

Canadian Railway and Marine World

August, 1918

Light Railways Along the British Front at Close Range.

By Robert K. Tomlin, Jr., War Correspondent of Engineering News-Record.

The primary function of the light railway is to deliver ammunition, troops, railroads and supplies from standard gauge railheads to points near the front, and by so doing relieve the highways of the enormous burden of traffic which they used to carry. The accompanying sketch plan, fig. 1, which is purely theoretical and does not convey information as to any actual location on the ground, will show the general relation to one another of the parts of a light railway system for the battlefront, and the area in the rear.

In the extreme forward section, rope-

munition, ordnance and supplies.

Fig. 1 shows also the loop system and cross connections which are characteristic of British light-railway practice. The idea is to have the loaded cars move forward on only one side of the loop, and the empties return on the other. Even where turnouts are built, the British endeavor to prevent even short haul train movements in opposite directions on the same side of a loop, and during my trip over the lines a non commissioner officer in charge of a gang building dug-outs was called to account for running a light push car for-

of track were recorded, while during the Cambrai "show"—every big engagement is called a "show" over here—a Canadian lieutenant colonel and his men laid 6 miles of track in 60 hours.

Repair work for all British armies at the time of my visit was involving the replacement each week of from 1,500 to 2,000 ft. of track broken by shell fire. This is an almost insignificant percentage of the total. In one army, however, 95 breaks in one day, due to shelling, were recorded, but this army has a greater track mileage than any other.



British Official Photograph

Fig. 4. Light railway construction at the British Front.

ways or push trolleys may be provided, although many situations demand the packing of ammunition and supplies on the backs of animals or men. Where possible, spurs are run out to artillery batteries, to which ammunition is delivered, one carload at a time. Further to the rear will be noted the various dumps for ammunition and stores. The designation R. E. on the sketch means Royal Engineers, and when used in connection with supplies refers to such material as timber, sand bags, wire mesh trench revetment, barbed wire, corrugated iron covering for dugouts and huts, duckboards, etc. At the extreme left the letters C. C. S. signify Casualty Clearing Station, to which the wounded are brought back, on light railway cars.

The layout at the railhead, fig. 2, provides for the transshipment of material from the standard gauge railway to the light railway, for the assembly of cars into trains, and for the storage of am-

ward on the track over which our train was making the inbound journey.

Although I saw some short sections of double track, the general practice here is to construct single track only, thus offering a smaller target for shell fire and cutting down the time needed for repair work if the track should be hit.

The mileage of light railway track per mile of battlefront varies within wide limits. In a quiet sector it may be as little as five miles, while in territory where there is much activity there may be a mileage of 10, 12 or even more per mile of front. A single track light railway weighs about 72 tons a mile for rail, connections and ties, while, as a rough average, 800 tons of ballast a mile is necessary, unless the ground is unusually bad. I was told that the grading, laying and ballasting of one mile of finished track requires, normally, about 2,400 man-days of labor. On some speedier work 1,760 man-days of labor per mile

At the head of the organization which is assigned to light railways is the Director of Light Railways (D. L. R.) who reports to the Director General of Transportation (D. G. T.). A mere listing of the various rungs in the organization ladder, however, would fail to convey an adequate idea of its real character. It is only when you circulate through the headquarters offices, go out on the line among the men, and see the splendid work they are doing, that you obtain a true appreciation of the light railway forces. Both British and United States officers are all railway specialists, hailing from every corner of the world—men who have built and operated railroads in Great Britain, the U.S., Brazil, Canada, the Argentine, India, Mexico and elsewhere. The U.S. force on one section of the line, for example, had been recruited, whole companies at a time, from such roads as the Boston & Albany, Maine Central, New York, New Haven & Hartford, and Boston

& Maine. The commissioned officers in these various companies, as a rule, came from the same railways as the enlisted men.

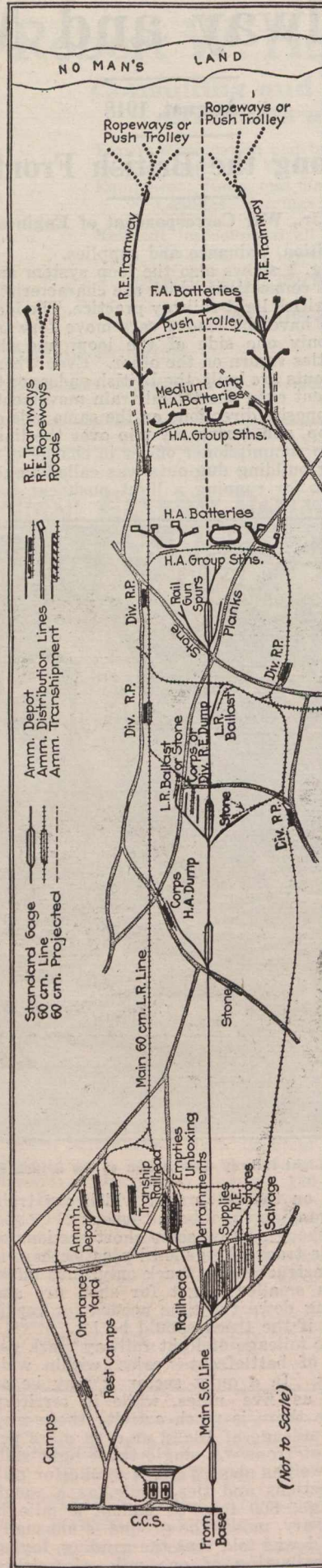
Having spent most of my time among officers and observed the splendid esprit de corps which prevails over the whole front, I was interested in getting the enlisted man's point of view, and during a stop at a siding I went up forward for a chat with the locomotive man and the brakeman of our train. One, I found, had served on the B. & A., and the other on the N.Y., N.H. & H. "Quite a difference between this job and the one back home on the B. & A.," I said to the locomotive man. "What gives you the most trouble in running one of these tractors?" He didn't hesitate a minute. "She's off the iron a little more than I like." Here was a man, who, by night or by day, nosed his trainloads of ammunition or supplies up into the danger zone, where high explosive shells, gas attacks and bombs from airplanes were all part of the day's work, and his chief concern was not of these things, but of locomotive derailments, of being "off the iron," of delays which would slow up deliveries. In answering my question, he had, unconsciously, given me something for which I had been blindly groping—a crystallization in words of the spirit which animates the light railway organization.

In the location of light railways no hard and fast rules can be laid down. The basic principle is that the line must follow the contour of the ground as closely as possible, although sometimes a trestle is built (fig. 3). Heavy cuts or fills must be avoided. It follows, therefore, that a light railway line, particularly near the front, contains a good many curves; the sharpest are of 30m. radius. An effort is made to keep the ruling grade below 2½%, but in some places 4% grades are required by local conditions.

As to proximity to the front, practice varies considerably also. In very quiet sectors, however, the lines may run as far forward as the reserve trenches. In others, single track known as "trench tramways" are used. Location depends upon the ground and the conditions with regard to observation by the enemy.

Fig. 4 gives a good idea of how a light railway line is constructed. Rail connections are made by fish-plates and bolts, four bolts a joint. A radical change in practice has gone into effect recently, involving the substitution of wood for steel ties. I traveled over a great many miles of line in the Flanders area, and close contact with the all prevailing mud of that region indicated quickly the reason for providing as large a bearing area as possible for the track. The wood ties are about 4½ ft. long, 7 in. wide and 4½ in. thick. When steel ties were used, the track sections, built up complete with ties, were delivered and laid in lengths of 5 m. The change to wooden ties, however, makes it necessary to spike down the rails in the field. I passed over long sections of old construction when wooden ties had been inserted under the rails between pairs of the steel ties.

Much of the ground in the northern areas occupied by the British armies is a regular morass, so that the drainage of the light railway roadbed is an extremely important part of the construction. Ditches on one or both sides of the line are universal. In looking over the weekly reports in a U.S. captain's quarters, I found a record of a 17-ton locomotive which had toppled over on its side when standing still, due to settlement of the saturated ground on which the track was laid.



The relation of various parts of a light railway system.

The construction and maintenance problems are further complicated by the scarcity of good ballast. The most easily obtainable material is the chalk which is characteristic of this region, and large quantities of it are employed for track ballast if nothing better can be had (fig. 5). The chalk, fairly satisfactory in dry weather, "turns to cream when it rains"—to use the phrase of one of the officers who was discussing its properties with me. Another objection to chalk ballast is that it shows up prominently in aerial photographs and offers a good target for artillery fire or bombing. Back of one of the U.S. railway camps is a pit from which sand is being taken for track ballast, and it is proving very satisfactory. In this area the old chalk ballast is either being removed and replaced by sand, or else covered with sand. Another material for ballast is what is called "mine earth," but this is to be had only in places near the coal mining regions. It is a waste product, looks like shale, and serves fairly well as ballast. Traveling over certain sections in northern France and Belgium, I looked down between the rails and read there the tragedy of cities that are no more, for brick and stone, all that remains of the buildings in what used to be towns near the front, are used to a limited extent near destroyed villages for ballasting light railway tracks. A government permit is required for the removal of this debris.

In spite of all the difficulties of construction and scarcity of materials, the track, in all of the regions where I traveled, is in very good condition. Derailments occur, of course, but with the comparatively light rolling stock used it is not much of a job to get an engine or tractor back on the rails. Rounding a curve at Ypres, where the track makes sharp turns to dodge the ruins of buildings, our petrol tractor, a 20 h.p. machine, was derailed. With a few wood blocks and steel bars, carried by every train, we got it quickly on the rails. Another time, when our tractor became unruly and jumped the track, it was lifted bodily and replaced by a working crew which happened to be near—just a case of "Off agin, on agin, gone agin—Finnegan."

Maintenance is consolidated with construction in the extreme forward areas, while farther to the rear separate gangs are assigned to these two duties. The chief task is the relining and rebalasting of track—for some of the very muddy areas are great ballast eaters—and the repair of breaks due to shelling. The maintenance crew must also keep the drainage ditches and culverts clear. During periods of frost and thaw a great deal of resurfacing is called for, and at such times the chalk ballast is particularly troublesome. Repair of track broken by shell fire falls to the lot of the maintenance or construction gang, according to whether the damage is at the front or rear. I was told at headquarters that for all the British armies the maintenance work requires about 14 men a mile of track. Breakage due to shelling at the time of my visit varied between 1,500 and 2,000 ft. of track a week for the entire front.

The hauling of light railway trains is done by several types of locomotives. In the rear area three makes of coal burning steam locomotives predominate. Near the front, where smoke and steam would draw enemy artillery fire, petrol-electric and plain petrol tractors do the work. Two of the types of steam locomotives weigh about 14 tons each and the third 17 tons. The 40 to 45 h.p. petrol-electric, or P. E., as it is called, weighs 6 tons. The light

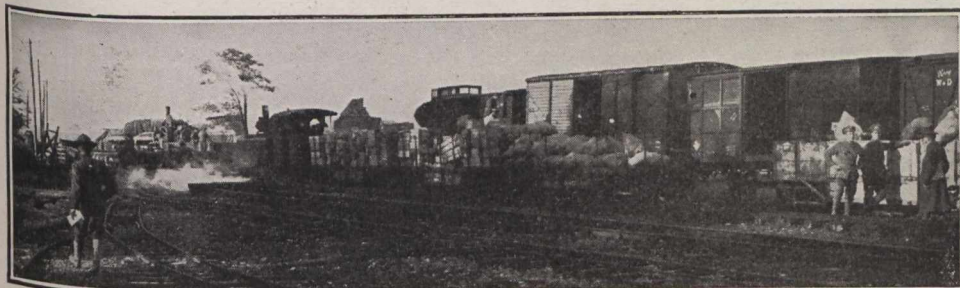
petrol tractor, 20 h.p., weighs somewhat less than 2 tons. There is, in addition, a tractor weighing about one ton, which consists of a small auto engine on a special truck; it is used for inspection trips or for hauling single carloads near the front. The table printed elsewhere in this article gives the load test on different grades for the several types of machine.

The steam locomotives, on account of their visibility, as before noted, and also

lighter and more bulky material, such as R. E. stores, the load per car may be only 5 or 6 tons. With troops the load per car will average about 3 tons. For perishable rations covered box cars are available. Then, too, there are small 4-wheeled wagons, 8 ft. long, for loads of 3½ tons each. For the hauling of heavy ordnance special trucks have been developed.

Hospital cars (fig. 7), fitted up with

8 and 9), for lifting derailed locomotives and tractors, and special groups of four or more cars, each 20 ft. long and 5 ft. 4 in. wide, constituting machine shops on wheels (fig. 10). The equipment in the latter includes drills, grinders, hack-saws, lathes and planers. These tools are operated by power from one of the standard petrol-electric tractors, which, if the occasion should demand, can haul the machine shop forward or backward. The shop on wheels remains in one location, however, unless it is decided to change the light railway base. The sides of these machine shop cars are hinged at the bottom and open outward, forming a platform extension on each side. Where the repair work is too heavy or complicated to be handled readily in the field, the rolling stock is shipped to a large central repair plant, thoroughly equipped with machine tools, spare parts and appliances of every sort for rehabilitating engines or cars suffering from shell shock or other ailments incident to light railway operation. We had intended to make a detour in our route for a visit to this central



British Official Photographs

Fig. 2. Layout at standard gauge railhead providing for trans-shipment to light railway cars.

the desirability of running them on track which is fairly well aligned, are reserved principally for the rear area haulage, while the petrol-electrics, and particularly the lighter petrol tractors, are for use close to the front lines. The petrol-electrics are equipped with internal combustion engines and generators, the motors being mounted directly on the axles. As indicated in the table, they are for heavier work than the plain petrol machines.

I asked one locomotive man about the relative operating difficulties with the light and heavy rolling stock. He replied, in substance, that the P. E.'s and steam

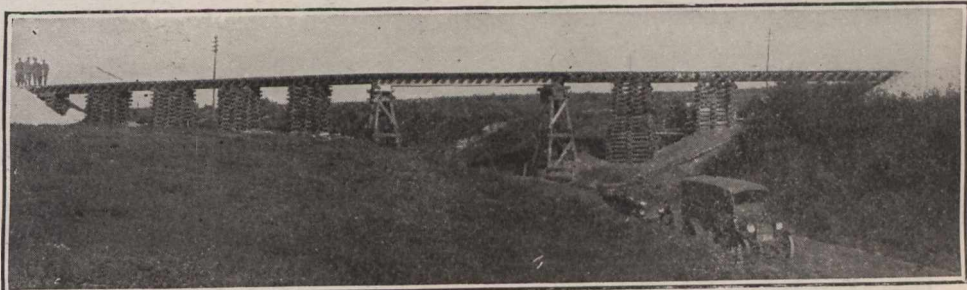
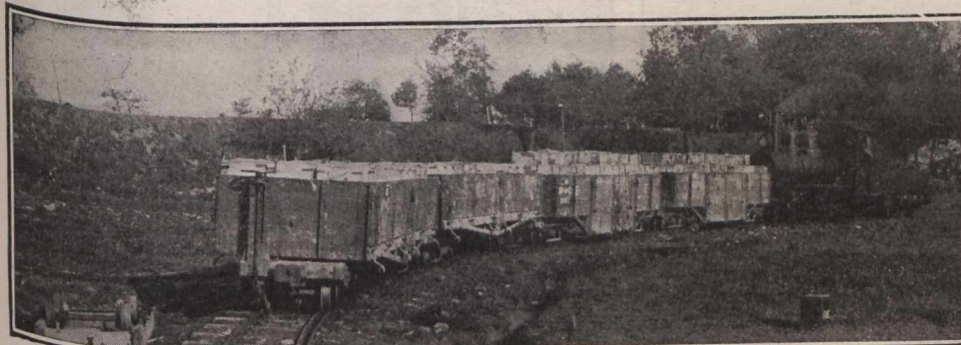


Fig. 3. Trestle on a light railway. British official photograph.

plant, but our schedule was so full that time did not permit an inspection of this very important feature of light railway work.

The information concerning light railways which I had picked up in scraps of conversation here and there before my visit to the front had led me to believe that these systems were operated to some extent on the go-as-you-please plan. An inspection of the field control posts and central train despatching offices in every army on the British front quickly dispelled this impression. Traffic is closely regulated, and the system in force allows the A. D. L. R. or his assistants to know at every hour of the day where each loco-



British Official Photographs

Fig. 6. Gondola cars of the flat-bottom and well-bottom types are used in large numbers.

omotives, if derailed, dug down into the roadbed, and, on account of their weight, came to a quick stop. The lighter machines, while easier to handle in case of accidents, generally ran farther off the rails.

On the petrol-tractor trains the crew consists of two men, driver and brakeman. With steam haulage, a third man, the fireman, is required. The maximum speed allowed is about 8 miles an hour, with a limit of 3 miles an hour at grade crossings.

A great many types of cars are used in light railway operation, depending on the kind of material to be hauled. The bulk of the freight handled comes under the following classifications: Ammunition, timber, coal and coke, rations, ballast, R. E. stores, salvage, stone for highway maintenance, with troops going to or returning from the front. In one army which I visited about a dozen different kinds of car were in service. The prevailing car (fig. 6) is a gondola about 20 ft. long and 5 ft. wide, made in both the flat and the well types. These cars can carry about 10 tons of ammunition, but with



Fig. 7. The wounded are transported by light railways in special cars. British official photograph.

banks of berths for carrying the wounded, are included in the rolling stock. I was told by the Assistant Director of Light Railways in one army zone that under normal operating conditions he considered 75 tons a 10-ton car a week a fair working average.

In addition to the car types enumerated, there are wrecking cars and cranes (figs.

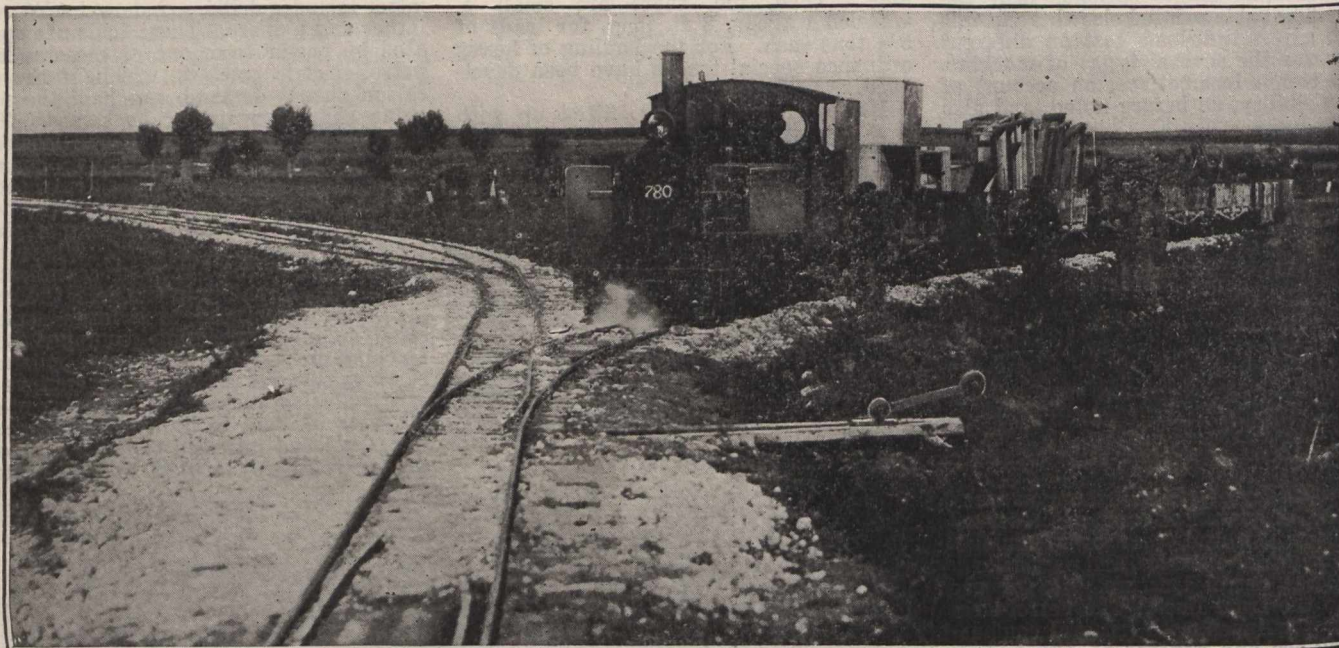
motive, tractor or car is, whether it is loaded or empty, what kind of freight is being hauled, and scores of similar details. In fact, one of our U.S. railway operating detachments has gone to the length of preparing a timetable for its section. The operating scheme in all of its main features is standardized along the whole front. From the nature of

things operation in the forward zone is largely at night.

In every army zone there are a central control station near A. D. L. R. headquarters and district control posts at various

with the approximate time of arrival at the latter, and no train is allowed to pass a district post unless the attendant has been so authorized. On one wall of every central control post is a long board with

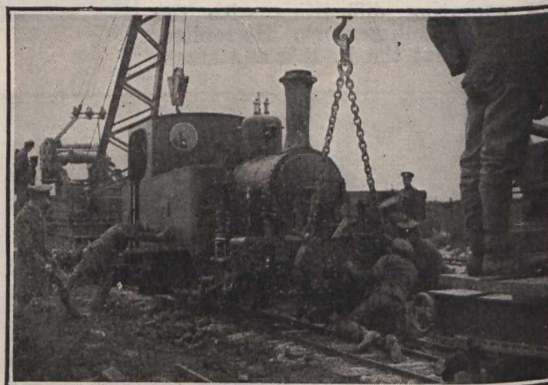
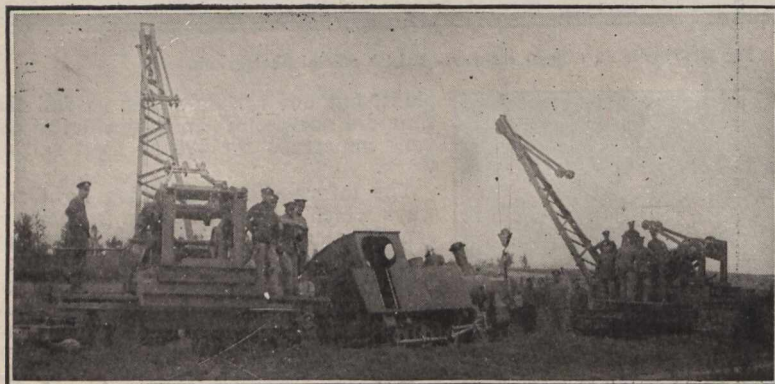
lettered on the board. Clips, with hooks which fit into grooves representing the track, are hung up for each train and moved forward or backward in accordance with reports on movements. A glance at



British Official Photograph

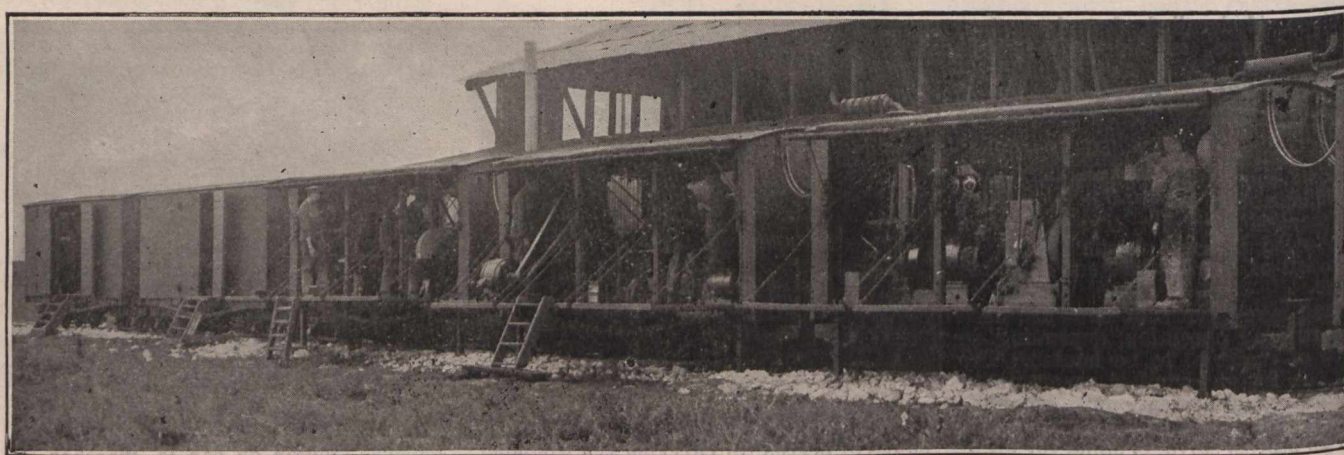
Fig. 5. A section of light railway track ballasted with chalk found in the vicinity.

Note also the switches, the drainage ditch at the right, which is a very important feature in muddy ground, the type of steam locomotive with water tanks on both sides of boiler, the cars, and the character of material carried in them.



British Official Photographs

Figs. 8 and 9. When the heavier steam locomotives are derailed, wrecking cars lift them back. The lighter petrol tractors can often be handled by blocking steel bars or derailing irons.



British Official Photograph

Fig. 10. Ordinary field repairs to rolling stock are made in a machine shop on wheels.

For heavy repair work and general overhauling, equipment is sent to a central repair plant.

points on the line, in direct telephonic communication with the main station. The time of departure of a train from the yards is telephoned to the district posts,

slotted wooden strips corresponding to every section of main track and siding in the system. Code numbers are given to each "station" on the line, and these are

the chart with its clips—red for loaded and green for empty—shows the position of every train in operation.

When a train is made up a form (fig.

12) is filled out, showing the number of the locomotive or tractor, the names of the crew, the destination, etc. For each car a "chit" (fig. 13) and waybill (fig. 14) are prepared. Then all the forms for one train are attached to the clip on the

system, starting at midnight. Thus a train does not leave at 9 p.m., but at 21 hr.

At each "station" on the main board is a small tin box with two divisions labelled "loaded" and "empty." When a car is

and deposited in the "loaded" compartment of the proper tin box and transferred to the "empty" compartment at the right time. Thus, information as to the location of the empties, for subsequent collection, is always at hand. When a locomotive has finished its run the chits are removed from the tin boxes on the control board and given to clerks who keep complete statistical records of the tonnage hauled.

In addition to this main train dispatching board there are separate boards at the central control stations designed to show the status, by districts, of each tractor and of each car—the number loaded and empty and the number working or idle. For each tractor or car there is a perforated metal disc, numbered, and, in the case of the cars, painted in two colors, red signifying loaded, and green empty. The locomotive and tractor discs are hung on hooks under three classifications: "Working," "spare" and "under repairs," assigned properly to their districts. A



On the railway in No Man's Land.

Official photograph taken on British Western Front, issued on behalf of Press Bureau. Crown copyright reserved.

DISPH.		BRANCH		DATE	
Jones 600 a. 200 PM Brown 200 P. 1000 PM Smith 10 PM 1000				Feb 21st, 1918	
WESTWARD		EASTWARD			
Conductor					
Engine					
Engineer					
Train					
Loads	30	24	Train	17	19
Empty	-	2	Loads	10	8
C-9	12-7	7	Empty	-	-
C-8	12-7	7	C-1	AM	AM
C-7	13-7	9-0	C-3	9-0	11-5
C-6	13-5	15	C-5	7-0	10-0
C-5	14-0	9-0	C-6	5-5	10-0
C-4	14-5	10-0	C-8	8-7	10-5
C-3	14-5	10-0	C-9	8-0	9-5
C-2	14-5	10-0			
C-1205					
C-1211					

Fig. 11. Train sheet used by United States railway detachments.



A Canadian narrow gauge railway crossing a French railway near Lens. Canadian official photograph.

main board and are moved back and forth with it. This gives a complete and immediate record. In light railway operation time is recorded according to a 24-hour

dropped from a train at any "station" or siding this fact is reported by telephone to the central control station. The "chit" for the car is then removed from its clip

L.R.P.C. 100	Loco Tractor No.	Class	Date
Depot		19	
Driver		On Duty	
Fireman		On Duty	
Guard		On Duty	
Total No.	STATION	Arr.	Dep.
57	C-1	800	5032
		154	
		897	
	C-3	830	835
	C-5	850	855
	C-9	915	1015
	C-103	1025	
			5032
			154
			897
			235

FIG. 12

L.R.P.C. 101	Class	Date	Train No.
61	K	2-10	120
Tractor No.	Time Loaded	Empty	
C-201	6:43		
TO	Time	Returned	
C-202	7:53		

FIG. 13

L.R.P. 114		LIGHT RAILWAYS.	
TO	DATE		
LOADED AT		Tons	Owts.
MATERIAL			
CONSIGNOR			
CONSIGNEE			

FIG. 14

Figs. 12, 13 and 14. Forms for tracing each train and each of its cars.

similar scheme of metal checks and hooks is employed for the cars, the classifications being "on hand," "loaded," "empty," "in transit" and "demurrage." The U.S. railway detachments employ the system in vogue in the British central and district

Load Test, in Long Tons, for Light Railway Locomotives and Tractors on British Front in France.			
Equivalent grade, per cent.	Steam locomotives	Petrol-electric, 40 h.p.	Petrol tractor, 20 h.p.
0.5	164	82	33
0.5-1.0	105	53	21
1.0-1.5	78	39	16
1.5-2.0	62	31	12
2.0-2.5	50	25	10
2.5-3.0	44	22	9

which members of the operating force had employed on their own railroads in the control posts, and in addition keep a train sheet (fig. 15). While the latter is not officially recognized, it is the method

U.S., and is kept up to date as a piece of extra work.

A very necessary part of the control system is the telephone lines, and to each A. D. L. R. headquarters are assigned a signal officer and men whose job is to keep the wires, switchboards and instruments in working order.

The number of cars per train varies widely. In the rear area one steam locomotive may haul on fairly level track nine 10-ton cars of ammunition or 12 cars of R. E. stores. These loads must be reduced in wet weather. As for the performance of light railways in carrying troops, one British officer told me that in his army zone alone as many as 160,000 had been carried in one day. As an indication of the relative amounts of the various materials which the light railways haul, the following figures, representing a month's traffic on a certain section of line operated by U.S. troops, is of interest, although I do not know whether these figures could be considered typical, for they are now several months old: Ammunition, 4,522 tons; rations, 6,284 tons; personnel, 3,281 tons; light railway ballast, 7,277 tons; salvage, 4,144 tons; miscellaneous, 6,992; total, 32,500 tons.

I am, of course, not at liberty to state the tonnage carried by the British light railway system, the figures for which I saw, among other records, at the headquarters of the Director General of Transportation, but in lieu of something specific this observation is pertinent: During the course of my trip over a good many hundreds of miles of highway, the routes were unobstructed and I noted scores of empty motor trucks, parked and idle, along the roadsides and in adjoining fields, both by day and by night. They told a silent, though none the less convincing, story of the work the light railways have done in the relief of traffic congestion behind the British front.

The foregoing is reproduced from Engineering News-Record, New York, to the editor of which we are indebted for most of the illustrations.

troops has been working unceasingly at the task, some units acting as pioneers in the construction of the great defence line that causes the Huns to hesitate on this sector. Little French villages, that never hoped for steel links with the larger cities, have now become, as if by the rubbing of some magic Aladdin's lamp, great junctions where trainloads of supplies come and go every part of an hour. The new lines run through the fertile fields of growing crops, and careful building has saved the Frenchman his harvest, but for the necessity strip of permanent way. There are alternate routes around towns

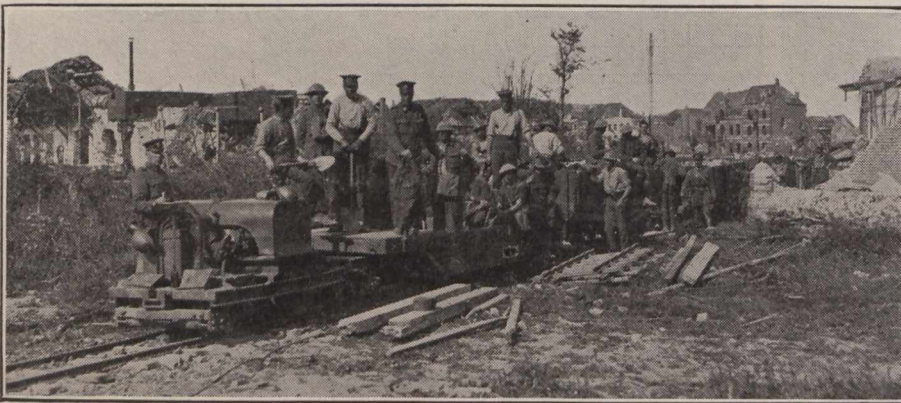
needed. The latest German thrust gave us the first test of the system, and divisions were shifted with a speed that must have surprised the Huns.'

"In the same way some of the Canadian auxiliary troops have been working untiringly in the gun spurs behind the new front, off which the big howitzers pound the enemy positions. One battery from the middle west has the record of construction, 12 of these in a week and each one cleverly camouflaged from the prying eyes of Hun airmen.

"From the new railheads, many of which have been christened with Cana-



Light railway laid over captured ground on the British Western Front. Official photograph issued on behalf of the Press Bureau. Crown copyright reserved.



Canadian railway troops passing through a ruined town after laying track. Canadian official photograph

Canadian Light Railway Building at the British Front.

Roland Hill wrote from the war correspondents' headquarters in France to the Militia Department, Ottawa, recently as follows:—

"Behind the new fighting line since the Huns' advance in April there has grown up a network of strategic railways, making a formidable system which more than compensates us for the loss of the lines we had to abandon and destroy in our retirement. Almost from the day the enemy crossed the Nord Canal practically every battalion of Canadian railway

which the Hun might shell, and day by day stores of carefully concealed ammunition dumps grow up which are fed by the strip of steel.

"Speaking from a strategical point of view," said a railway staff officer, "we are in a better position today than we were on the Somme. The hundreds of miles of new track have been built specially for military use and conform with the fighting front. All possibilities have been considered. Where, previously we had to rely on civilian built lines, which wound tediously round the country by indirect routes, we now have a military system which takes out supplies in the quickest and most direct way to where they are

dian names, there start fully constructed light railway systems that wind their way through little valleys, still screened from the enemy, to the fine new reserve trenches which have not yet had to be used, and perhaps never will be. You cannot run trains over a line drawn in blue pencil on an ordnance map, and the railway engineers have to build scores of miles that might be used. They must be there for an emergency.

"The construction of the new British defences—railways play a prominent part—have been marvellously complete, and have been so rapid that before the Huns could take breath for another stage of attacks on this northern section the fabric of a fortress faced them and grew into such menacing shape that he hesitated. Now if he takes another fling at the middle road to the coast he will have to pay the same great price in blood. The 'army behind the army' has done its duty and built well—even better than it destroyed in the sombre days at the end of March."

The Canadian Northern Rolling Stock Co. is reported to have obtained permission from the American Capital Issues Committee to issue \$5,000,000 of 6% equipment trust certificates. The company is a new one, incorporated for the purpose of providing rolling stock for the C.N.R. The certificates will be issued through a trust company and will be placed through a banking syndicate. The rolling stock is to be leased to the C.N.R. for an annual rental.

Steam Railway Statistics for Year Ended June 30, 1917.

Canadian Railway and Marine World for July contained a table giving the mileage of all steam railways in Canada, with details of the freight and passenger earnings and of the operating expenses and net operating earnings or deficits. In the following table the 1st column shows the net revenue or deficit on the railway operations of the several companies; the 2nd the profit or loss from operations outside railways, and the 3rd the income from all other sources. The 4th column shows the taxes paid, or loss from operations outside railways, and the 5th the income from all other sources. The 6th column shows the taxes paid, or loss from operations outside railways, and the 7th the income from all other sources. The 8th column shows the taxes paid, or loss from operations outside railways, and the 9th the income from all other sources. This is the first year in which we have published this table, but we consider it necessary, to supplement the table given in our June issue and to show the final results of the year's operation for each railway.

Name of Railway	Net operating revenue or deficit	Profit or loss from outside operations	Other income from all sources	Taxes deduction	Gross corporate income or loss	Rents, interest, sinking funds, etc.	Net corporate income or loss
Alberta & Great Waterways.....	-\$39,345.02	-\$1,708.12	\$25,855.70	\$2,160.60	-\$17,358.04	-\$153,387.28	-\$170,745.32
Algoma Central & Hudson Bay... .	186,996.68	287,521.32	113,765.84	30,728.67	557,555.17	818,994.31	-261,439.14
Algoma Eastern.....	271,020.22		1,186.98	1,839.13	270,368.07	272,573.07	-2,205.00
Atlantic, Quebec & Western.....	-13,361.83		59,074.61	3,263.00	42,494.78	78,274.69	-35,799.91
Brandon, Saskatchewan & H.B....	-84,391.13		595.31	1,071.89	-84,867.71	1,688.33	-86,556.04
British Yukon.....	137,377.47		22,592.22	6,805.27	153,164.42	103,889.97	49,274.45
Canada Southern.....	4,295.68				4,295.68	2,463.15	1,832.53
Canada & Gulf Terminal.....	5,936,234.61		593,384.38	252,859.82	6,276,759.17	4,149,550.06	2,127,208.51
Canadian Government Railways							
Intercolonial.....	1,638,139.91				1,638,139.91	786,605.68	851,534.23
International of N. B.....	-45,409.86				-45,409.86	18,699.10	-64,078.96
National Transcontinental.....	-82,032.16				-82,032.16	741,062.29	-823,094.45
St. John and Quebec.....	-18,115.95		230.67		-17,885.28	11,683.38	-29,568.66
Prince Edward Island.....	-245,183.35				-245,183.35		-245,183.35
Canadian Northern System.....	12,159,742.39		364,563.30	903,021.73	11,621,284.16	14,825,021.13	-3,203,736.97
Canadian Pacific.....	50,055,673.93	1,711,232.60	9,660,476.89	1,882,950.71	59,544,432.71	3,207,263.55	56,337,169.16
Cape Breton.....	-11,847.19				-11,847.19		-11,847.19
Caraquet.....	782.17				782.17	8,212.40	-7,430.23
Central Canada.....	-19,173.12		669.30	138.39	-18,606.21	38,116.41	-56,722.62
Central Vermont.....	66,305.25		22,546.45	5,450.39	83,401.31	68,296.74	15,104.57
Crows Nest Southern.....	-105,474.90		5.01	6,341.91	-111,811.80	4,332.60	-116,144.40
Cumberland Ry. & Coal Co.....	11,882.88				11,882.88		11,882.88
Dominion Atlantic.....	321,996.38	-2,666.89	23,291.67	412.36	342,208.80	341,462.43	746.37
Eastern British Columbia.....	-5,488.14			1,460.07	-6,948.21	6,624.97	-13,573.18
Edmonton, Dunvegan & B.C.....	-8,764.90	17,034.41	14,638.89	2,479.86	20,428.54	384,194.37	-363,765.83
Elgin & Havelock.....	-1,616.39				1,616.39		-1,616.39
Esquimalt & Naniamo.....	228,426.31			35,965.95	192,460.36	220,474.11	-28,013.75
Essex Terminal.....	32,441.92				32,441.92		32,441.92
Fredericton & G. L. Coal & Ry. Co.	41,233.78				41,233.78	51,416.61	-10,182.83
Grand Trunk.....	13,179,038.48		2,500,485.04	1,289,167.77	14,390,355.75	12,427,361.04	1,962,994.71
Grand Trunk Pacific.....	-205,734.81		2,535,064.04	44,725.79	2,284,603.44	7,992,184.38	-5,707,580.94
Grand Trunk Pacific branch lines..	-203,327.61		909,375.72	22,285.61	683,762.50	1,222,522.66	-538,760.16
Hereford.....	-55,837.58		382.01	1,800.97	-57,256.54	32,900.00	-90,156.54
Kent Northern.....	7,500.00				7,500.00		7,500.00
Kettle Valley.....	-100,159.48			10,020.18	110,179.66	84,392.50	-194,572.16
Lotbiniere & Megantic.....	1,052.03				1,052.03		1,052.03
Maine Central (Princeton Branch)	3,429.84		35.12	510.00	2,954.96	3,150.00	-195.04
Manitoba Great Northern.....	-83,218.36		210.54	920.34	-83,928.16	10,321.25	-94,249.41
Maritime Coal, Ry. & Power Co...	42,260.43				42,260.43	5,482.50	36,831.93
Massawippi Valley.....	-61,767.54		1,450.16	2,403.87	-62,721.25	69,035.52	-131,756.77
Midland of Manitoba.....	-9,810.70		28,076.90	27,128.45	-8,862.25	86,078.80	-94,941.05
Moncton & Buctouche.....	-1,230.03				-1,230.03		-1,230.03
Montreal & Atlantic.....	77,555.95		1,400.00	34,483.58	44,472.37	124,62.18	-80,189.81
Morrissey, Fernie & Michel.....	8,729.58				8,729.58		8,729.58
Napierville Junction.....	70,346.41		2,468.51	854.51	71,960.41	23,205.34	48,755.07
Nelson & Fort Sheppard.....	-47,830.30		105.41	5,619.66	-53,344.55	4,411.27	-57,755.82
New Brunswick Coal & Ry. Co....	-13,591.73				-13,591.73	3,456.43	-17,048.16
New Brunswick & P.E.I.....	-27,112.46				-27,112.46	5,107.94	-32,220.40
New Westminister Southern.....	-5,971.86		350.82	872.32	-6,493.36	16,944.18	-23,437.54
Ottawa & New York.....	-13,364.78		2,406.98	883.81	-11,841.61	52,240.15	-64,081.76
Pacific Great Eastern.....	-108,209.77				-108,209.77		-108,209.77
Pere Marquette.....	1,489,691.35		156,250.35	1,320.64	1,644,621.06	1,105,441.43	539,179.36
Quebec Central.....	566,082.35		15,427.18	15,046.24	566,463.29	289,970.37	276,492.92
Quebec, Montreal & Southern.....	-45,055.87		291,634.70	7,696.74	238,882.09	259,515.14	-20,633.05
Quebec Oriental.....	20,137.40		1.00	3,099.16	17,039.24	118,041.69	-101,002.45
Quebec Ry., Light & Power Co...	19,550.00			7,577.93	11,972.07		11,972.07
Red Mountain.....	-14,398.41		29.27	1,187.12	-15,556.26	137.73	-15,693.99
Roberval-Saguenay.....	47,537.00		4,000.00	17.44	47,537.00	94,131.73	-46,594.73
Rutland & Noyan.....	3,068.10				3,068.10	4,000.00	-931.90
Salisbury & Albert.....	6,779.34				6,779.34		6,779.34
St. Clair Tunnel (4).....	457,268.32		567.33	5,579.74	452,256.41	236,143.36	216,113.05
St. Martins.....	-2,809.46				-2,809.46	539.74	-3,349.20
Sydney & Louisburg.....	127,846.15				127,846.15		127,846.15
Temiscouata.....	28,866.35		2,485.81	3,628.42	27,696.74	22,560.88	5,135.86
Timiskaming & Northern Ontario.	525,577.25		134,700.43		660,277.68	77,706.74	582,570.94
Thousand Islands.....	12,241.37		534.29	78.99	12,696.67	10,569.90	2,126.77
Toronto, Hamilton & Buffalo....	884,948.20		72,684.55	34,988.78	922,643.97	302,635.08	620,008.89
Vancouver, Victoria & Eastern...	-333,980.53		168,120.80	64,745.56	-230,605.29	169,918.66	-400,523.95
Victoria & Sidney.....	1,044.94		344.57	1,488.75	-99.24	449.27	-548.51
Victoria Terminal Ry. & Ferry Co.	12,383.81	246.68	Dr. 403.43	1,380.05	10,847.01	25,550.87	-14,703.86
Wabash (6).....	1,207,668.04				1,207,668.04		1,207,668.04
York and Carleton.....	1,223.47				1,223.47	426.85	796.62
Total	\$89,894,376.24	\$2,016,035.61	\$17,731,038.52	\$4,726,462.17	\$104,334,486.19	\$51,175,398.81	\$65,092,798.87
Less—	2,013,534.22	4,375.01			1,437,407.82		13,371,119.32
Net operating earnings, etc.	\$87,880,842.02	\$2,011,660.60			\$102,897,078.37		\$51,721,679.55

Orders by Board of Railway Commissioners for Canada.

Beginning with June, 1914, Canadian Railway and Marine World has published in each issue summaries of orders passed by the Board of Railway Commissioners, so that subscribers who have filed the paper have a continuous record of the Board's proceedings. No other paper has done this.

General order 239. June 19.—Extending to Aug. 1, effective date general order 230, May 17, 1918, re interswitching to freight traffic.

General order 240. June 21.—Amending general order 94, July 24, 1912, re eyesight tests and protection of railway employees.

General order 241. June 29.—Authorizing railway companies engaged in westbound transcontinental traffic to increase commodity rates from Eastern Canada to place them on at least an equality with rates in effect from neighbouring points in U.S., rates so increased to become effective not earlier than Aug. 1, upon not less than 5 days notice to board and shipping public by filing in manner prescribed in Railway Act.

General order 242, June 28.—Authorizing change in rule 1 (c) of Canadian Freight Classification 16, to provide minimum weight for first car in series carrying articles too long for one car. This order is given in full on another page.

27378. June 28.—Dismissing complain of Crushed Stone, Ltd., Toronto, and Henderson Farmers' Lime & Phosphate Co., Woodstock, Ont., against increased G.T.R. rates on agricultural limestone and stone dust from Kirkfield, Ont., to various points.

27312. June 18.—Approving Chatham, Wallaceburg & Lake Erie Ry. standard freight mileage tariff C.R.C. 530, and standard passenger tariff C.R.C. 37, effective July 1.

27313. June 17.—Approving agreement between Bell Telephone Co. and Mud Lake Rural Telephone Co., Renfrew County, Ont., May 31.

27314. June 15.—Authorizing G.T.R. to build two spurs for Holden-Morgan Thread Miller, Ltd., Toronto.

27315. June 18.—Approving G.T.R. location and detail plan of proposed station at Campbellford, Ont.

27316. June 15.—Approving Canadian Northern Ontario Ry. revised location as built from Lot 123, Con. A, to Lot 8, Con. 3, Foley Tp., Ont., mileage 139.7 from Toronto; and authorizing C.N.O.R. to cross Blackstone Road by subway.

27317. June 18.—Approving Grand River Ry. bylaw authorizing M. W. Kirkwood, General Manager, and C. J. Whitney, General Freight and Passenger Agent, to prepare and issue tariffs of tolls.

27318. June 18.—Extending to Aug. 31 time within which Algoma Eastern Ry. shall complete fencing of right of way on east side of track between mileage 51.5 and 52.5, Merritt Tp., Ont.

27319. June 19.—Extending for two months from date time within which G.T.R. shall provide farm crossings in Bulstrode Tp., Que.

