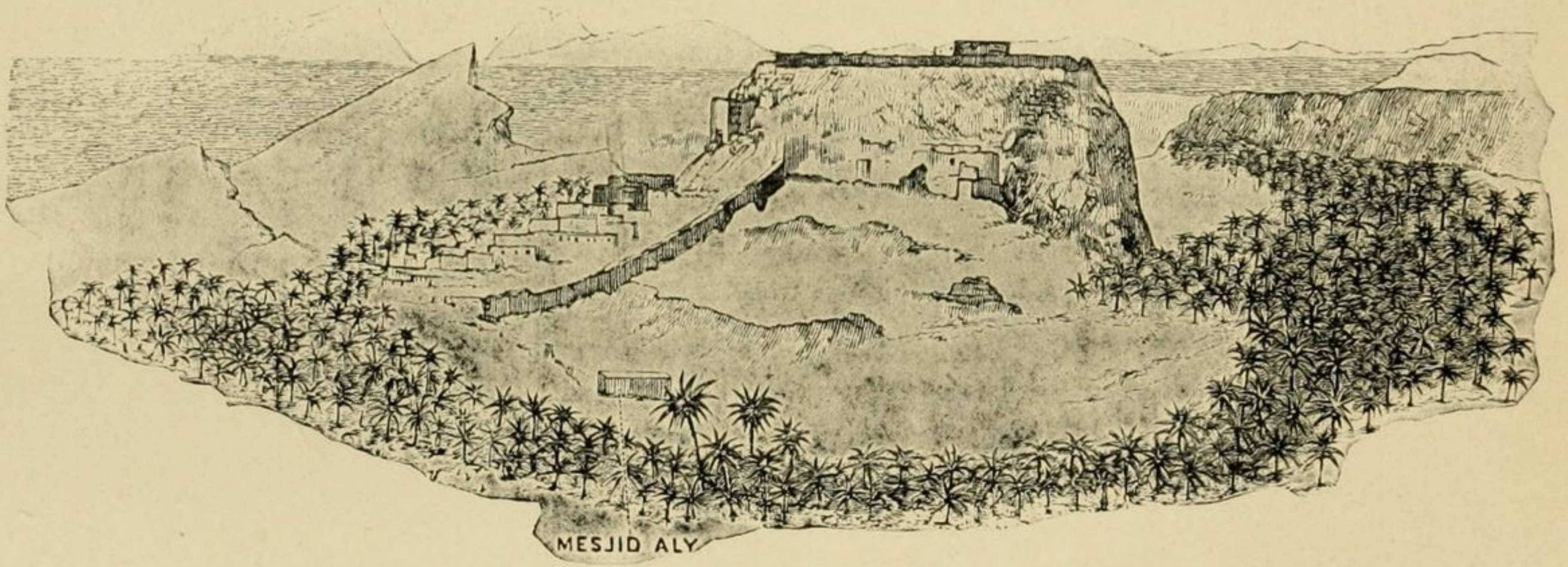
by the ruins of a very ancient fort, called *Kaser el-Jeudi.* Its population is composed of Moors and Abyssinians, descendants of slaves of the Uld-Suleiman and the Aleidan, who remained there when their masters some centuries ago, decimated by smallpox, and believing the water the cause, abandoned the village, but not all their proprietary rights."

He adds that the story of there having still been Jews in Kheibar in the eighteenth century is utterly without foundation.

Of the great Ḥarrah tract which lies to east of Kheibar Doughty has given an impressive picture, which reveals much of its nature: —

"We were engaged in the horrid lava beds, and were very oftentimes at fault among sharp shelves, or finding before us precipitous places. The volcanic field is a stony flood which has stiffened; long rolling heads, like horse manes, of those slaggy waves ride and override the rest, and as they are risen they stand petrified, many being sharply split lengthwise, and the hollow laps are partly fallen down in vast shells and in ruinous heaps as of massy masonry. The lava is not seldom wreathed as it were bunches of cords; the crests are seen also of sharp glassy lavas. . . . As we rode further I saw certain golden-red crags standing above the black horror; they were sandstone spires touched by the scattered beams of the morning sun."

Between this and Jabal Shammar proper lies a dusty steppe like all such in Arabia, varied by a few waterholes which are used from time to time by the roaming Harb tribesmen, and by shallow wadys running to



Doughty's Sketch of Kheibar (1877)

From *Arabia Deserta*, by kind permission of the Syndics of the Cambridge University Press

the Rumma bed. As the butt of Selma is neared, the settlements become of more permanent character and coalesce now and again into small villages held by the Shammar. There is little that is instructive about either these, or those which lie in the southern part of the "Belly" between the twin ridges. Thus speaks Guarmani, who saw as much of them as any European: —

"All these localities are vast palm plantations in the plain which the sand has formed among the mountains; they are surrounded by walls of earth, kneaded and dried in the sun, and they are flanked by towers. The houses do not differ in any way from those at Teima, except by the greater size of some among them. The products of the soil are the same. There is not any industry worthy to be so called; the women weave ordinary cloth (Abah), or striped cloaks and certain coarse carpets."

Hail lies almost at the northern mouth of the intramontane plain, commanding both the exit towards the Euphratean country and a cross-road which comes from the Nafūd through a depression in Jabal Aja, and continues southward by way of Faid to Kasim, crossing the low northern end of Jabal Selma. A wady bed, starting in the southeastern crags of Aja, makes a long riband of intermittent greenness upon which the straggling town sits astride. Hail has grown within the past half-century from the estate of an oasis village, and is still clearly distinguished into an old somewhat mean quarter, and a newer *burg* built

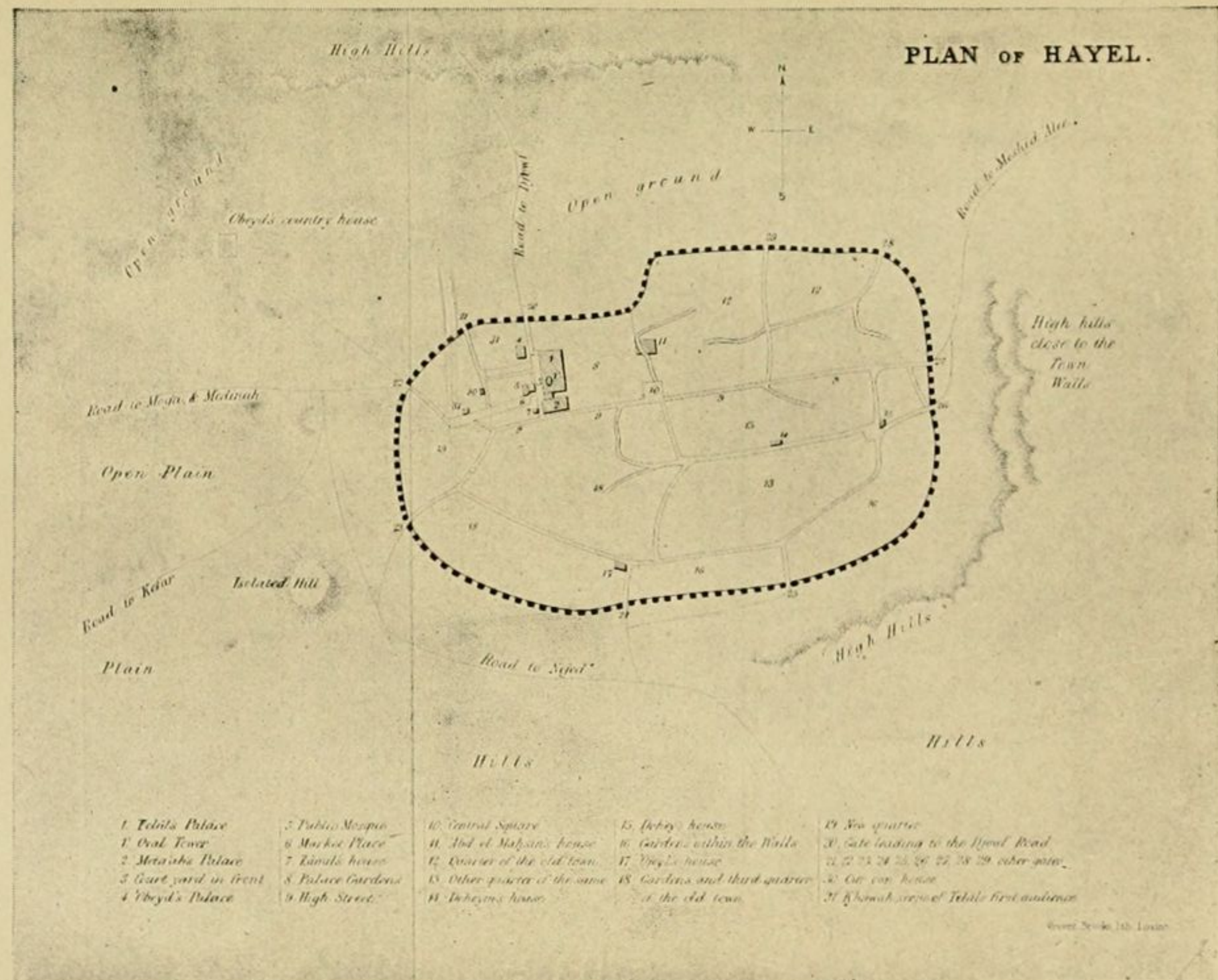
about the seat of the ruling family. This castle had been greatly enlarged between Wallin's visit and that of the two "Syrian" doctors, whom we left long ago seated before the emir's palace; and its mighty walls and towers have evoked superlatives from others than Palgrave. The newness and cleanness of Hail, and a certain liberal air of civilised commerce in its streets, have been remarked by all.

Describing social life in its private houses, its streets, and its court, Palgrave was at his best. This he went out to see; and urban society it was that really interested him. Speaking of Wellsted and Wallin, he says in his preface:—

"The researches of these gentlemen having been mainly topographical, they naturally paid but a subordinate attention to the circumstances of the inhabitants; and this blank in their narratives is precisely what I now desire to fill up."

To depict some imaginary day in that August of 1862, Palgrave could trust his memory; and he gives a typical impression of events, manners, and converse, wherein his minute sympathy with Oriental town life, and his command of colloquial Arabic, have enabled him to share as perhaps no other Arabian traveller has shared. Here is his picture outside the gates of Hail at dawn:—

"Behind us lies the Capital. Telal's palace, with its huge oval keep, houses, gardens, walls, and towers all coming out black against the ruddy bars of eastern



Palgrave's Plan of Hail (1862)

light, and behind, a huge pyramidical peak almost overhanging the town. . . . In the plain itself we can just distinguish by the doubtful twilight several blackish patches irregularly scattered over its face or seen as though leaning upward against its craggy verge; these are the gardens and country houses. . . . One solitary traveller on his camel, a troop of jackals sneaking off to their rocky caverns, a few dingy tents of Shomer Bedawins, — such are the last details of the landscape. Far away over the southern hills beams the glory of Canopus, and announces a new Arab year. The Pole star to the north lies low over the mountain tops. . . . Before the highest crags of Shomer are gilt with the first rays, or the long giant shadows of the easterly chain have crossed the level, we see groups of peasants who, driving their fruit and vegetable laden asses before them, issue like little bands of ants from the mountain gorges around, horsemen from the town ride out to the gardens, and a long line of camels on the westerly Medinah road winds up towards Hayel."

Nolde, the last European who has seen the town, found it little changed by thirty years. If we accept for the sixties Guarmani's estimate of its population rather than Palgrave's, the numbers had increased, in 1893, by one-third, the addition being doubtless rather to the mixed townsman and negro classes than to the pure Bedawin element. And probably the four schools which Nolde visited marked an advance in humanity. The Emir, still that same Muḥammad who had received Doughty, the Blunts, Huber, and Euting, but now grown greater and better assured, showed himself less chary of favour to an avowed Christian from Europe.

In the past winter of 1892 he had crushed the last resistance of the south country, headed by the famous Zāmil of Aneiza, now above sixty years old. More than fifty thousand men met in the final contest, but the chivalry of Shammar and Harb overbore the southern oasis folk, and established Hail unquestioned mistress of Nejd so long as Muḥammad should live. He died in his bed in 1897, leaving a great heritage to his nephew, who now reigns, but has had to beware once and again of the house of Sa'ūd in Riad, which still maintains the doubtful contest for supremacy in Central Arabia.

Beyond Jabal Selma the traveller must cross a bare, calcareous, plain country, which, as it begins to shelve towards the Rumma basin, takes on a sparse fertility, and the name Kasim al-A'lā or Upper Kasim. It contains very few settlements, and those not above the rank of watering-places, where Ibn Rashīd may tax his nomad subjects. Further south the plateau becomes sandy, and a little Nafūd is seen to the right. It is part of the tongue sent up the Rumma valley from the eastern desert belt. The land now falls a step, from whose brink Palgrave saw southern Kasim spread before him, "studded with towns and villages, towers and groves, all steeped in the dazzling noon, and announcing everywhere life, opulence, and activity."

Perhaps Palgrave's retrospective imagination glorified the scene, as it certainly magnified the Kasim towns to twice their true size; but this sandy basin in the heart of Nejd is really favoured in several

respects, thanks to one and the same agency, the Wady er-Rumma, to whose midmost course we are come at last.

It has been stated how the course of this great wady, obscurely known to Moslem geographers, came to be so far forgotten in modern times that Wallin, and after him Palgrave, reversed the main slope of Arabia, fancying the peninsula of greatest altitude in the northeast. Though Palgrave crossed the broad bed of Rumma itself at Bereida, he seems to have noticed it no more than Sadlier, who ascended it to Henakie, or Guarmani, who descended it to Aneiza. But he had hardly published his book ere J. G. Wetzstein communicated to the Prussian Geographical Society the result of certain inquiries into Arabian hydrography made by him at Damascus in 1861. His chief informant was one Sheikh Ḥāmid, a Shammar tribesman of Rass in Kasim, then commanding Ottoman irregulars at Maan. Wetzstein saw the man for a few hours only, and could do no more than take notes and submit a hasty sketch-map. The result, despite a serious confusion, was edifying.

He gathered that there was a great wady in the northern Hijaz, which collected all the Ḥarrah waters and carried them eastward. It was called Wady Hamd, and had its source in the Radwa mountain. After passing Medina, it turned northward to Henakie, on the edge of the Kheibar Ḥarrah, which Ḥāmid described as the volcanic northern part of the granite chain Aban. The wady now turned eastward

again, under the name Rumem, and passed Rass to Aneiza. Thereafter it was known as Batn (=Belly), and continued to Zulfa, whence it held a straight course northwestward, till at Suk es-Shiuk it debouched in the valley of Euphrates.

This was very like the account of Wady er-Rumma, given by Yākūt, to the citation of which by Wallin we have already alluded; but it was hardly less obscure; for the sheikh confounded the two main and contrary channels of North Arabian drainage in one. Wady Hamd is, as we have seen, a fact, then for the first time heard of; but it flows from, not to, the Kheibar Ḥarrah and Medina, and carries the waters of the eastern Hijaz and the Ḥarrahs to the Red Sea. Wady Rumma is also a fact, but it is distinct from Wady Hamd, rises on the other flank of the Kheibar Ḥarrah, and has thereafter more or less the course which Sheikh Ḥāmid described. In its upper part it is known as the Wady en-Nejd, and under that name was mentioned by Wallin.

To palliate the strange error of the sheikh in making one wady of two contrary ones, and to explain the blindness of Sadlier, Guarmani, and Palgrave to a main artery which they crossed or followed, one must recall the fact that great wadys in Arabia are rather *fiumuras* than streams. They usually have no running water to indicate their hardly perceptible slope; and they become in the intervals of freshets so choked with sand in many places as to be indistinguishable from the flanking deserts. The Wady

er-Rumma seems to be least evident where it has been most often seen, namely, in mid-Kasim. Its shallow, indefinite depression, filled with the gardens of Aneiza and Bereida, might well not strike a stranger as a wady at all, still less as part of a main valley some thousand miles in length.

Wetzstein was conscious that his informant's scheme of hydrography was not without its difficulties, if only for the reason that it displaced the watershed of Hijaz; but he put forward the sheikh's description of Wady er-Rumma as restoring to geography a fact too long ignored. To convince geographers in general, however, the witness of other eyes than native was needed; and it was not till fifteen years later, when Doughty and Huber had vouched for its continuity from Kheibar even to Euphrates, that Wady er-Rumma (or according to Huber, *Ermek*) [1] was accepted by men of science as the main artery of North Arabian drainage, and by men of imagination as one of the four rivers of Paradise.

