

The World's Greatest Goldfield

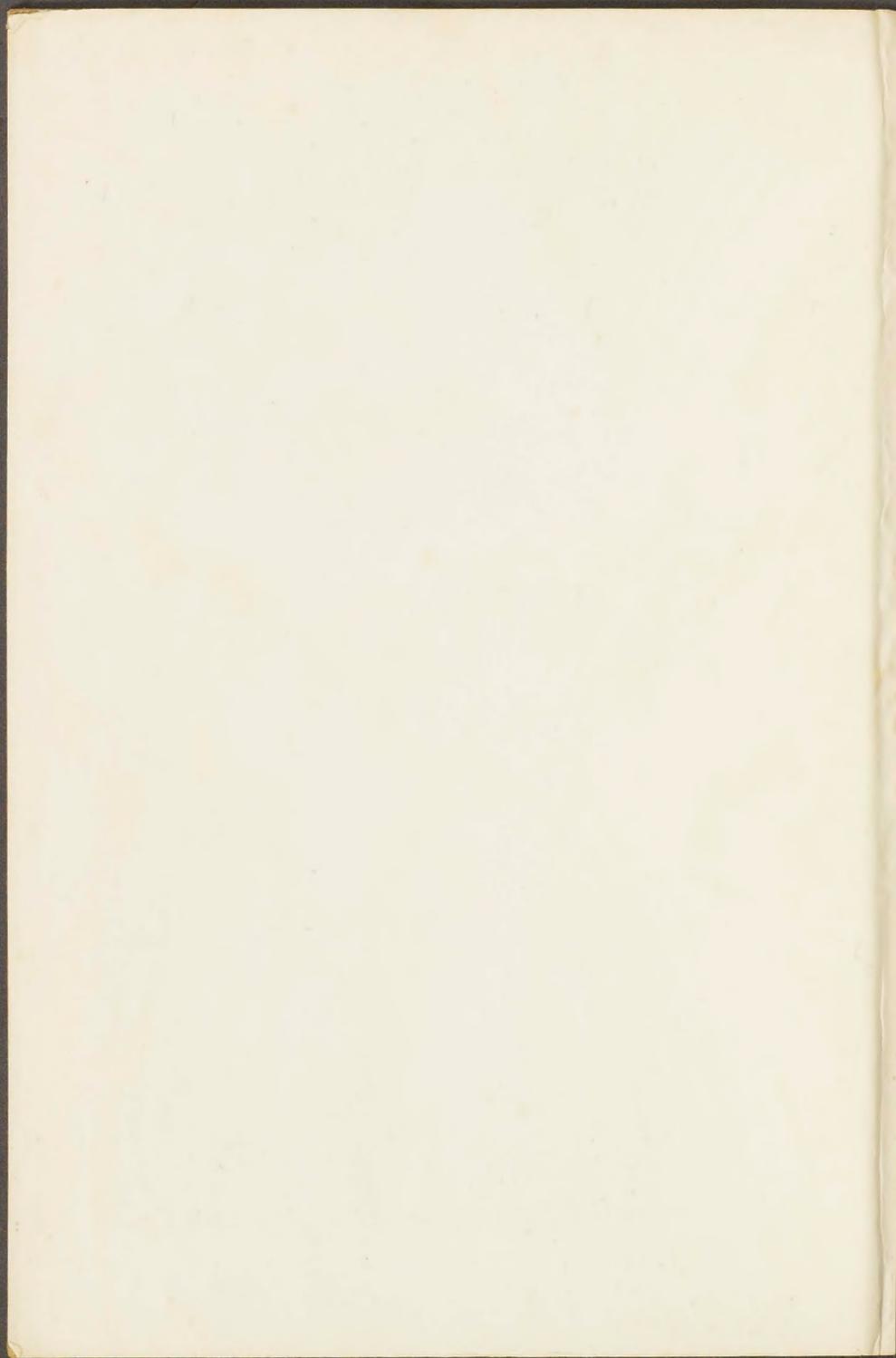
By
Capt. W. W. Luffman

With Map compiled by Mr. Fred Struben
on April 8th, 1885, showing the position of
all Gold discovered by him to that date

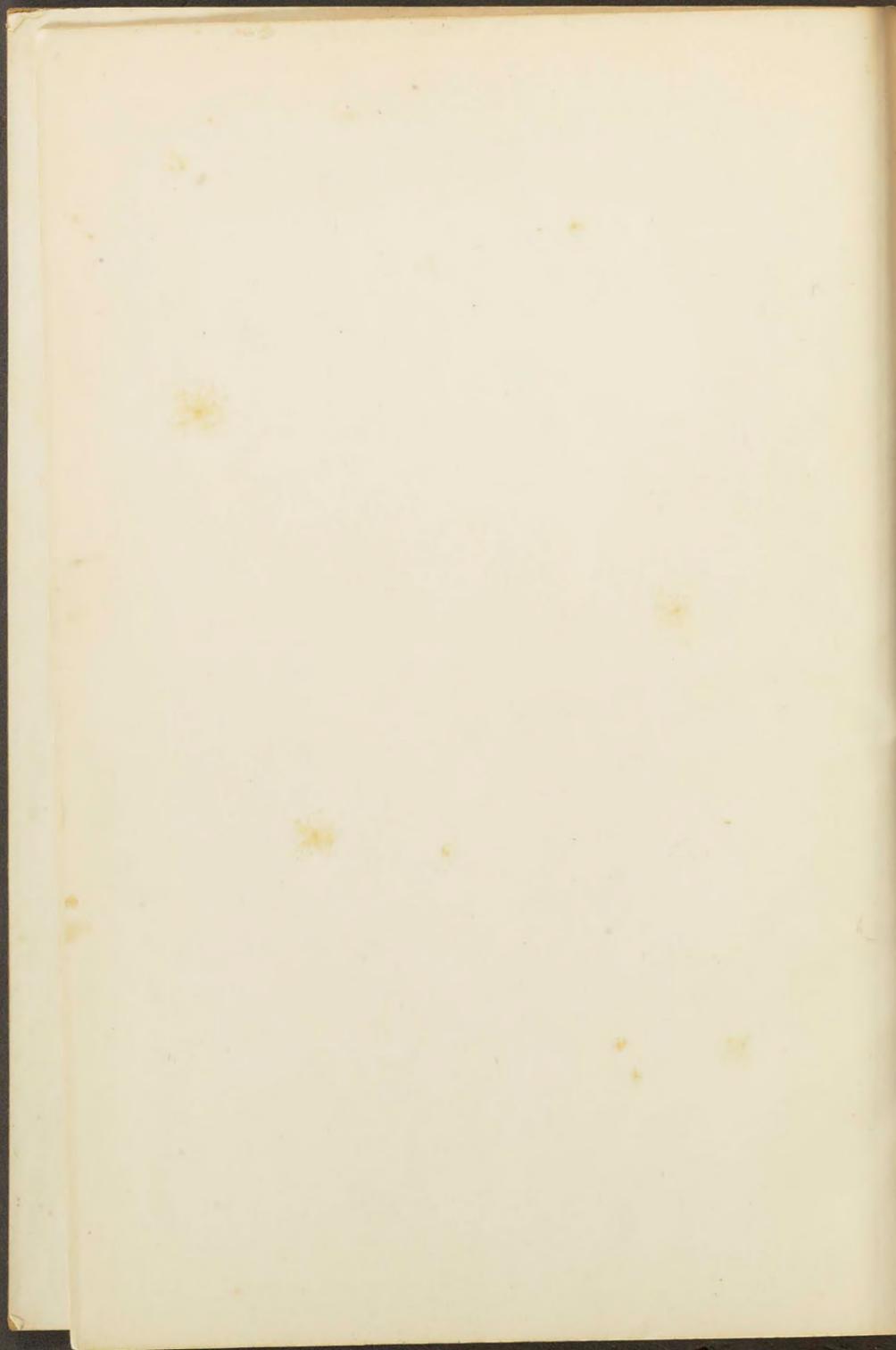
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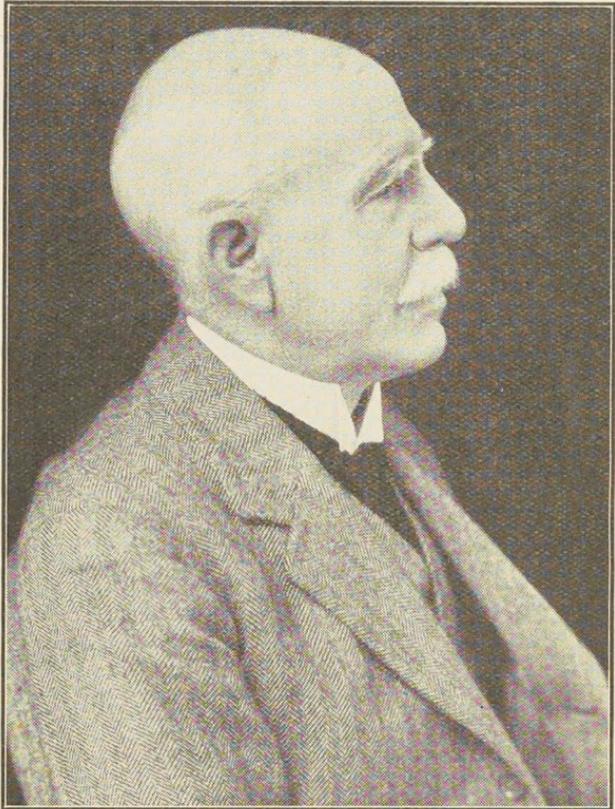
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ECON





MR. FRED STRUBEN,

The Discoverer of the Rand.

