

ASPECTS OF THE HISTORY  
OF COPPER MINING  
IN NAMAQUALAND

A THESIS PRESENTED FOR THE  
DEGREE OF MASTER OF ARTS IN  
THE UNIVERSITY OF CAPE TOWN

by

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I N T R O D U C T I O N

In undertaking this work, the object has been to present a picture of Namaqualand and its mines. This picture is by no means complete, but it is hoped that the pages which follow will in a small way contribute something to the history of Namaqualand.

The first chapter deals with the early explorations. Not all of the early travellers to Namaqualand have been mentioned, since not all have had anything of significance to say on the development of the copper mines. Nothing is said of Le Vaillant and John Barrow, to name but two. What we have attempted to show, is that, from the very earliest times of European settlement at the Cape, the existence of copper in Namaqualand was known, but that the difficulties of transport prohibited the development of these mines.

The second chapter deals with the story of the South African Mining Company. This company was the first mining concern actually to commence operations in Namaqualand, and the first public mining company in South African history. It is for these reasons that its development has been dealt with so extensively.

The third chapter deals with the copper mining mania of the 1850's. All too often, the very existence of such a boom is forgotten. Its importance lies in the fact that it was the first purely speculative boom of any extent in the history of South Africa. It marked South Africa's emergence into one of the typical features of

a modern economy.

The fourth chapter is concerned with the question of leases. The reason for devoting special attention to this is that the final settlement of the lease question, involving the vesting of mineral rights to the mission ground in the state, has been a factor contributing to the present state of conditions existing in these stations. It is a matter of interest, but also of regret, that the development of Namaqualand's mineral wealth was in many respects disastrous for the original inhabitants of the territory.

The fifth chapter deals with the transport problem from 1852 until 1876, when the Cape Copper Mining Company constructed its railway. Transport was, and still is, the most important obstacle to the exploitation of Namaqualand's mineral wealth.

The first part of the sixth chapter deals with the development of the industry from the commencement of the Cape Copper Company's railway, until 1937, when the O'okiep Copper Company commenced operations. This is rather a long period, and one about which not much is known. An absence of company records has made this section rather impressionistic. The second part of this chapter deals with the history of the O'okiep Copper Company, a company which is still in existence, and which has at present production rates, a life of some ten years. Like its predecessors, the Cape Copper Company and the Namaqua Copper Company, a foreign based organization, its role in the development of Namaqualand is uncertain.

The Dutch East India Company was a commercial body. As such it was anxious to carry on trade in a broad sense and also to discover the potentialities of the places where it had set up its flag. Whenever exploring parties were sent out from Cape Town, their leaders were instructed to search for minerals and to note the physical features of the country.<sup>1</sup>

In order to find the mythical empire of Monomotapa, and the mysterious city of Vigiti Magna, and also to make contact with the Namaquas, various expeditions were despatched from Cape Town during the early years of the settlement,<sup>2</sup> but for our purposes these are not important. Then in 1681 a party of Namaquas were induced to visit the Castle, and brought with them specimens of rich copper ore. Following upon this a certain Olaf Bergh<sup>3</sup> was sent out in 1682 and again in 1683 in search of the source of the copper ore, - both expeditions were in this respect unsuccessful. In 1684 however, a party led by Izaq Schrijver which included three miners was able to penetrate further than Bergh, and while not reaching the copper mountains, did manage to barter a sack of copper ore from a party of Namaquas which they brought back with them.<sup>4</sup> Apparently the Governor, Simon van der Stel, lost little time in finding out the value of the ore.<sup>5</sup> Schrijver's findings prompted van der Stel to personally undertake an expedition to find the copper mountains. The party which was a very large one, included a Mining Engineer, Friederich Mathias van Werlinckhof, who was employed by the Company. In his report upon the Namaqualand copper-field he states:-

...we left the Cape of Good Hope on 25th August last year, 1685, and, after about a month's journey, crossed the Oliphants River; from that place to the Buffel's River, as will appear in more detail in the diary,<sup>6</sup> the Commander was all the time fully informed by me of the nature of the rocks, which were closely examined to see if they held minerals, and on the way various minerals were found capping other minerals, which were, however, neither good nor were they in distinct veins. Thereafter the Commander prospected at all the resting places and examined closely into the possibilities of the localities, but nothing of value resulted.

It was not advisable for the Commander to delay further among these hills, which gave no apparent indications, as he intended to push forward and reach his aim in the Copper Mountains, in the first place in order to avoid scarcity of water on the return journey, and secondly, after forming an opinion on the Copper Mountains, to take back with him actual and various proofs of the minerals in the country passed through, so that they could be tested by the Directors at home. In order that the Commander might get better knowledge of the Copper Mountains, we eventually reached them after much trouble and delay. The Commander, with great zeal and taking advantage of all the circumstances investigated closely a part of the region, and choosing the best places, we began to work on the spot for the search for minerals, especially at a certain spot named by the Commander H.V.R. where in the working we found copper ore with pure metal disseminated through it. At this place we sunk a depth of three fathoms, finding better ore the deeper we went, holding the same minerals and real silver as far as tests could be made, so that, in my opinion, it is certain and obvious that the deeper one goes the richer and richer the minerals will be, the more so because the

fact is beyond all dispute that the minerals first found were not perfect, but the deeper they lay, the harder, more compact, and richer they were found to be. A gunshot to one side of this mine the Commander had further work done by my advice, and here a new trial, a fathom and a half deep was made; we found that the spot was a favourable one, and from it were produced copper and silver of the same kind as described above, yet it was richer in mineral and metal, as appeared from the tests; this place was designated S.M. by the Commander. According to the trials made, this place is of such promising appearance that no other opinion can be held than that in working there the deeper one were to sink, not alone very good minerals, but probably pure massive copper, would be obtained, the more so since the work has progressed more and more favourably from its commencement.

Again, at one or two gunshots' distance on the other side of the said mine, the Commander had a third trial made, and there found a mine holding minerals of the same kind as before, and after sinking three ells, we noticed the same good indications as in the two above-mentioned places, according to the trend of the evidence got there; this last spot was indicated by the name S.V.S. I am entirely convinced of the favourable character of these mines; in the event of mining operations being continued, richer and richer, and better minerals will be found, for the hills concerned extend several miles in length and breadth, and hold minerals almost everywhere, and in some places water for man and beast is plentiful, as the Commander found on inspection.<sup>7</sup>

But the costs of transport precluded the opening up of these mines. According to Theal, "... the steep declivities, the frightful ravines, the wastes of sand, the harbourless coast, were physical obstacles too great to be overcome,"<sup>8</sup> and for more than 70 years no further attention was paid to them.

In July, 1761 an expedition was despatched to Namaqualand under the leadership of one Hendrik Hop.<sup>9</sup> This expedition included among its members a burgher surgeon, Dr. Carel Christoffel Rykvoet, who was to report upon the mineralogy of the region. He found that the Koperberg of Simon van der Stel contained only "...a small quantity of copper."<sup>10</sup> But having examined "...the little Copper Mountain"<sup>11</sup> close by, he found that a mine might easily have been worked there had there been a sufficient quantity of wood and water in the place.<sup>12</sup> He also discovered that in certain places near the banks of the Orange River ore could be found which contained more than a third part of copper.

Although indications were favourable, he reported that:--

...it nevertheless appears that it would not be profitable to commence mining operations here. 1st Because the abovementioned rocks are of such a hard substance, that working out the ore would prove to be a very tedious and difficult process. 2nd Because in the vicinity of the abovementioned mountains, there is not a sufficient quantity of wood to be found to smelt the ore. 3rd Because the Orange<sup>13</sup> or Charie River is blocked up by so many rocks and shallows, that it is in many places quite unnavigable; besides, it is not known how it empties itself into the ocean, and should it be required to convey the ores by wagons, considering the long and miserable roads, the costs of the transport would exceed the profits.<sup>14</sup>

It has been asserted<sup>15</sup> that Gordon and Paterson<sup>16</sup> were next in the field and actually commenced mining operations, but no proof of this can be found. Lieut. Paterson certainly visited the Copper Mountains and found rich specimens of ore,<sup>17</sup> but that appears to be

where the matter was laid to rest until Sir James Alexander revived the subject some years later.

Alexander undertook a journey to the south-west part of Africa under the auspices of the Royal Geographical Society in 1836-7.<sup>18</sup> He found rich deposits of copper ore in the southern part of Namaqualand and in the north close to the banks of the Orange River. Of the former he merely says "...and there is also I know rich copper one day's journey north-east of Keerom, within the colony."<sup>19</sup> But as this presumably was inaccessible he does not refer to it again. With regard to the latter, samples were sent to Cape Town where they were assayed by Sir John Herschel and found to be submuriate,<sup>20</sup> containing 65 per cent of pure copper. A specimen picked out at random was taken to London by a certain Samuel Bennet and assayed in Hatton Garden. This showed about 28 per cent of copper. Bennet tried to form a company to work the mine, but did not succeed in so doing.<sup>21</sup>

Alexander contended that this copper was -

...quite accessible and it might be either smelted on the spot with Orange River wood, of which there is plenty, or it might be floated down to the mouth on rafts, which rafts might then be sawn up and sent to the Cape, where wood is always in great demand for building.<sup>22</sup>

He nevertheless advised a careful survey before any speculation was entered into.<sup>23</sup>

It is popularly believed that Alexander actually commenced mining, for which belief the following account of Fred Cornell is undoubtedly responsible -

As far back as 1838 Sir James Alexander F.R.G.S. published an account of an Expedition of Discovery into the Interior of Africa, which he had carried out under the auspices of the Royal Geographical Society during the previous year, and during which he had explored the lands adjoining the southern bank of the Orange River for some 200 miles from the mouth. He was shown many rich deposits of copper ore by the natives, and so struck was he by what he saw that a year or two later, in London, he formed a company having for its object the exploitation of this new source of mineral wealth. Sir James's scheme included the utilization of the Orange River during the flood season for the floating down of ore, in flat bottomed barges, to a wharf near the mouth of the river, and thence by waggon transport to one of the small bays near, for shipment overseas; or the alternative of smelting furnaces near the river, fuel being attainable from the thick luxuriant belt of timber on either bank.

Definite information as to operations carried out some seventy-odd years ago are hard to obtain, but some attempt was certainly made to carry out this scheme, ore being actually floated down the river and shipped from Alexander Bay, Peacock Bay, and Homewood Harbour; all within a few miles of the Orange River mouth, and at all of which the ruins of substantial buildings, boatships etc., standing deserted to-day on the lonely shores, bear eloquent testimony of this period of activity of a bygone day. But the venture was premature. It was before the days of steam; the ore had to be towed out by ships boats; the prevailing wind, which blows with extraordinary force along this coast, must have been a great obstacle to the rapid handling of ore, and the consequent delay was probably one of the principal reasons for the abandonment of the scheme.<sup>24</sup>

The buildings referred to are however much more likely to have been put up some years later by the South African Mining Company which did in fact send ore down river, but only in the 1850's.<sup>25</sup> Certainly the prospectus of this South African Mining Company would lead one to suppose that no mining had taken place before they commenced their activities in the 1840's.

Alexander's remarks upon Namaqualand's copper deposits served, however, to stimulate interest. In 1843 appeared the Outlines of a Prospectus to form a Cape of Good Hope West Coast Trading and Mining Company.<sup>26</sup> It was proposed that this concern have a capital of £10,000 in 200 shares of £50 each, and was to be established under sanction of an Act of Parliament. Its objects were, firstly, to establish a port on the west coast, for which they considered Rooe-Wall Bay excellently situated. Secondly, to establish an Orange River Mining Company, and lastly, to establish a number of trading centers. These outposts were to be protected by arms, following the example of the French Traders.

This undertaking apparently did not receive sufficient support for its establishment since nothing more is heard of it. As it had been proposed that the trading centers would also be missionary stations, the combination of philanthropic aims with military expenditures and investment in public works, which would not bring in immediate returns, in the plans of the promoters may have deterred potential investors.

The attention that it drew to that remote corner of Southern Africa was, however, directly responsible in stimulating the formation of the South African Mining Company in 1846, the first undertaking actually to commence mining in Namaqualand.

Chapter II.

The South African Mining Company, 1846 - 1848.

matter has been suffered to rest until now, when some foreigners are endeavouring to get possession of, and work, one of the Mines of Copper near the Orange River.<sup>4</sup> This has led to an examination of this Mine, and the result:-

In 28 degrees, 40 minutes South latitude, and 17 degrees, 8 minutes East longitude, there is a mountain of Quartz, on the surface of which are earth and stones, impregnated with oxide of Copper, and on penetrating about two feet into the mountain, the interstices between the strata which lie nearly perpendicular are full of rich Ore, yielding, as proved by Sir John Herschel and others, from 28 to 65 per cent of pure Copper.<sup>5</sup>

Following the publication of this prospectus, there was published a letter from a certain J.B. Harrison<sup>6</sup> "... trusting it... (might)... be the means of preventing the enterprising public from a loss through the ignorance of adventurers, or from entering into a ridiculous speculation, without due consideration."<sup>7</sup> This letter was accompanied by a "Report of the supposed Copper Mine, in the S.W. Coast of Africa, 1846", by a Capt. John Davies, a mine agent from Cornwall - addressed to J.B. Harrison, Esq., of Liverpool:-

Dear Sir - Having been called upon by you, to search out the Copper Mine District, so named by Capt. Alexander, and other travellers, and to report thereon, - and having proceeded on the coast, and into the interior as far as you deemed necessary, I beg faithfully to report thereon.

I have diligently and faithfully examined every part within the following boundaries, viz: from the mouth of the Orange River some twenty or twenty-five miles southward, and from thence some sixty miles eastward; comprizing a district of at least 1,200 square miles, - in which

district iron ores abound in large quantities, both in regular "lodes" and in irregular "masses". The ores are worth from 25 to 40 per cent, but as no coals can be found here, it cannot be recommended as a mining speculation. I have not however seen the least indication of copper ore except at the place called on the Colonial Map, "RICH COPPER MINE", situated south of the Cow Island, Orange River, from fifteen to twenty miles, and from the mouth of the said river, from fifty-five to sixty miles - the nature and appearance of which I shall briefly describe in the following manner -

The Copper Ore in question occurs on top of a small Hill, rising some eighty feet high; not in a vein or lode but as by mere accident, in a mass of hard quartz; and in so small a quantity, that if the said hill were smelted I do not think that 10 tons of copper could be obtained. I have certainly found here, small pieces of copper ore worth from 25 to 30 per cent, which I beg to hand you along with this report. However, very few pieces of this description can be had, since the quartz is merely oxidized with copper. And to geologically describe it - the "BLUFF", or top of the hill is a layer (sic) of hard quartz rock, not at all congenial to copper, under which mass is a layer of geniss(sic), having for its base hard granite.

As to this rich Copper Mine district, I beg to remark that for many miles around, it consists chiefly of irregular ranges of granite hills, with occasional layers of geniss(sic), mica, mica-slate, quartz rock, etc., without a lode, vein, or any strata; either indicative of gold, silver, mercury, zinc, lead, tin, copper, or any other metalliferous mineral. Nor can any man who understands the nature of mining be mistaken as to those matters, since both hill and dale are

completely freed from sand, soil, and vegetation.

Deep ravines also occur in almost every direction, occasioned by the annual torrents, showing at once to the Miner, Mineralogist and Geologist, the nature of this district, without digging, boring, blasting, or removing any rubbish.<sup>8</sup>

In reply, Thomas Fannin<sup>9</sup>, The Honorary Secretary of the South African Mining Company, commented as follows:-

...from the report of the "Mine Agent from Cornwall", it appears that he has not even seen, much less "faithfully examined", the mine near the Orange River, in which the mining company intend commencing operations. He may have seen a mine, but certainly not the mine. It appears the expedition brought out all the necessary tools and materials for a proper examination of the mines, but from the time they landed the wagon and tools at the mouth of the Orange River, misfortune attended their every movement, ... the party got into the hands of the Frenchmen who have been endeavouring to get possession of the mines. They were their guides to the mining district pointed out by Sir James E. Alexander, showed them what answered their purpose, and never lost sight of the mining adventurers from Liverpool until we find both parties in Cape Town.<sup>10</sup>

And Fannin comments further on the reasons for the publication of this report, -

I can only...pity the motives which induced Harrison to place such statements before the public. Intended evidently to mislead them on a subject of such serious importance to the commercial interests of the Colony; ...however... Unfortunate in all the movements of the adventure by the Ellen German, the managers of that disastrous expedition would thus endeavour to hide their ignorance and misfortunes, by trying to prejudice

the public mind against the operations of a company which would certainly ... (have) ... exposed the failure of the Ellen German's adventure.<sup>11</sup>

Dr. George Eveleigh<sup>12</sup> also commenting upon the report of Capt. Davies, and the introductory remarks stated in a letter published in the Shipping and Mercantile Gazette,<sup>13</sup> "...commencing with a valuable introductory caution, which I suppose Captain Harrison has considered necessary on account of the unfortunate trip of the Ellen German. The facts stated in the report are, I consider, opposed to the views and opinions of the writer, Captain Davies, who was, no doubt, in Captain Harrison's mind when the above named caution was written." We can only surmise as to the motives of Harrison. Perhaps he intended to commence mining himself if his criticism dissuaded the public from investing in the enterprise. On the other hand, historical reality has borne out his pessimism.

The publication of this letter appears to have taken its toll of potential shareholders since the original prospectus had mentioned an amount of One Pound per share as being more than sufficient "...to prove what can be done, and enable the Directors to bring the ore into the English market, and show the proprietors the value of this investment."<sup>14</sup> While a revised prospectus issued on the 20th March, 1846, that is, some fourteen days after the publication of Harrison's letter, states that the shareholders would run no risk beyond the deposit of Ten Shillings per share.<sup>15</sup>

In addition, at the first meeting of the company a resolution was passed that the capital should consist

of 2,000 shares of £10 each, whereas originally it had been proposed that the capital should consist of 5,000 shares of £20 each.

Dr. Eveleigh gives as further reason for thinking that the conclusions which Capt. Davies had arrived at being false the following -

No wonder then, if many miners failed in their expeditions to South America; and no wonder if they fail in South Africa; for the best mine superintendent and the most clever mineralogist, if ignorant of geology, are not fit for miners out of their usual sphere of operation.<sup>16</sup>

Nevertheless for all his pretensions to be a scientist, Dr. Eveleigh seems to have known less about geology than the missionary James Backhouse, who realised that Namaqualand was not a coal rich territory. In the same letter referred to above Dr. Eveleigh states that -

The barren state of that part of the country is, of all, one of the most confirmatory proofs of the abundant existence of metallic ore and coal.<sup>17</sup>

In fact Dr. Eveleigh had at this time not yet visited Namaqualand; he had, however, worked out a theory concerning its mineral deposits. This theory was he considered corroborated by the evidence of Davies. According to Dr. Eveleigh the South Western part of Africa formed part of an immense basin, and if South Africa lay on the opposite verge of the same basin as existed in South America then there was said to be every reason to suppose that the same minerals would be found in South Africa as in South America.<sup>18</sup>

And, if the Cornish miners were unable to appreciate the wealth of the South American mines because the

ore was found in different circumstances from those prevailing at home, then they were equally ill-equipped for ascertaining the merits of the South African mines.

The editor of the Mercantile and Shipping Gazette was meanwhile prompted to write an extremely bullish editorial, stating that the following facts were ascertained beyond doubt:-

First, that copper ore of rich quality exists in several places (at least six) in South Africa. Second, that it is on the surface, and no attempt has yet been made to trace it for more than two feet below the surface.

Third, that Native labour can be readily and cheaply obtained to work the mine near the Orange River.

Fourth, that the carriage of the ore from the mine to the shipping port (Peacock Bay), is under one hundred miles, and comparatively easy and cheap.

Fifth, that this ore is the same degree of latitude and similarly circumstanced, with ores found in South Australia.<sup>19</sup>

Of the above "facts", only one can be said to have been ascertained without doubt - namely, that the ore had not been followed further than two feet, this being the depth to which Fannin had followed the ore. The information in this editorial can only have been obtained from Fannin; it is substantially the same as that presented to the shareholders by him at the first meeting of the South African Mining Company held some seven days later. Thus, the editor of the Shipping and Mercantile Gazette can be seen to have been staggling on behalf of the South African Mining Company. Since he had been the Honorary Secretary of

the proposed Orange River Mining Company of 1843,<sup>20</sup> perhaps he also had some interest in the South African Mining Company.

A few days later the report of Dr. C.C. Rykvoet to Ryk Tulbach, 1762, was reprinted in the local press, and Thomas Fannin commented thereon giving his reasons for believing that the conclusions which Dr. Rykvoet had arrived at were no longer valid:-

Today I am pleased to see in the same paper, an old report laid before the Dutch Government by Dr. C.C. Rykvoet in 1762, referring to the mine near the Orange River, which it is now proposed to work, and which is highly interesting as confirming the value of the ore, and explaining the reasons under three heads, why he thought, at that time, mining could not be advantageously undertaken, ...His first objection is "because the aforesaid rock being of an uncommon hard substance the excavation of the ore would be most laborious and difficult."

To which I reply:- This is exactly the kind of rock (quartz) in which copper ought to be; and is so found similarly circumstanced in the mines of South America and South Australia, which are at this moment being successfully worked.

Second, . "that in the vicinity of the copper mountain, wood sufficient could not be obtained to smelt the ore."

To this objection I have only to state that the ore is sufficiently valuable to pay the expense of carriage without smelting.

Third, "that the great river is obstructed with many reefs and shoals, and thus in many places cannot be navigated even with boats, and it has also to be ascertained whether the place where it discharges itself into the sea, could admit of vessels riding there for the purpose of taking away the ore, or bringing such necessary articles

as are here required, - but if everything had to be removed by land carriage to the sea, I am confident that the expense of transport would amount to far more than any profit that might be derived from the ore."

To this I reply:- There is no part of the Orange River shallower than three feet from the copper mountain to the landing place near the mouth of the river, where it is intended to land the ore and carry it for six miles in ox-waggons to Peacock's Bay, thence to be shipped; so that between all the reefs and shoals there is sufficient depth of water, and room for navigating flat-bottomed boats or rafts within the required distance, which is between 60 and 70 miles. Thus the expense of transport will be from the mine to the Orange River say 20 miles, and from the Orange River to Peacock's Bay 6 miles; in all by ox-wagon 26 miles or one days work, and on the Orange River the current will bring the lighter or raft down guided by two men with poles; thus the expense of carriage will not be half as much as compared with most mines ... I will only add, the estimated value of the copper ore at the Orange River Mine, is between 20 and 30 pounds sterling per ton.<sup>21</sup>

The first point of interest which emerges out of the above is that there would seem to be no reason to suppose that Rykvoet's mine and Fannin's mine were one and the same. However, ignoring that, Fannin's first comment seems of no relevance since, whether or not the hardness of the rock was conducive to the presence of copper, this would not remove the difficulties connected with working a mine in such rock. One cannot really say anything about his second comment, except that this did not prove to be the case. But with regard to the third, his expectations were far

too sanguine. He had at that stage not personally inspected the route to the coast and was thus not in a position to be so categorical about the matter. As to his comment that "...the expense of carriage will not be half as much as compared with most mines", it was completely false.

The first meeting of the South African Mining Company was held in the Commercial Hall on the 21st March, 1846. A report of the proceedings of the company up to that time was read by Fannin, who gave the following as the basis of formation of the company:-

From the concurring testimony of various travellers into the interior of Africa, from 1762<sup>22</sup> up to this time, we have clear evidence of various ores on the surface of this continent.

We have similar testimony that the like ores are found exactly similarly circumstanced on the continents of South America and South Australia, where the mines are successfully worked at the present moment.

To Copper ore attention has been particularly directed, which from its intrinsic value,<sup>23</sup> as generally found in mines, will bear the heavy expenses of carriage to market, without smelting. Some pieces of this ore were proved on analysis to contain from 28 to 65 per cent of pure copper, the average proving over 40 per cent.<sup>24</sup>

Thus the company was in the first instance encouraged solely by the evidence of Alexander. This was not sufficient, however, and it was decided that further examination was necessary to determine:-

principles, - paying the labourer just and fair wages, - and not, as in some former trading transactions, grasping all the produce of the country, for which mere trifles were given in exchange; and not only so, but unprincipled men spreading debauchery and infidelity wherever they went, thus counteracting the labours of the Missionaries.<sup>26</sup>

Mr. Schemelen seemed confident that the Orange River mine would prove the more advantageous to work, but as it was not too far out of the way Fannin decided to see if it would be practical to bring the copper ore to the market from the copper mountains marked as such on Arrowsmith's map of the Colony, utilizing the bed of the River Kousie (which was at that time the official boundary of the Colony) as a road. And, in order to ascertain this he

rode forward, on the 26th December, to the Kousie River, now dry; - but during the months of June, July and August, it has from two to seven feet of water flowing along its nearly level bed, from the mountains to the sea; its breadth varying from twenty to two hundred yards; the distance from the copper mountains to the sea being about sixty miles. Rode along the course of the River, the bed of which is in many places full of rocks, rendering it in its present state an impassable path; and as there is no safe harbour near on the coast for shipping, no progress could be made in bringing the produce of those mines to the market at present.<sup>27</sup>

Fannin together with his guides, one of them a certain Abraham Josef, a son of William Josef, named by Alexander,<sup>28</sup> reached the mine on the Orange River on the 31st December, 1845, "...a hill of white flinty rock about one hundred yards high." Thus enabling Fannin

Map showing the relationship of Namaqualand to the Cape, and the situation of the mission stations relative to Fannin's mine.

John Noble, Descriptive Handbook of the Cape Colony its conditions and resources.



to report on the seven queries delineated; however, we shall concern ourselves with only the most important of these.

Firstly, as regards the state of the labour market, Fannin commented as follows:-

Native labour may be obtained through the influence of the Missionaries, certain and abundant. The Orange River Mine is centrally situate to the four mission stations of Kamiesberg, Kommagas, Kok Fontein, and Nisbet Bath, at each of which stations are hundreds of civilized Hottentots. Many of the young men have received a good education, know the value of wages, and beneficial employment, and are in every respect admirably circumstanced for assisting the company in working the mines ... It may here be remarked that the Hottentots are accustomed to use the mattock in tilling their gardens; this tool is similar to a miner's pick, which they can be readily taught to use, and under proper management they will make good miners without requiring many workmen from England. Nor will it be necessary to erect dwellings for these workmen, as they invariably live in their own huts, formed of reeds and mats, which with all their furniture for an entire family, may be carried on a single ox, and thus they wander from place to place. The farmers pay them wages from 3 to 10 rix-dollars per month,<sup>29</sup> and rations. Cape sheep may be purchased there for two or three shillings each, - oxen proportionately cheap, and there is abundance of water and corn land in the neighbourhood; so that there is no difficulty, but may be easily overcome, in procuring labour.<sup>30</sup>

This did not prove to be the case and the difficulty of securing labour proved to be the major one. In

fact, while Fannin blithely informs us that the Orange River Mine was centrally situate to the four mission stations, and this was true, in that the distance from the central point, the mine, to the stations was approximately the same, that distance was a considerable one.<sup>31</sup> And one wonders, since this area was beyond the borders of the Colony, how accustomed to the payment of wages the natives were.

Fannin had stated that he had encountered no European farmers beyond the river Kousie,<sup>32</sup> therefore it would seem likely that these natives were unused to money as a medium of exchange, or of wage labour of any kind. Perhaps, since Fannin enquired into the habits of working etc., of the Hottentots at the Mission Station of Kamiesberg, he obtained a false impression of their aptitudes and inclinations, since this station was within the borders of the Colony, and we may expect a different mentality amongst these people. Furthermore, the station of Nisbet's Bath was beyond the Orange River, and since Fannin had not journeyed there himself, he was obviously repeating hearsay.

Secondly, as to the existence of a safe harbour on the coast. Fannin stated that there was one at Peacock Bay,<sup>33</sup> some six miles south of the Orange River, and that this had been proved by the landing of a waggon there by the "Ellen German". He had not however at this stage personally inspected this bay, and so this was merely a matter of conjecture on his part.

Lastly, as to the rights of natives or "other parties" to possession of the district where the ores were situate or through which they would have had to have been carried, enquiries were made of various authorities<sup>34</sup> the result being as far as could be established, that "...no tribe or individual whatever has any claim, worth a straw, to any part of the district between the Kousie and the Orange River."<sup>35</sup> This seems utterly ridiculous since there were tribes of natives inhabiting that territory since time immemorial.<sup>36</sup>

Fannin arrived back in Cape Town on the 20th January, 1846, and on the basis of his recommendations it was decided to form a joint stock company to be known as the South African Mining Company - to this end the advice and co-operation of government was requested - and Fannin says that he was examined before the Governor and Council on the subject, "...after which the Prospectus was published."<sup>37</sup> The subsequent annexation of Namaqualand by Sir Harry Smith in December 1847, leads one to wonder whether this was not one of the earliest examples of the flag following trade.

At the first meeting of the company Fannin not only presented a report upon his activities to date in regard to exploratory work etc., but also gave details of the proposed mining operations, attention being drawn to the following points: firstly, that no heavy adits would be required to convey water from the mouth of the mines; secondly, unlike the situation in England where deep shafts had to be sunk before the lodes or veins were reached, here this would not be necessary

since the ore was close to the surface; thirdly, because open cast mining was possible, it would not be necessary for prospective miners to undergo extensive training, and thus those miners could be found within the colony, so avoiding both expense and delay in opening up of the mines; fourthly, in the first instance no expense would be incurred in purchase of the mine, and so it was proposed that one tenth of the net profits were to be reserved for such a contingency; fifthly, all the tools and equipment could be obtained in Cape Town; sixthly, the shareholders would run no risk beyond an initial deposit of 10/- per share, and three months notice would have to be given prior to any further call. Solicitors were to be appointed to draw up a trust deed which would limit the liability of the shareholders and leave it optional with them if they wished to retire from the concern before a second call was made. The Directors were given notice that they were not to expend a greater amount than £1,000 without the consent of a General Meeting of the shareholders.

The following were elected as Directors:

Baron von Ludwig, (Chairman)

Edward Chiappini, Esq.,

Isaac Chase, Esq.,

William Billingsley, Esq.,

L.H. Twentyman, Esq.,

Edward Eager, Esq.,

George Thompson, Esq.,

Thomas Andsell, Esq., and

John King, Esq.

Preparations were made to commence mining and a party was equipped for such an enterprize. On the 9th June, 1846, Fannin left once again for Namaqualand, accompanied by an engineer, a miner, and the requisite attendants.<sup>38</sup> The purpose of this second exploratory expedition was to confirm and augment the information derived from the first:-

The first examination of the Copper Berg being only superficial no penetration having been made farther than two feet into the upper crust of the hill, it was deemed prudent that a further examination should take place, for the purpose of ascertaining whether the copper ore existed in quantity, and as to the best means of conveying the ore to the coast for shipment.<sup>39</sup>

The party arrived at the mine on the 7th September and mining was commenced within seven days. By the 22nd of the month the shaft was already eight feet deep, and a vein some fourteen inches wide had been struck.<sup>40</sup> Progress was rapid, but that was essential, for while Fannin thought that the best way to open up the mine would be to drive a level or adit through the base of the hill, which was granite, rather than quarrying from the top which was quartz,<sup>41</sup> with the limited means at his disposal, and especially the shortage of labour, this was impractical, since it was likely that the whole of the available resources would have been expended before the ore body was reached. So, in conformity with his instructions and in order to satisfy the shareholders who doubted the existence of ore in quantity, it was deemed advisable to get out some as speedily as possible by following it down from where it appeared in greatest quantity on the

surface.<sup>42</sup>

As the shaft was pushed downwards the ore was found in what are called "bunches", larger and richer as they proceeded, green carbonate was found nearest the surface and grey sulphide deeper down. The former was found to contain fifty per cent and the latter seventy per cent of pure copper.

Having thus ascertained the certainty of a large lode of copper ore of uncommon richness, for excepting Australia, in no instance can I ascertain that such rich ore has been found so near the surface, and thus having accomplished the great object of the expedition, I sent off samples of the newly discovered ore, the grey sulphuret of copper to the directors of the company at Cape Town by four different conveyances, viz:- by Thomas, the Smith,<sup>43</sup> who said he was returning to Cape Town, by the Speculator which was lost on her way down, by the Challenger, and by Mr. Homewood. Only one of these samples (that by Mr. Homewood) reached the Directors; this sample yielded seventy per cent.<sup>44</sup>

Fannin's next duty involved ascertaining the "...best means of conveyance to the coast."<sup>45</sup> There was, it appears, a waggon path from the mine to the sea, but it would have taken four days to reach the sea by it, and he considered that ten tons could be transported on the Orange River as easily as one ton by the path. Thus he considered that transport via the Orange River was the only practical course, and he personally inspected this route upon which he commented:-

although... (the tale) can be told in a few words, I trust I will never again have to endure what I suffered in this survey from intense heat, thirst, and hunger.<sup>46</sup>

to obtain the services of three men to bring the ore to Kamiesberg, and the promise of others to drive it on to Cape Town. This last proved necessary since while at Kamiesberg he had received instructions to return to Cape Town by the fastest possible means - horseback - and leave the ore to follow.

His presence was required in Cape Town for the second Meeting of the Company. In conclusion to his address at this Meeting, Fannin commented:-

I will conclude by expressing a hope that no further delay will occur in working the mine we now possess, satisfied as I am that the exports of precious metals from this colony will soon be larger than all its other exports added together.<sup>52</sup>

The prices of the shares of the South African Mining Company are rather interesting as a gauge of the interest shown in the activities of the company.

Below is a price list.

