

Long Distance
and Rural Lines

1900	— 222 Miles
1901	— 222 "
1902	— 380 "
1903	— 740 "
1904	— 892 "

The Bell Telephone Company of Canada. Limited.

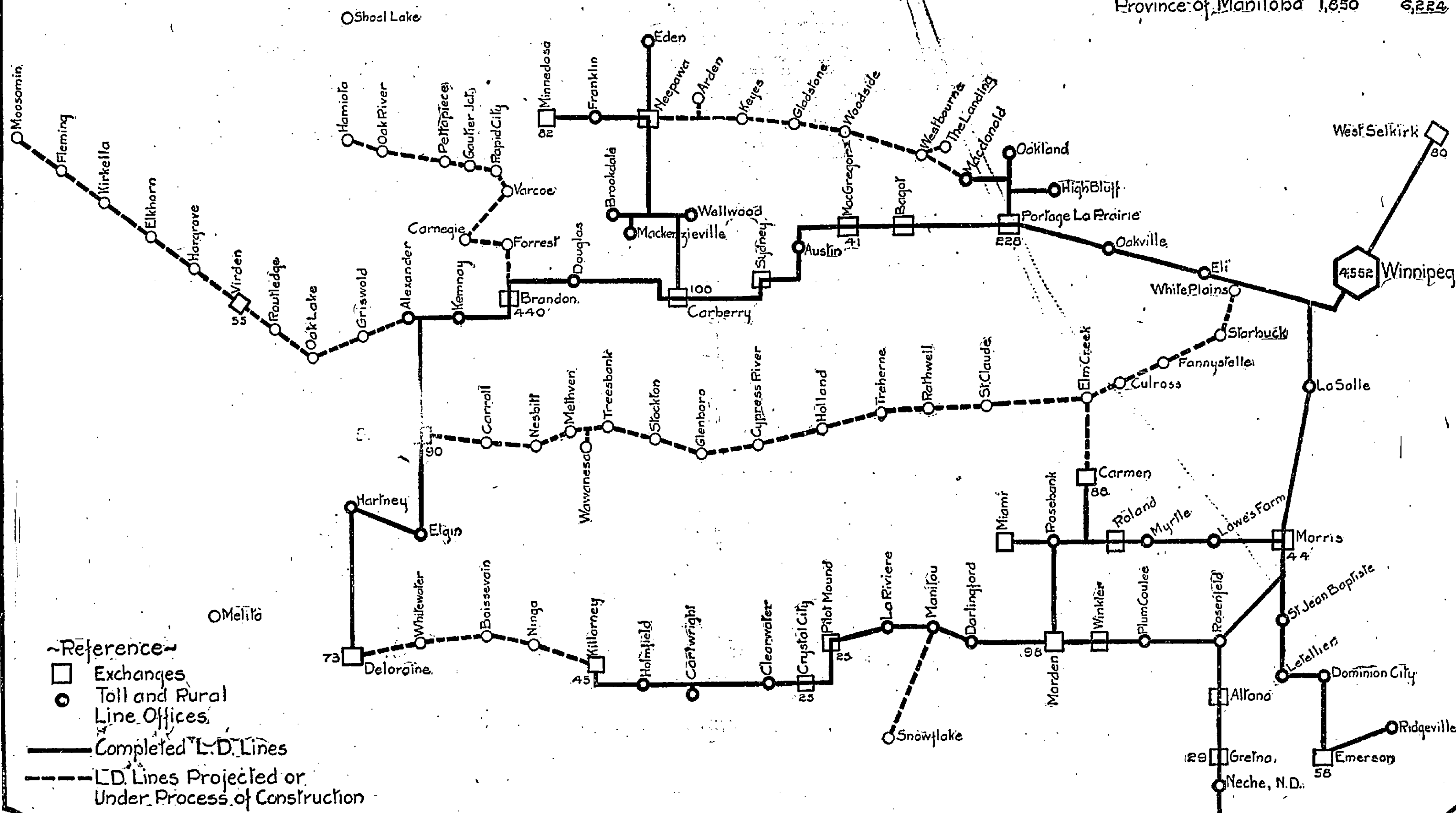
NORTHWEST DEPT.

