

ESQUIMALT
AND
NANAIMO
RAILWAY

The Canadian Northern Ry. in B.C.

The contract entered into between the British Columbia Government and Mackenzie, Mann & Co. for the construction of a railway from Yellowhead pass, on the boundary between B.C. and Alberta, and Seymour's Narrows, B.C., was actually entered into with the Edmonton, Yukon and Pacific Ry. Co. The charter of this Co. is owned by Mackenzie, Mann & Co., and a piece of line $4\frac{1}{2}$ miles in length, from a junction with the Calgary and Edmonton Ry. at Strathecona across the Saskatchewan river into the town of Edmonton, has been completed. It is proposed to amalgamate the E.Y. and P. Ry. Co. with the Canadian Northern Ry. Co., for which powers were obtained in 1901. The negotiations prior to the signing of the contract were made the subject of considerable debate in the B.C. Legislature and Smith Curtis made a number of charges against various members of the Cabinet, and more particularly against Premier Dunsmuir so far as the proposed sale of the Esquimalt and Nanaimo Ry., and the charter of the projected Comox and Cape Scott Ry. were concerned. Mr. Curtis asked that a committee of the House be appointed to investigate the charges, but it was decided to ask for the appointment of a Royal Commission. The Lieut.-Governor appointed Justice Walkem, of the B.C. Supreme Court, to hold an investigation, and the sittings were commenced on Mar. 27. J. N. Greenshields, K.C., Montreal, denied having acted in any way as between the B.C. Government and Mackenzie, Mann & Co.; in those negotiations he represented the contractors; in the negotiations with the Dominion Government, with a view of obtaining increased subsidies, he was acting for the B.C. Government. He also represented Mackenzie, Mann & Co. in the negotiations with the Dunsmuirs for the purchase of the Esquimalt and Nanaimo Ry. These negotiations were terminated because the U.S. shareholders have refused to sell. A great deal of evidence has been given, one feature being the refusal of the officials of the C.P.R. Telegraphs, and of the G.N.W. Tele-

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The proposal to purchase the Esquimalt and Nanaimo Ry. not having been agreeable to the U.S. shareholders, an application has been made by J. N. Greenshields, T. G. Holt, H. B. Robertson and J. Mitchell, to the B.C. Legislature for the incorporation of a company under the title of the Victoria and Seymour Narrows Ry. Co., to construct a railway from Victoria to Seymour Narrows, on Vancouver Island, B.C. In addition to all the powers conferred by the B.C. Railways Act, the Co. asks power to construct telegraph and telephone line, develop electric power and transmit the same, and operate steamships.

The Ontario Court of Appeal has given its opinion on the case submitted to it by the Attorney-General respecting the act passed in 1897 for preventing the profanation of the Lord's day. Of the four judges constituting the Court three have given their opinion that the act is constitutional, and that its provisions can be enforced as against running Sunday excursions by railways or steamships, and the operation of cars by street railway or tramway companies, except such as were in operation prior to April 1, 1897. The opinion of the majority of judges is further that the act cannot be made to apply to corporations operating exclusively under the legislative authority of the Dominion Government, nor to the individual employees of corporations. Chief Justice Armour is of opinion that the Ontario Legislature had no jurisdiction to pass the act in question.

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approved of location plans for this line from mileage 1556.11 to 238.89, Alta. (Oct., pg. 475.)

Esquimalt and Nanaimo Ry.—It is reported that the work of constructing the bridges and trestles on the line between Victoria and Wellington, B. C., has been completed with the exception of the timber trestle at Arbutus Canyon, the material for which is being delivered. Ten miles of new steel have been laid at the north section, thus completing the replacing of the old 52 lb. with 60 lb. steel. R. Marpole, Vice President, completed a trip of inspection over the line, Nov. 7.

Steel has been laid on the Courtenay extension as far as the Little Qualicum River, a temporary bridge having been built across French Creek. The permanent steel trestle, which is one of the largest structures on the line, is being built by the Dominion Bridge Co. It is expected to have steel laid to the crossing of the Big Qualicum River by the end of the year. The grading from this point into Courtenay is well advanced. There are two large bridges on this section of the line, viz., at the crossing of the Tsable and Trent Rivers. It is expected, however, that the entire work will be completed so as to enable trains to be run into Courtenay by June 1, 1914.

The terminals being laid out on the Songhees Reserve, Victoria, consist of four substantial concrete and brick structures, erected at a cost of about \$150,000 by H. B. Doe and Brother. The locomotive house will at present accommodate 10 locomotives but it can be enlarged when required. The other buildings which will be used as machine, repair and car shops, are being equi-

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ined with the plant and machinery from the old shops at Wellington, as well as with some new plant. The buildings also comprise a 15,000 gal. oil tank, and a service tank for feeding the locomotives, which are fitted for burning oil instead of coal. (Sept., pg. 480.)

Terminal Ry.—We are officially ad-

the line from Coldwater summit to Osprey lake, which it is said will save a long detour and open up some new territory. Track has been laid for seven miles west-erly from Penticton, and a considerable mileage of grading has been done.

Grading has been started out of Hope, on the section towards the Coquihalla summit, the man being spread over the first six

the Fredericton and Grand Lake Ry. and the New Brunswick Coal and Ry. Co's line, has a mine to Norton, and this proposed line would provide it with an entrance into St. John, on the east.

