

RUB' AL KHALI*

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An account of a journey through the Great South Desert of Arabia under the auspices and patronage of His Majesty the King of the Hijaz and Najd and its Dependencies.



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IT is indeed a great pleasure for me to find myself once more confronting an audience of this Society which, since I last addressed it, now many years ago, has been honoured by the grant of a royal title in recognition not only of the important work it has accomplished since its birth, but of its right to rank with the other great societies styled royal, of which our country may be justly proud for the leadership and encouragement they provide in every sphere of honourable adventure.

I have recently, as some of you know, returned from Arabia, where,

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during the past two years, and thanks to the kindly assistance and encouragement of His Majesty the King of the Hijaz and Najd, I have enjoyed rather exceptional opportunities of indulging my favourite hobby of exploration. I have, naturally, come back with a good deal to talk about, but I see from the cards issued by your Secretary that I am expected this afternoon to address you on the text: "Across the Rub' al Khali to Ubar." Now I am in no way responsible for the wording, much less for the spelling, of the cards issued to you; but I will content myself with deprecating the deplorable fact that a Society like this should so tamely follow the fashion set some years ago by Colonel Lawrence of spelling Arabic words just anyhow. My friend Mr. Thomas seems unaccountably to have fallen a prey to the same facile snare; and he at any rate ought to have known better, in view of the years we spent together in an Arabian atmosphere. I must not labour the point, and I am aware that Arabs, like other people, have many different ways of pronouncing the same word; but for all practical purposes and for obvious reasons the spelling of words has become standardized, and incorrect spelling is commonly regarded as the mark of slovenly, perhaps I should say artistic, minds! To return to the point, I know of no authority earlier than 1931 for the spelling UBAR, while the form WABAR was known to and used by the Arab geographers many centuries ago. And after all, who can have a better claim to know how the word *is* spelt than myself, for I have actually been there? I have seen it suggested that Ubar and Wabar may not be in fact one and the same place, but there is surely little solid comfort to be gained from such a reflection; and I would suggest as a much more exciting alternative, the possibility of challenging my claim to have discovered the site of Wabar. Such a possibility may some day encourage somebody to attempt another Rub' al Khali expedition, and that would be all to the good. But I, for one, have done for ever with the search for the mysterious city in the southern sands of Arabia, which has been my goal for the last fourteen years. My Arab companions had no doubt whatever that the ruins in which they burrowed in vain for treasure were the ruins of that city; and I am satisfied that I have traced the Arab legend about it to its source. I might almost go a step further, subject to the ultimate verdict of our geological and other experts on the material I have brought back from those parts, but before doing so I propose to conduct you to the scene of my recent wanderings.

Before leaving Hufuf on January 7 of this year for a journey which

was to take ninety days and which resulted in my third crossing of the Arabian peninsula between the Persian Gulf and the Red Sea by way of the Rub' al Khali desert, I had three main objectives in view. In the first place I wanted to investigate what Major Cheesman in 1923 called the "problem" of Maqainama. My second objective was to discover and examine Wabar itself. And, thirdly, I wished to attempt the crossing of the waterless desert south of Jabrin and east of Sulaiyil. Otherwise my object was generally to see as much of the Great South Desert as possible and to go as far south as might prove feasible. Mr. Thomas last year had struck across this desert from south to north on his great journey, in the course of which he had found and placed on the map for the first time an unexpectedly large series of wells, which are indeed the outstanding feature of the vast desert pasturelands which the Arabs call Al Rimal, or The Sands. As far as I can gather from his accounts, he was told that there were no wells to westward of his line, and that at any rate was my understanding of the position when I planned to keep well to the westward of his route as I went southward. In fact, I found myself marching from well to well on a line averaging about twenty to forty miles westward of his course, which I actually touched at two points—namely, Faraja and Shanna. It would seem therefore that Mr. Thomas's guide from the Murra tribe was deterred by the presence of other and potentially hostile elements in Mr. Thomas's party from revealing the secret of the more westerly wells, which are for the most part known only to the Murra tribesmen. That was fortunate for me, as it left me some mapping to do to complete the picture of the desert drawn so fully and with so much detail by Mr. Thomas, whose map, I may add, proved to be a most precious possession.