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The World's Greatest Goldfield

HOW AND BY WHOM IT WAS FOUND
THE STORY OF MR. FRED STRUBEN'S DISCOVERY

By
Capt. W. W. Luffman

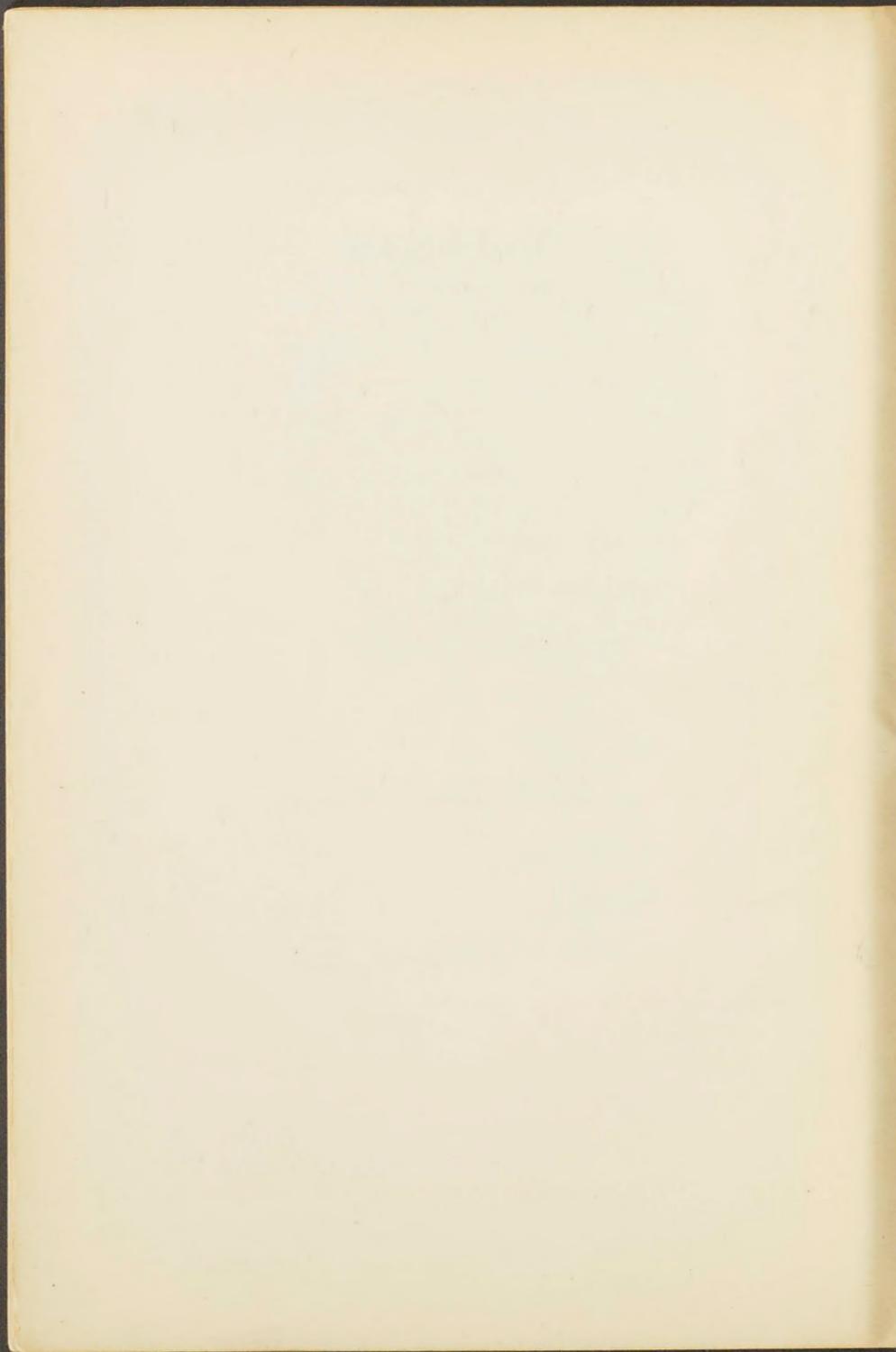
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the 8th of April, 1885, showing the position
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PREFACE

This brief memoir is the result of long and careful research. Difficulties confronted formed the incentive to probe and solve. Conflicting accounts over a long period of years intensified a desire for simplicity and truth.

“No attempt has been made to produce a history, though much that is presented could not fittingly be omitted from an early chapter of the Witwatersrand Goldfields.

“In collecting material ample was gathered which might have served to show by elimination ‘Who did not discover the Rand’—much of this has been withheld—positive evidence forms the chief feature.

“During investigation to elucidate and arrive at the discoverer of the world’s greatest goldfield, much cometary matter swept into the line of vision, stars of every degree radiated their glory, but, as discoverer, the lens focussed only on one—Mr. F. P. T. Struben. This account therefore takes on the form of a short biographical sketch.”

In an endeavour to compile a true and lucid account of one whose activities were, not infrequently, far away and remote from others, thanks are due to representatives of the Press, who long ago recorded events as they became known, and left material which made possible the building-up of this account.

It became abundantly clear, even for a small work of this nature, that it was necessary to have recourse to hundreds of papers and other documents. The task was lightened by access to the British Museum. Records that embrace the world are faithfully stored there, and can be brought into the light again from archives—the extent of which are beyond our adequate conception. There has been ample material available, an abundance bearing the stamp of veracity. From such have been culled parts, preserving the original meaning, and presented here in sincerity and truth.

The modern history of gold prospecting activities in the Transvaal

can be traced fairly accurately. The following tabulated list gives the chief events in their order, to the year 1883 :—

Date. (about)	By Whom Discovered.	Locality.
1854	Mr. Marcus	Near Potchefstroom
,,	Jan Marais	Yokeskei River and Witwatersrand
,,	Schoeman	Waterberg
1860	Mr. Sainders	Witwatersrand
1868	Carl Mauch	North of Olifant River
1869	.....	Lydenburg
,,	.....	Marabastad
1870	.....	Murchison Range
1871	.....	Spitzkop
1872	.....	Mac Mac and Rush to Marabastad
1872 & 3	.....	Pilgrim's Rest and Lydenberg fields—Blyde River
1875	.....	Waterfall, Rotunda Creek, etc.
1878	An Australian	North of Rand
1875 & 1882	.....	De Kaap—begun and renewed
1882	Mr. Hammerslag	Tweefontein
1883	J. Lismore	Blaauwbank
,,	Syndicate	Kromdraai
,,	Mr. and Mrs. Nourse...	Alberta farm and Kromdraai

“ That gold was located in the districts named is beyond dispute. The main point here is, the discoveries on the Witwatersrand. What kind of gold was found there prior to the year 1884?

“ Definitely and without question in every case it was alluvial gold. Moreover, in every instance it can be stated with equal certainty that the prospectors soon gave in—the obvious reason being that the finds were negligible.

“ Anyone who has surveyed the history under consideration will find it difficult to arrive at any other conclusion than that in the ‘ Rand Daily Mail ’ of September, 1906, where, speaking of the Witwatersrand, it says :—‘ Between 1836 and 1882 several reports are made of people prospecting over this area, but certainly nothing of any importance was discovered.’ ”

The World's Greatest Goldfield

EARLY DAYS

“There is surely no more remarkable career in biographical records than that of Mr. Fred Struben.”—“Rand Daily Mail.”

The subject of this memoir, whose name has passed into the history of the greatest goldfields in the world, was born at Maritzburg, Natal, in 1851. His father, Captain J. H. M. Struben, was in charge of four magistracies in that Colony. At the early age of four years F. P. T. Struben suffered the irreparable loss of his mother. About this time his father was offered the First Presidency of the Orange Free State, but, owing to pressure to remain in Natal, he declined. He did, however, at a later date move to Pretoria, and in 1867 became member of the Volksraad and State Attorney of the Transvaal. There were few educational advantages in the State. This had the effect of developing in young Struben wonderful powers of observation and initiative. As a child he discovered mica, and spent a whole day in trying to melt it. He longed to know, thirsted to understand. If he could not receive a tutored training he would start where the first began and progress not less rapidly. The halls of learning might be denied him; but the vault of heaven and earth's thick-folded leaves to that inquiring mind were no mean substitute.

* * * *

There is room for thought as to what might have happened had he received an academic training. Who knows, it may have so unfitted him for his life's work that the Witwatersrand would have remained a wilderness and Johannesburg unborn! Certainly men and women

have emerged, and will emerge, born with inherent gifts which no institution bestows nor can bestow.

* * * *

Struben was a born observer, a lover of the wild. With the aid of a few books, so familiar did he make himself with the topography and geology of the country, at a time when there were no easy means of travel, that he knew the Transvaal from end to end. It was said of him: "He was always looking for what he had not lost." Originality made up the man. He read nature as a book and transferred her pages to an indelible memory.

* * * *

In addition to his many geological discoveries he visited and tested every part where mineral wealth was reported. He spent some time at Kimberley, and the Vaal River, in Natal, Zululand, Swaziland, the Orange Free State, at Lydenburg, Barrets-Berlin, Marabastad and Waterberg; in fact, all the then known goldfields of South Africa, besides his constant search for new. During a period of some thirteen years' diligent prospecting he compiled a geological map of the country as he progressed. He was not only the ideal prospector and geologist; he played many parts. In times of national emergency we find him accompanying the army, and suppressing rebellion. For a time he served as adjutant to President Burgers. General Sir Evelyn Wood, when colonel and in command of a flying column in the Zulu War, sent him a letter of thanks and recognition, but could not obtain a medal for him "because he refused to be paid." Early in the 'eighties Mr. Struben spent much time in the Northern Transvaal. He was there in 1883, when the supply of food he had taken was exhausted, and late in that year he arrived at Pretoria.

STERKFONTAIN

“ There is a tide in the affairs of men which taken at the flood leads on to fortune.”

Mr. Fred Struben's brief stay at his brother's house, “ The Willows,” Pretoria, in December, 1883, led to a happy meeting with L. Geldenhuis, senior, the owner of the farm Wilgespruit, situated some 35 miles south of Pretoria on the Wit-Waters-Rand (or Range). Geldenhuis had paid a recent visit to Barberton and observed while there that the rocks somewhat resembled those on his own farm at Wilgespruit. He indicated to Mr. Fred Struben the possibility of gold on the Rand. Alert, deeply interested, the latter immediately catechised Geldenhuis. This led to an invitation to Wilgespruit, where the two spent a few days together. Following their arrival they got fresh horses, rode through Roodepoort to the Paardekraal Monument, on to Sterkfontein and back to the farm. When Struben returned to Pretoria he announced to his brother that “ from a cursory look round he considered the Rand the finest formation he had seen in South Africa.”

* * * *

Events moved rapidly. Mr. Fred Struben returned in January, 1884, to Sterkfontein. Forthwith he commenced operations, and, on the second day, found a reef which assayed on surface 6 dwt., and at 50 ft. depth gave nearly 2 oz. of gold to the ton. As it is important that the clearest possible information should be given concerning the events which led up to the discovery of the Witwatersrand as the greatest gold-producing centre of the world, and as many conflicting ideas exist respecting that discovery, it is incumbent to produce here a copy of the First Rand Syndicate.

MINUTES OF A MEETING OF SHAREHOLDERS HELD IN THE OFFICE OF
MR. B. M. KISCH, PRETORIA, ON TUESDAY, THE FOURTH DAY OF
MARCH, 1884.

ARTICLES OF ASSOCIATION.

We, the undersigned George Frederick Hudson, Henry William Struben, Frederick Pine Theophilus Struben, and George Pigot Moodie, all of Pretoria, South African Republic, have agreed to, and do hereby form ourselves into a Syndicate, for the purposes and on the conditions hereinafter set forth.