Ontario Lake Front Terminal Ry.—Appli-cation is being made to the Dominion Parla-ment for the incorporation of a company with this title to build a line from between

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EXP

Railway Development

Projected Lines, Surveys, Construction, Betterments, Etc.

Algoma Central & Hudson Bay Ry.—Construction on the completion of this company's line to Hearst on the National Transcontinental Ry. is rapidly drawing to a close. Trains are being operated from Sault Ste. Marie to Franz, at the junction with the C. P. R., 195 miles north of Sault Ste. Marie, and to Michipicoten Harbor and the company's mines, branching off at Hawk Jct. This section was opened for traffic Dec. 1, 1912. North of Franz, grading is entirely completed through to Hearst on the National Transcontinental Ry. Track was laid to Oba at the junction with the Canadian Northern Ontario Ry. in Dec., 1912. This season this section is being ballasted, and by Oct. 1, will probably be taken over for operation. Tracklaying is progressing north of Oba, and steel is expected to reach Hearst by Nov. 1. By that time this section will be practically ballasted also, so that it is quite probable trains will be operating through to Hearst via the A. C. & H. B. Ry. by Dec. 1. Hearst is 295 miles north of Sault Ste. Marie. Oba is 50 miles south, or via the A. C. & H. B. R., it is an even 100 miles between the C. P. R. and the National Transcontinental Ry. By a rather peculiar coincidence this is the shortest distance these two railways are apart over any feasible route for the connecting line anywhere between Quebec and a point west of Fort William. It is also the only place where the Canadian Northern Ry. comes just midway between these railways, hence the A. C. & H. B. R. has secured the shortest and most direct route connecting by a cross line these three transcontinental railways with the Great Lakes. All new work on the line north of Hawk Jct., 164 miles north of Sault Ste. Marie, is constructed on a maximum 0.6% compensated grade with 5 degrees maximum curves. The Superior Construction Co., T. J. Kennedy, President and General Manager, has the contract for the work north of the C. P. R. R. S. McCormick, M. Am. Soc. C. E., is chief engineer and G. F. Horsey is District Engineer, having direct charge of the work on this section.

Burrard Inlet Tunnel and Bridge Co.—The revised estimates of the cost of this projected bridge place its total cost.

mer of 1914. The building of the substructure for this bridge was delayed considerably owing to the depth to which the foundations of one of the piers had to be carried in order to reach bed rock. (Feb. pg. 83.)

Esquimalt and Nanaimo Ry.—Tracklaying on the extension from McBride Jct., has been completed to the Little Qualicum River, eight miles. At this point an extensive trestle has to be built, for which the material is being taken in. Grading has been completed from this point to the Big Qualicum River, and there is a short piece of grading to be completed thence to Deep Bay. Grading has been completed from Deep Bay to Courtenay, and it is expected that as soon as the Little Qualicum River trestle has been built, everything will be ready for the track layers right through to Courtenay. (Aug. pg. 375.)

Fredericton and Grand Lake Coal and Ry. Co.—Tracklaying on this line, between Gibson and Minto, N. B., was completed, July 30. Ballasting and other finishing up-work is being pushed forward, and it is expected that the completed line will be taken over from the contractors, Sept. 30. The line is to be operated by the C. P. R., in conjunction with the New Brunswick Coal and Ry. Co.'s line, which has been taken over from the New Brunswick Government. The railway was projected by Sir Thomas Tait, for the development of the coal deposits in the Grand Lake district, and for the purpose of giving another outlet to the coalfields in the Minto district. Sir Thomas, together with D. McNicoll, Vice President, and other C. P. R. officials, made a brief inspection over the line Aug. 4. Mr. McNicoll said after the inspection: "The Gibson-Minto line will be a first class line when the contractors have finished their work and turned the road over to the company. But the other piece of line, known as the New Brunswick Coal and Ry. Co.'s line, which we have taken over from the Government wants a heap of touching up before we can say the same of it. The C. P. R. will use at least 100,000 tons of coal annually from the mines at Minto to start with and probably as much more as can

is estimated to cost about \$3,000,000. C. Hitchcock, Vice President and General Manager of the contracting firm, is reported to be in charge of the work and to have established his headquarters at Hope. This section is to be built by the K. V. Lines, at the joint cost of itself and the Vancouver, Victoria and Eastern Ry., and will be used jointly by the two companies.

Construction on the uncompleted sections of the line is being pushed rapidly forward. It is expected that the substructure for the steel bridge at Trout Creek will be completed Sept. 1. This bridge will be 250 ft. long and will be at an elevation of 190 ft. Its completion will open up for the track-laying gang about 40 miles of completed grading.

The tender was accepted at a conference held, Aug. 6, between representatives of the two companies, the K. V. Lines being represented by J. J. Warren, President; A. McCulloch, Chief Engineer; and the Vancouver, Victoria and Eastern Ry. by J. H. Kennedy, its Chief Engineer, and A. Stewart, Assistant Chief Engineer, Great Northern Ry.

The contractors will start at once building a waggon road at each end of the section, at an estimated cost of \$200,000, for the purpose of getting in plant and supplies. In addition to these waggon roads, supplies will be taken by the 12 mile section of the K. V. Lines, now under construction by Twoby Bros., from Coldwater Jet, to the Hope Summit. This junction is the point at which the K. V. lines in the Nicola River Valley connect with the V. W. and E. Ry. from the Boundary and Okanagan districts. The section is to be operated jointly by the K. V. Lines and the V. V. and E. Ry., and at Hope the latter will switch off to its own route via New Westminster, while the K. V. line will go on to a junction with the C. P. R. by a bridge across the Fraser River.