27320. June 18.—Authorizing C.P.R. to build spur for Christian Community of Universal Brotherhood at Trail, B.C.

27321. June 15.—Dismissing application of Rugg-Ball Manufacturing Co., Ayers Cliff, Que., for reduction in classification of wooden snow shovels, without prejudice to renewal of application.

27322. June 18.—Extending for three months from date, time within which G.T.R. shall complete siding for Palmolive Co. of Canada, Ltd., Toronto.

27323. June 19.—Amending order 26847, Dec. 19, 1917, re St. Maurice Valley Ry. (C.P.R.) crossing of highway in Three Rivers Parish, Que.

27324. June 19.—Authorizing London & Port Stanley Ry. to build spur on Bathurst St., between Waterloo & Wellington Sts., London, Ont., without prejudice to G.T.R. rights, if any, in respect of its track on Bathurst St., which has been removed under city authority.

27325. June 20.—Authorizing G.T.R. to build extension of siding, and spur therefrom, for Dupont Fabrikoid Co., New Toronto, Ont.

27326. June 20.—Extending to June 1, time within which City of Fort William, Ont., shall complete installation of half-interlocking plants at intersection of Victoria Ave. and Vickers St., and at intersection of Franklin St., as required under order 19319, May 15.

27327. June 20.—Ordering Bell Telephone Co. to amend its tariff C.R.C. 3100 to provide rate for local messages from coin-box public telephones, or from attended public telephones on two-number basis inside base areas, at 5c each, and from coin-box public telephones outside base areas at 10c each; effective within 14 days from date.

27328. June 21.—Ordering Esquimalt & Nanaimo Ry. to erect shelter and platform at Bowser, B.C.; to be completed by Aug. 15.

27329. June 21.—Dismissing complaint of A. McKinnon, Cumberland, B.C., that Wellington Colliery Ry. refuses to note damages on freight bills when charges are prepaid.

27330. June 22.—Dismissing complaint of taxicab drivers in Winnipeg against treatment received from railway companies at Union station, Winnipeg.

27331. June 24.—Ordering Canadian Northern Ry. to erect platform for shipping milk at Rottluff Road crossing, Matsqui, B.C., to be completed within 30 days.

27332. June 24.—Dismissing complaint of Mac-Cosham Storage & Distributing Co., Edmonton, Alta., that Grand Trunk Pacific Ry. refuses to bill forward complainant's cartage charges in same manner as is done for Western Cartage Co.

27333. June 22.—Dismissing Canadian Northern Ry. application for authority to close station at Dropmore, Man.

27334. June 24.—Refusing application of council of St. Louis rural municipality 431, et al. for order directing Grand Trunk Pacific Ry. to erect station at St. Louis, Sask.

27335. June 22.—Refusing application of City of Moose Jaw, Sask., for order directing Grand Trunk Pacific Branch Lines Co. to install electric alarm bell at crossing of 16th Ave. and Toronto St.

27336. June 24.—Refusing application of W. R. Fansher, Govan, Sask., for order directing Grand Trunk Pacific Ry. and C.P.R. to provide interswitching facilities at Nokomis, Sask.

27337. June 24.—Ordering Canadian Northern Ry. to appoint grain agent at Hodgson, Man., Sept. 1, for grain shipping season.

27338. June 24.—Authorizing Miami Corporation to build across C.P.R. main line overhead at mileage 101.75, Cascade Subdivision, near Port Haney, B.C.; if any dispute, same to be settled by an engineer of the board.

27339. June 24.—Refusing application residents of Vantage, Sask., for order directing C.P.R. to erect new station building there.

27340. June 24.—Dismissing Vancouver Harbor Commissioners' complaint that C.P.R. will not allow foreign cars for Vancouver with export freight to be taken over line leased by British Columbia Electric Ry., to Vancouver wharves.

27341. June 24.—Amending order 26683, Oct. 25, 1917, re highway crossing over Grand Trunk Pacific Ry. at New Hazelton, B.C.

27342. June 25.—Ordering Canadian Northern Ry. to build stock yards at Haight, Alta., to be completed by Aug. 1.

27343. June 25.—Refusing application of residents of Buchanan, Sask., for order directing Canadian Northern Ry. to build siding for elevator site.

27344. June 25.—Ordering Canadian Northern Ry. to appoint station agent at Mecheche, Alta., by Sept. 1.

27345. June 24.—Refusing application of L. R. Barrett Lumber Co., Swift Creek, B.C., for order directing Canadian Northern Ry. to appoint agent there.

27346. June 24.—Refusing application of Purcell Coal Co., Maple Creek, Sask., for order directing C.P.R. to install scale at Taber, Alta.

27347. June 25.—Ordering Edmonton, Dunvegan & British Columbia Ry. to erect portable cattle loading chute at Prest, Alta., by Sept. 1.

27348. June 25.—Ordering Canadian Northern Ry. to provide well and an extra yard for pigs at Kuroki, Sask., by Aug. 1.

27349. June 24.—Extending to July 31, time within which G.T.R. shall complete station at Lyster, Que., as per order 26668, Oct. 18, 1917.

27350. June 25.—Ordering Edmonton, Dunvegan & British Columbia Ry. to install portable station and temporary loading platform at Prest, Alta., by Sept. 1.

27351. June 26.—Refusing application of residents of Buttress, Sask., for order directing C.P.R. to appoint station agent there.

27352. June 25.—Authorizing Grand Trunk Pacific Branch Lines Co. to build station at Hoey, Sask.

27353. June 26.—Ordering Canadian Northern Pacific Ry. to build 43 crossings over its tracks between mileage 54 and 96, Vancouver Island line, for Cowichan Lumber Co., Mossom Boyd Co., and W. T. C. Boyd Co.

27354. June 25.—Authorizing C.P.R. to divert road allowance on western boundary of Secs. 33 and 28, Tp. 40, Range 24, west 4th meridian, and to carry same across tracks at grade at mileage 14.8, Lacombe Subdivision, Alta.

27355. June 24.—Authorizing G.T.R. to rebuild bridge 143 over White River, Acton Tp., Que.

27356. June 21.—Authorizing G.T.R. to build spur for E. J. Jones, Brampton, Ont.

27357. June 21.—Authorizing C.P.R. to build temporary extension to Canada Iron Corporation siding for Morrow & Beatty, crossing Heriot and Forges Sts., Drummondville, Que.

27358. June 24.—Authorizing Toronto, Hamilton & Buffalo Ry. to build, at grade, across 4 highways in Saltfleet Tp., Ont.

27359. June 21.—Approving Toronto, Hamilton & Buffalo Ry. plans of culvert under its tracks at Albion Stream, between Stoney Creek & Kinross, Ont.

27360. June 21.—Ordering Michigan Central Rd. to stop train 14 on flag at Woodlee to let off passengers from Windsor and points west.

27361, 27362. June 21.—Authorizing Halifax & South Western Ry. (C.N.R.) to remove regular agents at Barrington and Woods Harbor stations, N.S., caretakers to see stations are kept clean and heated for passengers on arrival and departure of trains, and to care for l.c.l. freight and express.

27363. June 25.—Authorizing C.P.R. to divert road allowance on western boundary of Sec. 34, Tp. 40, Range 24, west 4th meridian, and build

same at grade across its tracks at mileage 15.8 Lacombe Subdivision, Alta.

27364. June 25.—Authorizing Laval Electric Co. to erect wires along C.P.R. at mileage 17, Lachute Subdivision, Que.; and rescinding order 27080, Mar. 20.

27365. June 26.—Authorizing D. Bushby, Kedleton, Sask., to cross under C.P.R. on his property in Tp. 21, Range 23, west 2nd meridian; to repair or fix crossing in any way he desires, providing safety of C.P.R. bridge and track be not interfered with, and permission and rights granted not to be interfered with by C.P.R. without reasonable notice first being given. This without prejudice to rights of either party.

27366. June 27.—Authorizing Toronto, Hamilton & Buffalo Ry. to build branch in Hamilton, Ont., from its belt line near Beach Road, through certain lands named in book of reference, across Ottawa St., to G.T.R. lands, in lieu of present Grasselli connection, and to occupy certain G.T.R. lands.

27367. June 26.—Approving agreement June 14, between Bell Telephone Co. and North Bonaventure Telephone Association, Ltd., Renfrew County, Ont.

27368. June 27.—Authorizing Algoma Eastern Ry. to carry highway over its tracks between Lots 4 and 5, Concession 6, Merritt Tp., Ont.

27369. June 25.—Approving Toronto, Hamilton & Buffalo Ry. plans of rebuilding of Thompson Road subway, Bridgeburg, Ont.

27370. June 27.—Authorizing C.P.R. to divert road allowance in north boundary of n.e. ¼ Sec. 22, Tp. 27, Range 6, west 2nd meridian, Sask.

27371. June 27.—Authorizing Canadian Northern Ry. to build highway crossings between Secs. 34 and 35; and Sec. 34, Tp. 22, and Sec. 2, Tp. 23, Range 27, west 2nd meridian, Sask.

27372. June 25.—Extending to May 1, 1919, time within which Edmonton, Dunvegan & British Columbia Ry. shall complete siding and station facilities at junction of its line with its Grande Prairie Branch, as required under order 25961, Mar. 22, 1917.

27373. June 25.—Ordering Edmonton, Dunvegan & British Columbia Ry. to put entire station building at Donnelly, Alta., to public use; partition same to make passenger waiting room 9 ft. by 15 ft. 8 in., and freight shed 9 ft. by 16 ft. 4 in.; appoint caretaker to keep station waiting room clean, heated and lighted, to see that package freight and express matter are properly housed, keep freight shed locked, with notice posted for information of residents, advising where caretaker can be found at convenient point, and make delivery of l.c.l. and express shipments between 8 a.m. and 6 p.m.; to extend station platform at least 100 ft.; all by Sept. 1.

27374. June 28.—Dismissing application of United Farmers of Alberta, Blackie, Alta., for order directing C.P.R. to install telephone at Blackie station.

27375. June 28.—Ordering Canadian Northern Ry. to erect fence on each side of spur for H. E. Cardey, Stettler, Alta.

27376, 27377. June 28.—Authorizing C.P.R. to build at grade its Regina, Saskatoon & North Saskatchewan Branch across East Second St., Renown, and across South St., Holdfast, Sask.

27379. July 3.—Authorizing Hull Electric Co. to file tariffs increasing freight rates, except on coal and coke, by 15%, rates on coal and coke by 16c a ton; and passenger rates so as not to exceed 2.875c a mile; tariffs be effective after compliance with secs. 327 and 331 of Railway Act.

27380. July 3.—Extending to Aug. 31 time within which C.P.R. may remove old piles and abutments from bed of Big Creek, Tilbury North Top, Ont., as required by order 27110, Apr. 4.

27381. June 28.—Ordering Grand Trunk Pacific Ry. to move station at Three Hills, Alta., from west to east side of track about 300 ft. north of north switch, subject to condition that board of trade and citizens contribute \$300 toward cost; if cost is less, surplus to be returned to contributors; if in excess difference to be paid by company; work to be completed by Sept. 1.

27382. July 4.—Approving Windsor, Essex & Lake Shore Rapid Ry. standard mileage freight tariff C.R.C. 236, effective July 20.

27383. June 28.—Dismissing application of Sidney, B.C., Board of Trade for order to apply B.C. coast terminal rates to Sidney.

27384. July 4.—Authorizing C.P.R. to build spur for Canadian Rolling Mill Co. in Lot 3607, Emard Ward, Montreal Parish, Que.

27385. July 4.—Authorizing Saskatchewan Government to build highway crossing over Grand Trunk Pacific Branch Lines Co.'s track between Regina and Melville on surveyed road north of n.e. ¼ Sec. 26, Tp. 19, Range 15, west 2nd meridian.

27386. June 29.—Dismissing Esquimalt & Nanaimo Ry. application for order exempting it from complying with circular 81, and ordering it to comply with its provisions and to display night signals on main track switches from sunset to sunrise; when weather or other conditions obscure day signals, night signals to be used in addition. 27387 to 27389. July 5.—Dismissing application of City of Galt, Ont., for order directing C.P.R. to provide bell or other appliance at crossing at Bev-

erley St. and Dundas and Waterloo Road, and ordering C.P.R. to flag trains over crossing, also dismissing applications of city that C.P.R. provide gates at crossing of Dundas and Waterloo Road and bell at Beverley St., the first crossing to be protected by watchman during shunting between 7 a.m. and 6 p.m., and trains to be flagged over latter crossing.

27390. July 4.—Authorizing C.P.R. to build extension to spur for D. Auckland & Son, East Kildonan, Man.

27391. July 3.—Approving agreement, June 19, between Bell Telephone Co. and Rydal Bank-Plummer Telephone Co., Algoma District, Ont.

27392. July 2.—Amending order 27241, May 21, re C.P.R. and Ottawa & New York Ry. train service at Finch, Ont.

N 27393. July 4.—Authorizing Essex Terminal Ry. to build across Sandwich, Windsor & Amherstburg Rd. at grade on Main St., near Langlois Road, Sandwich West Tp., and to cross on Main St. near Chappus St.

27394. July 5.—Authorizing G.T.R. to build two sidings for National Iron Corporation, Toronto.

27395. June 29.—Amending order 15015, Sept. 8, 1911, re G.T.R. connection with Timiskaming & Northern Ontario Ry. at Nipissing Jct., Ont.

27396. June 29.—Authorizing Canadian Northern Quebec Ry. to build branch for Silica Products, in St. Canute Parish.

27397, 27398. July 2.—Approving agreements between Bell Telephone Co. and Osprey Tp., Ont., June 15, and Rose Telephone Co., Algoma District, Ont., June 19.

27399. July 6.—Approving supplement F to Express Classification for Canada 3, to be filed as supplement 12.

27400. July 6.—Relieving Canadian Northern Ry. from providing further protection at crossing 2 miles east of Odessa, Sask.

27401. July 8.—Approving agreement, June 28, between Bell Telephone Co. and Montreal Light, Heat & Power Co., Soulanges County, Que.

27402. July 6.—Re charge by Canadian Northern Ry. for delivery in New Westminster of carload of barley from Clyde, Alta. This order is given in full on another page.

27403. July 6.—Dismissing application of municipalities of Burnaby and Coquitlam, B.C., for order requiring Vancouver, Victoria & Eastern Ry. & Navigation Co. (G.N.R.) to complete work required under order 25260, Aug. 10, 1916, with leave to apply to board re any matters arising out of temporary timber abutments supporting southerly end of bridge near Sapperton, B.C.

27404. July 8.—Dismissing application of W. S. Henderson, Drumheller, Alta., for order directing C.P.R. to build spur near high level bridge at Lethbridge, Alta.

27405. July 9.—Dismissing application of John Abrey, Souris, Man., for ruling re fencing by C.P.R. across Souris River.

27406. July 5.—Dismissing application of G. H. Furnival, Edmonton, Alta., for order directing Grand Trunk Pacific Ry. to pay for damages to his property.

27407. July 5.—Dismissing application of South Alberta Wool Growers Association for order requiring railway companies to establish minimum carload weight of 12,000 lbs. on sheep in single deck cars.

27408. July 6.—Ordering Grand Trunk Pacific Ry. to complete fencing of right of way between Houston and Knockholt, B.C., by Oct. 1.

27409. July 5.—Dismissing United Farmers' Association's application for order requiring C.P.R. to appoint agent at Cairns, Alta., and ordering C.P.R. to appoint caretaker to keep station clean, and when necessary heated and lighted for arrival of passenger trains, and to see package freight and express shipments properly housed; C.P.R. to remove coal from freight shed and repair planking of platform; work to be completed by Aug. 1.

27410. July 6.—Dismissing Fort Frances Pulp & Paper Co.'s application for order directing Canadian Northern Ry. to furnish 60 cars daily for transportation of mill refuse for fuel from Beaudette, Minn., to Fort Frances, Ont.

27411. July 10.—Approving Hull Electric Co.'s standard maximum passenger tariff C.R.C. no. P-9, and standard maximum freight tariff C.R.C. no. F-82, effective July 22.

27412. July 8.—Authorizing Grand Trunk Pacific Saskatchewan Ry. to connect with C.P.R. Southernland Subdivision at mileage 7.45, and with C.P.R. Lanigan Subdivision at mileage 105.2; also connect with G.T.P.R. at mileage 471.7; and at mileage 460.7; protection to be determined by board's engineer.

27413. July 4.—Authorizing Shawinigan Lake Railway Co. to build level crossing for logging railway over Canadian Northern Pacific Ry. right of way at Hunter Creek, Shawinigan Lake, B.C.

27414. July 5.—Authorizing Timber & Logging Co.'s logging railway crossing under Esquimalt & Nanaimo Ry. near Ladysmith, B.C.

27415. July 8.—Authorizing G.T.R. to rebuild bridge 107, near Agincourt, Ont.

27416. July 8.—Ordering Canadian Northern Ry. to erect 3rd class station at Lanfine, Alta.; to be completed by Sept. 1.

27417. July 9.—Approving Minto Tp., Ont., plan and specifications of work to be done on drain under G.T.R. near Harrington station, Ont.

27418. July 9.—Authorizing C.P.R. to build spurs for Consolidated Mining & Smelting Co. of

Canada, at mileage 75.9, Boundary Subdivision, B.C.

27419. July 9.—Extending for two months from date time within which Canadian Northern Ry. shall complete work required under order 27267, May 28, in Worthington Tp., Ont.

27420. July 9.—Amending order 27228, May 14, re G.T.R. sidings for Dominion Steel Foundry Co., Hamilton, Ont.

27421. July 10.—Approving London & Lake Erie Ry. & Transportation Co.'s standard mileage freight tariff C.R.C. 6.

27422. July 10.—Approving agreement, June 20, between Bell Telephone Co. and Renfrew & Shamrock Telephone Association, Renfrew County, Ont.

27423. July 11.—Authorizing Saskatchewan Government to make public highway over Grand Trunk Pacific Ry. between Secs. 5 and 6, Tp. 32, Range 27, west 2nd meridian.

27424. July 5.—Dismissing application of City of Victoria, B.C., for order apportioning cost of maintaining pedestrian traffic over Esquimalt & Nanaimo Ry. bridge.

27425. July 10.—Approving agreement, July 1, between Bell Telephone Co. & Timiskaming & Northern Ontario Ry. Commission, in Nipissing District, Ont.

27426. July 11.—Dismissing complaint of E. A. McKenzie of Arden, Man., against refusal of railway companies to supply him with car doors for sand and gravel shipments or pay him for doors supplied by himself.

27427. July 10.—Ordering C.P.R. to build spur for Simington Co., Calgary, Alta.

27428. July 10.—Authorizing Toronto, Hamilton & Buffalo Ry. to build at grade across highway at Ottawa St., Hamilton, Ont.

27429. July 12.—Dismissing application of Freight & Express Underwriters of Toronto, for same rating for zam-buk as provided in Canadian Freight Classification for vaseline.

27430. July 11.—Authorizing G.T.R. to remove shelter from Ballsville to Willow Grove, Ont., and to discontinue stopping trains on flag at Ballsville.

27431. July 12.—Authorizing New Brunswick (C.P.R.) to expropriate certain lands for additional main line at West St. John and Fairville, N.B.; to build main line at grade across New Brunswick Power Co.'s railway on Main St., Fairville; and to build at grade across North St., Union Point Road, Main St., Raynes Ave., Sherbrooke St., and Sand Cove Road, Fairville, N.B.

27432. July 12.—Authorizing G.T.R. to use highway bridge over its main line at mileage 222.22 near Belleville, Ont.

27433. July 13.—Authorizing Alberta Public Works Department to carry highway over Grand Trunk Pacific Ry. at Thornton, Alta.

27434. July 5.—Dismissing application of W. Harvey and C. C. Hale, Mazana, B.C., for order, directing Kettle Valley Ry. to build spur and shelter for freight and passengers at mileage 41, and ordering K.V.R. to erect shelter platform equal to board's standard 1-A at east end of Osprey Lake station grounds on north side of main line between water tank and east switch; to build spur for at least 2 cars to be spotted; and grade team track to enable cars to be driven along side and loaded from the ground.

27435. July 11.—Authorizing Grand Trunk Pacific Ry. to build over highway at Rosevear Station, Alta.; cost of construction and maintenance to be paid by Alberta Public Works Department.

27436. July 11.—Ordering Grand Trunk Pacific Ry. to build interchange track with C.P.R. near Forrest, Man.; and to file detail plans; work to be completed within 60 days from approval, and expense to be borne by G.T.P.R.

27437. July 15.—Ordering G.T.R. to stop train 103 at Oakville, Ont., when there are passengers for that point from Toronto; this order to remain in effect until Sept. 15.

27438, 27439. July 17.—Suspending, pending hearing on date to be fixed, C.P.R. Supplement 77 to Tariff C.R.C. no. E3210, effective July 25, and G.T.R. Supplement 73 to Tariff C.R.C. no. E3426, effective July 28, cancelling present commodity rates on glass bottles in carloads from Hamilton, Toronto and Montreal; also Supplement 7 to Toronto, Hamilton & Buffalo Ry. Tariff C.R.C. 502; Supplement 20 to G.T.R. Tariff no. E2619, and Supplement 9 to C.P.R. Tariff C.R.C. no. E2641.

27440. July 16.—Approving Minto Tp., Ont., plan of work to be done on municipal drain 10 under G.T.R.

27441. July 16.—Authorizing agreement between Canadian Northern Ry. and C.P.R. re C.N.R. bridge over C.P.R. and Moose Jaw Creek (third crossing) at mileage 86.1, Sask.

27442. July 16.—Authorizing Union Bank of Canada, Estevan Branch, to pay C.P.R. from amount deposited by Bienfait Commercial Co. to board's credit, \$3,445.31 allowed for spur at mileage 148.9, Estevan Subdivision, Sask., balance with accrued interest to be repaid to Bienfait Commercial Co.

27443, 27444. July 11.—Extending to Aug. 31, time within which G.T.R. shall install gates at St. Phillipe and St. Marguerite Sts., Montreal, provided crossing be protected by watchmen.

27445. July 18.—Authorizing C.P.R. to build spur for Standard Paint Co. of Canada, in Lot 954, Lachine Parish, Que.; and approving clearances at tank house door.

27446. July 18.—Authorizing Essex Terminal Ry. to open for freight traffic the portion of its railway from north side of Titcombe Road, Ojib-

way, to Amherstburg, Ont., 10.5 miles; speed of trains limited to 15 miles an hour.

27447. July 18.—Authorizing Canadian Northern Ry. to build highway over its tracks between Secs. 9 and 16, Tp. 45, Range 17, west 3rd meridian, Sask.

Training Women as Railway Ticket Sellers.

Because of the need for skilled ticket sellers and the difficulty of obtaining enough trained men, the United States Railroad Administration has opened schools in several sections of the country for training women to fill these positions. The present force of trained men ticket sellers will be retained whenever possible because of the expert character of their work, but it has been found necessary to supplement their activities with women. This is due partially to the increase of traffic and partially to the loss of men to the army and navy. When thoroughly trained, women ticket sellers will be paid the same salaries as men doing the same work. Already enough applications have been made to fill the schools for the present. After preliminary training of from one to two months, the women who show aptitude will be given work of actual selling the simpler form of tickets and gradually will be worked into the sale of more complicated forms.

Coal Supplies for the Northwest.

The United States Fuel Administration and the U.S. Railroad Administration have arranged for shipments of coal by the Great Lakes to take care of the Northwestern states and that portion of Canada dependent upon coal shipments on the lakes. A total of 28,000,000 tons of bituminous coal will be moved by the Lake Erie ports to the Northwest. Approximately 24,000,000 tons will go to the Northwestern States and the remainder to Canada. The movement of the coal will be forced during the summer months, so that if possible the movement of the coal can be completed by the end of October. This arrangement will avoid a repetition of the trouble last autumn, when Ohio and Michigan were unable to obtain coal in the early fall months because of the lake movement. This year, therefore, it will be possible for these states to lay in their supply before winter, although they will have to wait until autumn to obtain the major portion of their supplies.

Live Stock Freight Rates in the West.

J. D. McGregor, Food Controller for Western Canada, is reported to have said, July 13, that the railway companies had agreed on a reduction of 50% in the rate for moving live stock and feed from all points in Manitoba, Saskatchewan and Alberta east of Cochrane and Lundbreck, south of a line on the C.P.R., running from Red Deer to Lacombe, to Kerrobert, to Wilkie, to Saskatoon, and by G.T.P., east of Saskatoon to the eastern boundary, about 100 miles west of Winnipeg. Cattle and sheep will be moved to the north at half rate, subject to minimum rate of 5c per 100 lb. on cattle and 6½c per 100 lb. on sheep up to Nov. 15, 1918; shipment returning, half rate in reverse direction prior to Oct. 1, 1919, provided returned by original owner to original point of shipment.

Newfoundland Railway Rates.—The Reid Newfoundland Co., on June 1, increased its railway passenger fares per mile as follows: 1st class, from 3c to 4c; 2nd class, from 2c to 3c. Freight rates have not been increased.

Birthdays of Transportation Men in August.

Many happy returns of the day to:

V. T. Bartram, ex-Purchasing Agent, Timiskaming & Northern Ontario Ry., now of General Contracting & Dredging Co., Toronto, born at Ottawa, Aug. 2, 1880.

J. C. Beckwith, Engineer of Construction, Canadian Government Railways, Moncton, N.B., born at Fredericton, N.B., Aug. 1, 1875.

C. B. Brown, Assistant General Manager, Eastern Lines, and Chief Engineer, Canadian Government Railways, Moncton, N.B., born at Ithaca, N.Y., Aug. 27, 1879.

J. S. Carter, District Passenger Agent, C.P.R., Nelson, B.C., born at Aurora, Ill., Aug. 14, 1864.

A. E. H. Chesley, General Accountant, Dominion Atlantic Ry., Kentville, N.S., born near Annapolis Royal, N.S., Aug. 27, 1877.

A. B. Chown, Travelling Passenger Agent, G.T.R., Pittsburg, Pa., born at Belleville, Ont., Aug. 4, 1887.

G. T. Coleman, Car Service Agent, Ontario District, C.P.R., Toronto, born at Carleton Place, Ont., Aug. 25, 1875.

C. H. N. Connell, Engineer Maintenance of Way, Quebec District, Canadian Northern Ry., Montreal, born at Woodstock, N.B., Aug. 26, 1876.

H. W. Crawford, General Agent, Canada Steamship Lines, Ltd., Cleveland, Ohio, born at Bowmanville, Ont., Aug. 24, 1887.

E. L. Desjardins, Acting Superintendent, District 5, Intercolonial Division, Canadian Government Railways, Edmundston, N.B., born at St. Jean Port Joli, Que., Aug. 1, 1859.

A. Eastman, Vice President and General Manager, Windsor, Essex & Lake Shore Rapid Ry., Kingsville, Ont., and Vice President, Canadian Electric Railway Association, born in Bosanquet Tp., Ont., Aug. 21, 1870.

L. C. Fritch, ex-General Manager, Eastern Lines, Canadian Northern Ry., now General Manager, Seaboard Air Line Ry., Norfolk, Va., born at Springfield, Ill., Aug. 11, 1869.

J. V. Foy, General Passenger Agent, Canada Steamship Lines, Ltd., Toronto, born there Aug. 27, 1882.

G. H. Ham, Head Office Department, C.P.R., Montreal, born at Trenton, Ont., Aug. 23, 1847.

W. B. Harper, Resident Engineer, Laurentian Division, Quebec District, C.P.R., Montreal, born at Baie Verte, N.B., Aug. 15, 1882.

M. B. Helston, Superintendent, Division 3, Western District, Canadian Northern Ry., Edmonton, Alta., born at Michigan, Ind., Aug. 24, 1869.

W. P. Hinton, Vice President and General Manager, Grand Trunk Pacific Ry., and Western Traffic Manager, Canadian Government Railways, Winnipeg, born at Hintonburg, Ont., Aug. 30, 1871.

F. S. Isard, Comptroller, Canada Steamship Lines, Ltd., Montreal, born at Hamilton, Ont., Aug. 14, 1888.

J. D. McDonald, Assistant General Passenger Agent, G.T.R., Chicago, Ill., born at Toronto, Aug. 27, 1855.

T. McHattie, ex-Master Mechanic, Eastern Lines, G.T.R., Montreal, born at Dufftown, Banffshire, Scotland, Aug. 8, 1854.

M. K. McQuarrie, Engineer, Dominion Atlantic Ry., Kentville, N.S., born at Sault Ste. Marie, Ont., Aug. 17, 1884.

A. H. Mahon, District Locomotive Foreman, Grand Trunk Pacific Ry., Ed-

son, Alta., born north of Ottawa, Ont., Aug. 27, 1874.

W. J. Meakin, Locomotive and Car Foreman, C.P.R., Wetaskiwin, Alta., born Toronto, Aug. 22, 1872.

C. Montgomery, Master Mechanic, Pere Marquette Ry., St. Thomas, Ont., born near London, Ont., Aug. 29, 1860.

W. E. Mullins, General Manager (Freight), United Fruit Co., New York, born at Stratford, Ont., Aug. 13, 1870.

W. G. Murrin, Assistant General Manager, British Columbia Electric Ry., Vancouver, B.C., born at Greenwich, Eng., Aug. 27, 1875.

F. H. Phippen, K.C., General Counsel, C.N.R., Toronto, born at Belleville, Ont., Aug. 26, 1862.

W. M. Porteous, District Freight Agent, C.P.R., St. Louis, Mo., born at Edinburgh, Scotland, Aug. 3, 1857.

W. G. Ross, President, Montreal Harbor Commissioners, born at Montreal, Aug. 6, 1873.

W. LeB. Ross, Local Treasurer, G.T. Pacific Ry., Winnipeg, born at Ottawa, Ont., Aug. 9, 1868.

F. C. Salter, European Traffic Manager, G.T.R., and Canadian Express Co., London, Eng., born at Sarnia, Ont., Aug. 31, 1863.

W. H. Sample, Superintendent of

Motive Power, Grand Trunk Ry., Montreal, born at Altona, N.Y., Aug. 20, 1864.

A. O. Seymour, General Tourist Agent, C.P.R., Montreal, born at Ogdensburg, N.Y., Aug. 14, 1887.

S. A. Simpson, Superintendent, Sleeping, Dining and Parlor Cars and News Service, C.P.R., Winnipeg, born at Toronto, Aug. 22, 1880.

J. F. Sweeting, Industrial Agent, Natural Resources Department, C.P.R., Calgary, Alta., born at Worthing, Eng., Aug. 20, 1872.

W. J. Sturges, acting Assistant Purchasing Agent, Grand Trunk Pacific Ry., Winnipeg, born at Fairfield, Vt., Aug. 28, 1877.

L. Tait, Secretary-Treasurer, London St. Ry., London, Ont., born at Hamilton, Ont., Aug. 9, 1882.

F. E. Warren, General Car Foreman, C.P.R., Winnipeg, born at Chelsea, Que., Aug. 29, 1872.

W. B. Way, Superintendent, District 2, Transcontinental Division, Canadian Government Railways, Cochrane, Ont., born at Bowmanville, Ont., Aug. 22, 1867.

H. E. Weyman, Manager, Levis County Ry., Levis, Que., born at Guildford, Eng., Aug. 27, 1883.

Rail Deliveries.—Up to July 5, the Dominion Iron & Steel Co. had delivered 43,615 tons, out of the 100,000 tons of steel rails ordered by the Dominion Government for various railways.

Canadian Pacific Railway's Honor Roll 36.

Adair, Wilbert	Laborer	Lamton	Killed in action
Adam, Charles	Stower	Calgary	Killed in action
Agger, Ralph	Clerk	Winnipeg	Killed in action
Anderson, John Alexander	Assistant agent	Newdale	Killed in action
Arnold, John Henry	Clerk	Parkdale	Killed in action
Barlow, Fred.	Wiper	Souris	Wounded
Bell, Wesley	Car checker	Weyburn	Killed in action
Bickley, Charles H.	Fireman	Winnipeg	Died of wounds
Birkill, Thomas M.	Clerk	Calgary	Killed in action
Bolt, Arthur	Locomotive fireman	British Columbia Dist.	Presumed dead
Brown, Joseph	Car inspector	Kenora	Wounded
Burchall, Douglas	Car inspector	Kenora	Died of wounds
Clark, Job	Wiper	Broadview	Died of wounds
Clemis, Wesley	Brakeman	Winnipeg	Wounded
Cooper, Alex. M.	Clerk	Montreal	Died of wounds
Crisp, John	Apprentice	Angus	Wounded
Cumming, John	Checker	Place Viger	Gassed
Dauphin, Leonard	Apprentice engineer	Victoria	Killed in action
Davies, Owen	Lineman	Revelstoke	Gassed
DeMill, Frank	Clerk	Winnipeg	Killed in action
Duncan, James Foster	Clerk	Montreal	Killed in action
Esselmont, John W.	Assistant agent	Hope	Gassed
Exall, Albert E.	Inspector	Terrebonne	Killed in action
Fisher, John	Conductor	Calgary	Wounded
Flint, Alfred W.	Billor	Regina	Killed in action
Gilkes, Handel G.	Engineer	Lethbridge	Wounded
Green, Thomas Bold	Apprentice	Ogden Shops	Wounded
Hansen, P.	Fireman	B.C. Coast Service	Wounded
Harlow, Harry Vernon	Wiper	East Calgary	Wounded
Harrison, James	Sectionman	Westbourne	Killed in action
Hemming, Joseph Chas.	Clerk	Montreal	Wounded
Hickey, Herbert Chas.	Car repairer	Calgary	Died of wounds
Hobbs, Henry Harold	Messenger	Winnipeg	Wounded
Hunter, James	Checker	Victoria	Killed in action
Kelly, Walter	Stower	Winnipeg	Killed in action
Kirkwood, Wm. Hugh	Wiper	Winnipeg	Killed in action
Loudon, Wm. D.	Apprentice	Victoria, B.C.	Gassed
Love, J. R.	Tinsmith	Winnipeg	Wounded
McQuarrie, Geo. L.	Yard foreman	Winnipeg	Killed in action
Morris, Alfred William	Clerk	Calgary	Wounded
Mosley, Charles H.	Clerk	Montreal	Killed in action
Moss, Cecil Frederick	Wiper	Outlook	Presumed dead
Piggott, Frank	Car repairer	Winnipeg	Wounded
Porter, George L.	Laborer	Winnipeg	Presumed dead
Reid, William G.	Stock keeper	Winnipeg	Killed in action
Rider, Ernest H.	Storekeeper	Ogden	Killed in action
Roy, Joseph Peter	Yardman	Hardisty	Killed in action
Schroder, George H.	Air brake cleaner	Cartier	Wounded
Sharpe, Allison E.	Watchman	Toronto	Gassed
Sharland, Thomas	Car repairer	Woodstock, N.B.	Died of wounds
South, Thomas	Car cleaner	West Toronto	Presumed dead
Tanaka, Yasogiro	Red cap	Calgary	Died of wounds
Taylor, George	General helper	Calgary	Killed in action
Thompson, Jesse C.	Yardman	Angus	Wounded
Todd, Harry	Car inspector	West Toronto	Wounded
Trites, Barret A.	Locomotive fireman	Regina	Killed in action
Turner, Wm. F.	Yard foreman	Moose Jaw	Wounded
VanAlstyne, Wm. F.	Trainman	Fort William	Died of wounds
Walsh, John	Agent	Winnipeg	Gassed
Weatherhead, John C.	Constable	Deleau	Wounded
Wiseman, Stanley W. E.	Storeman	Kamloops	Died of wounds
		Winnipeg	Wounded

Shown on honor lists to date:—Killed, 666; wounded, 1,506. Total, 2,172.

Freight Rates Advanced by Order in Council.

The following semi official statement for the press was given out in Ottawa, July 25:—Acting on a report prepared by the Board of Railway Commissioners, an order in council has been passed increasing freight rates to an amount sufficient to meet the increased operating cost imposed on the railways by the new wage schedule. The increase will average about 20%. The freight rate increases are the direct outcome of the acceptance in Canada of the McAdoo award, which applies to both government railways and railways owned by private companies.

The railway companies, confronted with demands for increased wages, stated that they were willing to grant the increases allowed by Director-General McAdoo in dealing with the wages of railway employes in the U.S. They recognized the general similarity of operating conditions in Canada and the U.S., and admitted that in general wage scales of railway employes in this country were similar to those in force on the other side. The railway employes are taken in their daily work from one side of the line to the other, and the brotherhoods are identical in their scope. Recognizing these facts and conditions, the Dominion Government made effective in Canada the so-called McAdoo scale of wages. As a corollary the Canadian railways insisted that the McAdoo scale of freight rates, which were deemed necessary in order to carry the increased cost of railway operation in the U.S., should be adopted here.

The condition of the Canadian railways made this result all the more certain. The earnings of the Grand Trunk in 1916 of \$1,200,000 dropped in 1917 to such an extent that there were practically no net earnings, and no dividends on any of the preferred stock could be or were declared. There was also a drop in the first six months of this year in the C.P.R. net earnings of \$6,500,000 compared with the first six months of 1917. The deficit on the Canadian Northern was increasing and there was no other way in which money for meeting the increased scale of wages which the men demanded could be raised.

By order in council passed under the War Measures Act the government, after considering a report prepared by the Board of Railway Commissioners on the rate situation in Canada, has practically adopted the McAdoo increases. There are certain exceptions made in cases where it was found that the adoption of the scale would unduly limit or interfere with Canadian commerce. The export and import rates system in Canadian territory where rates were not increased, continue to stand, and can only be increased subject to a maximum of the lowest rate or rates in U.S. territory to or from the seaport ports. In like manner the low value ore in the Kootenay district, which could not well stand the U.S. increase, is held down to the stone and rubber commodity basis.

The effect of the application of the U.S. increases brings about a different increase in Canadian territory in the East and West. In the U.S. eastern territory advances were made by the Interstate Commerce Commission, in the so-called 15% case. Advances were also made in Canadian territory by the Board of Railway Commissioners in both Eastern and Western Canada, but no advances were granted in U.S. territory on the lines of the Northern Pacific and Great Northern Railways in territory immediately con-

tiguous to the Canadian West. In applying the increases, therefore, in eastern territory the McAdoo increases are calculated upon the rates advanced by the board following the action which has been taken in U.S. eastern territory, while in western territory the advances granted by the Board of Railway Commissioners are struck out and the McAdoo increases calculated upon the former rates.

This percentage of increased rate will not, however, be actually effective. On the short hauls, where the total freight bill does not constitute a large percentage of the value of the article carried, somewhat higher increases would be instanced, but on the longer hauls on most of the important commodities rates are held down to a maximum increase, and in other cases by flat increases, which cannot be exceeded, no matter how long the haul may be. It is impossible to tell what the exact percentages of increase will be that the railways will obtain under the McAdoo order. In all probability it will not exceed 20%.

The increase granted cannot add anything to the net revenues of the companies. It may fall short of meeting their increased expenses. The increased operating cost entailed by applying the McAdoo award is some \$53,000,000, and in 1917, when the Canadian railways probably earned the highest rates in their history, the gross freight earnings amounted to but some \$215,000,000. The government has ordered the Board of Railway Commissioners to check each month the operations of Canada's three main roads—the Canadian Pacific, Grand Trunk and Canadian Northern—so that if it is found that any increase is unnecessary it may be promptly reduced to the proper figure. The board is also ordered to make a monthly report to the cabinet covering the operation of the new tariff.

One important effect of the order will be to bring the western and eastern scale of rates more in line and remove the grounds for complaint by the westerner that he is more heavily taxed for the operation of Canada's railways than is the easterner. In this connection it may be noted that one of the first judgments of the present Chairman of the Board of Railway Commissioners was to reduce the express companies' tariffs in western territory 20%, leaving the rates in the eastern territory as they were. This reduction was followed by the general reduction in freight rates in western territory, which was brought about by the board's judgment in the western rate case, and the board in 1916 increased the freight rates in eastern Canada again, bringing the scales nearer a parity.

The Order in Council.

Following is the order in council passed by the Dominion Government, July 27, on the Minister of Railways' recommendation:—

Notwithstanding the provisions of any legislation heretofore passed, or of any rate-limiting agreement heretofore made, the charges for the carriage of freight on all railways owned, operated or controlled by the Government of Canada, and all other railways subject to the jurisdiction of the Parliament of Canada, shall be increased to the extent and in the manner hereinafter set out, that is to say:

Territory East of Ft. William.

Section 1—Class Rates.—All class rates in eastern territory shall be increased 25%.

Section 2—Commodity Rates.—(a) Commodity rates on the following articles in carloads shall be increased by the amounts set opposite each:—

Coal—Where rate is 0 to 49c a ton—15c a net ton of 2,000 lb.

Where rate is 50 to 99c a ton—20c a net ton of 2,000 lb.

Where rate is \$1 to 1.99 a ton—30c a net ton of 2,000 lb.

Where rate is \$2 to \$2.99 a ton—40c a net ton of 2,000 lb.

Where rate is \$3 or higher per ton—50c a net ton of 2,000 lb.

Coke—Where rate is 0 to 49c a ton—15c a net ton of 2,000 lb.

Where rate is 50 to 99c a ton—25c a net ton of 2,000 lb.

Where rate is \$1 to \$1.99 a ton—40c a net ton of 2,000 lb.

Where rate is \$2 to \$2.99 a ton—60c a net ton of 2,000 lb.

Where rate is \$3 or higher a ton—75c a net ton of 2,000 lb.

Ores, Iron—30c a net ton of 2,000 lb., except that no increases shall be made in rates on ex-lake ore that has paid increased all-rail rate before reaching lake vessels. The increase of 30c shall be added to tariffs in force prior to Mar. 15, 1918, and the increase since allowed by the Board of Railway Commissioners is struck out.

Stone, artificial and natural, building and monumental, except carved, lettered, polished or traced—2c per 100 lb.

Stone, broken, crushed and ground—1c per 100 lb.

Sand and gravel—1c per 100 lb.

Brick, except enamelled or glazed—2c per 100 lb.

Cement—2c per 100 lb.

Lime and plasters—1½c per 100 lb.

Lumber and other forest products not otherwise herein specifically dealt with—a flat rate of 1c per 100 lb. to be added to the tariffs in force prior to Mar. 15, 1918, and the rate so obtained to be then increased by 25%, but not exceeding 5c per 100 lb., the increase since granted by the Board of Railway Commissioners to be disallowed.

Pulpwood—25c%, but not exceeding an increase of 5c per 100 lb.

Cordwood, slabs and mill refuse, for fuel purposes—1c per 100 lb.

Wheat—Strike out limitation imposed of 2c per 100 lb. in increase allowed by Board of Railway Commissioners, effective Mar. 15, 1918, and add 25% increase, but not exceeding 6c per 100 lb.

Other grains, flour, and other milled products—To be increased to new wheat rates.

Live stock—25%, but not exceeding an increase of 7c per 100 lb. where rates are published per 100 lb., or \$15 a standard 36 ft. car, where rates are published per car.

Packing-house products and fresh meats—25%.

Bullion, base (copper or lead), pig or slab and other smelter products—25%.

Sugar, syrup and molasses, by cancelling existing commodity rates and applying 5th class rate as increased hereunder.

Ice—25%, calculated on tariffs in effect prior to Mar. 15, 1918. Increases since allowed by Board of Railway Commissioners to be disallowed.

(b) Commodity rates not included in foregoing list increased 25%.

(c) In applying increases prescribed in this section, the increased class rates applicable to like commodity descriptions

and minimum weights between the same points are not to be exceeded.

Territory West of Fort William.

(a) All class rates increased 25%, calculated on tariffs in force prior to Mar. 15, 1918; increases since allowed by Board of Railway Commissioners to be disallowed.

Coal and coke—Rates to be increased as rates on these commodities are increased hereunder in eastern territory.

Ores, iron—Rates to be increased same as rates on these commodities increased hereunder in eastern territory.

Ores, other—On ores not exceeding in value \$25 a net ton, 1c per 100 lb.; on ores valued over \$25 to \$50, 2c per 100 lb.; on ores valued over \$50 to \$100, the 10th class rates of the merchandise distributing scale as increased hereunder shall apply; on ores over \$100 in value, the 10th class rates of the merchandise standard scale as increased hereunder shall apply.

Stone (artificial and natural), building and monumental, except carved, lettered, polished or traced—by the addition of 2c per 100 lb. to the tariff in force prior to Mar. 15, 1918; increases subsequently granted by Board of Railway Commissioners to be disallowed.

Stone, broken, crushed and ground, also sand and gravel—by the addition of 1c per 100 lb. to tariffs in force prior to Mar. 15, 1918; increases since allowed by Board of Railway Commissioners to be disallowed.

Brick, except enamelled or glazed—by the addition of 2c per 100 lb. to tariffs in force prior to Mar. 15, 1918; increases since granted by Board of Railway Commissioners to be disallowed.

Cement—2c per 100 lb.

Lime—1½c per 100 lb. on tariffs in force prior to Mar. 15, 1918; increases since allowed by Board of Railway Commissioners to be disallowed.

Lumber—25%, but not exceeding an increase of 5c per 100 lb.

Grain and grain products to Fort William and Port Arthur—By addition of increases granted under the McAdoo order for similar mileages in adjacent U.S. territory, to rates in effect prior to Mar. 15, 1918. Where more than one tariff of a U.S. carrier in an adjacent state exists, the rate increase shall be that allowed on the lowest normal rate for the same or similar mileages in such contiguous territory under the McAdoo order; increases since granted by Board of Railway Commissioners to be disallowed. Provided that rates on said products shall not be greater from Edmonton than from Calgary.

Grain and grain products between local points and to the Pacific coast—By the addition of 25%, but not exceeding an increase of 6c per 100 lb. to tariffs in effect prior to Mar. 15, 1918, and by disallowing increases since made by the Board of Railway Commissioners.

Livestock—By the addition of 25%, but not exceeding an increase of 7c per 100 lb. where rates are published per 100 lb., or \$15 a standard 36 ft. car where rates are published per car; increases to be based on tariffs in effect prior to Mar. 15, 1918; increases since allowed by Board of Railway Commissioners to be disallowed.

Packing-house products and fresh meats—By the addition of 25% to tariffs in effect prior to Mar. 15, 1918; increases since allowed by Board of Railway Commissioners to be disallowed.

Bullion, base (copper or lead), pig or slab, and other smelter products—Rates from British Columbia smelters to Toronto and Hamilton to take rates from con-

tiguous U.S. smelting and shipping point, viz.: Northport, Wash., to Buffalo, N.Y., viz., 71½c per 100 lb.; Montreal to take the New York rate of 81½c per 100 lb. Rates to Canadian points, other than points in Eastern Canadian territory, to be advanced 25%. Rates on zinc for domestic consumption to be the same as on copper and lead.

Sugar, syrup and molasses—To be made on the basis and principle adopted hereunder for eastern territory.