LONG DISTANCE LINES & EXCHANGES IN MANITOBA

Exchange Subscribers

	1900	1905
Brandon	214	440
Carberry	61	100
Morden	67	98
Portage la Prairie	148	228
Virden	113	55
West Selkirk	29	80
Winnipeg	1,318	4,552

Province of Manitoba 1,850 6,224



BELL TELEPHONE CO'Y

OF CANADA, LIMITED

Rapid Development in Construction of Exchanges and Long Distance Lines in Manitoba

The above map shows the long distance lines and exchanges of the Bell Telephone Company of Canada in operation and projected in the province of Manitoba. There are also given some statistics which mark the remarkable development of this system during the past five years.

The Bell Telephone Company of Canada established itself in Manitoba in 1881, buying out a small exchange in Winnipeg, then owned and operated by Mr. Horace McDougall. Though there were but a few subscribers, and the equipment was primitive, and the service not by any means as efficient as it is to-day, the rate charged was \$50 per annum.

In 1882 the company branched out by establishing an exchange at Portage la Prairie and a year later an exchange was put in at Brandon. But in 1884 the company had only 340 subscribers in Winnipeg, 17 in Portage la Prairie and 51 in Brandon.

With the collapse of the boom, the telephone business suffered with every other interest. But the company never lost faith in the country and carried the burden until the turning of the tide. To the credit of the company, those who remember those dark days will bear testimony that the service was never allowed to deteriorate because of the depressing conditions which so universally prevailed. The result has justified their confidence, but the facts we have stated should not be entirely forgotten.

First Long Distance Line

The first long distance line, if it may be called such, was the connection, about 20 years ago, of a small exchange in West Selkirk with Winnipeg. But the development of the long distance telephone service of the province—we may say, of the Northwest—began in 1900. In this year the Bell Telephone Company built a copper metallic line from Winnipeg to Portage la Prairie and Brandon. Since that time has sprung into existence, after the manner of doing things in this country, the very extensive and complete system shown in the map above, which comprises to-day nearly 2,000 miles of wire and connects and consolidates, commercially, as well as socially, between 5,000 and 7,000 subscribers. The company has, within a couple of years, embarked in rural telephone service. We have not been able to show those lines on our map, but hundreds of farmers have already availed themselves of the admirable facilities which the company offers for this class of service.

Farmers' Rural Lines

For farmers' telephone lines alone the company will use this year over six thousand poles and when the work of the season is completed this service will include lines radiating within a ten-mile district from the exchanges

at Deloraine, Killarney, Crystal City, Pilot Mound, Manitou, Morden, Emerson, Carman, Souris, Brandon, Virden, Minnedosa, Neepawa, Carberry, MacGregor and other places.

At the present rate of development it will not be long before every enterprising farmer will have his telephone connecting with the merchant, the grocer, the doctor, the veterinary, and, best of all, with his neighbors. The isolation of farm life is already a thing of the past, even in this country of ample acres.

Winnipeg Exchange

Winnipeg has a telephone exchange which for modern efficiency is not surpassed by anything known to science. An evidence of the manner in which the growth of this city surpasses all expectations and calculations is seen in the fact that the switchboard, at present in use, which was designed to accommodate any probable increase of subscribers during ten years, though placed only four years ago, has already reached its maximum capacity, and the company seeing this has been preparing for still greater increase in prospect.

There is one feature of the problem which we have just mentioned which the public do not understand, but which is a serious consideration to the company. To install a new and larger switchboard means that there must be erected a new building to contain the board and all its appliances. This affords an explanation for the erection of the new building which the company has now about ready for occupation.

