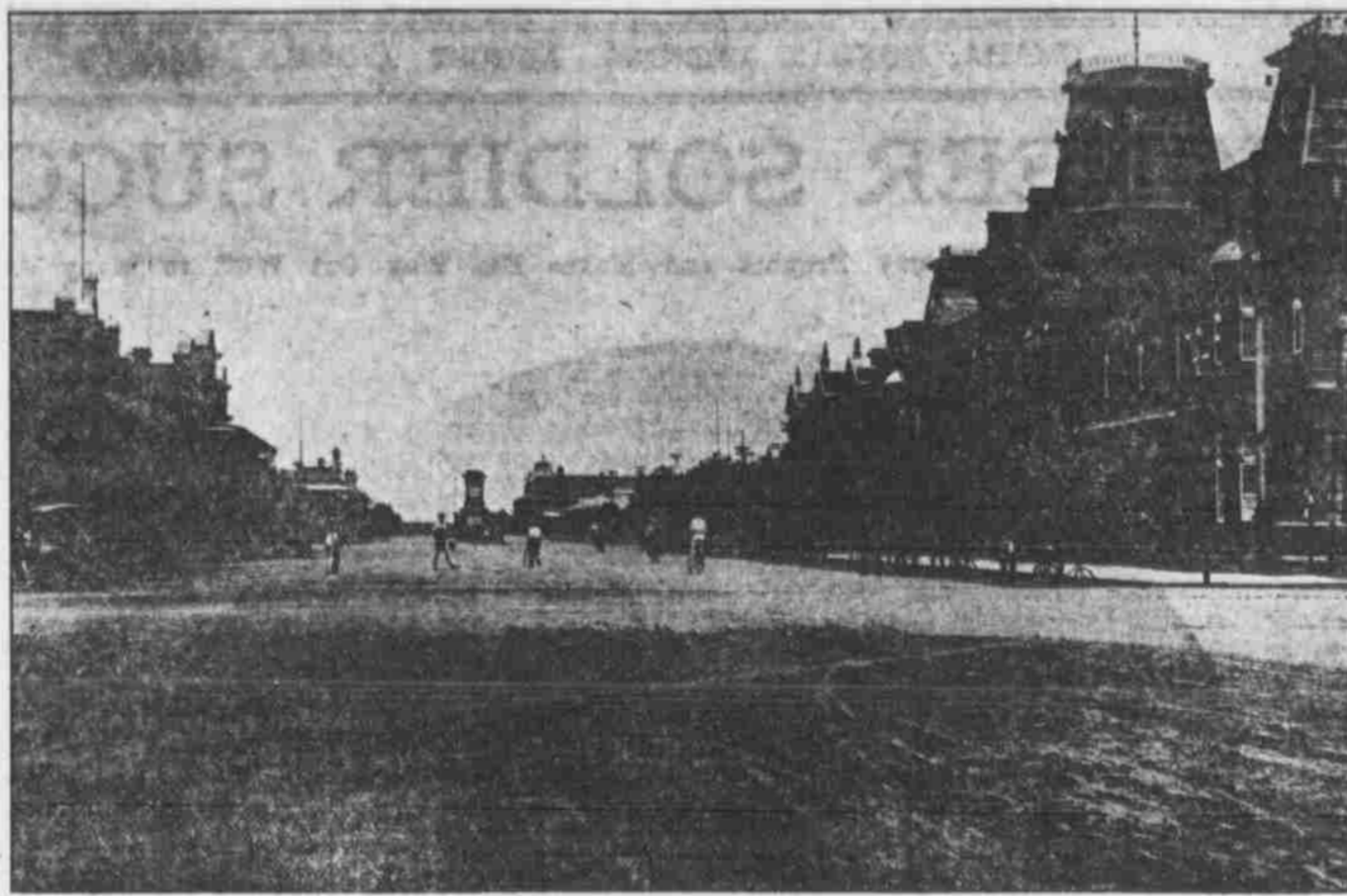


# Many Changes Have Taken Place in Africa Since Lobengula's Time



A NATIVE CORNCRIB.



MAIN STREET OF BULAWAYO IN 1908.



A MATABELE WITCH DOCTOR.

(Copyright, 1908, by Frank G. Carpenter.)  
**B**ULAWAYO—(Special Correspondence of The Bee.)—Stand with me in the public square of Bulawayo in front of the bronze statue of Cecil Rhodes and take a look at the changes that are going on in Rhodesia. We are in sight of the hill upon which the notorious African tyrant Lobengula had his kraal, and within an hour's walk of the crocodile pool into which he threw, tied hand and foot, any of his subjects who had offended him. The pool was full of man-eating reptiles and the criminals thus executed needed no burial.

of the country. There are about ninety telegraph offices opened, and the telegraph wire in use is almost long enough to reach through the earth at the equator. Last year about 250,000 telegrams were received and dispatched, and the revenue from the telegraphs and telephones approximated \$150,000. As to the railroad service, I will speak about that in the future. It is excellent for a new country, and one can travel here almost as comfortably as at home.