(b) Commodity rates not included in foregoing list shall be increased 25%, calculated on tariffs in force prior to Mar. 15, 1918; increases since authorized by Board of Railway Commissioners to be cancelled.

(c) In applying the increases prescribed in this section, the increased class rates applicable to like commodity descriptions and minimum weights between the same points are not to be exceeded.

Territories Both East and West.

Minimum Charges—(a) After the increases hereunder made in class rates, no rates shall be applied on any traffic moving under class rates lower than the amounts in cents per 100 lb. for the respective classes as follows:

Classes	1	2	3	4	5	6	7	8	9	10
Rates	24	21	18	15	12	11	9	10	10	7½

(b) The minimum charge on less than carload shipments shall be as provided in Canadian Freight Classification, but in no cases shall the charge on a single shipment be less than 50c.

(c) **Class Rates** between eastern and western points—The portion of the rate applicable to eastern territory to be increased 25%, and the portion applicable to western territory, 25%, based on rate in effect prior to Mar. 15, 1918; advances subsequently allowed by board in western territory to be disallowed.

Commodity rates between eastern and western points—On that portion of the rate applicable to eastern territory, the appropriate increase granted hereunder for the commodity for local movements in eastern territory; and on the western portion, the appropriate increase granted hereunder for the commodity for local movement in western territory. Advances allowed by Board of Railway Commissioners in western territory, effective Mar. 15, 1918, to be disallowed.

(d) **Import rates**—To be increased, subject, as a maximum, to lowest rates obtaining from Baltimore or any North Atlantic seaport in the U.S. to the same destinations, except that the rates from Halifax, N.S., shall be increased so as to continue on the present relative basis.

(e) **Disposition of fractions**—In applying rates, fractions shall be disposed of as follows:

(1) Rates in cents, or in dollars and cents, per 100 lb. or per package. Fractions of less than ¼ or 0.25 to be omitted. Fractions of ¼ or 0.25 or greater, but less than ¾ or 0.75, to be shown as ½. Fractions of ¾ or 0.75 or greater, to be increased to the next whole figure.

(2) Rates per ton—Amounts of less than 5c to be omitted. Amounts of 5c or greater, but less than 10c, to be increased to 10c.

(3) Rates per car—Amounts of less than 25c to be omitted. Amounts of 25c or greater, but less than 75c, to be shown as 50c. Amounts of 75c or greater, but less than \$1, to be increased to \$1.

(f) **Observance of differentials**—In establishing the freight rates herein ordered, while established rate groupings and fixed differentials are not required to be used, their use is desirable, if found practicable, even though certain rates

may result which are lower or higher than would otherwise obtain.

(g) All schedules, viz., tariffs and supplements, published under the provisions of this order, shall bear on the title page the following, in bold-face type: "This schedule is published and filed on one day's notice with the Board of Railway Commissioners for Canada, pursuant to order in council No. 1863."

The Board of Railway Commissioners shall obtain from the three larger railway systems, the Grand Trunk, Canadian Pacific and Canadian Northern, the results of railway operation per month, and report on the same monthly to the Governor in council, through the Minister of Railways and Canals, to the end that, should the earnings of the said companies under this order be greater than the sum required to meet increased costs and permit transportation to be properly and efficiently carried on, the appropriate reduction in the rates fixed shall be made. The said reports and the books, accounts and records upon which the same are based, shall be open to examination and audit by the Government of Canada, under such regulations as may be hereafter prescribed by the Governor in council.

The provision herein, and the rates herein prescribed, shall be effective, if filed with the Board of Railway Commissioners, as and from Aug. 1, and shall remain in force for the duration of the present war, and until further orders, subject to the provisions of the section next preceding. Increase of rates may become effective after Aug. 12, 1918, and as and when filed.

Grand Trunk Pacific Railway Betterments.

The company's traffic will, we are officially advised, enter Saskatoon, Sask., by a connection with the C.P.R. tracks east and west, the C.P.R. tracks, yards and facilities between the two points of connection being joint between the two companies. On the east the connecting line will start from the G.T.P.R. at Duro, connecting with the C.P.R. east of Engen, 3.23 miles. The western connecting line was parallel the joint spur to the government elevator, 0.945 of a mile.

The coal mixing plant at Edson, Alta., is, we are officially advised, being erected to utilize western Canadian coals. The products of three mines will be combined and mixed in this plant to give a fuel which, it is believed, will be entirely satisfactory for railway purposes. It will also enable full use being made of coal offering. The plant will have a reinforced concrete foundation and hoppers. The coal will be carried from the hoppers by conveying machinery to a discharging bin, from which it will either be loaded by car loaders into box cars or directly from the bin into gondola cars. The conveying plant will be in duplicate, and will have a capacity of 150 an hour. It will be operated by electric power.

The station to be built at Prince Rupert, B.C., will, we are officially advised, be a brick or tile and stucco structure, with the usual waiting-rooms, offices, etc., and an umbrella train shed. (July, pg. 297.)

The Canadian Government Railways, on July 22, put an embargo on the transfer of automobiles between the Nova Scotia and New Brunswick mainland and Prince Edward Island, and vice versa, so as not to interfere with freight traffic, which has been very heavy lately.

Canadian Northern Railway Construction, Betterments, Etc.

Eastern Lines Track Renewals.—We are advised that it had been arranged that the C.N.R. should receive 67 lb. rails sufficient to lay 75 miles of track, out of the rails ordered by the Russian Government and lying at Vancouver, B.C. These rails were to be used to replace 55 miles of 56 and 60 lb. rails on the Quebec & Lake St. John Ry., and 20 miles to replace rails of similar light weight on the Halifax & South Western Ry. There appears to be some difficulty, temporary at least, in obtaining the release of these rails from Vancouver.

Quebec Union Station.—S. J. Hungerford, General Manager, Eastern Lines, was in Quebec, July 10, looking into the company's terminal facilities there. According to a press report, it is intended to build a passenger and freight station on St. Andrew St., on the site occupied formerly by the old Quebec & Lake St. John Ry. station, the new building to be used jointly by the C.N.R. and the Quebec & Saguenay Ry., which is a part of the Canadian Government Railways system. The new building will be larger than the one which has been demolished, as it will be laid out to meet the requirements of the lines mentioned for some years to come.

Leaside Terminal Yards.—The new terminal yard near Toronto lies immediately north of the C.P.R. right of way, and extends from opposite Leaside Jct. station easterly. The work at present in hand is the construction of a freight yard for about 600 cars; a passenger car yard for about 140 cars; a circle track for turning trains, and the buildings which were described in Canadian Railway and Marine World for July. The yards are planned so that additions may be made as required without interference with the work now being done. The grading of the yards is, we are officially advised, approximately 50% completed; the locomotive house and store, and the ice house, are nearly completed; the walls of the passenger car shop are practically completed; the foundations of the general store are in; the water tank is erected, and the foundations for the coaling plant and the turntable are nearly finished. The whole of the buildings are being erected by the company's own forces under the direction of G. C. Briggs, Supervisor of Buildings, and the company's own gangs will lay the rails and ballast the track. The cranes will be supplied by Northern Crane Works, Walkerville, Ont., and the coaling plant by Canadian Fairbanks-Morse Co.

Ontario District.—We are officially advised that a contract has been let to Chambers, McQuigge & McCaffrey for building a deviation on the Toronto-Sudbury line, about 1.25 miles, between mileage 139 and 141 on the Muskoka Sub-division. The purpose of the diversion is to avoid three trestles, the filling of which would be an expensive process. The diversion will reduce the gradient slightly and give a better alignment. The greater part of the grading will be through rock, and it is not expected to have the work completed until April, 1919.

Central District.—Application was made to the Regina, Sask., City Council, Jan. 11, for permission to build a spur track through Block 80, in order to supply trackage facilities to the T. Eaton Co. M. H. MacLeod, General Manager, was advised that formal permission would be granted at the council's next meeting. (July 16.)

Western District.—We are officially advised that a contract has been let to W. A. Dutton, Winnipeg, for grading on the line between Hanna and Medicine Hat, Alta. Some grading had been done previously and it is said that the present contract covers the section of the line to the proposed point of crossing of the Red Deer River.

With reference to track laying on the Oliver-St. Paul de Metis line, we are officially advised that everything depends upon when delivery of the rails can be made. The same condition, we are advised, applies to all other western lines upon which it is proposed to lay rails, details of which were given in our July issue, pg. 293.

In respect to a press report from Edmonton, Alta., that the company proposed to take up the rails on its line from Alberta Beach to Lobstick, 36 miles, and to run its trains over the approximately parallel Grand Trunk Pacific Ry., we are officially advised that the approval of the Railways Department would have to be obtained before this could be done.

Vancouver Terminals.—Tenders are reported to have been called for shifting of a further 2,000,000 cubic yards of filling in connection with the reclaiming of the False Creek area for railway purposes by the C.N. Pacific Ry.

False Creek Wharf Litigation.—The Dominion Department of Public Works has decided that the Champion and White wharf in the False Creek area of Vancouver, B.C., was erected without the department's sanction and must be removed, unless terms be arranged with the Canadian Northern Ry. and the city for its remaining. The owners of the wharf secured an injunction against the C.N.R., preventing it going ahead with part of its seawall construction because it interfered with access to the wharf. The injunction was upheld on appeal. The Department of Public Works' action will enable the railway to proceed with its development work.

Vancouver Island Lines.—In speaking at Victoria, the British Columbia Premier gave some details of his late negotiations with the Dominion Government upon the C.N.P. Ry. situation as affecting the B.C. Government since the company's system had been taken over by the Dominion. The principal portion of his speech, however, was directed to efforts made to get sufficient steel rails from those bought for Russia and lying at Vancouver, in order to lay track on the C.N.P.R. on Vancouver Island from Victoria to Sooke, 40 miles, and from Nitinat to Cowichan, 30 miles, in order to aid in getting out spruce for aeroplane work and logs for ship construction. If this could have been arranged for, the Imperial Munitions Board would have undertaken to build a logging railway through the timber limits to connect with the line. The Dominion Minister of Railways advised the B.C. Government, June 24, that the laying of additional track on the C.N.P.R. lines on Vancouver Island was bound up with the question of the province selling additional land on the Songhees reserve in Victoria for terminal purposes, and asked that a price be fixed for the land required. If this were done, the Dominion Government would accept rails to lay 140 miles of track, which the B.C. Government had offered to loan out of what it had purchased for the Pacific Great Eastern Ry., such rails to be returned from the Rus-

sian rails or from elsewhere. Seventy miles of the rails so loaned would be used on the lines mentioned on Vancouver Island, and the other 70 miles would be delivered in Alberta. On behalf of the B.C. Government, the B.C. Premier denied that there had been any difficulty about Songhees Reserve land, and added that the price would be fixed and the rails supplied.

The Premier is also reported to have stated in an interview on July 4 that consent to action in respect to further construction on Vancouver Island must be obtained from C.N.P.R. officials, and that the company objected to paying any higher price for terminal lands on the Songhees Reserve than the price paid by the C.P.R. (July, pg. 293.)

An Ottawa dispatch of July 19 stated that an agreement had been reached between the Dominion Railways Department and the British Columbia Government under which the Pacific Great Eastern Ry. rails offered by the B.C. Government will be used to lay 70 miles of track on C.N.R. lines on Vancouver Island, as soon as they can be delivered. The condition upon which the C.N.R. will do the work is said to be that the B.C. Government will grant it an additional 40 acres of the Songhees Reserve lands at Victoria for terminal purposes.

We were officially advised, July 25, that an arrangement has been made between the Dominion Minister of Railways, the Premier of British Columbia, and the C.N.R., subject to approval by the Dominion Government, by which the C.N.R. is to immediately undertake the completion of 70 miles of railways northward from Victoria. The rails are to be taken from a quantity which the province has on hand, in connection with the Pacific Great Eastern Ry., and are to be loaned for the present, pending an adjustment after the war. The province has also agreed to convey for railway terminal purposes at Victoria, about 30 acres of the old Songhees reserve, at \$8,000 an acre. (July, pg. 293.)

Universal Mileage Scrip in United States.—The U.S. Railroad Administration has announced that there will be placed on sale on or about Aug. 1 a universal mileage scrip at the basic rate of 3c a mile. Each coupon of the ticket will represent the value of 3c and can be used for the payment of sleeping and dining car charges and transportation of excess baggage, as well as transportation charges on all trains on railways under government control. The advantages of this simple form of ticket are obvious, and the change is expected to relieve the pressure on ticket agencies at busy centers. The war tax will be collected by conductors at the time of the presentation of the mileage scrip.

Deputy Minister of Railways.—With reference to the announcement in our last issue that Major Graham Airdrie Bell, C.M.G., heretofore Assistant to the Minister, and Financial Comptroller, Railways and Canals Department, had been appointed Deputy Minister, as well as Assistant to the Minister, the positions being amalgamated, we are advised that he has been appointed acting Deputy Minister, A. W. Campbell, Deputy Minister, having been granted a year's leave of absence, on the expiration of which, Major Bell will automatically take the title of Deputy Minister.

Canadian Transportation Men, Engineers, Etc. in the War.

Timiskaming & Northern Ontario Railwaymen's Patriotic Association.—Up to Mar. 31, \$88,397.45 had been contributed to the Red Cross and Patriotic funds, exclusive of contributions by members of the commission.

PERSONAL NOTES.

Lieut. H. D. Brydone-Jack, Vancouver, B.C., who has been awarded the Military Cross, was formerly on survey work on C.P.R. western lines.

Lieut. A. G. Bonn, Canadian Railway Troops, has been awarded the Military Cross. When the enemy had penetrated the line, he rallied his men and led them forward again to the original line, which, despite the intense shell and machine gun fire, the company maintained, although both its flanks were exposed. When the order to withdraw had been given, he assisted in carrying away a wounded non-commissioned officer under extremely heavy fire. His marked courage and gallantry, and his untiring devotion to duty, contributed greatly in holding up the enemy's advance.

E. W. Camp, son of W. J. Camp, Assistant Manager of Telegraphs, C.P.R., Montreal, has been given a commission as lieutenant in the Canadian Engineers, and assigned to overseas service. **Lieut. F. E. Camp**, another son, is an instructor in an Engineers' camp in England.

Lt.-Col. F. F. Clarke, commanding the 2nd Canadian Railway Troops, who, prior to entering the army was Chief Surveyor, Canadian Northern Ry., at Toronto, is referred to in a London, Eng., cablegram of July 27, as follows:—"Singular testimony as to how Canadian railway troops can fight as well as build railways is given in a story regarding the conferment of a bar to the Distinguished Service Order, possessed by Lt.-Col. Frederick Fieldhouse Clarke, of Toronto. In an attack lasting four days, he organized 16 Lewis guns from his battalion, making all arrangements for munitions to be brought on his own lorries. This unit was entirely self-contained. It is officially stated that 'The promptitude and alacrity with which they responded to the call for volunteers, and the splendid manner in which the defence was organized, and the coolness and enthusiasm displayed by all ranks, were largely due to the courage and inspiring example of the fine leadership of the commanding officer.'"

Lieut. E. W. DuVal, who has been reported as killed in action, was born at Toledo, Ohio, June 5, 1885, and entered railway service, July 1, 1902, since when he has been, to June 1, 1905, in Superintendent's office, Canadian Northern Ry., Winnipeg, and at Port Arthur, Ont.; June 1, 1905, to Jan. 2, 1911, successively, secretary to General Superintendent, Central Division, C.P.R., Winnipeg; chief clerk to Superintendent, District 2, Central Division, C.P.R., Winnipeg; assistant chief clerk to General Superintendent, Central Division, C.P.R., Winnipeg; chief clerk to General Superintendent, Western Division, C.P.R., Calgary, Alta.; chief clerk to Assistant General Manager, and, later, to General Manager, Western Lines, C.P.R., Winnipeg; Trainmaster, C.P.R. Terminals, Calgary, Alta.; Jan. 2, 1911, to Apr. 6, 1912, Superintendent, District 1, Saskatchewan Division, C.P.R., Moose Jaw; Apr. 6, 1912, to May, 1913, Superintendent, District 4, Manitoba Division, C.P.R., Souris; May, 1913, to Feb., 1917, Superintendent, Saskatoon Division, Sas-

katchewan District, C.P.R., Saskatoon. He took an officer's training course at Regina, Sask., early in 1917, and recruited a company of reinforcements for the P.P.C.L.I., and subsequently went overseas with them.

Capt. J. E. Finlay, Canadian Railway Troops, has been awarded the Military Cross. He organized and carried out an urgent piece of work under most difficult conditions, working for two days and nights without rest until it was completed. On the following morning, when the enemy was advancing, he showed great coolness in evacuating all his men under heavy shell fire.

Major Chas. Flint, B.A.Sc., 4th Battalion, Canadian Railway Troops, formerly Resident Engineer, C.P.R., Edmonton, Alta., who has received two promotions, has been awarded the Croix de Guerre for gallant and distinguished service.

Capt. R. D. Galbraith, Canadian Railway Troops, has been awarded the Military Cross. On finding that the troops of other units on his right flank had withdrawn, he brought his company out in good order to a support trench, 50 yards in the rear. Going forward himself with a machine gun to his old position, he inflicted very heavy casualties on the enemy. Having expended all the available ammunition, he withdrew his men again to a comparatively sheltered position, where he reorganized and reinforced his company with men of other units, and led it forward to his first position, and maintained it until relieved. His personal example, great courage, and devotion to duty had a most inspiring effect on all ranks.

Acting Lieut.-Col. H. F. H. Hertzberg, D.S.O., M.C., has been gazetted as Temporary Lieutenant-Colonel. He is a son of A. L. Hertzberg, Engineer, Ontario District, C.P.R., Toronto.

Major James Hesketh of the Canadian Railway Troops, was decorated with the Distinguished Service Order and the Military Cross, at an investiture at Buckingham Palace, July 9.

Lieut. A. W. Ilott, Canadian Railway Troops, has been awarded the Military Cross. During an enemy attack, he was detailed with a small party to keep forward light railways open for traffic. He kept the lines in operation under heavy shell fire until he was almost surrounded, and then skilfully withdrew his men without casualties. By his coolness and determination he saved a large quantity of ammunition and valuable material.

Lieut. C. E. Knox, who was mentioned in dispatches by Field Marshal Sir Douglas Haig recently, is a son of R. R. Knox, Traffic Superintendent, Winnipeg Electric Ry. He left Canada with the 101st Battalion, and is now with the 16th Canadian Scottish, and has been in France for two years. Prior to entering military service he was chief clerk to his father in W.E.R. service.

Lieutenant L. Lanigan, of the Royal Air Force, reported killed in an airplane accident in England, July 12, was son of W. B. Lanigan, Assistant Freight Traffic Manager, C.P.R., Winnipeg.

Major T. A. Loudon, B.A.Sc., formerly of the Engineering Faculty, Toronto University, and of James, Loudon & Hertzberg, engineers, Toronto, has returned from the front, having been invalided in January. He was mentioned in dispatches.

Capt. Clarence M. Marpole, whose return on leave in June, was mentioned in our last issue, died at Vancouver, B.C., July 16, aged 38, following an operation for the removal of an abscess. He left Canada in 1915, with the 239th Railway Construction Corps and was later transferred to the 3rd Canadian Railway Troops, in France. Prior to going overseas, he was in business in Vancouver. He was a son of R. Marpole, General Executive Assistant, C.P.R., Vancouver, B.C.

Col. G. P. Murphy, of the Canadian Army Service Corps, and President, Ottawa Transportation Co., has been made a Commander of the Order of St. Michael and St. George.

Lieut. R. S. Richardson, 13th Light Railway Operating Co., R.E., formerly Superintendent, Canadian Government Railways, Fort William, Ont., writing from France early in June, said: "We have moved several times recently and have been acting in different capacities of labor. The men took it all with good grace, and now we are returning to our railway business once more, and everyone, officers and men, are delighted. We are tracklaying once more and will soon be operating again. I am confident that once the U.S. troops get going in full swing with us the situation will change very rapidly. June 6 was the anniversary of our arrival in France. We celebrated the day by service in the morning and by base ball, a tug of war and a tent pegging exhibition by the Fort Garry Horse in the afternoon, their officers and men being our guests. We had about 500 Canadians in the field."

Major William Sharp, Canadian Railway Troops, received the Military Cross at an investiture by the King, July 9.

W. L. Stone, formerly agent, C.P.R. Telegraphs, Edmonton, Alta., has been appointed to Y.M.C.A. work under the U.S. Army, and went overseas early in July.

J. C. K. Stuart, formerly on the Mount Royal Tunnel & Terminal Co.'s engineering staff at Montreal, has received a commission in the Royal Engineers.

E. D. Toye, formerly Division Storekeeper, Canadian Northern Ry., Trenton, Ont., who went overseas toward the end of 1916, as Quartermaster-Sergeant, No. 1 Construction Battalion, has been gazetted as a temporary lieutenant in the Canadian Militia, whilst serving with the Canadian Expeditionary Force, dating from Nov. 30, 1916.

Company Q.M.S. J. Watson, Canadian Railway Troops, has been awarded the distinguished conduct medal. During a withdrawal he succeeded in removing all the stores and equipment of his company, under an intense bombardment. On the following day, when rations were urgently needed, he went to a ration dump which was under heavy shell fire, and obtained the necessary supplies. On another occasion, he volunteered to remain behind and endeavor to salvage stores and equipment under heavy fire. He showed splendid coolness and resource.

W. Russell Way, B.Sc., son of W. B. Way, Superintendent, District 2, Transcontinental Division, Canadian Government Railways, Cochrane, Ont., has been given a commission as lieutenant in the Canadian Engineers, and is attached to the Canadian Engineers' training depot at St. Johns, Que.

Railway Development, Projected Lines, Surveys, Construction, Betterments, Etc.

Edmonton & South Western Ry.—The Edmonton, Alta., City Council has under consideration an application from the Hydro-Electric Power Co. for an extension of time for carrying out its contract to supply power in the city. A necessary part of the company's plans is a railway, from Edmonton to the Blue Rapids on the Saskatchewan River, where the power plant is to be located, and for the construction of which the E. & S.W. Ry. was incorporated by the Dominion Parliament. Under an agreement entered into in Mar., 1916, the company was to begin work in Jan., 1917, and was, within 2½ years, to expend \$1,500,000, and during the next two years approximately an additional \$2,000,000, unless prevented by causes beyond its control. The company reported that it had spent up to June, \$442,092 in connection with its plans, and that owing to war conditions the money for further development could not be raised. (May, pg. 186.)

Grand Trunk Ry.—Application is reported to have been made to the United States Government for aid in the completion of the Northern New England Ry. from Palmer, Mass., to Providence, R.I. This line is being built under the auspices of the Central Vermont Ry., which is controlled by the G.T.R. The line is about 65% completed, but no work has been done on it for several years. It is asked that aid to the extent of \$5,000,000 be provided. The matter came before F. L. Stuart, Chairman of the Budget Committee, Eastern Railways Region, in New York, July 2, and after hearing arguments, it was reported July 4, that the application would be given full consideration. (May, pg. 186.)

Intercolonial Ry.—Tenders were received to July 24, for building a siding 2,300 ft. long at mileage 21.3 from Moncton on the main line to Truro, N.S.

Some of the old shops in Moncton, N.B., yards are being pulled down to provide space for additional yard tracks.

Tenders are under consideration for building 40,000 gall. water tanks at Hampton, N.B., and West Bay Road, N.S.

Additional siding accommodation is being provided at Sackville, N.B., to handle the increasing traffic over the Prince Edward Island car ferry. A press report states that about three miles of new tracks are being laid.

At a celebration at Albert, N.B., July 1, in connection with the taking over of the Salisbury & Albert Ry. as an Intercolonial Ry. branch line, L. S. Brown, General Superintendent, Eastern Lines, C.G.R., was reported as saying that the work of bringing the line up to branch railway standard would be proceeded with at once.

C.G.R. officials made a trip of inspection recently over the Elgin & Havelock Ry., which was taken over as an Intercolonial Ry. branch June 1. It is said that the trip was made to see what work has to be done to bring the line up to the branch lines standard.

Work on the repair of the Moncton & Buctouche Ry. between Moncton and Buctouche, N.B., acquired recently as an Intercolonial Ry. branch, was started by the C.G.R. staff July 1. Some new rails are being laid, and a considerable amount of ballasting is being done. The principal part of the work is in the vicinity of Notre Dame, 19 miles from Moncton. (July, pg. 285.)

Pacific Great Eastern Ry.—A press report from Victoria, July 12, states that orders have been given by the British

Columbia Government for laying of rails on the right of way graded northwesterly from Clinton, B.C. The report says 29 miles of grading are ready for the track; that 50 cars of rails have been delivered, and that 30 more cars of rails are on the way. It is also expected to complete about six or seven more miles of grading and lay track on it this season.

It is reported that for the accommodation of trade between North Vancouver and Squamish, plans and specifications are being made for a nine car barge, and that tenders will be asked for its construction. The railway at present rents a barge from the C.P.R. at \$60 a day. (June, pg. 241.)

Quebec, Montreal & Southern Ry.—A Quebec press dispatch of July 9, stated that advices have been received from the Delaware & Hudson Co., owning the railway, that nothing will be done in the way of extending the railway from Fortierville to Quebec until after the war, by which time the question of terminal facilities for all south shore lines in Quebec will probably be settled.

Quebec & Saguenay Ry.—Canadian Government Railways officials made a trip of inspection over the completed section of this railway between St. Joachim and Baie St. Paul, July 5, in connection with arrangements for putting a regular train service in operation. The section of line acquired from the Quebec Ry., Light & Power Co. from St. Joachim to Quebec will be used for the operation of a service from Quebec to Baie St. Paul. Construction is in progress between Baie St. Paul and Murray Bay, and it is expected that this section of the line will be completed in the autumn. The length of the line from St. Joachim to Murray Bay is 54.54 miles, and connection is made there with a line 7.50 miles long, completed in 1911, to Point au Pic, near Nairns Falls.

Tenders were received to July 23 for building of stations, section houses, tanks, etc.

A project is reported to be under consideration for connecting the line with the Quebec & Lake St. John Ry. (C.N.R.) in Quebec, and using the terminals of that railway jointly. (See Canadian Northern Ry. Construction, etc.) (June, pg. 241.)

St. John & Quebec Ry.—The New Brunswick Government, on July 10, decided to permit the Nova Scotia Construction Co. to complete its contract for the building of the extension of this line, provided satisfactory guarantees are given that the work will be completed in the autumn. The section under construction is from Gagetown to a junction with the C.P.R. near Westfield, N.B., 37.8 miles. Track was laid during 1917, from Gagetown to Queenstown, 8.5 miles, and considerable progress has been made in grading on the remaining mileage. (July, pg. 285.)

Toronto, Hamilton & Buffalo Ry.—The Hamilton City Council has, after considerable delay, decided to grant a lease to the company for five years of the lands necessary for the extension of the company's yards in the city. The city opposed the extension of the yards, but the Board of Railway Commissioners approved the company's plans and recommended the city to grant a lease, on a basis of 7% of the original cost of the land, \$2,960, or on the present assessed value, as may be thought advisable. The city had asked \$933 a year, together with the construc-

tion of a public road along the property leased.

Negotiations between the Saltfleet Tp. Council and the company in connection with building a second track are in progress. It was reported July 12, that some preparatory work was being done between lots 32 and 33, con. 6. (June, pg. 241.)

Canadian Northern Railway Construction, Betterments, Etc.

Gross earnings, working expenses, net earnings, increases, or decreases, compared with those of 1916, from July 1, 1917:

	Gross Earnings	Expenses	Net Earnings	Decrease
July	\$3,844,900	\$2,940,000	\$ 904,900	\$ 292,500
Aug.	3,405,200	2,812,000	593,200	478,800
Sept.	3,341,760	2,915,800	1,924,000	306,700
Oct.	3,941,600	3,350,500	591,100	629,200
Nov.	4,050,200	3,295,500	754,700	495,300
Dec.	3,273,200	3,207,900	65,300	758,500
Jan.	2,715,300	3,290,300	x575,000	1,057,100
Feb.	2,691,000	3,171,400	x480,400	588,600
Mar.	3,436,300	3,225,900	210,400	407,700
Apr.	3,958,100	3,416,800	541,300	216,600
May	3,762,000	3,381,100	380,900	673,500

	\$38,419,500	\$35,007,200	\$3,412,300	\$5,904,500
Inc.	\$ 1,223,400	\$ 4,681,100		
Dec.			\$5,904,500	

Approximate earnings for June, \$4,031,100, and for three weeks ended July 21, \$2,522,100, against \$4,048,600 and \$2,710,000 for same periods 1917.

Canadian Pacific Railway Earnings, Etc.

Gross earnings, working expenses, net earnings, and increases or decreases, compared with those of 1917, from Jan. 1, 1918:

	Gross Earnings	Expenses	Net Earnings	Increase
Jan.	\$10,789,818	\$9,621,824	\$1,167,993	\$1,263,485
Feb.	9,574,302	8,983,404	590,898	1,896,151
Mar.	12,427,915	9,435,134	2,992,781	944,536
Apr.	13,328,849	9,873,459	3,455,390	719,588
May	13,314,117	9,626,341	3,687,776	863,944
June	12,577,286	9,765,139	2,812,147	1,103,759

	\$72,012,289	\$57,305,302	\$14,706,985	\$6,290,464
Inc.	\$ 655,510	\$ 6,945,974		
Dec.			\$ 6,290,464	

Approximate earnings for two weeks ended July 14, \$5,475,000, against \$5,968,000 for same period 1917.

Grand Trunk Railway Earnings.

Aggregate from Jan. 1 to June 30:—

	1918	1917	Increase	Decrease
G.T.R.	\$26,162,263	\$24,169,070	\$1,993,193	
G.T.W.R.	4,879,272	4,687,643	191,629	
D.G.H. & M.R.	1,496,437	1,665,745		\$169,308
Totals	\$32,537,972	\$30,522,458	\$2,015,514	

Approximate earnings for three weeks ended July 21, \$4,512,218, against \$4,034,315 for same period 1917.

Grand Trunk Pacific Ry. Earnings.

Approximate earnings for May, \$394,052; for June, \$456,787, against \$500,134 for May, and \$523,997 for June, 1917. Aggregate earnings from Jan. 1 to June 30, \$2,861,179, against \$2,509,457 for same period 1917.

Railway Lands Patented.—Letters patent were issued during June, in respect of Dominion railway lands in Manitoba, Saskatchewan, Alberta and British Columbia, as follows:—

	Acre.
Calgary & Edmonton Ry.	4,129.00
Canadian Northern Ry.	6,402.00
Edmonton, Dunvegan & British Columbia Ry.	416.21
Grand Trunk Pacific Ry.	12.18
Qu'Appelle, Long Lake & Saskatchewan Rd. & Steamboat Co.	874.05
Total	11,833.44

Mainly About Railway People Throughout Canada.

Mrs. E. N. Bender, wife of the General Purchasing Agent, C.P.R., died suddenly at Montreal, June 24.

Francis J. Cronk has been appointed Assistant Professor of Railway Engineering, Faculty of Applied Science, McGill University, Montreal.

Miss Florence Odell Bamford, only daughter of W. B. Bamford, District Freight Agent, C.P.R., Toronto, died there July 7, after a long illness.

H. G. Kelley, President, G.T.R. and Grand Trunk Pacific Ry., left Montreal early in July, for an inspection trip over the system to the Pacific coast.

S. G. Hatch, Passenger Traffic Manager, Illinois Central Rd., died suddenly in his office at Chicago, Ill., July 12. He was very well known in Canada.

E. D. Donald, who was accidentally killed by electric shock in a Toronto munitions plant, recently, was the only son of E. Donald, Land and Tax Commissioner, G.T.R., Montreal.

A. W. Smithers, Chairman of the Board, G.T.R., London, Eng., has been adopted as the conservative and unionist candidate for the British Parliament, for the Chiselhurst Division of Kent, at the next election.

Mrs. T. H. Cooper, who died at Toronto, July 18, was widow of the late T. H. Cooper, at one time in G.T.R. service, and mother of D. D'E. Cooper, until recently, Canadian Freight Agent, Lehigh Valley Rd., Toronto.

S. B. Wass, Engineering Department, Canadian Government Railways, Moncton, N.B., while travelling over the track near Penobsquis, N.B., July 10, collided with another car, and suffered a compound fracture of a leg.

H. G. Kelley, President G.T.R. and G.T. Pacific Ry., left Montreal, July 6, for Winnipeg. He left Winnipeg for the Pacific Coast July 10, accompanied by W. P. Hinton, Vice President and General Manager, G.T.P.R.

W. R. Smith, Chief Engineer, Edmonton, Dunvegan & British Columbia Ry., Edmonton, Alta., addressed the Calgary Rotary Club, July 11, on the resources of the territory opened for settlement by his company's lines.

Sir Henry Mather Jackson, Bart., Vice Chairman, G.T.R. and Grand Trunk Pacific Ry., and associated with several other railway companies in Great Britain and Havana, has been created a Commander of the Order of the British Empire.

J. F. Kane, who has been elected Secretary, Pullman Co., Chicago, Ill., was born and educated at Ingersoll, Ont., and entered the Pullman Palace Car Co.'s service Sept. 1, 1891, as a telegraph operator, and was appointed Paymaster in 1904, and Assistant Secretary in 1913.

R. E. Marks, who has been appointed Passenger Trainmaster, Eastern Lines, G.T.R., Montreal, entered G.T.R. service Mar. 27, 1897, as brakeman on the Belleville Division, was promoted to conductor May 15, 1906, and acted as such until his appointment to his present position.

Mrs. H. D. Reid, wife of the President, Reid Newfoundland Co., died at St. John's, Nfld., July 12, after a long illness. Although an invalid for many years, she took considerable part in many of the philanthropic organizations brought into being by the war, and contributed largely to them.

D. C. Corbin, formerly President, Spo-

kane International Ry., died at Spokane, Wash., June 28, aged 85. He was considerably interested in railway and mining properties in the west. The Spokane International Ry. was acquired by Minneapolis, St. Paul & Sault Ste. Marie Ry. and C.P.R. interests last year.

John Gordon, who died at Toronto, July 4, aged 88, was born in Scotland, and came to Canada at the age of 22. He entered railway service with the Toronto, Grey & Bruce Ry., and on the absorption of that road by the C.P.R., remained with the latter company, as roadmaster. He retired from active service about 20 years ago.

W. E. Weegar, whose appointment as Trainmaster, Districts 30, 31 and 32, Ottawa Division, Ottawa, Ont., was announced in our last issue, entered G.T.R. service No. 17, 1887, since when he has



W. E. Weegar,
Trainmaster, Ottawa Division, Grand Trunk Railway.

been, to Nov. 12, 1899, brakeman; Nov. 12, 1899, to Jan. 20, 1913, conductor; Jan. 20, 1913, to June 22, 1918, Passenger Trainmaster, Montreal.

W. C. Riddell, who has been appointed Advertising Agent, Grand Trunk Pacific Ry., Winnipeg, was born at Port Dover, Ont., and was for many years connected with newspaper and printing work at various points in Ontario. He entered G.T.R. service in 1902, and has since been chief clerk to the General Advertising Agent, G.T.R., Montreal.

F. A. Delano, member of the U.S. Federal Reserve Board, has resigned to accept a commission in the Corps of Engineers, U.S. Army, to engage in railway construction and management in France. He was President and Receiver, Wabash Rd., from 1905 to 1913, at which latter date he became President, Chicago, Indianapolis & Louisville Ry.

E. P. Quirk, who died at Montreal recently, was born in Ireland, and came to Canada in 1874. He was for some time

engaged on harbor works there, and later became associated with various railway undertakings in the vicinity, including the North Shore Ry., Northern Colonization Ry., St. Jerome Ry., South Eastern Ry., Montreal & Chambly, Pontiac Ry., and Montreal & Sorel Ry.

T. H. Gilmour, K.C., Solicitor, Western Lines, Canadian Government Railways, Winnipeg, visited Ottawa, Moncton and Toronto recently, particularly in connection with the operations of the act passed at the Dominion Parliament's last session, which provides that Dominion Government employes shall be subject to the provisions of the workmen's compensation acts in force in the various provinces.

William Edward McGill, who was appointed Assistant Superintendent, Montreal Terminals Division, Quebec District, C.P.R., Montreal, recently, was born at Toronto, Apr. 5, 1884, and entered C.P.R. service in 1900, since when he has been, to 1916, trainman and conductor, Farnham, Que., London and Toronto, Ont.; Feb. to Oct. 1916, Assistant Superintendent, Bruce Division, Ontario District, Toronto; Oct., 1916, to May, 1918, Assistant Superintendent, Sudbury Division, Algonoma District, Sudbury, Ont.

John Vass, whose appointment as Assistant Master Mechanic, Ontario Lines, G.T.R., Allandale, was announced in our last issue, was born at Braidwood, Scotland, and went to the U.S. in 1888, and was, to 1894, locomotive fireman, Wabash Rd., Chicago, Ill.; 1894 to 1895, locomotive fireman, G.T.R., Battle Creek, Mich.; 1895 to 1903, locomotive man, G.T.R., Battle Creek, Mich.; 1903 to June, 1918, Road Foreman of Locomotives, Nichols, Mich. On leaving to take up his new duties, he was presented with a chest of silver by associates and other friends.

W. A. Brown, General Superintendent, Western District, Canadian Northern Ry., Edmonton, Alta., who was severely injured in a motor accident on the Brazeau Branch, May 11, is progressing favorably at Jasper Park, Alta., and it is expected that within a short time he will have sufficiently recovered to resume his duties. Five ribs were broken on the right side close to the vertebrae, and from the nature of the break it was expected that it would take some time to heal. He, however, attended at his office until June 17, when he decided to ask for leave of absence.

Leslie Langmuir Grabill, who has been appointed General Baggage Agent, G.T.R., Toronto, was born at Walkerton, Ont., Feb. 6, 1878, and educated in the public and high schools there. After a course in a mercantile business, he entered G.T.R. service in May, 1897, since when he has been, to Jan., 1898, freight porter; Jan., 1898, to June, 1905, baggage porter and checker, Bonaventure Station, Montreal; June, 1905, to Dec. 15, 1907, baggage agent, same place; Dec. 15, 1907, to Jan. 1, 1909, chief clerk, General Baggage Agent's office, Toronto; Jan. 1, 1909, to July 31, 1918, Assistant General Baggage Agent, Toronto.

J. J. Sullivan, who has resumed duties as Roadmaster on the C.P.R., after returning from the front, was born at Fishers, N.Y., Apr. 29, 1866. He entered C.P.R. service in July, 1897, since when he has been, to June 20, 1901, rodman, instrument man, etc., on construction; June 20, 1901, to Dec. 1, 1903, Assistant Engineer; Dec. 1, 1903, to Jan. 1, 1907, Construction Engineer; Jan. 1 to Dec. 31,

1907, Assistant Engineer on location; Feb. 13, 1911, to July 11, 1912, Assistant Engineer on construction; Aug. 17 to Oct. 1, 1915, general trackman; Oct. 22, 1915, to July 20, 1916, Roadmaster. He went overseas as Major in the Canadian Railway Troops, and returned early this year.

John D. Farrell, who has been elected Vice President, Union Pacific System, was born at Brasher Falls, N.Y., July 31, 1856, and entered railway service as a track laborer in 1877. He was brought to Canada by the late Sir William Van Horne, and was from July, 1882, to May, 1883, chief clerk, and foreman of bridges, buildings and water department, C.P.R., Winnipeg; May, 1883, to Aug., 1884, Assistant Superintendent, Bridges, Buildings and Water Department, Western Lines, C.P.R., Winnipeg. He then returned to the U.S., where his subsequent railway service was given. Latterly he occupied the position of President, Oregon-Washington Rd. and Navigation Co., at Portland, Ore.

D. H. McDougall, heretofore General Manager, Dominion Steel Corporation, Sydney, N.S., has retired from that position and has been elected President, Nova Scotia Steel & Coal Co., New Glasgow, N.S., succeeding F. H. Crockard, who has resigned and returned to the United States. Mr. McDougall, who is 39 years of age, started work as assistant to the Dominion Coal Co.'s field engineer, subsequently occupying different positions in that company's service and in that of its successor, the Dominion Steel Corporation, his whole professional and business career having been with those companies, except for two or three years, when he was on engineering and construction work on the New York Central Rd.

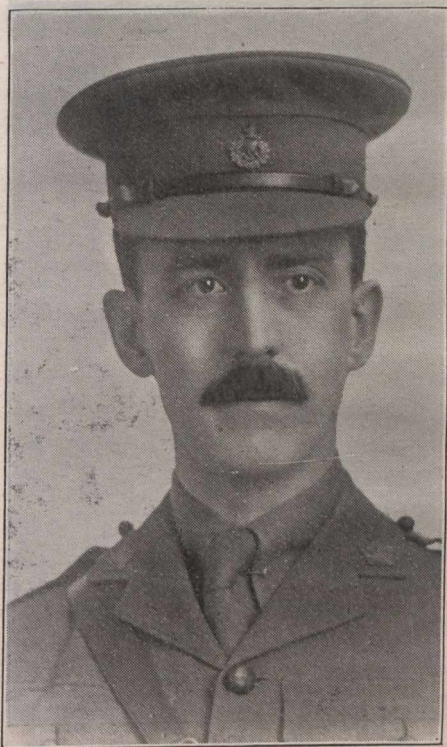
Fred Leonard Lamplough, whose appointment as Superintendent, Ottawa Division, Eastern Lines, G.T.R., Ottawa, Ont., was announced in our last issue, was born at Cambridge, Vt., Aug. 15, 1867, and entered railway service in Oct., 1882, since when he has been, to Jan., 1883, timekeeper, Canada Atlantic Ry., Alexandria, Ont.; May, 1883, to May, 1884, assistant agent, same road, Greenfield and Alexandria, Ont.; May, 1884, to June, 1885, operator and agent, same road at various points; June, 1885, to July, 1886, operator in dispatcher's office, same road, Ottawa; July, 1886, to Jan., 1900, track dispatcher same road, Ottawa; Jan., 1900, to Apr., 1907, Chief Dispatcher, same road and G.T.R., Ottawa; Apr., 1907, to June, 1918, Trainmaster, G.T.R., Ottawa.

Louis Drago, who died at Niagara Falls, Ont., July 10, aged 57, from pneumonia after a few days' illness, was born at Prairie Siding, near Chatham, Ont., and entered Great North Western Telegraph Co.'s service about 35 years ago, at Niagara Falls, Ont., as operator. He subsequently entered New York Central Rd. service, and was for several years, to Oct., 1908, Canadian Passenger Agent, Toronto. He was then transferred to Niagara Falls, Ont., in charge of the union ticket office at Clifton Hotel, later re-entering Great North Western Telegraph Co.'s service, latterly occupying the position of night operator at Niagara Falls, Ont. He leaves a widow and eight children and an aged mother. He began work and ended it under Geo. Phemister, Local Manager, G.N.W.T. Co., at Niagara Falls.

G. A. Stokes, whose appointment as Terminal Superintendent, G.T.R., Toronto, was announced in our last issue, was born in Nassagaweya Tp., Ont., July 23, 1879, and entered G.T.R. service Nov. 15, 1897, since when he has been, to Oct. 15, 1898,

operator, Listowel, Ont.; Oct. 15, 1898, to Mar., 1899, relieving agent; Mar., 1899, to Apr., 1907, agent, consecutively, at Harriston, Wingham, Wiarton and Brantford, Ont.; Apr., 1907, to Nov. 1, 1910, dispatcher, Stratford, Ont.; Nov. 1, 1910, to Sept. 13, 1912, Yardmaster, Don Station, Toronto; Sept. 13 to Oct. 25, 1912, General Yardmaster, Toronto Terminals; Oct. 25, 1912, to Aug. 10, 1913, Terminal Superintendent, Toronto; Aug. 10, 1913, to Nov. 4, 1915, Division Agent, Ontario Lines, Toronto; Nov. 4, 1915, to June, 1918, Superintendent, Sarnia Tunnel Terminals, Port Huron, Mich.

J. M. R. Fairbairn, who has been appointed Chief Engineer, C.P.R., Montreal, was born at Peterborough, Ont., June 30, 1873. He graduated from the School of Practical Science, Toronto, in 1893, and until Aug., 1901, was engaged in survey and construction work, since when he has been, to Nov., 1902, Assistant Engineer, Maintenance Department, Eastern Lines, C.P.R.; Nov., 1902, to Aug., 1904, Resident Engineer, District 4, C.P.R., Ottawa; Aug., 1904, to Aug., 1905, Assistant



Major Graham Airdrie Bell, C.M.G.
Acting Deputy Minister of Railways and Canals.

Engineer, Chief Engineer's office, C.P.R., Montreal; Aug., 1905, to Mar., 1906, acting Division Engineer, Eastern Division, C.P.R., Montreal; Mar., 1906, to Nov., 1907, Division Engineer, Ontario Division, C.P.R., Toronto; Nov., 1907, to Oct., 1908, Division Engineer, Eastern Division, C.P.R., Montreal; Oct., 1908, to Oct., 1910, Principal Assistant Engineer, Eastern Lines, C.P.R., Montreal; Oct., 1910, to Feb., 1911, Engineer of Maintenance of Way, Eastern Lines, C.P.R., Montreal; Feb. to Sept., 1911, acting Assistant Chief Engineer, Eastern Lines, C.P.R., Montreal; Sept., 1911, to July 1, 1918, Assistant Chief Engineer, Eastern Lines, C.P.R., Montreal.

J. E. Quick, who has retired from the position of General Baggage Agent, G.T.R., Toronto, after 47 years of service with the company and its acquired lines, was born at Richmond, N.Y., July 19, 1851. He entered railway service in 1871, since

when he has been, to 1874, baggage master and supply clerk, Port Huron & Lake Michigan Ry.; 1874 to 1876, General Baggage Agent and ticket clerk, same road; 1876 to 1884, agent, Port Huron, Mich., and General Baggage Agent, Chicago & Grand Trunk Ry.; 1884 to Apr. 15, 1896, General Baggage Agent, same road, and Detroit, Grand Haven & Milwaukee Ry.; Apr. 15, 1896, he was appointed General Baggage Agent, G.T.R., and Aug., 1908, also General Baggage Agent, Grand Trunk Pacific Ry., relinquishing the latter position in Jan., 1916. He was elected Secretary of the American Association of General Baggage Agents, July, 1885, and has been re-elected at each annual meeting since. He is one of the surviving charter members of the association, which was formed in 1882. Prior to leaving his office, he was presented with an engraved diamond and gold locket, by a number of his associates.

