

25.

MOOSE JAW
ELECTRIC
RAILWAY.

gess and Co., Ottawa, are supposed to be
applicants.

A local newspaper article respecting the company's power development plans states that the project has been under investigation for about three years by Sir John Jackson, Limited, a British firm of engineers and contractors, that the site of the proposed dam is on the Saskatchewan River, about 65 miles southwesterly from Edmonton, but considerably further by the river, that the dam will be 1,500 ft. long, and 105 ft. high, and will make an artificial lake of 60 square miles, that the power plant development is estimated to cost \$6,000,000, that for the purposes of the company a 65 mile railway will be built to the power plant site, by an independent but apparently associated company. The route through which the railway is projected is reported to be fairly well settled, and should offer considerable opportunities for further settlement. G. W. Farrell and Co., Montreal, who are interested in the project, state that they are unable to give any information as to the company's plans until after legislative sanction has been obtained.



Moose Jaw Electric Ry. Power House Equipment.

They are equipped with two 40 h.p. Westinghouse motors and turbines being used. Homic and cars are used throughout out with the aid of three way valve at the ends of the lines for turning.

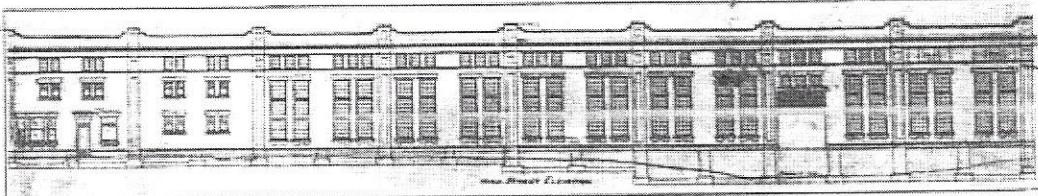
The power house building, at the corner of Pearin Ave. and High St., the 2 1/2 fl., one story high, contains the power generating units, as well as a heating plant, whisky, machine shop, car barn and office. The car barn is modern in every way, being exceptionally high and well lighted. A pit extends throughout the barn underneath floor. Along one

the room. This Diesel plant was the outcome of a great deal of study and thought as to conditions existing in Saskatchewan, the coal procurable being exceptionally poor principally lignite and reported coal is an expression that it makes a steam generation almost out of the question. These engines have been operating 18 hours a day since commencing on Sept. 1, 1911 and there has not been an interruption in service of any kind. The manager advises us that he considers their flexibility really remarkable, it being possible for the engine

being laid on the lever and on the side wall there will be two pits under each track, one extending the entire length of the building and the other extending half way. This will give accommodation for four sets of tracks in and the barn. The superstructure will be brick with large windows spaced along special running.

The accommodation on the car floor in addition to the storage of cars will consist of a washroom for cars 67 m. l., carpenter's shop, blacksmith's shop, mechanic's room, automotive room, drivers room, and master mechanic's office these being contained in an area of 12 by 145 ft. and on the opposite side of the building in an area 12 by 34 ft. deep, will be the inspector's office, conductors room, fire department, fireman's and coal room. W. G. Murray, London, Ont., is architect.

Western Canada Power Co.—W. McNeill, Assistant General Manager informed a meeting of rate-payers in New Westminster, B.C., April 30, that no



Moose Jaw Electric Ry. Car Barn.

pit or hydraulic hydraulic jack is in use for changing wheels and other repair work to cars. One section of rail can be taken out at machine shop doors. A job crane with trolley can pick up a pair of wheels or motor from pit and transfer to the beam runway in machine shop or transfer to any machine in the shop. The machine shop equipment consists of one geared lathe, one 24 x 10 back shafted lathe, one 16 in. swing, 6 ft. bed, back geared lathe, one 24 x 30 back geared shaper with down feed power, all made by the Canada Corporation manufacturer. Open 6 lb. 70 in. vertical drilling machine,

set in charge to have engines in operation and voltage on the board in 20 seconds. The photograph from which the accompanying illustration fig. 1 was made was taken when the unit was installed and the decorations were put up for inauguration day. An eight ton crane spans the entire width of the building, a 50,000 gallon tank is located at the back of the power house and with this size of tank it has been unnecessary to go into a cooling tower, as the volume of water is sufficient to procure efficient cooling. It is expected the very near future to have under way the installation

works would be made immediately for the New Westminster-Port Moody section of the proposed Vancouver-Mission electric railway (Mar. pg. 149).