When we left Jabrin on January 21 en route for Maqainama our party consisted of nineteen Arabs, mainly drawn from the Murra, Manasir, and 'Ajman tribes, thirty-two camels of the very best 'Umaniya breed, and a Saluqi hound, which was presented to us at Jabrin by an Arab of the Murra tribe, who arrived at that point simultaneously with ourselves from beyond Shanna in the south. He had come up with his camels and his family, consisting of his wife and two naked children, to take advantage of the richer pastures reported to have resulted from the recent rains in the northern part of the Hasa province, where at this time practically the whole of the Murra tribe had congregated. I had indeed seen a good deal of them during my journey from Riyadh to Hufuf and in the Jafura desert

between Hufuf and Jabrin; but this single belated family proved to be the last human beings we were to see until we arrived at Sulaiyil fifty-three days later. The man had indeed told us that the rumour of our expedition had preceded us and that, at the time of his starting on his long northward trek, all the pasturing tribes of the south had been busy packing up and moving far back to the shelter of the southern mountains. He prophesied that we should find the whole desert empty, and I surely cannot give you a better idea of the awe and respect inspired by the very name of Ibn Sa'ud than by saying that he was perfectly right. What is more, wherever we went it was our regular practice to leave our identity marks upon the sand and particularly in the neighbourhood of the wells we visited. After all, any Arab of the sands would know a good deal about us by simply inspecting our tracks. He could tell the number of our men and camels. He could see that we had a dog with us, and he would know that we had a good deal of baggage, including tents. He could even see that we were dawdling instead of hurrying, as is usual in such circumstances. But then he would possibly be puzzled as to the character of the people behaving so curiously in the desert. The King's mark on the sands would fill the blank in his knowledge of us, and he would keep away lest the King's men might be out to collect taxes or to make themselves unpleasant in other ways. It must not be supposed that a mere matter of nineteen men was a serious menace to the southern tribes, who are perfectly capable of putting 200 or 300 men into the field at the shortest notice; but they knew Ibn Sa'ud and his cousin, Ibn Jiluwi, the Governor of the Hasa, well enough to know that a larger force would pay them a visit in due course if they were unkind to a small body of comparatively innocuous tourists.

It took us three days of easy marching over rather dull desert country of alternating sand and steppe to reach Maqainama, which lies some seventy miles southward of Jabrin on a strip of gravel country which just divides the steppe desert of the Summan from the real sands of the tract known as Al Rimal. Major Cheesman had suggested a possible identification of this spot with Magan, the capital of an ancient kingdom which some thousands of years ago was in commercial relations with the Sumerians of Mesopotamia. I naturally hoped to find something exciting in the way of ancient relics of man in such a spot, and I did indeed find a bronze arrow-head, but that was all except the well itself, which proved to be no less than 171 feet in depth—a remarkable piece of work which is clearly not to be

attributed to the modern Badawin of these parts. The tracks leading westward towards Laila and eastward towards the deep well of Bir Fadhil suggested to me that we were here on an ancient trade route between the Persian Gulf and the Red Sea markets of Mecca, Madain Salih, and Petra. And it is at any rate a somewhat curious coincidence that at the Persian Gulf end of such a route there is actually a locality called Majann, which the modern Arabs pronounce Mayann or Magann, and where, according to my companions, ancient ruins are still to be found. There is, however, no reason to suppose that Maqainama was at any time more than it is now, a desert well in typical desert country of limestone superimposed on sandstones, which cannot by any stretch of the imagination be suspected of being the source of the little fragment of granite which Major Cheesman found near Jabrin and on which he built a very charming little legend. In point of fact, such fragments of granite and other igneous rocks may be found all over the Arabian desert right down to the very shores of the Persian Gulf, whither they have clearly been carried by the rivers which flowed across these parts in very ancient times and possibly even before the appearance of the human race on our planet. The "problem" of Maqainama may therefore, perhaps, be regarded as disposed of or non-existent, though the deep well and the well-marked caravan route I found here, to say nothing of the bronze arrow-head, encouraged me to believe that Wabar, the next item on our programme, would be found on another caravan track connecting the frankincense country of Mr. Thomas's Arabia Felix in the south with this obviously important east-west route across the peninsula.