Lake Erie and Northern Ry.—Work on the construction of this line from Brantford, Ont., northerly to Galt, and southerly to Port Dover, is proceeding at a rapid rate. Several hundred men are employed on grading, together with steam shovels, and very nearly half of the grading has been completed. The bridge work is also well advanced.

The Board of Railway Commissioners has approved of location plans of the line from Lorne Bridge, Brantford, station, to station 450, in Brantford City. (Aug. pg. 376.)

London and Port Stanley Ry.—Pres-

passed directing it to be dropped from the order paper. (May, pg. 219.)

Esquimalt and Nanaimo Ry.—The Board of Railway Commissioners has authorized the opening for traffic of the Cowichan Lake Branch from Hayward Jet. to Cowichan Lake. B.C., 18 miles.

The reconstruction of the original line from Victoria to Wellington, which has been in progress ever since the C.P.R. obtained control, is almost completed. The work laid out for this year includes the replacing of the last 12 wooden bridges with steel spans.

The improvements proposed to be made on the line during this year will involve the expenditure of \$1,000,000, according to a recent statement of R. Marpole, Vice President. (May, pg. 219.)

Fredericton and Grand Lake Coal and

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pany's officials state that there is no present intention of extending the line there. (April, pg. 168.)

Esquimalt and Nanaimo Ry.—We are officially advised that the expenditures authorized on this line for this year

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amount to \$1,461,630, distributed as follows:—Main line bridges, \$164,000; track, \$77,000; buildings, \$26,000; transfer slip, etc., \$44,630; terminals at Victoria, \$250,000; construction of new branches, \$900,000. Most of this work is in progress.

The 10 stall locomotive house under construction on the new terminals being laid out on the Songhees Reserve, Victoria, B.C., was expected to be completed July 30. A permit has been granted for the erection of a one story brick car repair shop, 52 by 152 ft., to cost \$15,000, for which E. R. Dee is the contractor.

Plans for the building of a new passenger station, freight shed and yards, at Nanaimo, are being prepared, and local reports state that work on the new buildings will be started immediately.

A passenger train service was put in operation over the Cowichan Branch, June 18. This branch leaves the main line between Duncan and Somenos, and passes two stations—Tansor and Sahtlam—before reaching Cowichan Lake. It has been operated for freight purposes for a year.

H. E. Beasley, General Superintendent, completed an inspection of the lines in operation and under construction, July 7. He reports that track laying and ballasting on the extension from McBride Jct. to French Creek have been completed. The bridge over French Creek is practically completed, and it was expected to resume track laying on the extension towards the Qualicum River a few days after his visit.

An engineering party in charge of H. Schupp, is reported to have started out from Victoria, July 1, to make surveys for a line from Campbell River, towards the northeast end of Vancouver Island, about 150 miles. (July, pg. 331.)

Hartland and Miramichi Ry.—The New

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(Feb. pg. 307)

Esquimalt and Nanaimo Ry.—Track-laying on the extension from McBride Jct., has been completed to the Little Qualicum River, eight miles. At this point an extensive trestle has to be built, for which the material is being taken in. Grading has been completed from this point to the Big Qualicum River, and there is a short piece of grading to be completed thence to Deep Bay. Grading has been completed from Deep Bay to Courtenay, and it is expected that as soon as the Little Qualicum River trestle has been built, everything will be ready for the track layers right through to Courtenay. (Aug. pg. 376.)

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Esquimalt and Nanaimo Railway Mechanical Terminal Facilities at Victoria, B.C.

The recently completed group of buildings forming the Esquimalt and Nanaimo Ry. terminal plant at Victoria West, B.C., comprises a locomotive house, machine shop, car repair shop, boiler and engine houses, store, etc.

The locomotive house has 10 stalls, each 13 ft. 7 ins. at the front, 28 ft. 5 ins. at the back, and 90 ft. deep. The walls are of 12 in. brickwork on strong concrete foundations, and the roof is of timber construction covered with felt and gravel. The usual locomotive pits are provided, together with one drop pit 7½ ft. wide. The walls of these are of 10 in. concrete, to which is fastened, by means of anchor bolts, the 6 by 12 in. timbers carrying trackage. For a width of 3 ft. all around the pit, 3 in. planking is spiked, the intervening floor space being finished off with cinders.