SHARE PRICE LIST OF THE SOUTH AFRICAN MINING COMPANY.<sup>53</sup>

<u>Date</u>	<u>No. of shares</u>	<u>Nominal value</u>	<u>Amount paid up</u>	<u>Market value</u>	<u>Dividends</u>
21/3/46	2000	£10.0.0.	£0.10.0.	£0.18.0.	none
26/2/47	2000	£10.0.0.	£0.10.0.	£0.10.0.	none
May, '47	2000	£10.0.0.	£1. 0.0.	£1. 0.0.	none
10/3/48	2000	£10.0.0.	£1. 0.0.	xxxxxxx	none
28/4/48	xxxx	xxxxxxx	xxxxxxx	xxxxxxx	xxxx

In May, 1847, at an adjourned public meeting of the company, a further 10/- per share was unanimously voted, in order to enable the directors to continue operations, and in the Mercantile and Shipping Gazette

of the 28th May, 1847, a notice was published as follows:-

A meeting to be held tomorrow to decide upon adoption or rejection of the arrangements about to be entered into with a Party of Miners to proceed to the Orange River.<sup>54</sup>

Nothing further appears to have been done however.

A new setting for the value of shares in Joint Stock Companies in the Shipping and Mercantile Gazette of 28th April, 1848 does not include the South African Mining Company. It should be noted that in March already the shares had ceased to have a market value, since the third meeting of the Company should have been held around this time, - an event which does not appear to have taken place - this may account for the shares becoming valueless. The Company simply appears to fade out of existence for a few years without being formally dissolved.<sup>55</sup>

Chapter III.

The Boom Years.

View of King's Mine, 1854

(Mendelssohn Library)

No. 18821.



V I E W . K I N G ' S . M I N E

(90)

Some time after the disastrous expedition of the South African Mining Company a German named von Schlicht went up to Namaqualand, and found, not only van der Stel's mine, but more important, a farm named Springbokfontein, alias Melkboschuil, alias Koperberg, "... where just above the homestead a great lump of many thousands of tons of fine ore stuck out of the mountainside in full view like a huge vein."<sup>1</sup>

Von Schlicht returned to Cape Town "...to proclaim the good news,"<sup>2</sup> but he was unable to interest either the capitalists or merchants in this venture. In the light of the failure of the South African Mining Company this was hardly surprising. Furthermore, *J. A. Linné* *stays*  
"...Sir Walter Scott's novels were much read at that time and von Dousterswivel was a German, so that although the corner of the veil had been lifted Africa still held her secret."<sup>3</sup>

At this time von Schlicht lived with a man named Jencken, whom he naturally told of his discoveries; while von Schlicht was absent from Cape Town for a number of years, Jencken, who was in business supported by Phillips and King, a Cape mercantile firm, got into difficulties, and, in order to repay them offered to go to Namaqualand to open a general store and at the same time to investigate von Schlicht's discoveries.

John King of this firm, had been one of the directors of the ill-fated South African Mining Company and must have known of the existence of these deposits since Thomas Fannin, the manager of that concern, had mentioned them in his reports;<sup>4</sup> and this may have

been a factor in persuading Phillips and King to accept Jencken's offer.

Jencken sent down such glowing reports of these deposits at Springbok that Phillips and King decided to send up a Mr. John Wild, in whom they had complete confidence, to investigate. He supported Jencken's observations entirely, and so the business of "... copper mining or rather copper gathering was entered upon."<sup>5</sup> No attention was drawn to their activities however, since they were not sure what action the Government would take in the matter. Sir Harry Smith had extended the boundaries of the Colony up to the Orange River in December 1847<sup>6</sup> and so Springbok fell within the sphere of the Cape Government. The farm had at this time not yet been granted to the Cloete's, the occupiers, and was granted to them only on the 21st January, 1850.<sup>7</sup> No mineral rights were retained by the Government, however, this would not have been the case had the existence of valuable and workable deposits of copper been known of. We may in this connection quote from a communication from the Secretary of State to the Lieut-Governor Sir G. Cathcart, which, although written much later, would surely have reflected a continuing policy in such matters:-

It is scarcely necessary to caution you against any recognition on behalf of the Crown of the claims of the occupiers of land to the minerals, especially where they do not hold title either originally granted or subsequently recognized by the Crown.<sup>8</sup>

Von Schlicht had meanwhile returned to Cape Town, and upon finding that Jencken was in Namaqualand, he realised that it was his discoveries which had taken that gentleman there, and getting together with two of his friends set off for Springbokfontein. Finding large stacks of ore upon arrival there they entered into negotiations for the purchase of the farm; these negotiations were apparently well advanced before they all retired for the night, promising to conclude their business in the morning, but...

while they slept, Mr. Wild who always travelled by night came home and he was not a man to let the grass grow under his feet. A glance at the neat Cape Town travelling wagon told him enough, and getting in at the back door of the house he quietly roused the farmer and his wife and at sunrise he met the travellers with a smiling face and the deed of sale of the farm in his pocket.<sup>9</sup>

How literally John Blades Currey's description of events should be taken is debatable; what is known is that on the 16th March, 1850, the purchase price of £50 was paid over, while the deed of sale for the portion purchased - which was 10 morgen , 351 sq.roods - was formally completed on the 28th October, 1850, at Melkboschkuil, and that this document was in fact witnessed by H.D. Jencken and John Wild.<sup>10</sup>

By this document Phillips and King obtained the mineral rights of the entire farm and in addition sufficient land for the erection of any buildings and works that might be considered necessary for the working of any future mineral discoveries. They were also granted

the right of grazing for any cattle, horses, goats, and sheep that they might require for the working of the mines; the right to the use of water; and the rights of free access and of making roads. The remainder of the farm was subsequently acquired by Phillips and King for the sum of £2,344.10.0.<sup>11</sup>

The von Schlicht/Stoll/Thomson, Watson & Co./Prince, Collison & Co.,<sup>12</sup> consortium engaged in further prospecting work and finding that there existed other rich deposits, but upon Crown land, entered into correspondence with Government, requesting permission "...to search and work for the same."<sup>13</sup> Following upon this came a proclamation of 13th September, 1853, which made provision for ascertaining and developing such mineral resources as existed on Government lands in Namaqualand.<sup>14</sup>

Notwithstanding the crisis which had existed in Cape Town only a short time before, resulting from overtrading and speculation with the gold regions of Australia, and which had seriously threatened to involve some of the most respected of the Cape mercantile houses and which apparently did make the "money market" inconveniently tight for some time,<sup>15</sup> the Cape, and especially Cape Town, indulged in a mania of speculation following the publication of this proclamation.<sup>16</sup>

To some extent the Copper Mania was probably the direct consequence of the news that had filtered through to the Cape of the Californian and Australian gold discoveries. Having searched in vain for gold here, the public on learning that the Cape Town firm of Phillips

report on the subject, printed in 1854 as part of the Papers and Correspondence on Namaqualand,<sup>20</sup> he had spoken flatteringly only of the Spectakel, Springbok and Concordia mines, and furthermore, that events had not disproved such flattery. The general tone of his report was, however, extremely optimistic:-

Let the farms be cultivated and the mines opened, and it will be found that Namaqualand contains more real wealth than the whole Colony put together; for I have little doubt that all the country from the Oliphants River to the Orange River abounds in mineral wealth, and only wants to be thoroughly explored to develop its riches.<sup>21</sup>

That his report gave people confidence in the prospects of Namaqualand is illustrated in the following resolution passed in June, 1854 by a meeting of gentlemen interested in the mineral lands of Namaqualand:-

That in the opinion of this meeting, any doubt of the correctness of the various statements as to the existence of rich deposits of copper ore in Namaqualand is entirely removed by the concurrent testimony of many gentlemen well known for their strict integrity, among whom may be named Mr. Bain.<sup>22</sup>

*See further 25, Bell's views.*

The alleged value of copper ore was, however, not the only stimulating factor; aware of the discovery of gold in Australia and California, the public became imbued with a "...craving lust, for sudden and extraordinary wealth"<sup>23</sup> by the rumours of gold deposits in the Sovereignty,<sup>24</sup> and great excitement prevailed

when a certain Mr. Nicholls who had been in the employ of Phillips and King, claimed the reward of the Gold Discovery Committee for having discovered gold in Namaqualand.<sup>25</sup>

These rumours caused an increase in the value of shares on the market at that time, i.e. early in 1854, most notably the South African Mining Company and the Cape of Good Hope Company.<sup>26</sup> The excitement was described as a hoax by the Cape Monitor's correspondent on mining. Apparently people in Namaqualand knew so little of the "...Gold fever raging in Cape Town, that the news took them by surprize, and Nicholls was given the cold shoulder since he could not lead those who went with him, to any definite spot where Namaqualand gold could be found."<sup>27</sup> As a result the shares were soon at a discount.<sup>28</sup>

A factor which gave stimulus to the boom was the generally held belief that large capitalists from England, would, on being assured of the abundance of copper ore in Namaqualand, purchase the centres at any price.<sup>29</sup> This naturally enough gave cause for the searching out of, and leasing of, as many centres as possible; and some companies possessed large numbers of centres - one had sixty or seventy and was still searching for more.<sup>30</sup>

Attempts to interest English capitalists failed however, since, having burnt their fingers only shortly beforehand in the Australian Mining Boom they were

at this time rather cautious. In an article in the English Mining Journal<sup>31</sup> investors were warned strongly against investment in the Namaqualand Companies. Describing the history of the Australian Companies, it was noted that the promoters of these Australian gold companies had promised immediate dividends to the fortunate allottees, who were to become rich over-night; the results had been that not one had paid a dividend, most had either wound up their affairs or gone defunct in discreditable circumstances, while those still in existence were carrying on a lingering struggle for survival.

The causes of this state of affairs were felt to be - firstly, the disputed lease question, and in this the Namaqualand mines were similarly circumstanced. Great movement was in fact engaged in by various persons interested in Namaqualand to obtain an extension of the lease period, ostensibly, in order to obtain greater security for English investors to invest in a Railway or Tramway Company, but in reality this activity was motivated more by the hope that some alteration in the lease period would induce English investors to invest in the mines.<sup>32</sup> Secondly, a cause of failure of the Australian mines was said to lie in the total lack of knowledge of the country, and in this too, Namaqualand was similarly circumstanced.<sup>33</sup> Thirdly, the greatest fault of all was said to have been the employment of incompetent agents, "...many of whom knew nothing of mining or

labour previous to their arrival at the scene of operations."<sup>34</sup> And, in this also there was a parallel in Namaqualand, illustrated by evidence given by Mr. Chiappini<sup>35</sup> before the Select Committee on Mineral Leases, 1856:-

Q.126. Is there anything more you wish to state to the Committee? - In corroboration of what I stated of the perfect inefficiency of parties sent up to work the mines, with regard to the Great Namaqualand Company, a gentleman was sent up as manager of the mines, and he wrote to say that he had come upon a splendid lot of about 80 tons, and he sent down a lot of it to our directors, who also thought it to be very good; but when it was examined, it was found that there was not a particle of copper in it.<sup>36</sup>

And further in the same report, Mr. H. Hewitt<sup>37</sup> states:-

Q.150. Were any of... (the shareholders)..., as far as you know, acquainted with mining operations? - No, I think not one of them; Superintendent Adams had been a miner, but not in metals, merely a sort of stone-quarrying, not a practical mineralogist, and knew nothing of geology.<sup>38</sup>

The implication of the English Mining Journal was then, that, the Namaqualand companies suffered from the same defects as the Australian ones, which had recently failed, and that the Namaqualand companies would suffer the same fate as their Australian counterparts, and, in this it was correct.

In describing the means likely to be used by these Namaqualand Mining Companies to obtain capital from England, a satirical commentary was given:-

The companies will be probably got up in the usual stereotyped manner - the directors an Irish peer, some decayed baronet, several honourables, a ruined merchant, a crafty solicitor, &c., all of whom will no doubt, for their names, receive a certain percentage, and several thousand free shares, which they can dispose of at premiums in the market. A secretary who can pay a portion of the preliminary expenses will obtain the situation, and some relative of the governing body, without the least knowledge of mining, will be sent out to the Colony, to take the direction of affairs. In nearly every instance this has been the case with our foreign mining adventures, and the consequence has been that, although the directors and employes have benefitted, the shareholders have found their money expended, in the enrichment of a few individuals, who, on the faith of their names and supposed high character, have extracted large amounts of money from the public, which they have themselves engrossed.

We will not further allude to the conduct of many of these bodies, whose infamy is now so notorious. We wish to see enterprize fostered in South Africa, but we emphatically caution the public from embarking on schemes where the only security they obtain is high-sounding names, and where incompetent agents are likely to be employed. These men may possibly rig the market, and run up the shares for a few days; but it will be done at the expense of the company. They have nothing to lose, but all to gain. Such

associations should be avoided. Money should be invested in those associations where the directors are men of business and standing, and thereby able to guarantee to the public that they will look as ably and conscientiously after their affairs as they do with regard to their own.<sup>39</sup>

With the example of the Australian mining mania before them and being warned by knowledgeable persons, it is not surprizing that English capitalists were not anxious to invest in Namaqualand. Monetary conditions were also unfavourable for foreign investments at that time; for, with the imminence of the Crimean War, the Bank Rate had increased to 5-5½ per cent by 1854, thus making speculative ventures abroad, unattractive, and, although the Bank Rate had decreased to 3½ per cent by June, 1855, the failure of many of the companies by that time made investment highly speculative. In any case, by October it was once again 5½ per cent and remained high for some time thereafter.<sup>40</sup>

The Cape public were continually warned of the dangers of indiscriminate speculation, even although any person who "...suggested a question that was calculated to bring an unsatisfactory answer was scouted as an enemy to the Colony."<sup>41</sup> Many of these warnings were contained in the extremely flowery language of the times:-

At the beginning of the week, the violence of the South-Easter kept everybody within doors who was not absolutely compelled to traverse the streets; and thus induced a short abatement of the Mining Share Fever. This epidemic has, however, recovered its power, and reigns and rages literally "like a house on fire", a conflagration which must now spend itself, and end only by burning itself out.

Unhappily, those best qualified to suggest and apply (or, if need be, enforce) a remedy, are themselves among those who have been attacked most violently. And the tedious convalescence of those who escape present destruction, will, it is to be feared, prove as fatal as the disease itself. A disorder of such virulence, and attended with such long and unintermitting delirium, such perplexing alternations of nausea and ravening hunger, must reduce the constitution to an ebb, from which the greatest care and skill will hardly effect recovery. Among some patients the understanding exhibits symptoms which lead to the apprehension of permanent mental aberration. Others have been affected in a different way, and seem to have lost the functions of sound business health, and the taste and the capacity for ordinary pursuits; and in not a few cases, a moral obliquity of vision has appeared, (as there are some men who do not possess the power to perceive certain colours) which disables the sufferer from recognizing or appreciating some very distinct shades in the ethical spectrum.<sup>42</sup>

Perhaps, however, the warnings were so veiled by rhetoric as not to be taken seriously; whatever the cause, they were largely ignored.

There does not seem to have been any control over the setting up of companies, and so, especially at the height of the boom late in 1854, when the majority of the companies were formed, many raised capital upon the most vague information. Below is reproduced the prospectus of one of these companies:-

HENKRIS MINING COMPANY.

PROSPECTUS

The proprietors of certain Nine Centres, to be leased from the Colonial Government, and which have been applied for on the selection of Mr. J.A. Bam, Jnr., who has personally visited Namaqualand, and brought to town with him samples of Surface Ore, gathered from these Centres, propose to form a Company to be called the "Henkris Mining Company."<sup>43</sup>

On the basis of the above "prospectus" the originators of the Company proposed to receive applications for shares to an amount of £15,000. This capital was then to be split in such a way that the originators who did not exceed half a dozen, would possess £8,500 and the subscribers £6,500 of the capital, thus the subscribers would be paying a premium of more than 100 per cent for entering a company which had done nothing besides exhibiting a few ounces of surface ore, samples which had not even been examined by a competent mineralogist, from centres selected by a gentleman whose credentials, if any, were not given. "Asmus", the Commercial Advertiser's correspondent commented:-

The most attractive part of the prospectus is probably the queer sounding title of the "Henkris" Company, which may possibly be either Sanscrit or Hottentot: or as some believe a Cockneyism for "Increase".<sup>44</sup>

Not content with the investment opportunities presented by enterprising Cape Town gentlemen<sup>45</sup> the public sought out promising private companies in the hope of persuading them to be allowed to participate, as may be seen from the preamble of the Prospectus of the Rietberg Mining Company, published in November, 1854:--

In consequence of the numerous Applications for shares, the Lessees of the Copper Mine "Wheal de Villiers" (claim 248) have resolved to allow the public to participate in the working of the said Mine.<sup>46</sup>

This prospectus contained amongst others, the following points - a capital of £1,000,000, in 20,000 shares of £50 each, 5,000 shares were to be reserved for the lessees for their own benefit, in remuneration for giving up one-fourth of the mine, the first four instalments, a total of £5 per share, making altogether £75,000 for the remaining three-fourths of the mine, if this was thought perhaps to favour the originators rather heavily, the public were at least given the benefit of knowing that their money would be put to good use, for, the prospectus stated further, that, "...whatever profits the present lessees may derive will be principally appropriated to Religious and Philanthropic purposes."<sup>47</sup> Since

such promising investment opportunities did not present themselves every day, the enterprising public had subscribed for 2,500 of the shares by May, 1855.

The deplorable gullibility of the public led one caustic citizen<sup>probably J.S. etc.</sup> to insert the following "prospectus" in the pages of the Cape Monitor:-

ADVERTISEMENT.

LADIES' MINING COMPANY.

[PROSPECTUS.]

SEVERAL YOUNG LADIES, who have made a tour to Namaqualand (in imagination), are desirous to make known their discoveries to the Wives and Daughters of their fellow-citizens of all classes.

The scheme on which they purpose to commence their work, will be, not only as avowedly honest and safe as many of those started before, but the Projectors assure their Sister-citizens, that they know as much of the NAMAQUALAND METAL (Brass) as many of those who have previously projected Mining Schemes. There will be no need of either Tramway or Railway for bringing their Metal from the Country, and its value is so well known to Speculators, that the Projectors feel no analysis of Samples is necessary. It is proposed to issue THREE MILLION SHARES, at A SHILLING each. SIXPENCE to be paid previous to any information being given of the Whereabouts of the Mines, and the other SIXPENCE when the Mines produces anything beyond the first Sample. The Directors will be appointed previous to the First Meeting taking place (as is usual); and no old Women or Apprentices will be allowed to have any Share in the undertaking. If all the Shares should be taken up before Applications can be sent in from the Country, the Original Proprietors will not hesitate to issue a few Extras on their own responsibility.

Some excellent hands at "Stagging" are engaged, and nothing will be left undone that legitimate trading in Mines will admit of. The First Meeting will take place on ROBBEN ISLAND. Queen REBECCA is engaged to propose the First Resolution.

Offices.—Kable Court.

Treasurer.—AGNES STRETCHER.

Solicitors.—Mesdames FLEECE'EM & DO'EM.

Secretary.—SARAH SCRIP.

The investment criterion of the public is difficult to understand, <sup>indeed</sup> The psychology of investors during <sup>periods of</sup> boom periods defies analysis. The Cape Monitor, commented in August, 1855, - i.e. after the "bubble" had burst - upon this:-

Companies, who started without knowing where they were to work, or without knowing if ever they should be enabled to get centres, have since then secured centres of some sort, and found "indications" of metallic deposits. This at least has been the case, we believe, with all the companies, started without anything beyond a prospectus and a secretary's name at the bottom of it. When the companies had nothing the public had faith. If the public here have a "mind's eye", it was strangely dazzled by glittering delusions, just at the time when premiums were given on nothing. The brass of prospectors glittered like gold, when "lit up by the sun of promise", as poets would say. They who said a word about "dupes" were stigmatized as "no friends to the colony". Into journals that brought out no "puffs", no advertizements were sent by many of the companies. It was an extraordinary time. Nobody would be undeceived. They cherished the deceits practised, in the most unaccountable manner, and fondled deceivers most encouragingly. Now the tables are turned; but if the deceived were asked why? they could not answer. Companies that had done nothing, have since sent agents to explore, who return and report favourably; but they who listened, when the companies promised without exploring, will not believe now. All the credulity, called faith, is gone. It was founded on nothing and it has evaporated. There has

been something most extraordinary in the conduct of the public on this matter. It was worse than chasing a bubble. There was no bubble. They chased without.<sup>49</sup>

While, then, such companies as the Henkris and Rietberg were able to attract investors, the Namaqua Mining Company,<sup>50</sup> whose prospectus appeared in September, 1854, was not. It was proposed that 10,000 shares were to be created, the proprietors retaining 5,000 shares, and the remaining 5,000 shares of £20 each to be issued to the public. Of the proposed seven calls, the first amounting to £25,000 was to be used to improve the works at the mines, the second, third, and fourth amounting to £37,500 were to be used exclusively to improve the means of transport, either by taking shares in the proposed Tramway Company,<sup>51</sup> or doing whatever seemed most beneficial to the interests of the company. The last three calls, also amounting to £37,500 were to be paid to the proprietors as compensation for giving up one-half of their mining interests, which included also the working capital, which had apparently cost some £7,000 - this included the cutter "Ceres" as well as all the ore sorted and unsorted lying at the mines. But, since it was proposed that these last three calls be made from the profits of the company, the shareholders would have had to bear directly, only four calls.<sup>52</sup> What is more, in a detailed report upon the probable profitability of the mines put before the

public in November, 1854, some seven weeks after the appearance of the prospectus, it was suggested that this money would not be appropriated by the proprietors, but instead, be added to the funds to be raised for the formation of a Railway or Tramway Company in London.<sup>53</sup>

Some interesting points emerge from this prospectus. Firstly, it was stated that the "...the difficulties inseparable from the establishment of new companies have already been overcome, ...and an immediate and profitable return for the Capital to be invested may be depended upon."<sup>54</sup> This was in contrast to the other companies who had most of them not even obtained centres. Secondly, this being the case, why were the proprietors prepared to give up any of their interest in the mines to the public? The reason advanced for this was that capital was needed to extend operations, and especially to improve the means of transport. In fact, lack of capital was subsequently to lead to the dissolution of this company.<sup>55</sup>

Operations had been in progress for some time at these mines, and, shortly before the appearance of their prospectus, an advertisement had appeared in the press calling for tenders to be submitted for the transport of 1,000 tons of ore to the coast for shipment.<sup>56</sup> Notwithstanding these favourable aspects

and even A.G. Bain's attractive description of their holdings, which, incidentally, appeared together with the report on probable profitability mentioned earlier, -

I next visited the mines of Prince, Collison, Watson, & Co., at a place called "Tweefontein", now called Concordia. These are also exceedingly rich, but, unlike the other mines I had visited, has something of the appearance of immense lodes running in an Easterly and Westerly direction, yet from their length, breadth, and depth, seemed inexhaustible. Here I saw some of the richest and most beautiful specimens of copper pyrites, peacock, and malachite, &c., that I had anywhere met with. For miles around this favoured spot, strong indications of copper everywhere appear; and a large village is in the course of construction, in which hundreds of happy families may yet reside. Much activity prevails here, as well as at Phillips and King's mines, but more in the way of building than of mining, as transport to the coast is not at present to be obtained, even at very high prices.<sup>57</sup>

The public proved unwilling to take up the shares offered in this company, and so notice was given in January, 1855, that since the required number of shares (4,000) had not been subscribed for, the proprietors were withdrawing their offer to the public.<sup>58</sup>

The lack of public interest in a company, which although demanding a fairly high premium for entering, had at least commenced operations, seems most surprizing in the light of the support given to such dubious undertakings as the Henkris and Rietberg companies, but

is easily explained. The Namaqua Mining Company were attacked most strongly by the correspondent for the Grahamstown Journal, who, in a letter published shortly after the appearance of the company's prospectus, stated:-

The central group of mines may be called those of Concordia, belonging to Prince, Collison & Co., and those in that neighbourhood, from whom appeared some time since an advertizement for transport for 1,000 tons of Ore! This, believe me, was all a flame, and a hundredth part would have been nearer the mark. The mine is, however, a very fair one, and will no doubt under careful management pay its expenses. A clue, however, to the advertizement has since been found in a circular, proposing to form a company with a capital of £200,000, the whole of which was to go eventually into the pockets of the fortunate holders of the mine. Blind, however, as the public generally are, this time they had their eyes open, and the scheme appears to have fallen to the ground. Concordia is not, nevertheless, as we said before, at all a bad mine, and if it had only a better pasturage in the neighbourhood, its central situation would be much in its favour. The nearest shipping place to this mine is Robbe Bay.<sup>59</sup>

And although the editor of The Cape Monitor rejected these allegations and gave prominence to the fact that ore from these mines had been tested by Sir H.T. de la Beche, "...the world renowned mineralogist," and found by him to be extremely rich - containing a large percentage of copper of the first quality, and further, that a Mr. Jidd, who had some connection

with the English Mining Journal, had certified that "...better foreign ore has not reached England,"<sup>60</sup> the public, would appear to have taken to heart at least one of the warnings concerning speculation. It must be pointed out though that by the Company's own calculations, in the statement as to probable profitability already referred to, they had only about 100 tons of ore awaiting transport to the coast. And from the figures presented in this report it would seem that without some improvement in the means of transport a profit of only £1,000 a year could be made, furthermore, it was recognized by the projectors, that, if reliance had to be placed upon wagon transport, "...the copper mines would ... become of little or no value." Since the majority of the subscribers to other issues were persons who were not planning upon, and indeed in most cases would not have been able to, pay up the nominal value of the shares for which they subscribed, then it is plain to see why a company, which was decried by the comment, that it would "...no doubt under careful management pay its expenses," should not find favour with a public mad about "glamour shares".

The companies were usually formed, either, without possessing any centres,<sup>61</sup> in which case they might be further divided into those who intended securing such, and those who did not, or else, they were formed,

by taking over the assets of a private group, the so-called proprietors or originators, who as the projectors of such an undertaking would obtain a certain percentage of the share capital.

In either case, the methods by which centres were selected left much to be desired. In most cases they were selected by people of "integrity" but with no knowledge of geology, and in Namaqualand where surface indications abound, great care was necessary in the selection of any centres. Unfortunately, the generally held belief was:-

that no operations were needed to raise ore, nor would there be any operations required for a great number of years. It ... (being said) ... that of surface ore there was sufficient to employ all the labour of the colony for a great number of years.<sup>62</sup>

Combined with the unsuitability of persons who did in fact select these centres, this led to a great emphasis on surface indications, with disastrous results. For, as Andrew Wyley in his Geological Report of 1857 mentioned:-

Although containing no ore, many of these hard granite or gneiss bosses show a brilliant stain of green on their joints and surfaces. This seems to arise from their being so much more impermeable than the softer and decomposed rock around them, into which the copper impregnation freely entered: while, not being able to find its way into the harder rock, it merely deposited a thin crust upon its surface... It would have

prevented many mistakes, and saved much wasteful expenditure, if those who sought for copper in Namaqualand had been aware of this fact, and its applications, and that the more brilliant the green stain on the surface, the less chance of finding abundance of copper in the rock.<sup>63</sup>

That "Heath Robinson" methods were used to discover indications is evident when we consider such tales as the following:-

we have ... (for example) ... the origin of the Dog's Ear Company, who are unsuspectingly outlaying on red paint. ... Hondeklip literally translated means Dogstone, and Hondeklip derived its name from a large stone likened to a dog, which is there found. A traveller some years ago, having no better amusement, painted the stone red. The weather has however cleaned the surface of it, and the paint is all off except in the crevices, where it just appears. A Prospector, sent down by one of the companies, mistook these red spots for indications, and knocked off the dogs ear and sent it home to his employers, who cherish it as the foundation of their hopes, and shew it as a prize, which the shareholders inexperienced in mineralogical science, rely upon in perfect faith.<sup>64</sup>

Not only were many of the men sent to Namaqualand to select centres ignorant of geology, but, moreover, they were frequently unused to any form of labour, and not prepared to commence their education. The Cape Monitor's correspondent writes:-

it is no use for any one to come up for a company, without first leaving their gloves at home, and they must be prepared to meet a work of difficulty and hazard, which they will be called upon to enter into with unflinching determination and spirit. Some of the gentlemen seekers who come up here find it so warm, that they have to lie in bed all day, and trust to the working men to find copper. These men who undertake the work, and undergo "the heat and burden of the day", get from £3 to £4 per month, and the bed-lier realises all the honour and profit.<sup>65</sup>

*Namagmas*

It was a common practice in fact to employ Hettentots to search out and secure centres, even the redoubtable Dr. Atherstone was forced into utilizing this indigenous prospecting service:-

Our... (difficulties in regard to exploration)... were also very much increased by the position of centres already applied for being so vaguely defined as to render it almost impossible to recognize the locality intended, and also by the fact that previous explorers frequently put up no beacons at all, or placed them purposely in positions where they could not be seen, generally at a distance from, and often out of sight of, the "indication" on which the centre was taken; so that after a hard day's work we had the mortification of finding that we had been rediscovering indications on centres already applied for! Finding that much valuable time was likely to be consumed in this unprofitable kind of research, I hired a native well acquainted with all the centres previously applied for, (and through whose instrumentality I believe most if not all of them had been

obtained) to guide me to some spot which no person had yet visited, promising him also that if he succeeded in discovering an indication which should be considered worth working, that the sum of £7.10.0. should be paid to him. As he did succeed in discovering an indication, I consider myself pledged on behalf of the committee to pay him this sum in the event of this centre being leased. I afterwards made a similar arrangement with another native, who is now I believe hunting for centres upon the same terms, which he promised to retain for us until Mr. Damant's return. This I found was the plan commonly adopted by the agents of the different companies in that part of Namaqualand, - most of the indications being discovered by natives in the first instance: in fact the task of clambouring up these rugged ridges in the summer months must be to a European almost a physical impossibility.<sup>66</sup>

By a process of logical deduction it was believed, that, scientific methods were unnecessary to discover ore bodies. The reasoning behind such a conclusion was, that, since the persons who had discovered the mines worked by Phillips and King, and the Namaqua Mining Company, were not qualified in the mineralogical sciences, it was unnecessary for anyone else to be so qualified. The chances of the discovery of these mines being merely a matter of luck being completely discounted.<sup>67</sup>

The boom period spans a number of years - from the proclamation of 13th September, 1853, until early 1855. During this period there occurred certain peaks, the

first occurring in the early months of 1854, when in March, for example, the shares of the Cape of Good Hope Mining Company reached £4 each - at this stage 10/- per share had been paid up, and the Company had not as yet obtained any centres (however poor those they later obtained might have been). Shares in the South African Mining Company reached £10.2.6, at this stage £1 per share was paid up (being the £1 advanced in 1847), and, it had been only in February, 1854, that the company had decided to revive its operations, a board of directors having been elected only shortly beforehand.

The cause of all the excitement was a rumour concerning the discovery of gold in Namaqualand, put about by a certain Mr. Nicholls.<sup>68</sup> When no gold could be found, the shares soon fell in value.

Rumours regarding the existence of gold interspersed with the Namaqualand copper, however, persisted,<sup>69</sup> leading to concern on the behalf of the Lieut.-Governor in case these rumours should lead to a sudden and unwarranted influx of population.<sup>70</sup>

A second and more sustained peak occurred late in 1854, when the majority of the companies were formed - none of which it might be added survived the mining mania. From the time of publication of A.G. Bain's report<sup>71</sup>, i.e. from about July, 1854, to January, 1855, some twenty-two companies were formed.<sup>72</sup>

Paradoxically, even while share prices fell every day, people were still prepared to invest in companies whose "...shaft sinking was never intended to be deeper than the breeches pocket of their victims."<sup>73</sup> During this period, enormous premiums were paid for shares in companies, which had done little besides obtaining a number of centres, and often, not even this. Statistics are rather incomplete, but below are listed the prices of a number of shares at different times:-

<u>Early December 1854.</u>	<u>Market Value</u>
Port Elizabeth Mining Company	£1. 0. 0. per share
Union Mining Company	£1.10. 0. "
Victoria or Een Dop Mining Company	£1. 0. 0. "
Equitable Mining Company	£0.10. 0. "
Cape Colonial Mining Company	£0.11. 0. "

<u>August 1855.</u>	<u>No. of</u>	
<u>Company.</u>	<u>Shares</u>	
Port Elizabeth Co.	75	) These 510 shares were ) purchased for the sum ) of £7, they purported ) to represent £2,000 ) par, £190 paid up. And, ) would have fetched in December 1854 £240.10.0.
Union Mining Co.	25	
Victoria or Een Dop Co.	40	
Equitable Mining Co.	310	
Cape Colonial Co.	60	

These figures may serve to illustrate the ridiculous heights to which share prices rose and fell - usually without the slightest intelligence from the mines.

When it appeared certain, late in 1855, that most if not all of the companies would fail, a suggestion made by Blancheton, in his "Vade-mecum" was given some attention.<sup>75</sup>

Blancheton had suggested that while there existed late in 1854 some thirty or forty companies, each in competition with the other, taking into consideration the difficulties in regard to transport, the shortage of labour, and especially of experienced miners and overseers, it might have been more sensible to have placed all the mining operations under a "...general company of copper mines in South Africa, with a central administration, composed of elective members, acting in Mutuality."<sup>76</sup> Anticipating the crash, he thus suggested that without waiting till the force of events came to assist in the fusion of the companies, a general company should have been formed, "...founded on the principle of unity of action in the centralization of ways and means, ...which...might produce practical results, in perfect harmony with the special conditions of separate existence and progress to each of the companies, considered independently."<sup>77</sup> Thus he was proposing a sort of early version of the Group system.