New Switchboard to Cost \$180,000

The new switchboard to be installed will cost over \$180,000. In installing a new switchboard every subscriber's line must be connected with the new switch and the whole system thoroughly tested and tried before the lines are disconnected from the existing board in the old building. Then the latter, which cost many thousands of dollars only four years ago, will become practically junk. This is by no means exceptional in the history of telephone development. In Winnipeg, during a period of sixteen years, the central office apparatus, style of telephone, system of wire construction, etc., has been entirely changed four times and the company has built two new buildings, or in other words, the whole investment has been repeated, at an added cost each time, every four years. This means a depreciation on the plant of 25 per cent per annum. This is a very practical illustration of the relation of depreciation to telephone management and maintenance, but it is a feature which those who discuss telephone problems theoretically almost unanimously insist upon minimizing, or more frequently ignoring altogether. It appears to be a fact which can be impressed only by dear experience.

Although to-day the standards of material and methods in telephone construction are much better than those formerly, yet they are also more

costly. Expert engineering has become a chief feature of the business and a standardizing of equipment an indispensable factor. From even a casual consideration will therefore appear the necessity for one system, one administration, and one source of production of apparatus and instruments.

Everything Made in Canada

The Bell Telephone has extensive factories in which everything used by them is produced. In this, profit-saving is not the chief advantage, though this is an important consideration; standardizing equipment, keeping pace with the rapid evolution of electrical devices, adopting the practical, rejecting the impractical, and keeping the supply always equal to the demand, are some of the more important advantages—we may say, necessities—of a modern telephone organization.

There are some very simple factors of the telephone business which subscribers, as a rule, do not understand—for instance, that there are two wires connecting every telephone in the subscriber's premises with the central office, used exclusively for his service. Similarly a subscriber, talking from Winnipeg to Brandon, has exclusive use of two copper wires from one city to the other during his conversation. Then it is not practicable to add indefinitely, as is generally supposed, to the number of offices on a long distance line, eight being the maximum

having a proper regard to efficient service. Hence the increased number of lines radiating from principal centres with through lines connecting the larger offices.

Another feature not generally realized is the higher cost of long distance line construction in this country. Poles have to be brought from the Ratin river country, and the cost of lines, exclusive of switches and instruments, has been from two hundred to two hundred and fifty dollars per mile.

It is safe to say that not one person in a thousand who constantly uses the telephone system has any adequate conception of the extent and intricacies of a modern central telephone equipment. It is one of the most interesting studies to an inexperienced person, and the suggestion has been made that the company would be conferring a favor on its patrons and the public if they were to set apart a visitor's day for the inspection of the exchange. Over 4,000 lines now centre at this point. The wires are brought to the building underground. The system for distributing these wires, the devices against lightning and other high potential currents, the central supply of current for the whole system, are all most interesting. In the operating room a hundred young ladies are employed to keep up the continuous service, an average of 80,000 calls being received per day. The telephone switchboard in Winnipeg is unquestionably the busiest place in Canada, unless it may be the main "Centrale" in Toronto and Montreal. It is a rare sight to watch the operators at work

and our readers will be well repaid if they avail themselves of the first opportunity of seeing it.

A word with regard to the switchboard itself. The object in its design has been to make it absolutely automatic so far as the subscriber is concerned. The user has only to lift the telephone from the hook; this automatically lights a lamp in front of the operator giving notice that she is wanted on that particular line. She has but to insert a plug in the subscriber's jack, take the order and complete the connection by inserting a plug in the jack of the subscriber asked for. The board, with its most complete and ingenious equipment, automatically does the rest. There is no occasion for cutting in or other interruptions by the operator, or for cutting conversations off before they are completed. Each subscriber in hanging up his telephone automatically gives the signal for disconnection.

The prime object in this board is by automatic devices to relieve the subscriber of everything but the simplest act in operating the service, and to place whatever action is required on expert operators.

As a business community, absorbed in its own immediate interests, we may fail at times to appreciate that in this city we enjoy a thoroughly up-to-date telephone service, and that it is being developed, throughout the province, more generally than we have realized.

For this reason this map will be found interesting and useful.