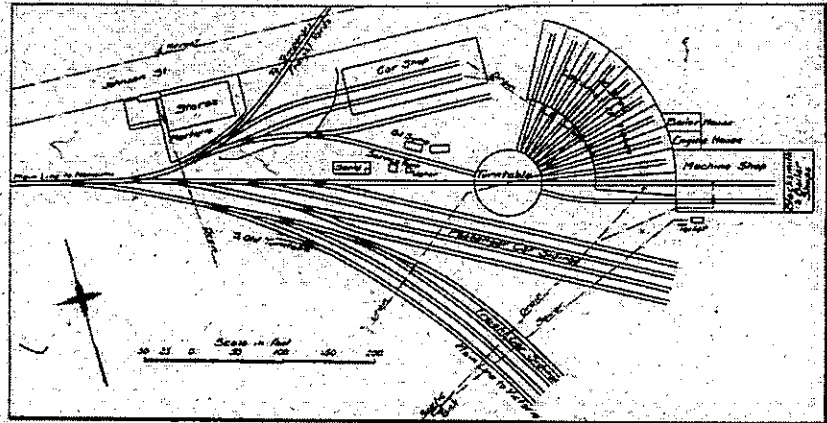
The machine shop is 68 by 112 ft., and 18 ft. high to the under side of roof truss, and is provided with two locomotive pits and one drop pit similar in construction to those in locomotive house. The shops abut end on to the back of the locomotive house, one track entering from the end stall, and one from the outside of the locomotive house, thus providing outgoing and incoming tracks over turntable. The roof is pitched and is carried by six timber trusses at 16 ft. centres; these are supported on brick piers standing out 4½ ins. from the 12 in. walls. Good lighting has been secured by three large skylights on the roof, together with ample sidelights, two windows being fixed in each bay. Bench accommodation has been supplied for the fitters, and the whole floor has been planked over. A width of about 36 ft., extending the length of the building, has been reserved for the installation of machinery tools, which are now being fixed, and include:—18 ft. wheel lathe, 16 ft. Bartram lathe, Bartram gap lathe, 20 ft. gap lathe,

be located the steam hammer, two circular and one oblong forges, together with one set of shears and one set of rolls. This building is 32 by 68 ft.

The engine room and boiler room are located in the angle formed by the two main buildings, the former being 31 ft. 10 in.

the usual features necessary for the economical handling of repair work.

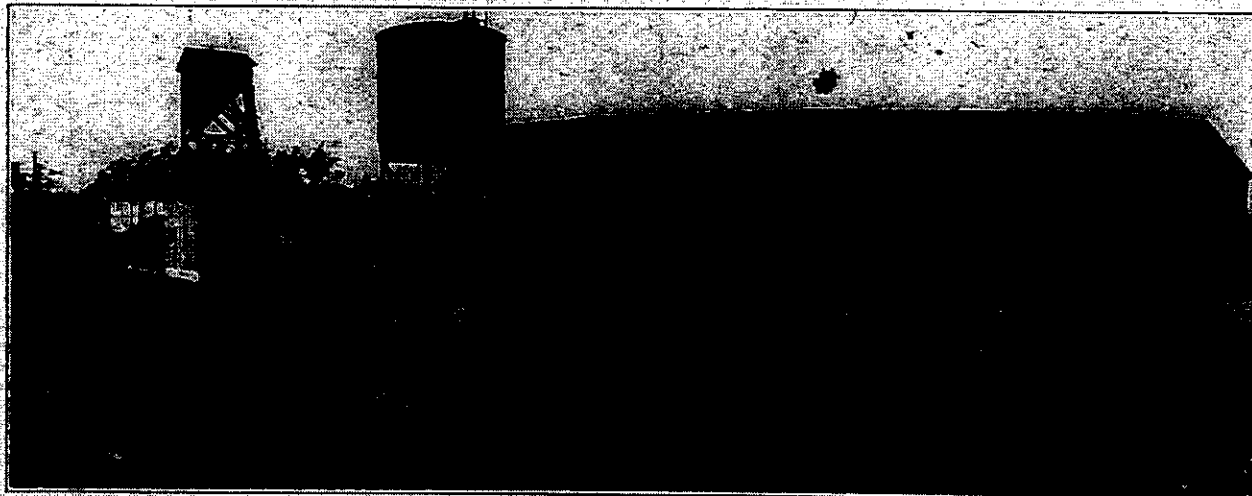
The store is one story and basement, the walls of the former being 12 in. brickwork, and of the latter of 18 in. concrete. On the ground floor a space of 38 by 56 ft. is reserved for the store proper and is equipped with a hand power elevator to serve the basement, and also shelving for the reception of supplies. At the east end of this floor there are three rooms, the outer two being offices for the Master



Esquimalt and Nanaimo Ry.'s Mechanical Terminal Layout at Victoria, B.C.

by 20½ ft. and the latter 45½ ft. by 19½ ft. The engine provided is 75 h.p. and of the tandem compound type. The air compressor is of the imperial cross compound steam driven type X, made by the Ingersoll-Rand Co. Two 100 h.p. standard C.P.R. locomotive type boilers, carrying 130 lbs. pressure, are being installed. They are equipped for fuel oil, which will be pumped to the burners from a 4 by 6 ft. circular auxiliary tank, located underground outside the building. This tank, in turn, will be

Mechanic and Storekeeper respectively, while the centre one is intended to house seven Bowser self registering oil pumps. The different varieties of oil to be used will be stored in 2 by 4 by 12 ft. oblong tanks, made of 3-16 in. plate. These are located in the basement in a reinforced concrete fireproof chamber, 16½ by 24½ ft., the feed piping leading direct therefrom to the Bowser pumps above. The remainder of the basement floor is intended for the storage of heavy material brought



Panoramic View Esquimalt and Nanaimo Railway Mechanical Terminal

See opposite page.

3 ft. screwing machine, small Bartram lathe, a large and a small drill, wheel press, planer, and shaper. The main shafting will be bracket fixed to the brick piers, and the counter shafting to the underside of the roof trusses.

The blacksmith and boiler shop is a continuation of the machine shop, partitioned

supplied by gravity from the service tank located near the turntable.