tion of Cecil Rhodes. It is on a hill, and in the grounds is the very tree under which this savage African king sat upon his biscuit-box throne and gave forth his decrees of life and death. Some of his numerous family still live, and I have a photograph before me of his favorite daughter. She measures 5 feet 11 inches from her bare yellow beils to her shaved black crown, and is fully as lusty as the old tyrant was in his prime. There are many men here who knew Lobengula. He was enormous. He stood 6 feet tall and weighed about 300 pounds. He was so fat that when he squatted on his biscuit box his flesh hung down in folds over his hips, and when he walked his elephantine frame rolled from side to side. He had bulging blood-shot eyes, thick lips and was the personification of cruelty. Stanley describes him as one of the bloodthirstiest of African kings, and Frank Thompson of Natal, who negotiated the mining rights of Mashonaland for him for \$500 a month, gives an incident of how he treated a native warrior who had drunk some of his beer. It was at the time of a great dance of Lobengula's women were bringing the beer to him. This man snatched a gourd and took a sip. The offense was reported to the king and the criminal was dragged before him. As he stood there Lobengula looked at him and said: "You drank the king's beer. That nose of yours is guilty. It smelt the beer. Let it be cut off." And with that the executioner cut off the man's nose. The king then said: "Those eyes of yours saw the beer. They are a temptation to you. They are guilty. They should be put out." And with that the executioner did the gouging.

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They believe in witchcraft. All of these South African natives believe in witchcraft and every tribe has its witch doctors. In coming here I traveled for one day with the chief native commissioner of Rhodesia, a man who has charge of all the negroes of Mashonaland. He tells me that the Mashonas have trials by ordeal to detect witches. One of the tests is heating a stone red hot and making the accused lick it with his tongue. If he is guilty his tongue will blister. If not he is innocent. Another test is by certain medicines. If the medicines make the man sick or cause his death he is supposed to be a witch. If not, he is allowed to free. A third test, used especially for thieves, is to drop a stone in a pot of boiling water. The accused must take his oath with his bare hand, and if the hand

showed no sign of scalding the man is cleared. If his hand burns he is adjudged a thief and punishment follows. The natives believe in the justice of these tests and submit to them. A white trader of the Zambesi told me that his misadventure a shirt not long ago and accused his native servant of stealing it. The boy said he was innocent, and the trader believed him. The next day the boy came in with his hand terribly scalded and confessed his guilt. In his cooking he had overturned a pot of hot water upon himself and he superstitiously thought that the burning occurred on account of his theft.

Another punishment is laying red-hot stones on the bare stomachs of the guilty ones, and among some of the tribes instances are known in which the witches have been roasted over slow fires. I understand that the witch doctors are by far the most important members of the tribes. They are supposed to be divinely appointed and especially authorized to use magic for the good of the tribe. Every witch doctor has to undergo a course of training before he can practice, and he must exhibit certain idiosyncrasies which prove him fitted for his job. He falls into trances and pretends to have seen spirits. He has a special headdress of fur and feathers, and has charms of many kinds about his neck. He must be able to handle poisonous snakes. He must be a sleight-of-hand performer and able to make the people believe he has miraculous powers. As a rule he kills more than he cures, but this does not seem to affect his reputation.

## What is Going On in the Field of Electricity

**"Wireless Attractions."**  
**T**HREE wireless stations established in the Alps by the Swiss government catch a great number of long distance messages not intended for them. The stations are on the Right and St. Gothard summits and at Dailly, above St. Maurice. According to an official report just published, the authorities spent £200 during the last year on experiments with wireless telegraphy across the mountains and the results were most satisfactory.

Indeed, it is hard to realize that it is now only fifteen years since this was the capital of the Matabele. I rode out today to the government house, which stands on the very site of the great hut in which Lobengula lived and ruled. It is reached by a wide drive shaded by trees, which were planted at the direction of Cecil Rhodes.

It is not alone because the tungsten lamps take a better quality of light than other artificial illuminant that it takes first place in the lighting world. But this new lamp is the perfection of economy and will give three times as much light as the ordinary electric light for the same amount of money.

The province of Ontario has throughout its history suffered from the serious handicap of having no discovered coal within its borders. In less than eighteen months the electrical industry is bent toward economy for both producer and consumer. The latest development in electric light, which will save two-thirds of all the electric light bills, is but another long step in the right direction.

Exhaustive tests of the telephone as a medium of transmitting train orders have been conducted on the Burlington system during the last three months, and the results are regarded as highly satisfactory. The results of the tests are thus summarized:

**Calcium Carbide.**  
 Numerous factories in France are engaged in the production of calcium carbide by hydro-electric agency, some of them being situated in the alpine territory and some of them in the Pyrenees. The Buller patents for the manufacture of this substance have been legally pronounced to be the only ones valid; therefore all these works are compelled to pay royalties to the proprietors of these patents, and the same applies to foreign carbides imported into France. These patents will expire, however, on February 9, 1910, and from thenceforth the French electro-chemical preparations will be no longer protected against foreign products, which can be manufactured at a much lower rate than carbide.