This great channel begins in reality on the south slope of the Kheibar *ḥarrah,* above Henakie, at a height of some six thousand feet, and thence takes its course due eastward through a sandy steppe to Rass, near which point some disposition of the superficial strata brings its water near to the surface. A little farther on it receives on the right a large affluent which comes down from the Ateiba steppe, and

[1] Ermek is merely the Turkish for "river." Huber must have heard this name in the mouth of some member of the Ottoman garrison in Kheibar.

just before Aneiza a second, up whose course lies the direct route to Mecca. Here its bed is some two miles broad. Aneiza lies on the right of it and Bereida on the left, at a point (close to the forty-fourth degree of longitude) where the sandy tract, through which it has come, narrows to a neck, and there is a firm isthmus linking the limestone steppes north and south. A short distance beyond Bereida the wady enters the eastern sand-belt of Nejd, and all cultivation along its course seems to cease. But no one has followed it henceforward as it slopes down to the Gulf at Koweit, or the Euphrates near Basra, at whichever point be the main outfall. The whole length of this "dry waterway of all North Arabia" measures not less than one thousand miles.

Lower Kasim, with twoscore settlements, is its creation. The great wady comes down in flood hardly once in a man's lifetime. Doughty heard of the last great freshet as being forty years bygone; it made all the Kasim wells brim over for a twelve-month, and a broad mere, formed by a chance dam of sand, remained two years to attract strange fowl, never before seen in Kasim. But beneath its bed, "at the depth of a camel stick," is abundant water everywhere and all the year through, with which the farmers of Rass, Aneiza, and Bereida may irrigate their great palm-groves and wheat-fields. Nor is this all that the wady does for Kasim; for it supplies those journeying across Arabia from the Euphratean country with a direct natural road, smooth and well

watered, whereon Kasim lies just midway to Mecca, and somewhat nearer to Medina. Therefore not only is there a large farming population in Kasim of a sturdy sort, well nourished and rooted to the soil, but an unusually enterprising, well-informed, and wealthy merchant class. The Bessams, for example, who helped to protect Doughty in Aneiza, had a great house at Jidda, and much commerce with India; and in such *divans* as theirs, Palmerston, Bismarck, and Disraeli were discussed, and cash could be obtained for a cheque. Even the poorer folk of Kasim travel farther afield and show less prejudice than others in Arabia. Among the foreign labourers on the Suez Canal the Kasimlis were in a conspicuous majority; and they habitually act as carriers for the Syrian as well as the Persian pilgrims. All are of independent spirit at home, and their greater towns have maintained continual warfare in the effort to avoid the dominion of the Emirs to south and north. Rass nearly wrecked the hopes of Ibrahim Pasha at the outset of his invasion of Nejd. The more populous Aneiza held out longest against both Riad and Hail; its Zāmil was the head and front of the last bond against Muḥammad ibn Rashīd; and it seemed to Doughty the best example of a free native community in Arabia, self-governed under an elective chief.

In the latter's day, as in Sadlier's, Aneiza was much the larger town, having at least fifteen thousand inhabitants; but Bereida, which has played a

more astute but less honourable part in the struggles of the Emirs, seems now to be regarded as the principal place in Kasim, having purchased by compliance an immunity from that devastation, which no doubt was inflicted by Emir Muḥammad on Aneiza after its defeat in 1892. Neither town has much that is distinctive. Palgrave described a great tower in Bereida, and a ring of bastioned walls; but the palace of the local emir seemed to him small and mean, and the houses ruinous. The smart and clean aspect of Hail was lacking here. Doughty was suffered to remain too short a time in Bereida for him to correct or add to Palgrave; but he had ample leisure to study Aneiza, which his predecessor had not seen; and there is no better account of the daily town life of Arabs, rich and poor, as a stranger might see it, than his.

BIBLIOGRAPHY

C. Guarmani, *Il Neged settentrionale : Itinerario da Gerusalemme a Aneizeh nel Cassim* (Jerusalem, 1866). *Cf.* G. Rosen's article in *Zeitschrift für allg. Erdkunde*, Neue Folge, xviii. p. 201.

C. M. Doughty, *Travels in Arabia Deserta*, 2 vols. (Cambridge, 1888). *Cf. Proceedings of R. G. S.*, 1879, p. 454; 1884, p. 382; and *Globus*, vols. xxxix., xl., xli.

C. Huber, Letter dated Dec. 6, 1880, in *B. S. G.*, 1881, p. 269, and articles, etc., cited for the preceding chapter.

J. G. Wetzstein, *Nordarabien und die syrische Wuste nach den Angaben der Eingebornen*, in *Zeitschrift für allg. Erdkunde*, xviii. pp. 408–498.

For the "Teima Stone," see *Corpus Inscriptionum Semiticarum*, Part II., tom. i., No. 113.

CHAPTER XIII

THE CENTRAL SOUTH

SCANT as is the testimony of European eye-witnesses for the north of Nejd, it is scantier for the south. Doughty and Huber both turned homewards from Kasim, making for Jidda by the great Mecca track. This runs through high plains, rising insensibly for three hundred miles, till the plateau brink is reached between two lava patches on the forty-first parallel of latitude. On this long and dusty slope, covered with black pebbles in its western part, there are no permanent settlements, but much desert vegetation and wells at the wide intervals, which suit Bedawins. It seems to be the largest purely pastoral tract in Arabia,[1] adapted to the support of two of the greatest of her wandering tribes, the Harb and the Ateiba.

Palgrave and Nolde alone have marched on from Kasim into the south centre of the peninsula, and the last but a very little way. The German adventurer was conducted from Bereida for some stages due south, through the sands which fill the Rumma basin, to a point on the indefinite frontier of Woshm, west of Shakra. Here at some unnamed wells was pitched

[1] Doughty even speaks of hay growing upon it.

the war-camp wherein Muḥammad had received the final submission of the southern oases after his victory before Aneiza in the early winter of 1892. Nolde tells us nothing of the nature of the district, but we may infer a steppe, like the Ateiba plains to westward. Supplies had to be fetched nightly for the camp by dromedary couriers from Aneiza and Shakra. The Emir kept his guest ten days, and then sent him by a direct path northward to the wells of Shaiba on Zobeide's road, and so to Meshed Ali, in the Euphratean country. Nolde must have recrossed the Rumma between Rass and Aneiza without touching the fertile districts of these towns; for on his seven marches to Shaiba he says that he saw no settlement, and but one group of trees, while water was drawn about every third day.

Henceforward Palgrave becomes our best informant, indeed the only first-hand authority for more than half that part of southern Nejd of which we have any sure knowledge at all; while for the other part his account is so much more full than those of his only predecessors, Reinaud and Sadlier, and his only successor, Pelly, that it forms a text to which their notes are but a commentary. We saw him last in Bereida. He had come thither from Hail in the autumn of 1862 with letters of the Emir Talāl, which would not serve him greatly in the true Wahabi country to south. But the "Syrian" was prepared to take all risks to see Riad and the Central Wahabi power; and this, his audacious passage from Kasim to the Gulf, through

the most fanatic society in Arabia, was to supply him with the most romantic and extraordinary of his experiences, and his main title to an explorer's fame.

In the existing state of war the direct south road, leading by way of Woshm, which had been traversed by Sadlier, was thought too open to the raiders of Aneiza; and the party, largely Persian, to which the "Syrians" joined themselves in Bereida, preferred to bear away eastward to Zulfa, and there strike into the track from Basra to Riad. Thus Palgrave came to journey, as no other European before or since him, through all the length of the mountain provinces of Sedeir and Ared, not following Sadlier's steps or anticipating Pelly's till he reached Ayane.

On the second day after leaving Bereida Palgrave reached the light sands which encircle the calcareous hollow of Central Kasim, and passed them in about a night and a day (one seldom hears from him a precise tale of marching hours). On the far side he found Zulfa commanding a valley which descends from Woshm and carries a natural road from South Nejd to the head of the Persian Gulf; and this, though Palgrave did not know it, is a part of the system of Wady er-Rumma. Beyond Zulfa rise steep cliffs, defining the broad, calcareous plateau of Jabal Tueik, a crescent bent from northwest to southwest, which, with its deep fertile valleys and high pastures, makes great part of habitable southern Nejd. Roughly speaking, the northern half of this

crescent is the province of Sedeir, the southern that of Ared, and in the arc lies Woshm.

Fearful of Woshm on account of its proximity to Aneiza, Palgrave's party went up into Sedeir. The province proved to be a chalky down-land, with thin grass and thinner tree-clumps, and arable marl and sufficient water in the bottoms of a labyrinth of steep-sided valleys. Its streams run but little way above ground before being spent in irrigation or reabsorbed into their calcareous beds; but wells need nowhere be sunk above twelve or fifteen feet to tap a copious supply. Village succeeds to village in these vales, where Palgrave found civility, hospitality, and settled order, the roads free of landlopers, and everywhere a healthy, industrious population of farmers, graziers, and gardeners living in the fear of Fayṣal. To two of their settlements, Mejma, the old residence of the independent Emirs of Sedeir, and Tueim, he assigned town rank, and as many as fifteen thousand souls apiece. The plateau rises in general elevation towards the south, and its summit is well clad with herbage, and abounding in game.

At last the head of a southward-trending valley was reached, deeper and more continuous than the rest, and descending it the party reached the frontier of Ared at Horeimle. This great valley, winding by Sedus and Ayane to the ruins of Deraiye and the existing capital, Riad,[1] is the heart of South Nejd and

[1] Palgrave states that Deraiye and Riad are in different valleys which bifurcate below Ayane; but Pelly does not bear this out.

the scene of its rivalries. Known in mid-course, where the drainage has cleft a deep ravine, as Wady Hanifa, it has not been explored beyond Manfuha. But whether it falls thereafter into a real "Wady Aftan" coming from southwest, or no, it is certainly largely responsible for the early tradition of the eastward-flowing stream of that name. Cutting across a spur of the plateau, Palgrave struck the valley again at Ayane, and found it "a good league in breadth, full of trees and brushwood." The great gardens of Deraiye presently clothe it from cliff to cliff, and Palgrave thought the ruined town must once have held not less than forty thousand inhabitants. Hither some mysterious European was reported to have penetrated a short while before, to meet the death of a spy. A few hours more and Riad was in sight.

"Before us stretched a wide open valley, and in its foreground, immediately below the pebbly slope on whose summit we stood, lay the capital, large and square, crowned by high towers and strong walls of defence, a mass of roofs and terraces, where overtopping all frowned the huge but irregular pile of Feysul's royal castle, and hard by it rose the scarce less conspicuous palace, built and inhabited by his eldest son, 'Abd Allah. . . . All around for full three miles over the surrounding plain, but more especially to west and south, waved a sea of palm-trees above green fields and well-watered gardens. . . . On the opposite side southwards the valley opened out into the great and even more fertile plains of Yemamah, thickly dotted with groves and villages, among which the large town of Manfoohah, hardly inferior in size to Riad itself, might be clearly

distinguished. Farther in the background ranged the blue hills, the ragged Sierra of Yemamah."

Palgrave sojourned in Riad fifty days, inclusive of time occupied on a short excursion across the low western hillocks to Kharfa, the chief town of Aflaj; and more conscious of responsibility to science in so inaccessible a spot than elsewhere, he has made shift to describe the physical and social features, and the fauna and flora of the district, as well as the religious customs of the town, its social observances, the types, speech, diseases, and other facts concerning the people of Ared. The accuracy of his general topography was borne out by the report of his successor, Pelly, who, moreover, spoke expressly to the justice of his historical account and his characterisation of the leading Wahabis. The faithfulness of his social sketches we may safely assume; for Riad was his ultimate goal and main preoccupation in Arabia, and his recollection thereof was not obscured by that of other districts of equal importance till he found himself in a position to commit it to writing.

Not that even in this section of his narrative Palgrave can be said to have taken up a position of scientific impartiality. We must reckon seriously with the prejudices and predilections of the man, the more seriously indeed because the occasion was favourable to their influence. Palgrave found himself describing the home of Wahabism, the enemy of his mission, and a personal situation which lent itself

to dramatic treatment. He would disarm incredulity at the outset: —

"I am quite aware that the events, the characters, the scenes which I must now set before [my readers] are in their telling subject to a double inconvenience: the first that of appearing, to some at least, hardly credible; the second that of making myself much more often than is desirable the hero of my own tale. But either inconvenience, however great, must of necessity yield to the truth of facts; so it looked and so it happened; I can only relate and leave comments to others."

This protest did not disarm Burton's criticism; it does not altogether disarm our own. To Palgrave a story was a work of art, not to be spoiled in the telling for lack of a little embroidery. We have no doubt that what happened to him in Riad was indeed so more or less. To believe that it was just so, that all parties in the final interview with 'Abd-Allah were strung to so fine a tension, and the escape in fact was so breathless and barely achieved, were perhaps to pay a poor compliment to the romantic chronicler of the adventures of "Hermann Aga." Where we cannot check the dramatic passages in the narrative of one whose subsequent religious and diplomatic vagaries were so significant, we must at least be ready to add a grain of salt.

In regard to Wahabism, Palgrave was not disposed to judge favourably the profession of a society whose Puritanism was essentially uncongenial to his hedonistic temperament, whilst its national spirit augured ill for the success of his mission.

"How stern, yet how childish a tyranny; how fatal a kindling of burnt-out fanaticism; a new well-head to the bitter waters of Islam; how much misdirected zeal; what concentrated though ill-applied courage and perseverance!"

He refused to recognise its spirituality, and insisted solely on the perversions both of creed and conduct, which were manifest in the baser sort of the Wahabi's disciples. He made overmuch of the sterile fatalism resultant on unconditional surrender to a God, between whom and humanity yawned a bridgeless gulf, and of the sanctimonious hypocrisy of sectaries, imbued with the single ambition to distinguish themselves in God's sight. He could not or would not see that fatalism is not of the essence of a system which has prescribed prayer as the first duty of man, and formulated a code of conduct making for justification; and that the gloomy rigidity of Nejdean practice in his day was largely an accident, the outcome of grievous trials which the faithful had latterly undergone by war and pestilence, especially in the cholera visitation of 1852. All spiritual communities begin with an ascetic phase and recur to it in periods of sore temporal distress; and there is more hope of stability, religious and political, for an Arabian society at any rate, in such a zealous temper as Palgrave found in Riad than in the liberal indifferentism of Jabal Shammar. Theocracy, not the pastoral patriarchate, is the durable and dominant form of Semitic government.

The best service which Palgrave rendered to pure geography during his stay in southern Nejd was by his excursion to Aflaj. This province, long known by name, had always been misplaced on maps of Arabia. Its capital, Kharfa, which lies really some eighty miles southwest of Riad, had appeared on Ritter's revised map of 1852, for instance, at more than double that distance, and on the shores of the dubious Lake Salume; and the Wady Dauasir, to southwest of it, had been "telescoped" into Nejran. This whole group of provinces, in short, was pushed too far to south by more than two degrees. Palgrave, who went as far as Kharfa in two days' march on fast camels, found Aflaj begin directly the low, sandy hillocks bounding the Riad plain on the southwest were passed. The chief settlement, whose population he estimated at eight thousand, was not near a lake, nor did he hear anything of the "Bahr Salume." The slope of the land, according to his information, was downwards to southwest for a long way, even to within seventy miles of Kalaat Bishe; not upwards, as Jomard's scheme of drainage had demanded. Which view was the sounder we shall inquire later. The Wady Dauasir, he heard, was some two hundred miles in length, a land of thin and rare palm oases, like Aflaj itself, and inhabited by a rude, fanatic folk, carriers on a frequented road to Nejran and Yemen.

How Palgrave and his companion lived in Riad, and how fared with the Emir, his truculent son, the treacherous *wazir*, and the Wahabi townsmen in general;

how the religious authorities became curious and insistent, and the civil arm suspicious of espionage; how Abū Aysa, the good genius of the latter part of the adventure, planned an escape which was happily effected, — these things must be read in the most sensational chapters ever written about Arabian adventure. Clear at last of Riad, the "Syrians" struck at Manfuha into a track which either was that followed by Sadlier, or ran parallel to his at a short interval. It led through the low and hot oases of Yemama, which is divided only by the hotter Harik from the great unknown sands, and thence across a line of heights to a desert belt of which Palgrave gives as lurid a description as of the northern Nafūd. The passage of these narrow barrier sands, though painful, had not presented great difficulties to Reinaud or Sadlier, and would not to Pelly; and one is at a loss to understand how Palgrave came to find so long an interval between water and water when following a track over which a contingent of troops from Hasa was dragging guns to Riad for the siege of Aneiza. He came, nevertheless, to Hofuf, and passed thence to Bahrein and Oman, and so out of Arabia, as we have already told.

The first public communication of Palgrave's experiences was made to the Royal Geographical Society in London on February 22, 1864. The author added to a paper, in which was as much geographical detail as he dared venture upon, a fluent speech on the history, politics, and social life of Nejd, and especially

the nature of Wahabism, subjects which embarrassed him less. His hearers were evidently not so wholly convinced that the chairman, in moving the usual vote, cared to suppress a sly allusion to the "Arabian Nights." Nor did men of science, brought up on the books of Jomard and Ritter, hesitate to call his views on Arabian hydrography in question, particularly in the matter of the eastward drainage by "Wady Aftan." Palgrave, however, had the better of a controversy on this head with G. P. Badger, since he found little difficulty in showing that no wady in southern Nejd could possibly carry waters directly to Hasa, and his opponent was as ignorant as himself of the Wady er-Rumma, which does in fact draw off a part of the Central Arabian drainage to the northeast. The full narrative of the journey appeared in two volumes the following year, making as great a sensation in France and Germany as in Britain; and the Société de Géographie awarded its author a distinction, which the society of his own nationality withheld. Many years later Palgrave had an opportunity of collecting and revising his views about Arabia, when chosen to contribute to the ninth edition of the "Encyclopædia Britannica;" and he touched various points in the periodical articles, of which he was prolific during his subsequent career as a diplomatist. But he never realised the hope, in which he embarked at Maskat, of exploring Arabia again.