You have at various times heard a great deal about the very high development of the art of tracking among the Arabs of these vast sandy tracts, and I will not enlarge on that subject; but it was something new to me on the evening before our departure from Maqainama to find a highly developed sense of smell added to the list of desert accomplishments. We had been summoned to dinner that evening as usual, and I noticed as we sat round the common dish that my companions all held their rifles in their left hands and were fully equipped with cartridge-belts and other accessories. On asking the reason for such an unusual phenomenon, I was told that our chief guide, a man of the Murra tribe, had about sunset smelt the smoke of a camp-fire somewhere in the neighbourhood. I have very little doubt that he had done so, and many weeks later we heard that a small raiding party from Najran had indeed about this time carried away the livestock of

the man we had said good-bye to at Jabrin. It was possibly their fire that our guide had smelt on this occasion, though the night passed without alarm, as the party in question was doubtless too small to venture on molesting our superior numbers. On another occasion later on I was asked for the temporary loan of my lamp, on the ground that my companions, while sitting round the camp-fire, had all distinctly heard a low whistling note which they naturally took to be the signal of an enemy scout. The lamp was wanted to cast round for tracks of such enemy, but our trackers found no trace of them. It must have been the voice of a Jinn, said one of the party, and everybody believed that that was a reasonable explanation of the phenomenon.

From Maqainama we struck due east for three days to Bir Fadhil, a group of four deep wells of about 125 feet in the midst of lofty dunes of piled-up sand. The intervening country was mostly sand with long narrow tongues of gravel protruding into it from the steppe country of the north. To prevent such wells going out of commission the Arabs using them make a practice of covering over their mouths after use with skins and rafters over which they spread a thick layer of sand. The next comers can thus easily and rapidly open up the wells if water is required, and it is only when a rapidly moving hostile raiding party strikes such wells and leaves them open that the blowing sand fills up the shaft and thus makes the clearing of them a lengthy operation. At Bir Fadhil we found that part of the covering had collapsed and thus let in a good deal of sand, so one of our party had to climb down the narrow shaft to clear it before we could draw water.

During the next three days we only marched thirty-five miles in a southward direction, but these days were full of interest. Our objective was the wells of Numaila and Tuwairifa, both about 125 feet deep and both reckoned as "dead," as they have not been in use these ten years or more. All this country had indeed been becoming more and more bare and desolate, with game scarce and very little sign of other life with the exception of occasional ravens, of which we duly collected two adults and a nestful of exceedingly ugly youngsters, who ultimately defied our well-meant attempts to keep them alive. The drought has been upon this area for many years, and the grazing Arabs had not apparently visited it for a long time. In addition to the "dead" wells I have referred to we found two others apparently unknown to the Arabs of today, to which we gave the names of Bir Maqran and Bir Makassar respectively. The first of these names resulted from a discovery of first-rate importance, for as we were traversing a long and

fairly wide strip of gravel plain wedged into the sands, we came upon a great deposit of freshwater shells, in association with which we found numerous beautifully made flint implements of ancient man. There can be no reasonable doubt that we had chanced upon the site of an ancient lake or river-bed, and I have tentatively connected up this spot with the great system of western wadis in the Aflaj district, of which Wadi Maqran, which I crossed fourteen years ago on my way down to Wadi Dawasir, would seem to be the most important. That is merely a suggestion, but at any rate there was at some time in the past a sheet of permanent fresh water in these parts, which were equally certainly frequented by man, presumably in search of such game as might come down to the water to drink. The experts of the British Museum are now engaged in trying to determine the age of these shells, and thus, indirectly, of the sportsmen whose weapons we found among them. The weapons are, I am told, of Neolithic and Bronze Age types, but we cannot yet say when such types of implements were evolved in Arabia; but it is surely a fair assumption that there was a river or lake in this locality when those weapons were in use among its inhabitants. When we can determine approximately the date on which water ceased to flow in these parts we shall know something of the antiquity of man in the Arabian desert. For the moment I naturally regarded these interesting finds of shells and flints as valuable clues to the riddle of Wabar, and yet another clue was provided by Tuwairifa, where we found the deeply scored tracks of an old caravan route in a patch of gravel round the buried wells. Odd flint implements were found here and there at frequent intervals, and indeed everything seemed to indicate that we were really on the point of discovering the mysterious city of the sands which, according to my guides, lay eastward of us at a distance of only about two days' journey.

The actual distance proved to be about fifty miles, and we reached the spot towards the evening of the second day. In the vast dreary wilderness of low rolling bare sand-billows nothing seemed less likely than that we were on the point of entering the portals of a great city of the past which, according to the legend, had been destroyed by fire from heaven owing to the riotous luxury of the court of the king of this country, named 'Ad ibn Kin'ad. Fourteen years before I had heard the story from my companions on the way down to Wadi Dawasir, when we skirted the northern edge of the Rub' al Khali. They had told me of the ruins in the sand and of a mysterious block of iron as large as a camel, and I had noted the spots suggested by their