1. The name of the Syndicate shall be the Sterkfontein Junction Mining Syndicate.

2. The objects for which the Syndicate is established are :—

- (a) The acquisition of certain landed property believed to contain gold, and other mineral deposits of value, viz. : The portion of the farm Sterkfontein No. 84 and the whole of the farm Swartkrans No. 83, both situated in the district of Pretoria in the South African Republic, and containing respectively according to
- | | |
|--------------|---|
| 492 | 12 |
| survey 1427— | morgen equal to 3021.89 acres and 1808— |
| 600 | 600 |
- morgen equal to 3826.75 acres, together with all buildings thereon and all existing rights arising from the ownership of the said property.
- (b) The examination of the mineral and other resources of the said property, by prospecting or working thereon
- (c) The working of such minerals as may be found to exist therein.

3. We hereby agree to contribute or subscribe such sums as may be found necessary for the carrying out of the objects named in the foregoing article (No. 2) in proportion to the number of shares in this Syndicate held by us respectively, and to pay or cause the same to be paid on or before such dates as may be fixed by any competent meeting of Shareholders in this Syndicate.

4. And whereas on the 11th day of February, 1884, a contract was entered into by Henry William Struben for the purchase of the property

named in Article 2 for the sum of two thousand eight hundred pounds, we do hereby recognise the said contract as *made on our behalf*, ratifying, and confirming the same, and we accept the liability so incurred as our joint liability, and we undertake to provide for the due and punctual discharge of such liability by paying to the funds of the Syndicate the sum of one hundred pounds in respect of each share subscribed for by us as follows :

£25 per share, equal to £700 in all, on or before signing these presents.

£25 per share, equal to £700 in all, with Interest added at 8 per cent. per annum on or before 11th day of Aug., 1884.

£25 per share, equal to £700 in all, with Interest added at 8 per cent. per annum on or before 11th day of Feb., 1885.

£25 per share, equal to £700 in all, with Interest added at 8 per cent. per annum on or before 11th day of Aug., 1885.

5. The money subscribed in accordance with the preceding paragraph shall be applied as follows :--

The first instalment of £700 now payable shall be paid to Henry William Struben to reimburse him for a like amount paid by him on the 11th February, 1884, as a first instalment of the purchase money to the vendor of the aforementioned landed property.

The remaining instalments shall be applied to the redemption and extinction of certain promissory notes made by Henry William Struben and passed, or to be passed by him, to the vendor of the said properties, and which will mature and become payable on the same dates, and to the same amounts as the said instalments.

Thus, by verbal agreement, land was secured, and on February 11, 1884, the first instalment (25 per cent.) was paid. On March 4, 1884, a syndicate was formed which took over the liability. In the syndicate there is no inference of any member being superior or inferior to another. The founders (four in number) had equal financial obligations

* * * *

These transactions were the direct outcome of the preliminary examinations in December, 1883, by Mr. Fred Struben. At the time

the farms Sterkfontein and Swaartkrans happened to be in the market, which rendered their acquisition swift and easy. Mr. Fred Struben acted as temporary manager, and, of the syndicate, was the only member on the range. It should be explained that Wilgespruit (some 12 miles away to the east of Sterkfontein) was purchased from L. Geldenhuis, and the mineral half of that farm was held in joint ownership by the brothers Struben.

* * * *

Over the whole of this distance Mr. Fred Struben made careful search, in addition to his many activities at the farms. Sterkfontein yielded gold, but not in payable quantity, and he decided after seven months to pitch his tent at Wilgespruit.

* * * *

Mr. George Moodie's name appears in the Sterkfontein Syndicate—this gentleman was an old friend of Mr. Fred Struben. He offered the latter the managership of "Moodie's," with £1000 a year, and a good interest in that property. Refusal meant much at a time when he was "hard up." His reply was, "Thank you, I have not yet found anything to justify the belief that I have made a fortune, but I intend to stick to the Rand."

* * * *

Before passing, it must be recorded that early in April, 1884, on a lofty part of the range—5000 to 6000 ft. above sea level—Mr. Fred Struben noticed water-worn pebbles; the position is near, and north-west of the Boer Monument on Paardekraal. These at once set him to hard thinking; by the end of that month he had traced the apparent site from which these conglomerate pebbles had been dislodged. He traced their course back on gradually ascending ground to a point a little south-east of the Monument; here he discovered two conglomerate reefs. He tested some of the rock, but it gave blank pannings. Being busily engaged with other things at the time, he could not follow up his investigations, but reserved them for later development.

THE CONFIDENCE REEF

By August, 1884, Mr. Fred Struben had concentrated his efforts on Wilgespruit. Gold was found in that month, but on September 18, 1884, he struck a remarkable vein of the Rand formation, about 4 ft. thick, showing in places visible gold. So extraordinary was its richness that a small piece yielded nearly a teaspoonful of gold. He applied acid tests, and brought some to the boiling stage. Having satisfied himself that the find was genuine, he wrote and invited his brother to come and see.

* * * *

There had been suffering, exposure, and disappointment; but, when this vein was struck and tested, Mr. Fred Struben, believing he had found a sea of pleasant waters in which to launch his craft, named it "Confidence"—as someone has said, "signifying his faith in the Rand."

* * * *

After this Mr. Harry Struben arrived, and the brothers worked on together. Up to this time Mr. Fred Struben had managed with the help of black labour only, and was the only prospector on the Range. His brother, however, sent into the district a Cornish miner to assist. This man, Arnold, talked so extravagantly about the wealth of the Strubens' work at the Confidence reef that Mr. Harry Struben set him to mining at the Willows, Pretoria. This was towards the end of 1884. It will be appreciated that in such work secrecy at first is important. To discountenance this man's unwisdom, a temporary withdrawal from the "Confidence" was made.

* * * *

It is remarkable that Arnold should have been put forward as the discoverer of the Rand. Mr. E. P. Mathers, in 1886-7, investigated

the case, as did also Mr. H. H. Webb, in 1903. Both these gentlemen assure us of the absence of any reliable evidence or support—his name has been linked with that of L. Geldenhuis, senior. It is said that he told the latter of gold on his farm. This is mentioned by Wilmot in his account. But surely, if this were correct, Geldenhuis would have known something about it. Inquiry into the matter shows that three members of the Geldenhuis family who were on the Rand in 1884 and 1885 say the story is untrue. They ascribe the first knowledge, and sole discovery of gold on their farm, to Mr. Fred Struben.

* * * *

Samples of the reef were sent to London for analysis, and arrangements were made for renewal of the enterprise. A journey was then taken together to Pilgrim's Rest, in the Eastern Transvaal Goldfields, where they saw a battery, and were able to judge the kind of Stamp Mill required for the Witwatersrand. With these preliminaries, and an order despatched to England for machinery, the first phase of the "Confidence" ends. Mr. Harry Struben proceeded to his home at the "Willows," Pretoria; Mr. Fred Struben returned to his beloved prospecting on the Western Rand.

A MAGNIFICENT ACHIEVEMENT

To the east of, and adjoining Sterkfontein, is "Honingklip." This farm was held by Mr. H. F. Groblar. He had ceded the mining rights to a Potchefstroom syndicate, seeking for gold at Kromdraai, a farm on a range some miles to the north-west, and of a different formation to the Witwatersrand. The syndicate had not been successful on Honingklip, and had withdrawn.

Mr. Fred Struben suggested that he could locate a new gold-bearing reef on the farm, but asked for an interest for himself and his brother—this was refused. Later the syndicate approached him on his own terms.

A verbal agreement was made; this was confirmed later by the following letter:—

"Pretoria, March 20, 1885.

"I hereby certify that the conditions upon which Mr. F. P. T. Struben is to prospect the farm, Honingklip, Witwatersrand, S.A. Republic, standing in the name of Mr. H. F. Grobbelaar, and the mining rights of which have been ceded by him to Mr. C. A. Cilliers, are as follows:—

"That the said F. P. T. Struben or his substitute shall within the space of six months dating from the first day of January, 1885, discover and show upon the said farm Honingklip, a gold-bearing quartz reef or lode of sufficient quantity and quality to be payable to work. That upon his so showing such lode or reef, which shall not be on any of the already opened reefs or blows worked by Mr. T. Minaar, within the six months mentioned, one-eighth share of the mining rights of the said farm shall be transferred to him, free of expense other than the usual transfer expenses, and in the same way, and on the same conditions as the shares transferred to the other members of the syndicate aforementioned.

(Signed) HUBERT J. JUTA,

"(pro C. A. CILLIERS)."

Mr. Fred Struben's work at Honingklip will for ever stand as a magnificent triumph in geological science.

About 12 miles away to the east he had in the previous year discovered the Confidence Reef. That reef approximated to 4 ft. in thickness or width on surface—the strata was nearly vertical!

So complete was his knowledge of the formation and direction, he calculated that the Confidence Reef should continue on a certain line at Honingklip.

Here was a lonely man on an open, cheerless waste—relieved only by torrential rain, sheets of water, and patches of long grass—endeavouring to pick up the continuation of a line which he knew existed 12 miles away! The feat is comparable only with the recovery of the Great Eastern cable in mid-ocean.

Before the letter was dated confirming the contract, Mr. Fred Struben wrote to a relative at Pretoria:—

“ Honingklip, March 18, 1885.

“ Arrived here on Saturday. Found a stone not larger than one’s hand, and so covered with dirt that its own mother would not own it—then a smaller piece cropping out of the ground. What do you think was the result? Why, the continuation of the Confidence Reef, showing a large body of it, and, what is better, a good show of gold. If at present not so much gold as ‘ Confidence,’ yet in other respects superior. The best of all is, it is in the belt I expected to find it.”

He named this reef “ Strubens.”

The accomplishment is surpassed only by the daring and exactness of the mind that attempted it.

He wrote:—

“ May 27, 1885.

“ Did you see in the ‘ Advertiser ’ the account of the wonderful reef supposed to be found on Grobbars? It meant the Struben Reef, but it was greatly exaggerated.”

This venture was entirely in the hands of Mr. Fred Struben. His contract, prospecting and geological knowledge alone, culminated in the successful issue.

THE GREAT DISCOVERY

Early success at Honingklip partly liberated Mr. Fred Struben for other and greater service. He immediately took up an investigation of the conglomerate beds he had examined in April, 1884, on Paardekraal. He opened reefs to a depth of 8 to 10 ft. and found gold all the way down. Confirmation of his doings, 42 years ago, have come from many sources.

Between March and August, 1885, a regular correspondence was maintained between him and a relative in Pretoria. Happily, much of this correspondence has been preserved. A letter from Mr. Fred Struben runs:—

“ Honingklip, April 8, 1885.

“ You ask me to explain about the reef (Struben's). You must follow the directions given on the back of the diagram. Remember the range runs nearly east and west. On the south side you will see three new reefs marked; they are what I have discovered within the last week—they all three are gold-bearing, more or less, and if they prove to contain payable gold, which I think they will, then this new discovery—which is quite a distinct formation from the other—means the commencement of a very large goldfield, and will give work, not only for a few machines but hundreds, and for thousands of miners. There are, I believe, innumerable similar veins about to the south of this and extending in length for miles in each direction.”