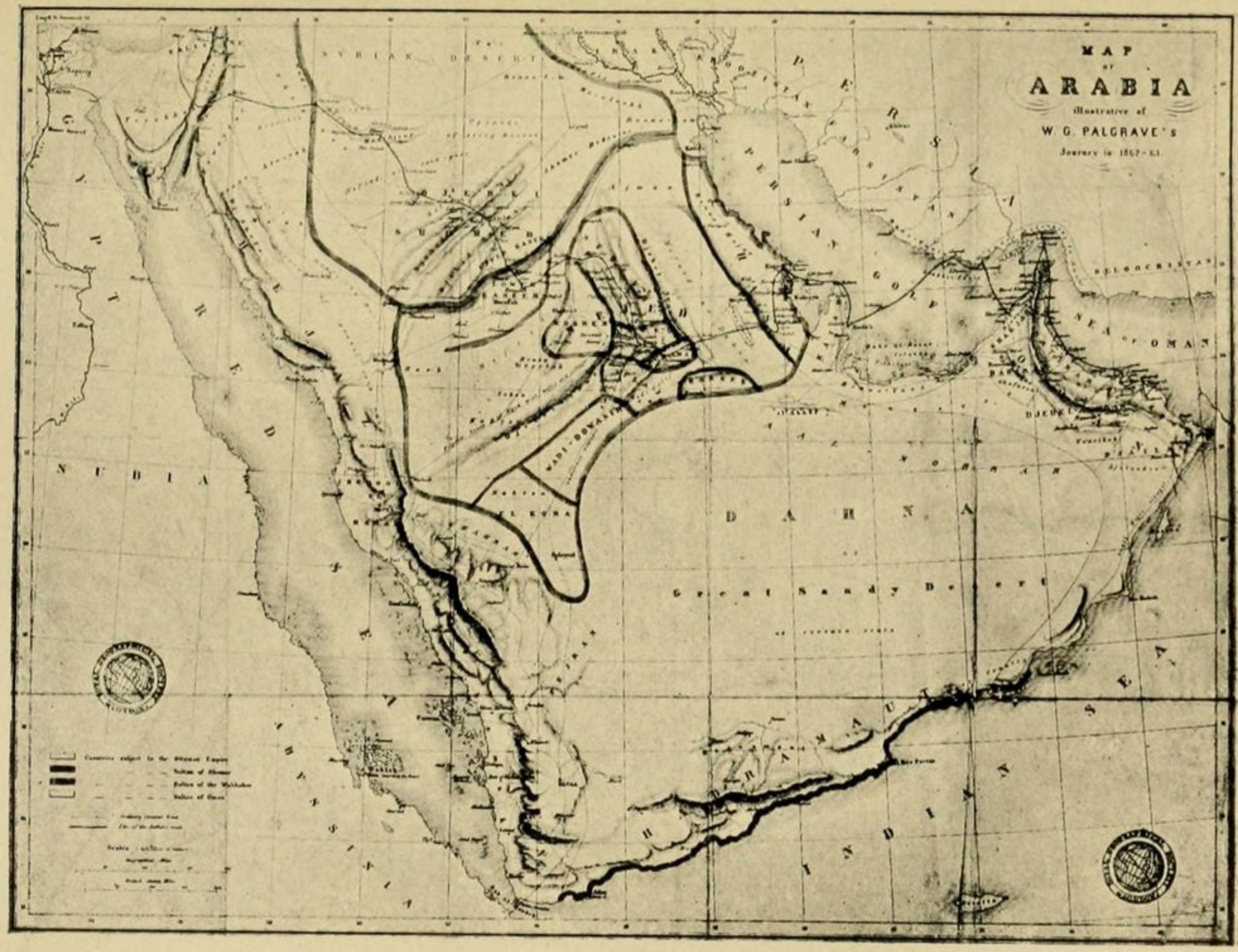
In these volumes on "Central and Eastern Arabia" Palgrave put forth a book which secured him imme-

diate fame and perhaps long immunity from oblivion, but which will not itself attain the immortality of a classic, — that immortality which only supreme literary quality, added perhaps to absolute sincerity, can confer on a record of adventure. The journey which it relates is certainly among the most remarkable ever made in any part of the world. Among Arabian explorers, when all counts are considered, — the area covered, the risk incurred, the success attained, — only Doughty can justly be compared to Palgrave. The range of the author's interests and knowledge, his intellectual capacity, and his extraordinary adaptability to the special conditions of the land he visited, distinguish him from all travellers but the very elect; and the qualities devoted to the composition of his narrative were such as rarely go to the making of a travel book.

But beside Palgrave's high qualities as a narrator, his brilliant generalisation, dramatic interest, sense of style, sympathy, and lightness of touch, he showed equal defects, — vagueness and haste, artificiality, vulgarity, and a fatuous garrulity which is truly Levantine. His "Odyssey" is the antithesis of Doughty's. It is saturated with the man, egotistic from cover to cover, the record of an individual, and no more than an individual. Palgrave presents himself as a type of none but himself. Reading him, one always wonders and sometimes admires; but few can sympathise, and fewer ever be at one, with his view of life.

The other exploration of Nejd which followed immediately on Palgrave's was undertaken in another interest by a very different man. In certain respects it is unique in the history of Arabian exploration. On this occasion only has the official representative of a European power ventured in virtue of his office into the centre of the peninsula without concealment of his nationality, his creed, or the nature of his mission.

Colonel Lewis Pelly, British Resident at Bushire and virtual controller of the Persian Gulf, determined on his own motion in 1864 to go up to Riad and have a personal interview with the Wahabi Emir. It is possible that Palgrave's recent action counted for something in this decision. Pelly, however, speaks only of his desire to clear up geographical problems and smooth over certain difficulties lately created between the Indian and Nejdean governments by the suppression of the pirates of the Gulf and the slave-traders of East Africa. The so-called "Trucial Chiefs" of the Gulf coast, who both robbed the pearl fleet and ran slave-cargoes, were at this time nothing more or less than the Wahabi's creatures; and supported from internal Arabia, they could not be brought so effectually to book by British gunboats as when they had been dependent only on their own resources. Oman indeed had long been detached from them by British pressure; but it was another matter to coerce distant Nejd. The Indian government, therefore, had welcomed, as we have seen, Ibrahim's conquest, and



Palgrave's Map of Arabia (1862)

rejecting an appeal made by the Wahabi Emir, who relied on former friendly relations, encouraged the Egyptians by all means to finish their work upon the Gulf coast.

These hopes, however, were doomed to disappointment, as we have seen in following Sadlier's mission; and since the final withdrawal of the Egyptians the temper of the restored Emirate in Riad towards the British *raj* had naturally not been cordial. As Fayṣal began to feel his feet in Riad in the early fifties, he ventured on angry remonstrance against the wholesale destruction of Wahabi property by British gunboats, and followed it by refusing to have any further relations with the British authorities in the Gulf. But Pelly, lately appointed to Bushire, was not inclined to let matters rest so. He had heard that Fayṣal was a vigorous and able ruler, and Nejd an orderly and concentrated state. There was hope the Emir might be made to understand the British attitude towards piracy and slavery, and in his own interest might withdraw support from the Trucial Chiefs. The British overtures, however, were ill received. Pelly's first letter did but evoke from the Emir reflections on the previous Resident; his second, asking for safe-conduct to Riad, remained unanswered. Nevertheless, he crossed the Gulf to Koweit, sent a third note, and waited some weeks, making excursions and shooting game on the coast with friendly sheikhs. The opportunity was used to gather information which, so far as it concerned geography, Pelly embodied in a letter written from

camp to Sir Henry Rawlinson, and published in the Journal of the Royal Geographical Society. At last came a laconic invitation to Riad, but neither guide nor escort. Pelly was not to be deterred. Selecting Lieutenant Colville and Dr. Dawes of the Indian naval service to be his companions, together with one Lucas, an interpreter, a Portugee cook, and a train of native servants, he struck inland by one of the three or four Riad tracks on February 18, 1865.

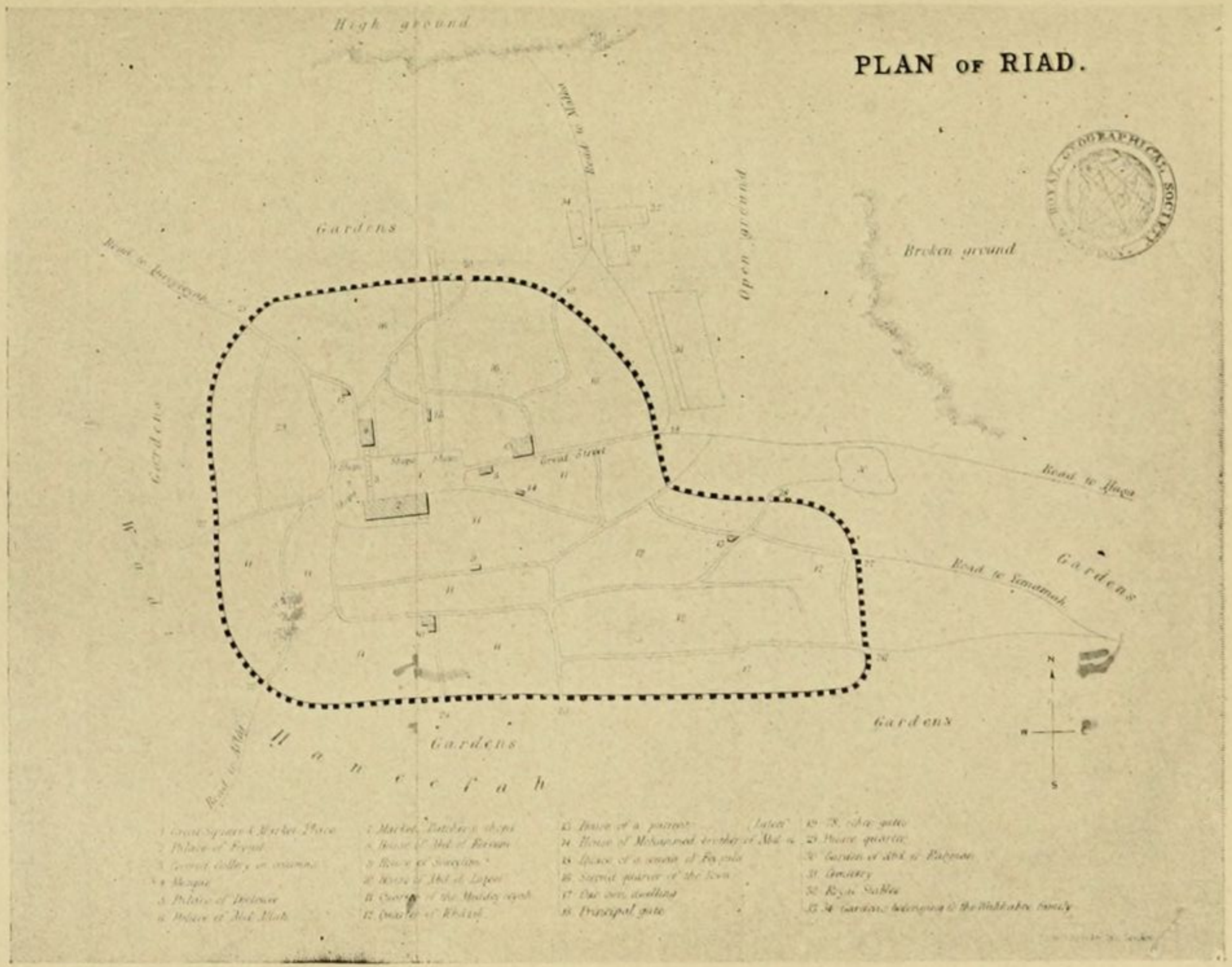
The party was well provided with instruments, but chary of their use, as of all action which might involve not its members only, but their government, in conflict. But with tents pitched to northward for coolness' sake, favourable opportunities for stellar observations were found nightly. To avoid remark on the road all the Europeans assumed the native cloak and head-kerchief, but no other disguise. Being lightly loaded and well mounted, they made unusually fast time, averaging thirty-five miles for each of the twenty-six days which were occupied in marching, with an interval of three days' halt at Riad.

The first ten days' march, as we have said already in a previous chapter, lay through a very lean country, in which water was found only at long intervals, and the camels drank but once. The travellers saw no settlement, and only one tree, either on the plains or the gravelly ridges which run parallel to the Gulf shore, one behind another, and presently give way to others of sandstone. On the seventh day the edge of the desert belt, crossed by Palgrave, was reached at

the hundred wells of Wabra, each bored for some four fathoms into the sandstone. Pelly testifies that this belt differs from what Arabs call *Nafūd*, in that hard soil lies in the troughs of its sand rollers, or *Dahnā*, — a term applied by Wallin to the great billow which he encountered on his way from Hail to Meshed Ali. The track most often followed west of Wabra strikes straight across the sand to Mejma in Sedeir; but Pelly's light caravan ventured to keep on the more direct line, which, after five waterless days, conducted them to the wells of Orma, at the foot of Jabal Tueik. The crown of the plateau was passed next day, and a wide depression found to divide it from a farther crown, which is the chain of the Ared hills proper. In the hollow, called, like most intramontane tracts in Arabia, the "Belly," lies a chain of settlements, continuing those visited by Palgrave on his way south from Mejma. To reach Riad at once Pelly should have kept on his southward course; but he induced his guides to bear away westward across the Ared crest into Wady Hanifa, and thus bring the caravan to Sedus. He had heard of a "written pillar" there, and expected some cuneiform or Himyaritic monument. What he found was an elegant shaft built up of small stones and mud-mortar, with two crosses cut upon it. He was assured it was pre-Mahometan; but more probably it is a relic of some early Mahometan mosque destroyed by Carmathians and forgotten in the long subsequent "pagan" period which preceded the rise of Wahabism in South Nejd.

The same monument was afterwards reported to Doughty as a marvel of antiquity, and by him recorded at hearsay, in ignorance of Pelly's eye-witness. Sedus seemed to the Englishmen a neat town of slow oasis folk, but they marvelled at the great stone revetments built at Ayane to confine the flood waters. Wady Hanifa Pelly characterised as a ravine with scarped walls some three hundred feet in height. From the gardens of Deraiye the caravan bore to the eastward, and, crossing a tongue of the plateau, came on the fifth day of March to Riad, which was seen to lie on a plateau to east of and above Wady Hanifa, and to present a good appearance. Outside the walls the party was bidden to halt and accept lodgment in a summer house of the Emir's. Here it received a temperate welcome from the Wazir Maḥbūḇ, Palgrave's bane, and had to wait Fayṣal's pleasure.

Audience was granted late next day, but only after much hesitation. The moment was less propitious than Pelly knew, for old Fayṣal was on the eve of the final stroke of paralysis, which led to his abdication three months later, and he felt less able than of old to make head against his overbearing son, 'Abd-Allah, and the treacherous Maḥbūḇ. The latter was adverse to any reconciliation between the Emir and the British power. If he was indeed, as Palgrave asserted, an Afghan fugitive from Balkh, who had been in India, he had reason to know how little British influence serves corrupt ministers of native states. What gain might ensue to Nejd from the present negotiation would



Palgrave's Plan of Riad (1862)

accrue to the Emir: the loss to himself and to the slave-owning, slave-raiding Wahabi aristocracy. With a strong party at his back he seems to have urged Fayṣal to send Pelly away unheard, but did not carry his point. In the first interview, the Emir, though courteous enough, rising to greet his visitor despite age and blindness, was severely on his guard and his dignity, — studious to dispel the idea that he would cede territory or permit Christian interference in Nejd. "We abominate your religion," he said, "but we hear yours is an orderly and good government." God, however, had given to him Fayṣal to rule over "this land of Arabia from Koweit to Ras el-Had and beyond," — that is, over all the Gulf coast, — and he assured the envoy he felt himself king thereof, absolute in his dominions.