information tentatively on the map. I now found myself standing on one of those spots, almost to the inch, but the ruins and the block of iron had apparently come together in the interval; and both, so to speak, lay before me. You may imagine my excitement as I walked up to the top of a low sand-dune to get a good general view of the ruined palaces and castles of Wabar. I had resolutely persuaded myself that at the very best we should possibly find the remains of such broken-down forts as are still to be seen at Jabrin. But what I did see from that hill-top simply took my breath away, and I scarcely knew whether to laugh or weep. The whole thing flashed through my brain in that painful second as I realized that for fourteen years I had followed a will-o'-the-wisp through the Arabian desert. I looked down not on the ruins of a city but into the open mouth of what I took to be a volcano with twin craters side by side surrounded by low walls of what looked like outpoured slag and lava. And that was the Wabar of which I had heard and dreamed so much all these many years. My companions were in no wise disturbed by the sceptical views to which I gave expression, and were soon busy digging for treasure, for on the way down I had entertained them with a little embroidery of the original legend. The ninety ladies of King 'Ad, I had told them, had, as a matter of fact, not perished in the conflagration, but had been stowed away in a cellar of the palace, where with any luck we should still find them alive and as beautiful as ever. We were nineteen and they were ninety, so there would be nearly five apiece if only we could find the key to the cellar.

Our camels were by now in need of water, and I decided to go down with them to the well of Ibrahima, leaving two-thirds of our party to continue the search for the treasure and the ladies, to say nothing of the block of iron big as a camel. On the way down and about ten miles from Wabar we touched Mr. Thomas's route at the buried well of Faraja; and on our return to camp those who had stayed behind had regretfully to confess that they had had no luck, though they had found masses of polished jet-black pellets which they took to be fire-blackened pearls and also a small lump of iron. The latter was so little like a camel in stature that they had not thought it worth while to pick it up, but I lost no time in adding it to my collection of curios from Wabar. It was, in fact, a fragment of a meteorite, and provided the necessary clue to the real character of the craters to which I have referred. These are not volcanic, but meteoritic craters, and one might be tempted to think that perhaps the Arab

legend of the destruction of Wabar by fire from heaven was, after all, based on the account of an eye-witness, except that, as Dr. Spencer of the British Museum has pointed out, there would probably be very little left of any eye-witness of such an interesting event. It may well be that a much larger fragment of the same meteorite lies somewhere in this neighbourhood buried in the sand, but I fancy that the piece I have brought home is in fact the block of iron so often spoken about by the Badawin with suitable and typical exaggerations.

In any case, I felt that we had duly completed the part of our programme relating to Wabar. We seemed to have discovered the origin of its strange legend and also the block of iron, or a sufficient part of it, to leave no doubt about its nature. It was all something of an anticlimax for everybody except the Mineral Department of the British Museum. We had now been just a month in the desert, and some of my companions were getting rather tired of our wanderings, so it was rather drearily and wearily that on February 6 we resumed our march southward. For nearly a month we had been keeping the fast of Ramdhan, and, as you may imagine, the daily ordeal of nothing to eat and nothing to drink from an hour before sunrise to sunset was becoming a little monotonous. The country had become utterly desolate and lifeless, and I must not attempt to linger over our marches of the next fortnight during which we covered about 200 miles to Shanna, where we again touched Mr. Thomas's route at the point from which he began his northward dash last year. On the way we had visited a considerable group of wells of such briny water as to suggest that the gypseous rock in which they are situated may have formed part of an ancient sea-floor now covered over by the sands. I am indeed inclined to think that the whole of the tract known as Al Rimal and Al Khiran (the salt wells), together with the great northern depressions of Jabrin and the Jiban, formed a great bay of the sea possibly at the time of the Eocene uplift, which raised the present mountainous tracts of Southern Arabia above the level of the ocean. If that is so, I should think that at that period the deep-well tract of Maqainama, Bir Fadhil, etc., represented the coastline, which would seem to have curved round southward to include Shanna, which is a well of comparatively sweet water at a depth of 55 feet. At any rate, Shanna and a series of five wells to west of it all seem to lie in a well-marked valley-bed whose floor is exposed for considerable stretches, in which I found small lots of freshwater shells, while at about twenty miles west of Shanna I came upon a very large deposit of shells like

those we had found 200 miles to the north. I have suggested that this valley-bottom represents the lower reaches of the great Wadi Dawasir channel, and, personally, I have very little doubt that this is so. In that case I would seem to have struck the two ancient rivers of Maqran and Dawasir at points very near their original mouths.