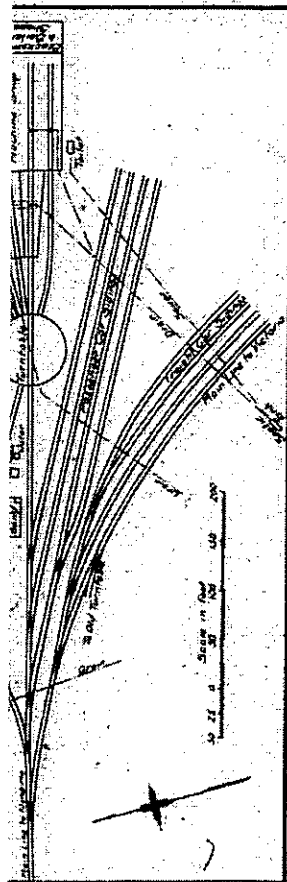
The car repair shop is 50 by 150 ft., and of 12 in. brickwork. The roof is pitched and covered with corrugated iron, the whole being carried by eight timber trusses at 18½ ft. centres. Here, as in the other buildings described, are all of concrete

down by the elevator. A platform has been erected round three sides of the building to facilitate the handling of deliveries from the track and street.

Eight feet from the centre of one of the tracks leading across the turntable is the concrete fuel oil storage tank, 22 by 8 by

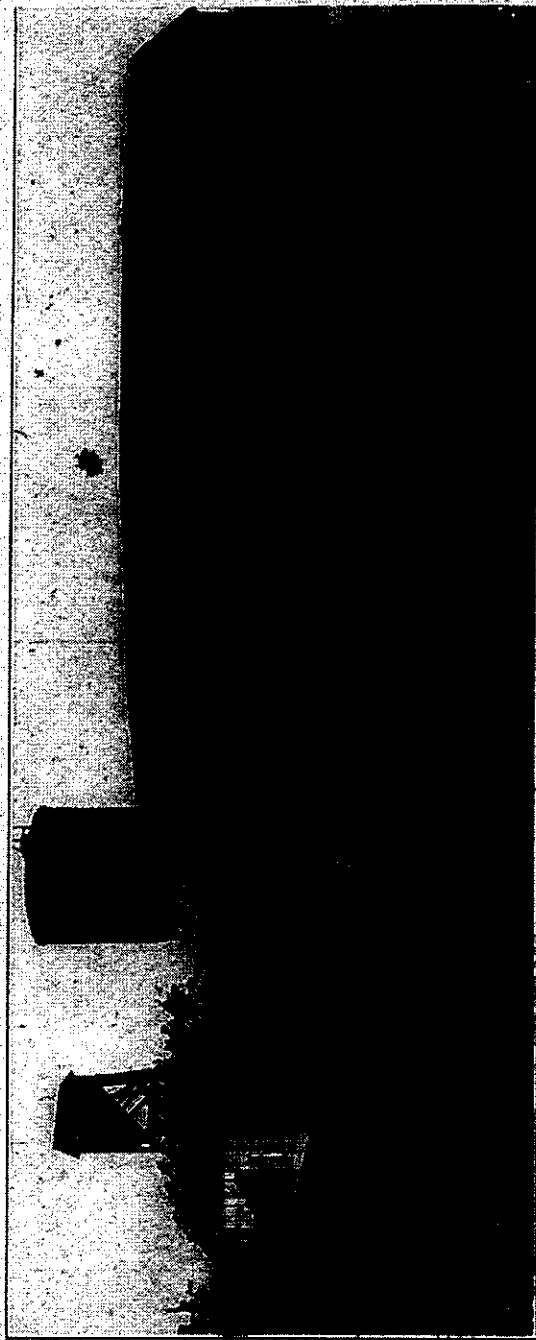
a width of 8 ft. all around the pit, 8 in. plank being spiked, the intervening floor space being finished off with clinders.

The machine shop is 68 by 112 ft., and is 18 ft. high to the under side of roof truss, and is provided with two locomotive pits and one drop pit similar in construction to those in locomotive house. The shops abut end on to the back of the locomotive house, one track entering from the end stall, and one from the outside of the locomotive house, thus providing outgoing and incoming tracks over turntable. The roof is pitched and is carried by six timber trusses at 16 ft. centres; these are supported on brick piers standing out $4\frac{1}{2}$ ins. from the 13 in. walls. Good lighting has been secured by three large skylights on the roof, together with ample sidelights, two windows being fixed in each bay. Bench accommodation has been supplied for the fitters, and the whole floor has been planed over. A width of about 36 ft., extending the length of the building, has been reserved for the installation of machinery tools, which are now being fixed, and include:—18 ft. wheel lathe, 16 ft. Bertram lathe, Bertram gap lathe, 20 ft. gap lathe,



Esquimalt and Nanaimo Ry.'s Mechanical Terminal Layout at Victoria, B.C.

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See opposite page.

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The blacksmith and boiler shop is a continuation of the machine shop, partitioned therefrom by a 9 in. brick wall. In it will

supplied by gravity from the service tank located near the turntable.

The car repair shop is 80 by 150 ft., and of 13 in. brickwork. The roof is pitched and covered with corrugated iron, the whole being carried by eight timber trusses at 16½ ft. centres. Here, as in the other buildings described, car pits of concrete construction are provided, together with

down by the elevator. A platform has been erected round three sides of the building to facilitate the handling of deliveries from the track and street.