**Wives Sold for Cattle.**  
 The native commissioner tells me that marriage among these negroes is largely a matter of bargain and sale. The groom pays the bride's father a certain sum for his daughter. The usual price for a strong and good-looking girl is four cows, or if she be the daughter of a chief she may bring as much as five or six. It used to be that girls were often betrothed and bought when they were babies, the groom paying a part of the purchase price at that time and the rest by installments. This practice has been stopped by the government, as it resulted in many an old man possessing several very young wives; and also as the girls frequently fell in love with young men, and the strifes between their old prospective husbands and the young lovers, when they wanted as husbands, was great.

**Towns of Clubs.**  
 Bulawayo is a town of clubs. It has several social organizations, a cricket club, a tennis club and a race track which is two miles around. The town has now five or six thousand people and its citizens need other exercise than being chased by a native black with a spear in his hand.

At a recent sitting of the French Academy of Sciences, some communications of an exceptional interest were made. M. Polonceau read a note from M. Jean Becquerel on the nature of positive electricity and the existence of positive electrons. According to this statement, one charged with positive electricity has been found in a Crookes tube. The importance of this discovery lies in the fact that it constitutes a fresh contribution to the problem of the constitution of matter.

**Canada Using Niagara Power.**  
 The largest and most complete system for electric transmission ever attempted, says Popular Mechanics, and the only public system in the world which is provincial in size, will soon inaugurate a new era in the history of the province of Ontario. After eight years of struggle, difficulty and agitation the hydro electric commission of that province has at last succeeded in putting through its gigantic project of furnishing government power to all the cities, towns and villages in central Ontario from the marshallable power of Niagara Falls.

**Electric Safety Devices Tested.**  
 A train on the main line of the Burlington road, near Chicago, going at a speed of fifty miles an hour the other day, ran past a block signal which stood at "danger," and was automatically brought to a full stop 1,500 feet beyond. While the test was being made a score of the foremost operating men of the United States, representing railroads from coast to coast, either rode on the train or watched from the side of the track the operation of the new automatic device for stopping trains when the engine crews have disregarded the warning signal. The experiment was conducted for the benefit of the joint committee of the American Railway association, of which F. C. Rice of the Burlington is chairman. The joint committee is made up of members of the train rules and safety device committee of the association.

**Train Orders by Telephone.**  
 The telephone is faster and more flexible, the dispatcher being able to get far more detailed information as to what each train is doing, even when occasional repairs, talking directly with the conductor or engineer.

**Before the Advent of Electricity.**  
 The wigwag Indians who came out to Denver from Tammany Hall traveling on five special trains, groused a good deal about the handlings of the journey, but they knew nothing about the meaning of such things as compared with the tribulations of our old pioneers.

**Poor Labor Supply.**  
 The natives are bad farmers and they do not form a good labor supply. In raising their own crops they do no plowing. They merely hoe the ground over and drop the corn. The crop is weeded once or twice and then allowed to ripen. Nothing is known about fertilization, and, as the soil is virgin, this is not necessary as yet. The negroes are largely used to work in the mines of Rhodesia, and there is a demand for them in those of the Transvaal. The whites of this country object to their transportation on the ground that they are needed for the local development and for the building of railroads, both in southern Rhodesia and in the lands farther north. I understand that the natives have been increasing in number under the rule of the white men, and that they are better off than ever before.

**Rhodesia's Wonderful Progress.**  
 This gives one some idea of how Rhodesia is progressing. It is charged that the development has been comparatively slow. It is not so when one remembers that this whole territory is only two decades from absolute savagery. Twenty years ago neither life nor property was anywhere safe, and the country was owned by negro tribes which were warring with one another. Today order is everywhere kept, and the natives have been reduced to peaceful subjects. The country has now something like 2,500 miles of railroads, and in southern Rhodesia alone there are more than 3,000 miles of wagon roads. In Mashonaland and Mashonaland something like 75,000 acres have been surveyed by the government, and in addition there is a large amount of land which has been surveyed by private owners. All along the railroad towns have sprung up in which are government offices, banks, churches, hotels, schools and public libraries. There is a fine hospital here at Bulawayo and others at Salisbury, Umtali, Victoria and Gwelo. The postal service has been extended until it now reaches every part of the country, mails being sent by runners to the borders of Lake Tanganyika. In southern Rhodesia there are seventeen money order offices, and during the past year something like 1,500,000 letters and post cards were sent to other parts of South Africa, while \$50,000 went over the sea. The postoffice revenues last year were in the neighborhood of \$200,000. Moreover, southern Rhodesia has now postoffice savings banks, and her deposits in them already exceed \$300,000.

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**Tungsten Lamps.**  
 Tungsten, or Wolfram, is a metal discovered in 1781 and named from the Swedish "tung" (heavy) and "sten" (stone). It is not found native but occurs as tungstate of iron and manganese in the mineral "wolframite," and as the calcium tungstate. The pure metal, which was produced only a few months ago in the electric furnace, is a bright steel gray, a hard and brittle crystalline substance. It is also used to crystallize the temper and tenacity of steel for hard tools. The fusing point of tungsten is higher than any other metal, which enables it to operate at the very high efficiency obtained in the tungsten lamp.

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