From Shanna I wanted to proceed south or south-west, while my companions had a strong preference for retracing our steps homeward, though they were not altogether averse to going south-east towards Dhufar, where we should be able to replenish our stock of provisions, which we had been using up at the rate of about two days' rations each day, while I only now discovered that our supply of dates had been freely dished out to the camels to make up for bad pastures. Against my plan there was the obvious argument that we had no one in our party who knew the way to the southern wells or who could safely introduce us to the southern tribes. To cut short a long story of argument and altercation, we ultimately decided to attempt the crossing of the waterless desert to Sulaiyil from here, and on February 22 all was ready for a start. The pastures round Shanna had been comparatively abundant, and our camels, much refreshed by a good feed, came in for a final drink, while we ourselves sat down to a substantial meal of rice cooked in butter, to prepare ourselves for a long diet of nothing but dates, as we would not be able to afford any water for cooking rice during the crossing, which would take us, as we reckoned, nearly a fortnight. We should certainly have sent our heavy baggage back by the water route through Al Rimal, and I think my companions were guilty of bad desert-craft in deciding that we should make the attempt on the waterless crossing with all our tents and other heavy paraphernalia. I fancy they had up their sleeves the idea of abandoning the attempt before we had got too far and of striking back to the nearest water if our experiences proved too unpleasant. And for the moment most of them were quite pleased at the thought that they might get some oryx shooting and thus some meat for the pot to compensate them for their trouble. At any rate, they all seemed to be quite cheerful at the prospect before them, and I began to think that our venture might after all prove to be a good deal simpler than it seemed. Nevertheless it must be remembered to their credit that the side-to-side crossing of this great stretch of waterless desert had, according to our guides, never been attempted before by human beings, much less by a party with full camping equipment and heavy baggage. It would seem that the Badawin who have occasion

to pay unfriendly visits to their neighbours across the desert generally skirt round the edges of it, keeping sufficiently near the wells on its boundary to call at them if there should be need. Similarly, grazing or hunting parties on all sides of the desert penetrate some four or five days' journey into its depths in favourable seasons, living on camel's milk and returning to their water-bases when their camels require a drink. In such circumstances the people of the desert and its fringes seldom, if ever, have any practical object to serve by a direct crossing, and my guides declared that they had never heard of its being done.

And so we started, nineteen men, thirty camels (for we had slain one for food and abandoned another at Wabar when it went lame), and a dog. The first day's march was a light one, as I made a detour with a small party to visit all the wells westward of Shanna while the main body went straight to the appointed rendezvous. During the next two days we found fair pastures, and the camels got on very nicely, while many members of the party went off from time to time on the trail of oryx, whose tracks we came across quite frequently. They invariably returned with nothing to show for their trouble, and they were, of course, subjecting their camels to a good deal of unnecessary exertion. However, all seemed to be well enough on the third night, when we extracted two foxes from the same burrow near our camp. Each night about 1 or 2 a.m. our practice was to send on the baggage animals to give them the advantage of marching during the cool hours, while the rest of us followed at dawn. On the fourth day we found ourselves in absolutely bare and pastureless country as we skirted the lofty sand-dune tract called Qa'amiyat, and the camels, marching all day under the blazing sun with heavy loads and nothing to eat, began to wilt, while my companions began to whisper uncomfortably about turning back. The fifth day brought matters to a climax. Never have I seen such deadly country. It was not like the vast flat gravel tracts of typical Arabian steppe where one expects nothing better, but a pleasant, undulating landscape of sand-ridges and valleys where one might reasonably expect to look upon fresh pastures from any ridge as one laboriously climbed to its summit. Yet everything we looked upon was dead, struck down by the unrelieved drought of twenty years, during which no drop of rain had been known in these parts. Not a green thing of any sort did we see that day, and the sweet piping of the desert lark, twice heard but not seen, seemed to be a mockery. One small desert warbler and a single raven were