In the course of the interview, however, the Emir seems to have learned to respect Pelly, as the British envoy frankly states that he, for his part, respected the blind old warrior; and at the second meeting the talk was cordial and friendly, more concerned with agriculture, and means of raising water, and the state of the tribes, and the possibility of making and maintaining a telegraph line through Arabia, than with the higher politics. Fayṣal would have had the Englishman see his horses, and make an excursion to Kharj in Yemama, where his stock was at grass; and he gravely begged him confess Allah and His Prophet, and settle in Nejd. But Maḥbūḥ and his party, having failed to stay the reconciliation, sought now to turn it

to account, urging that a treaty of immunity for slave-trading be extorted; and Pelly, feeling there was growing risk of some untoward incident which would undo his work, resolved to be off. Despite much let and hindrance, he got his camels together, and an old Slayb hunter for guide, and struck camp on the third day. The guide, partly from fear of the Wahabis, partly from tribal instinct for concealing water-holes, led the caravan by an unfrequented and arid track to north of Palgrave's, avoiding the oases of Yemama, and bearing considerably to northward of Hofuf. Its features, in other respects, repeated both those noted by Sadlier and Palgrave, and those remarked by Pelly himself on his outward journey, about two degrees to northward. All main lines of the relief were found to run north and south, and seven distinct ridges had to be crossed in the descent from the crown of the Tueik Plateau to the coast.

The abdication of Fayṣal in the summer of that same year robbed this courageous mission of any immediate result. But it was not without effect; for when 'Abd-Allah found his succession seriously disputed, it was to Bushire that he first applied for support, offering to fall in with British policy in the Gulf if allowed still to exact his tribute from Oman. Pelly, however, had formed too unfavourable an opinion of the man to recommend intervention on his behalf, and encouraged his brother Sa'ūd.[1] Forced to fly to Jabal Shammar, 'Abd-Allah made thence the appli-

[1] *Cf.* Doughty, *A. D.*, ii. p. 342.

cation to Baghdad, which resulted in the occupation of Hasa by Midhat Pasha, in 1871, and the hoisting of the Ottoman flag in eastern Arabia.

A glance at a map on which the routes of the three explorers, Sadlier, Palgrave, and Pelly, are marked, will show how little of the vast central region of Arabia below the twenty-sixth parallel has been seen by Europeans. The sum of all the eye-witness applies to no more than a square tract of about two hundred miles, whether measured from Zulfa to Manfuha, or from the eastern sand-belt to Shakra; and even this has been much less satisfactorily observed than most of northern Nejd. For, except upon the very short reach of Wady Hanifa, between Sedus and Riad, no two of these explorers have covered the same ground or seen the same points; and, moreover, for different reasons, the observations of each and all are subject to considerable discount. Sadlier, as we have seen, dragged at the tail of an army evacuating a bitterly hostile land, was unable to question natives, or to diverge to right or left of a devastated track. Pelly travelled fast, and, withal, saw much less ground in Nejd itself than either of the others. Palgrave had the opportunity to see much, but one cannot trust him too implicitly. Devoid of the ambition or the conscience of a scientific geographer, he was a very unsatisfactory pioneer of routes, who did not record the duration of marches and halts, and noted landmarks but vaguely, being, in fact, indifferent to, if not a little

contemptuous of, such pedestrian detail. "The proper study of mankind is man," he said. It was for him

"to afford some kind of insight into that real and living Arabia so often left a blank in many narratives, no less than its geographical surface in many maps. To determine the positions of mountains, the course of rivers, the gradations of climate, the geological character of rocks, and whatever else relates to physical and inanimate nature, is certainly of high and serious importance,"

he allows, but thinks it perhaps

"an even higher service rendered to science and to Europe if we attempt to draw aside at least a little the veil so thickly cast over human Arabia, its parties and politics, its mind and movement."

One feels it was only for the sake of the Geographical Societies, which he found most curious on the least interesting matters, that he noticed at all the problems of relief and geology.

While, therefore, nine-tenths of the southern half of Central Arabia must be reckoned to the unexplored territories of the peninsula, the remaining tenth cannot be treated by a geographer with the same confidence as Jabal Shammar or Kasim. We are not assured about even the leading facts of its relief or its hydrography. It would appear that the general elevation of the plateau of South Nejd is high relatively to the deep depression of the Rumma basin, but not to the Arabian plateau as a whole. If we are to judge by the direction of such wadys as have been traced, there is a general eastward decline south of Wady er-Rumma, as

there is also north of it; and the basin of Wady Hanifa, the heart of southern Nejd, lies not on the summit of a continental slope, as Palgrave thought, but far down it. The two parallel ridges, which undoubtedly rise to east of this basin, and are named Jabal Ared and Jabal Tueik, are accidents which do not alter the fact of the continental slope. Survivals from an earlier level, composed of a hard limestone, which has better resisted the general denudation, they bar the immediate eastward fall of the Hanifa waters; but these, turned southward, nevertheless, in all probability, find their way to the Persian Gulf ultimately, whether above or under the surface, through the unexplored region below Harik. The white cliffs which Jabal Tueik presents to westward (as noted in the "Jihān Numā") though striking in aspect, appear to be relatively low, — probably not above five hundred feet in height; and if the summit of that ridge be not more than a thousand feet above the bed of Wady Hanifa, as seems probable, there can be no question that Palgrave was wholly wrong in supposing it or its northerly continuation in Sedeir to contain the most elevated land on the Central Arabian plateau. The highest points upon Tueik are probably some thousands of feet below many summits on the western edge of the peninsula, such as the Aueirid and Kheibar *ḥarrahs,* Jabal Kora, between Mecca and Taif, and, of course, the Asir and Yemen highlands.

Of the four provinces into which the small explored square is divided, Sedeir and Ared lie mainly on the

hard limestone ridges which bound South Nejd on the east; Woshm is the northern part of the steppe immediately to westward, sloping towards the ridges; Aflaj, a southern counterpart of Woshm. Nothing can be added to the description of Sedeir, quoted already from Palgrave; but something, by using Pelly's impression, may be deducted from the mountainous character which the former ascribes to it. It seems to be in reality a rolling country with sparse settlements in its hollows, mostly looking west and south. The Ared downs are like to it; and of Woshm we can only say, on Sadlier's authority, that it is evidently mostly steppe, with a central canal of drainage flowing east into Wady Hanifa, on whose mid-course there is a notable strip of fertility, which supports the important settlement of Shakra. Commanding the entrance into Wady Hanifa from the west, this town has a considerable commercial and military importance, and perhaps some ten thousand inhabitants. We should judge the rest of the province to be good rolling pasture-land, supplied with wells, and having several small fertile tracts, especially in the south, where it borders Aflaj, and probably receives independent drainage from the southwest. The most important of these oases is that of Dorama, on an affluent of Hanifa, a place of note in the Egyptian campaigns. For Aflaj we have but Palgrave's account, already summarised. Its name (the plural form of *falj*) so far implies flowing waters and artificial irrigation that one cannot but suppose this level district of oases to

lie rather at the base of a long steppe, sloping *from* westward, than, as Palgrave reported, at the head of a short slope. In that case it will probably lie in the same drainage system as Wady Dauasir, and discharge its waters into the Harik sands, or some continuation of Hanifa.

Wady Hanifa is the main artery both of drainage and communication, the most remarkable natural feature, and the seat of political power in southeastern Nejd. The upper part of its system lies equally in Woshm and Ared; the middle part where all the tributary valleys have run into one deep cañon, is in Ared only; the lowest part of which we have any knowledge disappears into Yemama. What becomes of it thereafter is a problem. Palgrave reported the existence of a great Wady "Soley," in Yemama. This, according to him, has two main channels, one leading up between the Ared and Tueik ridges, the other into Harik. He did not make it clear whether the latter rose or fell on its way to Hauta, but he seems to have believed the Soley system distinct from that of Hanifa. Considering where he placed the wady, this conclusion is strange; and we prefer to believe it connected in some way with the Hanifa system, but reserve the point for discussion later in connection with unknown Arabia.

On the mid-course of Hanifa lies a chain of large settlements, — Horeimle, Sedus, Ayane, Eiman, Deraiye, Riad, Manfuha, — in one or other of which a dominant power has resided since the west has had

any knowledge of Nejd. All are remarkable for their palm gardens planted in the wady; Ayane and Deraiye, in fact, are now little but immense plantations, farmed by the cultivators of Eiman and Riad. The towns themselves are built for the most part at some distance from the main watercourse, so as to be out of reach of the sudden floods for which it is notorious; and certain of them, notably Riad and Manfuha, lie outside the actual ravine altogether, high and dry on the first shelf of the eastern ridge.

In the case of the capital this cannot have always been so, for its name means a green saturated hollow; and it is probable that a new town has grown within the nineteenth century round a castle of the Sa'ūd family, situated high above the gardens. Its size and population have been stated very variously. We may safely halve Palgrave's estimate of forty thousand souls, for Pelly thought it no bigger than Hofuf in Hasa.[1] Probably, like other settlements, it has expanded or contracted with the fluctuations of political power. In the best days of Fayṣal, when a large part of the Persian *ḥājj* was attracted to its walls, Riad was undoubtedly the largest city in Central Arabia. Since the stream of commerce has been diverted, with the political pre-eminence, to Hail, the Wahabi capital is probably become less than the chief places of Kasim.

But under any political conditions the unfailing ground-water of Hanifa insures the existence of pop-

[1] Compare also the discrepancy between Reinaud's and Palgrave's estimates of the population of Deraiye.

ulous settlements in this valley. Those for which we have the description of eye-witnesses appear to contain a society more considerable, better united by natural conditions, and of greater resources than any other in Nejd; and it must not be forgotten that other large settlements of ancient fame, unseen, but reported to be of similar character, such as Kharj in Yemama, and Hauta in Harik, remain to be added. It is neither hard to understand how this fixed population of wealthy farmers, traders, and merchants, thickly sown along a valley above a hundred miles long, came to take an independent religious position, and to exercise so great an influence over the thinly-peopled steppes of the peninsula; nor easy to believe that its present subjection to the Bedawins of Jabal Shammar can be other than a temporary eclipse. Wady Hanifa seems destined to be at least independent of other Arabian districts, if not predominant among them.

BIBLIOGRAPHY

The quoted works of Palgrave, Pelly, and Nolde have been catalogued in the Bibliographies to chapters x. and xi.

CHAPTER XIV

UNKNOWN ARABIA

A LAND, where structural and meteorological conditions are so uniform as in the Arabian peninsula, can keep geographical secrets only in the heart of very immense virgin regions. Where superficial formations are of infinite variety, where the earth's crust has been wrinkled into mighty folds, where abundant moisture produces violent contrasts of contour, hardly penetrable vegetation and great streams, there an explorer may find the scenery, the society, the flora, and the fauna of two worlds on either side of a single mountain chain, and miss a discovery of the first importance by the breadth of a valley. Not so in Arabia. Thousands of square miles of its northern sands have not been seen by a western eye; but since explorers have passed each end of the Nafūd, and across its waist, we are perfectly well assured of the general nature of the vast intervening tracts. The border slopes in Hijaz, Asir, Abu Arish, Hadramaut, Oman, and the Ottoman province of "Nejd" have been traversed on a very few lines by Europeans who were often very ill equipped and circumstanced for geographical observation; but no reasonable geographer any longer

believes these to hide important facts of orography, hydrography, or any other department of his science. These tracts have been seen at intervals near enough, though wide, and by eyes sufficient, though few, for their general character to be established.

I shall not, therefore, include any part of North Arabia among *terræ incognitæ*, nor any part of the littoral. I speak of the unknown in a relative sense. From certain scientific points of view hardly anything in Arabia is known. Not a hundredth part of the peninsula has been mathematically surveyed; the altitude of scarcely a single point, even on the littoral, has been fixed by an exact process, and we depend on little more than guesses for all points in the interior. The only astronomical observations of latitude and longitude, taken anywhere on the plateau except in Yemen, are those made hastily by Pelly at Riad, in 1865. The contours of the chief mountain ranges and the courses of the great interior wadys have in no case been even sketched on the spot; and in regard to the direction, identity, and diversity of the latter features, the possibilities of error, as we have seen, are all the greater for the absence of perennially running waters, which would leave no doubt as to slope and relative elevation.

Nor, again, is it to be denied that many districts, large and small, in North Arabia and the southern borderlands are very imperfectly known. Apart from the vast sands of the northern Nafūd, almost all the western plateau and the upper seaward slopes from

Jabal Shera to the Hashid province of Yemen remain ill explored; and, interrupted as they are by large tracts of eruptive matter, they have variety enough to offer to geographers possible surprises of a minor sort. On the other side of the Nafūd great stretches of unseen steppe roll down for hundreds of miles to the Persian Gulf, about much of whose littoral it is impossible to speak with certainty two miles above the tide-mark. The immense Harb and Ateiba plains, through which run the Medina and Mecca roads from Nejd, the upper part of the Hadramaut, the Mahra and Gara sections of the southern littoral, the coast of the Gulf of Katar, — all these are for descriptive purposes unseen districts.

A careful reader of the foregoing pages, however, who has noted frequent allusions to certain important problems of Arabian hydrography and relief still unsolved, will recall that they are associated not with any of these districts, nor at all with the northern part of the peninsula, but with the south centre. For there alone still lies a virgin tract, obscure enough to give a geographer pause ere he argue of its unknown content from the other parts of the peninsula. Between the innermost points reached by Europeans in their attempts to penetrate it, intervenes a dark space of six hundred and fifty miles' span from north to south, and eight hundred and fifty from west to east. This unseen area covers considerably more than half a million square miles, or not much less than half the whole superficies of Arabia. Such an expanse is vast

enough to hide many secrets of which the geographer has no inkling as yet; it does, in fact, hide certain half-secrets that he suspects but cannot unriddle. Until it be better explored, the problem of the course and destination of all the copious inland drainage of the southwestern part of the peninsula remains insoluble. There may be an important central lake, as Chedufau thought, or there may be more than one, or there may be a southern trans-Arabian channel above or below ground, longer and more important than the Rumma channel in the north. Resultant on such watercourses there may be unknown tracts of fertility and nomad or settled societies of which no rumour has reached us. Or there may be none of these things, but only sand and rock. Until the southern area be better explored, we remain ignorant of the general direction of the main South Arabian slopes, of the relation borne by the southeastern projection of the peninsula to the rest of the continental mass, and of the origin of the northern Hadramaut waters, and the ultimate fate of the southern waters of Nejd. We are aware of great nomad tribes of whom we know little but the names; notably the Kalb, Kahtan and Aal Morrah families on the north of the great unknown tract, and the Awami, Jeneba, Gara, Mahra, and Kathiri on the south. We are aware that there must be wells and oases far beyond the limit of European ken, such as those in Wady Yabrin, famous many centuries ago. We are aware that bodies of pilgrims have in earlier times been in the habit of passing by certain tracks

through parts of this unknown area;[1] and that if merchants do not usually strike straight through its heart on their way from Yemen to Oman, or from Nejd to Hadramaut, they, nevertheless, frequent caravan roads which pass across its corners obliquely. We are aware that there are natural features on the southern fringe of it which seem to indicate continued volcanic activity of a kind not observed elsewhere in the peninsula. But whether this area be in general desert, or only in part so, or fenced within a ring of sands; whether it be elevated or depressed in comparison with other parts of Arabia; whether it contain high mountains or deep valleys, be really impenetrable in large part, or crossed at will by Bedawins, who keep their wells and water-holes to themselves, — these and many other questions cannot be answered now with any better assurance than in the Middle Ages.

The great unseen area must be considered in two divisions, concerning one of which our ignorance is even deeper than concerning the other, probably because it is the less habitable by human society. There is a northern, or rather a northwestern part, which is certainly not wholly desert, but of the nature of steppe relieved by many considerable oases; and there is a larger southern and eastern part, which seems to be mainly, if not wholly, a deep sand waste. The first is a belt about three hundred miles wide, stretching

[1] The "Jihān Numā" adds, however, that lack of water always made the direct Mecca-Oman route unpopular, and Burckhardt heard it had been abandoned before his time in favour of a track along the coast.

across the peninsula from Nejran to Harik of Nejd, and bounded on the north by the Hanifa-Mecca road. The only inroad made upon it by a European traveller was Palgrave's excursion into Aflaj. This province, according to Pelly's information, gathered at Koweit in 1865,[1] is really a part of that great Wady Dauasir, which is reported to lie to southwest of it; it is, in fact, that part of Dauasir which is watered by a system of well-conduits. Palgrave, who found it a tract of rather thin oasis character, reported on hearsay that a desert belt some twenty miles wide divides it from the main Dauasir valley, which itself extends for some two hundred miles in a southwesterly direction to the frontier of Nejran, having a sand desert on the south all the way. It is provided with wells, and has tracts of oasis at short intervals, inhabited by a rude folk, fanatic and secretive, which builds itself palm-leaf huts, and supplies the caravans which fare between Nejd and Yemen;[2] and Doughty, who talked with a Kahtan tribesman in Hail, repeats from his lips: —

"When they yet dwelt in the south country, they drew their provisions of dates from the W. Dauasir; one of them told me the palms there lasted — with no long intermissions — for three thelul journeys;[3] it is a sandy bottom and their waters are wells. Those of the valley, he said, be not bad people, but 'good to the guest.'"

[1] See his letter to Sir H. Rawlinson in *J. R. G. S.*, 1865, p. 178.