Plans were then put forward to form an Amalgamated Mining Company as being the only way to salvage the capital sunk in the various concerns, and a prospectus in regard to such a company appeared early in 1856.<sup>78</sup>

These plans did not, however, materialize, and so almost all of the companies went into liquidation, until by 1857 only three of them survived - the two private mines of Phillips and King, and the Namaqua Mining Company, and the South African Mining Company.<sup>79</sup> The South African Company also soon disappeared. And, we find A.G. Bain, who was so largely responsible for the mania, commenting rather lightly:-

There have been a series of mineral and metallic monomanias of late at the Cape. The first was the coal, the second the copper, and the third the golden mania. Of the copper mania it has been truly observed, that it had shown a wonderful aptitude for the diminution of tin in this colony, the latter metal doubtless having amalgamated with the former to form a sort of spurious brass, an article so much in demand by some of the numerous mining companies.<sup>80</sup>

It was at one time estimated that a sum of about £100,000<sup>81</sup> had been locked up in the share market, this figure was subsequently estimated not to exceed £70,000,<sup>82</sup> most of this being subscribed by men of very limited means. The shareholders because of their belief in the illimitable wealth of Namaqualand had not calculated upon paying up the full value of their shares. Many had expected to receive dividends upon their deposits,<sup>83</sup> and, as a result, among the shareholders were to be found "...Apprentices and errand boys not out of their teens,"<sup>84</sup> leading one

commentator to observe, that, if one-third of the nominal capitals of all the companies were to be called up, the shareholders would not be able to meet the calls. Not that there was insufficient capital within the colony, but, because the majority of the shareholders would be found to be defaulters.<sup>85</sup>

Besides, however, the sum which was lost through being tied up in the share market in the subscribing to the issues, there was lost an even greater amount:-

that which has been realized to some pockets out of others in the shape of premiums. There is scarcely any calculating the extent of that sum. Shares changed hands, some of them ten times a day, and each time with a profit. These profits, although they are not now locked up, have chiefly passed out of business into the hands of another class of men altogether.<sup>86</sup>

In a subsequent assessment of the situation, however, it was realized that everything was not quite so straight forward:-

There has not ... (however) ... been the amount of money sunk that persons who only hear the tales about eighteen hundred pounds, and two thousand pounds, premiums, would be led to suppose. The chief part of the enormous premiums were paid in bills, that have never been taken up; putting down the gold for scrip has been rare. Some, it is true, gave very high premiums, in hard cash, but these cases were exceptions. The rule was, where high premiums were given, to give bills with the hope

of turning the transaction over a few times before the bill became due, and so contriving to scheme the necessary amount for the bill, with a profit for the dealer. Those who gave bills, were persons without means. If the bill became due before they had sufficiently realized on the scrip, it was either renewed or dishonoured.<sup>87</sup>

So great was the dabbling in scrip that it was even suggested that it should be declared legal tender.<sup>88</sup>

However, although the copper mania occasioned a great deal of activity, the stagnation in trade which followed could hardly be described as a full scale economic depression, and the stagnation must be attributed not only to injudicious dealings in shares. The Cape Monitor in 1856 says of the situation:-

The stagnation of trade which has prevailed for some time past, may be partially attributed to injudicious investments in mining speculation, to the consequent failures which have resulted from them and to imprudent shipments to Australia; while the demand for merchandize in the agricultural districts, must have been considerably checked by the sickness which has so long and extensively prevailed among the horses and cattle.<sup>89</sup>

This boom must be viewed as an inevitable concomitant of a particular period of development amongst all nations, and takes that place in South African history taken by the South Sea Bubble in England's - as a factor contributing to the growth of a modern, capitalistic, credit economy.<sup>90</sup>

Chapter IV

The Question of Leases

Sir Harry Smith, by a proclamation of the 17th December, 1847, extended the boundary of the Colony to the banks of the Orange River, thus adding to the Colony, the Sovereignty and Namaqualand.

The inhabitants of the latter had, till this time, consisted almost entirely of Namaqua Hottentots and Bastards of mixed races, coloured, colonial and others.<sup>1</sup> Many of these were no doubt refugees from justice, who had fled the colony after committing various crimes. Besides these Hottentots and Bastards, there were also a few Bushmen, under the authority of a certain Khamgaap.<sup>2</sup> These led rather a nomadic existence trekking wherever the want of water or game led them. From available accounts there would appear to have been few Europeans living north of the River Kousie.<sup>3</sup>

There existed great insecurity of tenure and there were no fixed boundaries. Charles Bell commented in his report on Namaqualand as follows:-

Individuals and families gathered themselves into tribes and clans, and resided in or frequented a particular locality, around which they were compelled, in self-defence, to create a desert proportionate to their power, so that they might not be taken unawares and at disadvantage. Individual property in land was unknown, and it would be no easy matter to define the ever expanding or contracting limits of the usual haunts of the tribes. Of course every now and then the time came when, by treachery, or skill, or

Map showing the extent of territory  
claimed by various Native parties  
and the situation of "Fanning's" mine.

Correspondence on the Subject  
of the Discovery of Metals in  
Namaqualand, 1854.



strength, the desert was passed from without, a general slaughter ensued, and any survivors who might escape, took up a new position or otherwise became (in border phrase) broken men.<sup>4</sup>

This instability in regard to tenure, and the lack of fixed borders created a problem in regard to the rights of the natives - a problem, which was brought to the fore with the advent of mining in the 1850's. As early as 1842, a memorial was addressed to Government by several inhabitants of the Missionary Institution of Steinkopf, - remonstrating against a possible extension of the colonial boundary, from the Buffels River to the Orange River. In reply to this, J. Moore Craig stated, that, Government had no intention of extending the boundary of the Colony, "...or of interfering with the rights of those inhabiting the country beyond the boundary, by granting those lands to the colonial farmers."<sup>5</sup> Although, as has been pointed out, farms had in fact been granted many years before to farmers as far away as the banks of the Orange River, and perhaps even beyond.<sup>6</sup>

Then, when in 1846 Government again made moves to extend the boundary, the natives were first consulted, and the chief of Steinkopf upon being asked, in the presence of the Rev. Mr. Brecher, by the Fieldcornet, Jacobus Kotze, as to his opinion of such a step, replied, that, "...what the great chief or governor does, I cannot object to; but this only I say, that I will keep my ground, for me and my people, in order to lead a quiet and honest life."<sup>7</sup>

Although the territory was annexed in December, 1847, there was no officer of the Government stationed there, the missionaries and native chiefs continued to manage the affairs of the territory as before.<sup>8</sup> This must of necessity have meant that the Native chiefs and the missionaries were not sure as to their rights. But, presumably they thought that their lands were secured, since they had beneficially occupied these before the annexation of the territory.<sup>9</sup>

In 1851<sup>10</sup> the Rev. Brecher addressed a further memorial to Government upon the question of the rights of natives to the possession of the mission lands:-

The chiefs and natives residing here wish to be placed under the protection of the British Government, and that the ground occupied by them (a diagram of which is herewith forwarded) may be reserved for their occupancy, against the encroachments of farmers, traders, or any others wishing to settle on the same, as much unpleasantness has already arisen on this point.

The chief or captain wishes, further, to ascertain how far his power extends over his own people, and also how he should act in such case of intrusion as above alluded to.

Your memorialist would further add, that the ministers of the Evangelical Church have laboured about 36 years amongst this people, and have been favoured by the Great Head of the Church with much success, and that the people are worthy of the countenance, support, and protection of the British Government.

The number of natives at present residing here is about - possessing cattle, sheep and goats; so that Your Excellency will perceive that the ground requested to be reserved is absolutely necessary for their support.

And, in conclusion, would humbly pray Your Excellency to take the matter into your consideration, together with the memorial relative to the station at Pella, and grant a favourable answer.<sup>11</sup>

In reply to the above, and also in connection with verbal communication with the Rev. Mr. Brecher, John Montagu, the Colonial Secretary, stated that no ticket of occupation could be granted to the natives, however, the Government would not "...countenance any encroachments on the land occupied by the people of the institutions ... on the part of any farmers or others not belonging to the same; nor has His Excellency any desire to disturb them in their occupancy."<sup>12</sup>

Meanwhile, the "Concordia Consortium" (i.e. the Namaqua Mining Company), formed through the influence of H.W.A. von Schlicht<sup>13</sup> finding that Phillips and King had acquired the deposits at Springbokfontein, conducted further exploratory work. Upon finding at Tweefontein, later called Concordia - because of the harmonious relationship existing between the various companies concerned in its exploitation - rich deposits, representations were made to Government in April, 1853, in order to ascertain whether they would be allowed to search for certain minerals which they believed to exist in Namaqualand; inquiring from Government, whether, if

they should be disposed to work such deposits, Government would be prepared to grant leases for this purpose, and if so, upon what conditions.<sup>14</sup>

In reply, the Acting Secretary to Government, William Hope, stated, that, having laid their request before the Lieut.-Governor, he was empowered to say that Government would no doubt be prepared to grant such leases, most probably upon the same conditions as had been established in the Australian colonies, and immediate measures would be taken to ascertain what these were.<sup>15</sup>

Secretary of State, Newcastle, approved of these interim measures, and forwarded a copy of the regulations governing the Australian leases. Regulations to govern the Cape leases, modelled largely upon the Australian ones, were soon drawn up, - appearing on the 13th September, 1853.<sup>16</sup>

Leases were to be granted for not less than 10 and not more than 40 morgen, to the first applicant, at a rate of £1 per morgen per year. These leases were to run for a total of 15 years, provided that a diagram of the ground was lodged with Government within 12 months from the date of the issue of the licence, during this 12 month period the potential lessee was to have the right of search upon land for a distance of one mile around the central point named in his licence, the lessee could then select the most favourable spot. Provision was also made for the pasturing of cattle belonging to

the lessees, and they were to have the right of grazing for a distance of 1 mile radius for a lease of 10 morgen, 1½ miles for 20 morgen, 1¾ miles for a lease of 30 morgen, or 2 miles for one of 40 morgen. This was to relate, however, only to "...ungranted or unleased Government lands."<sup>17</sup> At the termination of the lease period the land would be put up for public auction to the highest bidder; should the land not be purchased by the lessee, the purchaser would have to recompense the lessee for the value (to be estimated) of any improvements. The leases were to become void and forfeited for two reasons - firstly, if the rent was not paid in advance, and, secondly, if the land was not bona fide applied to mining purposes. The conditions relating to this last safeguard were, however, so vague as to be completely ineffectual.

Acting upon this information a company was formed by von Schlicht/Stoll/Thomson, Watson & Co./Prince, Collison & Co., - the Namaqua Mining Company - and having obtained a lease to work the deposits discovered at Tweefontein, representatives were despatched. Upon their arrival at this place they were greeted by a note of protest from the Rev. Mr. Brecher:-

To Messrs. A. von Schlicht, and

G. Prince, Tweefontein . -

Gentlemen, - Whereas I am informed by yourself of your settlement in the neighbourhood of the place called Tweefontein, for working copper mines, &c.; and whereas it was in your belief that the said

place was situated without the institution-ground of Steinkopf; - on, however, making inquiry I find the same is situated, not without, but within the ground belonging to the institution.

And I beg to state that this mentioned ground is secured from Government against any encroachments on the part of any farmers, or others.

Therefore, gentlemen, I must, in the name of my community, and especially of the Captain Jacobus Engelbrecht, make objection against your settlement on our territory, and declare you, by this, to remove from the said place.

Should you, however, be unwilling to remove, then I trust you will be kind enough to inform the Government of the truth of the case. I must do the same, and we have reason to believe the question between you and us settled according to law. You will please give me a reply. - I remain, &c.

F. Brecher, V.D.M.<sup>18</sup>

The Rev. Brecher would thus appear to have accepted that John Montagu's communication of 1851 gave some tangible proof of the natives right to the land they occupied. And, indeed, it must be admitted that Montagu's statement on behalf of Government, that, no encroachment would be countenanced, does seem to imply that the natives would be secure in their occupation. As a result of this communication, and in order to safeguard their interests, the Namaqua Mining Company represented by, J.A. Stoll, H.W.A. von Schlicht, G.W. Prince (representing the interests of the firm Prince, Collison & Co.), and J.D. Thomson (acting for and on behalf of the firm of Thomson, Watson & Co.), entered

into an agreement with the Office Bearers and Members of the Institution of Steinkopf, whereby, they, - the Namaqua Mining Company - were granted the "...exclusive right to work any copper or other mine or mines which they may discover upon any part of the land or lands belonging to the said church or institution, for and during the period of ten years."<sup>19</sup>

For this right the Namaqua Mining Company agreed to pay the sum of £100 per annum for ten years; the lease to be renewable at the end of this time. Payment was to commence only when exploitation began. As to why they felt compelled to enter into this agreement with the Office Bearers of Steinkopf - the reason would seem obvious, - in order to indemnify themselves. However, they might in part have been motivated by the advantages to be derived by leasing from the natives, as compared with Government. Mr. Prince being examined before the Select Committee on Mineral Leases in 1856, naturally stressed the Namaqua Mining Company's belief in the rights of the natives:-

Q.337. Were you under the belief that the native party had a right to lease those lands? - I had, and I thought at the same time that Mr. Darling had as much right to grant mineral leases to search for ore within ten miles of Paris or Berlin, as to search in native Namaqualand, without making the natives some compensation or coming to some understanding with them on the subject which gave him the right.<sup>20</sup>

In terms of their belief in the right of the natives to the land in question, the Namaqua Mining Company addressed Government, and desired to be made known of the facts of the case since it seemed to them that the natives were within their rights to eject them from Mission ground. They wished to know also, whether, if it should be found that the natives had not in fact given up possession of their mission grounds, the Government would be prepared to refund them the rent paid to them (Government), as otherwise, a duplication of rent would be had.<sup>21</sup>

In reply, Richard Southey stated, that, whether or not the Namaqua Mining Company entered into a lease with the natives at Steinkopf was their own affair. Ownership of the land, he contended, was admitted to be in the Crown by the very documents which purported to show that ownership was in the hands of the natives, -

...since...otherwise the missionaries and native captain would not have applied to the Government for a ticket of occupation, and the only promise on the part of the Government was, that the natives would be protected from encroachments of that very nature which the terms of the lease include.<sup>22</sup>

In effect what this meant was, that, while the Government recognized the natives right to the veld, they did not acknowledge their right to what lay beneath it. Since the natives had not engaged in large scale copper mining before the annexation of the territory, their rights in respect to minerals were not recognized, as distinct from their right to the land which they had beneficially

occupied, which was recognized.<sup>23</sup>

The Namaqua Mining Company were not happy about this missive. They therefore addressed the Lieut-General, Sir George Cathcart, by means of a memorial, which purported to come from the Captain, Commandant, Elders and other members of the Evangelical Church at Steinkopf, and other inhabitants of Little Namaqualand. In this memorial it was stated that -

We, your memorialists, beg humbly to bring to your Excellency's notice, that the land now belonging to the missionary institution at Steinkopf, has been the undisputed property of our forefathers and ourselves from time immemorial; that fixed places of residence were in existence nearly half a century ago; and when, in January, 1851, a memorial was sent to His Excellency Sir Harry Smith, at our request, by our respected minister, the Rev. Mr. Brecher, we merely requested that we might be taken under the protection of the British Government, without having the least idea of relinquishing our just claim to the lands in this locality.<sup>24</sup>

It was requested that the issue of any mining or other leases within the limits of possession of the mission station be suspended until the case had been decided.

In reply to this memorial it was stated that while the question of native rights had not yet been settled, any private arrangements in respect to lease or compensation could have no legal validity until some decision had been made as to the rights of the natives; and even then,

their validity would extend only within the bounds of the rights or grants made.

In order, then, to ensure themselves of adequate pasturage, Thomas Watson and H.W.A. von Schlicht, on behalf of the Namaqua Mining Company, entered into an agreement with the Office Bearers of Steinkopf re the pasturing of cattle.<sup>25</sup>

In the eventuality, while certain tracts were reserved for the natives,<sup>26</sup> they were deprived of the mineral rights which rightfully were theirs. This step was only finally, and absolutely, settled for all time, with the passing of the Mission Stations and Communal Reserves Act, No. 29 of 1909 which "...prohibited the "natives" of the territory from any legal claim to mineral rights on the land which was reserved for them."<sup>27</sup>

At the height of the copper mining mania tremendous numbers of leases were applied for, and it was confidently expected that the income from these leases would be some £3,000 per annum<sup>28</sup> - this being the rental on some 193 leases<sup>29</sup> (apparently some 2,000 centres were applied for),<sup>30</sup> however, within a short time most of these leases were forfeited through non-payment, and, since Government Notice of the 13th September, 1853, was withdrawn by Government Notice of the 2nd February, 1855, no new leases could be issued.<sup>31</sup>

In 1856 a Select Committee was appointed to consider a petition, from leaseholders of land in Namaqualand, which desired an extension in the period of the leases

from 15 to 33 years, a renewal of the right of search, and an alteration in the means of payment from one of rents to one of royalty or export duty. The Committee came to the conclusion that the "...prayer of the Petitioners is reasonable and deserving of the consideration of His Excellency the Governor."<sup>32</sup> This report is interesting as marking very definitely the close of a period of hysteria, almost all of the existing companies were represented, and it clearly emerges from the evidence, that most of these companies had undertaken very little real work. Evidence was given by the Secretaries or representatives of fourteen mining companies (excluding that given by the representatives of Prince, Collison & Co., and Phillips and King), and, these companies together, had it appears, exported by that time, only about 41 tons of ore, of which, 2 companies had exported 33 tons. The secretaries or representatives of these companies would also appear to have known virtually nothing of the activities of their respective concerns, that is, most of them did not even know the most elementary information such as the date of formation of their companies, how many leases had been obtained, or what the expenditure upon the centres obtained was.

In the main, activity to extend the life of the leases must be sought in the desire of the companies to dispose of their centres to English capitalists at a profit,<sup>33</sup> rather than the more often cited reason -

that of inducing English capitalists to invest in a railway or tramway company.<sup>34</sup> Yet there was perhaps some justification for the Select Committee upon the Practicality of Introducing Railway Communication into the Colony having accepted the argument that an extension in the lease period would lead to improved means of transport.

While the lessees complained incessantly about the onerous rents upon leases, their complaints, in the light of available evidence seem entirely unjustified.

Evidence given before the Select Committee on Mineral Leases 1856, makes it clear that most of the companies paid only very small amounts to Government as rent.<sup>35</sup>

What is more, Government allowed the lessees to pay what was called a "deposit"<sup>36</sup> of 5/- per morgen instead of the stipulated £1 in order to aid them. Certainly, the lessees would appear to have had very little to complain of, and, in acceding to their demands, the Select Committee was perhaps influenced very largely by the hope that such accession would lead to a revival in trade. Government in any case did not act upon the recommendations of this Select Committee.

In 1864 a Select Committee was appointed to consider and report upon the system of leasing by the Government of the Copper Mines in Namaqualand, and the expediency of altering the same, and levying a Royalty upon the quantity of copper ore exported from the Colony.<sup>37</sup>

This Committee reported that leases should be granted for

a period of not less than 33 years; that the extent of the leases should be not less than 10 and not more than 40 morgen; that for such leases the lessees should pay the Government a rental of £1 per morgen for the first year, this to be increased yearly by an amount of £1 until the tenth year, when, for the remainder of the lease the rent would remain fixed at £10 per morgen per annum; that every lessee should commence mining within 1 year of obtaining the lease; and that otherwise the conditions appertaining to the leases of the 13th September, 1853, be retained. As far as the existing leases were concerned, they suggested that they should be extended for a period of 18 years, upon the same scale of increasing rental. The Committee's only witness was the manager of the Cape Copper Company whose recommendations were largely accepted by them.

Government did not, however, adopt any of the Committee's suggestions. While the Committee had reported that the difficulties in levying a Royalty, and the expense of its collection rendered it unadvisable to adopt this mode of raising revenue from the Mineral Lands,<sup>38</sup> this was exactly the mode decided upon by Government. Act 12 of 1865, which was an Act "Fixing the Terms upon which Mineral Lands in Namaqualand, the Property of the Crown, may be leased and worked", provided for an annual rental of five shillings per morgen, the extent of a lease not to exceed forty morgen, in addition the lessee

would also be required to pay "...the sum of ten shillings upon or for every ton of ore raised from the land comprised in his lease, or of copper of whatever purity, smelted from such ore, and shipped at any port in Namaqualand, whether for exportation beyond seas direct or for transport coastwise to some other port or place in this Colony: Provided that, for the purpose of this Act, a ton shall be taken to mean 2,352 lbs. weight.<sup>39</sup>" Provision was also made for the resumption of the ground if proper use was not being made of it, that is, if after three years less than fifty tons of ore had been shipped the lease would become forfeited. But Government could not claim such resumption three months after such a term had expired.<sup>40</sup>

The settlement of the lease question and the influx of miners following the opening up of Namaqualand affected the natives rather adversely. We shall consider only briefly some of the social implications of the settlement of the lease question.

The Surveyor-General, Charles Bell, considered that the question of natives rights was a most important one, and felt that they should be secured against encroachment by whites upon land which they had beneficially occupied. He did not however consider that they had any right to claim mineral rights to such land. In an attempt to rationalize Government's attitude on the matter, he stated -

I said, "it appeared to me that copper was one of the Creator's gifts to man, and that their country, although poor in other respects, was rich in that metal; while in many portions of the earth, otherwise rich, nations had need of it, and would gladly send food and clothing, and tools and money, to Namaqualand, in exchange for it. I spoke of the skill, and labour, and expense they saw bestowed on the few mines opened, and asked them if they were fit to open all the mines, so as to offer to exchange their produce with the rest of the world, or whether they could smelt and work up and use the copper themselves. The reply usually was, "No, No; take the copper, we can't raise it, and don't want it." I then further said all that the Government appears to me to have done, has been to prevent quarrelling and oppression, by saying that no one should dig for copper without leave, and by giving, to such men as will honestly pay for what damage they may do, leave to dig copper ore: nothing more. Every blade of grass, every drop of water, taken by the copper-diggers from any one, must be paid for; and all that can be demanded of you is, that you shall not refuse to sell water and grass where necessary, for a fair price, if possible, because captious objections and extortionate demands, if permitted, would effectually keep the ore in the ground, as at present, useless to mankind in general. You say you apprehend oppression: rest quiet; - I cannot conceive why the Government should oppress you more than other men; but take care you do not oppress yourselves. Are the present prices you receive for labour, for carriage of ore, and for your crops, symptomatic of oppression? I think not; but your waste of these prices, formerly unheard of, in folly and vice, to the

destruction of yourselves and your oxen, is an oppression from which no Government can effectually shield you. And if, hereafter, your sons have difficulty in finding healthy and respectable wives of their own race, you will recollect, with bitterness, the drink, food, clothing, or indifference that induced you to shut your eyes while your daughters tempted the crowds of single men now landing on the coast. The Government cannot protect men who will not protect themselves in these respects, and struggle against the great oppressors of this land, namely, idleness and improvidence. You, yourselves, see, and no sensible man can avoid seeing, that a great change is taking place here; and while, as a friend of your race, I may congratulate the industrious and the prudent among you, on your improved prospects under that change, I warn you that the idler and the drunkard must give place by the force of circumstances which no Government can control.<sup>41</sup>"

Bell's pessimistic prognosis concerning the future of the natives was to be borne out. This was probably one of the chief factors in the Rev. Brecher's claims to the minerals on behalf of the Mission Station, that is, the fact that if the mineral rights were vested in the Mission stations then control could be exercised over the activities of the miners. The agreement reached between the Office Bearers of Steinkopf and the Namaqua Mining Company in regard to mineral rights contained the following clause:-

We, the parties of the second part, our heirs, executors, administrators, and assigns, do hereby bind ourselves and ourselves, that we and they shall not, either directly or indirectly,

sell or barter any spirituous or vinous liquors, to any person or persons belonging to or connected with the said church or institution.<sup>42</sup>

In connection with the unfavourable aspects of the influence of copper mining upon the lives of the natives, J.S. Marais, in his "The Cape Coloured People 1652-1937" comments:-

The history of the mission stations in Little Namaqualand is, on the whole, a melancholy one. Owing to the nature of the country the people were forced to be largely nomadic, following their flocks and herds from one part of their station to another, which meant that the civilizing influences of the mission and its school could only reach them intermittently. Nevertheless all the evidence points to the fact that until the days of copper, canteens and contact with Europeans they made appreciable progress under the guidance of the missionaries. They came to own fair numbers of large and small stock, and they learnt to work the soil on what must be regarded as a fairly large scale, if one takes into account the nature of the land.<sup>43</sup>

The evidence of the Civil Commissioner of Namaqualand in 1872<sup>44</sup> also appears to bear out Marais' conclusions:-

I really am of opinion that some special enactment should be passed, prohibiting the very free sale of liquor in a mining district like this, where there are men of every nation under the sun. There is no doubt that before the working of the mines in Namaqualand the natives of the country were well-to-do; but since the introduction of brandy they have been completely ruined. I agree with Mr. Joseph Orpen, that brandy should

be kept from the native until he is more advanced and capable of self-restraint.<sup>45</sup>

In the 1860's it appears that the dual effects of drought and of loss of cattle through copper-riding<sup>46</sup> had so impoverished the natives that many were reduced to a life of crime if they wished to survive. They were, it seems in the habit of committing crimes, in order to go to jail, as there, they were fed by the Government. This practice led the Civil Commissioner in 1866<sup>47</sup> to comment upon three possible alternative ways of reducing crime, the first of which would be to utilize convicts in road-construction, this he considered preventative rather than curative, the second, the sale of Crown lands and the encouragement of mining enterprise, which would open up employment, and the third, a reduction of the rations of the convicts, of which he says:-

The plan of reducing the rations of convicts is at once the most effectual and the most just punishment. It is really a more severe and a less brutalizing punishment than the lash, and has not the tendency attributed to the latter of ensuring a man's returning for a second infliction, while it is the cheapest for those who have to bear both the loss of the theft and their share of the cost of punishing the thieves.<sup>48</sup>

The commencement of mining in Namaqualand then seems to have impoverished the natives rather than made them better off. The lure of easy money by riding copper resulted in the neglect of agriculture, and the acquisition of wagons and animals which became redundant

after the construction of the Cape Copper Company's railway. The absence of white women, and the indifference to skin pigmentation displayed by the Cornishmen who were brought over to work the mines resulted in the "bastardisation" of the Namaqua peoples. The lure of "dop" providing the impetus for many of the actions of the natives. The people of Steinkopf are today on the whole rather poorly off. The average income of a family is given by Carstens as R287 (in 1957). A figure well below the poverty datum line he employs - R338 when the husband is absent and R460 when he is at home.<sup>49</sup>

Chapter V.

Transport 1852-76.

This chapter is divided into two sections, the period 1852 to 1862, at which latter date the Cape of Good Hope Copper Mining Company Limited was formed, and the period 1862 to 1876, that is, until the completion of a line of rail from O'okiep to the harbour at Port Nolloth.

1852-1862.

Transport is the underlying factor which affects the history of copper mining in Namaqualand. Costs of transport prohibited the exploitation of the deposits of copper ore - the existence of which had been known positively since the time of Simon van der Stel's expedition in 1685 - until the 31st August, 1852, when the first 11 tons of ore was shipped on board the steamer "Bosphorus" by the Cape Town firm of Phillips and King.<sup>1</sup> Even thereafter the difficulties in this respect inhibited the development of the industry.

Subsequent to the commencement of mining by Phillips and King of their mine at Springbokfontein, the interest displayed by the avaricious public, - and the boom which followed as a result - caused a marked imbalance in regard to available transport -

There were so many parties in the field that the ordinary means of transport were inadequate to furnish them properly with supplies throughout the year, even if the shipment of ore was restricted to the loads of the wagons sent down for such supplies. But while every ton received in Cape Town affected the value in the share market of

the mine from which it came, the cost of carriage was a secondary consideration.<sup>2</sup>

There was thus much agitation to improve the means of conveyance; to this end it was proposed to construct a railway or tramway.<sup>3</sup> The greatest obstacle according to those who addressed memorials to Government upon this subject was, a lack of capital, or at least an inability to raise it which, the claimholders held, resulted from the time limits placed upon their mining leases -

the greatest drawback against your memorialists either investing their own funds, or obtaining the necessary means from other sources, for the formation of the railway or tramway alluded to, is the shortness of the leases under which the mines are at present held, the early expiry of which would, in all probability, prevent the shareholders from receiving that fair remuneration which, under different circumstances, might be justly calculated upon as return for the investment of their capital.<sup>4</sup>

In fact, however, an extension of the lease period was sought more for the stability of tenure which it would provide for the purpose of disposing of the leases to overseas capitalists than as a means of providing for any manner of railway construction.<sup>5</sup>

Government was not forthcoming with regard to any of the requests made of it; namely, an extension in the lease period; sale of the centres in freehold; the guaranteeing of a rate of interest upon capital subscribed for the purpose of constructing a railway; or the construction

of a railway itself. The reason advanced by Government for its attitude was this: although the lessees might have been at a disadvantage in transporting their ores to the coast, yet, as it was calculated from figures at Government's disposal, that, notwithstanding the disadvantages, the lessees were nevertheless able to bring their ore to England for sale for a cost of about £13 a ton, where this ore fetched between £30 and £40 a ton, no help on their part was deemed necessary.<sup>6</sup> And, in spite of the favourable recommendations of two Select Committees appointed to enquire into the practicability of introducing railway communication into the Colony, the Government's attitude remained the same.

The first of these Select Committees was set up in 1854.<sup>7</sup> They distinguished in their report between two cases, - ordinary cases, and "extraordinary" cases. In ordinary cases, it was suggested that Government only endorse a sub-guarantee. In the case of Namaqualand, however, it was considered that the "...recent discovery of valuable and extensive deposits...has opened up a field for successful railway speculation, such as South Africa has never before presented."<sup>8</sup> The Committee as a consequence considered that the benefit to the whole colony from the development of a successful mining enterprise was of sufficient importance to warrant "... rendering such reasonable aid as may be required to accomplish the completion of Railroad communication from the sea-coast to a central position in the Copper Mining Districts."<sup>9</sup>

No indication was, however, given of the form which such "reasonable aid" might take. Further investigation was thus undertaken by a Select Committee appointed in 1855 to report upon the Practicability of Introducing Railway Communication into the Colony.<sup>10</sup>

This Committee found that there existed "...immense quantities of copper ore of excellent quality which can be raised to the surface at a comparatively trifling cost."<sup>11</sup> The existing means of transport was however so defective that only ore containing more than 25 per cent of pure copper could be exported. Since the ore was found on the whole to vary in richness from 12 to 18 per cent, unless something was done to improve the means of transport, many of the lessees would, they considered, be compelled to abandon their works.<sup>12</sup>

In order to bring about the necessary improvements in the means of conveyance, the committee suggested that three courses of action were open to Government, viz., an extension of the lease period from 15 to 50 years, a guarantee of a reasonable rate of interest upon the capital advanced, or by the Colonial Government taking an interest in the construction of a line of rail itself. While however, the Committee would have been pleased to see any of these courses followed, they considered that taking into account the state of the Colonial finances, an extension in the lease period would be the most practical, since this would place the lessees in a favourable position for making the

necessary improvements in the roads to a seaport without any cost to Government and the construction of such roads would increase the value of ungranted Crown land.<sup>13</sup>

In the event, none of these courses was adopted. Perhaps this was because the Colony had already entered a period of slight depression by the time the Committee was deliberating. Furthermore, Charles Bell, the Surveyor-General, whose opinion would no doubt have carried a great deal of weight with Government, stated in evidence before this Committee that he was not in favour of an extension of the lease period, nor was he really in favour of pledging any part of the Colonial Revenue for a speculation of this nature. Bell was not able to advise what course should be followed but alluded to the suggestion in his report on the Copper Fields of Little Namaqualand, 1855, that -

...as in these regulations, it is provided that buildings become a charge on sale of the mine, I see no reason why, in principle, improved access should not also be similarly considered. It may meet the question of railway guarantee on more equitable terms than by assuring the speculators their six per cent., that is, against all possible loss, without a chance to the assurer of a share in the alleged probable profit. The lessees argue that the mines at the end of their leases will be by so much the more valuable, and therefore claim the concurrent aid of the lessor, in consideration of this increased value received fifteen years hence.<sup>14</sup>

He saw no insuperable objection to meeting the expense of facilitating access by a servitude on the enhanced value of the mine when it reverted to Government, but recognized that in the case of roads and railways common to particular localities there would be enormous practical difficulties. He nevertheless suggested that-

...by a combination of those interested, with the approval of Government, these difficulties might be obviated, and an apportionment of railway shares, and common expense, made to each mine, so that mine and railway shares might be sold at the same time, and the expense and profit, or loss, and existing benefit fairly settled by arbitrators, as a charge on the purchase money of the mine, for the benefit of the outgoing lessees.<sup>15</sup>

The projectors of the aforementioned proposed Railway or Tramway Company had in fact decided at a meeting held already in September, 1854, that all lessees who wished to avail themselves of the services of the Tramway or Railway should subscribe to not less than 50 shares for every lease they held. This plan met with little success, presumably because most of the companies had only very small capitals, almost the whole of which were used up in securing enormous numbers of centres, - for reasons already discussed. Thus Bell's proposal was doomed to failure before it was made.