Major Graham Airdrie Bell, C.M.G., who has been appointed acting Deputy Minister of Railways and Canals, was born at Perth, Ont., Oct. 13, 1874, the son of James Bell, at one time Registrar for the south riding of Lanark County, and grandson of Rev. William Bell, a Presbyterian clergyman, who went to Perth, Ont., when it was opened as a military settlement, and was in the British Government's service as a clergyman there. He was educated at Perth public school and the collegiate institute. He entered government service at Ottawa, Dec. 1, 1890, with a temporary appointment in the Post Office Department, and received a permanent appointment in the Railways and Canals Department July 6, 1893, and has since advanced through the various grades in the accounting and auditing branches of the department. He was appointed Financial Comptroller, Sept. 1, 1908, and Assistant to the Minister, Jan. 1, 1917, holding that position until June 22, when the positions of Assistant to the Minister and Deputy Minister were combined, and he assumed the combined duties, with the title, for the present, of acting Deputy Minister. On the expiry of the year's leave of absence granted the Deputy Minister, A. W. Campbell, Major Bell will succeed to that position. He received a commission as lieutenant in the 43rd Duke of Cornwall's Own Rifles in 1900, and has passed the various grades to the rank of major. In 1912 he went to England at the request of the National Rifle Association to act as range officer at Bisley, and is the only Canadian officer who has held that position. At the end of that year he was appointed executive officer of the Dominion Rifle Association, which position he held until the outbreak of war. During 1915, he spent several months in France and England on special service, and was in the 207th Battalion, Canadian Expeditionary Force, during training, when he was recalled to civil duties. He was made a Companion of the Order of St. Michael and St. George in June, 1917.

John G. Sullivan, who has resigned as Chief Engineer, Western Lines, C.P.R., Winnipeg, to engage in private practice there, was born at Bushnell's Basin, N.Y., Jan. 11, 1863, and graduated C.E. from Cornell University in June, 1888. He entered railway service in July, 1888, since when he has been, to Mar., 1889, rodman, Great Northern Ry.; Apr., 1889, to Aug., 1890, rodman, instrument man and assistant engineer, Spokane Falls & Northern Ry.; Aug., 1890, to May, 1893, Assistant Engineer, Great Northern Ry. coast lines; July, 1893, to Feb., 1894, Assistant Engineer, Alberta Ry. & Coal Co.; July to Oct., 1894, section foreman, Northern

Pacific Ry.; Oct., 1894, to Apr., 1895, Locating Engineer, Butte Anaconda & Pacific Ry.; Apr. to Dec., 1895, Division Engineer, Kaslo & Slocan Ry.; Dec., 1895, to Feb., 1901, Locating and Reconnaissance Engineer, and Engineer in charge of construction, Columbia & Western Ry.; Feb., 1901, to Sept., 1905, Division Engineer of Construction, Western Lines, C.P.R.; Sept., 1905, to Feb., 1907, Assistant Chief Engineer, Panama Canal; Feb., 1907, to Sept. 15, 1908, Manager of Construction, Eastern Lines, C.P.R., Toronto; Sept. 15, 1908, to Jan. 1, 1911, Assistant Chief Engineer, Eastern Lines, C.P.R., Montreal; Jan. 1 to Oct. 9, 1911, Assistant Chief Engineer, Western Lines, C.P.R., Winnipeg, and from Oct., 1911, to July 1, 1918, Chief Engineer, Western Lines, C.P.R., Winnipeg. The chief work with which he has been concerned of recent years, is the construction of the Connaught Tunnel on the C.P.R. through the Rocky Mountains. He was President of the American Railway Engineering Association for 1917. In connection with Mr. Sullivan's retirement from C.P.R. service, D. C. Coleman, Assistant General Manager, Western Lines, C.P.R., said: "The withdrawal of Mr. Sullivan from active service is deeply regretted by all the officers who have been associated with him. We fully recognized his great abilities, and are proud of the fact that he stood at the very top of his profession in America. His name will always be honorably associated with the great programme of construction and betterments carried out by the railway during the past few years. Apart from his qualifications as an engineering officer, his personal qualities won for him the affectionate regard of all the officers in the west. We are glad that his association in a consultative capacity means that we will still have the benefit of his counsel."

Freight and Passenger Traffic Notes.

Alberta stock raisers are asking the railways in the province to grant special rates over their lines for the carriage of hay and other feed for next winter's requirements.

The Northern Construction Co., which bought a large quantity of tile in Alberta and consigned it to Vancouver via C.P.R., sought recently to recover from the C.P.R. for tiles damaged in transit. It was shown that the loss by breakage was only about 2%, which the court did not consider excessive and the action was dismissed with costs.

The Board of Railway Commissioners was asked, July 9, to order the restoration of passenger train service on the C.P.R. between Ottawa and Waltham, such as existed prior to 1916. The company contended that the traffic on the extra train asked for would not compensate it for the extra cost of coal and for the wages of the train crew. Decision was deferred.

Dismantled Railway Lines in Alberta. The roadbed of the Canadian Northern and Grand Trunk Pacific Railways between Lobstick, on the C.N.R., and Resplendent on the G.T.P.R., about 300 miles, from which the steel rails were removed for shipment to France, is to be used as a highway to Kamloops, B.C. We are officially advised that the Department of the Interior's Parks Branch is having surveys made in connection with the project. Until a definite decision has been reached, the steel bridges on the railway will be allowed to remain.

Railway Rolling Stock Orders and Deliveries.

The Canadian Locomotive Co. has delivered 3 switching (0-6-0) locomotives to Canadian Government Railways.

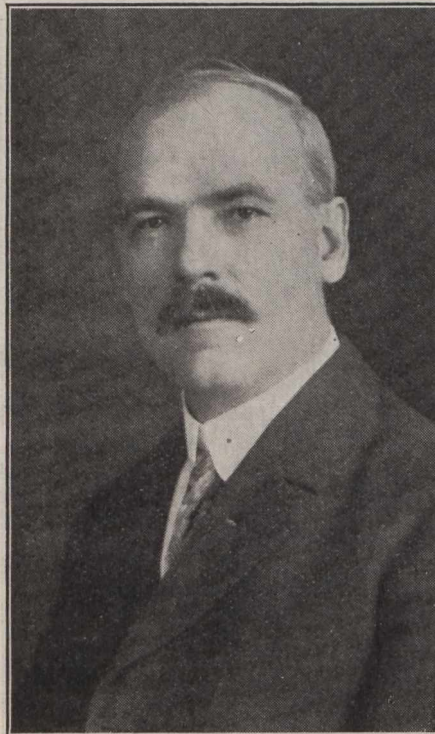
The G.T.R. has received 148 box cars, 80,000 lb. capacity, from American Car & Foundry Co.

The Canadian Copper Co. has ordered an all steel standard gauge snow plough from Canadian Car & Foundry Co.

The National Steel Car Co., since June 18, has shipped 470 box cars, with drop shutters, hand brakes and outside brake chain, to the Paris, Lyons & Mediterranean Ry., France.

The Dominion Iron & Steel Co. ordered recently, from Canadian Car & Foundry Co., 8 pairs of Simplex 80,000 lb. trucks, with solid side truck bearings 65 in. centers, for delivery in July.

Canadian Government Railways have placed two orders with Canadian Car & Foundry Co., covering repairs on approx-



W. C. Riddell, Advertising Agent, Grand Trunk Pacific Railway.

imately 400 cars, some of which will be changed into open pulpwood cars.

The C.P.R. received the following additions to rolling stock from its Angus shops, Montreal, between June 18 and July 16,—2 steel mail cars, 7 express refrigerator cars and 4 decapod type locomotives.

The Dominion Government has bought from D. R. Morrison & Sons, Summerside, P.E.I., 16 second hand dump cars, and 1 second hand saddle dinkey locomotive, 3½ ft. gauge, all for \$4,500, for use on the Prince Edward Island Ry.

The Dominion Government has bought 24 dump cars, 12 yard capacity, from the Dominion Dredging Co., at \$1,060 each. They were being used under rental by the Canadian Northern Ry. in connection with its Montreal tunnel and terminal work, and will be leased, sold or otherwise disposed of, by the government, to the C.N.R.

The Canadian Government Railways are building 200 wood underframe Hart convertible cars in their shops at Transcona, Man., at a total cost of \$625,000. They are of 50 tons capacity, side and center dump, similar to the 200 of the same type ordered in May and mentioned in our last issue, and which are being built by the Canada Car & Foundry Co. at its Fort William plant.

Following are chief details of the 15 Pacific and 20 switching locomotives which the Dominion Government has ordered from the Montreal Locomotive Works, as mentioned in our last issue. Of these locomotives, the 15 Pacific and 10 switching locomotives are for the G.T.R., and the other 10 switching locomotives for the Grand Trunk Pacific Ry.

	Pacific.	Switching.
Cylinders, diam. and stroke	24 x 28 in.	21 x 26 in.
Driving wheels	69 in.	51 in.
Boiler, diam.	72½ in.	68 in.
Boiler pressure	200 lb.	180 lb.
Firebox	108 x 75¼ in.	95-15/16 x 41¼ in.
Tubes, no. and diam.	228-2 in.	158-2 in.
	32-5¾ in.	21-5½ in.
Tubes, length	20 ft.	12 ft. 5 in.
Heating surface, firebox 215 sq. ft.		132 sq. ft.
Heating surface, tubes 3,302 sq. ft.		1,391 sq. ft.
Heating surface, total 3,517 sq. ft.		1,523 sq. ft.
Grate area	56.5 sq. ft.	27.5 sq. ft.
Wheel base, driving	13 ft.	12 ft.
Wheel base, engine	33 ft. 10 in.	12 ft.
Weight on drivers	170,000 lb.	154,400 lb.
Weight, front truck	46,000 lb.	
Weight, rear truck	48,000 lb.	
Weight, total	164,000 lb.	154,000 lb.
Tractive power	39,700 lb.	34,400 lb.
Factor of adhesion	4.3	4.49
Tank capacity	7,800 gall.	4,560 gall.
Coal capacity	12 tons	6 tons
Valve motion	Walschaert	Walschaert
Driving wheel centers	Cast steel	Cast iron
Tender wheels	Rolled steel	Tires and retaining rings
Safety valves	3-3 in.	2-3 in.
Tender type	C.G.R.	C.G.R.
Cab	Vestibule	C.G.R.
Grate shakers	Pneumatic	Hand
Steam heat	Gold	Gold or Vapor
Driving box shoes and wedges	Franklin	Brass
Reverse gear	Lever type	Casey-Cavin
Headlights	Pyle National	Pyle National

Twist Drills Investigation.—A series of experiments to disclose certain facts regarding the performance of metal drills has been completed by the University of Illinois Engineering Experiment Station, and the results published as bulletin 103. One-inch drills of many standard makes and special cast iron blocks made in the shop laboratories were used. The power required at the drill point for different speeds and rates of feed was noted in all tests, the thrust and torque of the drill were recorded by special dynamometers, and the endurance of drills of different designs was studied. The economical helix angle, point angle, clearance angle, speed, and feed were determined, and the effects of pilot holes and rounded corners were shown. Copies of the bulletin may be had free by addressing the Engineering Experiment Station, University of Illinois, Urbana, Ill.

The Sea Foods Special.—Following a conference of transportation officials, the principal shippers of fish, the Canada Food Board and representatives of the Canadian Fisheries Association, which was called by the Naval Service Department, and which met recently in Montreal, additional excellent transportation facilities for fish from the Atlantic coast to inland points has been provided. A train, known as the "Sea Foods Special," leaves Mulgrave and Halifax, N.S., on Thursday, Friday and Saturday of each week, hauling refrigerator cars for the transportation of fresh fish. The train operates on a practically express basis, and the cars are hauled right through to Montreal and Toronto.

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AND
Marine World**
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TORONTO, CANADA, AUGUST, 1918.

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The Canadian Railway War Board's Work.

Accidents to Employees.—The board's attention having been directed to the large number of accidents to employes which occur through persons being struck by cars "kicked" into yard tracks or sidings at intermediate stations, apparently without proper warning being given, it is urged that member lines direct those of their officers and employes concerned to redouble the efforts to avoid personal injuries, and where safety first departments are employed, to have these organizations give particular attention to the elimination of accidents attributable to operations such as those above mentioned.

Car Delays.—In reference to delays to cars at Montreal and other Canadian ports served by Canadian lines, while awaiting orders from various organizations, the board considers that the growing demand for freight cars, which will become heavier as time advances, necessitates the handling of export as well as other traffic in a manner that will permit of cars being released with the least minimum delay. Reports received by the board show that large numbers of cars of export freight have been seriously delayed awaiting orders from ocean steamship lines and others. This practice is similar to that which formerly existed in other countries and which caused car shortage and congestion of unprecedented severity. In view of the burden which will be placed upon sea port terminals during next autumn and winter, and the shortage of box cars that will undoubtedly exist, the board feels that pressure must be brought to bear upon those concerned to unload export freight much more promptly than has been the case heretofore. Action has therefore been taken as an incentive to speedy releasing of cars to apply existing demurrage regulations to export shipments, allowance being made of course for a longer period of free time than in the case of domestic traffic.

Car Inspection, Etc.—As separate car inspection and recording staffs are maintained at some interchange points, member companies have been urged, in view of the saving in men and other economies accruing from the employment of joint staffs, to arrange for the adoption of a joint system.

Cars on Foreign Lines.—Although the number of box cars in Canada has become greater during the past three months by approximately 14,000, the increase consists almost entirely of U.S. owned equipment which is now being loaded home rapidly. In the meantime the number of Canadian owned box cars on foreign lines has remained stationary, this being due in part to a relaxation on some member railways of the regulations restricting the use of Canadian owned cars to points on Canadian lines. As Canadian railways will, according to all present indications, be called upon to move an unprecedented volume of grain and other foodstuffs during the ensuing autumn and winter, and as experience has shown that the great majority of foreign cars are defective to an extent to render them unsuitable for this traffic, it is imperative, if the demand is to be met, that member lines take action to see that Canadian owned box cars are held, until further notice, in service on Canadian railways. Member lines have been directed to re-issue instructions to those of their officers and employes concerned, prohibiting the loading of Canadian owned box cars contrary to the foregoing, and in addition thereto in-

struct employes at interchange points with member lines, that in the case of cars being offered in interchange by such connecting member line, loaded or billed in violation of these instructions, the cars to be refused, the offering line to bear any expense involved in such refusal, including per diem charges and cost of transshipping. A member line becoming aware of its box cars being loaded to foreign railways in violation of the foregoing regulations is asked to report full particulars to the board.

In view of the comparatively plentiful supply of U.S. owned box cars at present available in Canada, and with proper intro-line distribution, the practice of using Canadian owned cars for international traffic, goods being transferred to U.S. cars at boundary points, involving as it does, considerable delay to cars and expenditure of labor and money, should be discontinued. Member lines have been asked to issue instructions accordingly to those of their officers and employes concerned.

Cars on U.S. Government Controlled Lines.—Certain lines of Canadian railways operating in the United States are now operated by the U.S. Government. Canadian box cars entering thereon are automatically absorbed in the box car pool existing on U.S. lines and are thereby taken from Canadian service. It is essential, if an adequate supply of grain cars is to be available for movement of the 1918 crop, that Canadian box cars be retained in Canada. By way of taking further action to avoid loss of Canadian box cars, existing instructions have been amended to prohibit the loading of Canadian owned box cars to points on Canadian lines in the U.S., except when assigned to a point located upon the line of the owner of the car; for example, G.T.R. box cars, but no other Canadian owned box cars, may be loaded to points on the G.T.R. in the U.S.

Cars Received Under C.S.S. Orders.—In the event of Canadian owned cars being received by a Canadian line under a car service section order, such Canadian cars, unless belonging to the road in whose favor order issued, must be diverted to owner instead of being moved through to receiving line on c.s.s. order billing. Deficiencies in deliveries under c.s.s. orders, resulting from abstraction of Canadian cars as above, should be promptly reported to the board, so that adjustment may be arranged by placing of supplementary order or in some other suitable manner.

Rails for Sidings.—The board has recommended member lines that the prices for second hand relaying rails, disposed of to industries for sidings, etc., should be the same as fixed by the United States Railroad Administration, viz: from \$55 to \$65 a gross ton, depending upon quality and location, f.o.b. carriers' tracks nearest to delivery point. In general, the price for good second hand rails, for sidings and spur tracks, should be \$60 east of the Rocky Mountains, and \$65 west of them, except that light inferior rails may be sold at from \$55 to \$60.

Cornwall Terminal Co., Ltd., has been incorporated under the Dominion Companies Act, with \$100,000 authorized capital, and office at Montreal, to carry on a general warehousing and wharfing and forwarding business, and in connection therewith, to own and operate warehouses, railways, tramways and other means of transportation, and to own and operate steam and other vessels.

Traffic Orders by Board of Railway Commissioners.

Grand Trunk Pacific Steamship Co.'s Freight Rates.

Commissioner Boyce gave the following judgment June 26, which was concurred in by the Assistant Chief Commissioner, D'Arcy Scott:—

This complaint was on the list for hearing at Vancouver, June 6, 1918, and the parties were notified. No one appeared in support of the complaint, and counsel for the respondents showed cause. Objection was taken to the board's jurisdiction to adjudicate upon the issues involved, on the ground that the tariff filed, and in question, was a special local freight tariff (port to port) of the G.T.P. Coast Steamship Co., which, while admittedly a subsidiary company of the Grand Trunk Pacific Ry. Co., was not, within the meaning of sec. 7 of the Railway Act, a company whose vessels were owned, chartered, used, maintained or worked by the G.T.P.R., nor, as it was contended, was such railway company (within the meaning of such section) a party to any arrangement for using, maintaining or working the steamship company vessels for carrying traffic by sea or by inland water between any ports or places in Canada.

The tariff filed by the steamship company is a purely local, port to port, tariff applicable only for carriage by water between Victoria and Vancouver, B.C., Seattle, Wash., and ports of call on northern British Columbia coast service. No question of a through traffic was involved, and the principle of the decision in Dawson Board of Trade vs. White Pass and Yukon Ry., 9 C.R.C. 190, is not applicable. While the G.T.P.R. Co. is the parent company of the steamship company whose local tariff is attacked, there is no such unity or relation between the two separate corporate entities within the meaning of the section referred to which would give this board jurisdiction over the local port to port rates involved in the dispute. The two companies, although, perhaps, having the same interests common to both, preserve their independent corporate existences, and must be treated as separate and individual entities for the purposes of this complaint. This board has never exercised any jurisdiction over port to port traffic, neither do I think that there is any authority conferred upon it by the Railway Act to do so. Wherever the board has exercised such jurisdiction the water traffic has been a part of, and incident to, a through railway rate, and jurisdiction was assumed by reason of the railway and not the water character of the traffic. In the present case the rate is purely a local rate for water-borne traffic between local ports, no part of it being, by any stretch of imagination, attributable to railway traffic or the traffic of the railway company. I am of opinion that this board has no jurisdiction in this complaint.

Apart from the question of jurisdiction, and if the board assumed jurisdiction in this matter, I should be very reluctant indeed upon the statements made at the hearing, to hold that, having regard to the nature of the traffic, the tariff was unreasonable. There is considerable hazard in connection with the traffic, expense of maintenance of it is great, and for many years it has been very unprofitable. It is stated that only last year was there a surplus from the earnings of the company. Added to the above reasons, it is very clear and ought to be a cogent and deciding factor, that the traffic is

largely, if not altogether, of a temporary character and most of it is directly attributable to the state of war now existing, as appears from the statements made at the hearing. It is more than probable that at the termination of the war the traffic would relapse to the former unsatisfactory conditions. The tariffs do not bear such an unreasonable proportion to the marketable value of the commodities carried as would in any event justify the board in going to the length of ruling that they were exorbitant and improper. It may be that there is some evidence in the complaint that they are not normal tariffs, but it is also to be observed that these tariffs are applicable to an abnormal condition of things, and to an exceptional and special condition of traffic which is of a temporary character. In my opinion the complaint must be dismissed.

Westbound Transcontinental Freight Rates.

General order 241. June 29. Re westbound transcontinental freight rates, and the powers conferred upon the board under sec. 323 of the Railway Act. Whereas the westbound transcontinental freight rates on specific commodities from Eastern Canada to destinations in British Columbia, recognized as Pacific coast terminals, have been in the past and are now lower than the regular scale of rates under the Canadian Freight Classification, and the said commodity rates were definitely related to the rates on the same or similar commodities shipped from the eastern states of the Union to Pacific coast points, including those in British Columbia, until March 15, when the last mentioned rates were increased without corresponding increases from eastern Canada; and whereas the Director General of the U.S. Railroad Administration has ordered U.S. carriers to increase the rates which were in effect from the eastern states immediately before June 25, by 25%, effective from that date, and because of the competitive character of the traffic it is expedient to continue at least the equilibrium existing before March 15, it is ordered that the railway companies in Canada engaged in the said westbound transcontinental traffic be hereby permitted to increase the present so-called commodity rates from eastern Canada so as to place them on at least an equality with the rates now in effect from the neighboring states of the Union, and that the rates so increased be permitted to become effective not earlier than Aug. 1, 1918, upon not less than five days notice to the board and to the shipping public by filing and posting in the manner prescribed in the Railway Act.

Idler Cars Taking Care of Overhang.

General order 242. June 28. Re application of Dominion Bridge Company, Montreal, for a ruling on the following question: "Should an idler car used to take care of an overhang from a car loaded with articles taking a commodity rate with a greater than classification minimum weight be charged two-thirds of the tariff weight of the commodity tariff or of the classification?" Upon hearing the application at Montreal, June 10, the applicant, the Canadian Freight Association, and the Grand Trunk and Canadian Pacific Railways being represented at the hearing; and upon the report and recommendation of the board's Chief Traffic Officer, it is ordered that the authority be, and it is, hereby given for a change in rule 1 (c) of Canadian Freight Classification 16, so as to provide that the mini-

mum weight for the first car in a series of platform cars (the longest car in the series to be considered the first car) carrying articles too long for one such car be that provided for in the appropriate tariff covering such articles, and two-thirds of the said minimum for each additional car over which the load extends. And it is declared that the lawful charge for each additional car used as herein described, prior to the effective date of the amendment herein authorized, was and is, two-thirds of the minimum weight provided for in the Canadian Freight Classification for the articles so carried, unless specifically excepted from the provisions of the said Classification in the tariff applicable.

Agricultural Limestone and Stone Dust.

27378. June 28. Re complaint of the Crushed Stone, Limited, Toronto, and Henderson Farmers' Lime & Phosphate Co., of Woodstock, Ont., against increased rates charged by G.T.R. on agricultural limestone and stone dust from Kirkfield, Ont., to various points. Upon hearing the complaint at Toronto, Feb. 15, the complainant, the Toronto, Hamilton & Buffalo, the Grand Trunk, the Canadian Pacific, and the Canadian Northern Railways, the United Farmers of Ontario, the Guelph Agricultural College, and the Canadian Freight Association being represented; and upon the report of the board's Chief Traffic Clerk, it is ordered that the complaint be dismissed.

Coast Terminal Rates to Sidney, B.C.

The Assistant Chief Commissioner, D'Arcy Scott, gave the following judgment, June 26:—Sidney is on the south eastern end of Vancouver Island. It is reached by the Great Northern Ry. car ferry from Vancouver, and also by the Canadian Northern Ry. via car ferry to Patricia Bay, and thence by interchange of its railway with the Great Northern Ry., which on Vancouver Island is called the Victoria & Sidney Ry. Sidney is not served by the C.P.R., except by its coast and island boats, which call at Sidney periodically. Sidney is not a port of call for any ocean going vessel.

The applicants state that there is an arbitrary rate of 5½c per 100 lb. carload and 11c per 100 lb. l.c.l., which is added to the coast terminal rates on all traffic to Sidney. The Sidney Board of Trade applies for the cancellation of this arbitrary rate. Sidney is about 18 miles nearer Vancouver than is Victoria, via the Great Northern car ferry and rail route. There are several industries established at Sidney, notably a saw mill, a plant for the manufacturing of roofing and a cannery. Sidney is not reached by rail by the C.P.R. Therefore, that company may be eliminated from the consideration of this matter, as no case could be made out against it. The Canadian Northern only, reaches Sidney over the Victoria & Sidney Ry. tracks from a point of interchange about 1½ miles from Sidney. Therefore, no stronger case could be made out against the Canadian Northern than against the Great Northern. The latter company's traffic for Victoria passes over the same line as traffic for Sidney and it is hauled 18 miles longer distance at a lower rate than similar traffic to Sidney. If the circumstances and conditions of the traffic are substantially similar, subsec. 5 of sec. 315 of the Railway Act prohibits a higher rate being charged to Sidney, unless the board is satisfied that owing to competition it is expedient to allow the lower toll for the

longer haul. Victoria is a port for ocean going vessels. There is actual competition via the Panama Canal and other water routes with the Great Northern Ry. service to Victoria. It is to meet this competition that the railway maintains the lower rate to that city. There is no such competition at Sidney, as it is not served by ocean going vessels. Under these conditions, I think the railway is justified in maintaining the lower rate to Victoria, without making it applicable to intermediate non-competitive points like Sidney. The reasonableness of the rates to Sidney per se was not attacked. Therefore this judgment deals merely with the competitive feature of the rates referred to. On the evidence before me I think the application should be dismissed.

Order 27,383 was passed, June 28, dismissing the application.

Grain Delivery in New Westminster.

27,402. July 6. Re complaint of Grain Growers' British Columbia Agency, that the Canadian Northern Ry., although publishing rates on grain to New Westminster, B.C., makes an extra charge for delivery in that city. Upon hearing the complaint at Vancouver, June 6, the complainants and the railway company being represented, it is declared that the rate the C.N.R. was authorized to charge the complainants for delivery in New Westminster of the carload of barley from Clyde, Alta., was the rate shown in its tariff C.R.C. no. W.384, subject with respect to delivery on the C.N.R. tracks to the board's General Inter-switching Order that the collection by the C.N.R. of the toll of 1c per 100 lb. charged by the Great Northern Ry. for its switching service was unauthorized and illegal under the said tariff, and that the C.N.R. is granted leave to refund to the complainants the excess amount so charged and collected by it on the shipment in question.

Minimum Carload Weights for Sheep.

27,407. July 5. Re application of South Alberta Wool Growers' Association for an order requiring railway companies to establish a minimum carload weight to 12,000 lb. on sheep in single deck cars. Upon hearing the application at Calgary, June 10, in the presence of C.P.R. counsel, no one appearing for the applicant, it is ordered that the application be refused.

Car Doors for Sand and Gravel.

27,426. July 11. Re complaint of E. A. McKenzie of Arden, Man., against refusal of railway companies to supply him with car doors for sand and gravel shipments or to pay him for doors supplied by himself. Upon hearing the complaint at Winnipeg, June 15, in presence of counsel for Canadian Pacific and Canadian Northern Railways, the complainant appearing in person, it is ordered that the complaint be dismissed.

Classification of Zam-buk.

27,429. July 12. Re application of the Freight and Express Underwriters of Toronto, for same rating for Zam-buk as is provided in Canadian Freight Classification for vaseline. Upon hearing the application at Toronto, June 24, the applicant and the Canadian Freight Association being represented, it is ordered that the application be dismissed.

Interchange Tracks at Forrest, Man.

27,436. July 11. Re application of Canadian Manufacturers Association (Brandon Section) and other interested shippers in Brandon, Man., for an order requiring the construction of an interchange track between the Canadian Pacific and the Grand Trunk Pacific Railways at Forrest, Man. Upon hearing the application at Winnipeg, June 15, in the pres-

ence of counsel for the applicants and the Grand Trunk Pacific and Canadian Pacific Railways, it is ordered that the G.T.P.R. be directed to construct interchange tracks between its railway and the C.P.R. near Forrest, Man.; the said railway forthwith to file detail plans of the proposed interchange; the work to be completed within 60 days from the approval of the plans by the board, and the expense of constructing such interchange tracks to be paid by the G.T.P.R.

Commodity Rates on Glass Bottles.

27,438. Re complaint of Montreal Board of Trade against proposed cancellation of present commodity rates on glass bottles in carloads from Hamilton, Toronto, and Montreal, published and filed in C.P.R. Supplement 77 to Tariff C.R.C. no. E. 3210, effective July 25, 1918, and in G.T.R. Supplement 73 to Tariff C.R.C. no. E. 3426, effective July 28, 1918: Upon reading what is filed in support of the complaint and on behalf of the railway companies, it is ordered that the said supplements cancelling the present commodity rates on glass bottles in carloads from Hamilton, Toronto, and Montreal, be suspended, pending hearing on a date to be fixed by the board.

Rates on Turnips.

27,439. July 17. Re application of Ontario Turnip Association and others for suspension of supplements to tariffs of the Canadian Pacific, Grand Trunk, and Toronto, Hamilton & Buffalo Railways, by which it was proposed to cancel through rates on turnips in carloads from stations in Ontario to points in the southern United States: Upon reading what has been submitted on behalf of the applicants, it is ordered that Supplement 7 to Toronto, Hamilton & Buffalo Ry. Tariff C.R.C. no. 502; Supplement 20 to G.T.R. Tariff no. E. 2619, and Supplement 9 to C.P.R. Tariff C.R.C. no. E. 2461, be suspended, pending hearing on a date to be fixed by the board.

Heaters in Banana Cars.

27,458. July 22. Re complaint of Vipond Fruit Company, Winnipeg, against a heater charge of \$15 a car on bananas from Minneapolis, Minn., to Winnipeg: Upon hearing the complaint at Winnipeg, June 15, the complainant and the Canadian Pacific, Canadian Northern, and Grand Trunk Pacific Railways being represented, and upon its appearing that there is no tariff provision for the supplying of heaters only, it is declared that the heater charge of \$15 a car made by the C.P.R. on bananas from Minneapolis to Winnipeg was wrongfully made, and the C.P.R. is authorized to refund the amount to the complainant company.

Coal Rates to Edmonton.

27,459. July 22. Re application of Great West Coal Company, Edmonton Collieries, and Byers Mine Coal Co., for an order directing the Grand Trunk Pacific Railway to reduce its rate on coal from the Great West spur to Edmonton: Upon hearing the application at Edmonton, June 11, it is ordered that the G.T.P.R. be required to reduce the rate on coal, shown in its Special Joint and Competitive Freight Tariff, C.R.C. 285, from the mines on the Great West Coal Co.'s spur to Edmonton to 45c a ton.

27,460. July 20. Re application of Twin City Coal Co., Swift Canadian Co., Northern Alberta Coal Operators' Association, and Alliance Power Co., all of Edmonton, Alta., for reduced rates on slack coal to that city: Upon hearing the application at Edmonton, June 11, the applicants and the Canadian Northern, Canadian Pacific, and Grand Trunk Pacific

Railways being represented, it is ordered that the application be dismissed.

Heater Charge on Bananas.

27,461. July 22. Re complaint of Plunkett & Savage of Calgary, Alta., against a heater charge of \$22.50 a car from Minneapolis, Minn., to Calgary, via Minneapolis, St. Paul, and Sault Ste. Marie and Canadian Pacific Railways, on 5 carloads of bananas ex New Orleans: Upon hearing the complaint at Calgary, June 10, and upon its appearing that the bananas arrived at Minneapolis in heated cars, and that there is no tariff provision for the supplying of additional heaters, it is declared that the heater charge of \$22.50 a car from Minneapolis to Calgary made by the C.P.R. was wrongfully made, and the C.P.R. is authorized to repay to the complainants the excess amount collected by it on the shipments.

Rate on Bundles of Mouldings.

27,462. July 22. Re complaint of Security Traffic Bureau of Minneapolis, Minn., alleging overcharge by C.P.R. on a shipment from Winnipeg, April 27, 1912, to Wilkie, Sask., described in the bill of lading as 62 bundles of mouldings: Upon hearing the application at Winnipeg, June 15, the C.P.R. being represented, no one appearing for the applicant, it is ordered that the application be, and it is hereby, dismissed.

Toronto, Hamilton and Buffalo Railway Report.

The report for the calendar year 1917 covers the operation of mileage as follows:—Main line, 79.88 miles; branches, 20.13 miles; lines operated under trackage rights, 4.36 miles; total road operated, 104.37 miles.

The total operating revenues were \$2,358,023.51, an increase over the previous year of \$487,786.83. Freight revenue was \$1,681,869.35, an increase of \$442,607.48, due to the greater volume of coal, iron and steel products, and other commodities handled. Passenger revenue was \$412,900.16, a decrease of \$9,559.98, due largely to a falling off in excursion business in July, 1917. Express revenue was \$51,428.53, an increase of \$14,783.96, due to the heavier volume of business. Switching revenue was \$137,460.87, an increase of \$28,323.33, and demurrage revenue was \$40,507.75, an increase of \$7,989.25, largely due to greater activity of industries at Hamilton and Welland. Dining and buffet revenue was \$24,578.36, an increase of \$3,670.64. Operating expenses were \$1,535,072.25, an increase of \$390,203.58, and were 65.10% of the operating revenues, which is 3.88% more than the operating ratio of the previous year. The increases in operating expenses are due to the handling of a greater volume of business than in the previous year, to higher rates paid for labor, and to increases in the cost of fuel and material. After payment of dividends aggregating 5% on outstanding capital stock, a surplus of \$308,914.30 was carried to profit and loss.

Unusual weather conditions which prevailed during the spring and early summer and recurrence of same during the latter part of the year seriously interfered with construction work in the Bridgeburg yard, in consequence of which no part of the yard was actually put into service. Two tracks, however, were completed on Canada Southern Ry. right of way leading from the entrance of the International Bridge to that company's Victoria yard, and they were put into service about Dec. 1. This relieved considerably the operating conditions at the

Victoria yard terminal. Yard construction was resumed as early as weather conditions justified, and it was expected to complete the same so as to bring the yard into operation Aug. 1, 1918.

The steel car ferry boat Maitland No. 1, owned and operated by the Toronto, Hamilton & Buffalo Navigation Co., resumed operation about the middle of March, continuing in service through the remainder of the year. The net income for the year amounted to \$10,711.02, or approximately 2.68% on the navigation company's capital stock, all of which is owned by the T.H. & B. Ry. Co. While this net income alone is not sufficient to justify the ownership and operation of the steam-

ship, the other benefits, resulting to the railway company, make such ownership and operation profitable, as the operating income of the branch line extending to Port Maitland amounted to \$57,824.74 for the year. After deducting interest and other fixed charges, the net surplus from the handling of traffic over the branch line was \$16,880.27. The revenue accruing to this company, on business originating on or in connection with the Port Maitland line, over and above the earnings on traffic handled over the branch line itself, amounted in the year to \$131,254.05. The railway company earnings, mentioned, are largely due to the operation of the car ferry steamer.

Great Northern Railway Report.

The report for the calendar year 1917 is the first for a full twelve months since the date of the ending of the fiscal year was changed from June 30 to Dec. 31. The directors' report states there has been no change in the capital authorized to be issued, which remains at \$250,000,000, of which \$249,478,250 has been issued. The unissued stock includes 17½ shares held to acquire 14 shares of St. Paul, Minneapolis & Manitoba Ry. stock, of which 10 shares are in the company's treasury and 4 are still outstanding, and 5,200 shares of the last issue of \$19,000,000 which have not yet been offered for subscription. Of the bonds outstanding, \$163,140,515.16 are in the hands of the public, \$39,813,393.93 held by mortgage trustees, \$500,000 held in pension fund, and \$17,716,000 held in the company's treasury. There were issued during the year first and refunding mortgage gold bonds, series A, 4¼%, for \$3,567,000, in accordance with the terms of the mortgage against the acquisition of the following securities:—\$707,393.93 St. Paul, Minneapolis & Manitoba Ry. Pacific extension mortgage 4% bonds; 26,500 shares of capital stock of Vancouver, Victoria & Eastern Ry. & Navigation Co.; 850 shares capital stock of the Crows Nest Southern Ry.

The company's investment in Canadian companies has been increased as follows: By purchase of capital stock of V.V. & E. Ry. & Navigation Co., \$2,650,000; purchase of capital stock of Crows Nest Southern Ry., \$85,000; purchase of capital stock of Midland Ry. of Manitoba, \$250,000; by advances to Brandon, Saskatchewan & Hudson Bay Ry., \$1,300.93; to Manitoba Great Northern Ry., \$2,479.40; to Nelson & Fort Sheppard Ry., \$8,828.83; to Red Mountain Ry., \$1,671.24; making a total of \$2,999,280.90. From this is to be deducted \$1,779,760.48, repaid the company on account of advances made in previous years, leaving the net increase on investment in Canadian companies for 1917 at \$1,219,520.42. The proceeds received from the sale of their share capital by the Canadian companies named, was used in making repayment to the G.N.R., in paying cost of construction and additions and betterments during the year, or is being held for payment of cost of future construction, additions and betterments.

The President's report shows that 9.71 miles of additional sidings, spurs and other tracks were laid in connection with the controlled lines in Canada; that 240,544 cubic yards of material were moved in filling the terminal grounds at False Creek, Vancouver, B.C.; and that the new passenger station at Vancouver was put in use. The work in progress at Vancouver includes not only the new passenger station, with express wing, but also

a bright freight house, power house, fuel oil plant, locomotive house, turntable, sand house, ice house, etc. Among the improvements on the company's lines are the building of a 200 ft. extension to the dock at Burrard Inlet, Vancouver, and a 200 ft. extension to the warehouse thereon.

Following are the results of operation:

Revenue from transportation	\$86,479,067.60
Revenue from operation other than transportation	2,119,666.04
Gross operating revenue	\$88,598,734.64
Operating expenses	59,282,156.31
Net operating revenue	\$29,316,578.33
Railway taxes accrued	6,302,952.08
Operating income	\$23,013,626.25
Other income	8,031,140.95
Gross corporate income	\$31,044,767.20
Deductions from income	8,004,594.98
Net corporate income	\$23,040,172.22
Dividends	\$17,462,959.50
Appropriations	5,385,635.00
	22,909,069.00
Balance to profit and loss	\$ 131,103.22

The consolidated general balance sheet shows the company's investments in Canadian lines as follows:—

Midland Ry. of Manitoba	\$2,400,000.00
Manitoba Great Northern Ry.	2,073,449.73
Brandon, Sask. & H. B. Ry.	1,151,943.09
Crows Nest Southern Ry.	4,295,000.00
Nelson & Fort Sheppard Ry.	1,129,407.26
Red Mountain Ry.	312,290.81
Vancouver, Victoria & Eastern Ry.	23,580,000.00
New Westminster Southern Ry.	260,000.00
Total	\$37,202,090.89

The mileage of lines owned by the G.N.R. and its controlled companies is 7,843.64, or, including second, and additional tracks, 8,119.23 miles, and including sidings, spurs and yard tracks, 10,495.60. In addition, the company has trackage rights over 420.35 miles of other companies' tracks. Following are the mileages in Canada:—

	Main line.	Spurs, etc.
Midland Ry. of Manitoba (joint with Northern Pacific Ry.)	2.10	11.11
Manitoba Great Northern Ry.	91.77	9.61
Brandon, Sask. & Hudson Bay Ry.	69.45	1.61
Crows Nest Southern Ry.	74.18	13.92
Nelson and Fort Sheppard Ry.	55.42	3.27
Red Mountain Ry.	9.59	2.84
New Westminster Southern Ry.	15.18	1.31
Vancouver, Victoria & Eastern Ry.	269.66	61.21
(Second track)	...	7.12
	587.35	121.00

Trackage rights:—

Canadian Northern Ry.—From boundary at Noyes, Minn., to Midland Ry. of Manitoba at Winnipeg	66.57
Canadian Northern & Grand Trunk Pacific Ry. at Winnipeg	1.68
Grand Trunk Pacific Ry. at Portage la Prairie	.99
Canadian Northern Ry., Hope to Camrose, B.C.	37.18
Kettle Valley Ry., Brookmere to Hope, B.C.	53.47

Canadian Pacific Ry., Troup Jct. to Nelson, B.C.	5.44
Province of B. C., New Westminster Bridge	1.48
	166.81

Canadian Pacific Railway Construction, Betterments, Etc.

New Brunswick District.—It is reported that Grant & Horne, contractors for the erection of the new grain elevator at no. 1 berth, St. John, N.B., have begun work thereon.

We are officially advised that no new elevator is being built at St. John. Grant & Horne, contractors, are doing some maintenance reconstruction on the company's grain conveyor gallery from elevator A to no. 1 berth, and along the face of no. 1 berth, a length of 581 ft. of gallery.

The Board of Railway Commissioners, July 12, authorized the company to appropriate certain lands for an additional main track between West St. John and Fairville, to build the main line at grade across the St. John Ry. at Main St., and also to cross at grade, North St., Union Point Road, Main St., Raynes Ave., Sherbrooke St. and Sand Cove Road, Fairville.

British Columbia District.—The Vancouver, B.C., City Council is negotiating with the company for the construction of a ramp to improve the approach to the C.P.R. station and other public property.

We are officially advised that business between the mainland and Vancouver Island has been increasing very rapidly, and that as barges cannot be taken in or out of Burrard Inlet, except at favorable tides, it has been decided to build a second transfer slip at Vancouver. It will be a three track slip, to be built just east of the present one, with an apron about 70 ft. long, similar to the one built at Esquimalt. It will be built of creosoted piles and lumber and is expected to cost \$70,000. (July, pg. 300.)

Amendment of Rules re Testing Eyesight.

The Board of Railway Commissioners passed general order 240, June 21, as follows:—Re the application of C.P.R. for an order amending clause 20 of general order 94, July 24, 1912, prescribing uniform rules governing the determination of visual acuity, color perception, and hearing of railway employes on steam railways so as to read "minimum" instead of "maximum standard specified." Upon hearing the application at Montreal, June 10, 1918, in the presence of counsel for the applicant, the Brotherhood of Locomotive Engineers and the Brotherhood of Locomotive Firemen being represented, it is ordered that the said general order be amended by striking out the words "maximum standard specified" in clause 20 of the rules thereunder approved and inserting in lieu thereof the words "the minimum standard of vision."

The clause as amended now reads as follows:—

"20. An employe in Class C, D, E or F who has been in continuous service for a period of not less than 5 years, and who, through diminution of vision or muscular imbalance, fails to reach required standard will be considered satisfactory if his acuteness of vision, with or without glasses, reaches the minimum standard of vision for the class of service in which he is employed."

Transportation Appointments Throughout Canada.

The information under this head, which is gathered almost entirely from official sources, is compiled with the greatest care, so as to ensure absolute accuracy. Anyone who may notice any error in our announcements will confer a favor by advising us.

Boston & Albany Rd.—H. M. BISCOE, heretofore Vice President, has been appointed Federal Manager, under the U. S. Railroad Administration. Office, Boston, Mass.

Boston & Maine Rd.—B. R. POLLOCK, heretofore General Manager, has been appointed Federal Manager under the U. S. Railroad Administration. Office, Boston, Mass.

Canadian Government Railways.—W. R. DEVENISH, Superintendent, Moncton, N.B., has had his jurisdiction extended to cover the Elgin & Havelock, St. Martins, Moncton & Buctouche, and Salisbury & Albert Rys., which are now incorporated with District 3, Intercolonial Division.

G. W. VAUGHAN, heretofore Superintendent, St. Martins Ry., Hampton, N.B., has been appointed a conductor on the St. Martins Branch, District 3, Intercolonial Division, C.G.R., and will also act as special agent. Headquarters, Hampton, N.B.

W. R. FITZMAURICE, Superintendent, Campbellton, N.B., has had his jurisdiction extended to cover the York & Carleton Ry., which has been incorporated with District 2, Intercolonial Division.

G. C. BROWNELL has been appointed Chief Dispatcher, Grant, Ont., vice J. P. Johnson.

F. H. PAULLEY has been appointed foreman upholsterer, Transcona, Man., vice C. Kemkes, enlisted in the 76th Battery.

Canadian Northern Ry.—W. ADAMS is reported to have been appointed signal inspector, Port Arthur, Ont., vice H. E. McDonald, transferred to Duluth, Winnipeg & Pacific Ry.

J. C. O'DONNELL, Superintendent, Divisions 2 and 3, Central District, Winnipeg, has been appointed acting General Superintendent, Western District, during the absence, through injuries, of W. A. Brown. Office, Edmonton, Alta.

J. J. CROWE is reported to have been appointed acting signal inspector, Edmonton, Alta.

Canadian Pacific Ry.—J. M. R. FAIRBAIRN, heretofore Assistant Chief Engineer, Eastern Lines, Montreal, has been appointed Chief Engineer of the C.P.R. system. Office, Montreal.

J. G. SULLIVAN, heretofore Chief Engineer, Western Lines, Winnipeg, has retired to engage in private practice, but will remain associated with the company as Consulting Engineer.

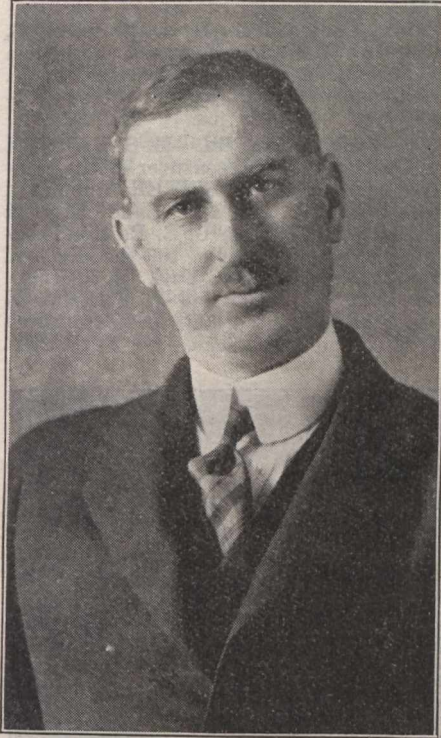
Sir George Bury, Vice President, issued the following circular, in connection with the above changes: "J. G. SULLIVAN, who has so well filled the position of Chief Engineer, is retiring to enter private practice, but will remain associated with the company as Consulting Engineer. J. M. R. FAIRBAIRN is appointed Chief Engineer."

W. A. JAMES, heretofore Division Engineer of Construction, Western Lines, Winnipeg, has been appointed Assistant Chief Engineer, Western Lines. Office, Winnipeg. No appointment as Division Engineer of Construction is to be made for the present.

Grant Hall, Vice President and General Manager, issued the following circular in connection with the above:—"W. A. JAMES is appointed Assistant Chief Engineer, with office at Winnipeg, in place

of J. M. R. FAIRBAIRN, who has been appointed Chief Engineer, with office at Montreal.

L. BERGER, heretofore Roadmaster, Winchester Subdivision, Smiths Falls,



J. M. Fairbairn,
Chief Engineer, Canadian Pacific Railway.



W. A. James,
Assistant Chief Engineer, Western Lines, Canadian Pacific Railway.

Ont., has been appointed Roadmaster, Sherbrooke, Que.

JOHN BURNS, heretofore Master Mechanic, Quebec District, Montreal, has been appointed Assistant Works Mana-

ger, Angus shops, Montreal, vice J. W. Buckland, granted leave of Absence.

C. A. WHEELER, heretofore Division Master Mechanic, Sudbury Division, Algoma District, Sudbury, Ont., has been appointed Master Mechanic, Quebec District, vice John Burns, promoted. Office, Montreal.