The conglomerate reefs opened up on this occasion were a little north of the Monument.

Thus we have it on definite record the date, place, and nature of the formation, with the discoverer's forecast of the magnitude to which he deemed the gold-bearing conglomerate industry would attain.

At the time, Mr. Fred Struben wrote also to others about the new formation—new to geologists—new in the realm of gold. By letter he informed his brother, who was not on the Rand at the time, but away in the bushveld. He also acquainted Mr. Godfrey Lys, who published the following in the "Rand Daily Mail," September 22, 1906:—

"Early in 1885, when I was at Maritzburg, I received a letter from Mr. Fred Struben saying that he had discovered a formation which carried gold, and predicted that there would be room for millions of capital and thousands of workers."

Confirmation of Mr. Fred Struben's discovery is given by an eyewitness. His presence on the Witwatersrand was under the oddest of circumstances. One who wrote his story has given us the following:—

"Many years ago a traveller over the bare uplands which stretch between Potchefstroom, the old capital of the South African Republic, and Pretoria, the new, might have seen a strange sight.

"Toiling painfully over the rough, thin grass-lands came a wagon bearing a burden the fame of which travelled from farm to farm from the Vaal to the Zoutpansberg. The load was a 37 ft. steel steamer of six horse-power, with two twin propellers. In front trudged a slight man of small stature. Suddenly he halted his lumbering vehicle and turned away and descended a kloof, as though looking for someone. Half-way down the little valley he came upon a white man watching a couple of natives digging. The man who had been escorting the steamer chatted to the isolated white man. Presently he walked to the spruit with him and watched him wash some of the earth in a pan. Then he shook his head and turned and went back to his wagon. The man in the kloof returned to his digging.

"Twelve months later, after hardships and adventures innumerable, John Thorburn, ex-trapper in the Hudson's Bay Terri-

tory, ex-soldier in the American Civil War, ex-slave buyer on a Southern plantation, ex-diamond prospector and trader in South Africa, future adviser to Umbandine, the Swazi king, launched his craft in salt water near Delagoa Bay. He had carried it 1600 miles across Africa."

John Thorburn related his story in September, 1906, and added: "The white man showed me a spot where he was taking out a very peculiar formation. I thought he had got it. (A phrase indicating that he thought the prospector was mad.) In answer to a question I told him I was Thorburn—he said his name was Struben." He advised the prospector to go down to the valleys and look for gold. Thorburn's biographer remarks: "On that pleasant morning he saw the beginning of the greatest goldfield the world has known. He watched Struben panning gold on the Witwatersrand, and he passed on his journey unbelieving."

This was the beginning—for the first time in the history of man, these rocks, these mighty reservoirs of wealth, were tapped. During 40 years they have poured out something like eight hundred and fifty million pounds' worth of gold. They remain as untouched as some inexhaustible, fathomless sea.

Mr. Fred Struben was not only the first to discover the conglomerates as gold-bearing, but, long before any other man, he mined and crushed them.

This strange formation soon received fanciful names. Its appearance was thought to resemble almond rock—the white pebbles being the "almonds," the matrix (which alone carries the gold) the "rock." The Boers therefore called it banket, Mathers wrote it "bank-et," others ban-ket, with a note of pronunciation—"Bon-cat"!

THE PRETORIA EXHIBIT

By May, 1885, the time was ripe for renewal of work at the Confidence. In that month Mr. Fred Struben turned eastward from Honingklip and Paardekraal. Scarcely had he uncovered the reef on Wilgespruit when news filtered through to the Volksraad at Pretoria.

The Strubens were approached by Dr. Jorrisen. He explained the bankrupt condition of the Transvaal, and on behalf of President Kruger requested an early declaration of the goldfields—if the reports were true. The Strubens were not ready. Being willing, however, to sink their interests if they could by any means assist in the salvation of the State, they answered by a public exhibition in Pretoria.

Mr. F. Struben wrote:—

“ The Confidence,

“ Wilgespruit,

“ May 27, 1885.

“ We have opened up the Confidence, and have done a lot of work on it already. To-day I took out some very rich samples—a large dishful—as my brother wants to take some to show in Pretoria, and for Dawson to assay. They are richer than the first lot I took out on finding the reef.”

At 11 a.m., June 5, 1885, in the tennis ground at the rear of the Union Club, Pretoria, there assembled the President, members of the Executive and Volksraad, mining experts and citizens. Mr. Harry Struben demonstrated.

The following extracts are taken from the Press of that time:—

“ To-day the dark mantle of doubt has been removed, and

there is now a feeling of security in the certainty of the bright change that must soon take place here."

"There is fresh hope inspired in our midst."

"Last Friday we were all despondent at the outlook, but to-day we are all smiling and happy again. The reason is attributable to a grand display of gold which has quite recently been discovered near to Pretoria."

Samples were exhibited which assayed up to 913 oz. of gold and 362 oz. of silver to the ton.

His Honour the President and the Honourable Chairman of the Volksraad tendered their thanks and appreciation for the discovery.

It was no small service that inspired hope into a dejected, bankrupt State. Mr. Fred Struben had, however, something infinitely beyond the transitory wealth of the Confidence to reveal, though for a while that reef held him.

So wondrously rich were the samples from the Confidence reef that Dawson assayed them a second time, as he could not believe the first results correct.

Accounts in the Press of June, 1885, appeared throughout South Africa. The following will illustrate:—

"The goldfields. More and more encouraging. Pretoria to the front. Struben's wonderful reef, 913 oz. to the ton."

Such statements to-day may appear exaggerated—they were, however, proved verities. Struben's discovery and his brother's demonstration at Pretoria lifted drooping heads and sinking hearts. Clouds parted, and once more men looked upward and took courage.

IN THE BALANCE

“ Our chief of men, who through a cloud,
Guided by faith and matchless fortitude.”

Acclamation has sometimes been echoed by swift rejection. In Struben's case the splendour of the Pretoria exhibit was followed by unexpected, threatening clouds.

For months the fate of the Rand was in the crucible and balance. Mr. Fred Struben was not a chemist, but he knew more than many that were. He was not a professional geologist, yet of the Rand no man was his equal.

Documents have sometimes been signed in blood. Struben knew something of this through those dark months, when he was fighting against odds, not only for himself, but for the promised fulfilment of the Transvaal's emancipation.

His strong assurance and reasoning were based on the substratum of years of diligent observation and proved realities, on facts too fundamental to be swayed by the opinions of any. He felt keenly, but yielded no ground where truth could stand erect.

By June 23, 1885, he wrote: —

“ I have now found gold along the range for over 20 miles.” From this time, daily, visitors began to arrive. Few cared to stay longer, owing to the inhospitable nature of the Rand. Some people came to see and learn; they went away wise. But “ there were giants in the earth in those day,”; “ men of renown.” They too came, but to advise, to instruct. As they went away they saw only “ a wind-swept barren range, a nameless wilderness ” devoid of food, shelter and human sympathy, except “ one solitary enthusiast, bent on a wild-goose enterprise ” that must end in disaster to himself and all that believed him. *They* condemned the Witwatersrand.

One of these had a world reputation. On his advent to the Transvaal he had been hailed in the highest eulogy. He came to see the Rand, to him Mr. Fred Struben revealed the treasure of the Conglomerate reefs.

The Press knew this man had visited the Range, and waited for his word. Only to the owners and a few friends would he say anything—it was condemnation. It needed more than the buffers of sentiment to receive this shock. In correspondence, in after years, this great authority admitted that Mr. Fred Struben had shown him in August, 1885, the gold-bearing conglomerates on Roodepoort and Paardekraal.

In those troublous times many a day Struben had to face—Was the Rand a failure after all? Was the choice trump card of the Banket reefs a deception to cheat him that held it?

That was the verdict of the mighty. Struben knew better, but he was almost alone in his strong faith in the Rand, and it was stronger and passed to the superlative when he was most alone.

As capital was urgently needed, and to secure the machinery lately arrived from England, Mr. Harry Struben proceeded to Natal. While there he invited Sir Theophilus Shepstone and others to form a syndicate. To satisfy themselves before they advanced £10,000 the syndicate sent up a representative. To this man also Mr. Fred Struben revealed the Banket reefs. He would have none of them; he wanted a quartz reef. Struben replied, "It is quartz pebbles cemented together with silica, and it surely does not matter so long as it carries gold." Struben also showed him the gold from the panning.

The expert wasted a few months of his own time, and much of Struben's, and then went back to Natal with his considered judgment that "there was more gold in the streets of Pretoria or Maritzburg than in the whole of the Rand."

Whatever happened after this point counts but little so far as the discovery and making known of the gold-bearing conglomerates of

the Witwatersrand were concerned. Other things happened, of course; richer reefs were found—all of which will be considered as we proceed; but they were incident, the consequent outcome of the original discovery and revelation of Mr. Fred Struben.

There seems to have been no doubt in the mind of Geldenhuis. One Sunday in 1885 Struben called on him. In the course of conversation Geldenhuis remarked, "Well, Struben, Napoleon was a wonderful man; he crushed humanity. But you are a wonderful man, too, for you are always crushing the rocks, and I think you have found a very great thing here."

Struben replied, "But someone else will come and claim the credit."

"Never," said Geldenhuis, rising in his chair and exclaiming in an excited tone, "never so long as I am alive."

Under Government notice of August 10, 1885, was granted to the Strubens the first concession of the Witwatersrand. This was for 1300 morgen on Wilgespruit.

Coupled with the disastrous misjudgments of the judges, there were constant anxieties and increasing hard work.

In a suggestive letter at the time, Mr. Fred Struben wrote, "We have not got through the rock in the tunnel yet. It is a tough job; I have to blast the rocks in many parts and ways." But there were more than hard rocks and merciless elements to conquer in the trenches of Wilgespruit.

Throughout Mr. Fred Struben kept up ceaseless prospecting, and as 1885 wore on he pushed further and further to the east.

Mr. Godfrey Lys joined the Strubens on October 12, 1885, at the Confidence Mine.

By December, 1885, the five-stamp battery and mill from England had been erected and was in working order.

The first large test put through the mill was very disappointing—owing to inexperience the gold was lost in the process, being washed down the stream.

This was from the Confidence Mine, and was the first ore ever milled on or from the Rand rocks.

About November, 1885, Mr. Henry Bantjes commenced prospecting on Roodepoort. He was unsuccessful in his efforts, and was about to leave when Mr. Fred Struben showed him the conglomerates on that farm, and advised him to work them. A first crushing of these at the Struben mill in January, 1886, was most discouraging. Webb remarks: "Those were trying times for these early pioneers, hard work and many disappointments. In spite of these disheartening results, Mr. Fred Struben's faith in the possibilities of the district did not fail."