Eight feet from the centre of one of the tracks leading across the turntable is the concrete fuel oil storage tank, 22 by 8 by 10 ft. high, which is entirely underground. The walls are 10 ins. thick with a 12 in.

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roof, the latter being strongly reinforced with T iron and expanded metal to ensure the safe carrying of trackage above. Near the storage tank, and equidistant between the two tracks crossing the turntable, stands an 8,000 gal. circular steel service tank, supplied by pump from the storage tank, from which the oil proceeds by gravity to the auxiliary tank near the boiler house. Locomotives will also receive their supply of fuel here by means of two sway pipes which radiate from the bottom of the tank, one to each track. Close by is the water standpipe, so that when taking oil, locomotives can also receive their water supply without change of position. A sand plant has been built 20 ft. from the water standpipe along the same track. The erection is of timber construction and of standard C.P.R. design. Generally speaking, the whole plant as above described is of an up to date character, all buildings are lit throughout by electricity, and are also equipped with water hydrants for fire protection.

The buildings are located to the extreme northwest of the ground, being allotted for terminal purposes. The layout of the freight yards, sheds and passenger station has not been completed, but the accompanying plan indicates the general scheme, so far as the shop layout is concerned.

The work of erection commenced April, 1913, and has been carried out by the contractor, E. R. Doe, of Victoria, B.C., under the direction of R. A. Bainbridge, Division Engineer, with A. L. Kennedy as Engineer in Charge. We are indebted to H. E. Beasley, General Superintendent, for the foregoing information.

The Most Powerful Electric Locomotives.
—The New York Central Rd. is having built for its terminal service six electric locomotives which will be the most powerful yet constructed. They will be capable of developing 2,000 horse-power continuously or 2,600 horse power for one hour. The equivalent tractive effort is 14,000 lbs. at 54 miles an hour continuously, or 20,000 lbs.

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Panoramic View Requisite and Mendham Railway Mechanical Terminal.

at 49 miles an hour at the one hour rating. Each locomotive will haul, if necessary, a 1,500-ton train on level track, continuously, at 60 miles an hour. They are insulated for 11,000 volts to enable them in the future, should it be desired, to operate on this voltage. They have a higher efficiency than any other high speed electric locomotives yet built.

be had at very low cost. Such a possibility suggests a development in manufacturing of incalculable value to the country and would seem worthy of special report. The existing canal system on the St. Lawrence is expensive to maintain and operate. The suggested system would seem to offer an canal locks, and that as an incident thereto, opportunity for large savings in both

See opposite page.

Experimental Fireproof Trains.—The Great Western Railway of England has put in service two experimental fireproof trains, each consisting of four cars. The cars are built entirely of steel, and are lighted throughout electrically. Wood has been practically eliminated from these trains. The only wooden construction is the foot board on the outside.

tractor. (May, pg. 218.)

Esquimalt and Nanaimo Ry.—A new steel viaduct on concrete pedestals and columns has been completed over the Arbutos Canyon, Vancouver Island, replacing a timber trestle. It was built by the Canadian Bridge Co. This is about the last of the timber bridges and trestles on the original E. and N. R., to be replaced.

The bridge across the Tsable River on the Courtenay extension is expected to be completed early in June, when track laying will be continued to the Trent River, where another bridge is under construction. When this is completed track can be laid into Courtenay. The ballasting gang is following close after the track laying. The terminal and other buildings at Courtenay are well advanced and are all expected to be completed by the time the track reaches the place in the fall. Shields and Newburn, Victoria, B. C., are the contractors for the buildings. (May, pg. 218.)

Ha Ha Bay Ry.—Although the Quebec Legislature has authorized the completion

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Railway Development.

Projected Lines, Surveys, Construction, Betterments, Etc.

Alberta and Great Waterways Ry.—Edmonton, Alta., press reports state that active work was started on this line at the point of junction with the Edmonton, Dunvegan and British Columbia Ry., April 27. Location plans for the first 180 miles of the line have been filed with the Alberta Department of Railways. It is expected that track will be laid to Lac la Biche by Dec. 31. W. R. Smith, who is Chief Engineer of the Edmonton, Dunvegan and British Columbia Ry., and of the Central Canada Ry., is Chief Engineer of the A. and G. W. Ry. also, all three lines being built by the J. D. McArthur interests. The E., D. and B. C. Ry., is to connect at the Alberta-British Columbia boundary with the Pacific Great Eastern Ry. (May, pg. 213.)

The Burrard Inlet Tunnel and Bridge Co.'s officials stated, May 4, that the British consulting engineers who prepared plans for the proposed bridge across the Second Narrows of Burrard Inlet, for which tenders were recently received, had agreed to withdraw from the contract owing to the fact that the tenders on their plans were not such as could be accepted. The directors are now considering the alternative plans submitted, and it is expected that one of them will be accepted. (May, pg. 213.)

Calgary and Fernie Ry.—We are officially advised that F. Crundell, Calgary, Alta., is General Manager of this projected railway. (May, pg. 213.)

Dominion Atlantic Ry.—Rapid progress is being made with the bridge renewal and strengthening work. The principal bridges on which work is being done are at Windsor, and across Bear River, near Annapolis, N. S. It is expected that the work will be completed by August. T. Cozzolino is the contractor. (May, pg. 213.)