The Select Committee of 1855 had also reported that the construction of good common roads should be undertaken, and suggested that convict labour might be used for this purpose. At that time, there were in the Colony -

three classes of roads, Main Roads, Divisional roads and Other public roads - the Main roads were constructed and proclaimed by the Government but kept in repair by the Divisional Council, the Divisional roads were constructed, proclaimed and kept in repair by the Divisional Council and the Other public roads were sometimes repaired by the Council but the Council was not legally responsible for them.<sup>16</sup>

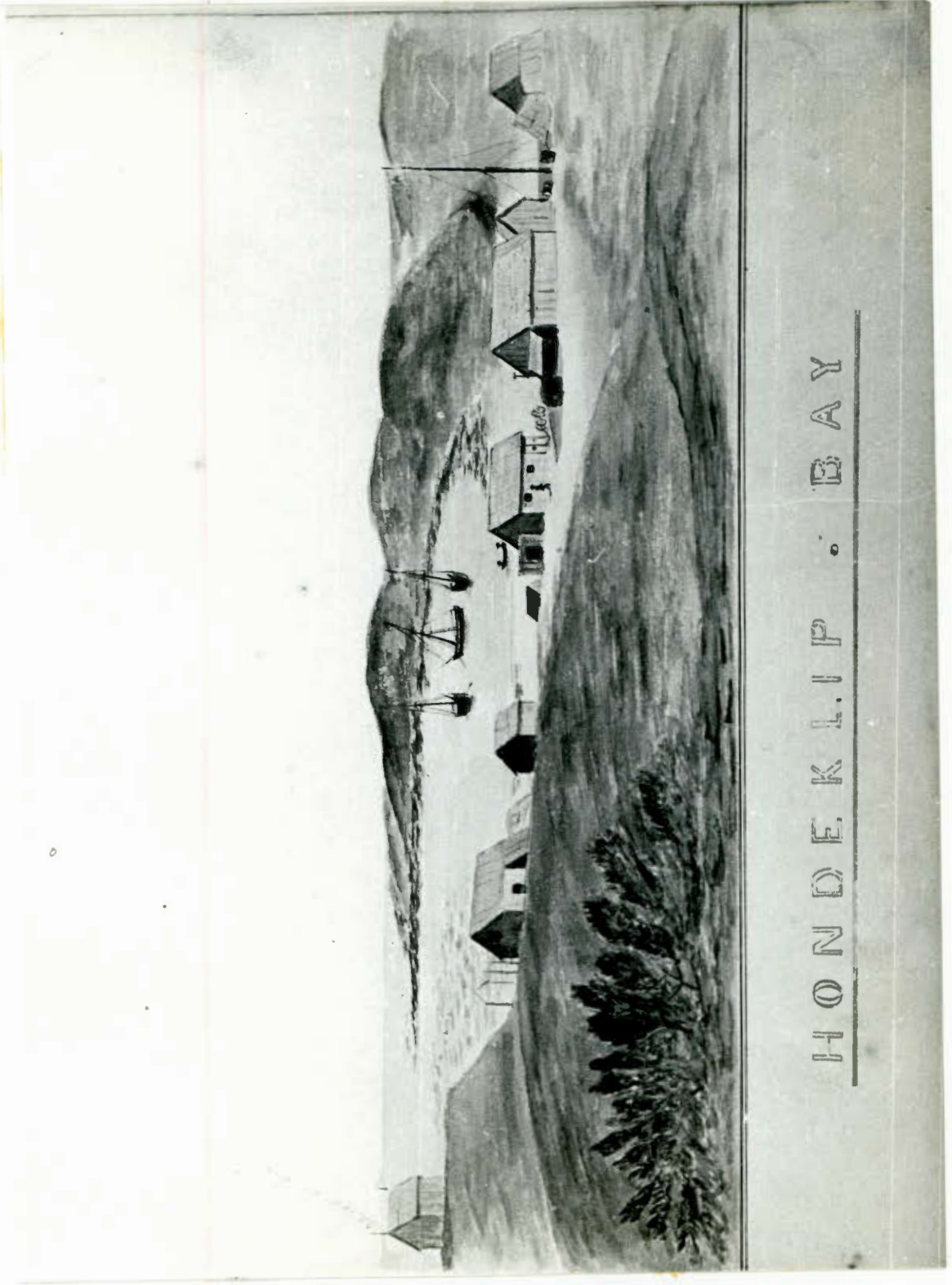
Since the Government did not construct a line of main road, and Namaqualand did not have a Divisional Council until 1861, the roads in Namaqualand fell into the latter category, that is, of "Other roads", and since the roads needed to be repaired at the end of each riding-season, Phillips and King, in their private capacity, and at their own expense, were reduced to employing gangs of labourers for the purpose of keeping the roads in some sort of passable state. Of this state of affairs Andrew Wyley, the Geological-Surveyor, commented -

A great deal can be done by improving the roads, and much has been done by the proprietors themselves; but the entire onus of making and keeping these roads in repair should not be thrown upon them.

If we consider that these mines pay for wages, for stores and transport, above £40,000 a year, the greater proportion of which is money expended in the colony, it would seem only fair that a small annual grant of money should be made to assist in keeping the present road in repair.

Hondeklip Bay, 1854

(Mendelssohn Library)



HONDEKLIP BAY

It has been urged that these roads are only a private affair, that improving them would only be putting money in the pockets of the proprietors of the mines; but this is a narrow view of the question, which could never be taken by any one who knows the statistics of these mines, which have done more to enrich the colony than their owners, - and, on that account, deserve the most favourable consideration.

It would be well to bear in mind, that the very existence of these mines depends on the efficient state of the road, and consider whether the colony would not suffer more by the withdrawal of the above expenditure, than by the small yearly outlay, called for to assist the mine owners to keep the roads in a fit and passable state.<sup>17</sup>

A year before this the Civil Commissioner of Namaqualand, J.C. Rivers, had written a report to Government concerning the awful state of the two main roads of export, viz., one to Hondeklip Bay and the other to Port Nolloth. Nothing was therefore done in the interval by Government to rectify the position.

By 1857 after a pretty fair trial the road to Port Nolloth was abandoned in favour of the Hondeklip Bay road by everyone except for a few natives who resided at Kookfontein and who sometimes used the Port Nolloth route, - especially if there had been good rains. The reason for the abandonment of the Port Nolloth route was that the deep sandy belt which stretches inland from the coast along the West Coast was wider at Port Nolloth than at Hondeklip Bay, and was additionally badly circumstanced for water.<sup>18</sup> A further

factor may have been that the Hondeklip Bay route was closer to the homes of the majority of the transport riders.

The most usual vehicle employed was the lighter Cape wagon drawn by ten mules, though in good seasons especially the ox-wagon was fairly common. The former means of transport was very much more expensive than the latter. The normal load was supposed to be 3,000 lbs., but because of the bad roads by the time the wagons reached the coast they seldom contained more than 2,000 lbs. This probably led to the practice of bagging the ores, an industry which achieved enormous proportions.<sup>19</sup> It is, however, curious that Wyley mentions that the ores were bagged,<sup>20</sup> and yet states that because of the poor state of the roads, ore was wont to fall off along the way. Perhaps, the explanation lies in the fact, that, the bags chafed through, thus allowing the ore to fall out. Experiments were instituted using Scotch carts at one time, but these came to nothing.<sup>21</sup> Andrew Wyley even suggested that camels should be introduced, but the expense and difficulty involved in importing a large enough number to experiment with deterred the mining proprietors.<sup>22</sup> This incidentally was not the first time that it had been suggested that camels might be used for transporting copper ore. Commissioner de Mist in his Memorandum on the Cape in 1802 had stated that -

If the sea is too far distant, and it is found necessary to transport the copper to Cape Town by road, it would be far better to import and breed camels at the Cape, and use them instead of draught oxen, since the camel will be far more at home in that region, resembling as it does the desert plains in the North of Africa. In addition, the camelopard, whose habitat is in the vicinity of the mines, is not unlike the camel, which we think could be used with success, and would be bound to benefit trade with the interior.<sup>23</sup>

The giraffe has not however proved capable of performing the duties of a beast of burden.

Costs of transport were exorbitant. It was claimed by certain petitioners in regard to the construction of a railway in 1856 that the total cost for carriage alone per ton of ore from the mines to the smelting works at Swansea was about £16. This was made up of charges from the mines to the coast of £7.10/-, and £3 for back carriage, with or without goods. The freight from there to Table Bay was £1.10/- and from there to London £2 to £3, from there to the smelting works at Swansea about 10/- to 15/- per ton. These figures were, however, almost certainly somewhat inflated. As a result it was claimed that all ore which contained less than 20 per cent of copper had to be thrown away. In 1857 Andrew Wyley commented that the cost of transport to Hondeklip Bay was nearly equal to all the other costs put together. Besides the high cost, however, there was an absolute limit on

the amount of transport which was available at any one time, this being a function of the state of the veld.

Phillips and King in order to ensure the transport of their ores systematically bought up almost all the farms on route to Hondeklip Bay. This not only ensured their transport but put them in a monopolistic position where they could "starve" out all but their only serious rivals, the Namaqua Mining Company.

In 1855 John Blades Currey was appointed by the Namaqua Mining Company as manager of their mines specifically in order to try and organise the transport of their ores to the coast. And, by obtaining outspan rights on the farm Kookfontein, owned by a certain Agenbag, he was, in fact, able to ensure that their ores could reach the coast. There is a rather amusing story attached to this piece of diplomacy, and in view of the fact that Currey's manuscript has not been published it is reproduced here at great length -

A greater difficulty... (than drunkenness)...<sup>25</sup>  
was the matter of transport. I had bought 150 mules and a dozen wagons at Cape Town but I found that Mr. Wild had bought or secured nearly all the farms on the way to the coast and having an idea that he could starve us out and so secure a monopoly of Namaqualand copper he courteously but firmly refused to let our wagons outspan on any of them. In the course of a long talk he laughingly said there were two farms which I might possibly get if their owner, a Mr. Agenbag, would

let me have them. This man seemed to be a terror even to Mr. Wild who confessed that he had been unable to do anything with him. He had a most violent temper which as being Monarch of all he surveyed he took no pains to control and he was in the habit of going to Hondeklip Bay where he would get drunk and bring more brandy home with him and until this was consumed and the effects had worn off he was unapproachable. On one of these return journeys driving recklessly over a road not really fit for wheeled vehicles he had upset his cart and broken his leg and had implored Mr. Wild to let his Doctor, the only one in those parts, come and attend him. This Mr. Wild did, hoping possibly to establish some hold upon him, and the Doctor spent a long time at the farm for the fracture was a serious one. At last Agenbag was himself again but when it came to paying the Doctor's bill a quarrel arose and he abused the practitioner very freely, who in turn lost his temper and ordering his horses told his patient he would never attend him again. Agenbag did not care, he would never want him, and finally consigned all Englishmen and particularly the Doctor to the infernal regions, whereupon the Doctor rode off with a parting caution to his host not break his leg again for if he did he might lie there and rot before he would go to him. Only a few weeks later coming home drunk as usual he upset his cart as before and as bad luck would have it he broke his leg again. Then he was all penitence and sent begging his dear friend the Doctor to come to him but the Doctor was adamant and merely sent a message reminding him of his warning. The poor wretch lay long in agony for the swelling of the broken limb placed it beyond the skill of any local bone-setter, but his strong constitution pulled him through and at the time of which I write he

was about again with a crutch and a stick, but only able to hobble along for the limb would not bear his weight and the foot stood out at nearly a right angle from the knee. He cursed all Englishmen if possible more heartily than before and none such dared to go to Kockfontein as his farm was called.

It was clear however that I must beard this old Cape Douglas in his Hall for if I could not get the use of his farms I could not use Hondeklip Bay and to transfer our landing and shipping business to Port Nolloth, the only other possible place, would have been terribly inconvenient. My talk with Mr. Wild had taken place at breakfast and fearing that my courage might ooze out at my finger ends I tried to make light of the redoubtable Agenbag and telling Wild he did not know how to manage such people I said I would go and see him at once and asked for my horses to be brought round. We all travelled on horseback in those days in Namaqualand and my Company had sent me five good hacks, two of which, a black and a chestnut named Blackberry and Cherry I used for travelling, riding one and leading the other bare backed, giving them a roll and changing every two hours. In this way they could go very great distances without being distressed.

Riding fast I reached Kockfontein in the afternoon in good time and found only Mrs. Agenbag and a daughter at home and they received me kindly. Whatever the Father might be there was no fault to be found with his child who was an extremely pretty girl with lovely soft eyes and a beautiful natural figure. The old lady was busy with household matters so the young one and I were left to ourselves, and with the wholesome natural appetite for each others society common to all young people we soon became fast friends, and

learning the object of my visit she promised me her help and guaranteed success if I should follow her instructions, the first point being that if possible I would not quarrel with her Father, and the second, that even if I did quarrel with him I would not go away. By the time all this was settled the sun was setting, the rumbling of wheels over the ruts and stones told us of her sire's return, and she ran to meet the cart and help him out of it.

He was not a pleasant looking fellow, and returning from Hondeklip Bay his face flushed and his voice was thick as extending the cold horny hand common among his race he asked what my business might be. It would have been of no use to beat about the bush so adopting a tone which seemed to assume that the proposal would be agreeable to him I said I had come to make an arrangement with him for grazing and watering rights on his farms. I saw a cloud come over his face but before he could speak his daughter placed herself in front of him and putting her hand over his mouth said "Father, you must not talk of these things now, tell me what you have brought me from the Bay." She was evidently the pet of the family and the rough old man relaxing began to feel his pockets, so I strolled off to look after my horses and was soon afterwards called in to supper where the girl waited on and coaxed and wheedled her father and while doing so quietly removed his crutch and stick into a corner out of his reach. After supper he insisted on our each taking a "souple" or dram of Cape brandy and then he opened fire. Why did I come to him for his land? That was the Englishman's way. Give then an inch and they would take an ell. Let me have ever so little now and in a year's time with our cursed laws which no one

could understand I should make out that the farms were mine and he would be turned out. I endeavoured to explain that such a thing was impossible and perhaps foolishly said that he might trust an Englishman's honour. This set him off. The English had no honour. Had they not made his Hottentots his equals, and had they not sent an English magistrate whom he could not understand to protect the lazy things and built a gaol to put him in if he flogged them. Let them try. He would shoot any magistrate or policeman who came to arrest him and much more to the same effect. I tried to stem the torrent but grew warm in turn and on my asserting with some vehemence that the English Government was the most liberal and just in the world he cut me short with the words - of no great significance among these people - "You lie!" and called on his strapping son who had driven the cart to turn me out of the house. I rose to go, first giving the old ruffian a bit of my mind but the son who was a very good fellow whom I met many years afterwards in Griqualand did not move and a door opening behind the old man I saw my sweet friend looking at me and laying her finger on her lips. The next moment she came in saying, "Father don't you see the poor Englishman is dead beat. Do leave off talking and let him go to bed." Her word seemed law and I was assigned a nice clean mat hut with a luxurious couch of skin karosses all spotlessly white on which for a long time I tossed in vain to laugh off my discomfiture, but sleep came at last and when I awoke the sun was up and I heard Maria singing outside by the open fire at which all the primitive cooking was done. I soon joined her and she gave me a bowl of coffee and making no reference to what had happened over night she said with a smile "go and see Father.. He is in the sheep kraal." I went in some

trepidation but the old man returned my greeting and we were soon engaged in talk about sheep where my farming experience came in and on the way to the house he said "If you are an Englishman how is it that you can talk Dutch?" I answered that intending to live in the Colony I had made it my business to learn it and he went on "Ah well then you are almost an Africander - I was a little hasty last night but you made me cross. Young men should not vex old people. About the farms, you may have the use of them but I will sign no paper. Jan Agenbag's word is his bond, you English people can't trust each other. I will teach you to trust me."<sup>26</sup>

In this way then the Namaqua Mining Company were enabled to get their ore to the coast and their supplies up.

As may be seen from Table A exports of copper ore grew rapidly over the years 1852 to 1862. By 1860 copper had become the colony's second most important export, but exports of wool were so much greater and Namaqualand so isolated from the rest of the Colony that copper certainly did not have a very large influence upon the development of the colony.

The death of two of the partners in the firm of Phillips and King in 1862 rendered it necessary that their property in Namaqualand should be disposed of. A large interest in the Cape of Good Hope Copper Mining Company Limited, which took over their mines, was, however, retained by individual members of the house. John King was appointed a director of the Company and in addition the firm of King and Sons acted as the managers of the company's affairs in the Cape.

In the prospectus of the Cape of Good Hope Copper Mining Company Limited, which was formed by John Taylor & Sons of London in 1862 with a capital of £150,000 in 15,000 shares of £10 each, attention was drawn to the benefits likely to be derived from the application of capital - firstly by concentrating the ores, and secondly by constructing a line of rail over the worst portion of the road to the coast. It was stated in the Prospectus that -

The results which have already been obtained, prove that the deposits of ore must be very large and unusually rich; for, not only have 19,000 tons been sent home of the best kinds, and have been sold for more than £500,000, but these ores have been picked out from vast quantities of lower quality, amounting it is believed, to nearly 50,000 tons, which are lying in heaps at the mines, containing from 5 up to 18 per cent of Copper.

The transport of the ores to the Coast has been a difficulty of no small magnitude especially in the commencement of operations. Bad roads, a tract of flat deep sand, rude waggons, a want of trained oxen and of pasturage, have all tended to render the carriage both tedious and costly.<sup>27</sup>

In undertaking the technical management of this concern, we have in view the advantages which may be derived from the application of capital in several ways.

By the introduction of some of the best modes of concentrating the poorer ores, both by dressing and by smelting into a regulus largely increased returns may be secured, and a considerable reduction in the current cost of raising the richer ores will be effected.

Again, to remedy the difficulties, and to lessen the cost of transport of the ores to the coast, the state of the roads must be improved, and instead of employing oxen and mules to drag the loaded waggons a distance of 15 miles over the deep sandy flat before alluded to, causing them to suffer more from want of herbage and good water in this length, than over the whole of the rest of the road, we have recommended that a tramway, to be worked by horses over this portion of the road, shall be laid down.

We estimate that £18,000 will pay the whole cost of the rails and sleepers, and of sending them out from this country, also of forming and laying the road, as well as of waggons suitable for the carriage of ore and coals. The effect of this tramway will be not only largely to diminish the cost of carrying, but it will liberate, as it were, many oxen and mules, and allow them to make more journeys than they now do, both working cheaper and carrying a larger quantity down annually.<sup>28</sup>

The purchase consideration for the property of Phillips and King in Namaqualand was some £73,000 including £30,000 in paid up shares. Thus the Company would be left with £77,000 (if all calls were made, which in fact they were not), for the working and development of the mines.<sup>29</sup>

#### 1862 - 1876

The formation of the Cape of Good Hope Copper Mining Company Limited ushered in a new era in Namaqualand's history with its advancement of plans for bringing within the pay-limit ores which were below 16 per cent.<sup>30</sup>

The Springbok Reduction Works, about 1870

(Private Collection of Mr. H.R. Moffat)

Spangholde. Reduchon looks - where Mother lived about 1870 A.D.  
1946 now a ruin -



In 1864 an engineer, a Mr. J.F. Davis, who was employed by the Cape Copper Mining Company,<sup>31</sup> arrived in Namaqualand. It was to be his duty to set up the necessary works for smelting the ore, which was then to be sent to England as a regulus.<sup>32</sup> By 1866 smelting was taking place on an experimental scale, and the value of ore smelted during that year is given as £2,096.<sup>33</sup> By the following year the Springbok Reduction Works were fully operational and ~~ore~~<sup>regulus</sup> to the value of £57,488 was obtained.<sup>34</sup> A second reduction works was constructed at O'okiep and by 1870 ~~ore~~<sup>regulus</sup> was being obtained from both.<sup>35</sup> The Springbok Reduction Works, however, soon closed down.<sup>36</sup> In 1872 E.J. Dunn<sup>37</sup> described the smelting works at O'okiep as follows -

The next attraction is the smelting works, under the management of a gentleman trained in the German School of Mines.<sup>38</sup> ...The process at present in operation for reducing the ore is by German blast furnaces. A small engine drives the blast, and the ore, fuel, lime, &c., used as flux, are fed in from a stage near the top of the furnace. One furnace will produce about one ton of copper per day. The principal ores used are silicates and mixed ore containing magnetic iron, from Koperberg, &c., and most of it is reduced to regulus. The fire, after being once lit is not allowed to expire until the furnace requires repair. At night it is a curious sight to watch the great flames dancing, and throwing a lurid glare for a considerable distance round. The slag comes flowing slowly out onto the hearth in front of the furnace, and falls as a sluggish stream of molten rock into crucible-shaped receptacles. These, when full, run along rails, and the slag is tipped out red-hot. As

these masses cool, they become dark in colour, vitreous, and brittle. When the furnace is ready for tapping, a steel rod is driven by means of a heavy hammer through the plug of clay left in the side and at the bottom of the furnace.

On being withdrawn, a fiery stream rushes out of liquid copper, likely perhaps, to be formed into pennies, sham jewellery, or saucepans - all useful articles in their way.

Rows of holes have been previously dug in the sand, and the stream of molten metal fills one after another. When the slag begins to run, the opening is stopped, and a fresh charge put into the furnace.

If coal and transport were more reasonable, there is practically no limit to the amount of ore available for smelting; but as fuel costs £9 per ton,<sup>39</sup> and it takes two tons for one of metal, nothing but rich ores can at present be profitably employed.<sup>40</sup>

But besides these measures introduced for the concentration of the ores, steps were also taken to improve the means of transport.

In 1865<sup>41</sup> a memorial was addressed to Government from certain Miners, agriculturists, and others, of the Division of Namaqualand,<sup>42</sup> which stated that during the previous ten years exports from the division had been of the order of £800,000, and that imports had amounted to £450,000, "...the former consisting of copper ore, corn, wool, skins, and ostrich feathers, and the latter of merchandise of every description from Cape Town, two-thirds of which has paid customs duties."<sup>43</sup> It was

further stated that exports would have been much greater were it not for the poor state of the roads between Springbok and the coast. As evidence of this it was pointed out that there were ores worth more than £500,000 lying at the mines - not being sufficiently valuable to pay the cost of freight to the coast. What is more, it was suggested that had the roads been in a better condition a greater quantity of wheat and grain would have been sown. This was no doubt considered a necessary judgement to make in order to obtain the aid of Government but is a most unlikely assertion. The construction of a line of main road between Springbok and Hondeklip Bay was therefore earnestly requested.<sup>44</sup>

As a result of this petition a Select Committee of the House of Assembly was appointed to report upon not only the question of the construction of a line of road from Springbok to Hondeklip Bay, but in addition upon the construction of a line of road from Springbok to Clanwilliam as well as to examine a bill authorizing the Cape Copper Mining Company to construct a Tramway or Railway from Hondeklip Bay to Riethuis - a distance of about 16 miles,<sup>45</sup> and which would eliminate the sandy belt stretching inland from the coast alluded to in the prospectus of the Cape of Good Hope Copper Mining Company.

This committee urged the construction of a line of road between Springbok and Hondeklip Bay, but considered that the construction of a line of road between Springbok and Clanwilliam was not important enough to warrant the necessary expenditure. As to the Cape Copper Mining

Company's line of rail - the construction of which because of the sandy belt was complementary to the construction of a line of road - they added a number of clauses to safeguard the interests of the public, the chief one being a provision for the purchase of the line at cost price ten years after the opening of the first portion of the line.<sup>46</sup>

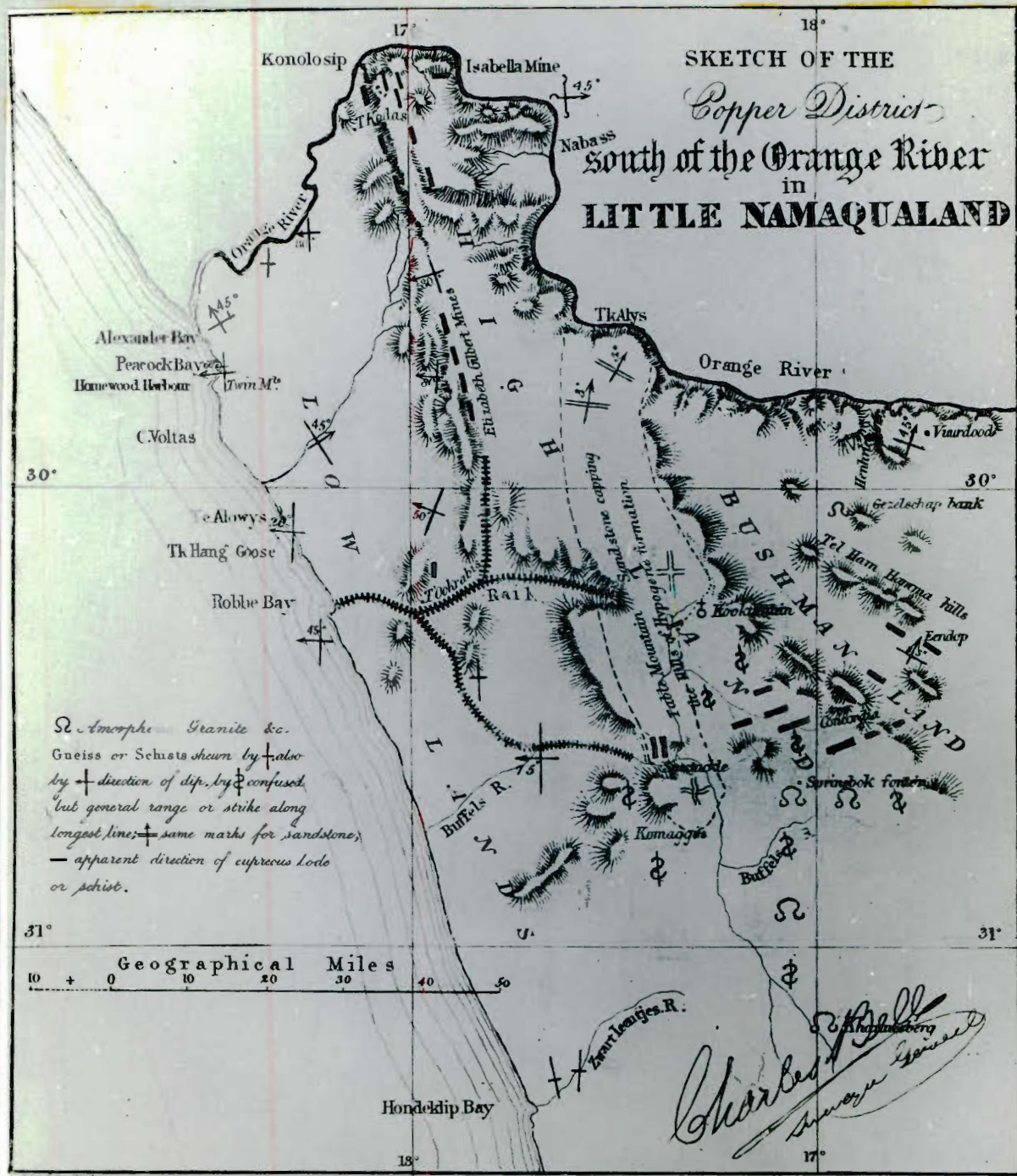
While this Select Committee was still deliberating, however, the Cape Copper Mining Company had brought out an engineer from England to investigate and report upon the most suitable line of rail. This gentleman, Mr. R.T. Hall,<sup>47</sup> describes proceedings -

On my arrival, the question of improving the road from Springbok to Hondeklip Bay was before the Parliament in connection with a Tramway Bill from Hondeklip Bay to Riethuis, sixteen miles towards the mountain.

On examining the country I found such greater facilities were afforded for making a railway or tramway towards the mines from Port Nolloth, and the superior advantages of that port over Hondeklip Bay were so manifest, that I recommended the directors to abandon the Hondeklip route and bay, and remove their establishment, and carry a railway of 2 feet 6 inches gauge from Port Nolloth to Muishonde, about forty miles inland. The question was duly considered by the directors, and approved of; but, in the meantime, they had been committed to the Government road between Springbok and Hondeklip, and were, therefore, compelled to abandon the idea.<sup>48</sup>

Map showing the relationship of various  
Bays and Harbours to the mining districts  
and the line of railway which Charles Bell  
proposed in his report of 1855.

Reports of the Surveyor-General  
Charles D. Bell, on the Copper Fields  
of Little Namaqualand, 1855.

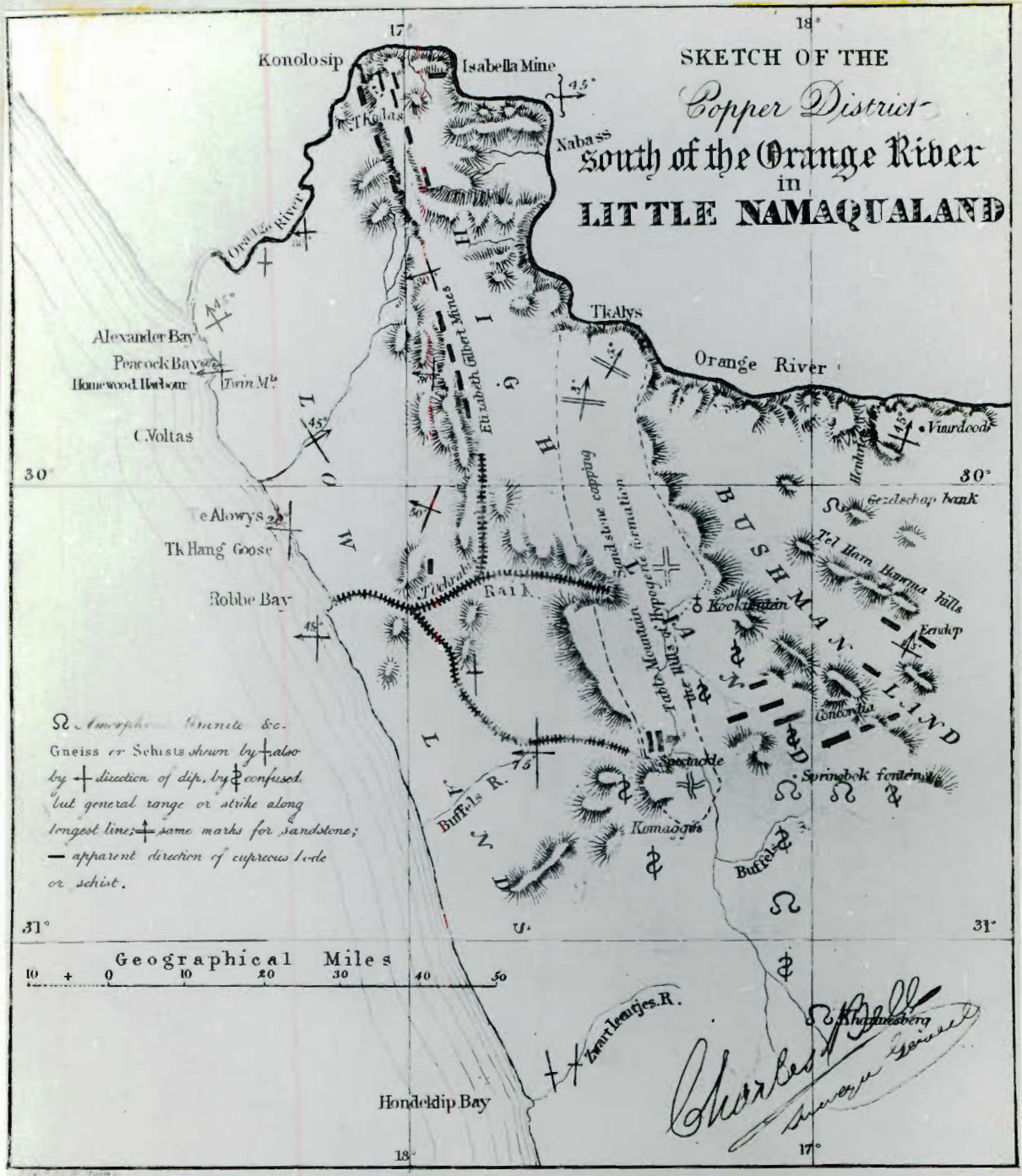


Hall was by no means the first person to favour Port Nolloth over Hondeklip Bay as the most suitable port of export for Namaqualand. Charles Bell, speaking of a line of rail, commented in 1855 in his report that it seemed to him that Hondeklip Bay was too far south to be of general utility and that furthermore the rolling sand hills and the features of the Swatlintjes River bed posed problems only to be overcome at great cost. He had therefore recommended a line of rail inland from Port Nolloth.<sup>49</sup> Andrew Wyley, in 1857, considered that with the limited amount of goods to be transported the most practical course would be to improve the road to Riethuis from Springbok and then to construct a line of rail from there to Hondeklip Bay<sup>50</sup> - ~~exactly the course proposed by the Select Committee~~ - but he considered that if the traffic had been sufficient to warrant it then the best course would undoubtedly have been to Port Nolloth, with the construction of a line of rail from that port inland some 40 miles - ~~exactly~~ the course proposed by Hall. There could be no doubt as to which was the better harbour, the advantages of Port Nolloth (Robbe Bay) having been pointed out by Commander Nolloth in his survey of the coast in 1855.

In arriving at its conclusions the Select Committee had taken into consideration the report of a certain Mr. Fletcher. This gentleman had been asked by the Inspector

The Village of Springbokfontein, about 1878

(South African Public Library)



- 103a -



of Roads in a letter dated 22nd March, 1865, to report upon the respective merits of lines of road from "the Mining Districts" to the two possible points of exit for the country's produce, namely Hondeklip Bay and Port Nolloth - which would tend most to the benefit of the colony, and to give a rough estimate of their probable cost of construction.<sup>51</sup>

He reported in favour of the Hondeklip Bay road, even although the cost of construction of a line of road from Springbok (which he considered as the centre of the mining districts) to Riethuis (17½ miles from Hondeklip Bay) was given by him as £20,000, while the cost of a similar road to Oograbis (16 miles from Port Nolloth) was given as £10,000. From either of these places it was necessary to construct a railway to the coast because of the deep sandy flat over which the construction of a road would have proved too expensive. Since the total distance (i.e. including the stretch of rail) to Hondeklip Bay was 75 miles while the easiest route to Port Nolloth was 83 miles, we may wonder why it should be that a road which was longer should cost so much less. The reason was apparently because the Hondeklip Bay road was very much more undulating and thus required a great many retaining walls and side cuttings, while the Port Nolloth road did not. In addition, the road to Hondeklip Bay would, as a result, be more costly to maintain than one to Port Nolloth.<sup>52</sup>

Having established that a road to Hondeklip Bay was very much more expensive to construct and maintain than one to Port Nolloth, we may find it curious that Mr. Fletcher should have favoured the more expensive route. The explanation does not lie in the fact that, according to his calculations, and using Springbok as the centre of the mining districts, Hondeklip Bay was closer to the mining districts than Port Nolloth for, notwithstanding the arguments of those who, correctly, placed O'okiep as the centre of those mining districts, and who by their measurements made Port Nolloth (77 $\frac{3}{4}$  miles) rather than Hondeklip Bay (80 miles) the closer,<sup>53</sup> Mr. Fletcher still favoured the Hondeklip Bay route over the Port Nolloth one, and for the very reasons that caused others to favour the Port Nolloth route over the Hondeklip Bay one.