[2] This is very much what we find in the "Jihān Numā."

[3] I. e., the long stages made by a high-bred dromedary: three are perhaps equal to one hundred and twenty miles.

The Aflaj villagers, his informant added, were Dauasiries, and the whole journey from Riad to Wady Bishe, that is, to the eastward limit of the Asir country, he reckoned at twelve dromedary marches, — probably correctly, for the actual distance as the crow flies is about four hundred and fifty miles. Doughty further obtained the eight names of Dauasir stations, which are marked at conventional intervals on our latest map.

The only traveller who has come anywhere near Wady Dauasir on the south is Halévy, whose visit to Nejran in 1870 served to confirm the statements of the earlier authorities, that a frequented caravan track leads direct from Yemen to Nejd. He was given to understand that a narrow belt of desert divides Nejran from Wady Dauasir, but that the waters of the former district, which he saw in Wady Habuna, flowing east, are continuous with those of the latter. Chedufau had long before reported that the main drainage from Asir reached Dauasir through Wady Bishe; and if both he and Halévy be right in their surmises, there may well be sufficient concourse of waters at some point in the heart of the peninsula to form the lake, or Bahr Salume, which the Frenchman induced Jomard to figure on his chart. These questions must be left to future explorers. It should be feasible some day to follow the Wady Taraba and Wady Bishe from Asir down the long northeastward slope of the plateau, and even the Wady Dauasir from Nejran. Their courses lead, probably, not through any impracticable sand deserts, but through steppes

of the kind over which runs the Nejdward road from Mecca.

The fortunate explorer will have an orographic as well as a hydrographic problem to solve. Are or are not the limestone ridges of southern Nejd connected with the Asir heights? The latest map still shows, on the authority of the Moslem geographers, a long range running from Taif almost to the Wady Hanifa. Does such a range really exist as a rib of the plateau slope, or is that slope unvaried except by the deep-cut channels of the Asir wadys?

The habitable region of the unknown area is not, however, bounded by the Dauasir-Aflaj line. There is good reason to think that another and inner series of fertile tracts shuts off the great sands, and that exploration of these will be essential to the complete solution of the hydrographic problem. Somewhere to southeast of Dauasir lies what early Moslem geographers knew for an inhabited oasis region and called Wady Yabrin. Abu-l-Fidā says of it that it is a saline palm tract with two springs, situated three days' journey from Yemama and three from Hasa: in connection with these points the "Jihān Numā" also alludes to it. Pelly, in conversation with certain Aal Morrah tribesmen, encountered on his way to Riad in 1865, learned that it was still a resort of theirs. "Jebal Yebreen" he reported to lie in the South Desert, "once a fertile and well-watered district whereon of old times stood a very extensive city. The city is now in ruins," thanks to the choking of the

watercourses; but the oasis still yields an annual crop of dates. This, as we have seen, is substantially what Miles also heard when in northern Oman in 1875; but his informants ascribed the desertion of the oasis to malaria.

The locality assigned to Yabrin by Abu-l-Fidā would not be so far to westward as Stieler's latest cartographer has placed it. It should lie on the tropic, in about longitude 49° 50′, and it is natural to assume that it has some hydrographic connection with the oasis of Harik, to the northeast, and the marshy "sābkhah," due east, which discharges itself into the Gulf at Khor ed-Duan (see p. 234). Harik lies equally in unseen Arabia. Palgrave, whose southward view from Riad was limited by the "Sierra of Yemama," heard of Harik as a hot, rich tract, which, while apparently an integral part of the Hanifa country, extends far to east and south and southeast; it was reported that it encroaches on the desert "till it almost gives a hand to the outskirts of Katar and the limits of Omanite rule." The predominance of Yemama and Kharj, whose kings ruled all the wady-land in the Middle Ages, has passed to Harik and its chief settlement, Hauta, which has often been mentioned in modern days as the equal of any of the Hanifa towns. Both Doughty and Nolde heard it reckoned great as Aneiza, and the latter found its sheikh a man of high dignity in the Emir's camp. According to Pelly, it was the last town to renounce, at the bidding of the Wahabi, the paganism into which Nejd had lapsed.

Palgrave represented the drainage of Harik as carried by a system of wadys distinct from Hanifa; but Miles's informants told him the latter discharged itself ultimately into the "Sābkhah," and so to the Gulf. In that case the Hanifa system and the "Soley" wadys of Palgrave cannot well be distinct, and we prefer to assume that Harik is fed by the same waters as make the fortunes of the other large settlements of South Nejd, and that the "running streams" there and in Yemama, of which Pelly heard that they do not come from Dauasir, are part of the Hanifa system. And these waters undoubtedly originated that story of Wady "Aftan," which bisected Yemama. Wady Yabrin, then, will be a tract occurring either on the farther course of Hanifa, or perhaps on that of an independent line of drainage which comes in from the west. It is, in fact, possibly a continuation of the important system of Wady Dauasir, destined to join the Hanifa waters in the Sābkhah marshes and fall out with them at Khọr ed-Duan.

Whatever their hydrographic connection, there is certainly a chain of points where water may be obtained considerably to south of the Nejdean oases; for a possible if not greatly frequented route does lead directly from Oman to some station high up in Dauasir, whence the traveller may go on due west to Taif and Mecca, or south of west to Nejran and Yemen. Beside the clear statement of Ḥājji Khalfah in the "Jihān Numā," that now and again pilgrims travelled in twenty-one marches over a direct road

from Oman to Mecca, not coincident with either the Nejd or Yemen *ḥājj* routes, we have certain modern records of such passage. Palgrave says he met in Katar two "intelligent Bedouins" who had journeyed in three months straight from Oman to Yemen by a chain of oases mostly uninhabited and containing wild palms, of which a few however were held by black Bedawins. And Miles heard in Bireima of a Nejdean notable, one Sa'ūd ibn Jalaui, who came in 1870 in fifty-six slow marches from Nejran to Abu Thabi on the "Pirate" coast of the Gulf, finding water plentiful enough till the last eleven stages.

To south of Wady Yabrin and the possible oases in line with it west and east begins the second and greater part of the unknown, — that which is figured on all modern maps as an unrelieved desert of sand, and named in general Roba el-Khali, "Abode of Emptiness." The western part of it is often distinguished as *Aḥḳāf,* that is, "Dune Country," under which title Wrede and Halévy heard it spoken of in Hadramaut and Nejran respectively. In the centre and east, on the other hand, it is written *Dahnā,* whether on local authority I know not. The use of that word, according to Pelly, is restricted to a hard desert with intervals of billowy sand-ridge. The whole of this area contains over three hundred thousand square miles. Three explorers claim to have had distant views of its mysterious sands, — Wellsted from the crest of Jabal Akhdar in Oman in 1836, Wrede from a point

north of the main Hadramaut wady in 1843, and Halévy on his passage from the Jauf of Yemen to Nejran in 1870. Their descriptions of their respective prospects have been quoted. All looked out over illimitable sands, and all found their attendant Bedawins shudder at the bare idea of venturing far upon them, whether from reasonable or superstitious fear. Yet of none of these three can it be said with confidence that he looked into the true desert. Wellsted stood at a height and a distance from which details of the features of the plains must have been nearly invisible; and if there were no oases in sight to westward of his particular point of view on Jabal Akhdar, from other parts of the range there are certainly such to be seen extending at least a hundred miles farther inland. Of Wrede it was said by Hirsch that he cannot have reached the true Aḥḳāf, for that lies much farther north than his Bahr aṣ-Ṣafī; while as for Halévy, whose testimony is more likely to be sound, the vagueness of his statement and his lack of information on the destiny of the drainage, which he saw flowing east from Nejran, suggest that he was somewhat easily satisfied with the assertions of guides,[1] only too anxious to deter him from any excursion out of the direct path. At the same time the information gleaned by most other Arabian travellers tallies with that of these three claimants to eyewitness. So great an authority as Doughty states:—

[1] He confines himself to saying of the Aḥḳāf that "l'imagination seule ose sonder les profondeurs mystérieuses."

"I never found any Arabian who had aught to tell, even by hearsay, of that dreadful country. Haply it is Nefud with quicksands, which might be entered into and even passed with milch dromedaries in the spring weeks."

And Euting gathered from certain Kahtani and Dauasir Arabs whom he met in Hail that the South Desert is all uninhabitable. These men had never heard of any one having crossed it in any direction. Finally Van den Berg's emphatic statement to the same effect is the more valuable in that it is based on the reports of exceptionally intelligent men whose whole lives had been spent on the southern fringe of the unknown area: —

"Ce desert aucun Arabe que j'ai rencontré ne l'a vu, ni n'en connait autre chose que le nom. Il en est de même des vallées de sable mouvant, appelées par de Wrede 'Bahr Safi' ou 'Mer de Sable.' D'après ce qu'on m'a raconté, il n'y aurait pas de communication au nord entre le Hadhramout et le pays des Wahhabi, ni au nord-est entre le Hadhramout et Mascate. Seulement on savait que les Bedouins de Nedjd se rendent parfois dans cette dernière ville et que ce voyage durait environ une quinzaine. Il n'y a routes ni même chemins indiqués, et il n'existe aucun trafic par terre dans cette direction."

Burton and Palgrave, however, received information rather less negative. The first says in his letter written to the Secretary of the Geographical Society after the completion of his pilgrimage: —

"Of this great East Desert (the white blot in our maps marked Ruba el-Khali or the uninhabited region)

I have heard from credible relators that its horrid depths swarm with a large and half-starved population, amongst whom the hardy and daring explorer will find it possible to travel, and that it is a system of rocky hills, semi-fertile ravines and valleys, sand deserts and plains of hard clay, covered with thin vegetation by a scanty winter rain. At El Medina I heard a tradition that in days of yore a highroad ran from the city, passing through this wild region to Hadhramut. It had, however, been deserted for ages; and my informants considered me demented when I talked of travelling by it."

Palgrave, while calling the whole area "an exaggeration of the Nefud," learned from certain of the Aal Morrah, whom he met on his passage to Hasa, that their tribe has "the free and undisputed range of the oases which it [the Dahnā] occasionally offers, where herbs, shrubs, and dwarf palms cluster round some well of scant and briny water. These oases are sufficient to preserve a stray Bedawi or two from perishing; though not enough to become landmarks for any regular route across the Central Dahnā."

In his paper read before the Geographical Society the same traveller stated more fully that though there are enormous tracts never visited, occasional oases of palms and desert vegetation do occur where the limestone floor is clear of sand. "Many such spots," he added, "are said to occur on a line drawn southeast by east from Oman towards the Yemen." In the vicinity of Hadramaut these become more frequent, while "rocky peaks interrupt the sand from time to time."

This is all we know about the great South Desert. It is about as much as Iṣṭakhrī knew in the tenth century, and about as little as Ḥājji Khalfah recorded in the seventeenth. That a vast district is sand of the Nafūd type we may be certain; and since much the same geological formations and prevailing winds are probably found here as in the Northern Desert, we may reasonably suppose the sands to be deeper, more heaped into dunes, and less stable in the south and western parts than elsewhere,— an inference supported by the use of the name Aḥḳāf in the west alone. The eastern part of the desert will then be the harder, a true Dahnā, showing sand only in strips and billows, and fading into hard steppe ere the limit of the inward drainage from Jabal Akhdar be reached. There is reason to think that there is a considerable tract of desert pasture immediately north of Hadramaut, locally called Nejd and roamed by the Kathiri Bedawins, as well as to east of it, held by the Mahra; while similar pastures stretch far to westward of Jabal Akhdar. There, as Miles heard, Awami and Aal Morrah Bedawins rear camels in a steppe diversified by dwarf acacia shrubs, and able to furnish water every three or four days to the travellers, who pass in twenty-five marches between Nejd and the Mahra country.

CHAPTER XV

SUMMARY

THE peninsula of Arabia, which we will look at no longer piecemeal, but as a whole, is seen to be a plateau, with a long and gentle decline from west and south to east and north. Its uppermost levels are lifted from five thousand to nine thousand feet above the western and southern seas, to which the land falls away steeply, carved into the semblance of a mountainous country by the monsoon rains, as they rush down sharp inclines of friable material; and since both the precipitation is greater, and the general elevation of the plateau face is higher in the southwest corner than elsewhere, we find the most "accidented" of the coastal lands to be the Yemen.

From the western or upper edge of this plateau the slope does not fall inland quite evenly. There stands up a more or less continuous rim, which presents the aspect of a mountain range, not only from the coast. This feature is due to two causes: first, as on long slopes all over the world, the denuding agent, impetuous at first, has slackened in force on the lower levels by reason of the débris which itself brings down, and

has carved easier gradients there; second, there are local intrusions of recent eruptive matter forced through the main constituent mass of the peninsula, — intrusions confined to the higher side of the plateau in accordance with the law that the more steeply-folded parts of the earth's crust are the most subject to volcanic disturbance. These patches of eruptive matter, spread abroad over the surface of the sandstones, and much harder than they, have not only themselves resisted denudation, but protected what underlies them; and thus they appear as huge tabular elevations, outwardly lava, but inwardly sandstone, which stand up at short intervals over all the space between the twenty-first and twenty-eighth parallels, greatly increasing the mountainous effect of the Rim.

Since the superficial formation of most of the peninsula is sandstone, which yields readily to denuding agents, — water, sun, and wind, which exercise a tremendous disintegrating action in a very hot and dry climate, with great diurnal range of temperature, — tracts of sand of a more or less loose texture are found all over Arabia; and if it were not for the volcanic tracts already mentioned, all the centre of its plateau would probably now be masked by the ruin of the high western Rim. In fact, above the twenty-eighth parallel and below the twenty-first, where the lava patches are no longer found, such masking has actually taken place, and the northern and southern ends of the plateau have been overwhelmed by deep beds of drift-sand, deepest on the west, and tailing off

gradually to east, till after some hundreds of miles they permit the limestone floor to reappear. These two vast sand-beds, which cover between them more than half the central plateau, have almost obliterated the physical features of immense tracts, absorbing into their depths the surface waters, and not rendering them again to the sea by any apparent channels of drainage. Settled life is only possible within their limits where some accidental shelter has caused a patch of the limestone floor to be left exposed, as in the Jubbe and Teima oases.

The interval between these sand-beds, protected by the western lavas, is therefore all of the main central mass of Arabia that has any system of superficial drainage, and by consequence any continuous settled human society. This interval is Nejd, where the limestones have long been generally exposed, with only here and there (especially in the sheltered depressions) certain intervals and strips of sand. The northern belt of the favoured region owes to an ancient intrusion of granites, which form two mountainous ridges, some independent precipitation of moisture and a little soil of unusual fertility, which supports many settlements and one town, Hail. This is Jabal Shammar, drained by short *fiumaras* east and south to the trunk system of the north central plateau, the Wady er-Rumma, which has its origin on the Rim at Kheibar and follows the whole slope northeastward to the Persian Gulf. Along its mid-course, often interrupted by drift-sands, is a second fertile belt, Kasim, with its

considerable urban settlements and many villages; but in the lower course of the wady, lying through absorbent gravels in a dreary down region, rolling by successive undulations to the Gulf, water can be reached only in deep wells.

South of the Rumma system and roughly parallel to its direction is a second main system of drainage; or perhaps there is more than one; for on the Rim in Asir and Yemen, where the elevation is greater and the rainfall more copious, more abundant sources rise. Whether this system (or systems) of drainage finds its way, like the Rumma, by superficial channels to the Persian Gulf is still doubtful. That it does so subterraneously is more than probable. But the mediæval Moslem geographers and their modern successors till the nineteenth century believed it to run aboveground; and we have tried to show that their view ought not to have been so easily abandoned. The modern view has arisen from the discovery of two ranges of hard limestone, Ared and Tueik, running north by south in the eastern part of southern Nejd. These, while they create an important drainage system of their own in Wady Hanifa, bar the immediate fall of those or any other waters to the Persian Gulf, and divert them to the south. There it is commonly supposed they are absorbed in sands, but cause has now been shown for thinking this is not their ultimate fate; but rather that the Hanifa waters eventually join others which have crossed the peninsula from the southwest, and all combined

fall out in the Gulf near Khor ed-Duan. This outfall is probably in great part subterraneous, and in any case presents no appearance of a river; but it is perhaps enough to justify the Moslem geographers of their "Wady Aftan," which they believed to carry the waters of Ared and Yemama to the Eastern Sea. Doubtless also a certain part of these waters, obeying the main slope of the plateau, percolates under the barring ridges, to reappear through the gravels near the coast, and make the rich oases of Hasa and Katif and the under-sea springs of Bahrein.

The occurrence of these hard limestone ridges in southeastern Nejd, inducing precipitation, has caused a third settled belt to exist there, along the course of the Hanifa system of wadys. Lying nearer the area of monsoon rains, and having more abundant ground water than Jabal Shammar, while of equally bracing climate, this region of South Nejd is richer and more populous, and has long disputed the domination over the low-lying, fertile, and enervated district of Kasim, which lies in the middle as the prize of its neighbours.