It is reported that the C.P.R., Canadian Northern Ry. and the G.T. Pacific Ry. are joining with the Saskatchewan Government in a scheme for the utilization of the South Saskatchewan river for a water supply for cities and towns in the province and for railway use. T. Aird Murray, M. Eng. Soc. C.E., Toronto is stated to have been engaged as consulting engineer, and it is estimated that the work will cost about \$20,000,000.

MAY 1912

that the surveys for the Strathy & Chester line will be started at once (June, pg. 305).

Moose Jaw Electric Ry.—We are officially advised that the land acquired by the company for park purposes is situated about 3.5 miles from the post office in Moose Jaw, Sask. A line is to be built from the corner of Cotter St. and Sixth Ave., South Hill, west along Cotter St. to Third Ave., then south crossing the river and to the park on the southern boundary of sec. 22. It is expected that the development and construction work will be started in the near future. A. H. Thain is manager (June, pg. 305).

4
Name index B.C. and S. consolidated areas

July 1912

newspaper clipping index no. 10010 - volume 196-
390.)

Moose Jaw Electric Co. Work was
started July 1 on the extension to the
proposed park. President Dorn in antify-
ing the city council of the extension said:
"This is the only extension that has been

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1912

Electric Railway Department

The Moose Jaw Electric Ry's Equipment, Plant, Etc.

This company, which is operating at Moose Jaw, Sask., has about eight miles of track, over three curves of which are double tracked. It is expected to build about 2½ miles more. Eight cars are being operated giving a service varying from five minutes on the principal line to ten minutes on the least travelled one. The cars are single truck, p-a-y-n manufactured by the Ottawa Car Co.

2 grinders, fired with carburetted oil, one single stage singing air compressor. This is to be used for cleaning generators, car motors and general purposes. The building is heated with a fan and venturi burners.

The power house staff is 120 x 62 ft. and at the present there are two four cylinder units, oil, diesel engines, direct connected to two 125 kw. 550-600 v.d.c. compound railway generators. These Diesel engines are supposed to be 700 brake h.p. at sea level, and are operated on crude oil, the normal speed being

at another Diesel engine unit direct connected to generator, this unit being of sufficient size to operate one 275 kw. railway generator.

The total expenditure on the system up to date is about \$150,000, including power house, etc., about \$60,000; power house equipment about \$45,000; rolling stock about \$53,000.

The company officials, etc., are—President, A. A. Dean, Ottawa, Ont.; Vice President, N. F. Kerr Ottawa, Secretary, D. R. Stewart, Ottawa, Superintendent, A. Herter Dunn, Moose Jaw, Sask.; Accountant, C. E. McIvor, Master Mechanic, R. W. Moore; Power House Engineer, G. Connors.

London and Lake Erie Railway Co.'s Car Barns.

The plans for that company's new car barn at St. Thomas, Ont., show a building 293½ ft. deep, by a width of 97½ ft. to the street and of 59 ft. at the rear. The foundations will be of concrete. The basement section will contain boiler and coal room, and the pits under the car tracks. The foundation walls will be 12 ins. thick, and one wall will extend from front to rear down the middle of the building. The area on one side of the wall will not be excavated, tracks to



MAY 1912

on Bleury St., from St. Catherine St. to Sherbrooke St. (June, pg. 286.)

Moose Jaw Electric Ry.—A contract is reported to have been signed for the building of a line passing through Boulevard Heights and Parkdale Boulevard, at a cost of \$50,000. It will open up a considerable area of building land, the owners of which are providing the funds for building the extension. It is said that the line will be built this year. (Dec., 1912, pg. 622)

Morrisburg and Ottawa Electric Ry.—A contract is reported to have been let to

July 1913

ORLD.

[October, 1913.]

Moose Jaw Electric Railway Car Shops.