E. J. MELROSE, Assistant Superintendent, has been appointed acting Superintendent, London Division, Ontario District, during the absence of A. Williams, on holidays. Office, London, Ont.

W. J. STINSON has been appointed acting Assistant Superintendent, London Division, Ontario District, London, Ont., while E. J. Melrose is acting as Superintendent.

P. J. BELL has been appointed General Foreman, North Bay, Ont., vice J. S. Allen, promoted.

J. S. ALLEN, heretofore General Foreman, North Bay, Ont., has been appointed Division Master Mechanic, Sudbury Division, Algoma District, vice C. A. Wheeler, promoted. Office, Sudbury, Ont.

J. F. EARL has been appointed Resident Engineer, Winnipeg, vice C. H. Fox, on leave of absence for military service.

J. KILPATRICK, heretofore Roadmaster, La Riviere and Gretna Subdivisions, Winnipeg Division, Manitoba District, Winnipeg, has been appointed Roadmaster, Kenora Division, Manitoba District. Headquarters, Kenora, Ont. This is a new position.

C. BRYNELSON has been appointed Roadmaster, La Riviere and Gretna Subdivisions, Winnipeg Division, Manitoba District, vice J. Kilpatrick, transferred. Headquarters, Winnipeg.

D. M. SMITH, heretofore Road Foreman of Locomotives, Medicine Hat, Alta., has been appointed Division Master Mechanic there, his former position remaining vacant for the present.

E. J. LEMIEUX, heretofore Division Master Mechanic, Lethbridge, Alta., has been appointed Division Master Mechanic and Trainmaster, Calgary Division, vice A. E. Dales, now locomotive man, Winnipeg, and J. D. Fraine, transferred, respectively. Office, Calgary, Alta.

J. D. FRAINE, heretofore Trainmaster, Calgary Division, Alberta District, Calgary, has been appointed Terminal Trainmaster, Calgary, Alta.

J. M. GILMOUR, heretofore chief clerk to Superintendent, Edmonton, Alta., has been appointed Yardmaster, Edmonton and Strathcona terminals, vice L. Stone, enlisted for active military service.

F. REYNOLDS, heretofore store man, Calgary, Alta., has been appointed storekeeper, Field, B.C., vice L. Norman, who has enlisted for military service.

Delaware & Hudson Co.—W. H. DAVIES, heretofore Comptroller, Albany, N.Y., has been appointed Treasurer, vice C. A. Walker. Office, New York.

W. H. EPPER, heretofore Chief, Bureau Departmental Accounts, Albany, N.Y., has been appointed Comptroller, vice W. H. Davies. Office, New York.

L. K. LUFF, heretofore Auditor of Revenue, has been appointed General Auditor. Office, Albany, N.Y.

W. J. DALLER has been appointed Auditor of Revenue, vice L. K. Luff, promoted. Office, Albany, N.Y.

A. J. GIES, heretofore Auditor of Disbursements, has been appointed Auditor of Expenditures. Office, Albany, N.Y.

W. L. SCHNEIDER has been appointed Freight Claim Agent, Albany, N.Y., vice H. D. Chamberlain, transferred.

Duluth, Winnipeg & Pacific Ry.—H. E. McDONALD, heretofore signal inspector, C.N.R., Port Arthur, Ont., is reported to have been appointed signal inspector, D. W. & P. R., Virginia, Minn.

Grand Trunk Ry.—L. L. GRABILL, heretofore Assistant General Baggage Agent, has been appointed General Baggage Agent, vice J. E. Quick, who, after continuous service for 47 years on the G.T.R. System, retired, July 31, under the pension rules. Office, Toronto.

C. H. TILLET, heretofore Supervisor of Signals, Eastern Lines, Montreal, has been appointed Electrical Engineer, vice J. A. Burnett, whose appointment as Technical Assistant to the British War Mission at Washington, D.C., was announced in our last issue. Office, Montreal.

J. J. GINTY has been appointed Supervisor of Signals, Eastern Lines, Montreal, vice C. H. Tillett, promoted.

R. E. MARKS, heretofore conductor, has been appointed Passenger Trainmaster, Eastern Lines, vice W. E. Weegar, whose appointment as Trainmaster, Ottawa Division, was announced in our last issue. Office, Montreal.

J. C. GARDEN, heretofore Master Mechanic, Battle Creek, Mich., has been appointed Master Mechanic, Stratford Shops, Ont., vice C. Kelso, assigned to other duties.

E. P. EAST has been appointed Road Foreman of Locomotives, Stratford, Ont., vice W. Kirkwood, promoted.

W. KIRKWOOD, heretofore Road Foreman of Locomotives, Stratford, Ont., has been appointed Travelling Engineer, London, Ont.

H. W. MATTHEWS has been appointed Superintendent Sarnia Tunnel Terminals, vice G. A. Stokes, whose appointment as Terminal Superintendent, Toronto, was announced in our last issue. Office, Port Huron, Mich.

C. J. HAIG, having been assigned to other duties, the position of Commercial Agent at Philadelphia, Pa., has been abolished. All correspondence with respect to business transacted at that office is dealt with by the General Eastern Freight Agent, 1450 Woolworth Bldg., New York, N.Y.

J. B. HECKENDORN has been appointed Lake and Rail Agent, Chicago, Ill., vice G. J. Harris, who, owing to ill health, has been assigned to other duties. Office, Canada Atlantic Transit Co.'s Dock, 309 East North Water St.

The following positions have been abolished, and correspondence with respect to business transacted there, is now dealt with by the Assistant Freight Traffic Manager, Chicago, Ill.: Pacific Coast Agent, W. H. BULLEN, Los Angeles, Cal.; Commercial Agent, J. WAUGH, San Francisco, Cal.; Commercial Agent, G. H. Brown, Omaha, Neb.; Commercial Agent, H. A. RICHARDS, Kansas City, Mo.

The position of City Passenger and Ticket Agent, Portland, Ore., heretofore occupied by D. B. SMITH, has been abolished.

Grand Trunk Pacific Coast Steamship Co.—J. H. BURGIS, heretofore General Agent, Passenger Department, G.T.R., Seattle, Wash., has been appointed General Agent, Passenger Department, G.T.P.C.S. Co. there, and his former position has been abolished.

Grand Trunk Pacific Ry.—W. C. RIDDELL, heretofore chief clerk to General Advertising Agent, G.T.R. System, Montreal, has been appointed Advertising Agent, G.T.P.R., and will act as assistant in Western Canada, of the General Ad-

vertising Agent, G.T.R. System. Office, Winnipeg.

Great Northern Ry.—L. W. HILL, Chairman of the Board, has been elected President, vice W. P. Kenney, appointed Federal Manager under the U. S. Railroad Administration. (Note.—As the operation of the railways in the U.S. is now undertaken by the U. S. Railroad Administration, the duties of presidents are presumably concerned with corporate affairs.)

Maine Central Rd.—D. C. DOUGLASS, heretofore General Manager, has been appointed General Manager under the U. S. Railroad Administration. Office, Portland, Me.

New York Central Rd.—M. S. BARGER has been appointed Treasurer of the company, vice E. L. ROSSITER, appointed Treasurer, N.Y.C.R. and Lake Erie & Pittsburg Ry. for the U. S. Railroad Administration, reporting to the Federal Manager. Office, New York, N.Y.

H. G. SNELLING and E. FREEMAN have been appointed Assistant Treasurers of the company. Offices, New York, N.Y.



L. L. Grabill,

General Baggage Agent, Grand Trunk Railway.

L. BENDER and G. W. PORTER have been appointed Assistant Treasurers, N. Y. C. R. and Lake Erie & Pittsburg Ry. for the U. S. Railroad Administration, with offices at New York, and R. P. AHRENS has been appointed Local Treasurer, for the U. S. Railroad Administration at Cleveland, Ohio.

New York, New Haven & Hartford Rd. E. J. PEARSON, heretofore President, has been appointed Federal Manager, N. Y.N.H. & H.R. and Central New England Ry., under the U. S. Railroad Administration. Office, New Haven, Conn.

Quebec, Montreal & Southern Ry., Napierville Junction Ry.—W. H. DAVIES, Treasurer, Delaware & Hudson Co., has been appointed Treasurer, Q. M. & S. and N. J. Rys. Office, New York.

W. E. EPPLER, Comptroller, Delaware & Hudson Co., has also been appointed Comptroller, Q. M. & S. and N. J. Rys. Office, New York.

H. D. CHAMBERLAIN, heretofore Freight Claim Agent, Delaware & Hudson Co., has been appointed Auditor, Q. M. & S. and N. J. Rys. Office, Albany, N.Y.

A. L. CURRIE, heretofore Secretary, has been appointed Superintendent, Napierville Jct. Ry. Office, Sorel, Que.

R. F. HOLLAND has been appointed Car Accountant, Montreal.

Railway Finance, Meetings, Etc.

Canadian Northern Ry.—Payment of an issue of \$5,700,000 of notes maturing is reported to have been made in New York, July 10. Another issue amounting to \$10,000,000 matures in September.

The company is reported to have sold through W. A. Read & Co., New York, an issue of \$5,000,000 of 6% equipment trust certificates at a price to yield the investor 7½%. Of these notes \$750,000 will mature July 1, 1919, and July 1, 1920; \$450,000 annually thereafter until July 1, 1926, inclusive, and \$400,000 on July 1, 1927, and July 1, 1928, respectively. The proceeds of the sale have been utilized to buy 4,500 steel frame box cars, 250 gondolas, 215 flat cars, 200 stock cars, 250 ballast cars and 25 steel tank cars.

There has been deposited with the Secretary of State at Ottawa, duplicate original of a lease dated July 1, 1918, and executed July 9, made by Canadian Northern Rolling Stock, Ltd., to the C.N.R., covering certain rolling stock, and attached, an assignment thereof to The Pennsylvania Company for Insurances on Lives and Granting Annuities.

Canadian Northern Ry.—Equipment trust certificates, series A, 6%, for \$5,000,000, maturing in different amounts from July 1, 1919, to July 1, 1928, have been bought by W. A. Read & Co., New York.

Pacific Great Eastern Ry.—The Premier of British Columbia announced July 6 that arrangements had been made to pay interest on the bonds of this railway from the consolidated revenue fund. The amount involved is \$452,541, of which \$309,293 is payable in London, Eng., and \$143,248 in Victoria, B.C. Up to January, the Government had paid for interest on the bonds, \$1,927,916.50 under its guarantee, and the company had paid \$1,021,647.60 out of the money turned over to it by the government from the proceeds of the bonds on construction account.

Pacific Great Eastern Ry.—
Traffic earnings for May \$12,833.13
Traffic earnings for May, 1917 8,174.16

Timiskaming & Northern Ontario Ry. Passenger receipts for May, \$54,992.67; freight receipts, \$182,645.02; total receipts, \$237,637.69, against \$53,266.07 passenger receipts; \$143,972.47 freight receipts; \$197,238.54 total receipts, for May, 1917. Aggregate total receipts for five months ended May 31, \$1,106,983.84, against \$855,732.45 for same period 1917.

White Pass and Yukon Route.—Earnings for March, \$16,209, against \$44,714 for Mar., 1917. Aggregate earnings for three months ended Mar. 31, \$35,370, against \$83,921 for same period 1917.

Pacific Great Eastern Ry. Lands.—The British Columbia Government announced July 13, that it had decided to assume ownership of the P.G.E. Development Co.'s property, under the terms of the settlement agreement with the P.G.E. Ry. Co. The land includes 516 town lots and 7,000 acres of land, valued by the railway company at \$1,300,000.

Electric Railway Department

Increases in Electric Railway Freight and Passenger Rates.

The Board of Railway Commissioners has passed the following orders, in addition to those given in Canadian Railway and Marine World for May, June and July:—

Hamilton Radial Electric Ry.—27471, July 22. Re application of Hamilton Radial Electric Ry. for an order permitting it to file tariffs providing for a general advance in the tolls for the carriage of passengers and freight over its line, in the same manner and to the same extent as has been permitted by the board in the case of steam railways: Upon hearing the application at Toronto, June 24, the applicant company, the townships of Nelson and Trafalgar, the Burlington Beach Commission, the towns of Oakville and Burlington, and the city of Hamilton being represented, it is ordered that the company be authorized to increase its standard maximum freight mileage tariff by 15%, and its carload rates on coal and coke by 15c a ton. That the company be authorized to increase its standard maximum passenger tariff from 2c to 2½c a mile, subject, however, to the limitations created by the bylaws of the townships of Saltfleet and Nelson, the village of Burlington, and the town of Oakville, consenting to the construction and operation of the company's railway through their respective municipalities. And it is further ordered that the increased rates herein authorized shall not become effective until the company has complied with the requirements of sec. 327 and 331 of the Railway Act.

Hull Electric Co.—27379, July 8. Re application of Hull Electric Co. for authority to file tariffs providing for a general advance in tolls for carriage of passengers and freight in the same manner and to the same extent as has been permitted by the board in the case of steam railways: Upon hearing the application at Ottawa, May 21, in the presence of counsel for the company, the Town of Aylmer being represented at the hearing, and what was alleged; and upon reading the further submissions filed, it is ordered that the company be authorized to publish and file tariffs increasing its existing freight rates, except on coal and coke, by 15%, and its rates on coal and coke by 15c a ton; also to increase its standard maximum passenger rate so as not to exceed 2.875c a mile. And it is further ordered that the said tariffs may be made effective in 15 days from the date of this order, subject to the provisions of sec. 327 and 331 of the Railway Act as to standard tariffs.

27411, July 10. Approving Hull Electric Co. Standard Passenger Tariff C.R.C. no. P9, and Standard Mileage Freight Tariff C.R.C. no. F82, to become effective July 22, same having been filed on basis permitted by order 27379 of July 8.

London & Lake Erie Ry. & Transportation.—27421, July 10. Approving L. & L.E.R. & T.C. Standard Mileage Freight Tariff, C.R.C. 6, filed on basis permitted in order 27105 of April 4.

Montreal & Southern Counties Ry.—The Chief Commissioner gave judgment, July 11, to allow the M. & S.C.R. to file tariffs providing for a general advance in freight and passenger rates in the same manner and to the same extent as permitted by the board in the case of

steam railways. At the hearing the Town of St. Lambert and the municipalities of Greenfield Park and Longueuil objected to the proposed advances on the ground of agreements. The agreement between the Town of St. Lambert and the company provided that the rates to be charged should not be higher than those charged by steam railways for similar tickets at the date of passing the bylaw. The Chief Commissioner held that it would be unfair to increase the rates in other municipalities and not in St. Lambert and the other municipalities which had agreements, and stated that in his opinion an order should issue as asked for, notwithstanding any municipal agreement to the contrary. Up to the time of writing (July 24), the order had not been issued.

Windsor, Essex & Lake Shore Rapid Ry.—27382, July 4. Approving W.E. & L.S.R.R. Standard Mileage Tariff C.R.C. 236, to become effective July 20, same having been filed on basis permitted by order 27308, June 15.

OTHER APPLICATIONS AND INCREASES.

The Brantford Municipal Ry. Commission, which operates the electric railways owned by the City of Brantford, Ont., in that city and the interurban line between Brantford and Paris, which was formerly a part of the old Grand Valley Ry., being faced with a deficit of \$12,000 for the year, largely owing to increased wages, has abolished the sale of green limited tickets heretofore sold, 8 for 25c, and which were good from 6 to 8 a.m., from noon to 2 p.m., and from 5 to 7 p.m. Only one class of tickets, red, is now sold, 6 for 25c. The cash fare remains at 5c. Following is a comparison of the rates on the Brantford-Paris line:—

	Old rate	New rate
Single fare	20c	20c
Return fare	30c	35c
Children's return fare	15c	20c
Workmen's card ticket, return	20c	25c
Workmen's book of tickets, return	25c	30c

The fares between Paris and Brantford cover transfer on the Brantford city lines when required.

British Columbia Electric Ry.—We were officially advised, July 16, that arrangements had been made between the company and the Vancouver and New Westminster city councils under which cash passenger fares have been advanced to 6c in those cities, and also in the Vancouver city lines in South Vancouver and Point Grey municipalities, 6 tickets being sold for 35c. Children's fares remain at 2½c. The cash fare from Vancouver to South Vancouver and Point Grey is 12c. Settlers' tickets giving transfer into Vancouver City from South Vancouver and Point Grey are sold for 7c each in strips of 10. North Vancouver having refused permission to charge 6c, the company has ceased operating there. Burnaby having also taken the same attitude, the 2 miles in that municipality are also not being operated. In Victoria the mayor flatly refused to agree to an increased rate, so the company took advantage of its charter powers and is charging a 5c fare without giving a transfer. Children's fares have been abolished.

The Cape Breton Electric Co. applied in June to the Nova Scotia Board of Pub-

lic Utility Commissioners for authority to increase its cash passenger fares in Sydney and Glace Bay from 5c to 6c. On the Sydney and Glace Bay interurban line there are 5 zones, in each of which a 5c fare is charged, making the one way fare from Sydney to Glace Bay 25c. The company has asked authority to increase 1c in each zone, which would make a 6c fare in each zone and 30c for the through fare from Sydney to Glace Bay. It has also asked for authority to charge 1c each for transfers, which are now issued free. It does not sell any tickets at reduced rates, either unlimited, workmen's or school children's. The application was heard by the board at Sydney on July 16, 17, 18 and 20, when the hearing was adjourned to Aug. 13. The municipalities in which the company operates were represented by counsel, who opposed the increases asked.

In connection with the application, the company has been carrying on an advertising propaganda in the form of one-minute talks on tramway matters, in which its side of the question is stated. The local newspapers have been carrying on a counter editorial campaign.

Edmonton Radial Ry.—The Edmonton, Alta., City Council, on June 25, refused to again take up the question of re-introducing workmen's tickets on the municipal railway.

Fort William Municipal Ry.—The managements of the Fort William Municipal Ry. and the Port Arthur Civic Ry. have made a joint application to the Ontario Railway and Municipal Board for authority to make a further increase in passenger fares. As the board considers that a serious point of law is involved in connection with the matter, it has been referred back, and no further action has been taken.

Grand River Ry.—The Ontario Railway and Municipal Board issued the following order June 10. Re application of Grand River Ry., on behalf of the Galt, Preston & Hespeler St. Ry. and Berlin & Waterloo Ry. for an increase of 15% in freight and passenger rates: Upon reading what has been filed in support of the application and upon the report and recommendation of the board's Traffic Expert, it is ordered that the Galt, Preston & Hespeler St. Ry. and the Berlin & Waterloo Ry. increase their freight rates by 15%, with the following disposition of fractions of one cent:—.24 and under to be dropped, .25 to .74 to be counted as ½c, .75 and over to be counted 1c. That the passenger fares of the said companies may be increased by 15%, but not to exceed a maximum of 2c a mile. The disposition of fractions to be as provided by the Ontario Railway Act. It is also ordered that the increased rates may be made effective after compliance with the requirements of sec. 177 of the Ontario Railway Act.

As soon as the board's decision was announced, municipal councils and boards of trade in Galt and Kitchener asked for the going into effect of the order to be delayed so that they might be heard. A protest was also made by the South Waterloo District Trades and Labor Council, to which the board replied, in part, as follows:—"The passenger rates approved by the board are those allowed under sec. 210 of the Ontario Railway

Act, chap. 185, R.S.O., 1914, which reads as follows:—(a) The fare to be taken by a company on a railway operated by electricity for each passenger shall not exceed 5c for any distance not exceeding 3 miles, and where the distance exceeds 3 miles, shall not exceed 2c a mile or fraction thereof for the distance actually travelled, etc. For example, the distance from Galt to Preston is 4.54 miles; under the act the company can charge 10c. These rates could have been charged by the company since 1906 under the law. The Lake Erie & Northern Ry., which runs from Galt to Port Dover, under Dominion jurisdiction, had its rates increased from 2½c to 2⅞c a mile. In granting the increase in freight rates of 15%, it was shown to the satisfaction of the Board's Tariff Expert and to the board that the average increase in cost of material in 1917 over what it cost in 1915 was 90.66%, and another statement showed an increase in the cost of labor, covering operation and maintenance, of 30.31% for the same period. In addition to this, our Tariff Expert advises us that the London & Port Stanley Ry., London & Lake Erie Ry. & Transportation Co., Chatham, Wallaceburg & Lake Erie Ry., Windsor, Essex & Lake Shore Rapid Ry., Brantford & Hamilton Ry., Quebec Ry., Light & Power Co., and Lake Erie & Northern Ry. were all allowed similar increases for these same reasons by the Board of Railway Commissioners, and as a result the Ontario Railway and Municipal Board could not do otherwise under the circumstances. Much of the Grand River Ry.'s track and equipment requires renewal and repairs, and for some time back this board has been insisting on the company putting its tracks and equipment in better shape, and to comply with the board's request in this particular would require the expenditure of a considerable sum."

Montreal Tramways Co.—Canadian Railway and Marine World for July gave some particulars, from press reports, of the increases in fares authorized by the Montreal Tramways Commission. We have since received an official copy of the resolution adopted by the commission on June 21, as follows: Whereas

An operating allowance of 22c per revenue car-mile for cars equipped with motors, and an operating allowance of 15c per revenue car-mile for trailers, used for the transportation of passengers, have been granted this day to the Montreal Tramways Co. for its operating expenses and taxes for the year ending June 30, 1919;

A maintenance allowance of 7.9c per revenue car-mile for cars equipped with motors, and a maintenance allowance of 5.2c per revenue car-mile for trailers, used for the transportation of passengers, have been granted this day to the M.T. Co. for its maintenance and renewal expenses for the year ending June 30, 1919;

The M.T. Co. must receive an annual return of 6% on \$36,286,295, its capital value, including all physical assets owned by it on Dec. 31, 1917;

The said company has a right to receive an annual return of 7% on all additions made to its capital value from Dec. 31, 1917, to this date, the additions amounting to \$195,086.56;

This commission must provide for an annual return of 7% on all additions to be made by the company to its capital value within its first year of operation;

This commission must provide for an annual return of 6% on all working capital to be furnished by the company during the first year of operation;

The company must receive annually, out of gross revenues, \$181,431.47 to cover the expenses to be incurred by it in procuring additional capital;

The City of Montreal must receive out of gross revenues over and above all other amounts to which it may be entitled under the contract governing the operation of the company, \$500,000 a year.

This commission must provide for a contingent fund into which a sum equal to 1% of the gross revenue of the company shall be paid annually;

This commission must amend the tramways tariffs in order to give full effect to the contract executed by the City of Montreal and the company, on Jan. 28, 1918;

Be it resolved that the following tariffs be established and put in force for the passengers carried by the company:—

1.—In the uniform tariff territory comprising the City of Montreal, as it exists at present, as well as the Towns of Westmount, Outremont, Verdun, St. Laurent, Mount Royal, also the territories of the portions of St. Laurent Parish and of the Municipality of Cote St. Luc, lying to the east of the company's line, running from Snowdon Jct. to Cartierville, including the land occupied by that line:—

(a) From midnight to 5 a.m., 15c cash.

(b) From 5 a.m. to midnight, 6c cash or 5 tickets for 25c.

(c) For school children, from 5 to 16 years of age, on week days only, and between 8 a.m. and 6 p.m., 7 tickets for 25c.

(d) Transfers shall be issued free to school children specified in clause (c) and to all passengers travelling on cars between 6 a.m. and 8 a.m., on week days only. At all other times, a transfer shall be issued to any passenger paying his or her regular fare, at a charge of 1c.

Municipalities Outside the Uniform Tariff Territory.

2.—Town of Montreal West. Local traffic:—

(a) From midnight to 5 a.m., 5c cash fare.

(b) From 5 a.m. to midnight, 2c cash fare or 6 tickets for 10c.

(c) For school children, from 5 to 16 years of age, on week days only, and between 8 a.m. and 6 p.m., 1c cash fare or 6 tickets for 5c.

3.—Town of Lachine. Local Traffic:—

(a) From midnight to 5 a.m., 10c cash fare.

(b) From 5 a.m. to midnight, 5c cash fare or 6 tickets for 25c.

(c) For school children from 5 to 16 years of age, on week days only, and between 8 a.m. and 6 p.m., 7 tickets for 25c.

(d) The above tariff will also apply to all passengers travelling from the Town of Lachine to the western limit of the uniform tariff territory and vice versa.

4.—Ville St. Pierre.

From the western boundary of Ville St. Pierre to the western limit of the uniform tariff territory and vice versa:—

(a) From midnight to 5 a.m., 5c cash fare.

(b) From 5 a.m. to midnight, 2c cash or 6 tickets for 10c.

(c) For school children from 5 to 16 years of age, on week days only, and between 8 a.m. and 6 p.m., 1c cash fare or 6 tickets for 5c.

5.—Town of Montreal North. Local traffic:—

(a) From midnight to 5 a.m., 10c cash fare.

(b) From 5 a.m. to midnight, 5c cash fare or 6 tickets for 25c.

(c) For school children from 5 to 16 years of age, on week days only, and between 8 a.m. and 6 p.m., 7 tickets for 25c.

6.—Town of Montreal East. Local traffic:—

(a) From midnight to 5 a.m., 5c cash fare.

(b) From 5 a.m. to midnight, 2c cash fare or 6 tickets for 10c.

(c) For school children from 5 to 16 years of age, on week days only, and between 8 a.m. and 6 p.m., 1c cash fare, or 6 tickets for 5c.

7.—Town of Pointe aux Trembles and Town of Laval de Montreal:—

(a) From midnight to 5 a.m., 10c cash fare.

(b) From 5 a.m. to midnight, 5c cash fare.

(c) For school children from 5 to 16 years of age, on week days only, and between 8 a.m. and 6 p.m., 7 tickets for 25c.

Interurban Traffic—From Laval de Montreal to western limits of Pointe-aux-Trembles, and vice versa:—

(a) From midnight to 5 a.m., 10c cash fare.

(b) From 5 a.m. to midnight, 5c cash fare.

(c) For school children from 5 to 16 years of age, on week days only, and between 8 a.m. and 6 p.m., 7 tickets for 25c.

From Pointe aux Trembles to eastern limits of uniform tariff territory:—

(a) From midnight to 5 a.m., 10c cash fare.

(b) From 5 a.m. to 8 a.m., 10c cash.

(c) For school children from 5 to 16 years of age, on week days only, and between 8 a.m. and 6 p.m., 7 tickets for 25c.

In connection with the decision, the following statement was given out:—

"The Tramways Commission, in establishing the tariffs, were bound to carry out the stipulations of the contract entered into by the City of Montreal and the Montreal Tramways Co. on Jan. 28, 1918, and ratified by the Quebec Legislature on Feb. 9, 1918. The tariffs, according to the act, must give full effect to this contract. The revenues to be derived from such tariffs are to provide tramways service at cost. The commission, after a careful study of the expenditures incurred by the company in previous years, and taking into consideration the increase in labor and material, found it necessary to provide for a total revenue of approximately \$10,000,000 for the 12 months ended June 30, 1919. This gross revenue exceeds the revenue of the year ending June 30, 1917, by about \$2,500,000, during which period the fares averaged 4.11c per revenue passenger. The increased cost of wages and material, as well as the increased fixed charges due to additional capital required, bring up the estimated cost per revenue passenger to approximately 5.5c. This increase of about \$2,500,000 is made up as follows:— Estimated increase in wages for 13 months, \$750,000; deficit incurred since putting in force of contract until June 30, 1918, \$400,000; estimated increased cost of material and supplies, \$1,000,000; additional fixed charges, \$280,000.

A Montreal paper points out that those living in the center of the city or adjacent thereto will help to bear the cost of operating the tramways in the newer parts of the city, for under the franchise agreement, the whole of the city of Montreal, including Cartierville, comes under the uniform tariff rate, as do also the cities of Westmount, Outremont, Verdun, and the towns of St. Laurent, Mount Royal and portions of St. Laurant parish and Cote St. Luc east of the tramways line, running from Snowdon Jct. to Cartierville.

People who do not buy 5 tickets for 25c, will have to pay a cash fare of 6c, and if they want a transfer after 8 a.m., they

must pay an extra cent.

People travelling after midnight and before 5 a.m. will have to pay a fare of 15c cash, against the 10c cash fare heretofore in force.

Workmen who formerly were able to buy 8 yellow tickets for 25c, and get a free transfer, will, when the new rates go into operation, be able to secure only 5 tickets, the same as every other citizen. The concession is made to them, however, that between 5 and 8 a.m., when most of them go to work, they will be able to get a free transfer on week days. There will be no free transfers for the return journey in the evening, and if they have to transfer to reach their homes from their work, they must pay 5c for their fare and 1c for their transfer.

Under the uniform tariff system a citizen can travel from Cartierville to the limits of the city east or west, a distance of about 12 miles, for 6c, including a transfer, or in the early morning for 5c. The previous fare from Cartierville was 15c, in addition to the city fare.

The rates outside of the uniform tariff territory are considerably altered. Heretofore there was an additional fare on the Lachine line ranging from 5c to 15c. Under the new tariff it will be 5c additional. To get to the end of the line in Montreal West, there will be an additional 2c in the day time, or 6 tickets for 10c, but as the uniform tariff territory extends to the corner of Westminster Ave., this will not be paid by many, as the car line only extends three blocks beyond the city limits.

The residents of Ville St. Pierre will also have to pay an additional 2c, or get 6 tickets for 10c, while passengers travelling to Montreal East will have to pay a straight 2c cash fare additional. To get to Montreal North the additional cash fare will be 5c, and the same to Pointe aux Trembles and Laval de Montreal, as against a maximum of 20c heretofore to the end of the line, while for interurban traffic between the two last named places the fare will be 5c straight. In the case of Lachine, Montreal North, Pointe aux Trembles and Laval de Montreal, the fare after midnight will be 10c additional to the city fare of 15c, making a total of 25c.

There will be no change in the fare for residents of Notre Dame de Grace, or Rosemount, for early morning workers, as they now pay a straight 5c fare, but those travelling after 8 a.m. and needing to transfer will pay a cent more.

In regard to the charge of 1c for a transfer, we are officially advised that a passenger desiring to make more than one transfer on a continuous trip in the uniform rate territory, will only be required to buy one transfer ticket.

As a result of several meetings held in the municipalities in which the Montreal Tramways Co. operates, appeals against the new schedule of fares were entered by all the municipalities on the general ground of the amount fixed by the Tramways Commission for the operation and maintenance expenses per car mile, and the fares fixed for the transportation of passengers for the year ending June 30, 1919; while additional objections were set out in one or two particular cases. The company also entered an appeal, contending that the sums allowed for operation and maintenance and renewals are too small; that the amount allowed for deficit on the working of cars during May and June is not sufficient; that allowance should be made for a deficit in operation for July, or until such time as the Public Utilities Commission decides the appeals and the new fares are put in force. The

Quebec Public Utilities Commission fixed July 19 for hearing of the appeals.

Prior to the day appointed by the Quebec Public Utilities Commission for the hearing of the appeals referred to above, a writ of prohibition was obtained from a Quebec court with the object of restraining the Q.P.U. Commission from acting until the general question of the validity of the legislation appointing the Montreal Tramways Commission is settled by the courts. The action was taken by L. Dubois and H. Robert, the Montreal Tramways Commission, the M.T. Co., the local municipalities and the Attorney General being named as defendants. At the Quebec Public Utilities Commission's sitting on July 19, counsel for the plaintiffs in the action argued in favor of postponing the hearing by the commission until the civil action is disposed of, but counsel for the city and for the M.T. Co. urged the necessity of an early settlement. The Public Utility Commission, after hearing argument, adjourned until July 14, when the Chairman, F. W. Hibbert, gave judgment, holding that the Public Utilities Commission has plenary powers in its own field and is not a court of inferior jurisdiction to the Superior Court. It also pointed out that a stay of proceedings might injuriously affect the public interests. The Public Utilities Commissioners then fixed July 31 for the opening of the hearing on the appeals.

New Brunswick Power Co.—See article "New Brunswick Power Co. Investigation" on another page of this issue.

Port Arthur Civic Ry.—See Fort William Municipal Ry. in an earlier part of this article.

Quebec Railway, Light & Power Co.—In reference to changes in this company's fares, detailed in Canadian Railway and Marine World for July, pg. 305, it was stated that workmen's tickets, the price of which was changed from 8 for 25c to 7 for 25c, good between 6 and 8 a.m. and 5 and 7 p.m., would be accepted only from males, and not also from females as formerly. It is now announced that their use by both sexes will be allowed during the limited hours above mentioned.

Electric Railway Statistics for Year Ended June 30, 1917.

A table prepared by the Comptroller of Statistics of the Railways Department at Ottawa as to electric railway operations in Canada for the year ended June 30, 1917, give the following details:—

	1916-1917.	1915-1916.
Mileage, operating ..	1,743.54	1,730.73
Capital stock	\$70,606,520.00	\$67,738,275.00
Funded debts	90,628,219.00	87,157,349.00
Gross earnings	30,237,663.54	27,416,284.60
Operating expenses ..	20,098,634.35	18,099,905.65
Net earnings from operations ..	10,139,029.19	9,316,378.95
Miscellaneous income ..	2,292,200.76	2,928,573.83
Corporate income ..	\$12,431,229.95	\$12,244,952.78
Taxes, interest, etc..	7,552,368.55	7,358,283.67
Net income	\$4,878,861.40	\$4,886,669.11
Appropriated to reserves ..	1,285,654.22	1,535,071.35
Appropriated to dividends ..	2,468,686.61	2,834,906.82
Unappropriated net earnings ..	\$1,124,520.57	\$516,690.94
Passengers carried ..	629,441,997	580,094,167
Tons of freight hauled ..	2,333,539	1,936,647
Car mileage	84,073,046	82,516,612
Equipment, all kinds ..	4,295	4,442
Employees, all grades ..	11,696	10,622
Salaries and wages ..	\$9,451,685.00	\$8,767,734.00
Accidents, all kinds—		
Killed ..	63	50
Injured ..	2,728	3,029

Toronto Suburban Railway Trailer Cars.

The Toronto Suburban Ry. has bought 2 second hand trailer cars, for use on its Guelph Division, where the existing rolling stock has proved quite inadequate to cope with the traffic. They were built by the Pullman Co., and purchased from the Transit Utilities Co., New York, and are finished straight panel outside and with mahogany and wood head lining inside. There are two steps on each side of the platform, 10 and 13 in. respectively, the drop from the lowest step to the ground being 26 in., for which a stool is used. The seats are both cross and longitudinal, upholstered in cane, and there is seating accommodation for 48 persons. There are 12 windows on each side and 4 at the ends, with upper and lower sash and pantasote curtains. The main body longitudinal sills, of which there are six, are 4 by 5½ in., platform sills, two outside 8 by 3¼ in., tapering to 6 in. at outer edge of platform; these run under the main sills of car body, with dimensions of 3¼ by 3½ in., and butt against car body steel bolster. The inside sills, 3½ by 8 in., are reinforced by steel plates and tied by rods, and they project under the main car body the same as the outside sills. Following are the chief dimensions:—

Length outside of sills	38 ft. 3 in.
Length over all	46 ft. 5 in.
Width outside of sills	8 ft. 6 in.
Width at eaves	8 ft. 9½ in.
Height over all	13 ft.
Length inside	38 ft. 3 in.
Width inside	7 ft. 10 in.
Weight of body	31,772 lb.
Truck wheel base	5 ft.
Wheel gauge	4 ft. 8¼ in.
Wheels	Chilled, 33 in.
Axles	M.C.B.
Journals	8¼ by 6 in.
Truck weight	6,200 lb.
Brakes	Westinghouse hand
Coupler	Tomlinson
Heating	Hot air

Calgary Municipal Railway Finances and Fares.

In an interview on July 10, Commissioner Graves, discussing the financial position of the city's electric railway for the six months ended June 30, is reported to have said that there was a surplus of \$4,672 this year, against a deficit of about \$20,000 at June 30, 1917. It might be said that the line was \$24,000 better off than in 1917, but that was not a justifiable premise on which to base any argument. The different position is due to better business conditions, general prosperity, and to the saving in cost of operation due to the introduction of the one-man cars. Mr. Graves further said that there will be considerable extra expenditure this year for many necessary repairs. Extensive repairs of an expensive character are necessary on the cars. The first shipment of wheels for this purpose is expected early in August. The car repairs are only the first of the big items of expense that will have to be taken into account. This will mean, he added, that increased revenue will have to be found somewhere, and the suggestion that workmen's fares be eliminated, will likely be the first step in that direction.

The matter of fares on the municipal railway was casually mentioned at a recent meeting of the city council, when the estimates for 1918 were under consideration. Suggestions were then made in the direction of cutting off workmen's tickets, of making the ordinary fare a straight 5c one; and of a double fare on the Bowness Park line.

Increases in Electric Railway Employes' Wages.

British Columbia Electric Ry.—As mentioned in Canadian Railway and Marine World for July, a board of conciliation and investigation was appointed by the Dominion Minister of Labor, to deal with a dispute between the company and its employes. The application for the appointment was made by the company, the board being constituted as follows: Mr. Justice W. A. MacDonald, chairman; F. Buscombe, representing the company; and T. J. Coughlin, representing the men. The nature and cause of dispute, including claims and demands by either party to which exception was taken, were set forth as follows: "The B.C.E.R. Co., on Sept. 1, 1915, entered into an agreement with the Amalgamated Association of Street & Electric Railway Employes of America, represented by local division 101, of Vancouver; local division 109, of Victoria; and local division 134, of New Westminster, comprising employes in various departments of the company, which agreement embodied a wage schedule and working conditions for the period ending June 30, 1918. On Sept. 16, 1916, and again on June 21, 1917, certain amendments to the agreement, by way of increase in wages and change in working conditions, were made by mutual agreement between the parties thereto. The company has offered to continue the agreement of Sept. 1, 1915, as amended, for a further period to be agreed on, with an increase in the wages therein stipulated equivalent to 10% of the total aggregate wages now paid to all the employes affected by the agreement, the allocation of such increase to be mutually agreed upon. The association has refused to continue the agreement after June 30, 1918, on the terms offered by the company and has demanded from the company wages and working conditions to take effect from July 1, which the company cannot accept."

The rate of wages per hour paid under the old agreement was as follows:—

	City lines.	Interurban lines.
1st six months	27c	28½c
2nd six months	35c	36½c
2nd year	35c	36½c
3rd year	36c	37½c
4th year	38c	39½c
After 4th year	40c	41½c

No extra rate for Sundays; overtime for day men, time and a half for first 6 hours, double time afterwards; overtime for night men, time and a half for first 2 hours, double time thereafter.

The men asked for an 8 hour day and other concessions, and for a maximum rate of 51c an hour, while the company offered 44c an hour as the maximum rate for the Vancouver men.

A majority report was issued July 6, the dissentient being T. J. Coughlin, the men's representative. The report concedes the principle of the 8 hour day, but recommends that its application be postponed until after the war; the minimum wages for conductors and motormen and conductors recommended is 40c an hour, and the maximum 47c an hour, this maximum to be reached in 2 years instead of 4 as heretofore; the new agreement to be for one year, and it is recommended that in the event of an appreciable further increase in the cost of living, the rate of wages be varied accordingly. The report also recommends that overtime should be paid after 9 hours' work instead of after 9½ hours as heretofore. The report refers to the jitney traffic, which materially affected the company's receipts, and added: "Whether, under the circum-

stances, the company will attempt to meet the heavy loss in operation, by curtailment of its lines, reduction of the number of cars, elimination of jitney traffic, increase of fares, or adoption of the 'carry for cost' scheme, is not for us to determine. At present it is in the unfortunate position of being unable, under existing conditions, to pass the enormously increased cost on to the public, upon whom, however, it must inevitably fall in the end; for if the public wants the service, it will have to pay for it."

Prior to the issue of the award, the men showed considerable restiveness, and on June 27, the chairman of the conciliation board intimated that they would be guilty of a direct violation of the law if they went on strike before the award was made. Notwithstanding this intimation, they decided at a meeting on the night of June 29, to go on strike July 2. The strike extended over the entire system, both on the mainland and on Vancouver Island, and continued until July 10. As the men refused the conciliation board's recommendation, a new scale was arranged, ranging from 40c to 51c an hour, the maximum to be reached in 2 years. Another strike started July 16, the men going out in sympathy with the electrical workers.

The Montreal & Southern Counties Ry. has advanced its conductors' and motormen's wages to the following rates per hour:—

Suburban lines, conductors and motormen, 1st year, 28c; 2nd and 3rd years, 29c; 4th and 5th years, 30c; 6th and 7th years, 31c; 8th and 9th years, 33c; 10th year, 35c.

Interurban lines, conductors and motormen, 1st year, 30c; 2nd and 3rd years, 31c; 4th and 5th years, 32c; 6th and 7th years, 33c; 8th and 9th years, 35c; 10th year, 37c.

Interurban lines, trainmen, 1st year, 28c; 2nd and 3rd years, 29c; 4th and 5th years, 30c; 6th and 7th years, 31c; 8th and 9th years, 33c; 10th year, 35c.

Conductors and motormen entering the company's employ must work at least six months on the suburban lines before being eligible for work on the interurban division.

Montreal Tramways Co.—In the particulars of increases in wages, given in Canadian Railway and Marine World for July, on pg. 308, the new rate for 4th year men was stated as 35c an hour. It should have been 33c, the same as for the 3rd year. As stated in the same issue, the increases were to date from June 1, but they were held back owing to the City of Montreal and surrounding municipalities having appealed against the Montreal Tramways Commission's decision authorizing the company to increase its passenger fares. Towards the end of July the men refused to wait longer and the new scale of wages was put into effect.

New Brunswick Power Co.—The board of conciliation appointed to investigate the dispute as to the New Brunswick Power Co.'s street railway employes' wages, consisting of Judge Chandler, of Moncton, chairman; G. E. Day, representing the company, and W. F. Hathaway, representing the men. The men asked an increase of 7c an hour for all classes of employes, with an additional 4c an hour for Sunday work. The present schedule for conductors and motormen is: 1st six months, 25c; second six months, 27c; after one year, 28c; after two years,

30c. Sunday labor is paid for at 4c an hour above regular rates.

Ottawa Electric Ry.—A board of conciliation was appointed recently to arbitrate as to employes' wages. The present rate of wages for conductors and motormen is 26c an hour for the 1st year, 27c for the second year, and 30c afterwards, with 4c an hour extra on Sundays and legal holidays and double time for over 9 hours' work. The wages of chief conductors and chief motormen are \$95 a month. The men asked for a rate starting at 46c and rising to 50c an hour, the higher rate to be reached after one year's service. The company expressed its willingness to accept any award made by the board, at the same time stating that it regarded the increase asked for by the men as being exorbitant. The board consisted of Judge Gunn, chairman; G. F. Henderson, K.C., representing the company, and F. Bancroft, representing the men.

Regina Municipal Ry.—Representatives of the union employes petitioned the Regina, Sask., City Council on July 16, asking that the minimum rate for all employes be 40c an hour. The present rate of pay is 30¼c an hour for the first 6 months and 33c thereafter. The council's street railway committee, on July 15, recommended the council to raise the minimum rate to 55c an hour. The whole question was referred back to the committee for further consideration.

The Three Rivers Traction Co., Three Rivers, Que., which heretofore paid its motormen from 25c to 29c an hour, has advanced them to from 30c to 34c an hour.

Toronto Ry.—See under "Toronto Ry. Machinists' Wages" on another page of this issue.

Regina Municipal Railway Investigation.

An investigation into Regina Municipal Ry. affairs was opened at Regina, Sask., before Judge Harrison, July 2. The scope of the investigation was set out in the report of the city council's committee published in Canadian Railway and Marine World for July, pg. 305. The parties interested were represented by counsel, who examined witnesses at length, and a considerable number of documents were put in. The judge of investigation sat until July 6, and again on July 13, it being expected that the hearing of evidence would be concluded early the following week.

It was reported at a meeting of the City Council July 12, that it had been arranged to postpone further investigation proceedings until the autumn.

The Southern Canada Power Co., which comprises among its properties the Sherbrooke Railway & Power Co., Sherbrooke, Que., has made some changes in its directorate, C. J. McCuaig, of Montreal, having retired. W. C. Hawkins, Vice President and Managing Director, Dominion Power & Transmission Co., Hamilton, Ont., has been re-elected President, the other directors being: F. W. Teele, Vice President; J. B. Woodyatt, General Manager; L. C. Haskell, Secretary-Treasurer; W. K. Baldwin, H. T. Chalifoux, Jas. Davidson, W. H. Miner, J. R. Moodie, A. J. Nesbitt, Geo. Parent, K.C., C. E. Read, J. M. Robertson, C. W. Tooke, J. S. Gillies, H. A. Sifton.

Toronto Railway Machinists' Wages Arbitration.

The Minister of Labor appointed a board of conciliation in June to deal with a dispute between the Toronto Ry. and its machinists, members of the International Association of Machinists. Judge Ruddy, of Whitby, Ont., was chairman, H. H. Dewart, K.C., representing the company, and F. Bancroft the men. The chairman and F. Bancroft made a majority report on July 4, from which the following are extracts:—

The company's representatives sought to show that its machine shop is not one which could be compared with a machine shop connected with an industry producing commodities for sale, and endeavored to compare it with locomotive houses on steam railways. The men's representatives sought to prove that the machinists employed by the company are doing general machine work for the company, for subsidiary companies associated with it, and also for other parties distinct from the Toronto Ry.