Mr. Fletcher's motives were not apparently to be found in his report which we have referred to, but in other documents. In reply to a requisition to represent Namaqualand in the House of Assembly Fletcher stated that in recommending the Hondeklip Bay route over the Port Nolloth one, he was -

guided by a principle which hitherto was not considered, that is, the convenience of a class of individuals who have gradually become of importance. I mean the copper riders, who are also the farmers of the district, and who are all residing on the Hondeklip Bay side of the mines.<sup>54</sup>

The question of whether or not the farmers were better off for their copper-riding activities was a contentious

one. As early as 1861 the Civil Commissioner of Namaqualand, Mr. Anthing, had commented in correspondence concerning the removal of the seat of magistracy from Springbok -


I apprehend that the magistracy of Namaqualand is not kept for Messrs. King & Co. They are prone to adopt an exaggerated opinion as to the great importance of the mines to the community. I hold a very modified view of the great benefit to any but themselves. A certain amount is expended annually for carriage of copper, but this is but diverting the labour and industry of the people from agricultural pursuits to those of mining. The carriers of copper ores are none the richer for their occupation: on the contrary, almost all the Bastards who have ridden copper are poor, and almost insolvent. Where is the great benefit to the community? It is true there is also a market at Cape Town, and a much more extensive and certain one, if the shipping place were but easy of access, and a good market established there.<sup>55</sup>

Even Mr. Fletcher agreed that the natives had become impoverished as a result of copper riding, but he attributed this to the brandy drinking which resulted from the fusion of interests of native carriers as a result of the breakage of one party's wagon, - the breakage of such wagons being as a result of the bad state of the roads.

Thus he considered that if the roads were but improved then carriage of ores would become a paying proposition. In any case, he did not consider that the Europeans who were carriers had become impoverished as a result

of riding copper ore. And, in support of his argument he pointed out that at least from the time of his arrival some thirteen years before, there had been almost no emigration from the district, and as there were only 134 farms in the division while the census returns had indicated that there were 678 farmers, then were it not for the possibility of earning a living by riding copper ores, an activity which put into circulation about £20,000<sup>56</sup> per annum, Namaqualand would be the most poverty stricken division in the whole colony. Mr. Anthing's comments seem to indicate that Namaqualand was a rich agricultural region, in fact this is far from the truth, and since Namaqualand had experienced several rather dry seasons then Mr. Fletcher's arguments seem the more rational. Certainly Mr. J. Rivers, a former Civil Commissioner of Namaqualand, in evidence before the Select Committee of 1865 considered that a great deal of money was put into the hands of the farmers by copper riding, and that therefore Crown Lands, if put up for sale, would fetch high prices in Namaqualand.<sup>57</sup>

Mr. Judge, Civil Commissioner at the time of the controversy, and who wrote a lengthy report to Government informing them of the facts as he saw them, considered that the argument concerning brandy drinking was simply "...an expense devised for want of a better argument,"<sup>58</sup> and that copper riding was equally as detrimental to the Europeans as to the natives. The fact that there were so many "farmers" and so few farms may be attributed to squatting, and is thus an indication of the extent to



which this was taking place.

Mr. Fletcher's well meaning intentions on behalf of the "farming" community would in any case have been of little avail since the transport of the ores was shortly afterwards given into the hands of contractors. An observer, J.S.H. commented in 1869 -

In summarizing the industry at the mines, we cannot pass over the transport, as that employs a very considerable amount of labour. Formerly it was diffused through the whole agricultural population, and rather had the effect of retarding prosperity; but now the concentration which characterizes the present management has given it into a limited number of hands as contractors, which allows every one to carry it on on (sic) a scale large enough to make it pay, and at the same time allows the farmers, when they have leisure, to ride a load or two, and thus keep themselves in a little available cash, without sacrificing the interests of their own profession.<sup>59</sup>

Mr. Judge considered that the interests of the farmers as agriculturists required encouragement, and asked whether, "...by inducing the farmers to leave their farms with most of their servants for several months of the year in order to ride copper ore, ...we (are) doing anything for Agriculture?"<sup>60</sup> Why, he asked, was so little grain and wool exported from a district - which at least according to the evidence given before the Select Committee of 1865 - possessed such great potential for their production. He was of the opinion

that the most practical and beneficial way to foster agriculture was by stimulating the mining industry, and thus building up a large local market at the mines, this could best be done by making cheaper and not dearer, the cost of carriage. In any event a road to Hondeklip Bay was unsuitable for the carriage of agricultural produce as it was too far north, and it therefore seemed to Mr. Judge to be logical to construct the most useful road as far as the mining industry was concerned, this was most definitely the road to Port Nolloth, which passed many indications of copper, whereas the Hondeklip Bay route passed none.<sup>61</sup> Neither of the warring factions made quantitative estimates of the benefit or otherwise received by the copper riders, so that it is difficult to ascertain whether or not this activity was more or less profitable than farming. But, one is inclined to think that the farmers would from experience have found that it was in fact more profitable, otherwise, they would not have persisted in the activity. *Diamonds would have affected both activities.* As to Judge's question concerning the alleged suitability of Namaqualand as a munificent agricultural producer, the evidence given before the Select Committee seems curiously misleading and it is strange that Judge, who after all had by this time resided in the territory for some years, could have been deceived as to the agricultural potential of Namaqualand. In most years not even sufficient cereals for local consumption could be produced.<sup>62</sup> The benefit to the farming community of the

construction of a line of road from Springbok to Hondeklip Bay was clearly nil - as Judge pointed out. Yet from the nature of the questions asked by the Committee, it can be seen that they were extremely anxious to establish whether or not the construction of the road to Hondeklip Bay would be of benefit to the farmers.<sup>63</sup> And, one is tempted to think that if they had established to their satisfaction that such a road would not in fact be of benefit to the farmers, then they would not have recommended the appropriation of public funds for its construction.

Government being then erroneously persuaded that the Hondeklip Bay road would be of benefit to the farmers, and knowing that the Port Nolloth road had no pretensions to being a stimulant to the export of agricultural produce, would not be persuaded to abandon the Hondeklip Bay road in favour of the Port Nolloth road even although the Cape Copper Mining Company Limited offered to make a loan of £5,000 (a sum considered sufficient for the construction of the road), to Government, at 6 per cent per annum, repayable in yearly instalments of £1,000.<sup>64</sup>

The Divisional Council of Namaqualand having in the meantime come into possession of Mr. Hall's plans, and being no doubt influenced to some extent by Mr. Judge, passed a number of resolutions in connection with the controversy, noting amongst other things that from the time of its establishment (1861) the Council had expended almost the whole of its revenue in vain attempts

to keep the road between Springbok and Hondeklip Bay in repair. That a debt of £300 incurred in 1861 in connection with this road had not yet been extinguished and that despite the levying of a road rate of one penny in the £ in every year but one, the Council regretted to record the fact that the road in question was in a worse condition than ever before.

The Council considered that even were a road to Hondeklip Bay to be constructed by the Government, the expense of keeping it in repair would be wholly beyond their means. The Council thus recorded its objection to the construction of a line of road to Hondeklip Bay and protested against being charged with its repair if constructed. It seems that the Council had received many verbal representations from the farmers of the Camiesberg and Hardeveld protesting against the expenditure of the rates paid by them upon the Hondeklip Bay road, which was of no benefit to them. The Council stated that it seemed that very great dissatisfaction existed among them, and that their complaints were justified. Thus in future they were determined to expend the road rates upon the construction and maintenance of roads which would be of some benefit to the farming community.<sup>65</sup>

Government was not to be deterred, however, and so work was commenced upon the road from Springbok to Hondeklip Bay, convicts being employed for the purpose of construction. These convicts were supplied with transport and accommodation by the Cape Copper Mining Company Limited,

who were in addition required to pay to Government two annual instalments of £800 to meet the cost of additional establishment necessitated by these works. The Company were, however, released in 1868, following a petition upon the subject,<sup>66</sup> from having to pay Government the £1,600.<sup>67</sup>

By 1869 some £10,000 had been expended upon this road which came to be known as the Messelpad, but as before its completion the Cape Copper Mining Company were granted permission for the construction of a line of rail from Port Nolloth to Nonams, and since the Hondeklip Bay road could be used for nothing else but the transport of copper ores, it became defunct. This fact brought Judge some satisfaction since it was exactly this of which he had warned Government in his report of 1866.<sup>68</sup>

The provisions of the Port Nolloth Tramway or Railway and Jetty Act, 1869, were virtually the same as those which had been determined for the Namaqualand Tramway or Railway Act, 1865. It is clear from the preamble of the Act that the Cape Copper Mining Company in being granted permission for the construction of the railway were not to be in the position of an ordinary commercial undertaking. The Company in the operation of its railway was to assist in the development and opening up of the country. Once the line was open a tariff was to be framed, which after ratification by the Governor would be Gazetted and would then become binding upon the Company who would be in the position of an ordinary public carrier.

Map showing the Cape Copper Company's line  
of Railway and also the branch line of  
the Namaqua Copper Company to Concordia.

(Private Collection H.R. Moffat).



Construction of the line of rail was commenced on 4th September, 1869 and the last rail of the first section was laid on the 23rd December, 1870. This first section was 46 miles long and terminated at Muishondfontein, and not at Nonams as was stipulated in the Act. The gauge employed was the narrow 2 foot 6 inch one recommended by Hall. The rails used were very light being about 18 lb. per yard, these were securely bolted to longitudinal sleepers 7 inches by 3 inches, and fixed laterally by iron tie rods, fastened underneath the sleepers, in order to allow free passage of the animals working on the line.<sup>69</sup> Two small engines were employed on the lower sections of the line, that is till the 22 miles and the 35 miles stations, but on the rest of the line mules were used. The Act under which the railway was constructed did not allow for steam traffic but it was used for some years. The two small engines employed - the "John King" and the "Miner" proved however to be subject to too many breakdowns, and were more expensive than mule traction, and so in 1876 they were scrapped and mule transport was reverted to along the entire length of the line.<sup>70</sup> The opening up of this first section of the line to Muishondfontein was so successful that application was made to Government to authorize an extension.

Permission for an extension of the line was obtained in the Port Nolloth Tramway or Railway Extension Act, 1871, which as can be surmized from the title was merely an extension of the previous Act, and thus embodied the same

provisions. This extension was only some 12 miles long, from Anenous (presumably Muishondfontein) to a place near the Mission Station of Kookfontein or Steinkopf but took until 1873 to complete. The reason for this was that while the first section of the line rose only 1774 feet, the seven miles from Anenous to Klipfontein summit involved a rise of 1330 feet and on what was known as Nixon's curve - a curve of 130 feet - the gradient was 1 in 19.<sup>71</sup>

Not content with this a further extension from Kookfontein to O'okiep was proposed. Sanction for the construction of this section was obtained by means of an Act entitled An Act to Authorize the Cape Copper Mining Company (Limited) to construct and work a Tramway or Railway from Kookfontein to O'okiep, 1873.<sup>72</sup> This Act did not embody the same provisions as the previous two in connection with the transport of the public's goods. The omission of provision for the transport of the public was at the specific request of the Company. And, the Company apparently had strong objections to the insertion of such provision. From the evidence given before the Select Committee on the Namaqualand Railway Extension Bill<sup>70</sup> it would appear that the Company had in any case not themselves inserted into the previous Bills any provision for the transport of the public. Asked as to what the objections of the Company were to being compelled to carry the public's goods, the manager of the affairs of King & Sons, Mr. Stephen Trill, stated that inclusion of such a provision would require a more expensive line,

and that the Company considered that having got the public over the worst part of the road they should not be compelled to carry their goods any further, as this would interfere with the objects of the Company, which was merely to get their ore down and their provisions up. No provision for the transport of the public's goods was inserted, perhaps the reasons for this were firstly that the Select Committee accepted that from Kookfontein there was a good road and that mule and oxen transport was easily available, and since the ground traversed by the railway was either Mission ground or land owned by the Company, so that no Crown land was traversed, then they might have considered that they could not very well coerce the Company into carrying the public's goods, since there was no quid pro quo.

Government had however the right of purchase of the line 7 years after passing of the Bill. The whole distance of the line - 93 miles - was opened on the 1st January, 1876. The cost of construction in the Balance Sheets of the Company was for many years given as £169,218.16.7.

<sup>including</sup>  
~~This~~ included the cost of construction of the Jetty at Port Nolloth. Extensive relaying of rails took place over the years but no record was kept of these expenses, it is however possible that these were paid for out of the profits made by running the railway.

As may be seen from Table B, exports of copper ore grew rapidly with the opening up of the railway, - but especially after the first section had been opened, that is, the section over the deep sandy flat previously

alluded to, and which had proved such an obstacle to the oxen and mules who had to drag their heavy loads through it. While, however, the availability of transport increased immeasurably with the construction of the railway, the cost did not really decline. The Cape Copper Mining Company in terms of the Port Nolloth Tramway Act of 1869 had in a letter dated the 22nd February, 1871, already submitted to Government a tariff, this was in its nature so oppressive that it was never ratified.<sup>73</sup> This left the Company free to do their will, with adverse consequences for all but themselves.

*Indeed the arguments advanced in 1871 were not sufficient to induce the Government to ratify the tariff. It was not until 1874 that the Government was induced to do so. The fact that the company was free to do as they pleased was a serious disadvantage.*

Chapter VI

Development of the Industry Until 1968.

The Village of Concordia, Headquarters of  
Namaqua Copper Company, about 1878.

(South African Public Library)

- 116a -



The construction of the railway brought within the pay limit large deposits of ore. This led to the formation, in England, of a new company to exploit the Concordia deposits of the Namaqua Mining Company, which had gone defunct as a result of excessive transport costs and mismanagement.<sup>1</sup> This new company, which was a sort of syndicate, was known as the Concordia Copper Company.<sup>2</sup> A reduction in shipping costs in 1881<sup>3</sup> led to the re-opening of the Springbokfontein mine of the Cape Copper Mining Company, and enabled the Concordia Copper Company to send some ore away. Although mining had been commenced by them in 1875, they had until this time been unable to get their ores to the market. The reason for this was threefold, low grade of ore, depressed prices and enormous transport costs.<sup>4</sup> In 1886 the Concordia Copper <sup>It had been the</sup> Namaqua Mining Company <sup>of the</sup> ~~was~~ <sup>Springbokfontein mine</sup> was formed into the Namaqua United Company. This company went into liquidation in 1888, when the Namaqua Copper Company, with a capital of £200,000, was formed.<sup>5</sup> In 1888 too, the Cape of Good Hope Copper Mining Company Limited, commonly known as the Cape Copper Mining Company, altered its name to the Cape Copper Company Limited, and increased its capital to £600,000, by issuing to each holder of a £10 share (upon which £8 had been paid up), fifteen shares of £2 each.<sup>6</sup> The First World War brought prosperity to the mines, but the slump in prices which followed peace, closed down the Cape Copper Company's mines. Their property was taken over by an American Company, calling itself the South

African Copper Company Limited. The Namaqua Copper Company was able to continue sporadic production, but the advent of the Great Depression closed down their activities. It also nipped in the bud, the development work of the South African Copper Company, whose assets and liabilities were taken over in 1937 by the O'okiep Copper Company Limited, a company which is still in existence.

As we saw in the previous chapter, the provisions of the Acts governing the construction and running of the various sections of the Cape Copper Company's railway were not the same. On the first two sections of the line, that is, from Port Nolloth to Kookfontein (or Steinkopf), the company was required to frame a tariff, which, after approval by the Governor would be published in the Government Gazette, consequent upon which the company would be in the position of an ordinary public carrier. Government could not, however, itself enforce a tariff upon the line. Over the third section of the line from Kookfontein to O'okiep, however, the company had absolute control - not being required under the Act to carry the goods of the public. As a result of the oppressive nature of the tariffs submitted to Government by the company, however, no tariff was published. As a consequence, the Cape Copper Company was left to its own devices in the running of its railway. They transported their own goods first<sup>7</sup>, levied discriminatory charges in favour of the Namaqua Copper Company (so that they would not object too vociferously), and

generally behaved in a rather dictatorial manner.

Although the Government could not compel the company to reduce their tariff, they did hold the option of purchasing the line at its cost price (estimated at £180,000)<sup>8</sup> ten years after the opening of the first portion of the line, and, the first portion had been opened to Abberlaack (22½ miles) on the 30th June, 1870. As a result of the excessive rates then, alleged to be charged, a petition was forwarded to Government in 1880 from persons engaged in trade and mining in Namaqualand, requesting that the right of pre-emption provided for in the Acts be taken up by Government. A Select Committee was appointed to consider whether the Government should exercise its right of purchase of the Cape Copper Mining Company's line.

Mr. William Dickson acting on behalf of the Concordia Copper Company, charged, in evidence before this committee, that, although the availability of transport might have increased as a result of the construction of the railway, the cost of transport had not decreased as compared to ox and mule wagon transport.<sup>9</sup> Mr. George Trill, manager of King & Sons, rejected these allegations. He claimed that the cost of transport had decreased considerably as compared to those rates prevailing before the construction of the railway. According to his evidence, the cost of transporting a ton of ore to the coast by wagon had been from £7 to £10, while the cost of bringing up a ton of supplies from Port Nolloth had

been from £5 to £6. What is more, these costs had applied only to the Cape Copper Mining Company, - who had enjoyed special rates. In addition, he pointed out that at the time at which these rates had prevailed, oxen could be purchased for 50/- each, while at the time of his evidence, the same oxen would fetch from £6 to £7. Thus he considered that the company's rates of £5.5s. from Port Nolloth to O'okiep, and 50/- from O'okiep to Port Nolloth per ton, compared extremely favourably with the previous charges.<sup>10</sup> Mr. Trill further claimed, that no reduction could be made in the rates which would still leave the company with a reasonable rate of profit. Mr. Thwaites, however, formerly employed by the company as engineer and traffic manager, stated that the company was at their present rate making a profit of 100%, and that the rate on goods up, from Port Nolloth to O'okiep could be reduced from what it was - 1/1 per ton mile, to 9d per ton mile, and still leave the company a reasonable rate of profit.<sup>11</sup>

Certainly, there is reason to believe that the Company was making a good return upon its investment, since otherwise they would have been anxious to dispose of the railway, and in fact, they were not at all anxious to do so.<sup>12</sup>

The Committee reported that they did not consider that the time had arrived for the purchase by the Government of the Namaqualand line of railway.<sup>13</sup> And this, in

spite of the fact, that, Mr. Trill on being asked (apart from his connection with the Company), his opinion concerning the petition, replied that he considered the prayer of the petitioners reasonable, and that it should be acceded to, as, the purchase of the railway by the Government, and decreased rates which would follow, would develop the resources of the country.<sup>14</sup> The reason for the Committee's decision against recommending the purchase of the line must lie in the fact, that evidence given before them would lead to the impression that the Cape Copper Mining Company were themselves almost the sole users of the line. Since the lives of the mines were uncertain, then should they fail, there would be almost no traffic on the line, and in this case, the line would prove a liability to Government. In addition it appears as if they considered that as the Cape Copper Mining Company had constructed the railway at considerable risk, and entirely at their own expense, then they were entitled to monopoly profits. The Cape Copper Mining Company were thus left to run their railway as they pleased. By not taking up their right of pre-emption, the Government had forfeited it, although this was not generally understood. The Company were free to do as they wished, even to the extent of removing the rails, should they so desire.

The construction of the railway completely altered the relative positions of Hondeklip Bay and Port Nolloth,

as may be seen from the Table below.

	FROM OOKIEP			
	Via PORT NOLLOTH.		Via HONDEKLIP BAY.	
	Up Transport. Goods, Fuel, and Forage. Shipping ton 2,240 lb.	Down Transport. Ore and Regulus. Gross Shipping ton 2,240 lb.	Up Transport. Goods, Fuel, and Forage. Shipping ton 2,240 lb.	Down Transport. Ore and Regulus. Gross Shipping ton 2,240 lb.
1868	316	367	222	1,829
1869	831	1,484	500	2,891
1870	1,364	2,478	915	3,172
1871	1,088	7,461	286	1,567
1872	1,794	7,611	157	1,163
1873	3,402	10,424	...	1,183

15

Before the construction of the railway, Hondeklip Bay had been a fairly large centre, although a factor in the decline of Hondeklip Bay had also been the change over by the Cape Copper Mining Company from employing casual "copper-riders" to a system of employing a contractor. J.S.H. in an article on Namaqualand and its mines, described Hondeklip Bay in 1870 -

Hondeklip is a loose, straggling place on a low sandy beach. It appears from the sea larger than you would expect, and longer than it is. The houses are of one storey; but the huge stacks of copper ore and of fuel quite overtop them, rising to a height of thirty or forty feet, and of such odd shapes that the stranger is rather puzzled to know what they are. Five or six trading stores run parallel to a road which for a little distance is contiguous to the beach, and then curves off, and leaves room for a row of outhouses at one end, between it and the beach, for the use of the Company, and of the shops. The buildings mostly, if not entirely belong to the Cape Copper Mining

Company, and a considerable number are occupied by them as receiving stores. A rude sort of square or market place is formed in one part, on one side of which is situated the court-house and custom-house, a building of one room, used also as a church. The residence of the Company's Superintendent in the olden time is pleasantly situated on the rising ground a little south of the town, and leading up from the beach, as are also some cottages; the Magistrate, who is also the Collector of Customs, has his residence near the beach at the south end, and the gaol is situated a little back from the shore, in the same direction.

This has been the great port for the shipment of ore; and formerly the Company had a large establishment here - a resident, who superintended the transport and shipping and landing, and a staff of well-paid clerks. Salaries had been fixed when ore realized high prices; and when the price of ore fell, the servants grew rich, whilst the Company grew poor. The payments on transport were made at Hondeklip, and therefore the shopkeepers grew rich also. Now all this is changed: the cost of transport is greatly reduced, and is paid at O'okiep; the shipping and landing and forwarding are done by a contractor, and the industry is limited to some thirty or forty men whom he employs; and as he keeps a store, and, of course, supplies his own workmen, it follows that shop-keeping at Hondeklip is a thing of the past. The Company's officers are limited to a resident agent.<sup>16</sup>

The Jetty At Port Nolloth, About 1890

(South African Public Library)



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Only two years later, in 1872, E.J.D. who also wrote an article on Namaqualand and its mines, landed at Port Nolloth, and described this port -

The aspect of Port Nolloth, as viewed from the sea, is not inviting. Iron roofed buildings nestling between mounds of drifting sand; huge piles of what afterwards proves to be copper ore stand prominently forth, as though asserting their importance. When the ship is anchored, and the ugly rollers that break over the "bar" are safely passed, the bay is reached, - not a very extensive one, but still not to be despised on a coast having so little shelter for vessels as the African.

A noticeable feature at Port Nolloth, and one shared by most small towns on the sea-board, is the superabundance of flag-staffs. Every house has at least one, and some staffs have no corresponding house. Perhaps the staff is erected as preliminary step. On the arrival of a vessel, anything that will float is sent aloft, from a red handkerchief to a union-jack.

On landing it is observable that the port has its improvement schemes, as well as older places. There is the jetty, which, when completed, will be a great convenience for loading and discharging ships. Down the jetty the miniature railway runs, so that the ore may be brought from Annenous and run alongside boats or small vessels, into which it can be discharged direct, - a great improvement on the existing method of shipping copper. At present, copper ore is brought down by the trucks in bags of about one hundred-weight each; these are placed in stacks larger than hay stacks. When ore is to be shipped, one gang of coolies carry the ore to the beach, while another gang wade out to the boat, each man carrying a bag.<sup>17</sup>

The decline of Hondeklip Bay is illustrated by the fact that while it had been created a separate magisterial division in 1862, it was again incorporated with the Namaqualand division in 1877. Port Nolloth, on the other hand, was created a separate magisterial division in 1874.

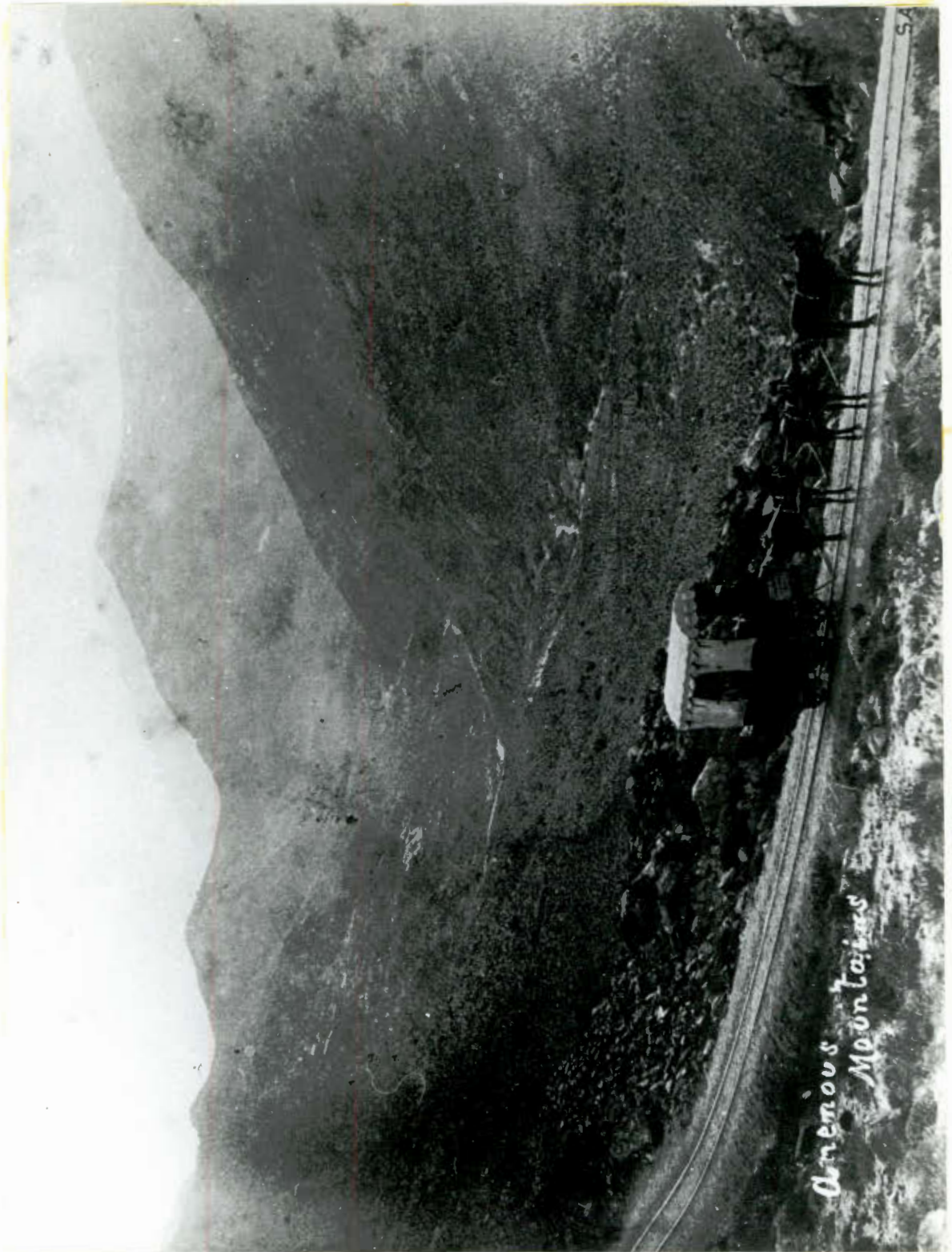
An amusing account of a journey on the Cape Copper Mining Company's railway is given by Bishop Simon, who was for many years a missionary in Namaqualand, in his autobiography. Arriving at Port Nolloth from France in 1882, he says -

There was a thick fog, and we could barely see thirty feet ahead. The thermometer read four degrees above zero (36°F), and we were lightly clothed. Would anyone in France have thought it possible to be cold in Africa! We walked back and forth, we blew into our hands, and looked impatiently into the distance. We were hoping to see the train so we could jump into a compartment and at least have shelter. But nothing came into sight except some mules with harnesses on their backs. We wondered what these beasts could be doing in the African sands.

I cannot describe our amazement when we saw that the mules were firmly harnessed to a few little carriages. Yes, this was the train! These rolling boxes were our dining and sleeping cars, these mules were our engines. Each passenger carriage had three mules, and the freight cars, which were coupled in groups of three, were pulled by six mules harnessed in single file and trotting between the rails. The whole train consisted of about sixty mules and thirty cars.

A "Special" on the Cape Copper Mining Company's  
Line in the Annenous Mountains.

(South African Public Library).



Onemous  
Meun taires

SA

A whistle announced the departure. Passengers for O'okiep, all aboard!

.....

The train began to move. I need not mention its speed since you already know the power of our locomotive. Each unit was entrusted to two conductors. One of them, armed with a strong whip, took charge of speeding the progress of the mules should they imprudently choose to slow down their gait. The other conductor had his hand on the brake to control the speed of the vehicle. This latter function was quite essential since the tracks tended to follow the topography of the land. When we went downhill, unless the brakes were applied the car would take on more and more speed until it was practically at the mules' heels. This would have been disastrous both for the passengers and the poor animals.<sup>18</sup>

Commenting upon the section of the line from Annenous to Klipfontein summit, a distance of 7½ miles with a rise of 1,330 feet, he says -

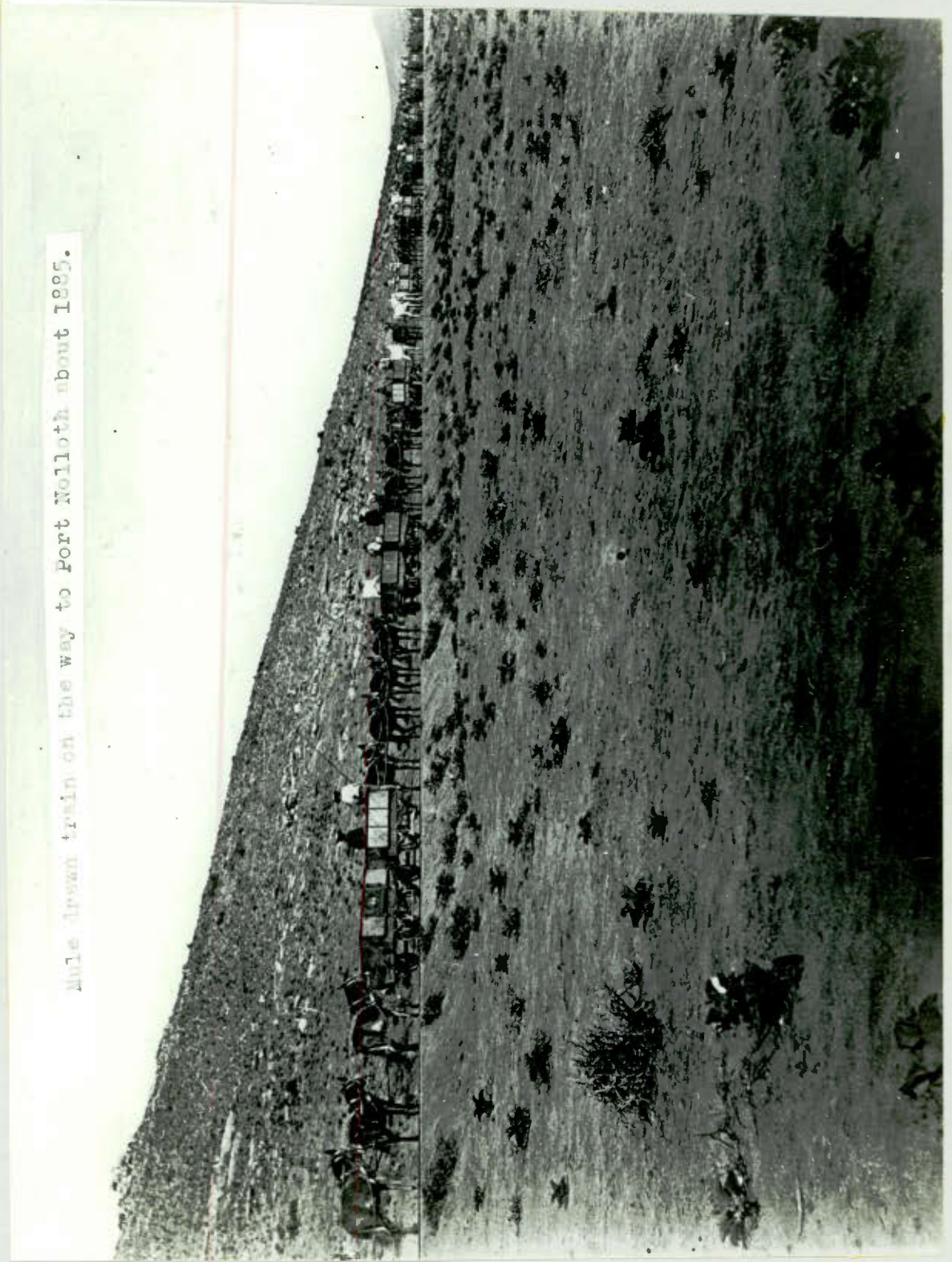
The construction of the railroad on this mountain is a masterpiece of engineering. The grade was calculated with a view to the locomotives that would someday replace the mules. The engineer who solved the problem certainly gave proof of his immense knowledge. The ascent lasted about two hours, and at two points bridges had been thrown over ravines. These bridges were about sixty-five feet high.