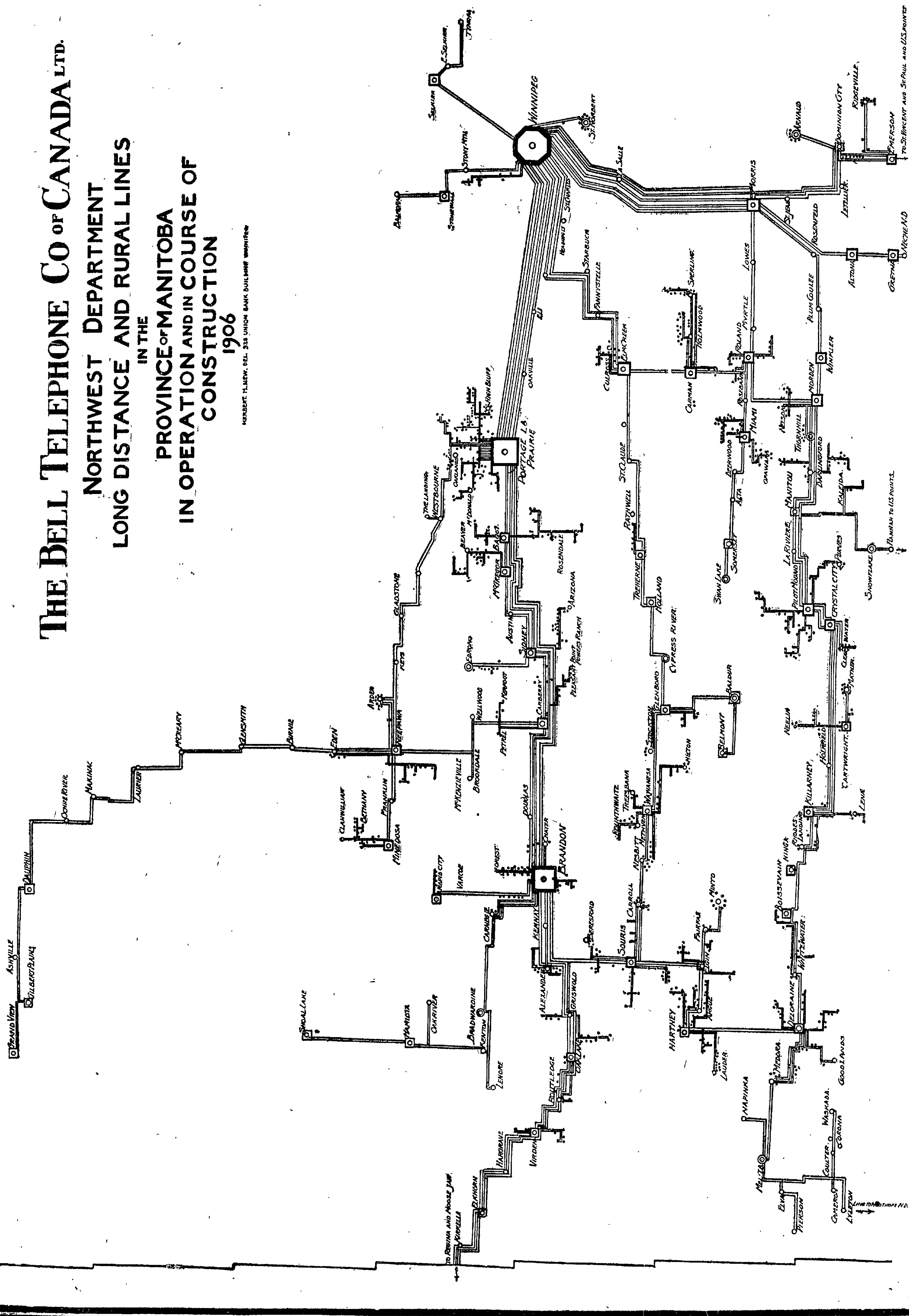
THE BELL TELEPHONE CO OF CANADA LTD.

NORTHWEST DEPARTMENT
LONG DISTANCE AND RURAL LINES

IN THE

PROVINCE OF MANITOBA
IN OPERATION AND IN COURSE OF
CONSTRUCTION
1906

HERBERT H. NEW, DEL. 533 UNION BANK BUILDING, WINNIPEG



1906
THE BELL TELEPHONE CO. OF CANADA LTD.
LONG DISTANCE AND RURAL LINES
IN THE PROVINCE OF
MANITOBA
COMPLETED AND APPROVED FOR CONSTRUCTION
 (HERBERT H. NEW, DEL. 928 UNION BANK BLDG.)