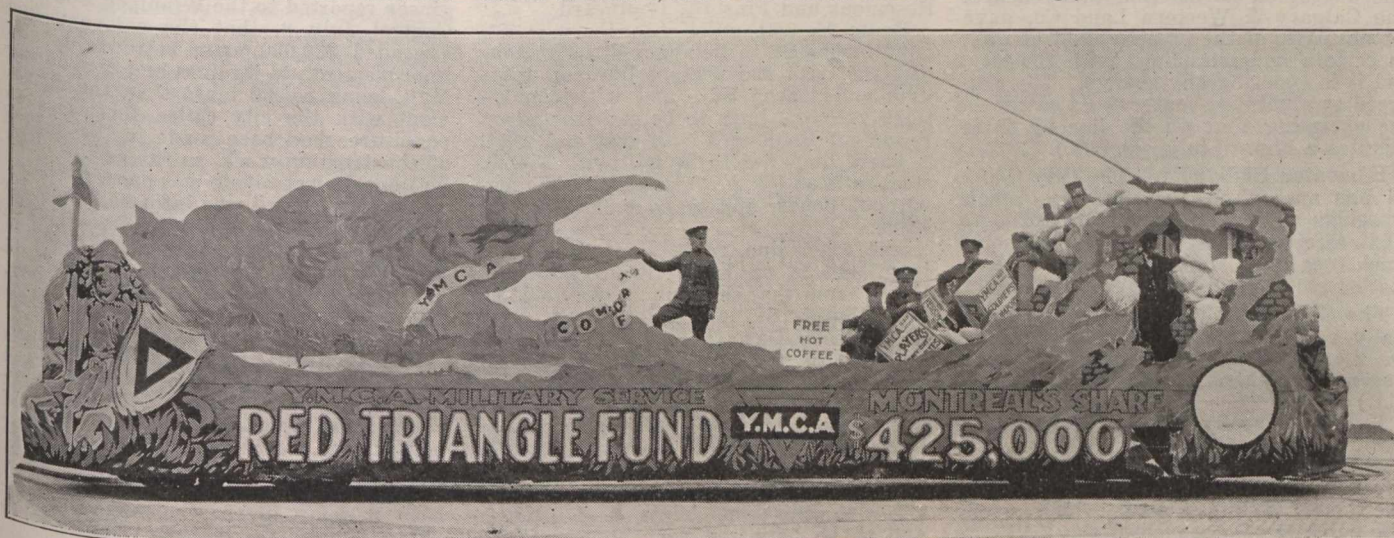
The members of the board who sign this award are convinced that the men's representatives have established by the evidence adduced that the men involved

of the week, time and a half. After 10 p.m., double time, until workman is finished and goes off duty. On Saturday, time and a half shall be paid for 4½ hours after one-half of the regular day has been worked, and then double time until workman leaves duty. Double time shall be paid on Sundays and holidays. No man shall suffer a reduction through the adoption of the foregoing rates. If any grievance arises between the parties to the contract, the company shall receive a committee of its machinists, and, if possible, adjust such grievance. In case of a disagreement over the interpretation of the schedule, there shall be no cessation of work until negotiations between the highest representatives of both parties shall have failed to come to an understanding. No discrimination shall be shown against shop committees elected by the men to transact their business. The award shall remain in force for one year from June 1, 1918, unless 30 days notice be given by either party of a desired change.

While the majority award is retroactive to June 1, and the machinists have

fares, it is unable to raise fares in order to compensate for advances in wages. He considered that the minimum rate of wages should be 55c an hour; that 9 hours should constitute a day's work on the first five days of the week and 5 hours on Saturday. The two matters affecting overtime and Sunday labor were dealt with together. He considered that as the Toronto Ry. operates continuously day and night all the year round, at a fixed schedule of fares, which is reduced during certain hours daily and on Sundays, the company is in a different condition from ordinary manufacturing and industrial concerns. He recommended that all hours worked in excess of 9 per day be considered overtime, and paid for the 10th hour at a rate not less than the minimum flat rate of 55c an hour; that the rate for Sunday labor be the same, subject to the provisions that no man shall be required to work more than 6 days in any one week. The terms of the award to be accepted for one year from June 1, and to be binding upon both parties.

While disagreeing with the majority report, the company considered it in the best interests of all concerned to accept it, and notified the Department of Labor accordingly.



Montreal Tramway Co.'s Float in Y.M.C.A. Campaign.

The float was made on a freight car, which was fixed up with beaver board, sand bags and paint, to represent a scene at the front, showing the trenches and a Y.M.C.A. hut, the latter being made from the car's cab. The car was run all over the city lines during the days and evenings of the campaign, carrying a uniformed band, and attracted great attention. We are indebted to A. Gaboury, Superintendent, M.T. Co., for the photograph.

are qualified machinists; that the standard minimum rate in Toronto for machinists is 55c an hour; that the standard working day for machinists in Toronto is 9 hours, and that overtime rates prevail after a regular working day of 9 hours for five days a week, and half a day on Saturday. The company's own witnesses to some extent corroborated these claims. It was established by witnesses for the company that men in the C.P.R. and G.T.R. machine shops enjoy a 9 hour day and general overtime rates. The majority of the board recommends the following as terms of employment for the men involved, "which ought to be satisfactory to both parties":—

That the minimum wages be 55c an hour. Nine hours shall constitute a day's work, for the first five days of the week, and 4½ hours on Saturday, to be worked as follows: From Monday until Friday, inclusive, between 7 a.m. and 5.30 p.m., and on Saturday between 7 a.m. and 12 noon. All hours worked in excess of this shall be overtime and paid for as follows: From the end of the regular working day until 10 p.m. on the first five working days

been working 10 hours a day during June, it is recommended that the 10th hour from June 1 to July 4 be paid at straight time, and after July 4 overtime rates prevail as herein before recommended.

H. H. Dewart, representing the company, made a minority report in which, after reviewing the nature of the application, and the efforts made to bring about a settlement, he set out the following matters as being in dispute and upon which the board's recommendation should be made:—The minimum rate of wages per hour; the hours of labor per day; the question of weekday overtime, time and half; double time for Sundays and holidays; the period during which any settlement should continue and the date when it should commence. The two first mentioned matters are dealt with together. The machinists based their claim upon concessions made by a large number of firms in February, 1918, which gave a rate of 55c an hour, both night and day, for practically a nine hour day. He contended that the Toronto Ry. stands in a different position from other concerns. On account of having a fixed tariff of

Regina Municipal Ry. Traffic.—The Regina, Sask., City Council on July 9, took up the question of street car service to the military camp on the exhibition grounds. In addition to the present street car service, jitneys are being operated for which the council charges a license fee. It was stated that 15 cars would be required for the transportation of the soldiers on their being released from their afternoon work, and that an additional number over the present service would be required to land them back at closing time. This is a question of extraordinary traffic of a temporary character, for the accommodation of which special provision can only be made by reducing service on other parts of the system, or by having rolling stock and a staff sufficient to cope with it.

The Levis County Ry. has bought a simplex side dump car, 12 to 14 yards capacity, with double trucks, cabin at one end, G.E. equipment and Westinghouse straight air brake.

The Toronto & York Radial Ry. has bought two second hand cars from Edmonton Radial Ry.

Electric Railway Projects, Construction, Betterments, Etc.

Brantford Municipal Ry.—The Brantford, Ont., City Council, on July 8, decided to employ a qualified electrician to make a report on the line from Brantford to Paris, and to have the City Engineer report as to the condition of the roadbed. This was the outcome of a discussion as to the condition of the line, its earning power and prospects. W. R. Turnbull, one of the commissioners in charge of the line, said the investigation would show that the line was safe, though not in a first class condition.

Reference was made to the projected Terrace Hill line, but no action was taken. (May, pg. 211.)

British Columbia Electric Ry.—We are officially advised that the only work being done now is the completion of the sub-station at Point Grey, and that no other betterments are contemplated at present. (July, pg. 308.)

Calgary Municipal Ry.—Several meetings have been held, at which the city council and the property owners affected by the proposal to straighten the Ogden line, were represented, but after considerable discussion no decision was reached. The Calgary & Western Land Co. gave certain parts of the present right of way, on certain understandings with the city, and it is opposing any change. The proposed straightened route would cut down the operating time on the line by three minutes a trip. (July, pg. 308.)

Edmonton Radial Ry.—The City Council has authorized the placing of new crossings on Jasper Ave., from 102nd to 108th streets at a cost of \$1,150, and some track repairs on Saskatchewan Ave., at a cost of \$800. (July, pg. 308.)

The Guelph Radial Ry. is, we are officially advised, constructing 3,000 ft. of track on Garden St., Guelph, Ont. A. H. Foster, Guelph, is Manager. (May, pg. 211.)

Kettle Valley Ry.—J. J. Warren, President, is reported to have stated recently that arrangements had been completed for carrying through the development of the Copper Mountain plans, which include the building of a branch of the K.V.R. to the mining properties. The three projects—the railway, the West Kootenay Light & Power Co.'s power line, and the erection of the ore mill by the mining company, will, he said, be carried through simultaneously. The contract for the railway was let to W. P. Tierney, who got his outfit on the job at the end of April. (July, pg. 285.)

The Levis County Ry. received tenders recently for the supply of 16,000 cedar, hemlock or jackpine ties, no. 1 grade, 6 in. thick, with a minimum face of 6 in., delivered at Levis, Que. H. E. Weyman, Levis, Que., is Manager.

Montreal Tramways Co.—We were officially advised, July 12, that work on the extension of lines in the city had not been commenced owing to the impossibility of obtaining the special type of rails required. As a result, the date of starting the work had been extended by the commission to July 15, and it was thought likely that it would be further extended until early in 1919. The work to be done is as follows:—

Route A, 1.95 miles—On St. Patrick St., from Church St. to Monk Boulevard, and on Monk Boulevard from St. Patrick St. to Allard St., these lines to be connected with those on Church St.

Route B, 1.49 miles—From Westmount on the company's property and on the

Cote de Neiges Road to Queen Mary Road with connections both east and west to the existing tracks on this last mentioned road.

Route C, 1.84 miles—On Park Ave. from Atlantic Ave. to Beaumont St., from Park Ave. to Bickerdike St., and on Bickerdike St. to Ball St.

Route E, 2.78 miles—On De Fleuremont St. from Christophe Colomb St. to Papineau St., with connection to the existing lines on De Fleuremont St. and with connection to the lines on Christophe Colomb St. and Papineau St. to the north; on Rosemont Boulevard from Papineau St. to Boulevard Pie IX., with connection to the lines on Papineau St., and on Boulevard Pie IX. to the south; on Boulevard Pie IX. from Rosemont Boulevard to the present double track of Boulevard Pie IX.; on Bellechasse St. from Henri Julien St. to St. Denis St., with connection to the lines on St. Denis St. in both north and south directions; the construction of these lines thus forming a continuous line from St. Lawrence St. to Pius IX. Boulevard, inclusively by way of Bellechasse, St. Denis, De Fleuremont and Papineau Streets and Rosemont and Pius IX. Boulevard.

Route F, 2.31 miles—On Iberville St. from Mason St. to Belanger St., with connections with the present lines on Iberville and Mason Sts., and with connections with the lines to be constructed on Rosemont Boulevard both east and west.

These lines are to be laid with 115 lb. steel rails on 6 x 8 x 8 ties, welded joints, without bonds, and to be ballasted with stone.

The other line, route D, is 4.11 miles long, and is on Kelly St. in Bordeaux Ward, from the Ahunstia railway station to Tolhurst St., on Tolhurst St. from Kelly St. to Daze St., on Daze St. from Tolhurst St. to Meilleur St., on Meilleur St. from Daze St. to McDuff St., on McDuff St. from Meilleur St. to Poincarre St., on Poincarre St. from McDuff St. to Boulevard Gouin, with a connection with the line to the Bas de Sault. This line is to be laid with 80 lb. steel rails on 6 x 8 x 8 ties, continuous joints, 2—4/0 bonds, and to be ballasted with stone. (June, 1917, pg. 243.)

Moose Jaw Electric Ry.—The Moose Jaw, Sask., City Council, on July 2, ordered the stopping of street railway traffic over the South Hill bridge, on and after July 5. A committee of investigation reported that while the bridge was in good condition, the method of laying the rails was such that the supports of the understructure must be absolutely sound. The stringers had become more or less rotten and the track was dependent upon the rails for alignment, the condition being such that the bridge was dangerous for traffic. The company had been advised that the council would take no responsibility for its further operation over the bridge. It was recommended that the finance committee and the City Commissioners consult with the committee as to necessary repairs to the bridge.

Quebec Ry., Light & Power Co.—W. J. Lynch, General Manager, on his return from a consultation with the company's directors in Montreal, July 10, is reported to have said that as soon as estimates are completed showing the materials required, construction will be started on the projected extension of the line along the Beauport Road, from Limoilou to the city boundary. It is also reported that the company will take over the spur line from Mastai station to Beauport asylum and

operate it in conjunction with its system. (July, pg. 308.)

The Suburban Rapid Transit Co., a subsidiary of the Winnipeg Electric Ry. Co., applied to the Assiniboine Municipal Council, July 2, for concessions respecting its pole lines. The council refused the application on the ground that the changes proposed were not in the locality's best interests.

Toronto Suburban Ry.—Under an agreement made with the Toronto City Council Nov. 30, 1917, and ratified at the Ontario Legislature's recent session, the company is granted an extension of time to Nov. 30, within which "to construct, complete, equip and put in operation its railway upon the portion of Davenport Road lying east of Bathurst St., to the northern limits of the city as the same existed in 1899. (Mar., pg. 117.)

Winnipeg Electric Ry.—The Winnipeg City Council received notice, July 3, that the company proposed to start work on the Sargent Ave. extension at once. (July, pg. 308.)

Winnipeg Electric Ry.—The city engineer reported to the Winnipeg Board of Control July 8, that the company had expended \$30,000 upon betterments and improvements to its lines and cars during May, being \$5,000 more than the agreement with the city called for. No expenditures had been made in the nature of construction work, so far as the elimination of electrolysis was concerned.

The city council was informed, July 10, that although the company looked upon an extension of the Talbot Ave. line to Cameron St. as a necessary one, it could not undertake it this year. (June, pg. 255.)

Fuel for Chatham, Wallaceburg & Lake Erie Ry.—The Ontario Railway and Municipal Board, on July 17, granted an extension of time to Aug. 1, for the use of natural gas for the generation of power for the operation of this railway. The reason for the extension is that there has been a delay in the delivery of repair parts required for the plant before other fuel can be used.

The Hydro Electric Power Commission of Ontario has received 10 of the 12 electric locomotives which it ordered recently from C. E. A. Carr Co., Toronto, for use in connection with its Chippewa-Queensston power development scheme. The trucks, bodies and cabs are being built by the National Steel Car Co. Six of the locomotives are supplied with General Electric equipment, and are supplied complete by C. E. A. Carr Co., and for the other six, which have Westinghouse equipment, that firm supplies the trucks, bodies and cabs only. These locomotives were completely described in Canadian Railway and Marine World for Dec., 1917, and illustrated in Apr., 1918.

The London Public Utilities Commission entertained representatives of London and other municipalities at dinner at Port Stanley, Ont., July 11. Among the speakers were the Premier of Ontario; Sir Adam Beck, chairman of the Hydro-Electric Power Commission of Ontario; R. Pocock, chairman London Public Utilities Commission, and J. W. Lyon, President Hydro-Electric Radial Ry. Association. Sir Adam Beck, in referring to criticisms of the London & Port Stanley Ry. finances, said the audited reports showed that the railway was not a burden to the city, but the exact reverse.

The Electrical Workers Strike in British Columbia.

The placing in jeopardy of so essential a public service as light, power and electric transportation by the action of a body of men who acknowledge no responsibility to the public, is a situation which should not be allowed to pass without a warning. An unprecedented state of affairs arose recently in Vancouver, due to the action of the operators of the British Columbia Electric Ry.'s power plants and substations in wilfully attempting to close down all electrical supply, as a means of enforcing their wage demands and other alleged grievances. The details of the actions which preceded the shutting off of power at midnight on Saturday, July 13, without notice being given to the company or the public, warrant full disclosure.

The agreement between the B.C. Electric Ry. Co., the Western Power Co. and the B.C. Telephone Co. respectively and the electrical workers expired on June 30. Previous to that the men laid a new agreement, embodying many drastic increases and changes, before these companies. The two first named offered the men increases of 10%, but they were refused. Accordingly a conciliation board under the Dominion Act was proposed, but the men refused, thereby necessitating the Dominion Government naming an arbitrator for them. The conciliation board was formed, but the electrical workers refused to recognize it.

In the meantime, an arbitration with the B.C. Electric Co.'s street railway men was going on, but its sessions did not close until June 28, and no time was left in which to bring down a decision before June 30. The men in both unions, decided to go on strike at midnight, July 1, in contravention of the law.

It is believed that the electrical workers fully intended that Vancouver and the surrounding country should have been left without light or power on their going on strike, but the Electrical Superintendent, and some seven or eight of his assistants, maintained the service in a score of substations scattered over the mainland. No inconvenience was occasioned, except by the absence of street car service, both because the street car men were on strike and because the handful of men could not keep the rotaries in operation.

On July 11, about 1.10 a.m., the company came to a settlement with the two unions, agreements were signed, and service was resumed the same day. It was believed that the matters had been finally settled, with the exception of one or two minor details, such as free transportation and a lighting rate concession, which had by consent been left to be adjusted later.

The astonishment of the whole district, the company's management included, may be imagined when it is stated that a few minutes after midnight on July 14, suddenly and without warning, all lights, power, street cars and interurban cars stopped. Thousands of persons were abroad at this hour. Street cars were loaded. Interurban cars were miles from their destinations. One car with 60 passengers and another with about 50 had set out from Vancouver for New Westminster. A train with 70 persons in it was stalled at New Westminster, unable to proceed along the Fraser Valley division. Other interurban cars were stalled on the Lulu Island and Burnaby lake lines, each with passengers in them.

The effect of the stoppage of light and power in hospitals and cold storage plants need not be emphasized. It is evident

that the men intended to make the tie-up complete, because not a switch was left in place in the main receiving station.

The Electrical Superintendent arrived there within a few minutes and found a large group of linemen and operators around the station. Luckily he had an electric torch in his automobile, for without it he would hardly have been able to make his way through the station. There was not a lantern left. The substation had been deserted.

All that it was possible to ascertain was that the operators had received orders from someone unknown, not the load dispatcher, to close down the plant. The operators at the Lake Buntzen hydro-electric plant were telephoned to and they threw off the machines there. All switches throughout the country were pulled, thus entailing a tremendous mechanical task to reinstate them.

Superintendent Newell immediately got in touch with Lake Buntzen and aroused the Superintendent there, who had retired for the night. Other engineers arrived and in 40 minutes the most of the city load had been picked up and an hour and a half later most of the railway lines were operated and cars able to proceed to the barns. Many of them finished their owl runs.

An attempt was made to arrive at the cause of the trouble, but communication with E. H. Morrison, business agent for the electrical workers, brought no coherent account. He intimated finally that they would not meet the company in any way unless the Electrical Superintendent was discharged. On Sunday morning Mr. Morrison called up and asked if this had been done, and when he was told that it had not, he refused to have further communication with the company. He mentioned that other unnamed officials would have to be discharged also.

The company understands, and it has been stated in the newspapers, that the men's union cabled to the directors of the company in London, Eng., demanding the dismissal of the Electrical Superintendent.

On Sunday, July 14, members of the board of trade and the mayor formed a committee to endeavor to bring about a settlement. Street cars were again tied up, owing both to the scarcity of current and to the refusal of the men to work while the electrical workers were on strike. A joint committee was formed, having on it several labor representatives, and the company laid its case before them.

The men demanded transportation and lighting concessions, and although it was pointed out that these had never come up, they were granted forthwith.

They alleged that 25 men had been dismissed in discriminating fashion and strike breakers kept on.

W. G. Murrin, Assistant General Manager, showed clearly that the men who had been laid off were linemen and groundmen, and were extra staff that had been working on special work, who the company expected to lay off several weeks since on the completion of the work. These men were laid off strictly according to the length of their service and not a single non-union lineman or groundman was in the company's employ.

The men demanded the dismissal of Mr. Newell, but it was pointed out that the 25 men had not been laid off by him, but by the foreman in the regular course of work. The company, however, agreed to

submit the case of the Electrical Superintendent to arbitration, while the electrical workers should go back.

This solution was accepted by the joint executive of electrical workers and street railway men, who promised to recommend it to their members. The street railway men met on Monday and car service was resumed the same afternoon. The electrical workers met on Monday night, but refused to carry out the recommendations of their executive and demanded the dismissal of the Superintendent immediately.

The arbitrary attitude of the electrical workers is without precedent in British Columbia, and they should be censured without exception, for their deliberate attempt to tie up the life of Vancouver and district when they shut down all electrical supply without warning on notice on the morning of July 14.

This has ceased to be a matter between the B.C. Electric Ry. and the employees. It is a matter for the public to settle, whether they will allow any person or body of persons to close down such essential services as electric light and power without a moment's notice and without responsibility for the consequences. The men may have the right to cease work, but they have not the right to tamper with the company's property, thereby inconveniencing thousands of persons and causing possible destruction of property, and perhaps death.

It is hard to see what good could have resulted from such action, which affected the public more than the company. The public is well aware who is to blame, and there is no disposition to saddle this disruption of public utility service on any but the men. Whatever grievances they might have had, they were not warranted for a moment in pulling the switches and plunging the country into darkness, without notice, but should have laid them before the company officers, when they would have been given fair consideration.

Mainly About Electric Railway People.

W. H. McAlooney, of Halifax, N.S., and formerly Superintendent of Rolling Stock, Denver Tramways Co., Denver, Col., has been appointed Superintendent of Rolling Stock, Winnipeg Electric Ry., vice G. Garrett, resigned.

James Anderson, Vice President and Purchasing Agent, Sandwich, Windsor & Amherstburg Ry., who intended making a trip to the Pacific Coast some two months ago, and had to postpone it owing to his wife's illness, hopes to be able to go in the near future, as Mrs. Anderson, who has been in Wellesley Hospital, Toronto, for some weeks, is convalescing satisfactorily.

Allan H. Royce, of Toronto, Vice President, Toronto Suburban Ry., and Secretary-Treasurer, Canadian St. Ry. Association, from 1904 to 1907, who died in North Carolina, April 16, left an estate valued at \$305,854.86. It consisted of clothing and jewellery, \$100; book debts, \$75; mortgages, \$6,204.83; life insurance, \$10,000; cash, \$104,114.86; real estate, \$5,400; miscellaneous, \$75,000; agreements for sale of land, \$30,000. As there was no will, the estate will be divided among his mother and four brothers, one of whom is Lt.-Col. G. C. Royce, Secretary-Treasurer and General Manager, Toronto Suburban Ry.

New Brunswick Power Co. Investigation.

Under the provisions of an act passed by the New Brunswick Legislature at its last session, the Lieutenant Governor in council appointed a commission to investigate the New Brunswick Power Co.'s affairs. The commissioners, G. W. Currier, Henry Holgate and Prof. A. S. Ritchie, commenced their sittings in St. John, June 28. The act authorizes them to examine so far as they shall deem necessary all records of the company and its predecessors, and subsidiaries, to ascertain the original cost of plant, the amount realized from the sale of stocks and bonds and the earnings and expenditures—in fact, they have power to review everything done by any of the companies since their formation, and to trace what has been done with the capital subscribed, the proceeds of the sales of bonds, and the earnings of the several companies. The commissioners are also especially directed to enquire into the matters and affairs of the New Brunswick Investment Co., alleged to have been formed for the purpose of working out the purchase and transfer of the St. John Ry. Co. to the N. B. Power Co., so far as the same are pertinent to the enquiry; to enquire into the cost of the water privileges, etc., acquired by the N.B.P. Co. from the New Brunswick Hydro-Electric Co. or other company or persons; to enquire into the cost of street paving and maintenance and the removal of snow on streets occupied by the car tracks, and generally the use of the city property and franchise for uses connected with the power company's operations; to examine and analyse all legislation affecting the company or its predecessors, together with letters, orders-in-council, etc.; and to prepare and recommend for enactment such new legislation, or amendments to existing legislation, as in their opinion will ensure to the city of St. John adequate public utility service in street railway traffic, electric light and power and gas supply for heat and light at fair and reasonable rates; provide for a proper measure of control of streets and franchises by the city; define clearly the respective rights of the city and the power company, and conserve all legitimate rights, interests and franchises of the power company, as well as those of the city of St. John.

In order to carry out the investigation, the commissioners have power to appoint accountants, engineers or other qualified persons to make any enquiry and report on such matters as may be referred to them; to hear any evidence that may be offered and to call any witnesses. A penalty of not less than \$50 or more than \$500 may be enforced for disobeying the commissioners' orders to produce books, etc., and witnesses are liable to the same penalties for disobedience as in the case of proceedings before the supreme court. The costs are to be divided between the city and the company, and the commissioners' report is to be submitted to the government in sufficient time to be acted upon at the legislature's next session.

The act provides that notwithstanding any other provision of any act, the commissioners may, during the course of the investigation, whenever it shall appear to them advisable or justifiable and necessary for the temporary financial relief of the company, adjust and allow rates of fare for transportation, and rates for heating, lighting or power, which rates shall become operative seven days after the first publication of the order in the city's papers, and these rates will remain

in operation until altered by the commissioners or the legislature.

The commissioners may for the purposes of the investigation, adopt in whole or in part the evidence taken before the N.B. Board of Public Utilities in respect of the company's application to fix a rate for gas; the reports of W. F. Sloan and J. W. Waterman (the company's engineers), reports of the directors, and audits of the affairs of any of the companies.

W. C. Whiting, Boston, Mass., and W. B. Bennett, Wisconsin, Wis., have been investigating the company's plant on behalf of the city; and H. Loring, Boston, Mass., is watching the interests of United States holders of the company's securities.

The investigation is likely to last some considerable time.

Eliminating Jitneys in Vancouver B.C.

Under the powers conferred by the British Columbia Legislature last session, carrying out the suggestions in Adam Short's report following his investigation into transportation matters in the territory in which the British Columbia Electric Ry. operates, the Vancouver City Council on June 21 passed a bylaw amending the old bylaw as to motor cars, covering the operation of jitneys. The new bylaw repeals a number of sections and subsections of bylaw 952 as amended by bylaw 1218, and enacts in their place sections classifying motor vehicles, and fixing the fees to be charged as licenses for certain classes, and prohibiting the operation of others on and after July 1.

Motor vehicles are divided into seven classes, of which two are prohibited, viz.: Class A, which includes all motor vehicles inviting passengers to travel by them over any particular route or within any zone, "as a means of local transportation similar to that ordinarily afforded by the operation of street railways." Class B includes motor vehicles accepting passengers for transportation at the terminus of any route traversed by it, and all other motor vehicles not covered by class A, C, D, E, F or G.

The other five classes for which licenses are required to be taken out to permit their operation after July 1, are:—Class C, including taxicabs or touring cars having no specified route, and hired only from a fixed stand on a public street or from a garage for a minimum fare of 25c in the city or partly in the city, and not more than two miles without, or for a minimum fare of 50c if the distance outside the city exceeds 2 miles. Class D includes sight-seeing cars not used in the carrier business, charging fares of 25c and 50c, as in class C. Class E includes motor vehicles used by hotels for the transportation of guests to and from trains and steamboats. Class F includes motor vehicles used exclusively for ambulances, hearses, or for the transportation of pall bearers at funerals. Class G includes motor vehicles used exclusively for carrying passengers between Woodward's Landing and Vancouver post office by a route specified in the bylaw. The license fee for each of these classes is \$30, with the exception of class D, the sight-seeing cars, for which \$50 is fixed.

The portion of the old bylaw as to license fee which is struck out is contained in schedule A of bylaw 952, as amended by bylaw 1218. It provided that "Every automobile or taxicab up to seven passengers, for every vehicle, \$30 per annum. Over seven passengers, per vehicle, \$50 per annum."

Notwithstanding the bylaw, which came into effect July 1, the jitney men continued their operations, the tie up of the street railway offering an excuse. Outside jitney men rushed in to the city, and a rate of 10c was generally charged, which was subsequently reduced. It was reported July 5 that over 400 jitneys were being operated during the strike.

Application was made to Justice Morrison in chambers, by the jitney men's league for an injunction to stay the coming in operation of the bylaw, which was granted. The council was advised by its legal department July 12 that the judge's action was ultra vires, and acting on this advice, the city's license inspector was directed to prosecute any drivers operating in contravention of the bylaw. The men were at once warned, and it is reported that a considerable number ceased operations.

Public Control of Public Utilities in Quebec.

The Quebec Telegraph says:—"The extent to which the Province of Quebec is honeycombed by public utility corporations of every description is fully revealed in the Quebec Public Utilities Commission's eighth annual report, which has just been issued. This commission—composed of F. W. Hibbard, President; Sir George Garneau and F. C. Laberge, commissioners, with Jos. Ahern, Secretary,—has the regulation and supervision of all the public utilities operating on Provincial charters.

"The Quebec Government, in establishing this central governmental authority, has recognized the fact that all companies operating public utilities have an especially close relationship to the public, which imposes in return for special privileges, special obligations, a point upon which special stress has been laid, within recent years, in all progressive communities.

"Owing to the close relation of the public utility to the community generally, a strong current of opinion is noticeable in favor of public ownership of public utilities. In instituting public control of public utilities through an efficient government commission, the Quebec Government has anticipated this movement for public ownership. Public control, as it thus exists, in the Province of Quebec, while less radical and drastic than public ownership, has nevertheless conferred many of the benefits of the more extreme system, since, while ensuring justice to the private companies operating the utilities, it has insisted ever on the rights of the public to adequate service. In its adjustment of all disputes, the commission has met with a singular success in satisfactorily settling all differences, and providing for the continuance of the necessary service. The Quebec Public Utilities Commission is, in fact, an outstanding example of the possibility of combining private enterprise with successful public control."

Women Conductors at Kingston.—The Kingston, Portsmouth & Catarqui Electric Ry., at Kingston, Ont., has 11 female conductors, no males being employed. Some of them have been working over 6 months. They are paid \$2.25 a day, and the management has experienced no difficulties in employing them, and states that their work has proved most satisfactory. No male conductors were discharged, but as vacancies occurred women were employed.

Electric Railway Finance, Meetings, Etc.

British Columbia Electric Ry. and allied companies.—

	10 months to Apr. 30, 1918.		10 months to Apr. 30, 1917.	
Gross	\$515,417	\$447,429	\$5,010,688	\$4,514,434
Expenses	385,420	350,341	3,848,134	3,545,033
Net	129,997	97,088	1,162,554	969,401

Cape Breton Electric Co.—

	Apr. 1918	Apr. 1917
Gross	\$37,674.04	\$34,508.77
Expenses	27,985.85	21,727.37
Net	9,688.19	12,781.40

Edmonton Radial Railway.—

	1918.	1917.
Revenue for May.....	\$39,975.01	\$38,981.50
Passengers carried ...	776,360	819,350

Although 42,990 less passengers were carried in May, 1918, than in May, 1917, the revenue, owing to the advances in fares, increased \$993.51.

London & Port Stanley Ry.—Sir Adam Beck, Chairman of the London Railway Commission, operating the L. & P.S.R., is reported to have stated, July 10, that after paying interest, sinking fund, rental and taxes, all but one year, the surplus earnings of the railway for the three years it had been operated by electricity, were about \$60,000.

London Street Railway.—

	June 1918	June 1917
Gross	\$44,279.70	\$35,758.18
Expenses	32,089.99	30,802.82
Net	12,189.71	4,955.36

Quebec Ry., Light & Power Co.—Gross earnings for Jan. \$44,099.84; Feb., \$38,551.74; Mar., \$42,646.51; total, \$125,298.09. Of this, \$6,631.38 were earned outside the city. Percentage paid on earnings within city, 4% on \$118,666.71—\$4,746.66.

Toronto Civic Ry.—Receipts for June, \$27,443.28. Passengers carried, 1,606,695, against \$22,617.29 receipts, and 1,342,062 passengers carried in June, 1917.

The surplus for April, after deduction of fixed charges, was \$11,128. The gross earnings for May were \$280,935; net earnings, \$68,592; surplus after deduction of fixed charges, \$13,192.

Toronto Ry., Toronto & York Radial Ry. and allied companies.—

	10 months to Apr. 30, 1918.		10 months to Apr. 30, 1917.	
Gross	\$1,065,766	\$970,367	\$4,229,490	\$3,896,595
Expenses	565,038	490,524	2,285,928	2,029,129
Net	500,728	479,843	1,943,562	1,867,466

Toronto Railway.—

	6 months to June 30, 1918.		6 months to June 30, 1917.	
Gross	\$533,393.40	\$499,731.83	\$3,273,540	
City percentage	106,678.68	99,946.36	613,406	

A New York press report states that among the public utilities securities maturing there during this year is an issue of \$750,000 of the company's 6% one year notes, payable Dec. 1.

Winnipeg Electric Ry. and subsidiary companies.—

	10 months to Apr. 30, 1918.		10 months to Apr. 30, 1917.	
Gross	\$296,433	\$265,594	\$1,237,263	\$1,159,350
Expenses	230,694	194,179	954,668	837,262
Net	65,739	71,415	282,595	322,088

Proposed Sale of London & Lake Erie Ry. & Transportation Co.

The directors of the L. & L.E.R. & T. Co. decided, July 3, to refuse the London, Ont., City Council's offer for the purchase of the company's property. This offer was reported to be \$241,500, with a bonus of \$12,500, together with a bonus of \$25,000 to be contributed by Westminster Tp., \$15,000 and \$5,000 each from Yarmouth

and Delaware Tps., and was made subject to a vote of the ratepayers.

The St. Thomas, Ont., City Council has decided to submit a question to the ratepayers at an early date as to the purchase of the St. Thomas—Port Stanley section of the line at an early date.

British Columbia Electric Railway Franchise.

Under the franchise agreement between the company and the Vancouver City Council, the city has to give six months notice of its intention to take over the company's lines. The date for giving this notice is Aug. 11, but as there have been tentative negotiations going on for some time past between the city and the company upon franchise matters, an understanding was reached, June 27, under which the existing franchise is to be extended for two months, the effect of which is that the city will not be required to give notice under sec. 34, before Oct.

11. This understanding was officially ratified July 3.

The franchise matter came before the Vancouver City Council's railway committee June 27, the company being represented by Geo. Kidd, General Manager, and A. T. Goward, Local Manager, Victoria. Mr. Kidd stated that he was willing and anxious to discuss a new franchise, as the present one was out of date and not in line with franchises in other cities of the size and importance of Vancouver. Campbell Sweeney, who had acted as chairman of a board of trade committee on street railway matters, referred to the mass of material this committee had collected, and stated that it had come to the conclusion that the company could not continue to operate under the present conditions. After some general discussion, it was agreed that when details of the proposed new franchise are to be discussed, the board of trade and other representative public bodies would be asked to send representatives to assist in framing the terms.

Electric Railway Notes.

The Brantford, Ont., Municipal Ry. is reported to have ordered two new cars for the Brantford-Paris line, from the Preston Car & Coach Co.

The Toronto Civic Ry. has bought 2 tons of broom cane, for sweeper, 30 in. long, from the C. E. A. Carr Co., Toronto, at \$440 a ton f.o.b. Toronto.

The Edmonton, Alta., Public Utilities Committee extended until midnight the time during which day fares were available on the Edmonton Radial Ry. during the annual exhibition held recently.

Brantford, Ont., City Council on Jan. 8, authorized the City Treasurer to provide the Brantford Railway Commission with \$8,000 to complete payment for two interurban cars for the line to Paris.

The Detroit United Railway has asked the Interstate Commerce Commission for permission to increase its passenger fares to 2c a mile and to cancel all mileage and reduced rate tickets except school children's fares.

Complaints that the Sarnia St. Ry. was not giving an adequate service, and that its cars were not fitted with sufficient safety appliances, were investigated at Sarnia, July 15, by the Ontario Railway and Municipal Board.

The charges against Hamilton St. Ry. conductors of stealing tickets from fare-boxes were concluded in the Criminal Court at Hamilton July 2 and 3, with the following results:—J. W. Thompson was acquitted; G. Rodney, Jas. Fraser, G. Phillips, C. House and L. E. Binkley were each sentenced to two months imprisonment.

The St. John, N.B., City Council passed a resolution, July 16, asking the New Brunswick Government to repeal the agreement entered into with the St. John Ry. in regard to the use of the new bridge at the Reversible Falls, whereby the value of the company's property in the city for purposes of taxation was fixed during the currency of the agreement.

The Fort William, Ont., Trades and Labor Council wrote the mayor on July 4, as follows:—"In view of the proposed increase in the fares of the Port Arthur and Fort William street railways, steps should be taken at once by you to supply better service and to prevent the disgraceful overcrowding of the cars, especially in the hours when workers are travelling."

A Hamilton, Ont., press dispatch of July 25, states that a number of p.a.y.e. cars will be put in operation on the Hamilton St. Ry. lines, Aug. 5. An earlier press dispatch stated that these cars would be placed on certain lines only, and would be operated as one-man cars; but we were advised July 22, that the adoption of one-man cars had not been considered.

Toronto Ry. representatives are reported to have interviewed the Ontario Railway and Municipal Board, July 18, in an effort to prove that with conditions as at present it is impossible for the company to comply with the board's order to place the required number of new cars in service. It is stated that the board advised the representatives that it could take no action without notifying the city authorities and holding a special hearing.

Edmonton Radial Ry. tickets are sold 4 for 25c on the cars, and are sold 5 for 25c at certain stores. A considerable number of stores handled the tickets when the new schedule came into operation, but it was reported that at the end of June that most of them had ceased doing so. The commissioners are considering some other plan for handling the 5 for 25c tickets. The City Council on July 25 refused to again take up the question of reintroducing workmen's tickets.

A deputation from Richmond Hill, Ont., and other points on the Toronto & York Radial Ry.'s Metropolitan Division waited on the General Manager, July 5, to discuss the new fares put in operation. The deputation claimed that the effect of the new rates would be to force working men to live in Toronto city, where there work is. The General Manager stated that with the large increase in wages and other expenses, any compromise was impossible.

The Regina, Sask., City Council, on July 16, passed a bylaw fixing the license fee of motor cars charging a fare of less than 25c, at \$100, with a \$5,000 bond and prohibiting such cars being operated on any street upon which the Regina Municipal Ry. operates. It was reported that there was only one jitney service being operated in the city, the principal route being from the city to the exhibition grounds, for which a 10c fare was being charged.

Marine Department

Steamship Building in Canada for British Government.

Cameron-Genoa Mills Shipbuilders, Ltd.—The s.s. War Skeena, built by Cameron-Genoa Mills Shipbuilders, Ltd., Victoria, B.C., is having her machinery installed by Hutchison Bros., Victoria, B.C.

Canadian Vickers, Ltd., Montreal.—The s.s. War Duchess was launched at Montreal, June 29, the ceremony being performed by Col. W. I. Gear, Director of Steel Shipbuilding, Imperial Munitions Board. She was built under contract with the Imperial Munitions Board, for the

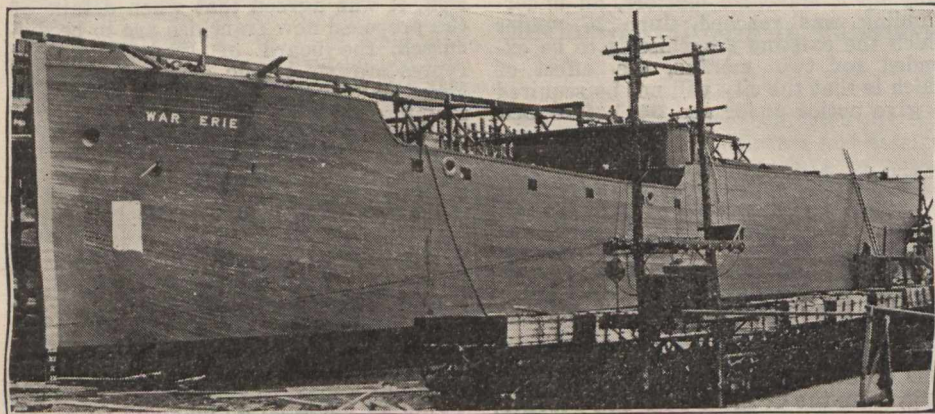
ter being considered a complete loss. Two other vessels are under way, and it is expected that 7 of the order for 9 will be completed this year. This is in addition to the s.s. Alaska, completed recently, and which was built originally for Norwegian interests, and taken over by the British Government.

Fraser, Brace & Co., Montreal.—The first two of the four wooden hulls under construction by this company for the Imperial Munitions Board, were launched,

War Suquash. This will complete the orders for wooden vessels placed with this company by the Imperial Munitions Board for the British Government.

Midland Shipbuilding Co., Midland, Ont.—The steel cargo steamship War Fiend, now building by this company, is the first of three ships ordered from it by the Imperial Munitions Board, and is of the following dimensions:—length over all, 261 ft.; length between perpendiculars, 251 ft.; depth moulded to main deck, 23 ft.; deadweight carrying capacity, 3,400 tons; load draft, 19½ ft. The vessel is being built to Lloyd's highest class and is of the ocean going type, with raised forecastle, bridge, and poop decks, the propelling machinery being placed amidships. The deckhouse containing the officers' quarters is located on the bridge deck, accommodation being provided for the chief officer, second and third mates, chief engineer and assistants, wireless operators and steward. The saloon, dining room, pantry, storeroom, galley and other offices are also contained in this house. Above these quarters are the captain's cabin and chart room, which are surmounted, in turn, by the pilot house and the navigating bridge. The layout of accommodations under the poop deck provide for 6 seamen, 6 firemen, cook and assistant, 2 mess rooms, wash room and shower, while the boatswain and the donkeyman are located in the forecastle, as is also the hospital. Coal bunkers are fitted alongside the engines and boilers, with coal chute above, and 3 coaling hatches each side on main deck; the space in 'tween decks can also be utilized for bunker coal.

A complete double bottom of the cellular type 42 in. deep runs for the entire length of the ship, constructed with solid floors on every frame and one longitudi-



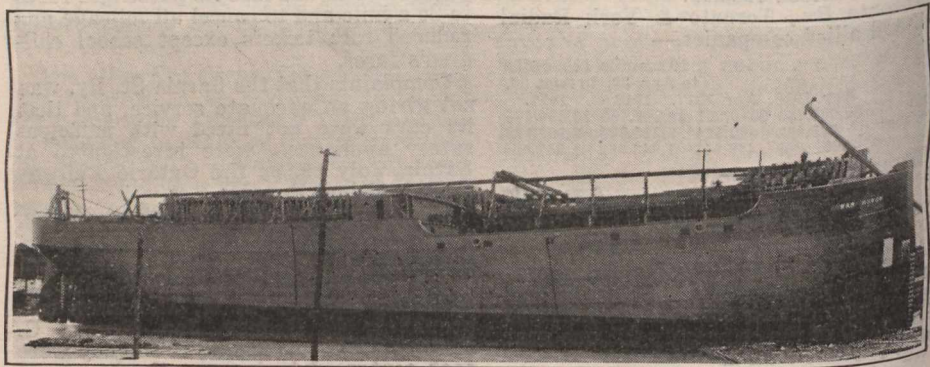
Wooden cargo steamship War Erie, for British Government, in Fraser, Brace & Co.'s basin, Montreal.

British Government, under the supervision of J. S. Bonnyman, representing the British Ministry of Shipping. She is a sister vessel of the s.s. War Earl, launched June 8, and described and illustrated in our last issue.

J. Coughlan & Sons, Vancouver, B.C.—The s.s. Alaska, which has been completed at this firm's yard recently for the British Government, was originally intended for Norwegian registry, but was taken over by the Imperial Munitions Board, when on the stocks. The hull is of steel, with double bottom, 5 water tight bulkheads, with poop, long bridge and forecastle. The officers' cabins are in the deck house on the bridge, and the crew's quarters are in the poop. She is equipped with Fletcher turbines with reduction gear, and 3 single ended Scotch boilers, equipped for oil fuel, and also for coal. There are two steel masts, with topmasts made to telescope for passing under bridges on the Manchester (Eng.) Ship Canal; 3 derricks of 5 tons capacity, 2 of 3 tons and 1 of 30 tons capacity. The chief dimensions of the vessel are: length over all 427 ft., length on water line 410 ft., beam 54 ft., depth 29¾ ft., draft loaded 24 ft. 2½ in.; deadweight tonnage 8,800, gross tonnage 5,825, net tonnage 4,201; speed on trial 12.65 knots in light condition; shaft horse power 2,500; revolutions on trial 107 per min.

Work is proceeding rapidly on the re-erection of the portions of the plant which were destroyed by fire recently. The damage was confined to the boiler shop and slips 3 and 4. The company has an order for 9 steel steamships of 8,800 tons each, from the Imperial Munitions Board, for the British Government. One of these, War Camp, was launched Mar. 16. Two others, War Charger and War Chariot, were on the ways at the time of the fire, and were considerably damaged, the lat-

July 4, and named War Erie and War Huron. Instead of being launched in the usual manner, water was let into the company's basin where the vessels were erected, and they were floated out. The third was expected to be launched during July, and the fourth during August. The two latter will be named War Niagara and War Ottawa.



Wooden cargo steamship War Huron, for British Government, in Fraser, Brace & Co.'s Basin, Montreal.

Grant & Horne, Ltd., St. John, N.B.—It was expected that the wooden steamship hull under construction by this company, under order of the Imperial Munitions Board, for the British Government, would be launched about July 26, and it was stated that she would be named War Fundy.

Wm. Lyall Shipbuilding Co., Vancouver, B.C., launched its fifth vessel for the Imperial Munitions Board, June 26, it being named War Nicola, by Mrs. A. B. Taylor, wife of the company's chief accountant. The sixth vessel was expected to be ready for launching during July, and it was stated that it would be named

inal girder on each side of the center line. Four water tight bulkheads, all extending to the main deck, divide the peaks and machinery space from the 2 cargo holds. There are 4 main cargo hatches. Two 26 x 18 ft., one 22 x 18 ft., and one 18 ft. square. The hatch coamings are 42 in. high, with extra stiffening to withstand heavy weather; the web beams are spaced about 4½ ft. apart, and fitted thwartship with fore and aft hatch covers. In common with the arrangements for loading and discharging cargo, the whole of the working gear is of the most modern type. Four steel hinged derrick posts 30 ft. high are provided, each with 2 cargo

booms, having a lifting capacity of 4 tons to each boom.

Eight 7 x 10 in. steam winches of the latest type are supplied. The steering engine is located on the main deck of the aft end of bridge erection, and is of the usual type for ocean freighters; the control shafting being run alongside the casing top on boat deck to the engine, with rods and chain to the quadrant. The steering engine is supplied from Scotland. There are 2 metallic lifeboats 24 x 7 ft. and 9 x 3 ft. 3 in. deep, each boat being capable of accommodating the entire crew; one 16 ft. working boat is also provided for. The propelling machinery consists of triple expansion engines, with cylinders 20½ x 33 x 54 x 40 in. stroke, steam being supplied by 2 single-ended Scotch boilers 15¼ ft. diameter by 11 ft. long, both engines and boilers being built by John Inglis & Co., Toronto. The vessel will be fitted out in accordance with the latest Board of Trade requirements, and during construction is under the personal supervision of Capt. E. E. Tedford, representing the British Government.

Port Arthur Shipbuilding Co., Port Arthur, Ont., on July 20 launched its steamship 21, War Hathor, a steel cargo vessel, for the British Government, almost

ate room is provided for each officer on the bridge deck amidships. She was completed and ready for sea early in July.

The Pacific Construction Co., Port Coquitlam, B.C., which received an order from the Imperial Munitions Board for 2 wooden steamship hulls, intended, in addition to its wooden shipbuilding yard, to establish berths for the building of steel steamships. We are advised that several contracts were offered for building steel steamships for the French and Norwegian Governments at satisfactory prices. Before these can be accepted, it is necessary to obtain permission from the Dominion Government, which takes the position that it is inadvisable at present to start a new steel shipbuilding yard, as it is considered that the labor and materials available are only sufficient to keep present yards employed. The company is said to be satisfied that it can obtain the necessary labor and materials, but, of necessity, accepts the Government's decision.