As we approached the summit of the mountain we were reminded of the gorges of Switzerland or the Tyrol. There were drops of over 2,000 feet. The road had been hewn out of the rock and there was just room enough for one man between the "Special" and the

Mule Train on the way to Port Nolloth,  
about 1885.

(Private Collection Mr. H.R. Moffat)

Mule train on the way to Port Nolloth about 1895.



rocks. When we looked over the precipices we felt dizzy. The view was grand, but it was hard to enjoy it because we were terrified when we looked into the abyss beneath our feet. We were afraid in spite of ourselves. What if the road should cave in! What if the "Special" should be derailed! What if the mules should lose their footing!<sup>19</sup>

Mules provided the means of locomotion for some ten years, from 1876 until 1886, when the Company re-introduced, quite illegally, steam transport on the lower section of their line. In the first instance this affected the section from Port Nolloth to Abberlaack, its use was subsequently extended to the Annenous mountains on the 1st June, 1887. The first engines employed were fitted with Condensers and tenders, in an attempt to overcome the water shortage. The Condensers and tenders were, however, subsequently dispensed with, and the engines used for shunting between the O'okiep and Nababeep mines. In 1890 the first "mountain" type engines were introduced. These were rather powerful little engines, constructed by Messrs. J. Kitson & Co., Leeds. By March, 15th, 1893, the whole distance to O'okiep, 91½ miles (the line having been shortened from the time of its construction), was converted to steam<sup>20</sup>. Mules were, however, retained for passenger traffic until 1896.<sup>21</sup>

With the monopoly which the Cape Copper Company possessed in regard to transport, and taking into account that the majority of the inhabitants of Namaqualand were in one way or another dependent upon them,

dealings with the Company were not always amicable. W.C. Scully, at one time resident magistrate at Springbok, stated in his Reminiscences -

I do not know what O'okiep is like now, not having seen it for some seventeen years, but in 1893 it contained what I should say was about the most unpleasant community in South Africa to deal with. The Cape Copper Company practically owned the bodies, and consequently tyrannized over the souls, of its inhabitants. The local head of the Company was, except in the matter of mining quite uneducated.

He was as pompous as a grocer-alderman and as touchy as a cuttle fish. ... The "Super" was, as a matter of fact, as much an autocrat in his little sphere as is the Tzar in all the Russias. The Company, of which he was practically the irresponsible executive, owned the house I lived in, the court room in which I sat as magistrate, the gaol in which the prisoners I sentenced were confined, and the well from which was drawn the only water available for my household.<sup>22</sup>

The intractibility of the Company was, however, modified to some extent in their dealings with the Namaqua Copper Company. Continual "nagging" from this company caused the Cape Copper Company to reduce the railway rates in their favour. The Namaqua Copper Company could not, however, complain too much, as the Cape Copper Company could always threaten to throw off their goods when they reached Kookfontein.

Although the Cape Copper Company charged the Namaqua Copper Company more favourable rates than were applied

to the general public, these rates were, nevertheless, considered by the Namaqua Copper Company to be excessive.<sup>23</sup> They were also considered by persons not connected with the mining industry to be rather high. Mr. Elliot, the General Manager of the Cape Government Railways, in evidence before the Select Committee on Differential Railway Rates in 1899, replied to the question, "Speaking generally, do you consider the Cape Copper Company's tariff as a very high tariff?"

Yes. The matter was first raised in 1871 or 1872, and the question again came up when I was Assistant Commissioner. The Company would not reduce, as they considered that they made reasonable charges, and the Government has persistently refused to sanction the tariff, because it was always considered too high.<sup>24</sup>

In order to remedy the situation, it was suggested that if the Government or someone else was prepared to build a line from Kookfontein to the Mining Districts, then terms could be arranged with the Cape Copper Company.<sup>25</sup> While, however, one section of the line remained free of any governmental control, nothing could be done.

The managers of the Namaqua Copper Company took up this suggestion and proposed the construction of a line of rail from Kookfontein to Concordia, parts of which were to run almost alongside the Cape Copper Company's line. A bill in this connection was introduced in 1900, and was considered by a Select Committee.<sup>26</sup> This committee approved the bill, and as a result, Act No. 7 of 1900,

being an Act to authorize the Namaqua Copper Company, Limited, to Construct a Railway, was passed. In terms of the provisions of this Act, the Namaqua Copper Company was to be granted running powers over the Cape Copper Company's line. This was an essential feature of the Act, since otherwise the Cape Copper Company could merely have raised their rates on the section from Port Nolloth to Kookfontein, - the Government having no control over the tariffs which they charged.

The line in question was, however, never constructed. It was merely a sort of Damoclean device. A compromise was arrived at whereby the Cape Copper Company reduced the rates to the Namaqua Copper Company. As far as the general public was concerned, however, the rates remained as high as ever before.<sup>27</sup>

The Boer War interrupted mining somewhat, especially since the villages were besieged for some time. After the war, however, the development of the industry proceeded apace. In 1903 Mr. Bellechasse Morison was appointed by Government to enquire into the Cape Copper Company's Railway. He was instructed to ascertain whether in the event of the line being acquired by the Government, the existing rates could be lowered, and at the same time could continue to pay interest. Some difficulty was experienced by him in determining upon a value for the line. This resulted from the Company's lack of records! The Company put a value of some £400,000 upon the line, a sum which Bellechasse Morison

accepted as the basis for his calculations, although he regarded the value as nearer £310,000. He reported that -

In the event of the Government acquiring the line there is no doubt that considerable reduction could be made in rates, and at the same time pay working expenses, and interest on purchase price.<sup>28</sup>

He considered that the Cape Copper Company did not in fact charge themselves for the transport of their ores, but were able to cover working costs upon the tariff levied to others.<sup>29</sup> Government did not, however, take over the line.

Again in 1905, an investigation into the Cape Copper Company's Railway was instigated. Messrs. Quentrall and Ronaldson were appointed by Government to Enquire into the Mineral Resources of Namaqualand with a view to consideration by the Government of advisability of taking over Port Nolloth - O'okiep Railway. They stated in review of the industry -

Several mines of high-grade copper have been discovered; some were entirely, and some were for a long time, worked under great difficulties through the high cost of transport.

Two of these high-grade mines, O'okiep and Tweefontein, are still working, and one low-grade mine, NababEEP, with its 6 per cent ores, is also working, and on a much larger scale than the other two. Each of these mines is being profitably worked. High-grade ore is sent away for treatment in England and the low-grade ore is smelted locally,

The Village of O'okiep, about 1890

(South African Public Library)



at O'okiep and NababEEP, and in the case of Tweefontein is either concentrated for shipment or stacked for smelting, in the water-jacket furnace now under construction. The treatment of comparatively low-grade ore is now possible by means of local smelting, particularly blast-furnace, making use of the sulphur in the ore as a natural fuel.

This treatment of low-grade ores has only become practicable through lower railway rates and the consequent possibility of local smelting, and it is not open to question that the former factor must influence most favourably.

The enquiry narrows itself down to three questions, viz., the life of the present mines, the probability of opening out other mines, and the influence of lower rates for railway transport and loading and unloading charges at the port.<sup>30</sup>

They believed that especially the NababEEP mine of the Cape Copper Company, and the Tweefontein mine of the Namaqua Copper Company, both had long leases of life. They further believed that other deposits would be discovered, and thus concluded that prospecting should be encouraged. They considered that the acquisition by the Government of the Cape Copper Company's railway was justified, and that after reasonable reductions had been made in the rates, the railway could still be run profitably.<sup>31</sup>

The early 1900's were difficult years for the Cape Copper Company. Imprudent investment in Indian mines and low grade of ores in Namaqualand, reduced profits. Fears that the O'okiep mine, once described as the richest

mine in the world,<sup>32</sup> was almost worked out, made the Company anxious to dispose of their railway. In 1906, a bill was introduced for the acquisition of the railway.<sup>33</sup> This was read for the second time, at the very close of the Parliamentary session. Because of disagreement over the purchase price (£320,000), debate was adjourned, and does not seem to have been re-opened. Thus the Cape Copper Company remained in possession of the railway.

The First World War brought prosperity to Namaqualand and its mines, production being worth approximately £500,000 per annum for the years 1915, 1916 and 1917, as may be seen from Table C. In 1918, however, production dropped to £68,622, and in 1919 was worth only £17,656. The Cape Copper Company closed down its mines in 1919, causing much poverty and distress. This is illustrated by the following letter to the Editor of the Cape Times -

Sir, - Only a small fraction of your readers can picture the extent of the calamity due to the sudden closing down of the Cape Copper Company. Three large villages are affected - O'okiep, which has seven stores; NababEEP, with eight stores; and Port Nolloth, which is larger than either of these. With the exception of the Fish Canning Co., and the Wireless, Lighthouse and the Customs staff at Port Nolloth, every living person except the postmaster depends upon the company for his daily bread.

On Friday, 23rd May, all day men dismissed at once, weekly men a week's notice, monthly a month, contract men three months.

Daily men means coloured labour, about 1,000. Paid daily, their wage was daily spent on today's or yesterday's food. Their wage had recently been reduced to 3s. per day, and before the crisis some families were actually starving. Weekly men include a few white men and more St. Helenas, a very worthy class, holding positions of some trust at very low wages. There are very few contract men. Some of the officials and all the remaining staff of white men will be paid one month's wages on June 1, and dismissed to take care of themselves.

Since retrenchment, following the fall of the O'okiep mine about nine years ago, all wages have been on a low scale. The provision of good houses, no rates and some privileges made life possible, and even comfortable. But, for men with families to maintain, there was little margin for saving. Those who desired advanced education for their children had to economise closely to pay boarding and school fees in Cape Town. During the rise in prices due to the War there was no war bonus to help employees of the company.

Now all these families are to sell up and depart. Sell up! To whom can they sell? Depart! Whither? Obviously to Cape Town. We are their neighbours, though so far away. Klaver, the railhead, is distant 180 miles of difficult road. The only other exit is by ship from Port Nolloth to Cape Town. The transport of a family without much baggage would swallow up all of a month's wages. And what prospect is there for many families arriving in Cape Town almost penniless at this juncture? It is difficult to understand what possible excuse can exculpate the directors of a company with such tremendous responsibilities, from what looks to be a criminal betrayal of a people who served them well.

To discuss that would be beside the mark, in our ignorance of the facts. ....

I am, etc.,  
T.G. Le Mesurier.<sup>34</sup>

To a company so used to the exploitation of enormously rich deposits, the advent of lower grade of ore, with a narrow margin of payability, was anathema. To some extent the fall of the Cape Copper Company must be attributed to the fact that they did not introduce the most economic processes of treatment for poorer grades of ore.

The Namaqua Copper Company were able to continue production, although as may be seen from Table C, production virtually came to a standstill in 1921, when only 113 tons of ore of 72.60% metal content was shipped, the value being but £5,026.

The affairs of the Cape Copper Company were put into the hands of an Official Receiver.<sup>35</sup> For some time the Company's property was under option to the General Mining and Finance Corporation, but, when they failed to take this up, an American concern, The American Metals Corporation, purchased the property of the Cape Copper Company for the sum of \$750,000. They formed a company known as the South African Copper Company Limited. This concern commenced development work, and plans for the construction of a large concentration plant were under consideration when the recession in copper prices in 1930 brought their operations to a close. The Namaqua Copper Company were forced to suspend smelting operations in

July, 1930, but the production of concentrates by the flotation process was continued until June, 17, 1931, when all operations ceased.<sup>36</sup> And while some small quantities of copper were exported, as may be seen by reference to Table C, no real work was done until the O'okiep Copper Company started in 1937.

The O'okiep Copper Company Limited was incorporated on the 29th May, 1937, with a capital of £1,600,000, consisting of 3,200,000 shares of 10/- each. In the first instance only 960,400 shares were issued and fully paid up. These shares were subscribed for at 2.5 dollars (Canadian) per share by the Newmont Mining Corporation, The American Metals Corporation, Rhodesian Anglo-American (who shortly sold out), International Minerals and Metals Corporation and certain other Canadian interests. A further 799,600 shares were reserved for the conversion of notes and bore interest at 5% per annum. An additional 1,200,000 shares were subscribed for and were subject to call. Of the total issue, including the convertible notes, the Newmont Mining Corporation held nearly 67%.<sup>37</sup>

Had the total issue been called up (2,960,000 shares) the Company would have had a capital of £1,480,000 - a sum which was considered necessary to purchase the property of the South African Copper Company, and to commence working. Since, however, the assets and liabilities of the South African Copper Company were purchased for the sum of £537,870.15.8. (\$2,667,000), - a price which included a hidden asset in that the O'okiep Copper Company was not required to pay any South African income taxes

until all capital expenditure, made not only by themselves, but also by the South African Copper Company had been recovered - the Company found themselves in an over-capitalized position. By redeeming the promissory notes at par, and cancelling the shares held for contingencies, the issued capital was finally limited to 1,021,056 shares by 1946 - which still remains the capital of the Company today.

The assets of the South African Copper Company consisted of mineral holdings of 105,000 acres, and the mineral rights to a further 50,000 acres, as well as various plant and equipment, the narrow gauge railway to Port Nolloth, and the jetty at that port.

Ore Reserves at the time of take-over were estimated at -

<u>Mine:</u>	<u>Short Tons:</u>	<u>Grade:</u>
NababEEP	6,000,000	2.52%
East O'okiep	2,675,000	2.33%
Narrap	625,000	2.18%
	<hr/>	<hr/>
	10,200,000	2.45%
	<hr/>	<hr/>

In August, 1939, the O'okiep Copper Company was able to acquire the mineral leases held by the Namaqua Copper Company for the sum of £2,125. They thus came to own, not only all the mines in Namaqualand, but also the more important copper prospects in the division.

The Company started installing new plant at NababEEP and rehabilitating the NababEEP South mine in 1937.

A smelter was also constructed there. A mining, milling and power plant was completed at O'okiep, and the East O'okiep mine came into production in April, 1945.

A mining plant was completed at Wheal Julia (which had been one of the properties of the Namaqua Copper Company) and this mine came into production during the latter half of 1951.<sup>38</sup>

Milling operations were commenced by the Company early in 1940, and smelting was instituted in August of that year, when 473 tons were produced. A contract was entered into with the British Ministry of Supply, for the delivery of, not more than, 12,000 tons of copper per annum, to be delivered in Cape Town. The year ending June 30th, 1941, saw a production of about 11,000 tons. Production for the year ending in June, 1942 was approximately the same.

In 1943 an advance of \$1,400,000 was made to the Company by the United States Government's Metals Reserve Company, - to increase wartime supplies. Since the Executive Vice-President of the Metals Reserve Company was a Mr. Henry DeWitt Smith, who had launched construction at O'okiep in 1937, he would have been aware of the potential of the mines. This loan was repaid by 1947. Production rose in 1943 to more than 13,000 tons, and as may be seen from Table D increased rapidly with the advent of peace, and a higher price for copper.

Mr. DeWitt Smith, who became O'okiep Copper Company's managing director after the war, was apparently an astute

diplomat, who was able to obtain the maximum of co-operation from the Government, "...those Dutch blooded Afrikaners" who politically controlled the country, by the expedient of forgetting "his front handle" and speaking his name "Duhvitt Smit."<sup>39</sup>

The Company paid its first dividend in 1946 - this was at 10%. Profits had, however, been made from the very first year of production (1941) when sales of Copper, Silver and Gold (Namaqualand copper contains traces of silver and gold), totalled £467,010.15.11. while profits amounted to £109,125.17.4. - this amount was transferred to the Earned Surplus account. Subsequent to the payment of the first dividend, Newmont Mining Corporation (who perform certain management functions for the O'okiep Copper Company for a fee of \$3,000 per month) offered shares in O'okiep Copper to their shareholders, and thus, indirectly to the United States public. The stock issue eliminated a double taxation problem, and fixed a market price for O'okiep Copper Company's shares.

Transport of the ores to the coast, and of stores and provisions from the coast, which has, from the very first attempts at mining in Namaqualand, proved a major problem, continues to be one. At first some money was spent by the Company on improving the O'okiep Port Nolloth narrow gauge railway. But the little engines proved too expensive to run. Road transport was resorted to between these points, but this too was soon abandoned. The reasons for the abandonment of Port

Nolloth as a shipping port would seem to be the result of its size, and the fact that it is largely unprotected; during the war, too, German submarine action may have been feared. The railway was scrapped and sold in 1944, and its rails now carry overhead wires. The ores are now taken by road to Bitterfontein (the railhead) whence they are transported by train to Cape Town, for shipment overseas, for the final electrolytic refining process. The copper produced at the mines is "blister" copper of some 99% purity.

Besides the problem of transport, however, there is perhaps an even greater problem in the supply of sufficient water for the reduction processes. The Company requires some 1,000,000 gallons of water per day. The property of the Namaqua Copper Company had been purchased in 1939 not only for the fact that they contained workable deposits, but more immediately because it was hoped to utilize the water in the shafts. These supplies were, however, soon found insufficient to meet requirements, and a pipeline was laid to a large alluvial basin in the Buffels River, some 15 miles from Nababeep, and 35 miles from Carolusberg (the newest of the Company's mines). This pipeline was completed in 1947. The Company does re-use certain amounts of water, sewage effluent is treated for use in the power house, but a continuance of dry seasons for a number of years is causing some concern. One solution might be to pump water from the Orange River by night to the catchment

area in the Buffels River, where the deep sand would prevent evaporation, and then pump water from this area to the mines during the day. The Orange River cannot be relied upon its own, however, since it does not run every year, throughout the year.<sup>40</sup>

The O'okiep Copper Company is one of the Republic's most important producers of copper ore. In Namaqualand, the Company forms a bulwark against retrogression. A large number of Whites (1,000), Coloured (1,550), and Bantu (1250) are employed by the Company. The market which these people provide, for what local agriculturists as there are, is most important. These farmers are too far away to supply national markets; hence, should the mines fail they would be severely affected. In addition, a large number of Coloured labourers are employed, and in their case the failure of the mines would be disastrous.

The company has undertaken an extensive amount of development work. A team of some 17 geologists and geophysicists being employed. During the calendar year 1968, R953,543 was expended on geological, geo-physical, and diamond drill exploration. It is contemplated that a like amount will be expended during 1969. Although no new major finds have been made (more usually old mines

Spektakel Mining Camp (date uncertain).

Work was commenced at the Spektakel Mine by Phillips and King in 1853 and it was one of the most important mines of the Cape Copper Mining Company. Work is now being re-commenced by the O'okiep Copper Company Ltd.

(South African Public Library)



such as the Spectakel mine of Phillips and King and the Cape Copper Mining Company have been re-discovered), tonnage additions to existing orebodies since 1967 have reversed the downward trend in ore reserves, as may be seen from the Table below.

<u>Year Ended</u>	<u>Ore Reserves Short Tons.</u>	<u>Grade. 666</u>	<u>Copper Content Short Tons.</u>
30th June 1962	28,123,000	2.07	581,922
" " 1963	27,719,000	2.01	556,441
" " 1964	29,431,000	1.87	549,817
" " 1965	28,166,000	1.81	510,934
" " 1966	26,396,000	1.81	476,854
31st Dec., 1967	25,410,000	1.73	440,053
31st Dec., 1968	27,430,000	1.62	443,871

At existing production rates, the mines have a life of some 10 years. But continuing geological research might either bring to light new ore bodies, or increase the extent of existing ones, or both. The price of copper must also be taken into account, the higher the price, the lower the pay limit. Thus Namaqualand's future is assured, at least for the next ten years or so. The O'okiep Copper Company is, however, assured of a longer life, since the Company holds a 9.5% stake in the Tsumeb Corporation.

The O'okiep Copper Company has, as may be seen by reference to Table D, paid enormous dividends to its fortunate shareholders. Dividends, which as a return on capital invested, far outstrip those paid by the old

Cape Copper Company and the Namaqua Copper Company.

Let it be hoped that (having reaped their rewards) they will not, like their predecessors, leave at a moment's notice.

The copper villages of O'okiep and Nababeep (the headquarters of the Company in South Africa) are fairly large centres. The village of Springbok is a thriving little town, but the division is almost entirely dependent upon the copper mines. Springbok gets its electricity from the Company, and also any deficiency in water supply, thus conditions have not changed much in Namaqualand from the old days, only the name and nationality of the Company has altered. Dependence upon one concern to such an extent is not a healthy state of affairs; provision must be found for some other industry to take the place of the copper mines in the "economy" of Namaqualand.

NOTES

Chapter I.

1. C.G. Botha, Early History of Mining in South Africa, The Official Yearbook of the Union and of Basutoland, Bechuanaland Protectorate, and Swaziland, No. 15, 1932-1933, p.28.
2. According to Dr. E.E. Mossop there were six strenuous attempts to find mysterious Vigiti Magna between 1659 and 1664. These were :-
  - (i) Expedition of Jan Danckaert in search of Monomotapa - 12 Nov., 1660 to Jan., 1661.
  - (ii) First journey of Pieter Cruijthoff - 30 Jan., 1661 to 11 March, 1661.
  - (iii) Journey of Pieter van Meerhoff - 21 March, 1661 to 23 April, 1661.
  - (iv) Journey of Pieter Everaert - 15 Nov., 1661 to 13 Feb., 1662.
  - (v) Second journey of Pieter Cruijthoff - 21 Oct., 1662 to 1 Feb., 1663.
  - (vi) Journey of Jonas de la Guerre - 11 Oct., 1663 to 22 Jan., 1664.

For a short survey of these expeditions see Dr. E.E. Mossop's "Old Cape Highways", (Cape Town, Maskew Miller, n.d.). For the journals kept on these expeditions reference should be made to Dr. E.C. Godée Molsbergen's "Reizen in Zuid-Afrika in de Hollandse Tijd." Volumes XI and XII of De Linschoten-Vereeniging, ('S-Gravenhage, Martinus Nijhoff, 1916).

3. Journals of the expeditions of the Honourable Ensign Olof Bergh (1682 and 1683) and Isaq Schrijver (1689); transcribed and translated into English and edited with a foreword and footnotes

by Dr. E.E. Mossop. Publication No.12 of the van Riebeeck Society. (Cape Town, The Van Riebeeck Society, 1931).

4. Theal says of this expedition of Isaq Schrijver - "In February 1684 a party of Namaquas visited the Cape, and when they returned Sergeant Isaak Schryver with fifteen soldiers and three miners was sent with them. The sergeant succeeded very little better than Ensign Bergh, though he managed to proceed somewhat farther and to collect from the people he visited a number of pieces of copper ore which he brought back on a pack ox. This ore was melted in crucibles, and the pure metal was sent as a specimen to the directors."

G.M. Theal, "History of South Africa (Cape Town, C. Struik, 1964). Vol. III, p.266.

G.M. Theal, "History and Ethnography of Africa South of the Zambesi, from the settlement of the Portugese at Sofala in September 1505 to the conquest of the Cape Colony by the British in September 1795. (London, Swan Sonnenschein & Co. Lim., 1909) Vol. II, p.266.

5. C.G. Botha, op. cit., p.29.

6. The diary referred to is that kept by Simon van der Stel on his expedition to Namaqualand. Simon van der Stel's journal of his expedition to Namaqualand, 1685-6; edited from the manuscripts in the Library of Trinity College, Dublin, by Gilbert Waterhouse.... (London etc., Longmans Green, 1932).

7. A.W. Rogers, "An Old Report on the Copper Field of Namaqualand, (by F.M. van Werlinckhof, dated March 18, 1686). South African Journal of Science, 1917,

Vol. 14 pp. 150-151.

The samples which van der Stel obtained apparently yielded the following results -

Out of the first 100 lbs. of quartz,  $11\frac{1}{2}$  lbs. Copper,  $\frac{1}{5}$  decigram Silver.

Out of the second 100 lbs. of quartz, 10 lbs. Copper,  $\frac{1}{3}$  decigram Silver.

Out of the third 100 lbs. of quartz,  $7\frac{1}{2}$  lbs. Copper,  $\frac{1}{2}$  decigram Silver.

De Mist, J.A. - Memorandum containing recommendations for the form and administration of government at the Cape of Good Hope : with an English version by Miss K.M. Jeffreys, B.A., and a preface by S.F.N. Gie, Ph.D. Publication No. 3 of the van Riebeeck Society.

(Cape Town, The van Riebeeck Society, 1920) p.217.

8. G.M. Theal, Compendium of South African History and Geography, (Lovedale, The Institution Press, 2nd Edition, 1876), Vol.II, p.63.

9. An account of this expedition has been published as The Journal of Carel Frederik Brink of the journey into Great Namaqualand (1761-2) made by Captain Hendrik Hop and The Journal of the journey of Ensign Johannes Tobias Rhenius (1724) : transcribed, translated and edited with an introduction, brief Lives and footnotes, by Dr. E.E. Mossop. Publication No. 28 of the van Riebeeck Society. Cape Town, The van Riebeeck Society, 1947. Originally this manuscript was published in Dutch as Dag-verhaal gehouden op een landtogt door het land der kleine en groote Namacquas... .., as the second part of the Nieuwste en Beknopte

Beschrywing van de Kaap der Goede-Hoop. (Amsterdam, J.H. Schneider, 1778)

10. Correspondence on the Subject of the Discovery of Metals in Namaqualand, G.8 - 1854, p.10.

11. Ibid.

12. Many years later a similar conclusion in regard to the deposits in the Springbokfontein area was arrived at by the Missionary James Backhouse, who stated in his Narrative of a Visit to the Mauritius and South Africa, that -

"In the latter country ... (Namaqualand) ..., copper ore frequently occurs; it is so plentiful in some mountains which we passed, that they are called Koperbergen, Copper Mountains. Probably it might be collected advantageously by the Namaqua Hottentots, and transmitted, in their skin knapsacks, to some place on the coast where they might exchange it for other commodities; but to smelt it in this country would be impractical. The only supply of wood that could be used for such a purpose is on the banks of the Orange River, and a few tributary streams, where the belt of wood is seldom twenty yards wide; from what I know of the quantity required, I think all that would be available for such a purpose would be consumed by a smelting-work in two to three years. The primitive nature of the whole country precludes the idea of the existence of coal; no coal is known in any part of South Africa except in the interior, at some distance from Port Natal. The only remaining

article of fuel which could be obtained is cow-dung, and the quantity required would be too great to be supplied in a country capable of supporting so comparatively small a stock of cattle."

A Narrative of a Visit to the Mauritius and South Africa, (London, Hamilton Adams, 1844), pp.581-582.

13. The Orange River was named in honour of the Prince of Orange by Col. Gordon, in July, 1779.

14. Correspondence on the Subject of the Discovery of Metals in Namaqualand, op. cit., p.16.

Dr. Rykvoet's report was first published as an appendix to the Nieuwste en Beknopte Beschryving van de Kaap der Goede-Hoop, (Amsterdam, J.H. Schneider, 1778).

15. Correspondence on the Subject of the Discovery of Metals in Namaqualand, op. cit., p.16.

16. Col. Robert Gordon, traveller, hunter, and commander of the Cape in 1797.

Lieut. William Paterson, traveller and botanist.

17. William Paterson, A Narrative of Four Journeys into the Country of the Hottentots and Caffraria. In the years 1777, 1778, 1779. (London, J. Johnson, 1789), p.68.

18. Originally Alexander was to have reported upon certain regions of East Africa, but, being forestalled by Dr. A. Smith he decided upon an exploration of the West Coast.

19. J.E. Alexander. An Expedition of Discovery into the Interior of Africa, through the hitherto undescribed countries of the Great Namaquas, Boschmans, and Hill Damaras. (Cape Town, C. Struik, 1967) Vol.1.p.119

20. A chloride of copper.

21. G.M. Theal, "History of South Africa" (Cape Town, C. Struik, 1964). Vol. VII, pp.84-85.

G.M. Theal, "History of South Africa since September 1795. (London, Swan Sonnenschein & Co. Lim., 1908). Vol. III pp.80-81.

22. J.E. Alexander, "Report of an Expedition through the countries of the Great Namaquas, Boschmans, and the Hill Damaras, in South Africa." Journal of the Royal Geographical Society, 1838, Vol.VIII. Reprint from the above, p.6.

23. Ibid., p.7.

24. F.C. Cornell, The Glamour of Prospecting: wanderings of a South African Prospector in search of copper, gold, emeralds, and diamonds. (London, Fisher Unwin, 1920). pp.92-93

25. The Cape Mercantile Advertiser, 25th Oct., 1854, p.4, col.3.

26. As no copies of the Cape of Good Hope Shipping List No. 183, in which the original prospectus was published, have survived, the only reference to this company is in a comment on the prospectus in the Grahamstown Journal, 3rd August, 1843, Vol. XII, No. 609.

NOTES

Chapter II.

1. This was the expedition led by Willem van Reenen which left Cape Town on the 17th September, 1791 and returned on the 20th June, 1792.

2. No copies of this issue have survived, the only reference to this company is that contained in the Grahamstown Journal. See Ch. I, p.7.

3. This must be a reference to the attempts made by Samuel Bennet to form an Orange River Mining Company. See Ch. I, p.5.

4. No further reference to the activities of these Frenchmen can be found, but the statement is interesting as perhaps providing a motive for the British annexation of Namaqualand in 1847.

5. Shipping and Mercantile Gazette, 27th February, 1846. p.1. The average grade of ore in Cornish mines was from 8-9%.

6. This J.B. Harrison was probably the prime mover behind an association formed "...at the beginning of 1846 ... with a capital of £1,000... in Cape Town to explore the district and ascertain if mining would likely prove remunerative, but the reports from the persons who were sent for this purpose were not very favourable." G.M. Theal, History of South Africa, (Cape Town, C. Struik, 1964) Vol. 7, p.85.

G.M. Theal, History of South Africa since September 1795, (London, Swan Sonnenschein & Co. Lim., 1908), Vol. III, p.81.

7. Shipping and Mercantile Gazette, 6th March, 1846, p.2., col.1.

8. *ibid.* This report was the result of exploratory work conducted during an expedition known as the "adventure of the Ellen German." A brig, the Ellen German had landed a waggon and all the implements necessary for mineralogical exploration at Peacock's Bay early in 1846. The report was the result of Capt. Davies' explorations.

9. Not much is known about Thomas Fannin however there are a few lines upon his personal history in an article written by his grandson M.G. Fannin, "The First Attempts at Mining in Namaqualand", The Mining and Industrial Magazine, 7th March, 1928.

10. Shipping and Mercantile Gazette, 6th March, 1846, p.2, col. 3-4. Fannin also quotes from two authorities, firstly, from Brande's Geology, that, "Districts rich in the metals are generally barren, and seem peculiarly desolate and dreary to the traveller," and further from Andrew's South America - "It was a fallacy to imagine that the Copper and Tin Miners of Cornwall could be competent judges of the appearance, character and value of Metallic substances to which they were unaccustomed. A mining surface and interior could not be fairly tried by a momentary superficial examination, months rather than a few hours, are necessary for the task of determining the intrinsic value of such a work."

11. *ibid.*

12. Professor of Physical Science at the South African College.

13. Correspondence on the Subject of the Discovery of Metals in Namaqualand. G.8. 1854. p.23.

14. Shipping and Mercantile Gazette, 27th February, 1846, p.1.

15. Shipping and Mercantile Gazette, 20th March, 1846, p.1.

16. Correspondence on the Subject of the Discovery of Metals in Namaqualand, op. cit., pp.23-24.

17. Backhouse although pretending to be nothing more than a Missionary had realized that no coal would be found in Namaqualand. See Ch. I, footnote 12.

18. Correspondence on the Subject of the Discovery of Metals in Namaqualand, op. cit., pp.24-25.

19. Shipping and Mercantile Gazette, 13th March, 1846, p.2, col.2.

20. See Ch.I, p.7. Silberbauer poured out eulogies, for instance:- Shipping and Mercantile Gazette, 10th April, 1846, p.2, col.1. "...As we happen to know a little of the difficulties and prejudices that had to be surmounted in the formation of our own "South African Mining Co.," - for most heartily do we rejoice that it is our own; - we shall watch over its proceedings with intense anxiety for its welfare; and in stating this, we believe we only give expression to the feelings of all who sincerely desire that the resources of the

Colony should be worked in a sound, upright, and efficient manner. Is it not possible that religion, civilization, and commerce may tread our earth hand in hand, that as companions of peace and plenty, they may be permitted to scatter their blessings as they move along through our world, too sadly damaged by all that defiles and debases human nature? Cannot commerce be so regulated by upright principles, that it will be made a blessing to our fellow man? We think it can, and to whatever land our last weeks supplement ... (containing the report of the first meeting of the South African Mining Company)... many(sic) find its way, the report of the South African Mining Company will tell its tale, (we fear too strange in the commercial dealings of the civilized with the uncivilized, or savage as he is generally called, and too often made so by those dealings) that every movement of the company will be carried out on "straight-forward" upright principles, paying the labourer just and fair wages and reserving a portion of the net profits of the company for the benefit of the natives.

Those are the right principles to start with; no doubt they will be assailed, perhaps in some disguised form, by those who might not like this mode of dealing with "Africa's swarthy sons," but as success has attended the formation of the company, so will it continue to attend its every movement, while thus worked. The good ship is afloat; it is well manned; the flag it has unfurled may well brave the "battle and the breeze"; we trust it will never be lowered, that

every man will do his duty; and if needs be "nail the colours to the mast." What has hitherto been done on the Western Coast of our continent to work out its resources, increase its commerce, or raise and improve its inhabitants? Answer ye who have been long treading on its shores, and what have ye given in exchange for its produce."