THE BELL TELEPHONE COMPANY OF CANADA IN MANITOBA.

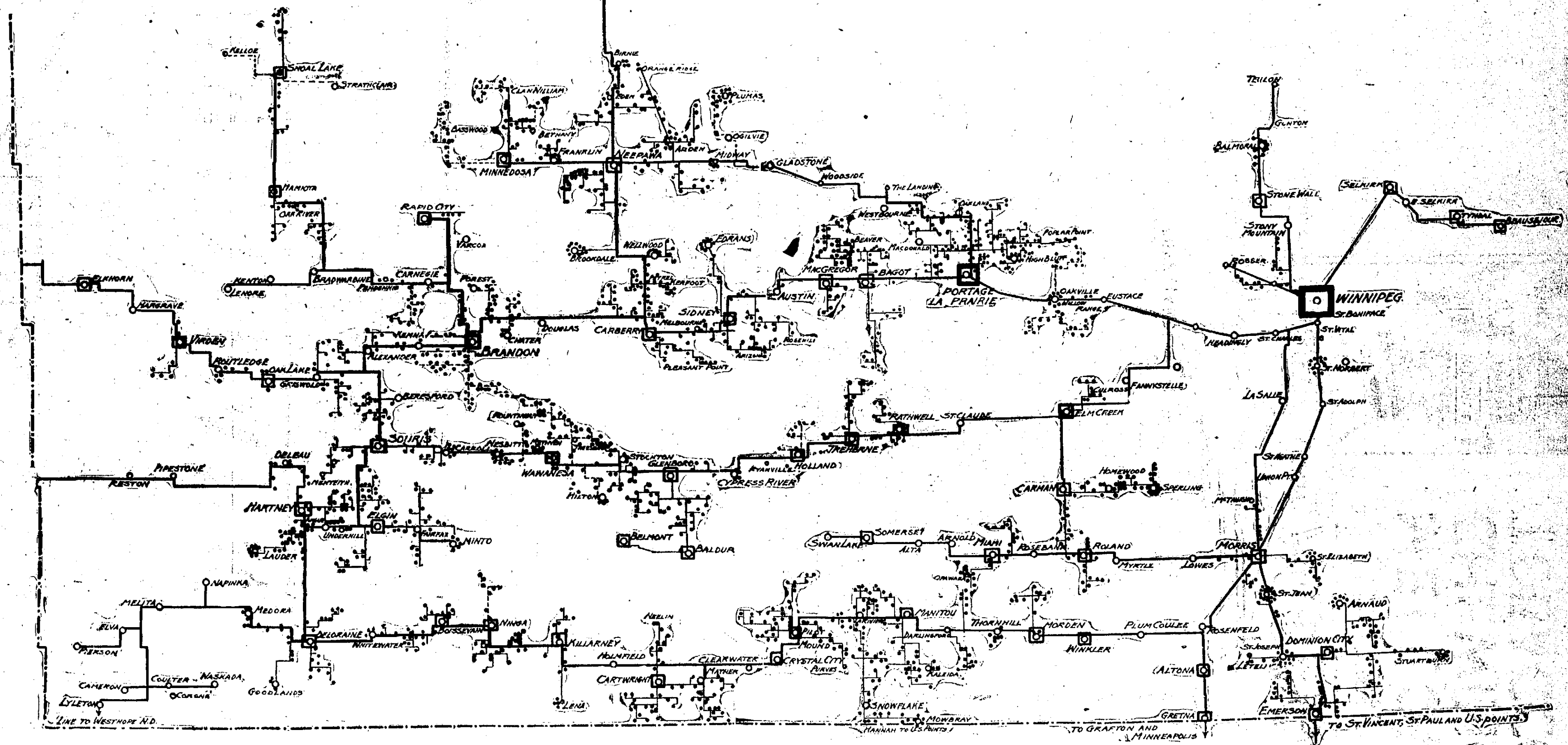
This Company has constructed about 1,500 miles of LONG DISTANCE and RURAL LINES in this province during the season of 1906, and expects to build nearly double that length in 1907, giving the province one of the most complete and efficient telephone systems in the world, conditions considered.