After a while the Confidence Reef (a formation of lenses) narrowed considerably at about 25 ft., and did not appear to play up to its name. It had, however, stirred to interest, had turned the eyes of South Africa to an unknown district, and had given an impetus to investigation that was soon to bring sure and permanent wealth to that waiting land.

Twelve months later a second and lower lens of the Confidence Reef was worked, and a third and deeper lens years after. These gave good values—about 700 oz. of gold per ton of ore by assay. In all probability lower and rich lenses exist, as this formation runs in continuity with and is part and parcel of the Range.

It must be stated, in all fairness and deference to the Press, that once and again during the period of this darkest chapter, they visited the Rand and sounded the clarion note—Forward.

GREAT ACTIVITIES

Until early in 1886 the only people prospecting on the Rand proper were the Messrs. F. and H. Struben, Godfrey Lys, the brothers Geldenhuis and Henry Bantjes. The latter, as stated previously, came in November, 1885, and represented a Potchefstroom syndicate, who at that time secured an option over a part of Roodepoort. The syndicate was attracted to the spot by Mr. Fred Struben's find on the adjoining farm, Wilgespruit.

The banket milled in January, 1886, by the Strubens for Mr. Henry Bantjes came from the north-west corner of Roodepoort.

The brothers Geldenhuis discovered a quartz reef on Bramfontein which yielded over an ounce of gold per ton.

Mr. Fred Struben opened up the western portion of Vogelstruisfontein and worked conglomerates from what he had originally named Water Reef, but afterwards known as the Bird Reef, which gave about 6 dwt. per ton. Mr. H. Bantjes quickly followed him to the eastern portion of that farm. Following this (February or March, 1886), a former employee of the Strubens', Mr. George Walker, waited in the vicinity until a friend was ready to accompany him to the goldfields of the Eastern Transvaal. As he tarried, and during a Sunday morning walk on the farm Langlaagte, he stumbled over a piece of outcropping rock hidden by the grass. Walker was already down, and examined the cause of his trouble. From his association with the Strubens he at once recognised it as gold-bearing conglomerate, but with evidences of greater richness than any he had seen previously. A test confirmed this, being startlingly good. This was the beginning of the Main Reef. Walker endeavoured to keep his secret; he secured an option and proceeded in search of a backer. While he was away, another white man

employed by the Strubens, one Honeyball, also visited Langlaagte, and was either shown by someone suspicious of Walker's movements, or he accidentally lighted upon the very spot where Walker had broken off pieces for panning. Honeyball took some of the conglomerate back to the mill, where Mr. Godfrey Lys saw it, and visited the place of origin; Walker returned without anyone to finance him, and to find his secret out.

Honeyball has been put forward for recognition. This man is a good second to Walker in knowing the whereabouts of the Main Reef—but his case was simply to find out what Walker already knew.

If the truth is to be known and appreciated, it is imperative we should understand the exact position.

What was it Mr. George Walker really found? Was it a new formation? No.

It will be remembered that at Paardekraal, Roodepoort, and Vogeltruisfontein, Mr. Fred Struben had already discovered, tested and crushed many tons of this banket formation—further, at the very time of Mr. Walker's find, Mr. Struben was extracting from large quantities of the Bird Reef ore (in close proximity to the Main) about 6 dwt. of gold per ton.

What, then, was Walker's find? It was the lighting upon the richest portion of the already discovered banket beds.

A parable may explain:—

For many years a man sought, suffered and endured. He was in quest of treasure. At length he discovered a massive book. Its characters were new, they baffled the wisest; no one in all the world had knowledge of them. The discoverer diligently studied the golden leaves. Little by little he made known the contents of the volume. It happened, however, that another to whom he had shown it stumbled over the book, and it opened at a hitherto hidden, the main and choicest illuminated page.

The news concerning the Main Reef spread rapidly.

Those on the spot immediately sought the spoor. Mr. Fred

Struben's sound geological knowledge put him in the van. He was first in tracing the Main Reef on other farms. He picked it up on the western half of Vogelstruisfontein and sunk a shaft 40 ft. deep—the first ever opened on the Main Reef. A little later Mr. Henry Bantjes found it on the eastern half of that farm, and by open cutting obtained ore which was the first milled from the main reef.

Others were soon drawn to the district, and news reached Pretoria. Mr. Jan Meyer, as Veldcornet, visited the Rand.

The Main Reef was traced by Mr. Dirk Geldenhuis on Turffontein, and Mr. Fred Struben assisted him in opening it up. One day, when panning and showing the gold to those who had come to take up claims, on the outside of the ring of people was recognised the prophet from Natal who had boasted of more gold in the streets of Maritzburg than the whole of the Rand. This man had now returned to gather crumbs where he might have enjoyed millions.

Mr. Fred Struben carried the investigation further, and found the Main Reef on Driefontein (Knights). At the latter he sunk a shaft 50 ft. deep. This was long before the flotation of Knight's company. Mr. Henry Nourse also opened the Main Reef at Doornfontein. Thus, at this early stage, at no fewer than six places along the line the Main Reef had been traced and worked.

In the year 1886 many people were on their way to the Barberton and Komatie goldfields and passed by the Rand, little knowing they were missing the richest goldfield in the world. Others, however, turned aside. They accepted the attractions of the range and remained. The news reached Kimberley and Barberton. Soon the leading capitalists of South Africa were on the scene. The late Mr. William Knight, with his great fortune, backed the Rand. J. B. Robinson secured choice possessions. Colonel Ferreira, Captain Maynard and Mr. John Charlton were there early. Mr. Cecil J. Rhodes for a while hung back, deterred by an adverse report of his engineer, but Rhodes soon recovered and invested heavily. Even

the faith of Mr. Mathers feared to follow Rhodes in his adventurous bent when the latter paid £70,000 for what Mathers feared would be only "grass roots." Notwithstanding, for many years Rhodes drew from £300,000 to £400,000 from his venture in the Rand. Barnato came in late owing to an agent's advice to hold back. Messrs. Beit, Caldecott, Whitehead, Rudd, and many others, came in and played important parts.

The experiences of the brothers Struben a year earlier were repeated in 1886, but this time there were other shoulders to share the burden. Leading authorities presumed they were doing a public service by giving their *sure* word that the Rand was only an uptilted river bed and was doomed to failure.

The land teemed with prophetic doubters, many would not believe that the gold-bearing conglomerates could possibly continue beyond a few feet in depth. Scepticism was rife; ridicule was heaped upon the advocates of the Rand. The majority professed that the reef would pinch out at depths from 50 to 100 feet. Other men unbiassed were content to stake their fortunes on the belief that length of outcrop involved depth, and that consistency of value on the surface justified faith in persistence of payability at depth. Foremost in this belief was the subject of this memoir.

Under the title "Past Prophecies and present Realities," etc., by Mr. Mathers, was published by "SOUTH AFRICA" in 1893 the following; it was a message from Mr. Struben on leaving the Rand in 1888:—

Everybody who knows anything of the Transvaal knows Mr. Fred Struben, the discoverer of the Witwatersrand. He wrote for me as follows, five years ago:—

"The amount of work done at low levels and otherwise has proved without doubt the enormous value and permanence of the main reef. Several permanent shafts now being put down will cut the reef at a depth of from 200 to 500 feet from the surface. When these are completed they will put at rest any

doubts now existing in the minds of some people as to the depth of these reefs, or rather beds of conglomerates. Such a doubt, I am happy to say, has never entered my mind, and never will till I have some substantial proof to make me alter it.

“I can safely assert that this generation won't get to the bottom of the main reef. That after a great depth is attained, the conglomerates may gradually become horizontal, I believe: but play out—NEVER.

“As long as the sandstone quartzite and slate formation, in which the conglomerates are embedded, continues, the conglomerates are bound to exist, however much they may jump about. They were deposited in much the same way and period. I may again repeat that I haven't the least anxiety as to the depth of the reefs. One of the best proofs is in their length on the surface.”

Despite the doubters, in nearly every South African town syndicates were formed.

Experienced gold prospectors poured in from Kimberley, Natal, Worcester, Tarkastad, Orange Free State, Barberton, etc. Thus a great impetus was given—backed by the ablest financiers of the time.

RISE OF THE RAND FOUNDING OF JOHANNESBURG

As the year 1886 moved from its Northern Solstice, it became apparent that another race had begun. Soon there were 2000 people gathered on the Witwatersrand. A notice indicated that the Range would be thrown open to the public, and that the Commissioner would be accompanied by artillerymen. Then followed:—

“Whereas it appears to the Government of the South African Republic that it is advisable that the farms named—Driefontein, Elandsfontein, Doornfontein, Turffontein, Randjeslaagte, Langlaagte, Paardekraal, Vogelstruisfontein and Roodepoort, all situate in the Witwatersrand district Heidelberg, be declared a public digging.

“Now, therefore, I, Stephanus Johannes Paulus Kruger, State President of the South African Republic, in terms of Article 5 of Law No. 8, 1885, do proclaim the above-mentioned farms a Public digging, etc.

“ (Signed) S. J. P. KRUGER,
State President.

“ (Signed) W. EDWARD BOK,
State Secretary.”

8th September, 1886.

Following this announcement, swiftly came another. On September 20, 1886, the Government marked off a township and named it Johannesburg, after the Surveyor-General of the time—Mr. Johannes Rissik.

The elements and surroundings were no more propitious to these late (or early) arrivals than they had been to the first and lonely prospector.

Johannesburg is some 35 miles south of Pretoria, about the same distance north-west of Heidelberg, 60 miles north-east of Potchefstroom, 440 from Durban and more than 1000 miles from Capetown.

The site is some 6000 feet above sea level on gently undulating country.

The rush increased, and people poured in daily. How they came surpassed any Old Kent Road spectacle on a Derby morning. "In lumbering ox wagons drawn by sixteen or eighteen bullocks, in Cape carts with small teams of mules, in old buggies pulled by worn donkeys, on horseback and on foot the cosmopolitan crowd poured in. Two or three men from the Cape Railway came up in a hansom cab."

By reason of this centring on the new township, land values went up from about a few pounds to thousands, farms that could have been purchased for a mere trifle, a year or so earlier, now brought the owners wealth beyond anything they had ever conceived. Fabulous were the prices paid, fabulous were the returns on the transactions.

The wonders of imagery and fable were realised.

In the loneliest part of that far away inland state, without railways or roads, with mere tracts as her only means of communication—without materials or habitation from which to start, and isolated in conditions unknown in Europe; yet in a few months, there at Johannesburg forty years ago they completely solved a great question.

So determined were these practical stalwarts of the time, "one firm brought three 12-ton boilers 150 miles by wagon—each wagon requiring 72 oxen at the drifts and 64 at other parts of the route."