With the exception of these three belts, each divided from another by intervals of comparatively waterless and sterile country, the interval between the great northern and southern sands is of a rolling steppe character, neither devoid of herbage nor of ground water at varying depths, but suitable only for pastoral life. At certain seasons of the year, and after rains, the sand-belts also are productive of a closer and

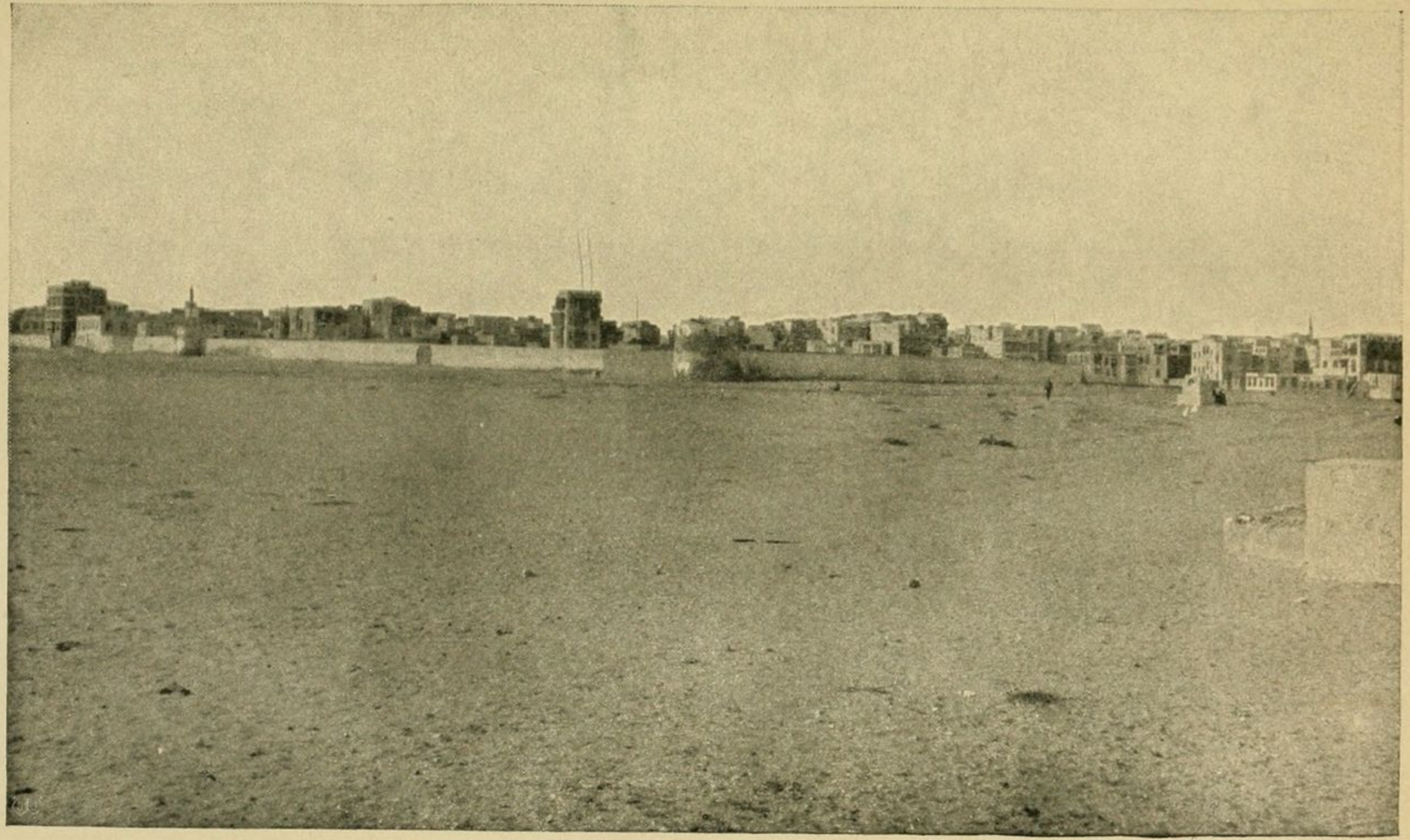
richer herbage than the limestone steppes. Since this herbage, however, like the shallow water-holes which primitive people can make and maintain, is exhausted quickly, the pastoral peoples are all more or less of nomadic habit. Central Arabia is the head and centre of the Bedawin type of humanity.

On the east, or rather the northeast, the plateau slopes down very gradually to the Persian Gulf, under whose shallow waters it shelves away. The littoral on this side, therefore, is not other than the inner land, only more sterile by reason of its lower elevation and greater distance from the sources of the drainage. But on the west and the south coasts, to which the elevated continental shelf presents high and steep faces, border tracts are found very diverse in their physical and social features. In the extreme north of the western littoral occurs an intrusion of ancient igneous rocks, uniform with those of the neighbouring Sinai. These have resisted denudation, and now stand up along the shore of Midian as an advance-guard in front of the limestone face of the plateau, which, however, they do not very greatly surpass in elevation. Thanks to their resistance and the remoteness of this coast from the monsoon area, there is little deltaic detritus; and less fertility or permanent human society is found on the Midian coast than any other in Arabia except the eastern.

With the cessation of these granites, a low, coastal strip begins, partly formed by the detritus of the limestones, partly by the labours of coral builders.

It continues without serious interruption all the length of western Arabia. But though the fertility of this "Tehama" increases to southward with the rainfall, and it there supports certain large inland towns, such as Beit el-Fakih and Zebid, its intense heat and porous soil render it everywhere comparatively barren. On its northern half at any rate it would hardly show a permanent human settlement were it not for the more favoured slopes behind it, which harbour considerable societies, having need of ports. Yambo, Jidda, Gunfude, Jezan, Loheia, and Hodeida have been created by and are maintained for Medina, Mecca, Taif, and the villages and towns of the Asir and Yemen highlands. The rest of the Tehama in Hijaz is given up to nomad life of a very thin and miserable kind, and the fertility even of the slopes behind is very small in the north. Both Medina and Mecca are situated in very naked tracts among sterile hills high up the plateau face, and were it not for the elevation of the neighbouring Ḥarrah tracts, neither would obtain enough water for half its population. Nor would water be needed for the tenth part were it not for the accident of their sacred character and its modern recognition by others than Arabians. Under any other circumstances, Central Hijaz, which Burckhardt thought the least productive of Arab lands, would be as unsettled as the northern part of the province or the seaward face of Asir.

The increased elevation of the relief and the incidence of the monsoon, causing much greater precipi-



Jidda

tation, together, it would seem, with some variation of the soils, due to the occasional outcrop of other formations than limestone on this part of the plateau face, make great difference to the southwestern littoral tracts, both those along the Red Sea and those along the Indian Ocean. Perennial waters flow among the hills, though they may seldom reach the sea, and cultivation is not wholly dependent on artificial irrigation. In western and southern Yemen, therefore, there is found a considerable population wholly settled, and in this part alone of the peninsula Bedawin society is unknown, except as an intrusive element. The great height of the central mass at this corner gives an Alpine character to its coastward buttresses, and both their well-clad ridges and the upland valleys they enclose are on a scale sufficient to support towns and villages much more considerable and frequent than are found elsewhere in Arabia, except in a small part of Oman, where the physical features are practically the same.

These fortunate conditions are continued for some four hundred miles along the southern littoral, in whose western portion the uniformity of the limestones and the even slope of the seaward face are often broken by plutonic rocks. A fine example of the long fertile wadys, of which the Alpine mass of southwest Yemen is parent, is supplied by the great Hadramaut system, which runs eastward, sloping so gradually to the sea that it attains a total length of some five hundred miles. Its main tributary valleys

contain as many and as considerable settlements as the better parts of Yemen; but the nearness of steppe on both hands produces a strong nomad element in the population. Before, however, the Wady Hadramaut falls out between Sihut and Kishin, the sterility which curses so much of the peninsula has resumed sway. We know little of the eastern half of the southern littoral, but may be fairly sure that, except for one or two coastal strips, steppe if not desert conditions, with very spare nomadic society, prevail right up to the frontiers of Oman. The monsoon sweeps over this part of Arabia, but we must suppose not only that the Yemen and Oman heights act as diverting agencies, but also that there is no cold barrier of mountainous buttresses in the region itself to precipitate the moisture, but only a plateau of moderate elevation cloaked with heated sands. Possibly also the sheltering ridge which protects Hadramaut from the sandy drift of the Aḥḳaf fails here. The absence of important wadys falling out on this coast certainly suggests that sheer desert lies everywhere not far inland.

Beyond this unknown region we should expect to come upon a gradual northeastward slope to the sea, as in the northerly part of the plateau. Instead of that, however, the mariner, approaching the shore of the Gulf of Oman, sees the land before him buttressed up to as great a height as in Yemen, and the same long, fertile wadys falling seawards. It might be supposed the whole southern belt of the plateau main-

tained its general elevation from west to east, and that Jabal Akhdar, in Oman, was but an elevated Rim, like the heights west of Sana. But not only are the Oman heights much more truly mountainous than those of Yemen, with a fall inland hardly less in height and much more steep than that towards the coast, but there is reason to think that the plateau steadily declines from west to east, and has but a very moderate elevation where the fifty-sixth degree of longitude crosses it.[1]

The spine of Oman is of the same formation as the mass of the peninsula, and is not due to any intrusion of igneous or other foreign materials; but its direction is not that of the other structural lines of the plateau; for it bends away from northwest to true north, and runs out into the eastern sea at a great elevation, almost barring the mouth of the Persian Gulf. One may, perhaps, see in all this blunt-headed peninsula of Oman a detached part of the elevated Persian country on the farther shore, and suppose the true plateau of Arabia to slope down to and be limited by some depression in the unknown desert to southwestward of Jabal Akhdar. The high elevation of Oman, under climatic conditions like those of Yemen, induces abundance of water and fertility, and a similar settled population of agricultural habits. That this is more subject to Bedawin influ-

[1] Dr. H. J. Carter (*Bombay A. S.* 1851, p. 245) heard from the south coast natives that the eastern part of the Great Desert was called *Batn*, or "Belly," a name given only to a low region between higher ones.

ence than in the western borderland is due to some extent to Oman being a much narrower strip, backed by a *hinterland*, which is not deep sandy desert, like the Aḥḳaf, but pastoral steppe; but its partial nomadisation results in greater degree from local and political causes, among which weight may be attached to the fact that its only central authority has elected to reside, not in the heart of the land, as at Sana, but on the coast.

INDEX

B. = Beni; J. = Jabal; R. = Ras; S. = Sheikh; W. = Wady.

Aal Morrah, B., 233, 239, 326, 330, 336, 337
'Abd al-Aziz, *see* Sa'ūd
'Abd al-Hūd, 154, *see* Wrede, A. von
'Abd al-Karīm, 157
'Abd-Allah, *see* Rashīd, and Sa'ūd
'Abd al-Wahhāb, Muḥammad Ibn, 71, 73, 77
Abdurrahman el-Oguyeh, S., 114
Abu Ali, B., 135, 136
Abu Arish, 127, 323
Abu Hasan, B., 136
Abū-l-Fidā, 28, 29, 30, 31, 48, 60, 98, 99, 115, 116, 330, 331
Abu Nukṭah, S., 121, 123
Abu Thabi, 231, 333
Abyssinia, 24, 196, 267
'Ād, B., 220
Aden, 20, 56; early visitors to, 31, 41, 43, 44, 46; British at, 130, 148, 181, 193 ff., 200, 208, 210, 211, 214, 215, 217, 221
Adim, W., 217, 219, 221
Admiralty surveys, British, 19, *see* Palinurus, Leven, Haines, Moresby, etc.
Ælius Gallus, 12, 13, 22, 125, 202
Aflaj, 31, 115, 172, 301, 304, 318, 328, 329
Africa, 47, 146
African association, British, 88, 90
Aftan, W., 21, 31, 108, 125, 172, 233, 300, 306, 332
Agatharchides, 11
Aḥkāf, 98, 147, 149, 199, 201, 202, 203, 221, 333, 334, 337, 346
Ahmed Pasha, 123
Ain, W., 217, 218, 221
Ain Une, 178
Aine, 156
Aja, J., 20, 158, 164, 165, 167, 265, 277 ff., 285
Ajer, 236
Ajlaniya, 218
Ajman, B., 239
Akaba, 8, 11, 35, 178, 180
Akhdar, J., 20, 22, 134, 138, 140, 226 ff., 333 ff., 348
Akuaibere, B., 148
Ala, 182, 183, 184, 271
D'Alboquerque, Afonso, 32, 33, 64 *n.*
Aleppo, 88, 157
Alexander the Great, 10
Alexandria, 10, 46, 80
Ali (Caliph), 76, 170, 223
'Alī Bey al-'Abbāsī, 78 ff., 95, *n.*, 185, 187, 188
'Alī Ibn Sanūsī, 70
Amasia, 120
Amd, W., 149, 217, 218, 221
Ammianus, 25
Amr, B., 184
Amran, 198, 199, 203
Amudi, B., 217, 219
Anaze, B., 68, 156, 253, 266
Ancient remains, 90, 127, 128 ff., 135, 142, 145, 149, 169, 179, 180, 184, 189, 199 ff., 218, 220, 253, 270 ff., 281, 311
Andree, K., 152
Aneiza, 36, 102, 110, 115, 159, 267, 273, 274, 288, 289, 290 ff., 305, 331
Anonymous travellers, 129, 186 *n.*, 269, 300
Antiochus IV. Epiphanes, 14
D'Anville, 29, 35, 36
Arabian peoples, gen. considerations, 1, 3, 5, 7, 8, 15, 47, 48, 57, 59, 61, 70, 93, 107, 130, 147, 166, 190, 223, 285
Arabic studies in Europe, 28; works, translated, 28, 29
Arafat, J., 81, 91, 92, 188, 191

Ared, 21, 31, 99 ff., 108, 114, 172, 299 ff., 311, 317 ff., 341, 342
Arhab, 199, 203
Arnaud, L., 22, 128 ff., 145, 151, 152, 171, 193, 199, 203
Artemidorus, 11
"Ascension," The, 43
Asia Minor, 51, 145
Asir, 2, 21, 85 ff., 120 ff., 136, 158, 172, 173, 177, 191, 202, 317, 323, 329, 330, 341, 344
Ateiba, B., 102, 109, 267, 274, 291, 296, 325
Atkins, 85, 123
Aueirid Ḥarrah, 181, 184, 317
Augustus (Emperor), 12
A'ūs, S., 123, 124
Austrian expedition, 211
Auwalik, B., 210, 211
Awami, B., 326, 337
Ayane, 73, 298, 300, 319, 320

BAB EL-MANDEB, 11, 206
Babylonia, 156
Badger, G. P., 41 *n.*, 142, 306
Badia-y-Leblich, D., *see* 'Alī Bey al-'Abbāsī
Bagara (Sudan), 70
Baghdad, 75, 155, 156, 170, 188, 237, 315
Bahr aṣ-Ṣāfī, 149, 151, 152, 334
Bahr Salume, 125, 172, 304, 329
Bahrein, 3, 10, 31, 36, 172, 305, 342
Balad al-Angrīs, 194
Balad ad-Dīn, 147
Ba'l-haf, 135, 212
Balkis, Queen, 128
Bankes, W. J., 80, 86
Barakat ash-Shāmī *or* Jurayjuray, 244 246
Barbier, Dr., 29, 45, 46
Basra, 4, 31, 73, 84, 110, 112, 155, 156, 292, 298
Batina, 140, 141, 230, 231
Batn, 290, 311, 347 *n.*
Baṭūṭah, Ibn, 27, 28
Baurenfeind, G. W., 40, 50
Bayt-Allah, 65
Bedawins, 52, 158, 187, 202, 260, 262, 272, 328, 334, 343; social organisation, 61, 165 ff., 272, 274, 321; first mentioned, 33, 67; tribes, 68, 102, 110, 116, 136, 160, 181, 239, 268, 270, 296, 337; character, 106, 107, 129, 130, 262, 274, 343; laws, 180, 284
Beirut, 245
Beit el-Fakih, 46, 48, 49, 50, 54, 56, 191, 344
Bekil, B., 56, 120, 199
Bent, J. T., and Mrs., 22, 146, 210 ff., 216, 219 ff.
Bereida, 102, 115, 273, 289, 292 ff.
Berg, Van Den, 152, 214, 215, 221 ff., 335
Berggren, 39, 50
Berghaus, 121, 230
Bernstorff, Count, 38
Bessam family, 293
Betha, W., 137
Biblical matters, 5, 39, 144, 291
Bin Ali, W., 219, 221
Bīr al-Hūdaj, 169, 281
Bir Ali (Medina), 111; (S. coast), 210, 212
Bir Borhut, 144, 220, 223
Bireima, 141, 143, 230 ff., 333
Bishe, W., 125, 126, 329
Bishr, B., 169
Blanc, Le, 60 *n.*
Blunt, W. S., and Lady Anne, 6, 167, 220, 249 *n.*, 250, 253 ff., 277, 287
Boetius, 21
Bombay, 50, 112, 135
Borka, 134
Bosra, 252
Bostra, 24
Botanical research, 48, 51, 55, 80, 82, 128, 198, 221, 228
Botta, P. E., 53, 55, 127, 194, 214
British E. India Co., 43, 104, 112, 135 ff., 192, 209; trade, 43, 46, 49, 50, 192, 209
British policy in Arabia, 43, 104 ff., 148, 192, 193, 209 ff., 215, 240, 308 ff., 312, 314
Bruce, J., 69
Bunbury, E. H., 16
Burckhardt, H., 194, 195, 198
Burckhardt, J. L., 6, 26, 67, 78, 80 ff., 115, 120, 132, 155, 158, 161, 184 ff., 214, 270, 344
Burton, R. F., 6, 67, 89, 91, 178 ff., 185 ff., 228, 302, 335