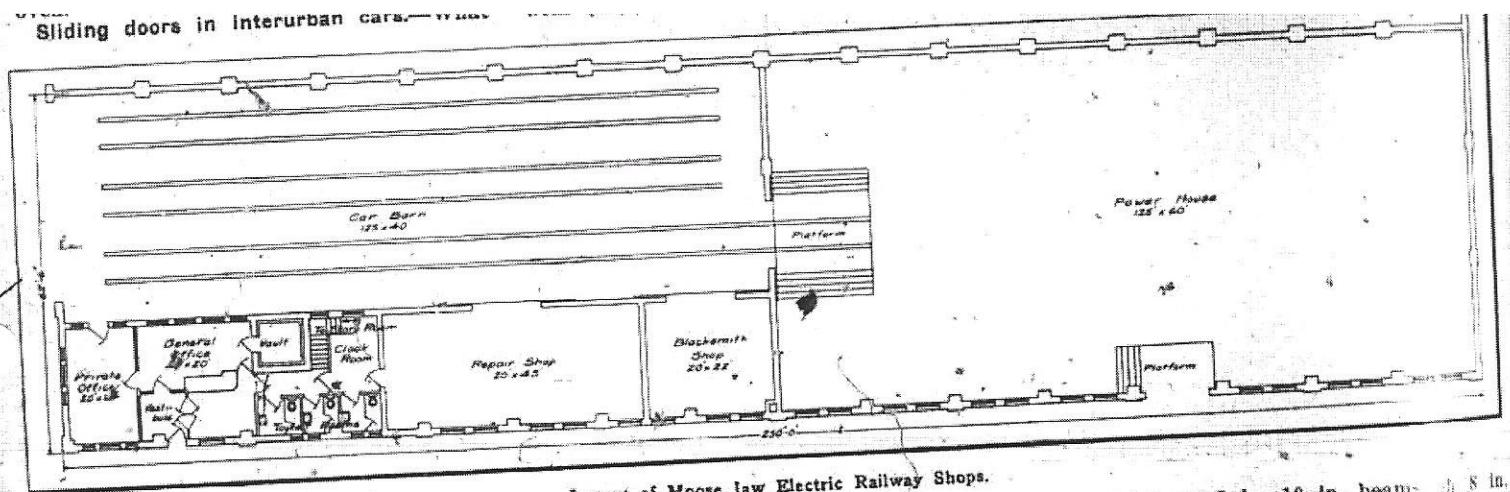
The accompanying plan shows part of the layout of the car shops at Moose Jaw, Sask., but does not give the complete lay-out, omitting a 5 track car barn addition, 125 ft. long, for storage, which has been added this year.

The buildings are of steel, brick and concrete construction throughout. The foundations are all of concrete, on which are built the brick walls, with the roof trussed by steel girders spanning the 62½ ft. width of the shop, these trusses being located at 15 ft. 5¾ in. centres through the length of the shop. The roof members are composed of 8 in. I beams resting on the trusses.

The front portion of the building contains on one side the offices, the private office 20 by 12 ft., and the general office 20 ft. square. To the rear of these is the vault, cloak room and lavatories, all forming with the offices one main division of the building. To the rear of this section is the repair shop, 20 by 45 ft., connecting with the car barn by wide opening, with sliding fire doors. To the rear of the repair shop is the blacksmith shop. The repair shop has a 2 in. plank floor, but the blacksmith shop is concrete. Alongside these several divisions of the shop is the car barn section, 125 by 40 ft., containing three repair tracks. These tracks have a pit construction beneath, the tracks being

October
1913

Sliding doors in interurban cars.



Layout of Moose Jaw Electric Railway Shops.

is the most satisfactory and economical arrangement for a single sliding door, located

do not require a deposit and the only protection we have is the amount of money due a man for a period of five or six days

supported on 8 by 10 in. beams on 8 in. square supports. Between top of rail and floor of pit, there is 4 $\frac{1}{2}$ ft. The clear height in this and the other shops is 20 ft.

October 1913

system on Main St. (M.R., pg. 184.)

Moose Jaw Electric Ry.—The Moose Jaw, Sask., City Council has been informed by A. H. Dion, General Superintendent, that he has been authorized by the directors to proceed with the extension on Hall St. for half a mile from Main St. The Council passed a resolution calling upon the company to extend the line on Hall St. to 18th Ave. and along that avenue so as to connect with the line now in operation on Athabasca St. East. (April, pg. 184.)

Calgary and Ottawa Electric Ry.—

MAY 1914

Answers to Questions on Electric Rail-way Topics

Following are a few questions on electric rail-way topics, sent to the American Electric Railway Association's question box recently, with replies thereto by W. F. Oliver, Chief Engineer, Montreal, Canada:

Misleading Radius Curves. "What should be the minimum radius curve to take care of the modern railway equipment?" The question as it stands is no better than it is rather difficult to answer. Cars with a big radius, when slow, 20 ft. or 10 ft. track control, operate readily around curves of 35 ft. radius, but usually when it is necessary to make a turn in a town or city or a tall and half beyond a curve of 19 ft. radius.

The **Use of Sharp Pointed Spikes.** Assuming that a spike with a sharp point is very dangerous, particularly to the roadbed, it would not, at the same time, be an unnecessary liability to responsible drivers. They ought to be some protection for them.