Johannesburg rose with the suddenness as of a mirage in the desert—as a vision crystallised. Yet in the magic of her rise she was stable. Her foundations were gold: her habitations and transforming characteristics that floated into the picture were realities.

The arresting power, the magnetism of it all was not the city, as she rose complete, and church spires kissed the skies, eastward and westward along the line of reefs could be heard and felt the pulsation of human activity. That great East-West Range that had served as little more than a watershed to divide was now the meeting place—the active scene of the busy multitude.

There were gleaners far and wide, there were others who kept to the regular and sure harvest of the reefs of golden grain.

Ore from the Crown reef was so rich that thousands of tons were protected by sacking and hides in transit to the mill.

The presence of the multitude on the Range as of the city was the fulfilment of those prophetic words from Mr. Fred Struben in 1885, when he announced his discovery of the Auriferous Banket—"room and work for hundreds of mills, thousands of miners, and millions of capital." It was now accomplished. He had breathed vitality into that belief, had laid hold on apparent emptiness, and saw it transformed into the chief mining centre of the world.

The transmutation of the wilderness into valuable suburban property, the sudden enrichment of every owner in the district, the lading with wealth of so many that came, had one common source—the faith and persistence of one man.

All other mineral centres of South Africa were now eclipsed—"The Rand" held sway. Among her supporters and promoters were men who stood for the highest in honour, patriotism, wealth and charity. Pioneers who amassed great fortunes went forth to found States that bear their honoured names—to scatter riches as they had gathered them, to found scholarships, chairs, and seats of learning. Perhaps no one concern ever drew so large a number of eminent men together as the discovery and development of the auriferous conglomerates of the Witwatersrand.

All too soon the ranks of these noble men were thinned—forty years have left them sadly depleted. The words of Omar Khayyam intrude the mind:—

“Lo, some we loved the loveliest and the best
That Time and Fate of all their vintage prest
Have drunk their cup a round or two before,
And one by one crept silently to rest.”

THE RIDDLE OF THE RAND

To grasp the significance and salients of the story, it is essential to refer to some difficulties of the geological formation of the country.

Reference has been made to the fact that for thirteen years Mr. Fred Struben visited, prospected and mapped not only the Transvaal, but the greater part of South Africa.

In that time he arrived at conclusions that have stood the test of more than forty years. His assertions have never been out of date. They are valuable to-day and quoted authoritatively. This in itself is emphasis. It will be readily admitted that in an age of wonders not many works survive so great a time.

In medicine, chemistry, geology, and research of every kind, the writings of not a few have needed serious revision. Struben lives in his declarations. It would appear that he never asserted anything seriously, until he had proved it, or it was capable of proof.

To elaborate on those declarations would be too bulky here; briefly, they were that the gold-bearing conglomerates as found on the Rand embraced not only a large area (more than 50 miles long and many miles wide), but that they extend from east to west across Africa. It is a question not only of extent, but of depth. On the Rand the formation is greatly tilted—some of it nearly vertical.

When Struben discovered the auriferous conglomerates, he traced the outcrops here and there from west to east approximately 40 miles. He took measurements and made diagrams of their inclination. These he linked up with observations and readings at other places. It was the first work of its kind in that part of the world. The combined results of his years of toil and study (including the Rand) were condensed into a map and despatched about the end of 1885 to England for publication. It went astray and was never recovered.

Fortunately old papers and preliminary drawings enabled him to prepare a second map. This meant years of delay, and some of the glory had departed. A small map was compiled in 1889, but in 1896 he issued through Stamford, London, another map with "Notes on the Geological Formation of South Africa."

He had marked on his original map in one place "should be very rich in gold about here." Afterwards in this vicinity "Moodie's" and Barberton goldfields were discovered and became centres of industry.

In July, 1885, he wrote a relative who had asked to see his work:—

"You must not let it go out of your hands, as it really is part of a large map which I am making for publication; besides, there is a lot of valuable information in it which some people might want to crib."

When the map appeared in 1896 it was received in the spirit of this extract:—

"South Africans generally, and that portion of the public interested in the development of South Africa's mineral resources especially, owe Mr. Struben a debt of gratitude for the excellent geological sketch map of Africa, south of the Zambesi, which he has just published. It is the most important work of the kind which has yet been issued.

"To us the most interesting feature of the map is that it demonstrates the fact that the Main Reef series of conglomerate beds on the Rand extend further and further away from what was at one time the so-called basin, both east and west, right across the Continent.

"At present the geological formation of South Africa is considered to present many conditions which are anomalous when compared with those presented by other parts of the earth, and such works as that which has been so carefully compiled by Mr. Struben will form a very material aid to the searchers out of the mysteries of this earth."

For many years a war raged over the origin of the Rand formations; indeed, the sword has not yet been sheathed. "The Battle of the Gauges" was but a small concern to this. With experts and the great majority in early days, the mode of origin was in a supposed river bed, but now uptilted, and as such of no permanence. It is well known that some of the leading men of the time held this view and passed judgment on the Rand. An extract runs: "One cannot wonder at it, seeing that the formation was quite new to geologists."

From the foregoing it will be seen why so many leading authorities stood aloof. The formation was new. It was absent from the text books. There was no known analogy. The knowledge of goldfields in other parts of the world counted for little in solving the Witwatersrand problem.

Early in life, from private observation, Mr. Struben arrived at many of the fundamentals of geology, with this advantage, he was not bound by any arbitrary line of thought.

Till his day gold had never been extracted from a formation similar to that of the Rand—nor had any hope ever been entertained of it as a gold-bearer. The trend of geological mining and prospecting knowledge in 1884 was against any such idea of gold in Bantek. Mr. Struben found it carried gold, and, unbiassed, after careful investigation by diligent prospecting and tests, wrote of the magnitude of the possibilities. To him there was room for new thought and, as a consequence, there followed from his discovery all we know of the Rand. However, the advocates of one and another of the theories held were adamant, and it was no small matter for him to appear in his first seen, self-made armour, and quietly await the assaults of intellectual artillery.

It was a good thing for the world that Mr. Fred Struben had not accepted finality, or any last word in the pursuit he loved. There came a time, however, when men had leisure to look back and survey the road they had travelled. They remembered Struben. If an argu-

ment needed clinching or driving force his authority was quoted. The R.G.S. made him a Fellow.

An eminent lecturer in 1897 remarked: "The theory that the gold-bearing reefs of the Witwatersrand will eventually be found to underlie the Karoo beds is borne out to some extent by Mr. F. P. T. Struben in his recently published work 'Notes on the Geological Formation of South Africa,' where he pointed out the probability—in fact, has determined conglomerates carrying gold extending in the Karoo formation from the north-west of Griqua Town to south of Prince Albert, which if proved throughout would embrace an approximate area of some 15,000 to 20,000 square miles."

Mr. H. G. Goch, referring in 1902 to Mr. Fred Struben, said: "The discovery of gold, or of the payable goldfields of the Witwatersrand, with all its vast developments, is due to the geological knowledge of one man."

During the years of his prospecting on the Rand he became familiar with every part of it; sometimes farmers brought him specimens of rocks from great distances, but would not reveal the place of origin. To their amazement, Struben could tell them exactly where they were found and the nature of the adjoining formations. This earned for him the title of "The Gold Devil."

Once men brought him ore which they professed carried visible gold. Struben examined it, pretended he was deceived, asked one of them if he had been in Pretoria lately, if he liked sweets, whether he had made a purchase—all of which elicited positive answers—then he inserted a knife, and from a cavity removed a cleverly inserted piece of gold-foil. The sequel can be left to a fruitful imagination.

So great is the riddle of the Rand that the following was published in the current year (1926) as a guide to those who attempt a solution of the puzzle:—

"A true appreciation of faulting, an adequate preliminary knowledge of the original constitution of the Rand, and a determination to face the obvious contradictions in conventional Rand geology!"

But to show the soundness of Mr. Struben's early knowledge and logical assertions the following extract is taken from the "Cape Times" of 1922, showing how this veteran of the Rand still holds, amid all the advance of education, a premier place in Rand geological knowledge:--

"Some years ago a certain section of mining men began to argue that a considerable number of existing mines of the West Rand were not on the main reef series, and, whether rightly or wrongly, their contention was that the main reef had originally been lost at no great distance to the west of the Langlaagte group of mines.

"One of the best-known exponents of this theory was Mr. Fred Struben. He expressed the opinion that the main reef series did not continue, as usually thought, to run practically due west, but turned sharply to the north, and thus was missed by the existing mines now working in the Roodepoort area.

"But, with one exception, nobody took advantage of this opinion, possibly because the whole subject was right out of fashion. The exception was Mr. E. Kumst, who through evil report and good stuck doggedly to the West Rand. As a result of steady and systematic prospecting, this gentleman was led to realise that Mr. Struben's theories were right, and during the last four days he, and those who are associated with him, have pegged some 30 claims on the easterly side of Roodepoort."

The discovery of the auriferous banket formation of the Rand was a great prize. Little wonder some have tried to appropriate the honour. In the annals of geological science there is none greater. In persistency and result it stands highest. In its world-wide benefit and enrichment to individuals and a multiplicity of professions it is unique. The world has never seen greater things than issue from this discovery.

IRREFUTABLE EVIDENCE

Where evidence is worth the name, surely no clearer signs of proof exist than presented here from the words and works of men of the highest repute over a period of more than forty years.

When the late Mr. Mathers visited the Witwatersrand in 1886 and 1887 he was careful not only to inquire into the potentialities of the district, but made diligent inquiry as to its discoverer. He met and conversed with all, and all that he has recorded was the tested and examined evidence of reliable witnesses. He published his account, which went to all parts of the world, was referred to by the leading papers of the time—and was challenged by none.

Mr. Mathers says:—

“As my visit to the Witwatersrand Gold Fields led me to form the opinion that when they are systematically and economically opened up they will become a great gold-producing centre, I took special pains to ascertain the truth as to their discovery. I thought that as years passed away reliable data on the point would be more difficult of access, and that if any disputation is to arise on the subject, it should take place now, when there are those on the spot ready to substantiate their claims to the honour of discovering an immense gold field.”

Mr. Mathers also tells us that at the time he obtained from Mr. Harry Struben an account in which “He stated positively that there can be no doubt that his brother, Mr. Fred Struben, was the first and only discoverer of the tilted conglomerates subsequently traced from farm to farm on the Rand.” After a searching inquiry Mathers

continues: "It will, I think, be admitted that to Mr. Fred Struben is due the honour of having discovered the Rand gold fields." Important written evidence exists. Reference to this has been made under "The Great Discovery."

The map of the Rand by Mr. Fred Struben in April, 1885, indicates where gold-bearing conglomerates had been discovered by him to that date.