the only living things in that scene of desolation, and the actual climax came when we topped a ridge about midday and saw ahead of us our own tents pitched for the first time since our leaving Shanna in the midst of the bare wilderness. We knew instinctively what that portended, but I scarcely expected to find several of the baggage-camels sheltering in the tents against the sun. They had simply collapsed under the strain of marching without any food, and we knew that nothing but a dose of water could restore their power of movement. It was a ghastly state of affairs. We were 120 miles from the nearest water, and it was obvious that the baggage animals would have to go back. They would, however, require a drink before attempting such a march, and the problem was whether a small party, lightly equipped, might, with reasonable prospects of success, attempt the remaining 240 miles of the waterless desert with our water supply so seriously reduced. On that issue we argued and wrangled the rest of that day while the precious moments passed. In the end I had to accept defeat. Much precious water was poured out to the camels most in need, while the others were given a short drink through the nose, a process which is supposed to cool their brains while economizing water. And finally the men, famished by their five days on a short ration of dates, insisted on the cooking of a great meal of rice, of which, hungry as I was, I refused to partake. At midnight the orgy was over and the baggage animals were got off while my party slept till dawn, when we also began the retreat, knowing that we had barely sufficient water left to get us back to the well of Naifa. It was a dreary business, but I must pass rapidly over the details of the next four days. Each day we had to halt for a few hours to let the animals rest during the hot afternoon, while the more weary of them were brought in under canvas as before. Two of our camels during this period actually gave birth prematurely to calves, which were at once slaughtered and eaten by us after a perfunctory roasting on the ashes of our fire; and the strain on the animals may be judged from the fact that those two camels never gave us a drop of milk. The meat of their calves was, however, a welcome addition to our diet, and I must confess that it made me feel a very different man after what had been nothing but a starvation diet, while I had so far not tasted a drop of water since leaving Hufuf nearly two months before. I had contented myself with tea and camel's milk, but now my supply of tea was running out and I had to economize by using the same tea-leaves over and over again for several brews.

On the morning of the fourth day we had exhausted our last drop of water at 5 a.m., while we did not arrive at Naifa till nearly 11 p.m., after a long day's march under a gruelling sun. My first thought was for water, and I don't think I have ever enjoyed a cold drink more than that bowl of Naifa stuff they brought me. It was as strong a solution of Epsom salts as one can well imagine, but I was not at the moment thinking of the consequences. The spell was broken, and next day I had my first bath for nearly two months—a fact which reminds me that Mr. Thomas in one of his lectures last year seems to have painted a rather alarming picture of Wahhabi cleanliness. As you know, the religion of Islam, like other religions, prescribes cleanliness as a virtue; but, in desert countries where water is scarce, the use of sand is permitted in lieu of water for all ceremonial ablutions. That rule is prevalent everywhere in Wahhabi country, not only among the Badawin, but in Court circles and generally in the best society. It is a very simple rule. If the nearest water is so far away that it would be unreasonable for the men to expect their womenfolk to go and fetch it, sand may be used; while a "reasonable" distance, according to the best authorities, works out to about two or three miles. In actual practice while travelling one uses sand as a matter of course unless one is actually encamped at a well.

On arrival at Naifa our future was dismally dark and uncertain. I scarcely thought that my companions would face another attempt on the desert. Our camels were much reduced in vitality by two long months of hard marching under exceedingly unfavourable pasture conditions. Our date supply was nearly exhausted, and we were all so weak with hunger that we had to kill one of our camels to replenish our larder. That, to be sure, put fresh life into us; but it was the clerk of the weather who actually decided our plans. On March 2 I was actually woken by drops of rain; and during the next few days, while our camels were out grazing to recuperate from their recent trying experiences, the storm-clouds gathered about us with thunder and lightning and occasional light showers, which made the Badawin as happy as sandboys. A Scotch mist descended on the sand-dunes of Arabia, and the whirlwind carried black clouds of sand in a wild stampede along the crests of the ridges around us, while occasional hurricanes swept down into our hollow to uproot our tents. It was here that some weeks earlier we had heard the singing sands, but the cold and rain had damped their musical ardour. Meanwhile our preparations for another attempt on the waterless desert went on apace.

On March 5, at sunset, we started, our desert party being reduced to eleven men, fifteen camels, and, of course, the dog, while with us we carried twenty-four skins of Epsom salts and our share of the wind-dried raw flesh of the slaughtered camel, which was to be our sole sustenance, besides what remained of the dates. We could afford no water for cooking, so the rice was sent with the baggage party, which marched the same day by easy stages along the well route to Riyadh.