Esquimalt and Nanaimo Ry.—A new steel viaduct on concrete pedestals and columns has been completed over the Arbutus Canyon, Vancouver Island, replacing a timber trestle. It was built by the Canadian Bridge Co. This is about the last of the timber bridges and trestles on the original E. and N. R. to be replaced.

The bridge across the Tsable River on the Courtenay extension is expected to be completed early in June, when track laying will be continued to the Trent River, where another bridge is under construction. When this is completed track can be laid into Courtenay. The ballasting gang is following close after the track laying. The terminal and other buildings at Courtenay are well advanced and are all expected to be completed by the time the track reaches the place in the fall. Shields and Newburn, Victoria, B. C., are the contractors for the buildings. (May, pg. 213.)

Ha Ha Bay Ry.—Although the Quebec Legislature has authorized the amalgamation of this company with the projected Roberval and Saguenay Ry., we understand that the amalgamation has not yet taken place, although the lines built by the H. H. B. Ry. are being operated under the title of the Roberval and Saguenay Ry.

The H. H. B. Ry. has 36.13 miles of line in operation, consisting of a line from Ha Ha Bay Jct., on the Quebec and Lake St. John Ry. to the Dominion wharf at Bagotville, about 20 miles; a branch to Chicoutimi, 3.5 miles; a branch to Lake Kenogami, 12 miles; and a branch to St. Alexis, one mile. The branch to Chicoutimi is operated by electricity. We are advised that no new railway work is being gone on with. A survey has been made for an ex-

tension of the line from Ha Ha Bay across the Saguenay, up around the north side of Lake St. John to the Mistassini River, about 70 miles. Nothing, however, has been done towards financing this construction. (Jan., pg. 21.)

Intercolonial Ry.—A large amount of work is reported to have been done on the new ocean terminals under construction at Halifax, N.S. The principal work consists of filling in and reclaiming from the water an area of about 200 ft. by 220 yards, necessitating the dumping of over 100,000 cubic yards of material. The cut for the branch line has been extended as far as Tower Road. The work in progress from Fairview towards the terminals has now reached a point between Mumford Road and Bayer's Road. The pier construction work, for which the contract was let to Foley Brothers, Welch, Stewart and Pauquier, has been started, and a sub-contract for dredging has been let to the Poupore Dredging Co., Montreal.

The acting Minister of Railways informed the House of Commons, May 6, that the contract for the construction of the branch line from Dartmouth to Dean's Settlement, N. S., 73 miles, was let to M. P. and J. T. Davis, Feb. 16, 1914, at schedule rates, aggregating \$1,740,277.98. The original contract had not been sublet.

Engineers have been making a survey for a diversion of line to overcome the present heavy gradient between Amherst and Napan, N.S. The diversion will probably start, local reports state, a little west of Amherst, and rejoin the main line near Blair's Lake.

A spur line is under construction into Pugwash, N.S., and is expected to be opened for freight traffic, early in July.

A contract is reported to have been let to Rhodes, Curry Co., Amherst, N.S., for the erection of nine steel bridges in Quebec and Nova Scotia. Tenders were received to May 27 for the substructures for 14 steel bridges in Nova Scotia, New Brunswick and Quebec. Tenders were also received to May 27, for a 40,000 gal. water tank at Jacquet River, N.B.; extensions to the freight sheds at Bathurst and Millerton, N.B., and Matapedia, Que.; and for the erection of a passenger station, freight room and dwelling at Perpetue, Que. (May, pg. 213.)

Kettle Valley Lines.—Good progress is being made with construction on the section of the line from Osprey Lake to Princeton, B.C., the completion of which for the track-layers is called for by Oct. 1. At Princeton the line will join the Vancouver, Victoria and Eastern Ry., and trains will run over that company's tracks, under a joint agreement, to the Coquihalla Summit, near Otter Creek. The K. V. Lines' route thence to Hope is under construction to be jointly operated with the V. V. and E. Ry. Over 50% of the grading on this section is completed, and there is only a three mile length on which work is not in progress. The contract calls for the completion of this section Dec. 1. Three of the piers of the bridge over the Fraser River at Hope, which is to give connection with the C.P.R., were reported completed May 6. The contract for the erection of the superstructure has been let to the Canadian Bridge Co., but it is not expected that the erection of this will be started until the track has been laid to the western approach. (May, pg. 214.)

Labrador, Quebec and Southern Ry. Co.—The House of Commons Railway Committee has changed the name of the proposed company, whose promoters asked for incorpora-

tion as the All Red Line Ry. Co., to the above; defined the line to be built as from Cape St. Charles, via Lake St. John, to Quebec, instead of from the Labrador coast to the Pacific Ocean; and reduced the capital from \$100,000,000 to \$10,000,000. Questions were asked in the House of Commons as to the standing of the promoters, and the acting Minister of Railways stated that F. A. Knapp, father-in-law of E. J. Holland, one of the incorporators mentioned in the bill, had formed him that "Mr. Gould, of New York and several other capitalists were interested in the project, and that there was sufficient backing to build the line from the Labrador coast to Quebec." Some discussion took place as to the differences between Canada and Newfoundland in regard to the Labrador coast, and it was decided to let the bill stand in order that this might be looked into. (See All Red Line Ry., April, pg. 165.)

Lake Erie and Northern Ry.—A special train ran over the completed line from Brantford to Galt, Ont., May 4, about 20 miles. The completed line starts at Jubilee Terrace in Brantford, and runs into Galt as far as the C.P.R.