The hull of the s.s. War Sumas, the second built by this company for the Imperial Munitions Board, was launched July 12. This completes the order for wooden vessels for the British Government placed with the company.

Quebec Shipbuilding & Repairing Co.,

stalled at the Louise dock tidal basin, and it is expected that the former will be ready for her trial trip about Aug. 15, and the latter about the end of September.

Wallace Shipyards, Ltd., North Vancouver, B.C.—The Dominion Public Works Department's steam tugs Point Ellice and Point Grey, which, as reported in our last issue, have been leased to the Imperial Munitions Board in connection with the transportations of spruce for airplane manufacture, from the Queen Charlotte Islands, are being lengthened at this company's yards. The Point Ellice is to be lengthened 15¼ ft., and the Point Grey 17½ ft. Both vessels use oil fuel and the extra space is to enable them to carry sufficient oil for longer cruises than undertaken heretofore.

Western Canada Shipyards, Ltd., Vancouver.—The s.s. War Nootka, which was launched by Western Canada Shipyards, Ltd., Jan. 4, underwent her trials at the end of June, over a measured course in Parry Bay out of Victoria.

Additional Orders.—There have been persistent rumors recently that the Imperial Munitions Board is about to place additional orders for steel steamships for the British Government, but up to the time of going to press no official information is available.

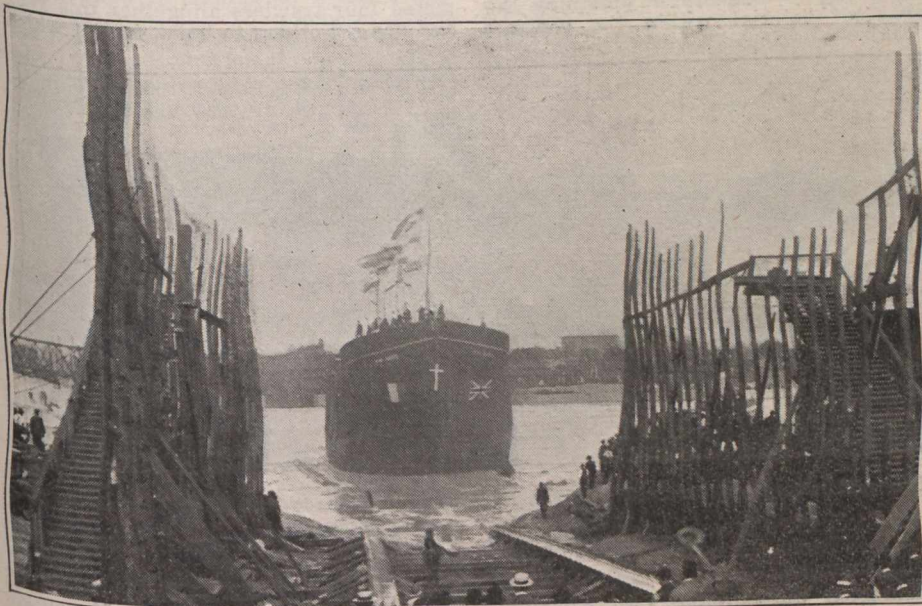
Launchings of Steamships.—Following are particulars of steamships ordered by the Imperial Munitions Board for the British Government, and which had been launched up to July 16, giving in each case the date of the launching, the name of the steamship, the name of the builder and the deadweight tonnage:—

Steel Steamships.

	Tonnage.
May 18, 1917—War Dog, Wallace Shipyards North Vancouver, B.C.	4,500
July 9, 1917—War Wasp, Nova Scotia Steel & Coal Co., New Glasgow, N. S.	1,800
Aug. 19, 1917—War Fish, Port Arthur Shipbuilding Co., Port Arthur, Ont.	4,300
Nov. 3, 1918—War Dance, Port Arthur Shipbuilding Co., Port Arthur, Ont.	3,400
Mar. 16, 1918—War Camp, J. Coughlan & Sons, Vancouver, B.C.	8,800
Mar. 23, 1918—War Power, Wallace Shipyards, North Vancouver, B.C.	4,600
Apr. 3, 1918—War Isis, Port Arthur Shipbuilding Co., Port Arthur, Ont.	3,400
May 8, 1918—War Wizard, Collingwood Shipbuilding Co., Collingwood, Ont.	2,900
May 21, 1918—War Bee, Nova Scotia Steel & Coal Co., New Glasgow, N.S.	2,400
May 27, 1918—War Osiris, Port Arthur Shipbuilding Co., Port Arthur, Ont.	3,400
June 8, 1918—War Earl, Canadian Vickers Ltd., Montreal	7,000
June 29, 1918—War Duchess, Canadian Vickers, Ltd., Montreal	7,000
Total 12 steel steamships	53,500

Wooden Steamships.

Dec. 28, 1917—War Songhee, Foundation Co., Victoria, B.C.	3,080
Jan. 4, 1918—War Nootka, Western Canada Shipyards, Vancouver, B.C.	3,080
Jan. 24, 1918—War Yukon, Cameron-Genoa Mills, Victoria, B.C.	3,080
Feb. 16, 1918—War Puget, Wm. Lyall Shipbuilding Co., Vancouver, B.C.	3,080
Mar. 6, 1918—War Selkirk, Western Canada Shipyards, Vancouver, B.C.	3,080
Apr. 10, 1918—War Caribou, Wm. Lyall Shipbuilding Co., Vancouver, B.C.	3,080
Apr. 11, 1918—War Comox, New Westminster Construction & Engineering Co., New Westminster, B.C.	3,080
Apr. 11, 1918—War Massett, Foundation Co., Victoria, B.C.	3,080
Apr. 13, 1918—War Tye, Pacific Construction Co., Coquitlam, B.C.	3,080
Apr. 25, 1918—War Haida, Cameron-Genoa Mills, Victoria, B.C.	3,080
Apr. 27, 1918—War Cayuse, Wm. Lyall Shipbuilding Co., Vancouver, B.C.	3,080
May 11, 1918—War Mohawk, Quinlan & Robertson, Ltd., Quebec, Que.	3,080
May 11, 1918—War Sioux, Port Arthur Dredging Co., Port Arthur, Ont.	3,080
May 21, 1918—War Atlin, Wm. Lyall Shipbuilding Co., Vancouver, B.C.	3,080



Launching of wooden cargo steamship War Quebec, for British Government, by Quebec Shipbuilding & Repair Co. at Quebec, Que.

identical with the War Isis, which was described and illustrated in Canadian Railway and Marine World for June, pg. 274. The War Hathor was christened by Miss Hazel Whalen, daughter of the company's President, Jas. Whalen.

Nova Scotia Steel & Coal Co., New Glasgow, N.S.—The s.s. War Bee, the launching of which on May 20, is illustrated in this issue, is the second steel steamship built, under order from the Imperial Munitions Board, for the British Government. She has the following principal dimensions: length 248¼ ft., breadth 35 ft., depth 20 ft., and will carry a cargo of about 2,400 tons deadweight. She is equipped with triple expansion engines, with cylinders 17, 28 and 46 in. diam. by 33 in. stroke, built entirely by the company, with air, feed and bilge pumps directly connected. Steam is supplied by two boilers 11½ ft. diam. by 11 ft. long at 185 lb. working pressure under natural draft. Other equipment includes complete cargo discharging gear, folding masts, four large hatches, complete electric lighting plant, etc. A separ-

Quebec, Que.—The hull of the first of the two wooden steamships under order from the Imperial Munitions Board, was launched June 28, and christened War Quebec, by Mrs. D. McLaughlin, wife of the Superintendent of the yard. The hull was subsequently towed to the deep water pier of the Louise docks, where the machinery is being installed.

Propelling machinery for the War Quebec has been somewhat delayed, but work is proceeding on the installation of the piping.

Quinlan & Robertson, Ltd., Limoilou, Que.—The keel of the fourth vessel to be built under the Imperial Munitions Board's order, was laid May 13, and construction is proceeding satisfactorily. Two vessels have been launched, the War Mohawk on May 11, and the War Seneca on June 13, not June 14, as mentioned in the news item in our last issue. The third vessel was expected to be launched July 25, and the fourth about Sept. 1.

The vessels War Mohawk and War Seneca, launched May 11 and June 13, respectively, are having machinery in-

May 23, 1918—War Tatla, Western Canada Shipyards, Ltd., Vancouver, B.C.	3,080
June 12, 1918—War Skeena, Cameron-Genoa Mills Shipbuilders, Ltd., Victoria, B.C.	3,080
June 13, 1918—Wan Seneca, Quinlan & Robertson, Quebec, Que.	3,080
June 14, 1918—War Edensaw, New Westminster Construction & Engineering Co., B.C.	3,080

June 15, 1918—War Babine, Foundation Co., Co., Victoria, B.C.	3,080
June 24, 1918—War Nicola, Wm. Lyall Shipbuilding Co., Vancouver, B.C.	3,080
June 28, 1918—War Quebec, Quebec Shipbuilding & Repairing Co., Quebec, Que.	3,080
June 29, 1918—War Ontario, Toronto Shipbuilding Co., Toronto	3,080
July 5, 1918—War Huron, Fraser, Brace & Co., Montreal	3,080

July 5, 1918—War Erie, Fraser, Brace & Co., Montreal	3,080
July 6, 1918—War Casco, Western Canada Shipyards, Ltd., Vancouver, B.C.	3,080
July 12, 1918—War Sumas, Pacific Construction Co., Port Coquitlam, B.C.	3,080
Total, 26 wooden steamships	80,080
Total deadweight tonnage, 12 steel and 26 wooden steamships launched, 133,580.	

General Shipbuilding Notes Throughout Canada.

Cape Breton Shipbuilding Co., Johnstown, N.S.—It is reported that a site has been acquired and contract let to R. Musgrave, for the construction of the yards. F. L. Kelly is President, N. A. McMillan, K.C., Secretary, and Wm. Hackett, Treasurer.

Dartmouth, N.S.—A London, Eng., press cablegram stated recently that Sir Wm. Beardmore, of Wm. Beardmore & Co., Ltd., shipbuilders, Glasgow, Scotland, had conferred there with the Canadian Premier, respecting the establishment of a shipbuilding plant at Dartmouth, and that the matter would be taken up further on the arrival of the Minister of Marine, Mr. Ballantyne, in England.

Another cablegram of July 11 said that Sir Robert Borden had discussed with the Minister of Marine, Mr. Ballantyne, the development of the shipbuilding industry in Canada.

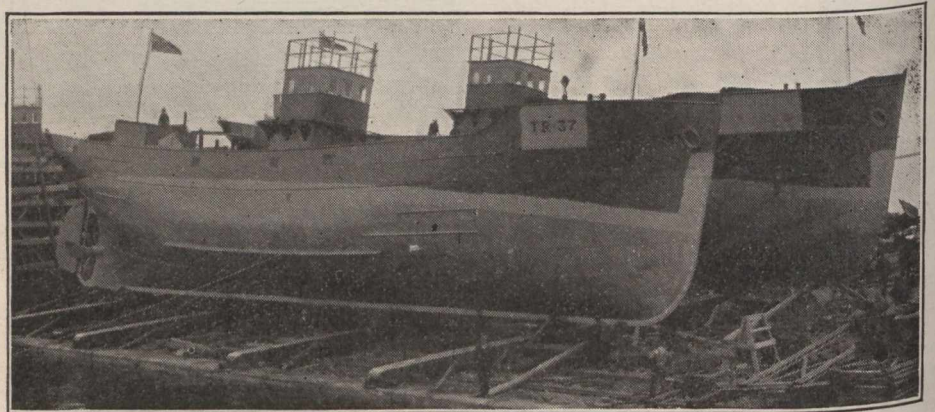
The Dominion Shipbuilding Co., Ltd., has been incorporated under the Dominion Companies Act, with an authorized capital of \$3,000,000, and office at Toronto, to build, own, operate and deal in vessels of any class, and to carry on a general shipbuilding and ship owning business. Power is also obtained to purchase the assets of any company at present carrying on a shipbuilding or engineering business, and to pay for same either in cash or shares, and also to build for its own use, or for hiring out, graving and other docks, for the convenience of building, repairing and docking vessels.

An Ontario charter was obtained under this name by the same interests in Nov., 1917, and the work of laying out the plant was proceeded with. The site was provided by the Toronto Harbor Commission on reclaimed land situated due south of the Thor Iron Works, near the foot of Bathurst St., Toronto. The land extends from the foot of Spadina Ave., westerly for 1,386 ft., and covers 15.2 acres. The Toronto Harbor Commission was responsible for the engineering work connected with the preparation of the site, and for the construction and equipment of the plant. The interests concerned with the Dominion Shipbuilding Co., control, and own practically the whole of the stock of the Thor Iron Works, Ltd., and it is understood that that property will be absorbed by the new incorporation. L. Dahlgren, President and General Manager, Thor Iron Works, Ltd., is Vice President and General Manager, Dominion Shipbuilding Co.

H. A. Ellis, Barachois, Que., launched the schooner Gaspé Trader towards the end of June. She is 120 ft. long over all, 29 ft. beam, and 10 ft. depth of hold, and of 300 tons register. She will have 2 masts, ketch rigged, and will be equipped with Fairbanks-Morse crude oil engines of 75 h.p. each, driving twin screws. Her other equipment includes a patent steering gear and gasoline engine for hoisting sails, anchor, etc., and there will be a complete electric lighting plant. She is intended for service between Montreal,

Gaspé ports and Newfoundland, and is expected to be on her route early in August.

Harrison & Lamond Shipbuilders, Ltd., Vancouver, B.C., is reported to be proceeding with the building of a wooden schooner with auxiliary power, 2,550 tons capacity, and of the following dimensions: length 225 ft., breadth 44 ft., depth 21½ ft., 1,600 tons gross. This firm had a contract from the Dominion Government last year for building such a vessel, at an approximate cost of \$230,000, for operation between Canadian Atlantic and Pacific ports via the Panama Canal, details of which were given in Canadian Railway and Marine World for Oct., 1917, but, owing to difficulty in obtaining the requisite material within the contract



Two trawlers for Naval Service Department, just prior to launching by Port Arthur Shipbuilding Co.

time, declined to proceed except on a cost plus 10% basis. The contract was eventually cancelled.

Kingston Shipbuilding Co., Kingston, Ont.—The third trawler built by this company for the Dominion Department of Naval Service, was launched July 6.

Wm. Lyall Shipbuilding Co., North Vancouver, B.C.—A press report from Vancouver, July 15, stated that Montreal interests had placed a contract with the company for the construction of 24 wooden steamships. These vessels, it is said, will be of a slightly larger type than those now being built, being of 3,500 tons.

The company is building on its own account, 6 auxiliary powered schooners, which will be rigged with topsails, and three of them will be equipped with twin Atlas full Diesel engines, the other three having twin Fairbanks-Morse semi-Diesel engines. The vessels will be 235 ft. long at the water line, 44½ ft. beam and 20½ ft. moulded depth, with approximately 2,500 tons deadweight capacity.

Marine Construction Co. of Canada, Ltd., St. John, N.B., is reported to have laid the keel of a double deck steamship, about 200 ft. long over all.

McLennan Foundry & Machine Works, Ltd., is reported to be arranging to establish a shipbuilding plant on the Restigouche River at Duncans Point, N.B.

Melanson Bros., Gilberts Cove, N.S., have laid the keel for a three masted schooner of about 200 tons register.

S. A. Moulton, Prince Rupert, B.C., is reported to have an order for the construction of 10 composite boats.

Port Arthur Shipbuilding Co., Port Arthur, Ont., has completed two trawlers for the Naval Service Department, which have already sailed. They are of the Castle class type, with the following general dimensions:—length, 125 ft.; beam, 23 ft. 4 in.; moulded depth, 13½ ft.; net tonnage, 116.3; gross tonnage, 294.5. They have one single end Scotch boiler and one triple expansion engine, developing 500 i.h.p. The company has completed four trawlers altogether this year and has six others to build, two of which

were expected to be launched before the end of July.

Prince Rupert, B.C.—W. P. Hinton, Vice President and General Manager, Grand Trunk Pacific Ry., Winnipeg, is reported to have announced that a contract has been closed for building five steel steamships at the Grand Trunk Pacific Ry.'s dry dock and shipbuilding plant at Prince Rupert, and that there is another order in prospect for five more. These will probably be of about 8,500 tons each. Negotiations have been proceeding for some time for leasing the plant to some U.S. interests, who are desirous of building steel vessels at Prince Rupert, but up to the time of writing, we have not been advised that the matter has been definitely closed.

T. Rawding, Allendale, N.S., has laid the keel for a 250 ton three masted schooner, and expects to begin work shortly on another schooner of 175 tons. The master builder in charge is R. McLeod, formerly of the Tuskent Wedge Shipbuilding Co.

Shelburne Shipbuilders, Ltd., Shelburne, N.S., are building a tern schooner 136 ft. long, and one of 150 ft. The first is expected to be launched in September and the second in November.

Songhees Reserve, Victoria, B.C.—It is reported that negotiations have been com-

pleted for laying down a new shipyard in Victoria, for the construction of wooden vessels for Norwegian interests. A site is said to have been leased at West Bay on the old Songhees reserve, that a contract has been made for the construction of the vessels, and that keels will be laid shortly. Chris. Cholberg is mentioned as being in Victoria, as representative of the interests concerned. The contract mentioned is stated to be for three wooden sailing schooners about 1,400 tons each and 200 ft. long, for operation in the Norwegian trade.

Standard Shipbuilding Co., Vancouver, B.C.—In addition to the 6 wooden steamships of the Donahoe type, with steel keelsons, 3,500 tons deadweight capacity, under order for French interests, as mentioned in our last issue, it is reported that the company has received an order from the Brazilian Government for 2 similar vessels.

St. John Shipbuilding Co., St. John, N. B.—Orders are reported to be in hand for 10 five masted auxiliary powered schooners. As mentioned in our last issue, the company plans to establish a steel and wood shipbuilding plant at Courtenay Bay, St. John, but apart from local reports that these plans are being pushed ahead, there is nothing to indicate any active construction. The promoter states that the work to be undertaken by the St. John Dry Dock & Shipbuilding Co., which has taken over the balance of the Norton Griffiths Construction Co.'s contract from the Dominion Government, will not interfere with his company's plans. The directors of the company, as given in Canadian Railway and Marine World for Sept., 1917, are: J. W. Norcross, R. M. Wolvin, Montreal; Senator W. C. Edwards, Ottawa; M. J. Haney, Toronto; Angus McLean, Bathurst, N.S.; R. O'Leary, Richibucto, N.S.; T. Bell and T. Nagle, St. John, N.S. Several of these are interested in Halifax Shipyards, Limited, which has been organized recently.

Tidewater Shipbuilders, Ltd., Three Rivers, Que.—It was expected that a steel steamship with wooden bottom would be launched before the end of July, at this yard, for Canada Steamship Lines, Ltd. She is 240 ft. long, 40 ft. beam and 15 1/2 ft. moulded depth, with a displacement of about 3,000 tons. She is equipped with twin engines and 13 ft. Scotch boiler. She has been named T. P. Phelan after one of the C. S. L. directors.

Victoria Shipbuilding Co., Victoria, B.C., is reported to be building wooden cargo steamships for the British Government. All orders for steamships to be built in Canada for the British Government have been placed by the Imperial Munitions Board, and a complete list of these orders was published in Canadian Railway and Marine World for March. At that time no order for vessels had been placed with the company, by the Imperial Munitions Board, and it is a well known fact that the British Government decided not to place any further orders for wooden steamships, prior to the date the list mentioned was published. The Victoria Shipbuilding Co. was organized in the early part of the year, J. H. Price, President, Cameron-Genoa Mills Shipbuilders, Ltd., being chiefly interested, and it was reported that arrangements had been practically completed for building 20 wooden vessels for the British Government, and that plans had been submitted direct to the British Controller of Shipping. Similar negotiations were undertaken some time ago by another firm, and in commenting on them in March, we stated that we were unable to obtain any verification of the reports, but from the

best information available, thought it unlikely that the British Government would place any further orders for wooden steamships, though there were possibilities of orders from allied or neutral countries. So far as our information goes, no change has taken place in the situation regarding this matter.

The Canadian Northern Car Ferry Canora's Voyage to British Columbia.

J. D. Macpherson, Wreck Commissioner for British Columbia, Victoria, B.C., wrote recently, as follows: "I note with interest in Canadian Railway and Marine World for July, an account of the C.N.R. car ferry Canora, and the route she is to follow from Quebec to Vancouver, though why she is to call at Port Townsend, Wash., I am at a loss to imagine, for not only will she have to clear at the quarantine station at Williams Head, off Victoria, but she will, I presume, have also to touch here for a pilot.

"Further, the distance from Port Townsend to Vancouver is 89 miles (not as you have it, 80 miles), making a total distance from San Francisco to Vancouver via Port Townsend of 859 miles, whereas the distance from San Francisco to Vancouver via Victoria is 817 miles, a saving of 42 miles, thus:

"San Francisco to Port Townsend.....	770 miles
"Port Townsend to Vancouver	89 miles
	<hr/> 859 miles
"San Francisco to Victoria	744 miles
"Victoria to Vancouver	73 miles
	<hr/> 817 miles"

Mr. Macpherson's letter was referred to Capt. Norman McKay, of the Canora, who replied as follows:—"The chart from which I figured the approximate sailing distance on the proposed voyage of the Canora to Vancouver was a very general one. In fact there was no distance shown from Port Townsend to Vancouver, hence my guess that it was about 80 miles. The reason that Port Townsend was listed as a point of departure was merely that it was indicated on this chart, with the mileage shown from San Francisco to that point, whereas as above stated, there was no mileage indicated inward, either

from Port Townsend or Victoria to Vancouver. There would be no good reason for the ship calling at Port Townsend unless in distress."

Newfoundland Shipping Department.

Reference has been made in previous issues to the formation of a Shipping Department by the Newfoundland Government. Following is a summary of the act creating the department and defining the duties of the Minister, which details have only come to hand recently. There shall be a department called the Department of Shipping, over which the Minister of Shipping shall preside, and he shall have the management and direction of the department, holding office during pleasure. A Shipping Board shall be formed, of which the Minister of Shipping, ex officio, shall be chairman, and not less than two other members, appointed by the Governor in council, holding office during pleasure, the board's powers and duties being to confer with and advise the Minister of Shipping on matters over which the department has control. The department shall have control and regulation of all shipping available for the country's needs, and shall regulate the movement and employment of that shipping so as to make the best use of it having regard to the circumstances, with power to take steps for providing and maintaining an efficient supply of shipping. The appointment of the present Minister of Shipping, Hon. J. C. Crosbie, and all things done by him as such Minister have been ratified by the act.

Inverness Harbor, N.S.—The improvements contemplated in Inverness harbor, tenders for which were received July 5, cover the dredging of a channel 30 ft. wide at the bottom, and to a depth of 6 ft. below low water spring tides, from the Gulf of St. Lawrence to McIsaacs Pond; the extension of the existing western and eastern breakwaters; the repairing of the existing western breakwater, and the raising of the top of the eastern breakwater to the level of the new works, and providing that the top of the covering of the extensions shall be 5 ft. above high water and 9 ft. above low water spring tides.

Sault Ste. Marie Canals Traffic.

The following commerce passed through the Sault Ste. Marie canals during June, 1918.

	Eastbound			
ARTICLES.	Can. Canal.	U.S. Canal	Total.	
Lumber m. ft. b. m.	2,795	49,335	52,130	
Flour Barrels	455,600	831,060	1,286,660	
Wheat Bushels	1,686,300	2,347,031	4,033,331	
Grain, other than wheat Bushels	529,002	208,500	737,502	
Copper Short tons	3,535	7,927	11,462	
Iron Ore Short tons	1,512,671	8,364,242	9,876,913	
Pig Iron Short tons	2,400	.....	2,400	
Stone Tons	3,637	1,625	1,828	
General Merchandise Short tons	1,339	489	1,828	
Passengers Number				
	Westbound.			
Coal, soft Short tons	122,810	1,526,218	1,649,028	
Coal, hard Short tons	8,000	260,947	268,947	
Iron Ore Short tons	.....	11,961	11,961	
Mfgd. iron and steel Tons	1,200	1,934	3,134	
Salt Barrels	4,605	8,150	12,755	
Oil Tons	2,780	45,974	48,754	
Stone Short tons	6,832	98,869	105,701	
General Merchandise Short tons	33,217	34,049	1,700	
Passengers Number	1,594	106	1,700	
	Summary.			
Vessel passages Number	733	2,345	3,078	
Registered Tonnage Net	1,492,234	1,998,167	9,490,401	
Freight—				
Eastbound Short tons	1,637,307	8,617,166	10,254,473	
Westbound Short tons	179,444	1,988,102	2,167,546	
Total Freight Short tons	1,816,751	10,605,268	12,422,019	

Cargo Steamship Building for Dominion Government.

Orders for Steamships.—Since Canadian Railway and Marine World for July was issued, the Marine Department has ordered from the Port Arthur Shipbuilding Co. 2 steel cargo steamships of about 3,400 tons d.w. capacity. The department has also agreed to give Halifax Shipbuilders, Ltd., an order for 3 steel cargo steamships of approximately 10,000 tons d.w. capacity each, when its yard at Halifax, N.S., is ready to begin building. This makes the orders given and promised up to date as follows:—

Canadian Vickers, Ltd., Montreal—1 of 4,300 tons, and 1 of 8,100 tons.

Collingwood Shipbuilding Co., Collingwood, Ont.—2 of 3,750 tons each.

Halifax Shipbuilders, Ltd., Halifax, N.S.—Order promised for 3 of approximately 10,000 tons each.

Tidewater Shipbuilders, Ltd., Three Rivers, Que.—2 of 5,100 tons each.

Wallace Shipyards, Ltd., North Vancouver, B.C.—2 of 4,300 tons each, and provisional arrangements for 4 of 5,100 tons each.

Other orders will be placed, as berths may be becoming vacant, with the shipbuilders mentioned in Canadian Railway and Marine World for March and April, and if the St. John Drydock & Shipbuilding Co. goes on with its proposed shipbuilding plant at St. John, N.B., it will also probably be given some orders.

Thos. Nagle, of the St. John Shipbuilding Co., St. John, N.B., is reported to have stated there recently that that company has been given an order to build 3 steamships for the Dominion Government. We were officially advised by the Marine Department recently that no such order had been given by that department, which has charge of all the cargo steamship building for the Dominion Government.

The 4,300 Ton Type of Steamship.—Following is a description of the 4,300-ton type of steel cargo steamships for the Dominion Government, which are to be built under the Minister of Marine's shipbuilding programme, as first detailed in Canadian Railway and Marine World for February, and additional particulars in regard to which have been given in each subsequent issue. As previously stated in these columns, three steamships of this type have been ordered, one from Canadian Vickers, Ltd., Montreal, and two from Wallace Shipyards, Limited, North Vancouver, B.C. Other orders for similar steamships will be placed as suitable berths become available at various shipbuilding yards. Canadian Vickers, Limited, laid the keel on April 12 for the one ordered from them. The following are the principal dimensions, etc., of these vessels:—

Length	320 ft.
Breadth	44 ft.
Depth	25 ft.
Draft, loaded	21 ft. 2 in.
Speed, maximum	11½ knots
Permanent bunkers	670 tons
Water ballast capacity	630 tons
Complement, officers and men, including gunners	35

The vessels will be of the single deck type, with poop, bridge and forecastle, straight stem, elliptical stern and subdivided into 13 watertight compartments. A double bottom 42 in. deep, with solid floors on every frame, will be fitted from the collision bulkhead to the after peak bulkhead, connected up in the usual way with the steam suction. The vessel will be built on the ordinary transverse system, the frames being of bulb angle spaced 24 in. apart, ample compensation being provided to the shell plating in lieu of side stringers. The main deck, poop,

bridge and forecastle decks will be of steel sheathed with B.C. fir in way of the accommodation.

The cargo hatches will be arranged for the speedy handling of bulk cargoes and will have the following dimensions:—No. 1, 22 ft. x 22 ft.; no. 2, 26 ft. x 22 ft.; no. 3, 12 ft. x 18 ft.; no. 4, 26 ft. x 22 ft.; no. 5, 26 ft. x 22 ft.

The usual stanchion arrangement in the holds will be dispensed with, in order to facilitate loading and unloading. The holds will be of the following capacities in cubic feet:—No. 1, 48,300; no. 2, 78,200; no. 3, 86,800; no. 4, bridge erection, 13,060.

In accordance with what is now recognized practice in modern cargo vessels, the seamen and firemen will be housed under the poop deck aft, in large compartments, each accommodating 2 men. Separate mess rooms will be provided for the seamen and firemen, and all other requirements, such as lighting, ventilation and sanitation will be in conformity with the Board of Trade regulations governing the survey of masters and crew spaces. The ship's officers, etc., will be berthed in an island deck house, at the fore end of the bridge deck, which will contain one cabin for each officer, wireless office, dining saloon, pantry, baths, lavatories, and the usual stores. An internal stairway will lead to the captain's quarters and chart room on the upper bridge, which will be surmounted by the flying bridge and navigating positions. The engineers, petty officers, mess rooms, baths and lavatories will be located in side houses abreast the engine casing near the aft end of the bridge deck. All the accommodation throughout will be steam heated.

Each vessel will be provided with 6 derrick posts, and 1 pole mast, carrying wireless aerials. Each derrick post will have 2 derricks fitted, capable of lifting 5 tons each. The 11 cargo winches will be 7 x 12 in., of the Clarke-Chapman type, manufactured by Canadian Vickers, Limited. The windlass, which will be placed on the forecastle head, will also be of the Clarke-Chapman type, and manufactured by the builders. The steering gear will be at the after end of the engine room casing, inside the bridge erection. The engine will be of the ordinary Hastie horizontal type with cylinders 9 in. diameter by 9 in. stroke and will be manufactured by Canadian Vickers, Limited.

A 10 k.w. electric generating set will be placed in the engine room. The dynamo will be built by Vickers, Limited, Sheffield, Eng., and will be coupled to a single cylinder enclosed forced lubricating engine, manufactured by the Goldie & McCulloch Co., Galt, Ont.

The life saving appliances will be in accordance with the requirements of the Canadian Board of Steamship Inspection and will comprise: 2 lifeboats, 22 x 6½ x 2¾ ft.; 1 lifeboat, 20 x 6½ x 2½ ft., and 1 dinghy, 20 x 5½ x 2 ft. 4 in. Each vessel will be fitted with the usual armament as required by law and provision will be made for defence from floating mines.

The propelling machinery will be of the triple expansion surface condensing type, having cylinders 25 x 41 x 67 x 45 in. stroke. It is being built on separate contract by the Goldie & McCulloch Co. The air, feed and bilge pumps will be worked off the main engine. The main circulating pump will be of the centrifugal type driven by an enclosed forced lubrication engine, manufactured by Goldie & McCulloch Co. The general service pump and

auxiliary feed pump will be 9½ x 7 x 15 in. of G. & J. Weir's make, and the ballast pump will be of the vertical duplex type, 7½ x 9 x 10 in. The reversing engine will be of the all round type.

Steam will be generated in 2 single ended boilers 15½ ft. diameter by 11½ ft. long, designed to work under forced draft and with a working pressure of 180 lb. per sq. in.

The vessels will be built to Lloyd's 100 A1 class, under special survey, and under the direct supervision of the Marine Department's shipbuilding branch. Satisfactory progress is being made with the work of construction in both hull and machinery departments and it is anticipated that the first vessel under the government's shipbuilding programme will be placed in service well under the contract date.

Grant Smith & Co., Vancouver, B.C., is reported to have received an order from the Dominion Government for 6 wooden cargo vessels of 3,000 tons capacity, and of the following dimensions:—length 250 ft., breadth 43½ ft., depth 25 ft., with engine equipment for a speed of 9½ knots an hour. Canadian Railway and Marine World for July contained, on page 316, information of the orders placed for steamships by the Dominion Government, covering all the orders placed by the government for cargo steamships, up to June 20. As previously pointed out, the Dominion Government has decided not to place any orders for wooden steamships, and so far as we are at present advised, has not placed any orders for cargo vessels, other than those mentioned on this page. During 1917, the Dominion Government awarded contracts for the construction of wooden schooners with auxiliary power, but on the ground that the Imperial Munitions Board had practically cornered the supply of ship timbers, the contractors declined to proceed, except on the cost and percentage basis. The government then cancelled the contracts.

Wallace Shipyards, Ltd., North Vancouver, B.C., which has built 2 steel cargo steamships for the British Government, under order from the Imperial Munitions Board, has orders for 2 steel cargo steamships, 4,300 tons deadweight capacity, for the Dominion Government, and provisional arrangements have been made by the government for the construction of 4 additional steel steamships of 5,100 tons deadweight capacity. The company is also reported to be building 2 wooden schooners with auxiliary power, 2,500 tons capacity, for the Dominion Government, and 4 wooden cargo steamships totalling 17,500 tons for undisclosed interests. Elsewhere we have mentioned that up to June 20, subsequent to the date of the report, the Dominion Government had placed no orders for wooden vessels. A schooner of this type was ordered last year by the government, and the contract was subsequently cancelled.

The Canadian Merchant Service Guild's members have, according to a press dispatch from Vancouver, decided to resign from the service of steamship companies which refuse to recognize the guild, the dispatch stating that, as a result, steamships of the C.P.R., the Union Steamship Co. and the British Columbia Towboat Owners' Association will be without masters and officers. On application from the men, a conciliation board has been appointed to deal with the matter.

St. John, N.B. Harbor Work, Drydock and Shipbuilding Plant.

Canadian Railway and Marine World for June and July contained particulars of the St. John Drydock & Shipbuilding Co.'s plans for establishing a drydock and shipbuilding plant at St. John, N.B., and in connection therewith to do certain harbor improvements. We have since been favored with copies of the orders in council passed by the Dominion Government in connection therewith. The first order, passed May 18, was not satisfactory to the company, and another order was passed June 10, cancelling the previous order. The Minister of Public Works' report, dated May 31, on which the second order in council was based, is as follows:

As authorized by an order in council dated Feb. 12, 1912, a contract was entered into on Mar. 25, 1912, with Norton Griffiths & Co. (Canada) for the construction of certain works, at an approximate cost, according to the schedule rates, of \$7,500,000, required to provide at the important port of St. John, N.B., adequate shipping facilities to meet the requirements of Canada's increasing trade, and particularly to create terminal facilities for the Intercolonial, the Grand Trunk Pacific, the National Transcontinental, and other projected railways, such as the St. John Valley Ry. The following works were comprised in the contract. The construction of a breakwater 4,570 ft. long, including 5 groynes, each 150 ft. long. The dredging of a channel about 6,800 ft. long, 500 ft. wide at bottom and to a depth of 32 ft. below low water; the dredging of a basin to a depth of 32 ft. below low water in Courtenay Bay; the construction of 4,890 lin. ft. (more or less) of quay walls; the filling of the whole of the area shown in red on plan, sheet I, approximately 28 acres; the construction of a drydock of the first class under the provisions of an Act to encourage the construction of drydocks statutes of 1910, chap. 17. That with regard to the drydock it was stipulated that the government would enter into an agreement with the company for the payment of a subsidy thereon.

The company proceeded to carry out the contract, but as time advanced it was seen that but comparatively little progress was being made with the works as a whole. The company was notified time and time again that it must see to the prosecution of the works with greater diligence, but the efforts of the Public Works Department in this direction were without result, and the company finally ceased operations. The following was the standing of the contract on May 31, 1918:

Amount of final estimate	\$3,913,802.07
Amount of extras on contract returned in final estimate	127,955.09
Total payable to contractors, thus far	3,913,802.07
Actually paid	3,910,048.78
Amount held against claims	3,753.29
Claims against contractors, on file	2,655.00
Amount of security deposit which was released under order in council of Aug. 8, 1917	250,000.00

The Norton Griffiths Co. Ltd. (Canada) is in liquidation, and has assigned any rights which it may have under the contract mentioned to the St. John Dry Dock & Shipbuilding Co. Ltd., subject to the Minister of Public Works' approval. The Department of Justice has expressed the opinion that there can be no legal objection to the assignment of this contract to another contractor who will complete the works upon the terms stipulated. The St. John Drydock & Shipbuilding Co. Ltd. proposes to establish a shipbuilding plant at St. John, and has filed an application for a subsidy agreement for the construction of a drydock of the first class at St.

John. In an order in council passed May 18, 1918, which granted authority, as hereinafter quoted, it was stated that in order to afford access to the proposed drydock it would be necessary to complete the dredging of the basin in front of the dock site, to dredge a channel from the main channel to St. John harbor, to the said basin—it to be understood, however, that no submarine rock work was to be included in the excavation of this channel—and to protect the dredged channel by the extension of the existing breakwater for approximately 2,500 ft. It was also stated in the said order in council "that the present scheme may be summarized as hereunder, showing the probable cost thereof as estimated by the Chief Engineer of the Public Works Department, amounting approximately to \$1,962,265.52"—To extend the existing breakwater approximately 2,500 lin. ft., estimated cost \$1,030,369.60. To dredge a channel from the main channel to the St. John harbor, inside the breakwater, to the basin in front of the proposed drydock, it to be understood, however, that no submarine rock work is to be included in the excavation of this channel. Estimated cost \$746,296.00. To complete the dredging of the basin, estimated cost \$185,599.02.

The following authority was granted by the order in council of May 18, 1918, referred to: 1—To approve of the assignment of the contract of Norton Griffiths & Co. Ltd. (Canada)—in liquidation—for the construction of the works above mentioned, to the St. John Drydock & Shipbuilding Co. Ltd., subject, however, to the following conditions:—(a) That nothing in the agreement of assignment herein or in the approval by the government of this agreement shall be deemed to prejudice or affect any right, title or claim on the part of His Majesty accrued, accruing or provided for, under, or by reason of the contract of Mar. 25, 1912. (b) That the assignee shall covenant with the government that it will execute and perform all unfulfilled covenants, agreements or obligations which the contractors had made with the government under the contract of Mar. 25, 1912, subject to the provisos hereinafter contained. (c) That the assignee shall enter into an agreement to construct a drydock of the first class at St. John, N.B., under the provisions of an Act to encourage the construction of drydocks, 9-10 Edward VII, chap. 17 (1910), as amended by chap. 27, 1917.

2—To extend the existing breakwater, constructed under the above contract, by a length of 2,500 lin. ft.

3—To complete the dredging of the basin in front of the drydock site as well as the dredging of a channel from the main channel of St. John harbor inside the breakwater to the said basin.

The works described in paragraphs 2 and 3 above to be carried out under the terms, conditions and prices of the contract with Norton Griffiths & Co. Ltd. (Canada), as amended by the following provisos: (a) The works to be performed in accordance with the annexed layout plan; (b) with reference to the dredging of the channel from the main channel to St. John harbor inside the breakwater to the basin of the drydock site, no submarine rock work is to be included in the excavation of this channel; (c) no work to be performed beyond the amount of the parliamentary appropriation granted in any one fiscal year; (d) the time

for the carrying out of these works to extend over three years; (e) the St. John Dry Dock & Shipbuilding Co. Ltd. to deposit a cash security of \$125,000 as a guarantee for the proper carrying out of the said works.

The estimate of \$1,962,265.52 for the work described will have to be increased very materially for the following reasons:

Extension of existing breakwater. The quantities on which the estimate for this given in the order in council was based were taken from the contract plans prepared in 1911. A plan which has been made recently by the engineer in charge shows that the extension will have to be built in deeper water, hence the increase in the quantities.

Completion of dredging of basin and submarine rock in entrance leading to proposed drydock. It is proposed to increase the area of the basin as described in the order in council of May 18, 1918, so as to make it coincide with the area set forth in the plan attached to the original contract, with the exception, however, that the pier sites and slips as shown on the plan hereto annexed are not to be dredged and the piers are not to be constructed unless the company is specially called upon to do so by the department, and there will also be rock excavation leading to the drydock entrance.

Detailed estimate on which the order in council was based.

Core stone in breakwater, 333,333 cu. yds. at \$2.50	\$ 833,332.00
Cover stone in breakwater, 51,852 cu. yd. at \$3.80	197,037.60
	\$1,030,370.10
Dredging channel, 2,407,407 cu. yd. at 31c.	746,296.00
Dredging basin, 773,333 cu. yd. at 24c.	185,599.92
	\$1,962,265.12
Add contingencies 5%	96,100.00
	\$2,058,365.12

Quantities according to revised estimate.

Core stone in breakwater, 588,625 cu. yd. at \$2.50	\$1,471,562.50
Cover stone in breakwater, 81,250 cu. yd. at \$3.80	308,750.00
	\$1,780,312.50
Dredging channel, 2,500,000 cu. yd. at 31c.	775,000.00
Dredging basin, 4,200,000 cu. yd. at 24c.	1,008,000.00
Submarine rock in entrance leading to proposed dry dock, 75,000 cu. yd. at \$8	600,000.00
	\$4,163,312.50
Contingencies 5%	208,165.62
	\$4,371,478.12

There is an amount of \$500,000 provided in the estimates for 1918-19 for St. John harbor improvements. The Minister, therefore, recommends that the order in council of May 18, 1918, already referred to be cancelled, and that authority be granted as follows:—1—To approve of an assignment of the contract of Norton Griffiths & Co. Ltd. (Canada), in liquidation, for the construction of the works mentioned at Courtenay Bay, St. John, to the St. John Drydock & Shipbuilding Co. Ltd., subject to the following conditions:—That nothing in the agreement of assignment herein or in the approval by the government of this agreement shall be deemed to prejudice or affect any right, title or claim on the part of His Majesty accrued, accruing or provided for under or by reason of the said contract of Mar. 25, 1912. That the assignee shall covenant with the government that it will execute and perform all unfulfilled covenants, agreements or obli-

gations which the contractors had made with the government under the contract of Mar. 25, 1912, subject to the provisoes hereinafter contained. That the assignee shall accept in their present condition the works and such of the specific chattels referred to in the schedule to the said assignment as are on the premises and works, and shall be found by the certificates of the engineer heretofore given, and under no circumstances shall the assignee be entitled to payment for work performed at the date hereof, and the assignee shall not advance any claim for damages or otherwise for anything arising out of the partial performance of the contract by Norton Griffiths & Co. Ltd. (Canada), provided, however, that any work heretofore performed on the construction of a drydock shall not come under the provisions of this clause. That the assignee shall enter into an agreement to construct a drydock of the first class at St. John, under the provisions of an Act to encourage the construction of drydocks, 9-10 Edward VII, chap. 17, (1910), as amended by chap. 27, 1917.

2—To extend the existing breakwater, constructed under the above contract, by a length of approximately 2,500 lin. ft.

3—To complete the dredging of the basin in front of the drydock site, as well as the dredging of a channel from the main channel of St. John harbor inside the breakwater to the said basin, and also to dredge the entrance leading to the drydock, the same not to exceed 300 ft. in width.

The works described in paragraphs 2 and 3 immediately preceding to be carried out under the terms, conditions and prices of the aforementioned contract with Norton Griffiths & Co. Ltd. (Canada) as amended by the following provisoes:—The works to be performed in accordance with the annexed layout plan. Should the amount voted by parliament and applicable towards payment for the work hereby contracted for, be at any time expended previous to the completion of the works the Minister or the engineer may give the contractors written notice to that effect, and upon receiving such notice the contractors may, if they think fit, stop the work, but in any case shall not be entitled to any payment for work done beyond the amount voted and applicable as aforesaid unless and until the necessary funds shall have been voted by parliament in that behalf. And in no event shall the contractors have or make any claim on His Majesty for any damages or compensation by reason of the suspension of payment, or by reason of any delay or loss caused by the stoppage of work. And in the event of the contractors electing to proceed or proceeding with such work after such notice, and before such additional funds are voted, no action of the engineer or of any other person on behalf of His Majesty, in giving orders, directions or instructions, or otherwise acting with respect to such work, shall be taken or considered as in any manner improving the rights of the contractors or as waiving in any particulars any of the provisions of this section. The time for the carrying out of these works to extend over four years. The Crown to have the same remedies against the assignee in case of default or failure to perform the work diligently as against the Norton Griffiths & Co. Ltd. (Canada). The St. John Drydock & Shipbuilding Co. Ltd., to deposit a cash security of \$125,000 as a guarantee for the proper carrying out of the said works.

The approximate estimated cost of the works for the carrying out of which au-

thority is asked is, as already stated, \$4,371,478.12.

The foregoing report was approved by the Privy Council on June 10.

Harbor work to be done.—The agreement between the Dominion Government and the St. John Drydock & Shipbuilding Co., entered into on July 11, provides for an extension of 2,500 ft. to the existing breakwater of 4,570 ft., making a total length of 7,070 ft.; dredging an entrance channel about 6,800 ft. long, to a depth of 22 ft. below low water, and excavating a basin in front of the drydock, with a channel leading into it, to a depth of 32 ft. below low water, including the removal of approximately 75,000 cu. yd. of submarine rock at the entrance to the drydock. These harbor works are estimated to cost over \$4,000,000. The time for completing them has been extended to June 30, 1922.

Drydock.—Under another agreement entered into July 11, the company has undertaken to build, under the Drydock Subsidies Act, a drydock of the first class, capable of docking the largest British war vessels. It will have the following dimensions:

Length on center line on bottom from caisson groove to head	1,150 ft.
Width of entrance at coping level	133 ft.
Width of entrance on bottom	125 ft.
Width of dock at coping level	143 ft.
Depth of water on sill at l.w.l.	12 ft.
Depth of water on sill at h.w.o.s.t.	40 ft.

The estimated cost of the dock is about \$5,900,000, including work already done by Norton Griffith & Co., at a cost of \$1,093,831.25, and the subsidy to be paid is based on a maximum amount of \$5,500,000, as fixed by the act for docks of the first class, that is, 4½% on that amount for 35 years. The company is to commence work on the drydock by Jan. 11, 1919, and to complete it by July 11, 1922.

After the company shall have expended \$2,000,000 upon the construction of the drydock, including the work already done by Norton Griffith & Co., it will not be compelled to proceed further with its construction until the Dominion Parliament shall have voted the following sums, viz.: for the fiscal year 1919-1920, \$500,000, and for each of the three following fiscal years \$750,000. The company is to keep the drydock in repair and working order, in default of which the Minister of Public Works may take possession of it and repair and operate it.

Subsidies.—The company has submitted a proposal in regard to its protest to the New Brunswick Government and to the city and county of St. John, with a view to obtaining cash bonuses aggregating \$500,000. In addition to this, it is desired to obtain the right to divert the road at the head of the dry dock site, and the freehold to the land occupied by the municipal home, which the company will undertake to reproduce elsewhere. T. A. Duff, Toronto, one of the directors, is reported to have stated that unless assistance is forthcoming from the province, city and county, the company will not build the shipbuilding plant; but if the assistance is granted, work will be proceeded with at once. He is also reported as stating that work will commence on the drydock at once.