I calculated that we had about 350 miles to reckon with, while the weather forecast seemed to be favourable enough. At any rate, we had made a start, and now we had to hurry all we knew. For the first three days all went well, with clouds to shield us from the sun and occasional rain to refresh us and the camels, while the fourth day remained cool enough, though the storm had passed away. During this period, marching hard all day with scarcely a halt and for a few hours each day before dawn, we traversed the tracts known as Bani Zainan and Hawaya, covering about 120 miles, which brought us level roughly with the point from which we had retreated so ignominiously ten days before. So far we had not been unduly extended, and we had found moderate pastures. The fifth day was rather grim. The sun came out in all its glory into an unclouded sky; the pastures failed suddenly, and disappointment awaited us as we topped each ridge, hoping to find signs of fresh herbage. We marched forty miles that day, passing from the dreary sands of Shuwaikila on to a vast flat stretch of gravel called Sahma, lying between sand-ridges. Apart from a few insects, there was not a vestige of animal life to be seen during the next few days; even the raven had given up all hope, and everywhere we found horns and skeletons of the oryx and the white Rim gazelle, where they had laid down to die on the barren sands. On the sixth day we had to call a halt at noon to give our camels a rest, and it was pitiable to see their ugly pessimistic faces as they stood or sat round us without making the slightest attempt to prospect for forage. There was only one cheering aspect of the situation in which we found ourselves at that moment. We were just about in the very middle of the desert with water in practically every direction at a uniform distance of about 200 miles. There was no point in turning back, and there was never any question of that, though we wrangled and quarrelled as hungry and thirsty and tired people are prone to do.

And so we went on. That night we gave four of the most weary camels a drink to keep them going, while the rest were from time to

time watered through the nose during the next few days. Our water supply held out admirably, with the result that I was able to bring back a barrel of Naifa water for analysis at home. The sixth day was critical but decisive. Early that morning we looked out from the last ridge of Bani Ma'aridh on to what appeared to be an immense ocean. It was the gravel plain of Abu Bahr. Our guide had never been here, and we plunged into it, looking optimistically for the sand-dunes which would mark our approach to possible pastures. For more than fifty miles we marched that day, and the sun went down with never a sign of the welcoming sands ahead. One can scarcely imagine a more perfect speed track or an aerodrome more capable of accommodating all the air-fleets of the world; but in all that flat smooth expanse of light gravel there was not a drop of water, not a dry blade of grass, and not a stick for fuel. Tealess and coffeeless we marched on, and never have I seen Arabs drive camels as they drove that day; never have I seen camels on the borderland of starvation march as those camels marched; and for the first time in my Arabian experience it was I that clamoured for a halt from sheer fatigue. That was about 9.30 p.m., after we had been marching since 2 a.m. with scarcely a halt. The Arabs had no earthly hope of reaching pasture, but they did hope to come to dead bushes, which would give us fuel and therefore coffee. That was the uppermost thought in their minds, but what I really needed was sleep, for I at any rate could not sleep on camel-back as most of my companions could do for long periods at a stretch.

Next morning, after only five minutes of marching, we came to fuel and sat down to an orgy of coffee, while the camels looked on bored and disconsolate. When we came to some possible fodder, as dry as hay, they were too thirsty to eat, but we were now very nearly at the end of our tribulations. Once more the storm-clouds worked up from the west and we had drops of rain, while that evening, the eighth of our march, we camped within sight of the dark hills of Tuwaiq. That was practically the end, though we had to march fifty miles on the ninth day. The scene had, however, changed. Everywhere we saw the bushes that marked the lines of drainage descending from the western uplands; at last our camels found greenstuff to eat; and the beasts and birds, which we had missed for nearly 300 miles, began to reappear. The sands had ended, and we marched over gravel and steppe to camp for the last night in a charming coppice of trees and bushes in the bed of Wadi Dawasir. The thing was done, and it was a bevy of women gathering sticks for the home fires that actually

welcomed us back to civilization, the first human beings we had looked upon since we had said good-bye to the little Marri family at Jabrin nearly two months before. We had seen for ourselves that the Rub' al Khali was indeed an empty quarter, and some weeks later we were back home at Mecca just in time for the pilgrimage, which we performed on the camels which had carried us so well and so far. My companions were disappointed of the fortunes which they had hoped to make out of the black pearls of Wabar, but they had not done so badly with an average of about £8 apiece as the result of three months of hard labour—just about enough to buy a wife, but not quite enough to buy a good camel. For such is life in Arabia Felix.