In the Press of February, 1886, there is reference to Mr. Struben working the conglomerates, while later in that year a Pretoria correspondent wrote: "Mr. Fred Struben originally discovered the gold-bearing formation in these parts last year" (1885).

In the year 1897 a Pioneer dinner was held at Johannesburg: more than 50 members were present, each with over ten years' knowledge of the Rand, embracing the earliest period. Mr. Caldecott, Mr. C. Joubert, Mr. Harry Struben and his brother were on high.

Mr. Fred Struben, who had been absent from the Rand six years, was received with enthusiasm. A gentleman rose and, referring to him, said: "They ought to be proud to have with them that night the absolute discoverer of the conglomerate lodes of the Witwatersrand." "There were many of them who remembered the fields in their infancy."

Of that goodly company, with all their experience of what had happened, there was perfect accord with Mr. Britten's speech.

Reference has been made in another place to Mr. G. H. Goch's appreciation, and his sweeping verdict—"that the discovery and all its vast development is due to one man."

Than Mr. H. H. Webb, we have not found a more thorough, patient and unbiased investigator of these records. As President of the South African Association of Engineers, he had many opportunities for searching, testing and interviewing. In 1903 Mr. Webb, for a closing address, prepared an exhaustive account of Rand history to his day from all available sources. His words are

forceful; moreover, they are backed by the oldest dwellers and pioneers of the Rand. He concludes his great survey:—

“ There seems little doubt, however, that Mr. Fred Struben was the first to recognise the auriferous nature of this banket formation, and it will be seen that he actually opened up one of the conglomerate beds in March, 1885, which by panning showed a value of about 5 dwt. per ton.

“ In my investigations I have had no substantial proof of anyone else having worked them as early as that date. He backed his opinions as to the value of the Witwatersrand district as a gold producer by several years' hard and continuous prospecting on both quartz and banket formation, and certainly his name will always be the most prominent one associated with the discovery and early development of the fields.

“ In the interesting interviews I have had with Mr. Henry Nourse, Mr. Dirk Geldenhuis and Mr. Louw Geldenhuis, these gentlemen stated that they were constantly brought into touch with Mr. Fred Struben in the early days, and remember well his work all along the Rand, and they substantiate and agree with the statements and remarks herein made.”

The Mining Editor of the “ Rand Daily Mail ” in 1906 gave a survey of the history and concludes: “ It will be seen that Mr. Fred Struben was undoubtedly the pioneer of the Rand gold fields.”

Thorburn's inimitable account has been heard—it vibrates with the exactness of a faithful eye-witness.

A writer in 1921 asserts: “ The history of the mineralised range begins with Struben's doings.”

The writer is not unfamiliar with the claims of others. One gentleman based his claim on certain alleged activities on Kromdraai, and of journeys undertaken. Exact dates were given. In justice, these statements were taken as a basis and examined. It was found from official records that he was not in Africa at the time

when and where he claimed to have been active. Further, the dates given for journeys made and work on the Rand differ by as much as two years from the returns of the time.

Others from time to time have been heard, and how they discovered the Rand or particular parts of it. A gentleman tells us of his discoveries, and how, when Pretoria was little more than a sign-post, he found gold. In looking up the records of this Hercules, he was found to be scarcely a year old at the time.

To the late Mr. George Walker, who found the Main Reef in 1886, is very fittingly erected a stone recording the part he took on the Rand, yet for himself Mr. Walker neither claimed to have prospected, nor to have been the discoverer of its gold fields. In his account of 1924 he relates as a basis the earlier activities of Mr. Fred Struben, corroborates much that is recorded here, and ultimately shows in his own words how he "stumbled over the main reef."

One has heard the term "the discoverer of the payable gold fields." But surely much that is not worked to-day *was* payable. Moreover, what is not payable now may yield a handsome dividend in the future. The shore line discovered by Columbus may not have been the richest part—but it was the landing-place for the following millions. F. Struben knew more of the Rand than ever Columbus knew of the interior, yet we not unfittingly ascribe to the latter "The Discoverer of America." The honour does not depend on "payability" or otherwise.

There is another question that requires an answer. "Marais found gold on the Witwatersrand in 1854 and told the Volksraad." It is known that it was alluvial gold. What appears to be behind this case is a presumption that the Volksraad of 1884 and 1885 knew of unlimited wealth on the Rand, but for fear it would draw the foreigner they kept it a secret.

If we for a moment entertain such an inference, then it must be

carried to its logical conclusion. Think of what happened in 1885, when an official visited the Strubens. Remember the State was on the verge of bankruptcy; remember also that Dr. Jorrison came with a message from Kruger that, if the account of gold found on the Rand were true, to hasten and declare it. They knew of no other means whereby the country could be saved. Does this infer or savour in the slightest degree that in the Volksraad of that time there was knowledge of great wealth which they would not use?

We need to give President Kruger and his supporters more credit than can be found for them in this absurd story.

If the witness-box can accommodate and stand the strain, the assembled Pioneers of 1920 should be heard through Mr. W. P. Taylor. "It has, I believe, been claimed by several that they were the first discoverers of the Rand. As far as I can say the true discoverer was Fred Struben." Mr. Godfrey Lys, the first pioneer to follow the Strubens to the Rand, writes: "Frederick Pine Theophilus Struben is the only man who prospected and found the conglomerates."

In all the controversies that have raged round the question, it is a remarkable fact that where the Press have, without full knowledge of the facts, supported another claimant, instances exist where they have corrected their first print; and in every case, no matter who the claimant, the same man has always emerged from the contest with honour. Struben is as the Rand he discovered; the greater the effort to deprive him, the greater he appears.

A small percentage of the evidence that can be marshalled would be sufficient in a Court of Law. In very truth, there is so much in favour of Mr. Fred Struben, it has to be curtailed or withheld, lest the reader be wearied.

Life, its claims and assertions, are about as strong as the weakest part. The writer has stood back and viewed the life-work of Mr. Fred Struben, has sought for weak points where his claim could legitimately be set aside, and the honour of the first successful

prospector and discoverer of the auriferous conglomerates be honestly ascribed to another.

No pains have been spared to search hundreds of documents and somewhat obscure records. The claims of others have been impartially analysed. In the wide sweep taken, as also the microscopic investigation of every part, not only is there an entire absence of tangible and truthful evidence for another, but the overwhelming confirmation for Mr. Fred Struben leads one to marvel that his rightful honour was ever disputed. He stands magnificently supreme, impregnable, unique.

TRANSVAAL AND WORLD INDEBTEDNESS

It will be remembered when President Kruger sent Dr. Jorrisen to the Strubens, he declared the Transvaal on the verge of bankruptcy, nor was this a state secret. The Press of that time ransacked language to give expression to the gloom and fear that existed in all hearts at the threatening inevitable. They sat down to despair. But immediately the exhibit of gold from the Rand was announced, the wildest scenes of jubilation took place. For depression and cloud there was sunshine, for doubt and fear—confidence, hope, security. The Press of 1885 wrote all this, and much more.

While this condition existed in the State, and before the news of Struben's discovery reached England, a London paper in July, 1885, asked: "Is there to be a complete collapse of the gold-mining business of the Transvaal?" Thus from within and without there was fear.

Writing early in 1887, Mr. Mathers said:—

"Perhaps no town in the South African Republic has reaped such solid benefit from the influx of gold seekers and English money into the country as the Capital (Pretoria). Many of the Boers have received sums for their farms which it had never entered into their wildest dreams they would possess. Farms, which but a few years ago could have been bought for a mere song, have in recent times changed hands at extraordinarily high prices. Owners have sold out at figures ranging away up to £100,000 and beyond."

Far-seeing men looked beyond the confines of the Transvaal and South Africa. Within a year of Struben's great discovery prophecies were made, "that it would be of world-wide significance."

President Kruger seldom wasted his words. In 1888 he visited Heidelberg and Johannesburg. On the occasion he said:—

“ My officials had to work for poor salaries, still we worked in unison, and now the bowels of the earth have been opened and its riches are shed abroad amongst us, I have seen that they are well paid.

“ To you newcomers, because I will not call you strangers, I welcome you whether you have come here to become Burghers, or only to fill your pockets and return to your land; you have always obeyed the laws of the State, as I have seen now and again in Johannesburg, when the fields were opened. . . . We ought to give the diggers praise for the comparative orderliness preserved in your country.”

Further, Captain von Brandis, special Landdrost, proceeded to read an address of welcome from the inhabitants of the different Corporations of Johannesburg and district:—

“ He congratulated his Honour on the prosperity of the Republic, and the favourable state of the finances, and with pride drew attention to the fact that the Witwatersrand Gold Fields contribute greatly to that prosperity.”

The President replied in Dutch, his speech being translated by Mr. Koch, Customs Officer. He said:—

“ The reason of his visit was to bear eye and ear witness to everything that occurred, so that he would not have to listen to anybody. Looking around he could not help imagining that he was once more in civilised Europe. It was a fact that the Gold Fields of Johannesburg carried the name of the Republic everywhere; and he trusted the Government would go further, and increase the civilisation, so that nobody on the face of the earth could say Johannesburg was not in the foreground in this respect,” &c.

But a few moments ago we read of a cowering people trembling under the threatening fall of the State. Now we have the President and chief officials rejoicing in a prosperous Transvaal. They ascribe prosperity and their higher salaries to the discovery of the Wit-

watersrand Goldfields—a great admission—Hansard never contained anything like this.

From her apparent insignificance the Transvaal rose, as her President said, till “ the goldfields of Johannesburg carried the name of the Republic everywhere.”

The eyes of the world became riveted on this State. She received a name and was given a prominence beyond her expectations. Among mining centres she is second to none.

The greatness of Johannesburg's output meant also a vast inflow. Men and material, the best the world could give, were required—nearly every profession was affected. Early in her history it was admitted that the finest mines and machinery of the world were at Johannesburg. The nature of her product has done much to solve world problems.

That able statesman Mr. C. J. Rhodes wrote: “ The Rand is the biggest thing the world has seen.”

Mr. H. H. Webb, as President of the South African Association of Engineers, has told us in his 1903 review: “ The community depending on the mining industry means more or less the whole of South Africa.”

While in 1906 Mr. F. B. Stephens, the Mining Editor of the “ Rand Daily Mail,” wrote:—

“ Truly the rise of the Rand may be termed the most wonderful story in the history of mining.”

“ The Rand is to-day the most wonderful mining field the world has ever known. It is possible its equal will never be found.”

Statistics to 1926 are given by Mr. Hedley A. Chilvers. After reviewing the far-reaching discovery of Mr. Fred Struben, he adds:—

“ Since then the Rand has produced roughly £850,000,000 worth of the precious metal. That is about 80 per cent. of Britain's war debt to America, and about 25 per cent. of all the loans raised to pay for the Great War. Upon its wealth—for it now contributes 40 per cent. of the revenues of the Union—the city of Johannesburg has grown up on desert veld in forty years. This epitomises the romance of the Rand—unparalleled in industrial history.