Material supplied and connections given to local systems on the most favorable terms.

Full particulars given on application.

F. C. PATERSON,
 Manager Northwest Department.

Winnipeg, Nov. 24th, 1906.



MANITOBA GOVERNMENT PURCHASES BELL TELEPHONE SYSTEM IN PROVINCE

RAILWAY DEAL REPORTED

Minneapolis and St. Louis Said to
Have Been Secured by the
Rock Island.

Chicago, Ill., Dec. 31.—The Minneapolis & St. Louis railway is reported to have been sold to the Rock Island. This report is generally credited, although it is announced that no official confirmation has been received. The Rock Island people accept the report as true. It is understood the deal was fought about as a result of the sale of the Chicago & Alton to the Clover Leaf when the Hawley interests in the St. Louis road were part of the purchase price.

If the report is true, the Hawley interests are out of the Minneapolis & St. Louis entirely. If the Rock Island has possession of the St. Louis road it means it will have a direct line to the twin cities and that St. Louis trains will soon be entering Chicago over the Rock Island tracks instead of the Illinois Central.

EXPLOSION IN MINE

At Least Nine Men Killed in Berna
Property at Carthage,
New Mexico.

Albuquerque, N.M., Dec. 31.—A terrific explosion occurred in the Berna coal mine at Carthage, N.M., to-day. Nine men are known to be dead and there are many others not heard from. Fire damp is supposed to have caused the explosion. There were fewer men in the mine than usual, as one relay was at dinner above ground when the explosion took place. The mine was reported on fire as a result of the explosion, but owing to the lack of telegraph facilities few details can be obtained.

The miners are Americans and Mexicans, with a few Greeks and Italians. Several of the bodies were badly burned and mutilated. The number of men employed by the owners, the Carthage Fuel company, is not known here. Carthage is in the West Sodor county, twelve miles from San Antonio.

LAW TO STAND TRIAL

Will Be Given Hearing at Present
Term at Toronto on Charge
of Conspiracy.

Toronto, Dec. 31.—The preliminary hearing

Price Paid is \$3,300,000 to Be Covered by Forty Year Four Per Cent.
Bonds—Expected That Control of Entire Plant Will Be Assumed
on January 15—Management is to Be Left in Hands of a Com-
mission—\$100,000 Worth of Supplies Also Acquired.

Jan 1908

On January 15, 1908, the Bell telephone system in Manitoba passes into the hands of the Manitoba Government.

The price to be paid by the province is \$3,300,000 for the entire plant and the business of the Bell company. Payment will be made in 40 year 4 per cent. bonds at par.

At the present market price of provincial bonds the price paid for the system at the present time is, in round figures, about \$3,000,000. The Government has also purchased from the Bell company supplies and equipment to the value of \$100,000.

Premier Roblin was seen in his office last night by a representative of the Free Press and asked if the rumor that the Bell system had been purchased, was correct.

"Yes," replied Mr. Roblin, "we have purchased the system for \$3,300,000, and have also purchased \$100,000 worth of supplies and equipment."

"When do you take over the system, and how will you operate it?"

"We hope to take charge on January 15. With regard to the operation, to be a consistent Conservative Government in harmony with the policy of R. L. Borden, we shall have to operate the system by a commission, which will be free from all parties. Personally, I am strongly of this opinion, though the Government has not formally dealt with the matter of operation as yet."

"How does the Government propose paying for the Bell system?"

"We shall issue the Bell company debentures payable in 40 years, at par, and bearing interest at four per cent."

"Will you give me a detailed statement of the value you have placed on the Bell system?"

"No, I do not think I should give out any details nor correspondence until they have first been submitted to the legislature. Mr. Sise first asked \$4,600,000 for his system in Manitoba, but when he left he gave his final offer at the figure which we have accepted. I have written Mr. Sise that we accept his offer. We have had our engineer, O. F. French, all over the Bell system and he made an exhaustive report and presented it to us before we made the bargain."