Bushire, 308, 309, 314
Byzantine authors, 11

CAIRO, 46, 68, 85, 88, 90, 94, 151, 160, 161, 168
Caliphate, 47, 79, 84
Caprotti, G., 204
Caravaners, early, 11, 16, 19, 20, 23, 26
Caripeta, 13
Carless, Capt., 133, 145 *n.*
Carmathians, 5, 238, 311
Carter, Dr. H. J., 142, 145 *n.*, 213, 347 *n.*
Castro, J. da, 32
Chateaubriand, 80
Chedufau, Dr., 123 ff., 172, 326
Chosroes Nushirvan, 25
Christian Arabs, 25, 34, 41, 120
Climate, 2, 3, 12, 49, 50, 177, 197, 338
Climax, 20
Coastal explorations, 11, 15, 19, 35, 69, 133, 134, 144, 172, 178
Coffee trade, 43, 45, 48, 49, 54, 94, 126, 191, 196
Colville, Lieut., 310
Combes, E., 127
Cornish, V., 260 *n.*, 262
Couillan, P. de, 31
Couret, Du, 130 *n.*, 152
Courtellemont, G., 186 *n.*, 204 *n.*
Cox, Major, 232
Cramer, C. C., 39, 50
Cruttenden, C., 127, 135, 142 ff., 148, 197, 209
Cyprus, 51

DAHIRA, 143, 231, 232
Dahnā, 4, 311, 333, 336, 337
Damar, 42, 44, 55, 56, 59, 195
Damascus, 24, 73, 84, 96 *n.*, 111, 157, 158, 245, 246, 252, 271, 289
Dana, W., 50, 203
Darb Ash-Sharkī, 187
Darb As-Sultānī, 187
Dauasir, W., 21, 22, 31, 75, 98, 115, 125, 200, 202, 304, 319, 328 ff.
Daumet Al-Jandal, 18, 31, 157
Dawes, Dr., 310
Deflers, A., 193, 195, 198, 215
Deraiye, 72 ff., 81, 98 ff., 112, 117, 157, 159, 299, 300, 312, 319, 320
Deriam, W., 178, 179, 180
Di Bin, W., 199
Dionysius Periegetes, 25
Diyabi, B., 145
Doan, W., 143, 144, 149, 158, 217, 218, 221, 222
Dofar, 27, 208, 212
Dorama, 318
Doughty, C. M., 126, 131, 146, 164, 181 ff., 190, 242, 249 ff., 270 ff., 296, 307, 312, 328 ff.
Dumaetha, 18, 157
Dutch in Arabia, 35, 46, 56, 135
Dutch, Colonial Department, 214

EGRA, 18
Egypt, 10, 25, 26, 78, 80, 84, 100, 103, 138, 148, 169, 247
Egyptians, 8, 9, 110, 111, 159, 309; knowledge, 8, 9; occupation, 12, 85 ff., 101 ff., 118, 122 ff., 132, 160
Ehrenberg, C. G., 127
Eiman, 319, 320
Eloy, A., 143, 227 ff.
Eratosthenes, 10, 15
Ermek, W., 291
Euphrates, 156, 164, 256, 290, 292
Euting, J., 6, 113 *n.*, 145, 182, 204 *n.*, 253 ff., 277, 281, 335
Eve, Tomb of, 220

FADLI, B., 210
Faid, 31, 36, 155, 156, 165, 278, 285
Falj Problem, 163, 251, 260 ff.
Fartak, R., 213
Fatima, W., 184, 274
Fayṣal, *see* Sa'ūd
Fejir, B., 272
Felix, Arabia, meaning of, 41
Ferret, 123
Finati, G., 80, 85, 122
First editions, Moslem authors, 28
Floyer, E. A., 260 *n.*
Forder, A., 250 *n.*, 255 *n.*
Forskall, P., 38, 39, 48, 50, 51, 54 55, 128
France, 47, 49, 247, 306

French policy in Arabia, 245 ff., 247
Fresnel, F., 123, 124, 128, 131, 144, 148, 151

GABRIN, 228
Gaiban, 218
Gail (Yemen), 201, 203; (Hadramaut), 219
Galinier, 123
Gama, Stephen da, 32
Gara, B., 213
Gasparis, 34
Gatti, 123
Gaza, 237, 247
Gentili, Dr., 101
Geology, 2, 3, 4, 91, 162, 176, 208, 256 ff., 259, 260
Gerra, 10, 11, 12, 15, 26, 156, 233
Ghahbun, *see* Gaiban
Ghats, 181, 182
Gibbon, 28, 47, 72
Glaser, E., 6, 14, 145, 194, 198 ff., 223
Gobreh, 229
Gofeife, 280
Gold-workings, ancient, 178 ff.
Greeks, ancient, 9 ff., 144, 223; modern, 118 *n.*, 197, 220 *n.*
Grelaudière, de la, 29, 45, 46, 52
Guarmani, C., 6, 251, 252, 266 ff., 279, 283, 285, 289, 290
Gunfude, 47, 85, 122, 344

HABBAN, 149, 210, 211
Habuna, W., 202, 329
Had, R. El-, 35, 134, 208, 213
Hadafa, 50, 56
Hadrama, 31
Hadramaut, 30, 36, 129, 136, 207, 323, 333, 336; incense trade in, 11 ff., 133; main wady of, 22, 36, 194, 200, 207, 326, 334; general character of, 143 ff., 221 ff., 345 ff.; exploration of, 148 ff., 214 ff.
Haig, Gen., 194
Hail, 116, 230, 279, 281, 293, 294, 311, 328, 335; ancient site, 156; under Egypt, 159; visitors to, 165, 244 ff., 268 ff., 273 ff.; social state of, 166 ff., 190, 243, 274, 287 ff., 320; description of, 251, 278, 285 ff., 340
Haines, Capt. J. B., 133, 142, 150 ff., 192, 214
Haianiye, 255, 258
Hajarein, 218, 221
Ḥājji, Khalfah, 97 ff., 332, 337
Halévy, J., 6, 14, 22, 126, 131, 145, 194, 200, 202, 329, 333, 334
Hamad, 3, 9, 11, 24, 162, 253
Hamd, W., 21, 182 ff., 188, 273, 282, 289, 290
Hamdan, 198, 199, 201
Hamdānī, 27, 29
Ḥāmids (of Rass), 289 ff.
Hamilton, J., 190
Hanbalī school, 157, 169
Hanifa, W., 21, 74, 102, 109, 116, 172, 233, 300, 311, 312, 317 ff., 328 ff., 341 ff.
Hanin, 153
Ḥaramein, 120
Harb, B., 68, 87, 102, 179, 188, 283, 284, 288, 325
Harib, 210
Harik, 31, 100, 103, 115, 172, 317, 319, 321, 328, 331
Ḥarrah tracts, 4, 21, 82, 168, 169, 181, 259, 267, 273, 282, 284, 289, 290, 339
Harris, W. B., 194, 195, 196
Hārūn al-rashīd, 157
Has, 54, 127, 128
Hasa, 100, 113, 231, 233, 234, 237, 238, 315, 320, 330; waters in, 3, 107, 306, 342; religion in, 5, 122, 235 ff.; Egyptians in, 103, 107; visitors to, 107, 113, 305, 315
Hashid, B., 56, 120, 199, 325
Hātim, 156
Hauaire, W., 217
Ḥauḳal, Ibn, 27
Haura (Red Sea), 14; (Hadramaut), 212, 217
Hauran, 157
Hauta (Hadramaut), 217, 218, 221; (Nejd), 319, 321, 331; (Lahej), 201, 211; (S. Yemen), 210
Haven, F. C. von, 39, 49
Hawashib, B., 196
Haytham, 164

Hebrew knowledge, 9
Hegra, 13, 14, 270
Hein, W., 213 *n.*
Hejr, 14, 18, 128, 169, 183, 184, 270, 273, 278, 280
Hemprich, W. F., 127
Henakie, 110, 289, 291
D'Herbelot, 28, 29, 98
Heretical Moslems, 42, 72, 121, 122, 202
Herodotus, 8, 9, 25
Heteim, B., 267
Hijaz, 56, 64 ff., 111, 121, 164, 207, 240, 250, 270, 271, 323; visitors to, 46, 64 ff., 185 ff.; character of, 67 ff., 124, 177, 344; limits of, 120, 121; hydrography of, 183 ff., 289 ff.
Himyaritic civilisation, 25, 145, 149, 198, 200, 204, 280, 311
Hippalus, 14
Hipparchus, 15
Hippus, 20, 182
Hirsch, L., 22, 131, 146, 151, 216 ff., 223, 334
Hisma, 179, 180
Hisn Gorab, 145
Hodeida, 54, 56, 127, 128, 196, 198, 211, 344
Hofuf, 107, 113, 232 ff., 305, 314, 302
Horeimle, 73 *n.*, 299, 319
Horse-trade, 6, 11, 160, 249 *n.*, 251, 257, 267, 269, 277
Huber, C., 6, 145, 164, 191, 242, 252 ff., 260, 270, 277, 281, 283, 287, 291, 296
Hud, 148, 220
Hulton, Dr., 127, 142
Humboldt, 151
Humth, W., 184
Hurgronje, J. S., 6, 189, 190, 272 *n.*, 281 *n.*
Huweitat, B., 180
Hydrography, 21, 54, 116, 151, 163, 172, 177, 183 ff., 188, 194, 202, 203, 207, 232 ff., 239, 273, 278, 283, 289 ff., 298, 304, 306, 317, 333, 334, 340 ff.

IAMBIA, 18
Iathrippa, see *Lathrippa*
Ibb, 55, 195
Ibra, 138
Ibrahim Pasha, 101 ff., 123, 159, 293, 308
Ibri, 140, 227, 232
Idrīsī, 27, 28, 30, 65, 98, 121
"Ignorance, times of," 24, 26, 156
Incense trade, 8, 9, 13, 144, 146, 223
India, 1, 12, 14, 33, 43, 106, 112, 141, 146, 215, 217, 274, 312
Inscriptions, ancient, 18, 50, 127, 129, 145, 149, 163, 199, 200, 204, 223, 253, 271, 280 ff.
Instruments, scientific, 54, 80, 81, 95, 96, 114, 161, 310, 324
Irak, 27
Irrigation conduits, 137, 319
Irwin, E., 69, 178 *n.*
Isan, 211
Islam, general considerations, 7, 26, 47, 64, 79 ff., 111, 122, 158, 202, 216, 236
Issa, B., 149
Iṣṭākhrī, 27, 28, 29, 30, 337

JABAR, B., 229
Jailan, 229
Jauasmi, B., 134, 230, 232
Jauf (North), 18, 36, 116, 157 ff., 162 ff., 170, 173, 247, 250 ff., 256, 266 ff.; (South), 31, 56, 198, 200, 201, 210, 334
Java, Arabs in, 153, 214
Jeheina, B., 182
Jeneba, B., 137, 213, 326
Jeramis, W. 210
Jerusalem, 157, 266, 268
Jesuits, 33, 235, 245, 247, 249
Jews in Arabia, 8, 25, 50, 67, 68, 113, 127, 195, 201, 202, 283, 284
Jezan, 41, 344
Jidda, 35, 60, 76, 95, 123, 220, 274, 281, 296, 344; visitors to, 32, 41, 46, 67, 79, 88 ff., 110, 128, 148, 185, 189, 191; trade of, 43, 82, 94, 293; character of, 46, 68, 93
Jihān Numā, 28, 29, 98, 100, 180, 186, 223, 317, 330, 332
Jisl, W., 184
Jol, 217, 219
Jomard, E. F., 17, 86, 114 ff., 123, 124, 172, 173, 191, 304, 306, 329

John of Portugal, 31
Jubbe, 163, 251, 255, 265, 279, 340
Justinian (Emperor), 24

KA'BAH, 65, 68, 76, 81, 91, 189, 197
Kabr Al-Hūd, 150, 220
Kaf, 252
Kafar, 165, 169, 278
Kahtan, B., 59, 326, 328, 335
Kahza, 229
Kaiti, B., 218, 219
Kalb, B., 326
Kamaran Island, 41
Kanats, 137
Kasim, 31, 75, 99 ff., 114, 165, 191, 255, 267, 273, 277, 285 ff., 316, 320, 340
Katabe, 192, 195
Katar, 36, 234, 238, 325, 331, 333
Kathiri, B., 220, 326, 337
Kātib-chelebī, 98
Katif, 3, 102, 112, 113, 234 ff., 342
Kaukeban, 198
Keane, J. F., 176 *n.*, 187, 188, 191
Keith-Falconer, 194
Keith, T., 85
Kena, 164
Kerbela, 75, 78, 83
Khab, 201
Khaldūn, Ibn, 28
Khalid, B., 102, 106 ff., 239
Khamis-Misheit, 125
Khamr, 199
Kharfa, 301
Khariba, 129, 130
Kharid, W., 198
Kharj, 99, 109, 115, 116, 313, 321, 331
Khaulan, 203
Kheibar, 21, 30, 36, 68, 169, 184, 267, 272, 273, 282 ff., 289 ff., 317, 340
Kheima, Ras el-, 76, 105, 170
Khor ed-duan, 233, 331, 332, 342
Khoraibe, 149, 222
Kiepert, H., 171
Kiryat, 33, 229
Kishin, 142, 213, 217, 346
Koch, A., 204 *n.*
Kora, J., 90, 317
Kora, W., 184, 187
Koreish, 69
Koweit, 4, 36, 75, 112, 113, 237 ff., 277, 292, 309, 313, 328
Kufa, 164

LAKEITA, 251
Lakes, 125, 283, 304, 329
La Roque, 29, 45
Lar, 21, 22
Lathrippa, 18, 24
Leake, M., 90
"Leven," The, 134
Levke, 12, 14
Loheia, 47, 53 ff., 58, 344
Lunt, W., 219, 221

MAAN, 162, 247, 250, 270, 289
Madra, 231
Maffei, 34
Maḥbūḥ, 312, 313
Mahomet, 5, 70 ff., 76
Mahra, B., 137, 146, 213, 217, 223, 325, 337
Maifat, W., 148, 209 ff.
Makalla, 145, 146, 148, 150, 212, 214, 215, 217, 219
Makhlaf, 202
Makhna, 180
Makramī, S., 5, 122
Makrana, 42
Maltzan, H. von, 152, 188, 211, 214
Manfuha, 108, 109, 300, 305, 315, 319, 320
Mansūr, S., 134
Manzoni, R., 195 ff.
Map-making, 15 ff., 29, 35, 104 ff., 115, 121, 171, 181, 204, 216, 220, 304
Marcian, 23
Mariaba, 13, 14
Marib, 13, 22, 56, 128 ff., 151, 152, 193, 200, 203, 210, 216, 223
Marid, 157
Marinus Tyrius, 16
Marol, L. de, 32 *n.*
Mary, 123
Masila, W., 207
Maskat, 33, 34, 46, 50, 104, 105, 134 ff., 186, 192, 227 ff., 306
Massora, W., 134
Mata'ab, *see* Rashīd