“ Johannesburg may now be described rightly as the greatest of mining cities. The claim was put forward recently in respect of Butte, Montana ; but Butte has a population of 80,000, whereas the latest census of Johannesburg reveals a European population of 164,381 whites and 132,749 coloured, making a total of 297,130, or nearly four times as many as Butte. Moreover, the population of the entire reef is actually between 600,000 and 700,000.

“ To the world’s gold output last year of £81,000,000 the Rand contributed 52 per cent. and the United States of America 14 per cent.

“ In 1925 the Rand milled 28,500,000 tons of rock, which means that the mills of these goldfields handle as much tonnage in a fortnight as do the Capetown docks in a year.

“ The deepest shaft on the Rand—the Turf shaft of the Village Deep, immediately south of the Carlton Hotel, in the centre of the city—is 7400 ft. deep from the surface. It would take nine Woolworth buildings, one over the other, to reach the bottom of it.

“ Two hundred thousand persons—19,500 whites and 180,000 natives—carry on the mining work between them.

“ The underground excavation on the Rand to date amounts to 3400 miles, which would suffice to drive a tunnel from Edinburgh to Quebec, or from Capetown to Khartoum. The world’s largest mill, the 600-stamp battery of the Randfontein Central, is 630 ft. long and crushes 200,000 tons of ore monthly.”

The “ South African Mining and Engineering Journal,” published :

“ The discovery of the auriferous conglomerates of the Witwatersrand was an event that effectively inaugurated the era of definite development and progress in South Africa, and set on foot an industry which in one way or another has had a direct and beneficial influence upon the financial activities of the whole world.”

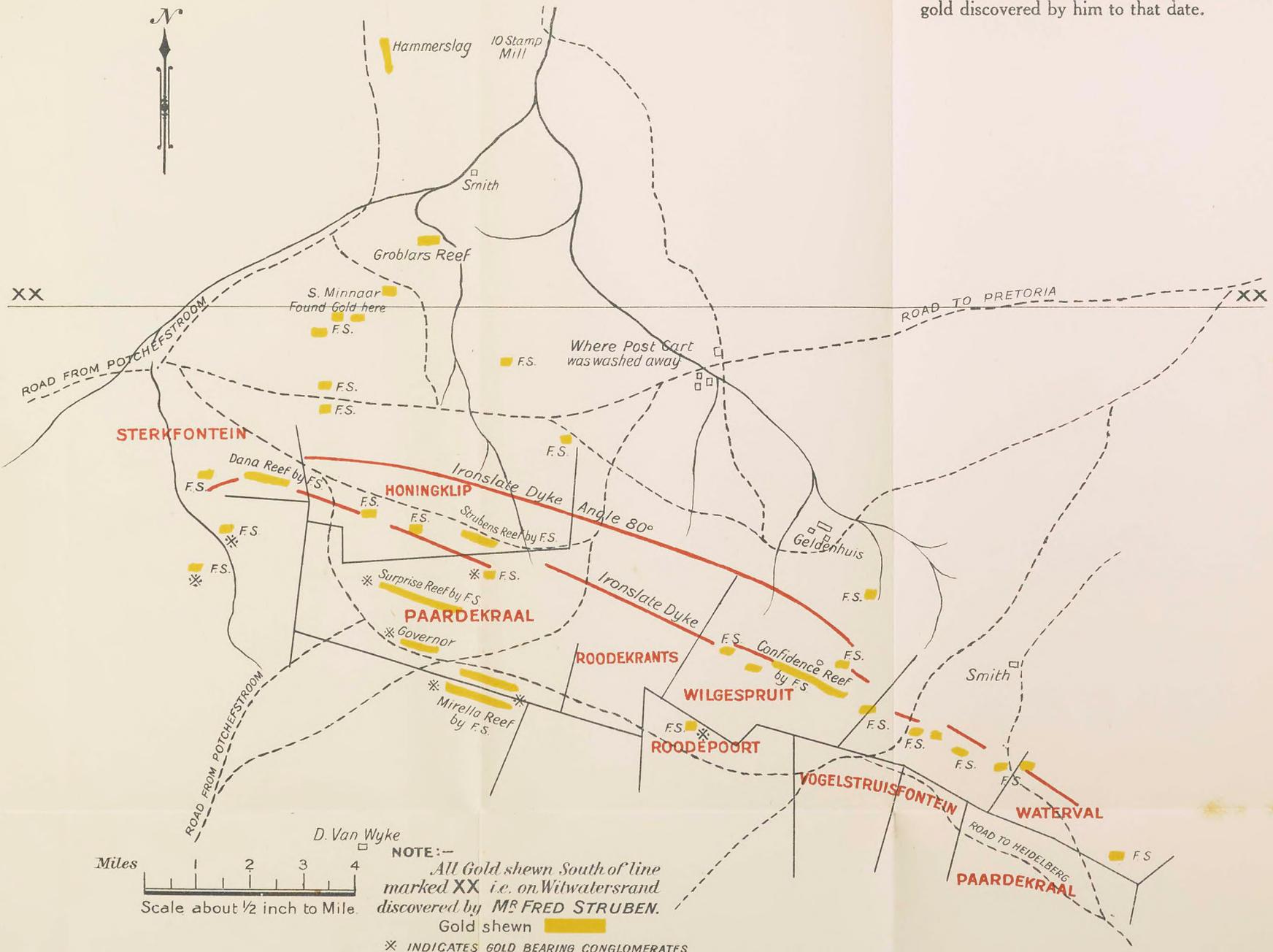
The Rand continues to pour out its golden treasure in ever-increasing magnitude, yielding from its once hidden store more than three million pounds’ worth of gold every month—sufficient to keep an otherwise erratic world well balanced.

Chronological Order of Events to the Founding of Johannesburg.

Date.	Chief events. Where not otherwise stated, they refer to Mr. Fred Struben.
1851	F. P. T. Struben born at Maritzburg, Natal.
1867	Began investigation of Geological formations in South Africa.
1870	At Vaal River and Kimberley.
1871-3	At Pilgrim's Rest.
1874-81	Generally prospecting in all parts of South Africa.
1882	At Barrets-Berlin.
1883	Discovered gold in Waterburg.
December, 1883 ...	Investigated formations of the Witwatersrand.
January, 1884 ...	Discovered gold at Sterkfontein.
February, 1884 ...	Sterkfontein partly secured by brother.
March, 1884 ...	Syndicate formed to work and take over Sterkfontein.
Early April, 1884 ...	Conglomerate pebbles found on Paardekraal.
End April, 1884 ...	Two beds of conglomerates found on Paardekraal.
September, 1884 ...	Discovered "Confidence Reef" on Wilgespruit.
	Mr. H. W. Struben arrived at Wilgespruit.
	Journey taken with brother to Pilgrim's Rest to see Stamp Mill.
End of 1884 ...	Brother returned to Pretoria, Mr. F. Struben to Western Rand.
	Juta contract. To prospect on Honingklip.
March, 1885 ...	Discovered "Struben's Reef"—a continuation of the "Confidence" on Honingklip.
	Discovered gold-bearing conglomerates on Paardekraal.
April, 1885	Letters to brother in Bushveld, to Mr. G. Lys, Maritzburg, and to others, with map (reproduced), announcing discovery of auriferous conglomerates.
May, 1885	Return to "Confidence Reef."
5th June, 1885 ...	Exhibition at Pretoria of Rand gold.
About July, 1885 ...	Mr. Dirk Geldenhuis found continuation of "Confidence Reef" on western half of Wilgespruit.
10th August, 1885 ...	Government concession to Strubens for the discovery of gold on the Rand.
August, 1885 ...	Auriferous conglomerates on Paardekraal and Roodepoort shown to an expert.
October, 1885 ...	Auriferous conglomerates shown to expert from Natal.
	Mr. Godfrey Lys joined the Strubens on the Rand.
November, 1885 ...	Visit to Strubens by "Natal Mercury."
	Mr. Henry Bantjes arrived on Rand.
About November, 1885	Mr. Walker arrived on Rand and employed by the Strubens.

Date	Chief events. Where not otherwise stated, they refer to Mr. Fred Struben.
December, 1885	Strubens erect first stamp mill on the Rand.
January, 1886	Visit to Strubens by "Transvaal Advertiser."
About January, 1886	Conglomerates on Roodepoort shown by Mr. Fred Struben to Mr. H. Bantjes. See position on 1885 map.
February, 1886	Conglomerates from Roodepoort crushed for Mr. H. Bantjes.
March, 1886 ...	Brothers Geldenhuis discovered quartz reef on Bramfontein.
February or March, 1886	Bird Reef worked by Mr. F. Struben. Fifty tons of conglomerates yielded about 6 dwt. per ton.
April, 1886 ...	First consignment of gold from Rand, sent to Standard Bank by Strubens.
April or May, 1886 ...	Eastern part of Bird Reef worked by Mr. H. Bantjes.
May, 1886 ...	Mr. Walker found "Main Reef" on Langlaagte.
June, 1886 ...	Mr. F. Struben found "Main Reef" on western half of Vogelstruisfontein and sunk shaft 40 ft. deep.
August, 1886	Mr. J. G. Bantjes arrived on Rand.
8th September, 1886	Mr. Jan Meyer arrived on Rand.
September, 1886 ...	Main Reef found on eastern portion of Vogelstruisfontein by Bantjes.
20th September, 1886	Information given to Government at Pretoria of rich reef discovery.
From June to about September, 1886	Capt. Maynard, Col. Ferreira and Mr. John Charlton on Rand.
September, 1886 ...	Mr. Henry Nourse found "Main Reef" on Doornfontein
June, 1888 ...	Mr. Dirk Geldenhuis traced "Main Reef" on Turffontein.
	Two thousand people on Rand.
	Main Reef traced on Driefontein by Mr. F. Struben and shaft sunk 50 ft. deep.
	Trial crushing of conglomerates by Strubens for Bantjes from Vogelstruisfontein; 25 tons yielded 35 oz. or 1 oz. 8 dwt. per ton.
	Nine farms on Rand declared a public digging.
	Four thousand people on way to Rand.
	Government mark off a township (Johannesburg).
	Arrivals on Rand included: Messrs. J. B. Robinson, Jeppe, de Villiers, Wm. Knight, C. D. Rudd, C. J. Rhodes, H. S. Caldecott, and G. H. Goch.
	Mr. Wm. Knight formed a company.
	Mr. Fred Struben retired from Rand.

THIS is an exact copy of the Map sent by Mr. Fred Struben to Pretoria on the 8th of April, 1885, showing the position of all gold discovered by him to that date.



MR. FRED STRUBEN'S MAP OF THE RAND

DATED 8th April, 1885