On the other hand, it would be absurd to have a spike which is half a mile away from the nearest serviceable purpose of drawing a road up an unattractive hill. At the same time, the result of such a spike will be to impose a heavy fine on the arrival of another car.

There may be a case for such a spike if there is a street car, particularly the last of the day, particularly in the worst place situated. Presumably he same check on reckless drivers which law is enforceable in Woodstock and Stanley Park.

Cleddification of the London and Port Stanley Railway. The work of removing this line, preparatory to its electrification, is proceeding rapidly.

I believe that an absolute inspection of track construction outside of the Northern Section, and the tie are being removed in perfect harmony, and with the department heads. Otherwise the results which is much to the detriment of the construction itself.

Inspection of Bridges and Buildings. Should there be a monthly inspection of bridges and buildings? By all means, monthly inspection record of buildings should be on the line in each department. It is our practice to inspect the main spans of bridges and railroads, especially the bridge over the St. Lawrence River, annually. This inspection is accompanied by a personal inspection by the Assistant Chief Inspector, and decisions have to be made on the ground, as to repair work of the departments. These inspections are joint inspections of all roads of record.

Mobile Trailing Standing Electric Motor. World for publication on page 347 particulars of which were omitted.

Editor, *Railway and Marine World*, 100 King Street East, Toronto, Ont.

Signaling. Whether automatic signaling with low voltage current or high voltage current, is to be standard, or to be selected, is to be determined by the experience of the Hydro-Electric Power Commission of Ontario, P.A. Galy, Chief Engineer, Canadian Gasoline and Fuel Co., Canadian Gasoline and Fuel Co., Ontario, July 18, in connection with two automobiles for racing at a short race when K. Wilson was driving a Hudson on the ground—that the

Commission has decided to keep out in and a long car, with the possibility of the selling of the

[September, 1914.]

Mosso-Jew Electric Railway Company's Annual Report.

Following are extracts from the financial annual report for the calendar year 1913, issued over the signatures of A. A. Dion, President, and D. R. Street, Secretary-Treasurer, both of Ottawa:

The revenues from all sources aggregate \$162,300.40. The expense of maintenance, operation and maintenance, together with bank interest, amount to \$16,565.11, leaving a surplus of revenue over expenditure of \$155,735. During the year \$1,373.14 was expended on capital account which includes the construction of new furniture, fixtures and equipment, the acquisition of a new motor vehicle, the purchase of a new telephone, the addition of a new office, and the purchase of a new motor vehicle.

The balance at credit of profit and loss account, after the addition of this year's surpluses, was \$16,235.30. From which sum, \$15,000.00 was paid quarterly dividends at the rate of 6% per cent., leaving a balance of \$1,235.30 at the credit of shareholders' \$16,319.61 at the close of this account. The financial increases have not been quite up to expectation. Motor cars, 1913, more efficient, faster, stronger, etc., have been seriously affected by the financial crisis. Year directions, however, expect the results satisfactory. The rate of passenger traffic increased 10% in 1913, while the total passenger traffic increased 15%.

The balance with a sharp point is nearly always checked on recklessness, which is the result of the use of a sharp spike to some protection for them. On the other hand, it would be absurd to have a spike which is half a mile away from the nearest serviceable purpose of drawing a road up an unattractive hill. At the same time, the result of such a spike will be to impose a heavy fine on the arrival of another car.

There may be a case for such a spike if there is a street car, particularly in the worst place situated. Presumably the same check on reckless drivers which law is enforceable in Woodstock and Stanley Park.

Cleddification of the London and Port Stanley Railway. The fact that this was largely over-subscribed proved the confidence that the shareholders have in the future of this undertaking.

The average number of cars in use during 1913 was 1126, against 746 in 1912. The lowest monthly average for 1913 was 9 in March, April and May, and the highest monthly average was 14.5 in August.

The average earning per car, mile to passenger, for the year 1913, was 21.75c. The total number of passengers carried in 1913 was 3,401,380, against 1,650,805 in 1912.

Electric Curves. As far as I can learn, there are no electric power companies in the Province of Quebec using electric curves.

Electric West Shore Railway.—We are officially advised that no tender was received for the extension of the line to the Lake of the Woods, Ontario, to be completed by December 31, 1915. The contractor is to be selected by the Quebec Electric Power Commission. The company will be entitled to the use of the line, and the rate will be to be set on the basis of

CANADIAN CONSTRUCTION ELECTRIC RAILWAY PROJECTS.