Sir PERCY COX: My Lord Chairman, my Lords, Ladies and Gentlemen—I am very grateful for the privilege of saying a few words on this occasion, a most important one in the history of the Royal Central Asian Society. I have had for many years the very strongest personal reasons for being interested in the Great Arabian Desert and its crossing. At the end of the last century—thirty-three odd years ago now—I was British representative at Muscat, and during the five years I spent there I did what travelling I could as a Government official. On one of these occasions I travelled from Abu Thabi on the Persian Gulf and southward along the edge of the desert to the neighbourhood of Adam and thence back to Muscat. At that time the problem of the crossing of the Great Desert was specifically under the limelight, in connection with a certain vogue for amateur ballooning which then prevailed in England. One of the chief among the amateur balloonists was the Rev. John Bacon, who was a great enthusiast and set himself to tackle seriously the problem of the crossing. His idea and belief was that if he could be helped to find a starting-ground somewhere on the shores of the Red Sea he could balloon across Arabia. The enquiries which he had made gave him good reason to believe that there was a constant easterly wind blowing from the Red Sea coast across the Great Sands which would carry his balloon over to the Persian Gulf, where he could count on being seen and rescued by one of our gunboats stationed in those waters. Unfortunately, before his project could mature he died of some malady quite unconnected with his ballooning activities. I left Muscat soon after-

wards on promotion and the subject passed out of my lively attention, but I have never since ceased to be keenly interested in the exploration of this region. And now I feel very proud that within a year of each other two friends and comrades of mine should have thus shared the unveiling of the secrets of the sands; and, further, that each of them should have travelled under the auspices respectively of two Arab potentates, King Ibn Sa'ud and the Sultan of Muscat, by whose friendship I am also honoured. As I say, I feel very proud that such have been the circumstances of the crossing.

Now to turn for a moment to the actual journeys of the two explorers. It is really extraordinary that they should have been accomplished within such a short distance of each other, in time, and that they should have been concerned with two quite different portions of the Great Desert. It is, of course, only natural, in the case of journeys in completely untravelled and uncharted regions, that differences of opinion, or of information gathered, should be found to exist between successive explorers in regard to particular points; and such differences can only be set at rest by specific research or further exploration. Two instances of the kind I might, I think, mention here.

Firstly, Mr. Philby clearly feels that, so far as he is concerned, he has solved beyond all doubt the question of the identity and position of the supposed buried city of Wabar (as he spells it). Mr. Bertram Thomas, on the other hand, tells us that the locality to which his companions pointed as containing the ruins of Ubar (as he spells it) was, in latitude, quite 150 miles south of the point where Mr. Philby found his crater or meteor-pit. As to the question of the spelling, I agree with Mr. Philby—*i.e.*, in thinking that they must be merely two different renderings of the same name. I suggest that what needs to be done now is that some keen student should investigate the history of the name or names on the record, find out if possible the earliest reference to the place among the ancient native historians and trace it back to its source, and thus enable us, perhaps, to get to the bottom of the problem.

Mr. Thomas, I feel sure, will not be satisfied until this is done.

The other point to which I referred is this; I notice that on Mr. Philby's slide-map one part of the desert is called Rimal and another Ruba'-al-Khali. He apparently considers that they are quite distinct portions of the Great Desert; while Mr. Thomas tells us that the expression Ruba'-al-Khali was not current at all where he was travelling and was never used by his Arab companions. Well, I think this is

quite understandable. In just the same way people living in London, or not far off, would speak of having been to Kensington, or Hampstead, or Hammersmith, whereas people living a long distance away would not know their London well enough to differentiate. To them it would be all just London. In the case of the Arabian Desert the tribesmen who traverse it or graze into it would have different names for various sections of it, and would never think of it or speak of it as a whole; while to the dweller at a distance or the intelligent public in general it would be all Ruba'-al-Khali, and to them the names of its various subdivisions would be unknown. My experience was that outside the immediate neighbourhood of the desert, at any rate north and east, the expression Ruba'-al-Khali was generally known and commonly used for the whole desert.

Mr. Philby has done a splendid piece of work. That portion of his route westwards from Shanna, thence back to Naifa, in straits for water, and then, after all, the second and successful dash across the waterless tract to safety at Sulaiyil, was a wonderful effort. You must have realized, I feel sure, from what we have heard just now that but for that most providential spell of wet weather on his leaving Naifa he would probably never have got across the waterless belt at all.

There is still a blank corner remaining on the map which I hope we may soon see explored by Mr. Philby or some other enthusiast. I mean the western edge of the desert from Sulaiyil due southwards, past Najran, and on to the south-western corner and limit of the Ruba'-al-Khali. Mr. Philby, as you have just heard, declares that he personally has finished for ever with the Great Sands, but I cannot quite take him seriously nor help hoping that he will some day find an opportunity to take this remaining piece of country in hand.

In conclusion, may I once again offer him most hearty congratulations on his fine exploit.

The CHAIRMAN congratulated Mr. Philby on his remarkable achievement and joined Sir Percy Cox in hoping he would one day take up his explorations in Arabia and would fill in that still unmapped corner in the Rub' al Khali.