"Are you going to retain the present officials in office when you take over the system?"

"That matter will be left to the commission. We have power at present under the act to appoint the commission. I believe that the officials here are very competent, and I think it would be impossible to improve on them at present."

"Mr. Roblin," said the reporter, "there have been statements made that there will be an independent telephone company chartered at the next session of the House and that the Bell system will be handed over to them, the Government retaining control of the rates. Have you anything to say regarding these statements?"

"I have this to say," replied the Premier, "There will be no other private telephone company chartered in the province of Manitoba as long as this Government is in power."

"How will the work which has already been done by the Government be affected by the purchase of the Bell system?" was next asked.

"We feel that all the work done by the Government can be utilized to good advantage in connection with the Bell system. The telephone exchange at the corner of McDermott avenue and Charlotte street, will be completely and used for offices and storage. The Bell company are at present renting large offices outside of their exchange."

"Will you tell me just why the Government purchased the Bell system instead of completing the public system already begun?"

"We purchased the Bell system," said the Premier, "for the purpose of avoiding the necessity of having a dual telephone system in the province, and in that way preventing the waste of several millions of dollars of capital as well as the extra cost to the telephone user. I believe, also, that it is a good

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It is expected that as the Bell have sold their system in Manitoba they will endeavor to negotiate with the governments of the two western provinces close out their entire system between Manitoba and the Rocky Mountains. The Bell have evidently decided to retire from competition with governments, and will sell, if possible, to the other governments.

As to the personnel of the telephone commission which will have charge of the system in Manitoba, nothing can yet be learned. It is stated, however, that sittings on the commission will be given to some local men, not necessarily possessed of a knowledge of the telephone business, but who will constitute a board who will have charge of the officials directly in charge of the operation of the plant.

The government has not given out a report of the values of the Bell system as estimated by its engineer, but on Feb. 21, 1906, Lewis B. McFarlane, general manager of the Bell Telephone Company of Canada, when giving evidence before the telephone commission at Winnipeg stated that the capital investment of the company in Manitoba was \$1,360,787.15 including real estate to the value of \$86,040.02. He further stated that the general cost of construction of the plant in the province, after writing off all depreciation, was \$1,271,878.78; real estate, \$86,040.02. The gross earnings of the system in the province for the year 1905 were \$303,066, and the number of telephones under lease was 7,656.

In the year 1906 the Bell spent approximately \$1,000,000 in Manitoba in various works, putting in new switchboards, new conduit work and long distance wiring. During the last year new exchanges building has been erected in Fort Rouge at a cost of \$40,000 and a great deal of the underground cable work has been done preparatory to opening this exchange. There has been a large addition to the Winnipeg switchboard. A modern rural energy, multiple switchboard has been installed in Brandon and the cable work in the city has been reconstructed, all wires on Rossier avenue being placed underground, and all here in the city in cables in the new. The Winnipeg switchboard as

it stands to-day is worth about \$200,000 and the Brandon board approximately \$40,000.

Another Method of Valuation.

Another method of estimating the value of the Bell system is by taking the number of subscribers at the average cost of installing the lines. The average cost of the different lines is about \$150, which would make the 14,000 telephones worth \$2,100,000. There are 1,250 miles of long distance lines averaging six copper wires per mile at a cost of \$600 per mile, totalling \$750,000. There are also 1,250 miles of rural lines averaging four copper wires to the mile, and worth about \$150 per mile, making the cost \$187,500. This would bring the estimate of the total cost of the Bell system in Manitoba up to \$2,937,500.

Interesting Story of Growth.

The figures of the Bell Telephone company in Manitoba form an interesting story of the growth of that company and also of the growth of the west. In 1900, after nineteen years of operation, there were 1850 subscribers in the province and 230 miles of long distance and rural lines; in 1905 there were 6,224 subscribers and 892 miles of long distance and rural lines. To-day there are more than 14,000 subscribers in the province and more than 2,500 miles of pole lines. There are approximately 5,000 miles of

(Continued on Page Seven)

Jan
1908