Bethel and Northern Ry.—We are officially advised that the line now under construction between Bethel and New Haven, which extends from Buello to Buelloport, and then to Buelloport to Buellostrand, and then to Buelloport to Buellostrand, Ont. It is owned and operated by a private concern, Mr. M. S. Brewster, Boston, Mass. Brewster's company date 1890 date on the file, and never before from the city of Berlin, Mass., date 1882.

British Columbia Electric Ry.—Construction is being proceeded with rapidly on the new car barns at Fairmont Ave. and Main St., Vancouver. Application has been made to the company to extend its lines to Princeton, B.C., between Peter and Peter Roads, Victoria, British Columbia. A contract is reported to M. J. Goulding and Sons for the erection of a steel frame building at Prince George, B.C., on the site of a former saw mill. It is reported that the cost of the building will be \$25,000. It is said that the basis of an agreement was reached June 12, between the company having the contract, and the Vancouver, B.C., City Council, on the price of \$10,000.

The British Columbia Electric Ry. has been granted the right to run its lines through certain towns and villages in the interior of British Columbia, and to use the name of "The Canadian Pacific Coast" on its signs. It is reported that the improvements and extensions of the British Columbia Ry. will be made with a view to increase the value of the property along the way of track sections arranged for.

In many cases the right appears to charge up to 1000 feet above the line of a railway, and it is found that the company was not given the right to run its lines through certain towns and villages. The British Columbia Ry. has been granted the right to run its lines through the city of Vancouver, B.C., and the company has elected not to do anything with the line of track sections arranged for. In many cases the right appears to charge up to 1000 feet above the line of a railway, and it is found that the company was not given the right to run its lines through certain towns and villages. The British Columbia Ry. has been granted the right to run its lines through the city of Vancouver, B.C., and the company has elected not to do anything with the line of track sections arranged for.

Edmonton Interurban Ry.—Press reports claim that the line from Edmonton to Fort Saskatchewan, Alberta, is being electrified, and that power for the operation of the line will be supplied by the city of Edmonton. A number of buildings have been built, but nothing has been done with the line of track sections arranged for. The line from Edmonton to Fort Saskatchewan, Alberta, is being electrified, and that power for the operation of the line will be supplied by the city of Edmonton. A number of buildings have been built, but nothing has been done with the line of track sections arranged for.

Fair William Electric Ry.—It is reported that there are only two small groups in each town that are connected to the new line with the rest of the system. At present the two million of new track have been laid this year. (C. & W. 86, 25.)

Hastings St. to Barton St. Ry.—It is reported that the extension along Hastings St. of Hamilton, is reported completed, thus connecting line along Keechwood Avenue, formerly Superintendent, Keechwood Railways, now the H. & W. Ry. It is reported to be in charge of the work. The C. & W. 86, 25.

Hastings St. Ry.—The extension along Hastings St. to Barton St. Ry. connects the city lines of Hamilton, and the new line will be connected to the Canadian National Ry. This is a reversal of the original intention, introduced earlier in the year. (C. & W. 86, 25.)

Mississauga Ry.—The extension along Mississauga Ry. has been completed, and the line will be connected to the Canadian National Ry. This is a reversal of the original intention, introduced earlier in the year. (C. & W. 86, 25.)

Sundays, that it would be a direct violation of the law.

An arbitration board is being formed to settle differences between the Moose Jaw Electric Ry and its employes. Jas. Summerville was nominated Sept. 16 to represent the men. The other members of the board had not then been named.

The London & Port Stanley Ry. will almost certainly have to purchase additional rolling stock, whether the second tracking of a portion of the line is carried out or not, as it was impossible during the past summer to handle the traffic without renting a number of steam railway passenger cars.

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August

1916

Moose Jaw

Employment of Women on Moose Jaw Electric Railway.

1919

October

A. H. Dion, Superintendent, Moose Jaw Electric Ry., Moose Jaw, Sask., has favored us with the following information: "We have employed women as conductors for about two years and have found them very satisfactory. We now have about 22 employed. They are treated in exactly the same manner as the men whom they replaced and whose positions they fill. They work on the same schedule and are paid the same scale of wages, no difference being made between the male and female conductors. At present we have no male conductors, owing to the extreme shortage of men in the west, and have found that the employment of women for this work has been a most satisfactory means of overcoming the shortage. We do not give preference to female conductors, but have employed them solely owing to its being impossible to obtain men. We are seriously considering trying women as motormen and have had several applications from women for such employment."