21. Shipping and Mercantile Gazette, 20th March, 1846, p.2., col. 3-4.

22. It is interesting to note here that in the original prospectus issued in February no mention was made of this testimony of 1762, the company being stimulated to exploratory work by the opinion of Alexander, and the van Reenen expedition of 1792, although in fact van Reenen had not obtained the 1,000 tons of ore he brought back with him from the south side of the river but from the north side.

See The Journal of Hendrik Jacob Wikar (1779) with an English translation by A. W. van der Horst; and the Journals of Jacobus Coetsé Janz: (1760) and Willem van Reenen (1791) with an English translation by Dr. E.E. Mossop; edited with an introduction and footnotes by Dr. E.E. Mossop. Publication No. 15 of the van Riebeeck Society. (Cape Town, The van Riebeeck Society, 1935) pp. 292-293. Perhaps even if the promoters of the S.A. Mining Co., had known of the existence of Dr. Rykvoet's report they would not themselves have drawn attention to it because of its pessimistic nature.

In the event it is clear that the originators of this company based their interest in Namaqualand solely upon the evidence of Alexander and were thus led astray in disregarding the deposits of the Springbokfontein area which it was considered were unexploitable because of the difficulties in regard to transport.

23. Perhaps this intrinsic value referred to was thought privately to represent more than copper, we refer to evidence brought forward by Dr. Eveleigh to prove that he was the first person to discover the existence of Gold in Namaqualand. He states in a sworn affidavit given on the 16th February, 1854:

"I, George Eveleigh, do hereby solemnly and sincerely declare that, in the month of March, 1846, Mr. R.C. Jones gave me a specimen of "Copper Ore", which he declared had been brought from the North part of the division of Clanwilliam, which on chemical examination, I found to contain a small quantity of gold, which I produced in the presence of Mr. Jones and others. That, on producing this in the presence of the directors of the South African Mining Company, they requested me to repeat the experiment on a larger scale in their presence, or of their Secretary, which I did, and obtained nearly two grains of Gold from one hundred grains of the Ore. And I further declare that I gave a globule of the said Gold to the said Secretary, for the satisfaction and information of the Directors of the said Company, and another globule I retained in my own possession." Correspondence on the Subject of the Discovery of Metals in Namaqualand, G.8 -1854. pp.22-23.

24. Shipping and Mercantile Gazette, 3rd April, 1846, p.5, col.1.
25. Ibid.
26. Ibid.
27. Ibid. The Kousie River empties itself into the sea approximately midway between the Bays of Hondeklip and Robbe (Port Nolloth), thus Fannin was correct in asserting that there was no suitable harbour close to the mouth of the river. His mistake lay in choosing what he thought was the most direct route to the sea.
28. J.E. Alexander, Expedition of Discovery into the Interior of Africa, (Facsimile Reprint, Cape Town, C. Struik, 1967). Vol. I, p.117. William Joseph was referred to by Alexander as his "Copper-indicator." Ibid. Vol. I. p.253.
29. At a value of 1/6 per rix-dollar this would have been from 4/6 to 15/- per month.
30. Shipping and Mercantile Gazette, 3rd April, 1846, p.5, col.2.
31. See Map.
32. Already in the 18th Century farms had been granted to colonists along the Orange River. See Ch.IV, p.61.
33. See Map.
34. Enquiries were made of:- Rev. Dr. Phillip, the Rev. Messrs. Hodgson, Jackson, and Shaw, of the Civil Commissioner at Clanwilliam, Mr. Ryneveld, of the Dutch boers encountered south of the River Kousie, and most important of all of the Rev. Mr. Schemelen.

36. See Ch. IV.
37. Shipping and Mercantile Gazette, 3rd April, 1846, p.5, col.3.
38. Shipping and Mercantile Gazette, 12th June, 1846, p.2, col.1.
39. Shipping and Mercantile Gazette, 30th April, 1846, p.2, col.1.
40. Shipping and Mercantile Gazette, 6th November, 1846, p.2, col. 1-2.
41. Quartz being a much **harder** rock than granite it was much easier to sink a shaft through the **latter** than the **former**.
42. Shipping and Mercantile Gazette, 30th April, 1847, p.2., col.1.
43. "At the mines some work was done and rich Copper Ore opened up, but the two Welsh miners soon grew discontented with the lonely life, and, in the end, when a vessel from the Cape touched at the mouth of the Orange River, they returned by her." The South African Mining and Industrial Magazine, M.G. Fannin, "The First Attempts at Mining in Namaqualand", 7th March, 1928, p.17.
44. Shipping and Mercantile Gazette, 30th April, 1847, p.2, col.2.
45. **Ibid.**
46. **Ibid.**
47. **Ibid.**

48. This report was published under the title "Orange River Copper Mine". Shipping and Mercantile Gazette, 6th November, 1846. p.2. Col. 1-2.

49. M.G. Fannin, "The First Attempts at Mining in Namaqualand", op. cit., p.18.

50. M.G. Fannin "The First Attempts at Mining in Namaqualand" op.cit., pp.17-19. In this letter of von Ludwig is also mentioned the activities of a certain Mr. Maclear, who was probably Thomas Maclear on a survey trip.

51. Paul Lynx was a Namaqua chieftain who claimed suzerainty over large tracts of Namaqualand. See Map.

52. It is noteworthy, however, that Mr. Fannin sold his interest in the company soon afterwards and bought a farm in Natal with the proceeds. Thus his faith in the prospects of the Company could not have been very great.

53. Compiled from various issues of the Shipping and Mercantile Gazette.

54. Shipping and Mercantile Gazette, 28th May, 1847 p.1.

55. The company was not formally dissolved as is shown by the fact that when it recommenced operations in 1854, notice was given that those who had not paid the second instalment voted in May 1847, would be allowed to continue their shares if they paid this within three months of notice being given in the Gazette.

Shipping and Mercantile Gazette, 17th February, 1854,  
p.2, col.4.

NOTES

Chapter III

1. J.B. Currey, *Half a Century in South Africa*,  
(Manuscript, South African Public Library) Ch.6. p.9.

2. *Ibid.*, Ch.6, p.9.

3. *Ibid.*, Ch.6, p.10.

Herman Dousterswivel was a character in Sir Walter Scott's novel "The Antiquary" who is best described as a "charlatan". By causing Sir Arthur Wardour to expend large sums upon alleged copper mines he almost brought about the downfall of the family.

It must have been around the same time that Jencken was exploring Namaqualand that a certain Donald McDougall who was the proprietor of a trading establishment at Alexander Bay obtained a lease to work for copper on the south bank of the Orange River about 60 miles from its mouth from a native chief. But although the fact that such a lease had been obtained was known to many merchants in Cape Town, no immediate use was made of it.

G.M. Theal, "History of South Africa since September 1795" (London, Swan Sonnenschein & Co. Lim., 1908)  
Vol. III p.81.

4. *Shipping and Mercantile Gazette*, 3rd April, 1846,  
p.5, col.1.

5. J.B. Currey, *op. cit.*, Ch.6, p.10.

6. Proclamation of 17th December, 1847.

7. It was one of 11 farms granted at that time, the deed was signed by Sir H.G. Smith. The quitrent amounted to £4 per year on the 21,410 morgen. The farm was granted in equal portions to the seven brothers: Nicolaas, Jan, Gert, Jacobus, Piet, Dirk, and Jacob Cloete.

8. The South African Commercial Advertiser and Cape Town Mail, 26th August, 1854, p.2, col.3.

9. J.B. Currey, op. cit., Ch.6, p.11.

10. Agreement dated 28/10/1850 filed in the Deeds Office, Cape Town, together with Deed of Transfer No. 197, dated 26th December, 1850. The sale was in the following proportions:

3/6ths to Silvanus Phillips, John King, and Charles Phillips;

2/6ths to Peter Clarke Daniels, and

1/6th to James King.

P.C. Daniels subsequently transferred his shares as follows:

½ of 1/6th share to Phillips and King, on 23rd May, 1852.

½ of 1/6th share to Phillips and King, on 25th May, 1852.

11. On the 13th September, 1851, Jacobus Cloete sold his seventh share to Phillips and King for the sum of £100 (Deed of Transfer 242 - 29/10/1851). Jacob Cloete sold his share also for £100 (Deed of Transfer 33 - 4/12/1851). The other five brothers were unwilling at that stage to sell, and so an arrangement was entered into whereby Phillips and King acquired a first option for purchase in return for paying each of the brothers the sum of £5. They all eventually sold as

follows:

Gert	Deed of Transfer 68 - 3/6/1853	£375.15.0.
Dirk	Deed of Transfer 69 - 3/6/1853	£375. 0.0.
Piet	Deed of Transfer 70 - 3/6/1853	£393.15.0.
Nicolaas	Deed of Transfer 185 18/10/1853	£500. 0.0.
Jan	Deed of Transfer 186 18/10/1853	£500. 0.0.
Jacobus and Jacob		£200. 0.0.
		<hr/>
		£2,344.10.0.
		<hr/>

12. In October, 1853 they were formed into the Namaqua Mining Company.

13. Correspondence on the Subject of the Discovery of Metals in Namaqualand, G.8 - 1854, p.1.

14. Ibid., pp.3-4.

15. The Cape Monitor, 16th September, 1854, p.3,col.4.

16. The boom gave rise to many excesses such as for instance this theory put forward to explain the inability of mining companies to secure payable mining centres.

"Noah's Ark, when heavily pitching and tossing, knocked off with its bows the protruding mountain peaks, which contained all the copper deposits, and that the crumbled material buried in the Orange River, is now dug up in the shape of the once called "indications", Springbok mountain, the inventor thinks, escaped the metal-destroying keel of the world-preserving vessel, and thus the participators in the "Springbok" interest, retain what was chipped off from the other mountain tops."

The Cape Monitor, 9th January, 1856, p.2, col.1.

Another interesting suggestion was made by a Mr. Zietsman, who proposed that a Chinese Labour Importation Company be formed, and delivered a lecture upon this topic. See Shipping and Mercantile Gazette, 29th September, 1854, p.2, col. 1., and for an account of his lecture Shipping and Mercantile Gazette, 6th October 1854

17. E. Blancheton, Universal Exhibition (Paris) 1855. Colony of the Cape of Good Hope. Vade-mecum (Cape Town, Saul Solomon, 1855). p.57.

18. The Cape Monitor, 27th January, 1855, p.2, col.5. For a biographical sketch of A.G. Bain see the Journals of Andrew Geddes Bain, trader, explorer, soldier, road engineer and geologist : edited with biographical sketch and footnotes, by Margaret Hermina Lister. Publication No. 30 of the van Riebeeck Society, (Cape Town, The van Riebeeck Society, 1949), and relating especially to Namaqualand and his geological observations pp.XXXII - XXXIII.

19. The Cape Monitor, 5th January, 1856, p.2, col.4.

20. Correspondence on the Subject of the Discovery of Metals in Namaqualand, op.cit., pp.35-37. Bain's report was also published in various newspapers, among them, The South African Commercial Advertiser and Cape Town Mail, 16th November, 1854, p.2, col. 3-4.

21. Correspondence on the Subject of the Discovery of Metals in Namaqualand, op.cit., p.37.

22. The Cape Mercantile Advertizer, 24th June, 1854, p.6, col.2.

23. The Cape Monitor, 16th September, 1854, p.3, col.4.

24. Correspondence on the Subject of the Discovery of Metals in Namaqualand, op.cit., pp.20-26.

Considerable excitement prevailed in Cape Town during 1854 especially, as a result of the alleged discovery of gold in South Africa. Rumours were put about concerning the discovery of gold in Namaqualand, but these were soon discounted. A far greater attraction was the Smithfield Diggins. So much excitement was created by the alleged discovery of gold in the Soverignty (Orange River Colony) that The Cape Monitor even had a column devoted to "Chronicles of the Cape Diggins," in which some space was devoted to Namaqualand, but the major portion of which was devoted to the Smithfield Diggins.

25. Correspondence on the Subject of the Discovery of Metals in Namaqualand, op.cit., pp.20-21. Eric Rosenthal in his "Other Men's Millions" gives a description of the founding of the Committee for the Discovery of Gold. Eric Rosenthal, Other Men's Millions, (Cape Town, Howard B. Timmins, 1953), pp.21-23.

In support of the contention that A.G. Bain must be held largely responsible for the belief in the illimitability of Namaqualand's mineral wealth, we quote the following from the report of Charles Bell,

who says that he arrived in Namaqualand "...with highly excited ideas of inexhaustible wealth, for, in this office here, I had heard much of it; and I had read Mr. Bain's Memorandum, as to what he saw on the southern border. Had my observation been limited to the same range, and had my fellow-citizens of Cape Town been less excitable, this report might have been couched in the same strain, for I saw nothing to damp my high expectations at Springbok and Concordia, nor, perhaps, at Spectacle, on my return, in another condition of body, and, consequently, in another frame of mind."

Reports of the Surveyor-General Charles D. Bell, on the Copper Fields of Little Namaqualand and of Commander M.S. Nolloth, of H.M.S. "Frolic", on the Bays and Harbours of the Coast, G.8 -1855 pp.18-19. For our purposes, it is sufficient to note that even Bell was put in a highly excited state of mind by Bain's report.

26. See pp.54-55.

27. The Cape Monitor, 11th March, 1854, p.3, col.5.

28. The Cape Monitor, 15th April, 1854, p.3, col.1-2.

29. Rev. W. Holden, History of the Colony of Natal, (London, Heylin, 1855) p.441. The South African Commercial Advertiser and Cape Town Mail, 2nd December, 1854, p.3, col.1.

30. Rev. W. Holden, op.cit., p.441.

31. The Cape Monitor, 21st April, 1855, p.2, col.4.

32. Report from the Select Committee of the House of Assembly on the Petition of Leaseholders of Land in Namaqualand, S.C.5 - 1856, p.10, Q.120. Charles Bell in his report of 1855 commented upon the fact that Government Notice of 13th September, 1853, lent itself to abuse:- "I may here again express my surprize that the notice of 13th September, 1853, should have so well met the sudden rush of applicants to an unknown country like Namaqualand. In practice, the provisions of that notice are open to much abuse, and they encourage clever evasions, so apparent, yet so difficult to check, that the simplicity of an honest applicant in the spirit of the regulations, leaves him at a great disadvantage. I can point to numberless instances. These regulations have served their purpose long ago, and they should be withdrawn as soon as possible, or so far modified as to leave few doubts. If encouragement is to be given to honest search and discovery, reckless applications should be repressed by a heavy fee; and then, besides other advantages, there would be less trouble in recording and inquiring into hap-hazard applications for unknown spots, and in finding the applicant when wanted. There should only be one extent of mine, say 40 morgen, thereby cutting of the additional three years' time and option of partial forfeiture of lease which is now gained by the applicant, who in his own and three other names takes out four separate leases of ten morgen each, on the same centre; and it is

questionable whether the rent should not be raised, for the low rate only tempts numbers to speculate to the great embarrassment of those who really intend to mine." Reports of the Surveyor-General Charles D. Bell, on the Copper Fields of Little Namaqualand and of Commander M.S. Nolloth, of the H.M.S. "Frolic", on the Bays and Harbours of the Coast, op. cit., p.26.

33. The Lt.-Governor, C.H. Darling, in correspondence to the Duke of Newcastle commented upon Namaqualand - "Of the particular district which is thus about to become the scene of mining enterprises far less is known, with certainty, than of any other portion of the Colony, except, perhaps, the extensive Karoo, or District which stretches along the southern banks of the Orange River ..." Correspondence on the Subject of the Discovery of Metals in Namaqualand, op.cit., p.5 para.10.

34. The Cape Monitor, 21st April, 1855, p.2, col.4.

35. Mr. Chiappini was at one time the Secretary of the No. 6 Mining Company.

36. Report of the Select Committee on Mineral Leases, 1856, p.13.

37. Mr. Hewitt was the Secretary of the Western Province Mining Company.

38. Report from the Select Committee of the House of Assembly on the Petition of Leaseholders of Land in Namaqualand, op.cit., p.13.

39. The Cape Monitor, 21st April, 1855, p.2, col.4.

40. R.G. Hawtrey, A Century of Bank Rate (London, Longmans Green, 1938). p.281.

41. The Cape Monitor, 26th December, 1855, p.2., col.4.

42. The Shipping and Mercantile Gazette, 10th November, 1854, p.2, col.1.

43. The Cape Monitor, 9th December, 1854, p.1, col.5.

*Get another reference*  
\* 44. The South African Commercial Advertiser and Cape Town Mail, 2nd December, 1854, p.2, col.6.

45. Perhaps this mania for finding investment opportunities was the result of a long absence of these. In 1838 James Alexander commented that - "...the influx of compensation money for slaves had given a temporary show of wealth; and as, unfortunately, there are hardly any other means of investing money except in houses, there is, at present, quite a rage for building." J.E. Alexander, Expedition of Discovery into the Interior of Africa through the hitherto undescribed countries of the Great Namaquas, Boschmans and Hill Damaras ... (Facsimile Reprint, Cape Town, C. Struik, 1967), Vol.II, p.280.

46. The Cape Mercantile Advertiser, 16th November, 1854, p.1, col.2.

47. Ibid.

48. The Cape Monitor, 4th November, 1854, p.1, col.5.

49. The Cape Monitor, 8th August, 1855, p.2, col.1-2. The Rev. W. Holden in his History of the Colony of Natal, op.cit., (p.441) gives the following extract from a newspaper account:- "The proprietor of the lease of three or four centres disposes of them on the following conditions:- five thousand shares are to be created of £5 each, of which he is to receive one thousand shares without paying a sixpence, and out of the first profits (!) the sum of £15,000. Would you credit that the company was formed in less than an hour, that the following day 5/- per share was paid, and that in the course of a fortnight they were selling at £5 per share?"

50. The Namaqua Mining Company was formed in October, 1853 to work the property of Messrs. Stoll/von Schlicht/Thomson, Watson & Co./Prince, Collison & Co.

51. See Ch.V, Note 3.

52. The Shipping and Mercantile Gazette, 29th September 1854, p.1, col.3-4.

53. The South African Commercial Advertizer and Cape Town Mail, 16th November, 1854, p.2, col.1-4.

54. The Shipping and Mercantile Gazette, 29th September, 1854, p.1, col.4.

55. See Ch.VI, p.117.

56. The Shipping and Mercantile Gazette, 21st July, 1854, p.2, col.1.

57. The Shipping and Mercantile Gazette, 29th September, 1854, p.1, col.4. Correspondence, Etc., 1854, p.36. The South African Commercial Advertiser and Cape Town Mail, 16th November, 1854, p.2, col.4.
58. The Cape Monitor, 6th January, 1855, p.1, col.1.
59. The Cape Monitor, 30th September, 1854, p.3, col.5.
60. The Cape Monitor, 14th October, 1854, p.2, col.4.
61. The Cape Monitor, 24th February, 1855, p.2, col.3-4
62. The Cape Monitor, 3rd February, 1855, p.2, col.4-5.
63. Andrew Wyley, Esq., Report upon the Mineral and Geological Structure of South Namaqualand and the Adjoining Mineral Districts. G.36 -1857, p.29.
64. The Cape Monitor, 30th December, 1854, p.2, col.4.
65. Ibid.
66. Dr. G. Atherstone, Namaqualand and its Mining Prospects, The Eastern Province Monthly Magazine, Vol.II No.13, September, 1857, p.5. It is interesting to note that this report upon Namaqualand had been submitted to the Grahamstown Prospecting Company already in February, 1855; perhaps the delay in its publication had something to do with its pessimistic character. In reply to a question which he asks himself, viz., "Can the ore be worked and shipped at remunerative prices?" he answers, "In the present state of the country, without rail or tramway, and

with no foreign or sufficient colonial capital to assist in developing the resources of the country, I am of the opinion that it will not pay; and I fear that any single unaided company that attempted it would only be expending capital to benefit later adventurers by their experience. I would strongly recommend that no expense whatever be incurred at present beyond what is necessary for having the centres already applied for fixed and surveyed." (Ibid., pp.7-8).

67. The Cape Monitor, 5th January, 1856, p.2, col.1.

68. See pp.35-36.

69. The existence of this gold interspersed with the copper from Namaqualand had been known for some time. The question of this gold apparently made the people of Cape Town think that they were upon the eve of the discovery of a "...new Australia".

For an interesting comment upon this see, the article by M. Delesse. Notice sur Les Mines de Cuirvre du Cap de Bonne-Espérance, in Annales des Mines, 5<sup>e</sup> série, 1855, tome VIII.

70. Correspondence on the Subject of the Discovery of Metals in Namaqualand, op. cit., p.8.

71. Bain's report is dated 19th June, 1854.

72. Some 40 companies were formed altogether. See Table of Companies.

73. The Cape Monitor, 23rd December, 1854, p.2, col.3.

74. Compiled from various issues of The Cape Monitor.

That there was a fall in share prices early in 1855 is illustrated by the below table -

<u>Company.</u>	<u>Price fetched at various dates.</u>	
	<u>1st January.</u>	<u>3rd February.</u>
South African Mining Company.	£21.10.0.	£18.10.0.
New Burra Burra Mining Company.	3. 1.0.	none offered.
Nabas Mining Company	£10. 0.0.	none offered.
Union Mining Company	11.0.	3.0.
	to 12.0.	
Graham's Town Namaqualand Mining Co.	7.0.	.....
Equitable Mining Company	11.0	5.0
	to 15.0.	to 5.6.
Cape Colonial Mining Company.	7.6.	2.6.
Alliance Mining Company	5.0.	5.0.
Cape of Good Hope Mining Company.	£5. 5.0.	£3. 0.0.
Paarl Mining Company	£1. 1.0.	none offered.

(The Cape Monitor 10th February, 1855, pp.3, col.1.)

By January 1856 the share market had really plunged into a state of gloom and shares in the South African Mining Company, on which £5 had been paid up fetched 9/- each.

(The Cape Monitor, 5th January, 1856, p.2, col.4.)

75. E. Blancheton, Vade-mecum, op.cit., pp.57-62 contains a description of the state of mining until the end of 1854.

76. Ibid., p.60.

77. Ibid., p.60.
78. The Cape Monitor, 5th January, 1856, p.2, col.2, contains a 10 point plan for an Amalgamated Mining Company.
79. The Cape of Good Hope Almanac and Annual Register for 1857 by B.J. van de Sandt de Villiers, (Cape Town, van de Sandt de Villiers & Co., 1856), p.171.
80. A.G. Bain, Geology of South Africa, Reminiscences and Anecdotes connected with the History of Geology in South Africa .... Eastern Province Monthly Magazine, Vol.I, 1857, pp.403-404.
81. The Cape Monitor, 30th December, 1854, p.2, col.3.
82. The Cape Monitor, 27th October, 1855, p.3, col.3. Subsequently it was suggested that as much as £200,000 had been sunk in mining speculation, see Report from the Select Committee of the House of Assembly on the Petition of Leaseholders of Land in Namaqualand, op.cit.p.40.
83. The Cape Monitor, 19th May, 1855, p.2, col.3.
84. The Cape Monitor, 11th November, 1854, p.2, col.3.
85. Rev. W. Holden, op. cit., p.440.
86. The Cape Monitor, 30th December, 1854, p.2, col.3.
87. The Cape Monitor, 29th August, 1855, p.2, col.2.
88. The Cape Monitor, 30th December, 1854, p.2, col.3.
89. The Cape Monitor, 28th May, 1856, p.2, col.4.

90. G.C.W. Schumann, *Structural Changes and Business Cycles in South Africa, 1806-1936*, (London, P.S. King, 1938), pp.77-79. Theal comments upon the effect which the opening of the copper mines had upon the development of the Colony:-

"The opening of the copper mines had no effect whatever upon the great majority of the people of the Cape Colony, who remained a purely agricultural and pastoral community. After the industry became settled, the white labourer employed was obtained from Cornwall, and the district was as secluded owing to its physical features and its barrenness, as if it had been an island. The mines indeed provided a small market for Cape produce, but that was sent by sea from Cape Town to Hondeklip Bay or Port Nolloth, and the farmers came no closer in contact with the consumers than did the Malay fishermen on the south-western coast with the labourers on the sugar plantations of Mauritius for whose use they dried snoek and geelbek."

G.M. Theal, *"History of South Africa"*, (Cape Town, C. Struik, 1964) Vol.7, p.88.

G.M. Theal, *"History of South Africa since September 1795"*, (London, Swan Sonnenschein & Co. Lim., 1908), Vol.III, p.84.

NOTES

Chapter IV

1. R. Bright, Lecture on Namaqualand and its Mines, (Cape Town, Saul Solomon, 1855), p.4.
2. See Map. Charles Bell in his Report on the Copper Fields of Little Namaqualand, G.8 - 1855, mentions many interesting facts concerning these Bushmen.
3. Thomas Fannin in his report to the first meeting of the South African Mining Company states that he encountered no Europeans north of the River Kousie, which was at that time (1846) the official boundary of the Colony. Shipping and Mercantile Gazette, 3rd April, 1846, p.5, col.2. James Alexander on the other hand mentions that there were Europeans north of the River Kousie, who had obtained their farms in a most curious manner, by merely applying (in the Dutch time) "...for places beyond the Olifant river. Now, in these days, the information of the Cape authorities was very limited regarding the geography of the colony, and matters were conducted in so careless a manner, that the farms in question were granted, and it turns out that, not only are they beyond the Olifant river, but beyond the boundary also, which the applicants well knew when they applied for them. These farmers continue to pay taxes, that they might have a claim on colonial protection". J.E. Alexander, An Expedition of Discovery into the Interior of Africa, (Facsimile Reprint, Cape Town, C. Struik, 1967), Vol.I, p.35. Dr. E.E. Mossop says in this connection, "...even before Wikar's journey..."

(1779)...the D.E.I. Company had granted to burgers at least three cattle stations (leg-plaatsen or more correctly, leenings-plaatsen) upon the banks of the Groote (Orange) River in Namaqualand." The Journal of Hendrik Jacob Wikar (1779) with an English translation by A.W. van der Horst; and the Journals of Jacobus Coetsé Jansz : (1760) and Willem van Reenen (1791) with an English translation by Dr. E.E. Mossop; edited with an introduction and footnotes by Dr. E.E. Mossop. Publication No. 15 of the van Riebeeck Society. (Cape Town, The van Riebeeck Society, 1935), p.4.

What is more, W. van Reenen in his journal (1792) mentions a certain Guilliam Visage who had a farm at the present Keetmanshoop, South West Africa. However, Dr. Mossop says that he was unable to trace the grant of such a farm in the Archives. Ibid., pp.306-307.

4. Reports of the Surveyor-General Charles D. Bell, on the Copper Fields of Little Namaqualand and of Commander M.S. Nolloth, of H.M.S. "Frolic", on the Bays and Harbours of that Coast, G.8 - 1855, p.3.

5. Report from the Select Committee of the House of Assembly on the Petition of Leaseholders of Land in Namaqualand, S.C.5 - 1856, p.32.

6. See footnote 3, Chapter IV.

7. Report from the Select Committee of the House of Assembly on the Petition of Leaseholders of Land in Namaqualand, op.cit., p.49.

8. Ibid., p.37.

9. See W.P. Carstens, *The Structure of a Cape Coloured Reserve*, (Cape Town, Oxford University Press, 1966), p.23. It would appear that the natives naturally assumed that their territory would be reserved for them.
10. A memorial had been addressed to Government early in 1850, but as upon enquiry no trace of this could be found, Government requested a copy of said memorial.
11. Report from the Select Committee of the House of Assembly on the Petition of Leaseholders of Land in Namaqualand, *op.cit.*, p.48.
12. *Ibid.*, p.49.
13. See Chapter III, pp.30-33.
14. Correspondence on the Subject of the Discovery of Metals in Namaqualand, G.8 -1854, p.1.
15. *Ibid.*, p.1.
16. *Ibid.*, pp.3-4.
17. *Ibid.*, p.3.
18. Report from the Select Committee of the House of Assembly on the Petition of Leaseholders of Land in Namaqualand, *op.cit.*, pp.34-35.
19. *Ibid.*, pp.33-34.
20. *Ibid.*, p.39.
21. *Ibid.*, p.36.
22. *Ibid.*, pp.36-37.

23. In a letter forwarding a list of persons who held concessions for mining in Namaqualand to the Rev. Brecher, this is explicitly stated - "The grounds upon which the Government has based its right to dispose of the mineral resources of that country consist in the principle that, as mining was not one of the purposes to which the land was appropriated by the natives prior to the extension of the colonial boundary to the Orange River, so no ticket of occupation issued after that time should recognize any right in that respect on the part of the natives, much less their power to alienate any such privilege, by lease, sale or otherwise." Ibid., p.51. The natives were nevertheless to be compensated for the use of the land in respect of water and pasturage.

24. Ibid., p.38.

25. Ibid., p.52.

26. A "Ticket of Occupation" was issued for Steinkopf on 9th December, 1874, twenty-seven years after the extension of the boundary.

27. W.P. Carstens, *op.cit.*, p.30.

28. Report of the Select Committee on the Practicability of Introducing Railway Communication into this Colony, S.C. 2-1855, p.16. It was hoped to use this income for the appointment of a geological surveyor, see Correspondence on the Subject of the Discovery of Metals in Namaqualand, *op.cit.*, p.7.

29. The exact number of leases applied for is not positively known.
30. The Cape Monitor, 27th October, 1855, p.3, col.3.
31. Report of the Select Committee on the Present System of Leasing the Copper Mines in Namaqualand, S.C.5 - 1864, p.v.
32. Report from the Select Committee of the House of Assembly on the Petition of Leaseholders of Land in Namaqualand, op.cit., p.iii.
33. See Chapter III, p.36.
34. Correspondence on the Subject of the Discovery of Metals in Namaqualand, op.cit., pp.38-39, and p.41. Report of the Select Committee appointed to Inquire into the Practicability of Introducing Railway Communication into this Colony, op.cit., pp.14-15.
35. Report from the Select Committee of the House of Assembly on the Petition of Leaseholders of Land in Namaqualand, op.cit., p.12, Q.138-139. Of a total expenditure of £5,172, including preliminary expenses and excluding resold stores (£300), the Western Province Mining Company had paid to Government as rental upon 14 centres (they paid only £2.10.0. per centre instead of £10) the sum of £35. P.7, Q.79-80. Of a total expenditure of £3,000, only £43.15.0. had been paid to Government by the Cameron Mining Company, being the rental on 175 morgen, and also paying only the deposit of 5/- per morgen, and not the stipulated £1.

36. This so called "deposit" was resorted to by Government in order to aid the companies by lessening their expenses. Many companies made use of this leniency, including the two mentioned above in Note 35.
37. Report of the Select Committee on the Present System of Leasing the Copper Mines in Namaqualand, S.C.5 - 1864.
38. Ibid., p.vi.
39. Act No. 12 of 1865. Being an Act for Fixing the Terms upon which Mineral Lands in Namaqualand, the Property of the Crown, may be leased and worked, p.1.
40. Ibid., p.3.
41. Reports of the Surveyor-General Charles D. Bell, on the Copper Fields of Little Namaqualand and of Commander M.S. Nolloth, of H.M.S. "Frolic", on the Bays and Harbours of that Coast, op.cit., pp.6-7.
42. Report from the Select Committee of the House of Assembly on the Petition of Leaseholders of Land in Namaqualand, op.cit., p.34.
43. J.S. Marais, The Cape Coloured People 1652-1937, (London, Longmans Green, 1939), p.76.
44. L. Boyes.
45. Cape of Good Hope Blue Book, 1872, Report of the Civil Commissioner of Namaqualand, JJ-4.

46. The Civil Commissioner of Namaqualand in his report of 1865 stated that "The carriage of sopper ore has not been so profitable as usual to the riders. Their losses in cattle on the roads must have been nearly, if not quite, equal to their receipts. This is attributable partly to the drought." Cape of Good Hope Blue Book, 1865, JJ-4.

47. A.E. Judge.

48. Cape of Good Hope Blue Book, 1866, Report of the Civil Commissioner of Namaqualand, JJ-47.

49. W.P. Carstens, *op.cit.*, pp.60-64 gives details of the income and expenditure of Steinkopf residents.

NOTES

Chapter V

1. Report upon the Mineral and Geological Structure of South Namaqualand and the Adjoining Mineral Districts, by Andrew Wyley, G.36 - 1857, p.10.
2. Report of the Select Committee on the Practicability of Introducing Railway Communication into this Colony, S.C.2 - 1855, p.iv.
3. In September, 1854, a prospectus was published in Cape Town relative to the formation of a Namaqualand Railway or Tramway Company. It was proposed that the company have a capital of £200,000 in 20,000 shares of £10 each. A provisional committee was elected consisting of Messrs. E. Chiappini, John King, G.W. Prince, Thos. Watson, E.J. Jerram, S. Bushell, P. van der Byl, J.T. Pocock, and R.H. Arderne. This committee was charged with the task of enlisting the aid of English capitalists in the undertaking. The formation of the company being contingent upon such aid being received. At their request the Lieut.-Governor instructed the Surveyor-General, Charles Bell, to examine and report upon the lines of road from the mines to the three Bays - Roodewal, Hondeklip and Robbe. In a like manner, Captain Nolloth was instructed to proceed on a survey of the coast. Their reports appeared in 1855. English capitalists, however, it would appear, were unwilling to invest in a Namaqualand Railway or Tramway Company unless the lease period was extended. Local capitalists were curiously enough not prepared to invest. Although the company had passed a resolution that all lessees who wished to avail

themselves of the use of the railway should subscribe for not less than 50 shares for every lease held, many lessees did not subscribe to any extent. The company thus enjoyed a swift demise.

4. Correspondence on the Subject of the Discovery of Metals in Namaqualand, G.8 - 1854, p.38.

5. Report from the Select Committee of the House of Assembly on the Petition of Leaseholders of Land in Namaqualand, S.C.5 - 1856, p.10, Q.120.