The further construction of the line to Brantford is being held up pending a decision on the question of the raising of the Lorne Bridge. The plans for this were submitted to the city, May 3, when certain objections were made, and will be laid before the Board of Railway Commissioners. Construction is being proceeded with rapidly on the section south from Brantford to Port Dover.

It is expected that the Brantford-Galt line will be put in operation early in August. (May, pg. 214.)

Miramichi Bay Shore Ry.—The New Brunswick Legislature has incorporated a company with this title, to build a railway, along the shores of Miramichi Bay to serve Newcastle, Chatham and other points. (May, pg. 24.)

North Ry.—Press reports state that a contract will be let on an early date for the building of the first section of this projected railway from Montreal to a junction with the National Transcontinental Ry. at the Bel River crossing, Que. Surveys are being made for the second section of the line from the Bel River to Hudson Bay. F. H. Clergue, Montreal, is President, and C. J. Smith, Vice President and General Manager. (Feb., pg. 70.)

North Shore Ry. and Navigation Co.—The New Brunswick Legislature has granted an extension of time for the building of the uncompleted portions of this railway, in the vicinity of Beersville, N. B. (Jan., 1913, pg. 21.)

North Western Ry. Co. of Canada.—The bill asking for the incorporation of the North Western Ry. Co. of Canada was withdrawn from further consideration in the Dominion Parliament, May 13.

Pacific and Hudson Bay Ry.—W. R. Jenkins, described as General Purchasing and Right of Way Agent, visited Edmonton, Alta., recently, and is reported to have stated that he was on his way to Grouard, and other northern points, with a view of looking over the territory through which the company's projected line would pass, that the Pacific terminal will be at Bella Coola, that the line will run easterly through a comparatively rich country to the Pine Pass, and will then turn northerly to Lesser Slave Lake, that the original preliminary surveys showed a line passing along this lake by the N.W. ¼ sec. of sec. 15, tp. 75, range 14 west of the 5th meridian, about half a mile east of Grouard, and that something in the way of construction will probably be arranged for within the next few months. (May, pg. 214.)

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located as well as, west of the old meridian,
Alberta. (May, pg. 212.)

Esquimalt and Nanaimo Ry.—It was expected to have track laid to Courtenay, B.C., on the extension from McBride Jct., by June 30. The last report of the progress of the work prior to that date was that the superstructure on the Trent River bridge was being put in place by the Dominion Bridge Co. The ballasting gang is working close behind the tracklayers, and as the buildings in Courtenay are completed it is expected to have a train service in operation early in July. (June, pg. 266.)

Glengarry and Stormont Railway.—So far it has been impossible to obtain any official information about this company's proposed

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323.)

Esquimalt and Nanaimo Ry.—It was expected to open the extension of the line from McBride Jet. to Courtenay, Vancouver Island, for traffic, July 30. (July, pg. 323.)

Gananoque and Arnprior Ry.—The ratepayers of Gananoque, Ont., have voted \$25,000 towards building this projected railway. (April, pg. 168.)

The Glengarry and Stormont Ry. is under construction from about a mile west of St.

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act until 1910. (Aug. pg. 370.)
 Esquimaux and Nanaimo Ry.—The extension from Parksville to Courtenay, B.C., was formally opened for traffic, Aug. 6. The extension is 44½ miles long, and the distance from Victoria to Courtenay by rail is 101 miles. The line has been built to the C.P.R. standards, all bridges and other structures being of a permanent character, the same class as those put in on the original line acquired from the Dunsmuir interests in 1908. At Union, the seventh station from Parksville, a connection is made with the Wellington Colliery Co.'s railway. The station heretofore described as McBride Jet. has been renamed Parksville. The original section of the line from Esquimaux to Nanaimo, including the connection with Victoria, 73 miles, was opened for traffic, Aug. 13, 1886, and no further construction was undertaken until the line was placed under C.P.R. control. On Dec. 30, 1911, an extension from Wellington to Port Alberni, 54 miles, was opened for traffic.

monstrated by the fact that the extension consists of a form of being a steamship of the local streets. The local streets will have steamships the steamships utilized steamships be 2,800 for passenger traffic.

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The Outlook in Canada

TRULY, it is an ill-wind that blows nobody good. One Continent's "down" is another Continent's "up." The industries of Europe are, generally speaking, at a standstill, and matters will be worse before they can be better.

The whole world is looking to the North American Continent—to Canada and the United States—for much of its provisions, machinery, textiles, boots and shoes, beverages, vehicles, cement, brick, earthenware, fancy goods, furs, glass, garments, paper, soap, tobacco, wood products, and much else. Canada must get ready to meet the demand made upon her. We have continued prosperity ahead of us if our manufacturers and merchants use quickly to take advantage of their opportunity.

It is a time for business hopefulness, not for business gloom.

On June 18, 1913, an extension from Esquimaux to Cowichan Lake, 18 miles, was opened. The opening of the new extension makes the company 139½ miles of line on Vancouver Island. The B.C. Government has approved of the extension of the line to Duncan, but it has not been decided when the work will be gone on with. The company's shops, which heretofore have been located at Wellington, have been transferred to Victoria, where new buildings have been erected on the terminal site situated on the Songhees Indian reserve. A description of these shops, and of the final layout was published in Canadian Way and Marine World for March 5, pg. 370.)

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