Matra, 33
Matraka, 35
Maurizi, V., 135
Maze, B., 181
Medayin Salih, 18, 90, 182, 184, 270, 271
Mediæval knowledge, 27 ff.
Medina, 36, 76, 79, 82, 120, 182 ff., 273, 289 ff., 325, 344; early name, 18; visitors to, 32, 67, 89, 161, 167, 185 ff.; religion at, 73, 81, 92; Egyptians at, 85 ff., 102 ff.
Medinet el-Khudud, 202
Mehemet Ali Pasha, 84 ff., 100, 103 ff., 118, 120, 122 ff., 160, 161
Meitam, W., 53
Mejma, 299, 311
Mecca, 4, 52, 98, 120, 126, 155, 173, 184 ff., 292, 296, 317, 325, 330, 332, 333, 334; early history, 25, 32; visitors to, 27, 32, 64 ff., 79 ff., 85 ff., 161, 167, 185 ff., 333; Wahabis and, 75 ff.; Egyptians at, 83 ff., 122; trade of, 46, 94, 121, 274; character of, 124
Menader, 125
Mengin, F., 17, 86, 87, 114
Merchant companies, 43, 45
Meshed Ali, 84, 170, 277, 297, 311; (Hadramaut), 218
Mestajedde, 116, 279
Meteir, B., 102, 109
Michaelis, 29, 38
Midhat Pasha, 230, 237, 238, 240, 315
Midian, 4, 20, 168, 177, 178, 180 ff., 221, 228
Middleton, H., 43, 44, 52, 55
Miles, S. B., 138, 143, 200, 204, 209, 214, 228 ff., 331 ff., 337
Millingen, C., 193, 198
Min, 201
Misamir, 195
Misena, 134
Missionary enterprise, 5, 34, 83, 127, 193, 195, 231
Moahib, B., 273
Mokha, 43 ff., 126, 145, 191
Monsoons, *see* Rainfall
Moresby, Capt., 114, 133, 168, 178, 211
Mubariz, 234, 236
Mufhak, 56
Mugair, 178, 179
Muḥammad, *see* Rashīd and Sa'ūd
Muḳadassi, 27, 28, 29
Mukhtar Pasha, 193, 198
Muna, W., 76, 81, 91
Muntefik, B., 110
Munzinger, W. M., 204, 210
Musandam, R., 10, 36, 230
Musaylamah, 5, 72
Muweila, 168, 178 ff.
Myos Hormos, 13, 14

NABATHÆANS, 10, 12, 13, 271, 280
Nafūd, 4, 30, 36, 99, 100, 110, 116, 157, 162, 165, 169, 173, 239, 242, 243, 250 ff., 265, 266, 280, 285, 305, 311, 323 ff., 336, 337
Nagara, 21
Nakab al-Hajar, 135, 145, 149, 209
Nakhl, 228
Napoleon I., 69, 80, 100
Napoleon III., 45, 247
Nāsir, Sultan, 34
Nearchus, 10, 19
Nega, 219
Negrana, 13, 202
Nehm, 201, 203
Nejd, 36, 73, 136, 172, 202, 236, 240, 267 ff., 296 ff., 328, 340 ff.; visitors to, 6, 104 ff., 160 ff., 178, 266 ff., 277, 298 ff., 308 ff.; early history, 26, 30, 31; religion in, 74, 79, 122, 158; geographical features of, 98 ff., 108 ff., 115 ff., 163 ff., 172, 233 ff., 270 ff., 277 ff., 288 ff., 298 ff., 315 ff., 331 ff., 340 ff.; Egyptians in, 102 ff., 140; roads to and in, 143, 155 ff., 170, 179, 187, 230 ff., 240, 251 ff.
Nejran, 5, 13, 14, 20 ff., 31, 56, 98, 121, 122, 125, 126, 149, 200 ff., 304, 328, 329, 332 ff.
Nezwa, 134, 139, 229
Niebuhr, C., 6, 29, 35 ff., 87, 93, 95, 98, 115, 119, 125, 126, 132, 133, 138, 140 ff., 155, 157, 171, 191, 197, 198, 219
Nisab, W., 210
Nolde, E., 249, 255 ff., 273, 277, 287, 296, 331

OASIS society, 3, 31, 166, 231, 235 ff., 286, 294, 301

Ogba, B., 180
Ohod, Mt., 184, 187
D'Ohsson, 67
Okdat, J., 231, 232
Oman, 2, 133 ff., 323, 327, 332, 333; ancient, 15, 20, 22, 26; visitors to, 27, 32 ff., 50, 136 ff., 227 ff., 305; roads to, 31; geographical features, 36, 138 ff., 208, 226 ff., 334, 345 ff.; history of, 76, 103, 134 ff., 213, 308, 314
Omanum, 22
Orma, 311
Ormuz, 32, 33, 34
Orography, 20, 21, 95, 109, 115, 116, 139, 164, 167, 173, 181, 194, 206, 211, 227, 270, 289, 330, 340, 341, 343, 347
Oryx Beatrix, 158, 258
Ottoman power, 42, 43, 47, 62, 65, 70, 75, 83, 108, 126, 193, 194, 198, 204, 236, 238, 274, 283
Owen, Capt., 134

PALGRAVE, W. G., 6, 77, 78, 106, 117, 162, 164, 167, 190, 233 ff., 242 ff., 265 ff., 274, 277, 286 ff., 296 ff., 328 ff.
"Palinurus," the, 127, 133, 135, 142, 144, 145, 148, 150, 172, 178
Pelly, L., 233 ff., 247, 277, 297 ff., 305, 308 ff.
Periplus of the Red Sea, 23, 32
Persian Gulf, 8 ff., 104, 112, 118, 125, 135, 170, 190, 227, 298, 308, 317, 325, 340, 342
Petra, 11, 12, 15, 19, 24, 27, 88, 156
Phœnicians, 8, 9
Pilgrims, Persian, 4, 26, 27, 155, 157, 161, 167, 170, 188, 320; Syrian, 36, 46, 66, 84, 90, 91, 111, 159 *n.*, 186, 271, 272, 298
Pilgrim reports, 27, 30, 64 ff., 167, 173; roads, 67, 155, 156, 180, 187, 326
Pinkerton, 113
Pirates, 104, 134, 232, 308, 309
Pitts, J., 66, 67, 186 *n.*
Planat, J., 123
Pliny, 14, 15, 17, 23, 26, 27
Portuguese expeditions, 31 ff., 43, 134, 192
Pre-Semitic language, 213
Prion, 22
Procopius, 24
Ptolemy, Claudius, 3, 15 ff., 130
Punt, 8

QUADRA, G. DA, 64 *n.*

RABIA, 237
Rabig, 281 *n.*
Racial characteristics, 5, 7, 61, 147, 190, 223
Radman, 206
Radwa, J., 182, 289
Railway projects, 239
Rainfall, 2, 3, 68, 108, 124, 177, 208, 257, 292, 338, 341, 344
Rakhiya, W., 151
Ras al-Jabal, 141, 227, 230
Rashīd, House of, 159, 165, 166, 254, 272, 277, 288; 'Abd-Allah Ibn, 165, 170, 243; Mata'ab Ibn, 170; 'Ubayd Ibn, 170; Talāl Ibn, 170, 244, 245, 247 *n.*, 252, 268, 269, 297; Muḥammad Ibn, 252, 254, 255, 273, 277, 287, 288, 293, 294, 297
Rass, 102, 110, 289, 290, 292, 297
Rastak, 33, 134, 135
Red Sea, exploration of, 9, 10 ff., 14 ff. 69, 178
Reda, 194, 195, 196, 206
Reinaud, 75, 104 *n.*, 112, 113, 236 *n.*, 297, 305, 320 *n.*
Relief, surface, 1, 21, 48, 53, 95, 99, 116, 124, 134, 162 ff., 177, 181, 190, 194, 199, 206 ff., 221, 226, 256 ff., 277, 278 ff., 282, 288, 296, 299, 314, 316 ff., 326, 338 ff.
Rema, 108
Renan, E., 271, 281 *n.*
Renegades, 6, 56, 65, 66, 85, 88, 118 *n.*, 186 *n.*
Revivals, religious, 5, 47, 69 ff.
Riad, 99, 173, 230, 235, 236, 299, 315, 329, 330, 331; religion in, 77, 301 ff.; visitors to, 109, 300 ff., 308 ff., 320, 324; history of, 118, 159, 160, 238, 255, 288, 319 ff.; society in, 166, 190, 274; roads to, 277, 298, 304, 310 ff.
Ritter, K;, 151, 156, 171 ff., 183, 304, 306

Rivers, 3, 21 ff., 108, 125, 140, 172, 233, 290, 300, 306, 332
Riyam, B., 139, 229
Roala, B., 258, 266, 269
Roba el-Khali, 115, 139, 202, 333 ff.; *see* Aḥḳāf, Dahnā, Bahr Aṣ-Ṣāfī
Rochwusky, Count W., 113
Roman knowledge, 12 ff., 23 ff., 26
Rome, 12, 41
Rooke, H., 69 *n.*
Royal Geog. Society, 134, 150, 161, 170, 248, 262, 305, 310, 336
Rumem, W., 290
Rumma, W. er-, 164, 184, 190, 208, 233, 239, 273, 277, 285, 288 ff., 296 ff., 306, 316, 326, 340, 341
Rüppell, E., 168, 178, 180

SABÆANS, 10, 146, 147. *See* Himyaritic Civilisation
Sābkhah, 232, 332
Sabor, J., 55, 192, 194, 195
Sachan, 203
Sade, 120
Sadlier, G. F., 17, 86, 105 ff., 120, 125, 131, 159, 172, 233, 235, 236, 242, 289, 290, 293, 298, 305, 309, 314, 315, 318
Sadr, W., 179, 180
Sa'īd Sayyid of Maskat, 135
Saiyun, 151, 217, 222
Sakaka, 162
Sāleḥ, prophet, 169, 220
Salmah, 156
Sana, 41 ff., 120, 126 ff., 142, 191, 193 ff., 206, 211, 347, 348
Sand phenomena, 150, 251, 259 ff., 263
Sa'ūd, House of, 72, 75, 166, 230, 288, 314, 320; Muḥammad Ibn, 74, 75; 'Abd al-Aziz Ibn, 75, 76; Sa'ūd Ibn, 75, 76, 79, 87, 121, 159; 'Abd-Allah Ibn, 102, 103; Turkī Ibn, 160; Fayṣal Ibn, 140, 159, 160, 170, 247, 299, 309, 312, 313, 320; 'Abd-Allah Ibn Fayṣal, Ibn, 237, 238, 267, 304, 312, 314
Sawa, 149, 151, 221 *n.*
Schweinfurth, G., 192, 193, 221
Schimper, W., 190 *n.*
Scientific method, improvement in, 15, 27, 39, 57, 60, 81, 89, 114, 161, 189, 270
Scoto, Dr., 101, 111
Scylax, 9
Sedeir, 31, 100, 108, 298, 299, 311, 317, 318
Sedus, 299, 311, 312, 315, 319
Seetzen, U. J., 6, 81, 82, 90, 112, 155, 159, 161, 185, 195
Selma, J., 156, 164, 277 ff., 285, 288
Semail, W., 22, 138, 140, 228, 229
Semed, 138
Semitic matters, 7, 8, 12, 26, 213, 253, 271, 275, 303
Ser, W., 220
Shabwa, *see* Sawa
Shahran, W., 125
Shaiba, 277, 297
Shakik, 252
Shakra, 109, 114, 296, 297, 315, 318
Shammar, J., 4, 31, 36, 75, 100 ff., 113, 116, 155 ff., 243 ff., 250 ff., 265 ff., 303, 314, 316, 321, 340, 342
Shar, J., 182
Sharīf, Grand, *see* Mecca, Hijaz
Sharīf, Imam Bahadur, 219, 220
Sharja, 141, 230
Sharpey, Capt., 43
Shefa, 181
Sheher, 146, 209, 215, 216
Sheikh Said, 194
Shera, J., 178, 260, 325
Sherarat, B., 266
Shibam, 36, 143, 151, 217 ff., 222
Shinas, 141, 230
Shiraizi, 139, 229
Shukra, 194, 211
Sib, W., 134, 140, 230
Sif, 150, 217
Sihut, 151, 207, 214, 217, 346
Siki, 228, 229
Sinai, 46, 178, 343
Sirhan, W., 157, 162, 269
Slayb, B., 61, 314
Smith, Sir L., 137
Smith, Lieut., 212
Sobe, 195
Socio, Dr., 101
Socotra, 15, 135, 213
Sohar, 33, 141, 231
Sokhr, B., 266

Soley, W., 319, 332
Sprenger, A., 17, 156
Stephen of Byzantium, 23, 24
Stern, H. A., 33 *n.*, 193
Stieler's *Hand-atlas*, 35, 331
Strabo, 11, 12
Struys, J., 134
Styx, 22
Suares, Lopez, 32
Sub, B., 187
Sueik, 140
Suez, 12, 32, 83, 92, 102
Suez Canal, 197, 247, 248, 293
Sufeine, 188
Suk As-Shiku, 290
Suk el-Khamis, 56
Suleiman Ghazi, 32 *n.*
Sur, W. (Midian), 181
Sur (Oman), 136, 229
Suriya, 212
Swaba, W., 198
Syria, 1, 26, 29, 51, 80, 86, 88, 90, 123, 155 ff., 246, 247, 252, 269

TABAN, W., 195
Tadmor, 254
Tai, B., 156
Taibism, J., 180
Taif, 68, 87, 90, 95, 98, 100, 101, 115, 120, 122, 173, 190, 191, 274, 317, 330, 332, 344
Tais, 42, 44, 49, 54, 55, 128, 195, 196
Tamisier, M. O., 85, 123 ff., 172
Taraba, 85, 122, 329
Tarīk al-Ghabīr, 187
Tebuk, 31, 168, 178
Tehama, 11, 12, 48 ff., 126, 127, 176, 191, 201, 212, 215, 344
Teima, 18, 30, 31, 36, 165, 169, 189, 256, 266 ff., 272, 273, 280 ff., 340
Teima Stone, 189, 272, 281
Tema, 18, 280, 282
Terim, 36, 146, 151, 217, 219, 222
Thamud, B., 184, 270
Tinam, 203
Todeschini, Dr., 101
Trade routes, ancient, 4, 8, 10, 11, 12, 14, 15, 16, 18, 19, 23, 26; modern, 43, 94, 104, 156, 160, 170, 228, 234, 274, 293, 320, 327, 328, 332, 335
Trajan (Emperor), 24
Trucial chiefs, 308, 309
Tueik, J., 20, 99, 109, 115, 298, 311, 317, 319, 341
Tueim, 299
"Turkja-Bilmez," 123
Tussun Pasha, 85, 87, 101, 114
Tyin, W. and J., 22, 228, 229

UBNE, W., 149, 151
Umm el-Dulbhan, 252
Uthman, B., 209

VAISSIÈRE, 101, 114, 123
Varthema, L. di, 31, 33, 41, 43, 65 ff., 184, 188, 270, 282
Vogüé, M. de, 271
Volcanic phenomena, 4, 81, 95, 144, 168, 172, 199, 211, 220, 223, 227, 234, 259, 284, 339; *see* Ḥarrah

WABRA, 311
Wahabi doctrine, 70 ff., 77, 157, 269, 302, 303, 331
Wahabi history, 73 ff., 82, 83, 84 ff., 90, 102 ff., 135, 140, 158, 159, 230, 238, 308, 309
Wahabi movement, 5, 47, 69 ff., 83 ff., 98, 121, 122, 331
Wahabi society, 78 ff., 113, 136, 141, 235, 245, 299 ff., 313, 314, 320
Wahadi, B., 144
Wallin, G. A., 6, 160 ff., 178, 242, 243, 247, 250 ff., 265 ff., 277, 280, 286, 311
Walther, J., 261, 263
Warfare, tribal, 26, 74 ff., 87, 102, 136, 156, 288, 297, 305
Weisit, 162
Wellsted, J. R., 134 ff., 178, 209, 211, 213, 227 ff., 232, 286, 333, 334
Wetzstein, J. G., 164, 273, 289, 291
Whitelock, Lieut., 137 ff., 230
Wij, 182, 184, 187
Wild, J., 66, 186 *n.*
Wolff, J., 83, 127
Woshm, 31, 100, 102, 110, 296, 298, 299, 318, 319
Wrede, A. von, 129, 131, 145, 148 ff., 171, 209, 214 ff., 333, 334

YABRIN, W., 31, 98, 233, 326, 330, 331, 333
Yafia, 196, 211
Yākūt, 28, 95, 164, 290
Yam, J., 201, 203
Yambo, 68, 79, 87, 90, 111, 120, 182, 184, 185, 186, 344
Yass, B., 134, 232
Yathrib, 18, 24
Yemama, 31, 99, 100, 108, 115, 233, 305, 313, 314, 319, 330 ff., 342
Yemen, 30, 120, 147, 206, 211, 212; geographical features, 2, 20, 42, 53 ff., 151, 177, 199, 202, 317, 338, 344 ff.; visitors to, 27, 29, 32, 40 ff., 47 ff., 127 ff., 193 ff.; government of, 43 ff., 125, 130, 191 ff.; antiquities of, 11, 14, 50, 56, 128 ff., 198 ff.; trade of, 12, 43 ff., 51, 94, 121, 304, 327 ff.; history of, 24, 26, 191 ff.
Yerim, 42, 50, 55, 194, 195, 196
Yūsuf al-Mālikī, 157, 162, 164

ZAHLEH, 244, 246
Zahura, J., 148
Zāmil (of Aneiza), 267, 273, 288, 293
Zebid, 42, 46, 48, 50, 54, 83, 191, 344
Zehme, A., 130, 267 *n.*
Zenan, 44
Zobeide's road, 155, 157, 188, 297
Zulfa, 290, 298, 315
Zwemer, S. M., 194, 195, 198, 231, 235, 237

H 304 85

26

RITTER'S MAP OF ARABIA (1852)

To face Page 171