6. Correspondence on the Subject of the Discovery of Metals in Namaqualand, op.cit., pp.39-40. It was, however, stated that the Legislature was considering the extension of a guarantee upon a loan for the construction of a railway.

7. Report from the Select Committee appointed to report upon the Construction of Railways in this Colony, S.C.8 - 1854.

8. Ibid., p.vi.

9. Ibid., p.vii.

10. Report of Committee appointed to Inquire into the Practicability of Introducing Railway Communication into this Colony, S.C.2 - 1855.

11. Ibid., p.v.

12. Ibid., p.v.

13. Ibid., p.v.

14. Report of the Surveyor-General, Charles D. Bell, on the Copper Fields of Little Namaqualand and of Commander M.S. Nolloth of H.M.S. "Frolic", on the Bays and Harbours of that Coast, G.8 - 1855, pp.26-27.

15. Ibid., p.27.

16. A.E. Judge Papers, Manuscript, (University of Cape Town Library, Cape Town), p.124.

17. Report upon the Mineral and Geological Structure of South Namaqualand and the Adjoining Mineral Districts, by Andrew Wyley, op.cit., p.54.

18. Ibid., p.54.

19. Apparently bagging of both ores and fuel took place, and the sewing up, marking and mending of these bags, which often chafed through was done by a contractor who employed native labour. J.S.H. "The Copper Mines of Namaqualand", Cape Monthly Magazine, August, 1870, p.94.

20. Report upon the Mineral and Geological Structure of South Namaqualand and the Adjoining Mineral Districts, by Andrew Wyley, op.cit., p.53.

21. R. Bright, Lecture upon Namaqualand and its Mines, (Cape Town, Saul Solomon, 1855), p.21.

22. Report upon the Mineral and Geological Structure of South Namaqualand and the Adjoining Mineral Districts, by Andrew Wyley, op.cit., p.53.

23. De Mist, J.A. - Memorandum containing recommendations for the form and administration of government at the Cape of Good Hope : with an English version by Miss K.M. Jeffreys, B.A., and a preface by S.F.N. Gie, Ph.D. Publication No. 3 of the van Riebeeck Society, (Cape Town, The van Riebeeck Society, 1920), pp.219-220.

24. Report of Committee appointed to Inquire into the Practicability of Introducing Railway Communication into this Colony, op.cit., pp.17-18.

25. The problem of drunkenness was solved by a treaty between Currey and Wild to the effect that all wagons coming up from the port should be searched and all contraband liquor destroyed, and that neither should employ a man discharged for drunkenness by the other.

26. J.B. Currey, Half a Century in South Africa, (Manuscript, The South African Public Library, Cape Town) Ch.6, pp.16-21.

27. According to Andrew Wyley in his report of 1857, the cost of transport by ox wagon was about 1s.10d. per ton-mile, this was much cheaper than using mules. He considered that the use of ox wagon transport would have developed considerably had it not been for the lung-sickness which had ravaged especially the native oxen. Over the sandy portion of the road (on the Hondeklip Bay route this was from Riethuis to Hondeklip Bay), the cost was 5s. per ton-mile, or almost three times the average of the whole route. On the Port Nolloth route difficulties

commenced when one approached the mountains, and while the cost from Concordia to Uitkyk (30 miles) was £1.5s., and from Springfontein to Uitkyk (36 miles) £1.10s. per load of 2,000 lbs., from Uitkyk (a hill near Kockfontein) to Port Nolloth a distance of some 40 miles, and over which Wyley proposed that a tramway be constructed, if there was sufficient transportable produce, the cost of riding by wagon was about £6.5s., i.e. about four times the average of the rest of the road.

Report upon the Mineral and Geological Structure of South Namaqualand and the Adjoining Mineral Districts, by Andrew Wyley, op.cit., pp.53-54.

28. The Cape of Good Hope Copper Mining Company Limited to be incorporated under the Companies Act, 1862, (London, Smith, 1862) Prospectus pp.1-2.

29. The mines which had apparently cost Phillips and King £11,286 (the buildings at the mines, stations, and including a jetty at Hondeklip Bay had cost an additional £17,832) yielded from 1853 to October 1862, ore to the value of £515,752 (18,999 tons at £27.3s. per ton), and produced during this time a profit of more than £115,000. Ibid.

30. The grade of ore which could profitably be mined is generally given as 20 per cent, but in the prospectus 16 per cent is mentioned.

31. The Cape of Good Hope Copper Mining Company Limited is referred to hereafter as the Cape Copper Mining Company Limited. In 1888 the name and capital of the company was altered, and thereafter the company was officially known as the Cape Copper Company Limited.

32. A.E. Judge Papers, Manuscript, op.cit., p.113.
33. Cape of Good Hope Blue Book, 1866. F.F.7.
34. Cape of Good Hope Blue Book, 1867, F.F.7.
35. Cape of Good Hope Blue Book, 1870, J.J.3.
36. The Springbokfontein mine was abandoned in 1861, it was not re-opened until 1881. The construction of a reduction works at Springbokfontein in 1866 may then seem rather curious. The answer must lie in the fact that although the Springbokfontein mine had been worked out by 1861, not all the ores which had been removed had been sent away. The contemplation of the construction of a road from the shipping port (Hondeklip Bay) to Springbok might also have been a factor in the selection of the site of a reduction works. The Springbok Reduction Works did not have a long life. In the 1870's Springbokfontein became a ghost town. A traveller commented in 1877 - "Leaving O'okiep behind me, I was off to Springbok, the seat of the Magistracy of Namaqualand. Before O'okiep was known, Springbok was a large mining centre with smelting-works, but it is now nearly deserted. A few shopkeepers, and the magistrate with his clerk and the few constables and a wagon-maker, form the whole white population; and even these would not be in existence were it not that O'okiep being the private property of the Cape Copper Mining Company, is not open to the public." From Namaqualand to Piquetberg Road on Foot, Cape Monthly Magazine, Vol. III, July to December, 1880, p.311.

37. The article is signed E.J.D. - probably E.J. Dunn, who was the leader of the "Gold Prospecting Expedition" to Namaqualand in 1872.

38. The German gentleman referred to was a Mr. Thielen. (Cape of Good Hope Blue Book, 1871, J.J.5.) Thielen together with a certain Mr. Arneman reported to the Cape Copper Mining Company on "The Modes of Smelting to be adopted in Namaqualand", 1870.

39. In the report by Dunn, Report by E.J. Dunn, Esq., on the Country Traversed by the "Gold Prospecting Expedition" in Namaqualand, &c., G.21 - 1872 (p.10) he says - "The great difficulty in connection with the copper industry, and the one into which all other resolve themselves, is the matter of transport. Could fuel (coal) be delivered at £5 per ton at Springbok, ores that are now utterly worthless would become of considerable value and yield handsome returns for treatment. Another means by which the difficulty might be lessened is the use of acid for the reduction of sulphurets, instead of fuel, or shipping them in their raw state. These ores would burn themselves. The sulphur with the aid of nitrate of potass (the principal expense) would be converted into sulphuric acid. The desulphuretted pyrites would then be dissolved and precipitated as pure copper. This process ought certainly to have a trial in a district situated as Namaqualand is."

40. E.J.D. "The Copper Mines of Namaqualand", Cape Monthly Magazine, March, 1872, pp.168-169.

41. Already in 1863 a similar memorial was addressed to Government but no trace of this can be found.
42. Memorial of Certain Miners, Agriculturists, and others, of the Division of Namaqualand, A.7 - 1865.
43. Ibid., p.1.
44. Ibid., p.2.
45. Report of the Select Committee appointed to consider Petitions with regard to the Construction of Lines of Main Road from Clanwilliam to Springbok, and on the Bill to authorize the Cape Copper Mining Company to construct a Line of Tramway or Railway between Hondeklip Bay and Riethuis, S.C.8 - 1865.
46. Ibid., p.iv.
47. R.T. Hall had previously worked with at least one company connected with John Taylor & Sons.
48. R.T. Hall, "The Little Railway in Namaqualand", Cape Monthly Magazine, Vol.II, January-June, 1871, p.251.
49. Reports of the Surveyor-General Charles D. Bell, on the Copper Fields of Little Namaqualand and of Commander M.S. Nolloth, of H.M.S. "Frolic" on the Bays and Harbours of that Coast, op.cit., p.22, C.45.
50. Report upon the Mineral and Geological Structure of South Namaqualand and the Adjoining Mineral Districts, by Andrew Wyley, op.cit., p.54.

51. A.E. Judge Papers, Manuscript, op.cit., pp.125-126.

52. A.E. Judge Papers, Manuscript, op.cit., pp.128-129.

53. It is to be noted that in these calculations of the distance to Port Nolloth the road did not go round Kookfontein but in an almost direct line from O'okiep to Muishondfontein.

54. A.E. Judge Papers, Extract from the Advertizer and Mail, 7th April, 1866.

55. Correspondence on Namaqualand Magistracy, A.97 - 1861, p.6.

56. In 1863 the payment of carriage was broken down as follows:-

Mine Proprietors,	Carriage Paid ... ..	£	977.
Contractors,	" "	£	2.217'
Farmers,	" "	£	10,315.
Natives,	" "	£	<u>7,472.</u>
		£	<u><u>20,981.</u></u>

The Advertizer and Mail, 7th April, 1866.

57. Report of the Select Committee appointed to consider Petitions with regard to the Construction of Lines of Main Road from Clanwilliam to Springbok, and on the Bill to authorize the Cape Copper Company to construct a Line of Tramway or Railway between Hondeklip Bay and Riethuis, S.C.8 - 1865, p.9.(Q.83 Mr. Watermeyer.) "Why should the people there be willing to pay ten shillings per morgen

for mere pasture land in Bushmanland, when they can get far superior lands in the districts of Colesberg and even Graaf-Reinet for a much less sum? - Because they have the means of earning a large sum of money every riding season."

58. A.E. Judge Papers, Manuscript, op.cit., p.135.

59. J.S.H. "The Copper Mines of Namaqualand", Cape Monthly Magazine, August, 1870, p.95.

60. A.E. Judge Papers, (University of Cape Town Library, Cape Town) Item 19, p.16.

61. A.E. Judge Papers, Manuscript, op.cit., p.131.

62. John Noble, Descriptive Handbook of the Cape Colony : its conditions and resources. (Cape Town, J.C. Juta, 1875), p.86.

63. Apparently the road was especially selected for the conveyance of the traffic of the general public. See Petition of Matthew Woodfield, Superintendent of the Cape Copper Mining Company (Limited), A.41 - 1868, p.2.

64. Enclosure in a letter dated 18th December, 1866, from A.E. Judge to the Colonial Secretary, Springbok Magisterial Reports, (Archives, Cape Town), 5/1/3.

65. A.E. Judge Papers, Manuscript, op.cit., pp.132-133

66. Petition of Matthew Woodfield, Superintendent of the Cape Copper Mining Company (Limited), op.cit.

67. Unprinted Papers, Annexure 223, Report of Committee of the Whole House on Motion on Namaqualand Road. House of Assembly annexures No. 132 - 250, 1868, (Archives, Cape Town).

68. A.E. Judge Papers, Manuscript, op.cit., p.332.

69. R.T. Hall, "The Little Railway in Namaqualand", op.cit., p.253.

70. Report of the Traffic Manager, N.E. Moffat, on the Namaqualand Railway owned by the Cape Copper Company Limited, dated Port Nolloth 27th November, 1906.

71. Ibid.

72. Act No. 24 - 1873.

73. Report of the Select Committee on the Namaqua Copper Company Railway Bill, S.C.7 - 1900, p.5, Q.28.

NOTES

Chapter VI

1. E.J.D. "The Copper Mines of Namaqualand", The Cape Monthly Magazine, March, 1872, p.170.
2. The Civil Commissioner of Namaqualand in his report of 1875 calls the company which took over the interests of the Namaqua Mining Company, the Concordia Company. Cape of Good Hope Blue Book, 1875, JJ3.  
John Noble in his Descriptive Handbook also refers to the Concordia Company, who he said, had with a large capital, commenced work on the Hester Maria and Wheal Julia mines. John Noble, Descriptive Hand book of the Cape Colony its condition and resources, (Cape Town, J.C. Juta, 1875), p.82.
3. Mnr. P. van Heerde in medewerking met Mnre. D. Scholtz, J. Jowell, en S. van der Merwe, Springbok, (Uitegegee deur : Die poskoetsReëlingskomitee van Springbok, ... tydens die van Riebeeck Fees op Vrydag 14 Maart 1952), p.16.
4. Report of the Select Committee appointed to consider and report on the Namaqualand Railway, S.C.7 - 1880, p.5, Q.62.
5. Report of the Select Committee on the Namaqua Copper Company Railway Bill, S.C.7 - 1900, p.<sup>73</sup>~~72~~, Q.847.
6. The Story of Copper Mining in Namaqualand, The South African Mining and Industrial Magazine, 18th May, 1927, p.254. At some time between its formation and its reorganization in 1888, the company must have increased its capital by £50,000.

7. Report of the Select Committee appointed to consider and report on Port Nolloth, S.C.20 - 1874, p.9, Q.71.
8. Although the cost of the railway and jetty was given in the Balance Sheet of the Company as £169,218.16. 7. the actual cost was apparently closer to £180,000. Report of the Select Committee appointed to consider and report on the Namaqualand Railway, op.cit., p.16, Q.182.
9. Ibid., p.1, Q.10.
10. Ibid., pp.14-15,
11. Ibid., p.9, Q.107.
12. Ibid., p.14, Q.155.
13. Ibid., p.iii.
14. Ibid., p.15, Q.168.
15. John Noble, Descriptive Handbook, op.cit., p.85.
16. J.S.H. The Copper Mines of Namaqualand, Cape Monthly Magazine, July, 1870, pp.39-40.
17. E.J.D. The Copper Mines of Namaqualand, op.cit., p.165.
18. Bishop J.M. Simon, Bishop for the Hottentots, African Memoirs, 1882 - 1909. (New York, Benziger Bros., 1959), pp.12-13.
19. Ibid., pp.15-16.

20. From the Sea to the Mines, The Cape Illustrated Magazine, October, 1896, pp.35-36.

21. Report of the Traffic Manager, N.E. Moffat, on the Namaqualand Railway owned by the Cape Copper Company Limited, dated Port Nolloth 27th November, 1906. Passengers were transported free of charge by the Company - not from any philanthropic motives, but because legally they should not have transported them at all. By not charging, and thus not issuing tickets, they were able to indemnify themselves.

22. W.C. Scully, Further Reminiscences of a South African Pioneer, (London, Unwin, 1913), pp.221-222.

23. In 1900 the charges per ton for the public were -

From O'okiep to Port Nolloth.....50/- per ton

From Port Nolloth to O'okiep.....72/6 per ton

The rates for the Namaqua Copper Company were -

From their junction to Port Nolloth ..35/- per ton for  
the first 3,000 tons.

30/- per ton for  
next 1,000 tons

25/- per ton for  
all above  
4,000 tons.

From Port Nolloth to their junction...50/- per ton.

24. Report of the Select Committee on Differential Railway Rates, S.C.14 - 1899, p.31, Q.279.

25. Ibid., p.36, Q.310.

26. Report of the Select Committee on the Namaqua Copper Company Railway Bill, S.C.7 - 1900.

27. House of Assembly Debates, 1906, p.634, Column 2.
28. Report of Mr. R. Bellechasse Morison on the Cape Copper Company's Line, A.27 - 1903, p.6.
29. Ibid., pp.6-7.
30. Report of Commissioners appointed to enquire into Mineral Resources of Namaqualand, with a view to consideration by Government of advisability of taking over Port Nolloth-O'okiep Railway, G.11 - 1905, p.10.
31. Ibid., p.12.
32. John Noble, Descriptive Handbook, op.cit., p.81.
33. Wetsonwerp om het Gouvernement in staat te stellen het Recht van Aankoop, verleend door zekere Wetten van het Parlement, uit te oefenen, A.B.66 - 1906.
34. The Cape Times, 28th May, 1919.
35. The Story of Copper Mining in Namaqualand, op.cit., p.255.
36. Owen Letcher, Namaqualand; Cradle of Mineral Development in Southern Africa, The South African Mining and Industrial Magazine, 11th May, 1932, p.188.
37. O'okiep Starts Production, The South African Mining and Engineering Journal, 31st August, 1940, p.788.
38. J.M. MacLeod and D. de N. Wiid, The O'okiep Copper Company in South Africa, The South African Mining and Engineering Journal, 20th November, 1954, p.467.

39. NababEEP and East O'okiep, Fortune Magazine,  
January, 1947, p.80.

40. Suggestion of Mr. H.R. Moffat.

Table A.

Exports of Copper Ore - 1852-1862.

<u>Date:</u>	<u>Total Exports:</u>	<u>Quantity:</u>	<u>Copper Ores:</u>		<u>% of</u> <u>Total</u> <u>Exports</u>
			<u>Value:</u>	<u>Price:</u>	
		<u>Tons</u>	£	£	
1852	772,537.	31.	650.	20.97.	-
1853	1,064,883.	199.	3,346	16.81	.31.
1854	662,936.	1,084.	25,056.	23.10.	3.78.
1855	970,839.	1,864.	54,337.	29.15.	5.60.
1856	1,240,625.	2,067.	77,749.	37.61.	6.27.
1857	1,988,406.	3,438.	102,055.	29.68.	5.13.
1858	1,798,179.	4,289.	127,182.	29.65.	7.07.
1859	2,021,371.	3,803.	113,514.	29.85.	5.62.
1860	2,080,398.	3,129.	91,540.	29.26.	4.40.
1861	1,972,700.	2,197.	61,442.	27.97.	3.11.
1862	1,957,686.	3,396.	93,565.	27.55.	4.78.

(Source : various Cape Blue Books).

TABLE C

Exports of Copper Ore - 1877-1937.

<u>Date:</u>	<u>Copper Ores</u>	<u>% of Metal:</u>	
	<u>Quantity:</u>	<u>Value</u>	<u>Price</u>
	Tons	£	£
			%
1877	15,244	303,645	19.92
1878	12,641	252,485	19.97
1879	14,178	283,885	20.02
1880	15,310	306,790	20.04
1881	13,134	261,110	19.88
1882	19,669	394,032	20.03
1883	22,705	454,113	20.00
1884	20,348	405,415	19.92
1885	20,213	395,675	19.58
1886	28,429	559,328	19.67
1887	28,264	577,053	20.42
1888	40,023	856,803	21.41
1889	32,338	696,918	21.55
1890	32,674	694,356	21.25
1891	23,691	254,184	10.73
1892	25,459	253,681	9.96
1893	18,495	202,316	10.94
1894	27,077	284,800	10.52
1895	23,545	246,597	10.47
1896	20,843	218,422	10.48
1897	27,329	300,772	11.01
1898	24,808	262,830	10.59
1899	25,693	446,985	17.40
1900	30,032	498,552	16.60
1901	33,755	571,031	16.92
1902	16,053	273,366	17.03
1903	37,284	457,205	16.76
1904	29,931	514,286	17.18
1905	30,789	573,076	18.61
1906	23,967	481,649	20.10
1907	17,810	577,395	32.42
1908	22,611	418,250	18.50
1909	18,945	430,892	22.74

From 1883 -  
1903 the %  
Metal content  
was 18.99%

Date:	Quantity:	Value	Price	% of Metal
	Tons	£	£	%
1910		401,206		
1911	21,019	503,908	23.97	47.50
1912	16,951	507,836	29.96	45.89
1913	13,095	369,528	28.23	48.06
1914	14,369	372,028	25.89	47.76
1915	13,973	517,208	37.01	44.48
1916	10,599	474,076	44.73	44.52
1917	10,525	550,642	52.32	47.66
1918	1,669	68,622	41.12	48.51
1919	276	17,656	63.97	74.62
1920	7,892	255,157	32.33	38.33
1921	113	5,026	44.48	72.60
1922	706	38,622	54.71	93.33
1923	2,846	159,713	56.12	97.19
1924	3,384	187,745	55.48	97.51
1925	2,995	160,074	53.45	98.16
1926	3,274	165,017	50.40	98.46
1927	2,909	141,779	48.74	98.44
1928	2,802	164,315	58.64	98.46
1929	2,521	171,694	68.11	98.52
1930	1,315	69,211	52.63	98.44
1931	5,735	37,578	6.55	25.16
1932	-	-	-	-
1933	108	1,502	13.91	58.74
1934	-	-	-	-
1935	-	-	-	-
1936	28	362	12.93	50.70
1937	1	54	54.00	98.86

(Source: Official Yearbooks).

Table D.

<u>Year Ended</u>	<u>Blister Copper Short Tons.</u>	<u>Dividend per share</u>	<u>Dividends</u>	<u>% on Issued Capital.</u>
30th June 1941	11,000)			
" " 1942	11,000)			) approx.
" " 1943	13,643.			
" " 1944	13,483.			
" " 1945	13,903.			
" " 1946	16,348.	1/- £	51,052.16.0.	10%
" " 1947	17,763.	3/-	153,158. 0.0.	30%
" " 1948	21,359.	9/-	459,475. 4.0.	90%
" " 1949	19,305.	14/3	727,502. 8.0.	142½%
" " 1950	22,303.	8/-	408,422. 0.0.	80%
" " 1951	22,707	29/-	1,480,531. 0.0.	290%
" " 1952	23,622.	45/-	2,348,429. 0.0.	450%
" " 1953	24,063.	48/-	2,450,534. 0.0.	480%
" " 1954	27,554.	46/-	2,348,429. 0.0.	460%
" " 1955	29,428.	52/-	2,654,746. 0.0.	520%
" " 1956	32,327.	90/-	4,594,752. 0.0.	900%
" " 1957	31,311.	75/-	3,828,960. 0.0.	750%
" " 1958	34,859.	21/-	1,072,109. 0.0.	210%
" " 1959	38,090.	44/-	2,246,323. 0.0.	440%
" " 1960	39,457.	60/-	3,063,168. 0.0.	600%
" " 1961	38,909.	R5.00.	R 5,105,280.00.	500%
" " 1962	39,654.	4.50	4,594,752.00.	450%
" " 1963	40,776.	5.00	5,105,280.00.	500%
" " 1964	45,953.	5.50	5,615,808.00.	550%
" " 1965	46,077.	10.50	10,721,088.00.	1050%
" " 1966	43,157.	14.00	14,294,784.00.	1400%
31st Dec. 1966				
6 months	21,748.	7.00	7,147,392.00.	700%
31st Dec. 1967	42,529	12.50	12,763,200.00.	1250%
" " 1968	41,441.	10.00	10,210,560.00.	1000%

TABLE E

Table of Companies

From E. Blancheton, Universal Exhibition.

The following corrections were noted by Blancheton.

<u>Column</u>	<u>Line</u>	
4	7	Instead of H. Hewitt read H. Hewitt jun.
4	17	Instead of J. Wilson read H. Hewitt sen.
4	18	Instead of P.G. van der Byl read J. Maynier.
4	36	Add the name of Mr. H. Gordon as Secretary.
5	2	Add the name of Mr. Hawes residing in London as Agent.
5	17	Add the names of Messrs. G. Kenett & Co., residing in London, as Agents.
6	7	Add the figure 8.
8	2	Add the number 9,000.
8	7	Add the number 120.
10	2	Instead of 35, read 75.
13	14	Instead of £7, read £10.
14	14	Instead of 70,000 read 100,000.
16	5	Add the number 8,000.
17	5	Add the number 17,000.
18	5	Add the number 80,000.
19	5	Add £0. 2. 6.
20	1	Instead of 1,700, read 6,000.
20	4	Instead of "unknown" read 3,750.
20	29	Add the number 2,500.

Since the time of completion of the Table a number of companies were formed in addition to the ones enumerated. These were, The Ezel's Fontein Mining Company, The New Walwich Bay Mining Company, The Rietberg Mining Company, The Numies Mining Company, and the Koper Kop Mining Company.

STATE AND POSITION OF THE COPPER MINES OF THE COLONY OF THE CAPE OF GOOD HOPE, ON THE 1ST JANUARY, 1855.

NAMES OF COMPANIES.	Date of the formation of each Company.	Names and Residences of the Secretaries or Agents of said Companies.		Number of Centres allotted to each Company.		Approximate number of Morgen of Land that can be worked by each Company.	Nature of formation of Ore in the several Centres.	Approximate quantity of pure Copper in a given weight of Ore of each Company, according to results furnished by Chemical analyses already made.	Number of Shares created.	Original price of each Share.	Nominal Capital.	Number of Shares reserved for the Proprietors.	Number of Shares granted to the Public.	Number of Shares reserved for the benefit of each Company.	Amount of Capital represented in each Company by the total subscribed by the Public.	Installments paid to this date on the Shares.	Capital paid up on the 1st December, 1854.	Present value of the Shares in the Cape Market.	REMARKS.	Numbers.
		At the Cape.	In Europe.	Applied for.	Opened and being worked.															
<b>PUBLIC COMPANIES.</b>																				
South African Mining Company	March 1846	R. Clarence, Cape Town	do.	90	5			from 37 to 40 pCt.	2,000	10 0 0	20,000	None.	2,000	None.	20,000	3 0 0	1,700	23 0 0		1
Company of Good Hope	January 1854	J. Saunders	do.	119	1			35	10,000	10 0 0	10,000	do.	7,500	2,500	75,000	1 0 0	7,500	5 0 0		2
Swan's Bay	July 1854	J. Philip	do.	par. 10	8	400		33 to 40	3,000	10 0 0	30,000	do.	2,750	250	27,500	0 2 0	8,000	12 0 0	Capital realised £8,000, including the bonus effected on 750 Shares sold by the Company before its definitive formation.	3
St Elizabeth	October 1854	W. Kuhr	do.	12	2			unknown	10,000	10 0 0	10,000	do.	7,500	2,500	75,000	0 10 0	not known	1 5 0		4
Stam's Town Namaqual.	do.	Rutherford, H. E.	do.		3		E. de Pass & Co., London	30	25,000	5 0 0	5,000	do.	1,600	400	32,000	1 0 0	1,600	0 7 0		5
Swan's Bay	November 1854	H. Searle	do.					unknown	2,000	20 0 0	2,000	do.	4,500	5,500	22,500	0 2 6	563	16 0 0		6
Swan's Bay	do.	H. Hewitt	do.						10,000	5 0 0	10,000	do.						0 3 0		7
<b>PRIVATE COMPANIES.</b>																				
Springbok Fountain	do.	Phillips & King	do.	12	1	20,000		35 to 37												8
Spectacle (No. 1)	do.	do.	do.	1	1															9
Namaquala	October 1853	Prince & Collison	do.	6	4	150		25 to 50	10,000	20 0 0	10,000	6,000	4,000	None.	80,000		12,000		25 to 30 pCt. is the scale of proportion which the several samples assayed up to the present time have shewn. 1,000 Shares for sale in Europe. The Shares are not yet divided amongst the public. The £12,000 paid up were advanced by the founders of the Company.	10
Great Namaqualand	do.	R. Arderne, Jun.	do.	23	7		Sinclair, Hamilton & Co., Lon.	34	2,400	100 0 0	2,400	2,400		240,000	2 0 0		40 0 0	Of the 2,400 Shares, 1,200 are destined to be sold in Europe.	11	
Esther Maria	do.	Prince, Collison & Co.	do.	8	2			30 to 90											Not yet formed.	12
Beal Julia	do.	P. F. R. de Villiers	Paarl		1	10		66	6,000	10 0 0	6,000	1,500	4,000	500	40,000	0 10 0	2,000	4 0 0	66 pCt. on the analysis of some specimens. £40 only nominal value.	13
Carl Kolbe	do.	J. G. S. de Villiers	do.	13	3	130			10,000	7 0 0	10,000	2,000	7,000	1,000	49,000	0 2 0	700	2 0 0		14
Carl Kolbe	do.	Edw. Hull	Cape Town	21	3		J. Brodie, London		10,000	100 0 0	10,000	10,000					2,000	2000 0 0	This Company is divided amongst 20 proprietors, who, while they reserve the right to transfer their titles, only pay up capital on the call of the majority. Some of the Shares have been sold at the rate quoted.	15
Burra Burra	August 1854	Ditto	do.	3	4	45		35	5,000	50 0 0	5,000	1,000	2,500	1,500	125,000	0 5 0	625	2 15 0		16
Burra Burra	September 1854	J. Wilson	do.	21				unknown	300			300					1,500	20 0 0	The re-partition amongst the public of a certain number of Shares subdivided, will probably take place eventually. Up to this date, the proprietors have advanced £1,500 on the whole of the Shares created.	17
Orange River	do.	P. G. van der Byl	do.	18	2			unknown	1,000	25 0 0	1,000	500	250	250	6,250	5 0 0	1,250	12 0 0		18
Spectacle (No. 2)	do.	Landsberg, E. G.	do.	6	2	115		25	400	50 0 0	400	400			20,000	1 0 0		75 0 0	25 pCt. is the average given on a small number of specimens analyzed. Some proprietors' Shares have already been paid £75, and 200 Shares have been sold for a bonus of £5,000.	19
Great Namaqualand	do.	Keytel, P. W.	do.	1		10		30 to 40	1,000	10 0 0	1,000	500	500		5,000		1,200	2 0 0	Subscription not yet covered; in course of operation.	20
Great Namaqualand	do.	R. Arderne, Jun.	do.	5		50		unknown	4,800	5 0 0	4,800	2,400	2,400	None.	12,000	0 10 0	1,200	0 10 0		21
Grain	do.	J. A. H. Wicht	do.	13	1	160		do.	12,000	10 0 0	12,000	5,000	5,000	2,000	50,000	0 5 0	1,200	0 6 6		22
Grain	do.	D. Tennant	do.	2				do.	10,000	10 0 0	10,000	6,000	4,000		40,000	0 10 0	2,000	0 12 0		23
Grain	November 1854	Edw. Hull	do.	2				33	6,000	5 0 0	6,000	2,000	4,000		20,000	0 10 0	2,000	0 10 0		24
Grain	do.	C. Upward	do.	2	3	40		unknown	10,000	5 0 0	10,000	4,000	6,000		30,000	0 5 0	1,500	0 7 6		25
Grain	do.	W. Sampson	do.	2				do.	6,500	5 0 0	6,500	3,000	3,000	500	15,000	0 10 0	1,500	0 12 0		26
Grain	do.	W. Millard	do.	2		260		do.	10,000	5 0 0	10,000	2,500	5,000	2,500	25,000	0 10 0	2,500			27
Grain	do.	John Marcus	do.	18		240		do.	4,000	10 0 0	4,000	2,000	1,500	500	15,000	0 10 0			Company in course of being subscribed to.	28
Grain	do.	W. S. Anderson	do.	3		60		60	3,000	10 0 0	3,000	2,000	500	500	5,000	5 0 0			Do. do. do.	29
Grain	do.	do.	do.	3		60		30											Not yet definitely constituted.	30
Grain	do.	do.	do.	1															Do. do.	31
Grain	do.	L. P. Cauvin	do.																Projected.	32
Grain	do.	do.	do.	8				45 to 60	10,000	5 0 0	10,000	4,000	6,000						Will only be completed 1st March, 1855.	33
Grain	do.	S. Stanger, Sec. Prov.	do.	14			Cavood Freres, London		20,000	5 0 0	20,000	5,000	15,000		75,000				In course of formation.	34
Grain	do.	Charles Coxen	Port Eliz.	12					3,000	10 0 0	3,000	3,000							Do. do.	35
Grain	do.	Philip Freres	Cape Town																Do. do.	36
<b>ADDITIONAL COMPANY.</b>																				
Namaqualand Railroad or Tramway Comp.	September 1854								20,000	10 0 0	20,000		20,000				500		Do. do.	36

N.B.—A certain number of Copies of the Prospectus published by each of these Companies, will be distributed to the different Chambers of Commerce and to the principal Bankers and Merchants of Paris and London, at the opening of the Universal Exhibition of 1855. We shall content ourselves in the text following the present Table, with offering a few reflexions of general interest both to the Public and to the Companies in question.

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X ✓  
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Report of Committee appointed to Inquire into the Practic-  
ability of Introducing Railway Communication into this  
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✓  
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Copper Fields of Little Namaqualand and of Commander  
M.S. Nolloth, of H.M.S. "Frolic", on the Bays and  
Harbours of that Coast, G.8 - 1855.

X ✓  
Report of the Civil Commissioner of Namaqualand on the  
state of the roads from the mining districts to the  
ports of export, G.34 - 1856.

✓  
Provisional Report, &c., By Andrew Wyley, G.35 - 1856.

X ✓  
Report from the Select Committee of the House of Assembly  
on the Petition of Leaseholders of Land in Namaqualand,  
S.C.5 - 1856.

X ✓  
Report upon the Mineral and Geological Structure of South  
Namaqualand and the Adjoining Mineral Districts, by  
Andrew Wyley, G.36 - 1857.

✓  
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A.103 - 1861.

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✓✓ Memorial of certain Miners, Agriculturists, and others, of the Division of Namaqualand, A.7 - 1865.

X ✓ Report of the Select Committee appointed to consider Petitions with regard to the Construction of Lines of Main Road from Clanwilliam to Springbok, and on the Bill to authorize the Cape Copper Company to construct a Line of Tramway or Railway between Hondeklip Bay and Riethuis, S.C.8 - 1865.

✓ Act for Fixing the Terms upon which Mineral Lands in Namaqualand, the Property of the Crown, may be Leased and Worked, Act No. 12 of 1865.

Act to Authorize the Cape Copper Mining Company (Limited) to construct a Tramway or Railway between Hondeklip Bay and Riethuis, Act No.15 of 1865.

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Act to Authorize the Cape Copper Mining Company (Limited) to construct a Tramway or Railway between Port Nolloth and Nonams, and to build a Jetty at Port Nolloth, Act No.4 of 1869.

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