Personnel of Company.—The contracts entered into with the government, on July 11, as stated above, were signed for the company by the President, Robt. Wall, Manager Contractors' Supplies Co., Montreal, and by the Secretary, R. T. Heneker, K.C., Montreal. Since then the directorate has been reorganized as follows:—President, Jas. Playfair, President Great Lakes Transportation Co., Midland, Ont.;

Vice President and Managing Director, D. S. Pratt, coal, wood and lumber merchant, and General Manager Canadian Dredging Co., Midland; Secretary-Treasurer, T. A. Duff, legal advisor for Great Lakes Transportation Co., Canadian Dredging Co., Midland Shipbuilding Co., Midland Engine Works Co. and other companies in which Mr. Playfair is interested, Toronto; other directors, R. S. Heneker, K.C., Montreal; W. E. Phin, contractor, Hamilton, Ont.; W. J. Sheppard, lumberman and former President, Northern Navigation Co., Waubaushene, Ont.; D. L. White, Jr., President Midland Shipbuilding Co., President Midland Lumber Co., and partner with Jas. Playfair in Playfair & White, wholesale lumber, Midland.

Among others said to be interested in the company are Senator H. W. Richardson, Vice President Great Lakes Transportation Co., and G. Y. Chown, manufacturer, Kingston, Ont.; J. B. Tudhope, M.P., Orillia, Ont.; Robt. Hobson, President Steel Co. of Canada, Hamilton, Ont.; Geo. McAvity, hardware merchant and manufacturer, and Jno. Moore, St. John, N.B.; J. B. Craven, contractor and electrical engineer, New York, N.Y., and J. A. Paisley, Cleveland, Ohio. J. B. Craven was interested in the original contract held by Norton Griffiths & Co., and on the abandonment of the contract, he applied at Montreal for an interlocutory injunction to prevent the transfer of certain of the company's property, and claimed that he was interested to the extent of one half of 49% of the total net profits on the contract, over and above 15% of the total prime cost of the construction works.

The harbor work will probably be carried out by the Canadian Dredging Co., in which Mr. Playfair and some of the other persons above mentioned are interested, and of which D. S. Pratt is General Manager.

The company has appointed as its Chief Engineer, A. R. Dufresne, B.A.Sc., C.E., heretofore Assistant Chief Engineer, Public Works Department, Ottawa. The Public Works Department engineer in charge of the St. John harbor works is Alex. Gray.

Nova Scotia Steamships, Ltd., is reported to have been organized to operate a steamship service between Halifax, Newfoundland and New York. F. H. Chipman, formerly Manager, Canada Atlantic & Plant Steamship Co., is mentioned as Manager, and H. L. Chipman, who was Manager before him, and has been on military service in Canada since early in the war, is stated to be acting as Halifax Agent. Shea & Co. are said to have been appointed agents at St. John's, Nfld., and the Federal Line, agents at New York. It is said that the offices occupied formerly by the Canada Atlantic & Plant Steamship Co. at Halifax are being renovated for occupation by the company, and its vessels will use the Plant Line wharves. The Canada Atlantic & Plant Steamship Co. discontinued business May 1, 1917, on account of the falling off of passenger traffic due to war conditions.

British Vessel Purchases.—In a report covering transfers of vessels from and to the United Kingdom register during 1917, it is shown that 371 steamships and 23 sailing vessels changed ownership. The gross tonnage of the steamships was 1,060,155, and of the sailing vessels, 42,990. During the year, Great Britain purchased from neutral and allied countries 355 steamships of 752,780 gross tons, and 76 sailing vessels of 96,174 gross tons.

The Toronto Ferry Co's Earnings, Fares Etc.

Towards the end of June, the Toronto City Board of Control dealt with the Toronto Ferry Co's application for permission to increase passenger fares from 10c to 15c a round trip, between the main land and Toronto Island, and the board passed a resolution approving the increase, and ordering that a bylaw be drafted to give effect to it. When the matter came before the city council subsequently, the board's action was not approved and any further move was delayed pending a report on the company's financial position. On receipt of this, and after some discussion by the council, when some opposition was made to the proposals, a bylaw was drafted and submitted to the Ontario Government for approval. In the meantime, it was pointed out that the bylaw did not carry out the council's wishes, as it was stated to be the intention that fares for children should not be increased, and that the increases authorized under the bylaw, should be for the duration of the war only. The Government thereupon returned the bylaw for amendment. As a special meeting of the council would be necessary for this purpose, and as this was not considered expedient in view of the holiday season, the board of control approved the proposal that an agreement be made with the company providing that the bylaw shall not apply to increase children's fares above the existing rate, which by the original bylaw is fixed at half the adult fare; that it shall not apply to picnics and baseball combination tickets, and that the increases authorized by the bylaw shall be only for the duration of the war.

The bylaw has been submitted to the Government again for approval by order in council, and until such approval is given, the fares remain as hitherto. It is not known, at the time of writing (July 24), what the Government will do in the matter, as it has returned the bylaw once for amendment. It may possibly amend it, according to the council's wishes, of its own volition, or may withhold approval until such time as it is thought fit to call a meeting of council to have the bylaw put in the shape in which it should have been before being submitted to the government. In any case, the proceedings exhibit a degree of municipal ineptitude which bodes ill for the municipal operation of the street railway system in the near future.

In connection with the Toronto Ferry Co's recent application for authority to increase its passenger fares between Toronto and Toronto Island, the city board of control requested the Commissioner of Finance, T. Bradshaw, and the City Auditor, W. Sterling, to examine the company's statements for five years, from Oct. 31, 1912 to Oct., 1917. As their report will be of special interest to ferry companies generally, and also to others, it is given in full as follows:—

The revenue from "passage traffic" and from rentals year by year is as follows:—

Year.	Rental.	Passage	Rental.	Total.
1912	\$118,057	\$17,731	\$135,788
1913	121,518	17,109	138,627
1914	109,066	20,757	129,823
1915	90,641	15,361	106,002
1916	94,931	16,679	111,610
1917	107,782	21,094	128,876

Average \$125,121

The revenue fluctuated from \$106,002 in 1915, to \$138,627 in 1913, and the average for the whole period was \$125,121.00. The revenue for 1917 was \$3,755.00 in excess

of the average of the period. The greatest fluctuation took place in "passage traffic." In 1915 the receipts from this source were \$90,641.00, while in 1913 they reached the maximum, \$121,518. In 1917 they were \$107,782. Receipts from rentals were higher in 1917 than in any of the previous years.

Operating and Other Expenses.—The following statement shows the operating and other expenses for the same period:—

Year.	Operating and other expenses.
1912	123,626
1913	113,513
1914	127,906
1915	107,153
1916	108,284
1917	120,718

The operating expenses have had their ups and downs. In 1915 they were \$107,153, while in 1912 they reached \$123,626.00. The average for the six years was \$116,867.00.

Comparison of Revenue and Expenses.

Year.	Revenue.	Expenses.	Per cent. of Revenue.
1912	135,788	123,626	91
1913	138,627	113,513	82
1914	106,002	107,153	101
1915	111,610	108,284	97
1916	128,876	120,718	94

Operating expenses have run from 82% to 101% of revenue, and since 1915, which was the most unfavorable year for the company, there has been a steady improvement. For 1917, the expenses represented 94% of the revenue.

Comparison of Expenses.—1915 being the most unfavorable year of the company's experience, it has been thought desirable to analyze the expenses of that year with those for 1917, in order to determine the cause of the great variation:

	Expenses 1915.	Expenses 1917
Fitting out	\$2,953	\$3,511
Repairs	5,234	8,568
Running expenses	35,068	44,301
Laying up	2,113	2,296
Hanlans Point expense.	8,172	7,012
General expense	6,418	7,263
Electric light	3,993	3,035
Advertising	1,208	1,684
Entertainment	9,066	10,116
Accident insurance	2,376	2,388
Dockage	5,813	6,431
H. o. expense	6,630	5,484
Insurance boats	6,425	6,706
Interest	11,684	11,924
	\$107,153	\$120,719

The net increase of 1917 expenses over those of 1915 were \$13,566. The items of increase arise chiefly in operations involving labor and material.

Surplus and Deficit on Year's Operations.—In order to determine how profitable or otherwise the company's operations have been, the net results for the past six years are tabulated.

Year.	Surplus.	Deficit.
1912	12,162	
1913	25,114	
1914	1,917	
1915		1,151
1916	3,326	
1917	8,158	

The foregoing expenses include interest on all borrowed moneys, including that on the mortgage bonds of \$100,000.00. In 1915 there was an actual deficit of \$1,151, while in 1913 there was a surplus of \$25,114. In 1917 the surplus was \$8,158. The average earnings for the six years were \$8,254, or practically the same as those for the past year.

Capitalization.—The company is capitalized as follows:—Common stock, \$300,000; 8% preferred stock, \$100,000. In addition to the foregoing there are outstanding mortgage bonds for \$100,000, carrying interest at the rate of 6%. We are informed that the preferred stock and bonds were sold at par, and that the com-

pany received the full face value. It is stated that the \$300,000 new common stock was transferred in exchange for common stock of the old company. Just exactly what this implies, we cannot say.

Dividends.—Interest has been regularly paid on the mortgage bonds, but the 8% dividend on the preferred stock has only been paid up to 1913. For 1914 only 4% was paid thereon, and since that no dividends whatever have been paid. Two per cent. was paid on common stock in 1906 and 1907, but no dividend has been paid since.

Depreciation.—No amount has been charged, nor provision made for depreciation. We are informed that the increase in wages this year, compared with those in effect in 1917, will amount to \$1,000 a month, and that the cost of material in connection with operating and repairs has increased during the past year 50%.

Concessions.—We understand that for certain concessions the company receives rentals. Whether the rentals received for these concessions are fair or not, we are unable to determine, nor do we know to whom these concessions have been granted.

Increase in Rates.—If the same volume of passage traffic is experienced in 1918 as in 1917, and if rates are advanced as mentioned below, the increases in revenue will be: 10%, \$10,778; 20%, \$21,556; 30%, \$32,334; 40%, \$43,112; 50%, \$53,891.

Canada's First Concrete Steamship.

The first reinforced concrete steamship to be built in Canada made her trial trip between Montreal and Cornwall, July 25, making the trip under 24 hours, at an average speed of 10 knots an hour. This vessel, which has been named *Concretia*, was launched at the Atlas Concrete Shipbuilding Co's premises, Montreal, Nov. 14, 1917. After completing the trip, the vessel returned to Montreal, where the superstructure and other work is to be completed. Her dimensions are given as follows:—length 126 ft., width 22½ ft., depth 12½ ft. The skeleton frame, on which the concrete was poured, consists of structural steel ribs 5 in. at the top and 14 in. at the base, and spaced 27 in. center to center. She is spoken of as the "first genuinely concrete vessel to be built and launched in America," but this is incorrect, as the concrete steamship *Faith*, was launched in California some time ago, and made a trial trip on the coast as far north as Vancouver.

Steel Plant for British Columbia.—A press dispatch from Trail, B.C., states that that place has been selected as the site for the erection of a steel plant to be bonused by the Dominion and provincial governments. As far as we are aware, the Dominion Government has not decided on any policy of granting a bonus for the erection of a steel plant, and in the case of the rolling mill for steel plates for shipbuilding, which is being built at Sydney, N.S., by the Dominion Iron & Steel Co., the Dominion Government has merely undertaken to buy a certain tonnage of plates over a period of years.

Frank Waterhouse & Co. of Canada, Ltd., the incorporation of which was announced in a recent issue, has its head office at Vancouver, B.C., the board being as follows:—Frank Waterhouse, Seattle, Wash., President; H. B. Neil, J. R. Lane, Seattle, Wash., and D. G. Marshall and John Speer, Vancouver, B.C. The company has bought the steamships *Easthol*, *Westham* and *Selkirk* from the *Lincoln Steamship Co.*

Atlantic and Pacific Ocean Marine.

The s.s. Sewalls Point, 3,354 tons, which went ashore in a fog at Five Fathoms Harbor, near Halifax, N.S., July 1, has been floated and docked at Halifax.

The s.s. Celtic Prince, 10,500 tons, which went ashore near Father Point about July 14, arrived at Quebec, July 24. She was bound to Montreal from Liverpool, Eng., on her maiden voyage.

France & Canada Steamship Co. has purchased the yacht Karina, stated to be one of the largest three masted schooner yachts in the world, from Mrs. T. P. Burgess, Dedham, Mass., for use as a training ship. She is of steel construction, 200 ft. long overall, 150 ft. long on the water line, 34 ft. wide, and draws 17 ft.

The Cunard Line s.s. Carpathia was reported to have been sunk by a German torpedo off the Irish coast, July 19, outward bound on transport service. No lives were reported lost. She was about 14,000 gross tons, and came into prominence for the part she played in rescuing survivors from the s.s. Titanic which was lost on her maiden voyage in April, 1912.

At Elder, Dempster & Co.'s annual general meeting at London, Eng., recently, Sir Owen Phillips, Chairman, stated that while, under pressure of circumstances, the company had been obliged to suspend its Canada-South Africa steamship service, the British Ministry of Shipping was endeavoring to release some tonnage to enable the company to meet the position.

Canadian Pacific Ocean Services, Ltd., is reported to be negotiating for the chartering of one or two steamships for its Pacific Ocean service. Since the requisitioning of its Pacific Empresses by the Dominion Government, the trans-Pacific service has been curtailed, only two vessels being operated, and much of the traffic has been diverted to Japanese lines. Reports were current recently that the company might charter two steamships owned by companies located in Holland, but the two vessels then mentioned, are being operated by the U.S. Shipping Board.

Maritime Provinces and Newfoundland.

The tern schooner Herbert Warren, which was purchased by the Newfoundland Government about a year ago, was sold by auction at St. John's, Nfld., July 18, for \$76,500, to J. Sellars.

Reinhardt Bros., La Have, N.S., are reported to have purchased the tern schooner Marion Douglas, registered as owned in Parrsboro, N.S., and built there about a year ago, for \$92,000.

The Public Works Department received tenders to July 23 for repairs to the wharf at Shediac, N.B.; to July 25 for repairs to the breakwater at Cow Bay, N.S., and to July 25, for dredging at the Government wharf at Fourchu, N.S.

The service given by the s.s. Aranmore between Yarmouth, N.S., and Boston, Mass., which was suspended recently for ten days, has been resumed, and it is reported that the Dominion Government has agreed that the service be continued indefinitely.

The Department of Public Works has dredged a channel 200 ft. wide inside the breakwater at the south entrance to Shipigan Gully, N.B., to give a more direct course into the harbor. The new channel obviates the abrupt bend to the eastward, immediately inside the breakwaters, and the sharp turn to the westward above the main light.

Ontario and the Great Lakes.

The Dominion Public Works Department will receive tenders to Aug. 7, for the completion of the renewal of the south pier at Bayfield, in Huron County.

The Northern Navigation Co.'s s.s. Huronic was towed into Port Arthur, July 24, having blown out a cylinder head, while upbound, near Passage Island. The passengers were transferred to a C.P.R. steamship.

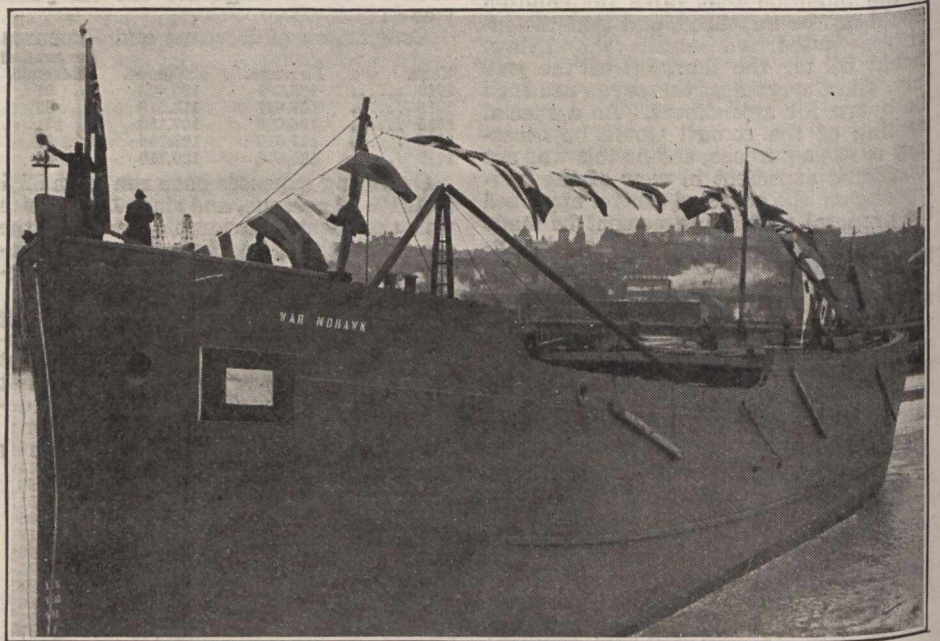
The s.s. Australia, owned by the Pioneer Steamship Co., Cleveland, Ohio, which was sunk in collision in the St. Clair River recently, has been raised by the Reid Wrecking Co., Sarnia, and taken to Port Huron, Mich., for overhaul and repairs.

The Dominion Public Works Department has completed the dredging of a channel from deep water in Sarnia Bay, St. Clair River, to the Dominion Salt

length 91.2 ft., breadth 18.3 ft., depth 8.8 ft.; tonnage, 99 gross, 65 register.

W. H. Evans, Montreal, is asking the Superior Court there to declare that he is the only lawful owner of an undivided seven-eighths interest in certain property at the corner of Craig St. and Victoria Square, Montreal, and a judicial sequestrator has been appointed for the Ogdensburg Coal & Towing Co., which has been ordered to give security for all petitioner's claims to the revenues from the property pending final judgment of the action.

It was announced from Cleveland, Ohio, July 24, that members of the Great Lakes sailors' union had decided to call a strike for July 28, on the ground that vessel owners had not granted the demands for better working conditions and increased wages. A statement issued by a vessel owner and member of the Lake Carriers' Association, declares that the working conditions were submitted to the U.S. Shipping Board in Sept., 1917, and the



Wooden cargo steamship, War Mohawk, immediately after launching by Quinlan & Robertson, Ltd., Limoilon, Quebec.

Co.'s wharf. The channel is 1,050 ft. long with a bottom width of 60 ft., and a depth of 15 ft. below zero of the gauge at Point Edward, which is 578.51 ft. above mean sea level, New York.

J. E. Lawrence, formerly paymaster for the Welland Canal, under the Department of Railways and Canals, was sentenced to imprisonment for 3 years, at St. Catharines, Ont., July 12, for the theft of about \$16,000 from the Dominion Government. The method adopted was that of padding the payrolls, and the defalcations extended over 25 years.

The U.S. Lake Survey reports the levels of the Great Lakes in feet above mean sea level, for June, as follows:—Superior, 602.10; Michigan and Huron, 581.97; St. Clair, 575.89; Erie, 572.53; Ontario, 247.01. Compared with the average June levels for the past ten years, Superior was 0.16 ft. below; Michigan and Huron 1.19 ft. above; Erie 0.42 ft. below, and Ontario 0.02 ft. below.

The steam tug Alex. Clark, registered at Collingwood, has been bought by the Canadian Stewart Co., and is being overhauled and remodelled by the Collingwood Shipbuilding Co., to make her suitable for ocean service. She was built at Collingwood in 1911, and is screw driven by engine of 29 n.h.p. Her dimensions are:

whole matter left in its hands. The matter of wages has been given considerable discussion by the Shipping Board, and on May 18, a wage scale was put into force for the sea coast, which is lower than the voluntary scale for the Great Lakes. The strike did not materialize, better counsels having prevailed.

Manitoba, Saskatchewan and Alberta.

The Dominion Public Works Department reports the following improvements by dredging in the Red River channel between Selkirk, Man., and Lake Winnipeg:—Selkirk repair slip—a cut 170 ft. long by 20 ft. wide on each side of the outer end of the boat repair slip, at Selkirk; Park Point—a curved cut 2,400 ft. long, the upper 1,789 ft. 80 ft. wide, the lower 611 ft. 40 ft. wide, around Park Point below the town, to improve the channel close to the west bank, following the curve of the point; Sugar Island Bar—a cut 951 ft. long by 40 ft. wide in the channel through the bar below Sugar Island; Selkirk slough—a cut 3,215 ft. long by 40 ft. wide to improve the channel to the wharves in the slough; Slough turning basin—a cut 488 ft. long by 40 ft. wide on the east side of the slough oppo-

site the government ship yard, to provide a turning basin; entrance to Middle Channel at Forks—a cut 1,753 ft. long by 140 ft. wide at the Forks to improve the main channel leading to the lake; easing of the bend into new channel—easing of the turn at the junction of middle and new channels by dredging 120 ft. in width off the point; back filling protection work, a cut 957 ft. long by 50 ft. wide between the breakwaters, close to the west one, the material deposited outside the west breakwater for back filling; deepening channel outside breakwaters—a cut 954 ft. long by 140 ft. wide immediately outside the breakwaters in the axis of the range lights; all this dredging has been done to a depth of 9 ft. below low water, which is 711 ft. above mean sea level at New York.

British Columbia and Pacific Coast.

The Border Line Transportation Co. is stated to have chartered the reinforced concrete barge built recently by the Inter-Ocean Barge & Transport Co., Seattle, Wash., with the intention of operating her in general freighting business between Seattle and Victoria and other B.C. ports. The barge has the following dimensions: length 116 ft., breadth 34.9 ft., depth 10 ft. The hull is divided into 8 water tight compartments, which can be used for carrying liquid cargo in bulk, and she has a deck cargo capacity of 550 tons. The steel reinforcing ranges from ½ in. to 1½ in. thick, and the sides, bottom and deck of the vessel are of concrete 3½ in. thick.

Fast Freight Service on New York Barge Canal.

Through freight service with all the commercial machinery common to railway freight service has been initiated by the U.S. Railroad Administration on the New York State Barge Canal, the operation of which the government took over some months ago. A triweekly fast freight carload and less-than-carload service has gone into effect between New York and Buffalo, serving Albany, Troy, Amsterdam, Little Falls, Utica, Rome, Syracuse, Rochester, Lockport, Tonawanda, Niagara Falls and Buffalo. Ten deck-loading power freighters and two covered barges were acquired to form the nucleus of a fleet. As traffic develops and demand for additional equipment arises, the service will be extended to other points and additional vessels acquired. Freight agents have been appointed and will be located at each of the above named ports.

Uniform bills of lading, naming all the conditions and liabilities accepted by rail lines, will be issued and freight will be accepted subject to the rules and regulations relative to ratings, packings, etc., that are prescribed by current classification. Tariffs have been issued naming class and commodity rates between all points to be served. The rates are the old railway rates, which are about 25% less than the present railway rates. Tariffs will also be issued naming joint rates with connecting carriers, both water and rail. For the present the new boat line will operate only between Albany and Buffalo, transfer being made at Albany to the Hudson River Line.

As a part of the new freight service the government has had built a 50 ft. spur at Troy, which connects the Boston & Maine Rd. tracks with the barge canal warehouse and dock. This is the first actual track connection between railway

and canal, and will permit the ready transfer of freight between these two carriers. The Railroad Administration is also building trestles at Ithaca on Lake Cayuga and Watkins on Lake Seneca, to be used in loading barges with coal from the accessible fields.

Mainly About Marine People.

Hon. A. K. Maclean, M.P. for Halifax, N.S., is acting Minister of Marine and Fisheries, during the absence in England of Hon. C. C. Ballantyne.

H. S. Carmichael, Passenger and Freight Manager, Canadian Pacific Ocean Services, Ltd., London, Eng., has been installed as Worshipful Master of Canada Lodge 3527 of the Freemasons.

Lieut.-Commander J. V. Forster, R.N. R., Marine Superintendent, Canadian Pacific Ocean Services, Ltd., Liverpool, Eng., has been given the Order of the British Empire.

Capt. J. M. Bales, deputy port warden, Montreal, is reported to have been appointed port warden, vice Capt. A. Reid, deceased. He has been in Montreal harbor service since May, 1899, and was born in Liverpool, Eng., in 1854. He was formerly in Elder, Dempster & Co.'s service on vessels plying between Montreal and South Africa.

Capt. A. A. Sears, who died at Victoria, B.C., July 6, aged 55, was a native of Sackville, N.B., and had been connected with the coasting service in British Columbia for the past 28 years. He was for some time in Canadian Pacific Navigation Co.'s service, and later with the Pacific Coast Steamship Co.

Hon. C. C. Ballantyne, Minister of Marine and Fisheries, arrived in England on July 8 to join Sir Robert Borden and other colleagues. Mrs. Ballantyne and family are spending some time at St. Andrews, N.B. A London cablegram of July 27 said that Mr. Ballantyne, with Sir Robert Borden, had had an important conference with Admiral Sir Rosslyn Wemyss and Admiral Hope.

A. E. Philp, who was given the Order of the British Empire recently, is chief engineer of the Canadian Pacific Ocean Services' s.s. *Empress of Britain*, and the senior chief engineer of the service. After serving the customary apprenticeship of seven years in a locomotive works in Glasgow, Scotland, he entered marine service with Elder, Dempster & Co., with whom he served in all engineering grades to that of chief. He passed to C.P.R. service when that company acquired the Beaver Line. He has had considerable experience of transport work, having taken part in it in connection with the Benin and Ashanti expeditions of 1895-96, and also during the South African war.

Standard Shipbuilding in China.—A press dispatch says that the British Government has contracted with the Shanghai Dock & Engineering Co. for the construction of three standardized steamships, each of 5,000 tons d.w. capacity. The engines, boilers, steam steering gears, windlasses, winches and other auxiliary machinery will be made in the company's workshops.

A Shipbuilding Record.—Workman, Clark & Company, Belfast, Ireland, are stated in a cablegram to have achieved a world's record in completing an 8,000 ton standard steamship in 15 days after she was launched. The vessel was launched at 9 a.m. By 8 p.m. the same day all her engines and boilers were in position.

The Limitations of Lake Built Vessels for Ocean Service.

It has always been considered that the shipbuilding yards on the Great Lakes, are at a great disadvantage with regard to the construction of vessels suitable for ocean service, owing to the necessary limitation in size, to allow of their passage through the connecting canals. This situation has not been lost sight of, and the construction of the new Welland Ship Canal, work on which is temporarily suspended, is a good step in the right direction. Unfortunately the cause for the suspension of that work, and the cause for the renewed demand for an enlarged outlet to the ocean, are one and the same, namely, the war. Some opinions have been expressed to the effect that the Dominion Government should not have suspended the work at all, but should have pushed it along, as an urgent measure. Undoubtedly, if the canal had been completed, the passage of lake vessels to the ocean to relieve the vessel shortage there, would have been hastened considerably. The only other means which could be employed to get the vessels into this urgent and necessary service, are those adopted, namely, that of cutting the vessels in two and rejoining them after the passage of the canals.

Numerous suggestions have been made regarding plans to overcome the difficulties and loss of time entailed by this procedure, and the following paragraph has recently appeared in the daily press:—"Lake boats built this year will carry sufficient steel with them through the Welland Canal to enable another section to be built into them when they reach the coast." We have not been able to obtain any confirmation of this method of obtaining larger vessels from lake shipyards, but if such a proposal is to be carried out, we do not quite see the advantage to be gained. To build in another section at the coast, would entail the cutting of the vessel in two, either at the coast, or on the lakes. If the vessel is to be cut in two, it would certainly be better to have it done on the lakes, where the vessel is built. It then follows that the vessel might as well be made the larger size at first, sent through the canals in two parts and rejoined after passing through the St. Lawrence Canals, thus leaving the situation practically as at present.

Another suggestion is the construction of the hull in two separate fore and aft sections, and joined together by a form of sponson on each side, thus making the completed vessel, a ship of four compartments. It is claimed that such a vessel could be built on the lakes and taken to tidewater without difficulty, and that the fish-jointing, or overlapping of the sponsons would make a much stronger vessel than an ordinary lake vessel, cut in two and re-joined. A plan of a vessel of this type has been prepared, showing one of 500 ft. long over all, 480 ft. long on the water line, 72 ft. beam. The two sections of the vessel are 250 ft. long each, and the sponson attachments are each 250 ft. long by 14¼ ft. wide by 32 ft. deep.

Coals Company, Ltd., has been incorporated under the Dominion Companies Act, with \$1,500,000 authorized capital and office at Montreal, to carry on a wholesale coal, wood and fuel business, and for such purpose to own and operate steam and other vessels, railways, coal handling plants, etc., and to carry on a general navigation and transportation business.

Shipbuilding Information and Its Value.

It has never been Canadian Railway and Marine World's policy to utilize space which should be devoted to other purposes, for sounding its own praises, or calling attention to its good points, but occasionally it is quite legitimate to do so. Since the awakening of Canada to the realization of the opportunities offered for the building of ships, we have expended a great deal of time and energy in obtaining the necessary information to enable our readers to keep pace with the great expansion of the trade throughout the Dominion. This information has been collected from various sources, and in almost every case is officially confirmed. Where it is not possible to obtain confirmation before the matter is published, it is given with reserve, and again dealt with when further details are obtained. We believe that in placing information before our readers, it is a duty we owe to them, as well as to ourselves, to see that it is correct, and on this policy has been built the reputation of the past 20 years.

The importance of the expansion of the shipbuilding industry cannot be emphasized too much, nor can the necessity for the allied industries keeping in close touch with the actual situation as it develops. To enable manufacturers to anticipate and meet the demands arising from this expansion, it is necessary that they should have easy access to reliable information concerning the industry, and for this purpose we collect and classify the information in condensed and easily read form, month by month, so that in following through our various issues, the reader finds a complete consecutive record of the progress made.

We have been complimented several times recently on the character and form of the shipbuilding information we publish, and on looking over our pages for the past twelve months, we feel that we are above comparison. The same attention to detail is being continued, and readers may rest assured that the information placed before them can be relied on as correct.

Manufactured Shipbuilding News.

The following Canadian Press Dispatch, dated Quebec, Que., July 17, was published by a number of daily papers during July:

"With a capital of \$5,000,000, a new shipbuilding concern has been formed, and will operate one of the largest shipyards in America on the shores of the St. Lawrence, opposite Quebec City. The new concern will take in a number of actually existing firms, among which are some Ontario companies. The new syndicate will comprise the Federal Shipbuilding Co. of Sarnia, the Dominion Shipbuilding Co. of Collingwood, and Dussault & Hutchison of Levis, and a number of old country French capitalists. The firm will build steel vessels for the French Government, and yesterday the building of the docks and yards was started. The Federal and Dominion Shipbuilding Companies will cease building ships in Ontario."

Canadian Railway and Marine World for July stated that W. H. Hutchinson, of Baldry, Yerburch & Hutchinson, Ltd., contractors, St. Catharines, Ont., and President of the National Shipbuilding Co., Ltd., Goderich, Ont., and H. Dussault, President, General Public Enterprises Co., Levis, Que., were among the promoters of a company to establish a shipbuilding plant at Benson's Cove, New Liverpool, in St. Romuald Parish, Que., the site selected being on the south side of the St. Lawrence River, near the Quebec Bridge.

At the time of writing no official information is at hand as to the incorporation of a company, as indicated in the dispatch. Of the companies named as likely to com-

prise the new syndicate, we have no information as to the Federal Shipbuilding Co. of Sarnia, and may point out that there is no Dominion Shipbuilding Co. at Collingwood. The Dominion Shipbuilding Co., Ltd., which obtained an Ontario charter with a capital of \$1,000,000, some time ago, and which has now been incorporated with a Dominion charter and a capital of \$3,000,000, is building a large shipbuilding plant at Toronto, and an officer of the company stated, July 17, that his company was in no way connected with the proposals mentioned.

W. H. Hutchinson, of Baldry, Yerburch & Hutchinson, Ltd., was in charge of the contract held by that company, for a section of the Welland ship canal, and on the closing down of that work, acquired the Doty engine works at Goderich, Ont., and incorporated the National Shipbuilding Co. The company has not built any vessels, and the plant at Goderich is apparently only engaged on engine work. In conjunction with H. Dussault, he purchased the Dominion Government dredge Galveston recently, and intends converting it into a cargo steamship for Atlantic service. The General Public Enterprises, Co., of which H. Dussault is President, owns a number of dredges and contractor vessels.

U.S. Shipbuilding Notes.

J. H. Rosseter, Vice President and General Manager, Pacific Mail Steamship Co., San Francisco, has been appointed Director of Operations of the U.S. Shipping Board.

A total of 67 wooden steamships, with an aggregate tonnage of 242,200, was added to the U.S. merchant marine up to June 1, according to figures prepared by the Division of Wood Ship Construction. Twenty-two of these are of the Hough type, 28 Ferris, 16 of the Emergency Fleet Corporation's own design and 1 of the McCormick type.

Merchant vessels built in the U.S. during the year ended June 30, as officially returned to the Bureau of Navigation, numbered 1,622, or 1,430,793 gross tons, giving the U.S. a merchant marine of about 10,000,000 gross tons.

The U.S. flag has been raised over the first of 8 former German steamers which were seized some time ago by the Uruguayan Government. This is the Artigas, once known as the Weygand, a vessel of 8,800 d.w. tons. The other German ships that will shortly follow the Artigas into the U.S. merchant marine will increase the new tonnage thereof by 62,000.

Counting in 2 steamships which stuck on their ways, 11 which had been held up by a sudden freshet on the Columbia River and whose crews had stood by until midnight hoping the flood would subside in time to get the ships overboard on July 4, and the 8 which, through tidal or other causes, had been launched on the eve of July 4, there were launched on that day 95 ships with an approximate dead-weight tonnage of 474,464 tons. The list comprises 42 steel ships of 287,464 d.w. tons and 53 wooden steamships of 187,000 d.w. tons.

Following the conclusion of an arrangement with the Kiangnan Dock & Engine Co. of Shanghai, China, whereby that company is to build 120,000 tons of steel steamships for the U.S. Shipping Board, contracts for 30 additional steel cargo steamships had been awarded to Japanese shipyards. The U.S. Shipping Board had already chartered 150,000 tons of shipping from Japan and purchased another 127,000 tons. Some of the ships will be

equipped with guns and gun crews and put immediately into the overseas service to carry men and supplies to France. Others will be used in the coastwise and South American trades. Total contracts now let to Japanese shipbuilders provide for 380,000 tons of shipping, including 50 cargo carriers. These will cost approximately \$78,000,000, of which about \$20,000,000 has been expended. The Shipping Board has permitted Japan to obtain 100,000 tons of steel plates, and will now provide 35,000 tons for this new construction.

Steamboats in the Far Northwest.

The following item appeared in Canadian Railway and Marine World for July:—

"The Peace River Development Co.'s steamboats are the only ones trading from Peace River Landing to Herschel Island, 2,000 miles, this season. The route is not a continuous one. The steamers connect with the Edmonton, Dunvegan & British Columbia Ry., and the first piece of navigation extends to Vermilion Chutes, whence a motor road is being completed to Lower Peace River, where there is steamboat connection to Chipewyan on Athabaska Lake. From this point there is a steamboat route to McMurray on Athabaska River, which is the terminal point of the Alberta & Great Waterways Ry., extending to Edmonton. The tourist possibilities of this area are being developed by the railway company."

A correspondent writes pointing out that the first sentence of the item is erroneous, as the Hudson's Bay Co. is operating its steamboats north of Vermilion Chutes as in former years. The Peace River Development Corporation operates on Peace River from Hudson's Hope, on the boundary between Alberta and British Columbia, to Vermilion Chutes. At this point freight and passenger traffic is transferred to the Hudson's Bay Co.'s steamboat McMurray and carried on to Fort Fitzgerald. After crossing Smiths Portage, which extends from Fort Fitzgerald to Fort Smith, freight and passengers are taken on by the Hudson's Bay Co.'s steamboat McKenzie River to Fort McPherson, at the head of the delta of the Mackenzie River.

The Edmonton, Dunvegan & British Columbia Ry., connects Edmonton with the Peace River navigation by its Central Canada Ry. branch, from McLennan to Peace River Landing.

Warning to Navigators in Welland Canal.—The attention of masters of vessels is drawn to the fact that the s.s. Wiley M. Egan, loaded and down bound, sank in the Welland Canal, immediately north of the Michigan Central Rd. swing bridge, south of Welland, after having struck the southerly rest pier, July 15. Her stern rests on the eastern bank and her bow points somewhat out into the channel. She is tied up as securely as possible, but there is imminent danger of her sliding into the channel and blocking navigation. Vessels passing her must do so at low speed and exercise great caution, otherwise the maximum penalty provided under the canal rules will be imposed. Patrols will enforce this regulation.

The J. H. Price Shipbuilding Corporation, headed by J. H. Price, President, Cameron-Genoa Mills Shipbuilders, Ltd., Victoria, B.C., is reported to have purchased the Sandstrom Shipbuilding Co.'s plant at Meadow Point, Seattle, Wash., and to be building wooden motor ships.

Dominion Canal Statistics for 1917.

The total traffic through Canadian canals during the navigation season of 1917 was 22,238,935 tons, a decrease of 1,344,556 tons from 1916. The distribution of the traffic through the various canals, with increases or decreases, was as follows:—

	tons.	Increase.	Decrease.
Sault Ste. Marie ..	15,447,092	.....	1,366,557
Welland ..	2,490,542	.....	54,422
St. Lawrence ..	3,391,144	23,080	.....
Chambly ..	434,818	35,841	.....
St. Peters ..	62,254	52,625	.....

To Montreal—	1915.	1916.	1917.
A ton per mile.....	0.132c	0.205c	0.263c
A bush.....	4.99c	7.55c	9.78c
A ton ..	\$1.66	\$2.52	\$3.26
To Georgian Bay—			
A ton per mile	0.282c	0.264c	0.270c
A bush.	3.54c	4.10c	4.25c
A ton ..	\$1.18	\$1.37	\$1.42
To other Canadian ports—			
A ton per mile	0.124c	0.169c	0.185c
A bush.	2.84c	3.68c	4.18c
A ton ..	94.80c	\$1.22	\$1.39
To Buffalo—			
A ton per mile	0.159c	0.159c	0.196c
A bush.	3.97c	4.27c	5.000c
A ton ..	\$1.32	\$1.42	\$1.67

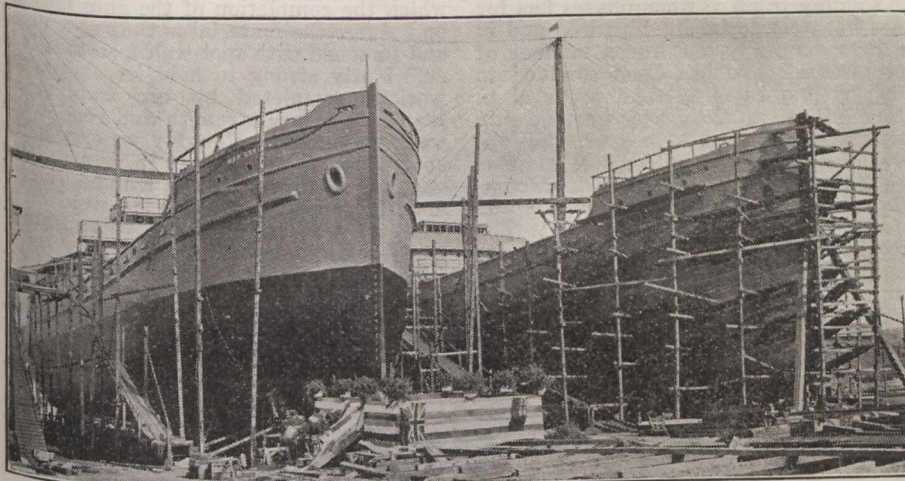
In order that the bearing of these rates

British Colonies Transportation Company, Limited.

This company has been incorporated under the Dominion Companies Act with an authorized capital of \$750,000, divided into \$250,000 of cumulative preference stock bearing interest at 8%, and redeemable at 110, and \$400,000 of common stock. An issue of \$230,000 of preference has been placed on the market, with a bonus of 30% of common stock. The charter provides that 10% of the net earnings shall be used annually in the redemption and cancellation of preference shares, and the prospectus states that it is estimated that in about four years, one half of the preference shares will have been redeemed through this sinking fund. The first preference dividend is to be paid Nov. 1, and quarterly thereafter (of course, if earned).

The prospectus also states that it is estimated that on the basis of contracts which can now be secured, the earnings for the first year will approximate \$300,000. Thus, after providing for interest and sinking fund on \$200,000 of bonds which are to be issued in part payment of vessels, and for the preference dividend, and setting aside the amount required for redeeming preference shares, the balance of earnings should show approximately 30% on the common stock. The bonds are redeemable annually over four years and the amount to be paid off in the first two years should reduce the bonded indebtedness nearly 75%. It is also stated that owing to the shortage of tonnage and the large amount of freight awaiting shipment to and from South Africa and other southern ports, a steady business is assured at very remunerative rates.

The company has three wooden ships under construction, and these are now nearing completion. It is expected that two of them will be delivered during August, and the third in September. The first two have a carrying capacity of about 1,000 tons each, and the third, about 2,000 tons. The smaller vessels will be three masted, and of the following dimensions:—length over all 171 ft., beam 35



Two wooden cargo steamships for British Government, in Cameron-Genoa Mills Shipbuilders, Ltd., Yard, Point Ellice, Victoria, B.C.

The s.s. War Skeena to the left, just prior to launching, and the s.s. War Stikine to the right.

Murray ..	57,603	10,923	.....
Ottawa ..	214,835	.....	22,816
Rideau ..	84,549	.....	20,881
Trent ..	48,924	3,915	.....
St. Andrews ..	7,175	.....	6,264
Total ..	22,238,935	126,384	1,470,940

The tonnage for 1917 was divided as follows:—Canada, 5,964,369; U.S., 16,274,566. It covered the following classes of commodities:—

Agricultural products ..	3,827,692 tons
Animal products ..	13,439 tons
Manufactures ..	813,158 tons
Forest products ..	1,170,402 tons
Mine products ..	16,410,856 tons

Total .. 22,238,935 tons

The volume of Canadian wheat carried through the Canadian canal at Sault Ste. Marie in 1917, was 60,551,243 bush., against 82,807,342 in 1916; and the volume of Canadian wheat carried through the U.S. canal, during the same period, was 98,023,019 bush., making a total of 158,574,262. This was distributed between ports as follows:—

From Fort William and Port Arthur	Bushels.
To Montreal ..	1,280,170
To Georgian Bay ports ..	52,453,042
To other Canadian ports ..	31,369,487
To Buffalo, N.Y.	72,872,692

From Duluth, Minn., to Montreal 157,975,391

Total .. 158,574,262

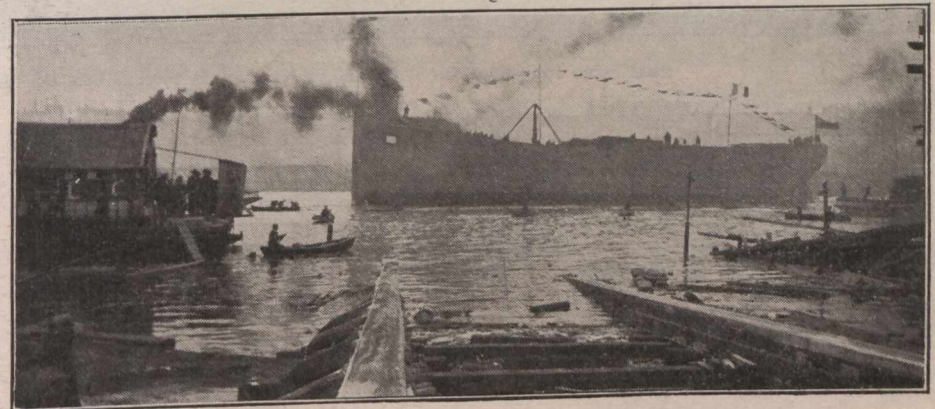
In addition to the foregoing, 13,230,859 bush. of Canadian wheat passed through in the form of flour, making a total of 171,805,112 bush. of Canadian wheat waterborne.

Carriers by water obtained exceptionally high rates on wheat, during 1917, which may be taken as indicating heavy tolls for all commodities. The rate over the different routes for 1915, 1916 and 1917, all out of Fort William and Port Arthur, were as follows:—

may be understood properly in their relationship to gross earnings, allowance should be made for the following charges per bushel paid by shipowners on all cargoes of wheat between Fort William and Montreal:—

Clearing house at Fort William.....	0.01 to \$.03c
Trimmers at Fort William	0.06c
Elevation at Montreal	0.30
Showelling at Montreal	0.20c
	0.59c

To Port Colborne the average deduc-



Wooden cargo steamship, War Seneca, for British Government. Immediately after launching by Quinlan & Robertson, Ltd., at Limoilou, Quebec.

tions would be 0.44c a bush.; to Georgian Bay ports, 0.38c, and to Buffalo, 0.41. The total rates from Duluth to Montreal were substantially the same as from Port Arthur and Fort William to Montreal.

A considerable volume of other grains passed through the Sault Canals, the actual figures being as follows:—

Oats ..	1916 bush.	1917 bush.
Barley ..	57,743,636	37,014,644
Flax seed ..	8,679,607	5,149,725
	4,931,569	5,073,760
Total ..	71,354,812	47,238,129

ft., depth of hold 12 ft. 8 in. The larger vessel will be four masted, and 216 ft. long over all, 39 ft. beam and 18½ ft. depth of hold. The vessels will be equipped with oil engines for handling pumps, cargoes, sails and anchors, and generating electricity for lighting. They are being built to Lloyd's highest classification, with a rating for 13 years. The three vessels are valued at over \$450,000. They are being built in the Maritime Provinces.

The company's head office is at St. John, N.B., and the directors for the cur-

rent year are:—Senator Crosby, Halifax, N.S.; F. W. Sumner, Moncton, N.B.; J. A. McDonald, Amherst, N.S.; G. Douglas, Amherst, N.S.; J. F. M. Stewart and C. E. A. Goldman, Toronto.

Licenses for Sailing Vessels.

The following order in council was passed May 11, providing regulations for sailing ships leaving Canadian ports:—

1. No sailing ship registered in Canada shall, after May 11, 1918, start on or make any voyage other than a voyage from one port in Canada to another port in Canada, unless a license therefor has been granted to or in favor of the owners or charterers of such sailing ship.

2. The committee of persons appointed by the Minister of Marine and Fisheries under the provisions of the order in council of March 11, 1916, respecting the licensing of steamships exceeding 500 tons gross tonnage, shall have power to grant the license required by the next preceding paragraph. Licenses may be general with reference to any such sailing ship and its voyages, or may be special with reference to a particular voyage.

3. The owners, charterers, and master of any sailing ship violating the provi-

Test of Electric Welding for Shipbuilding.

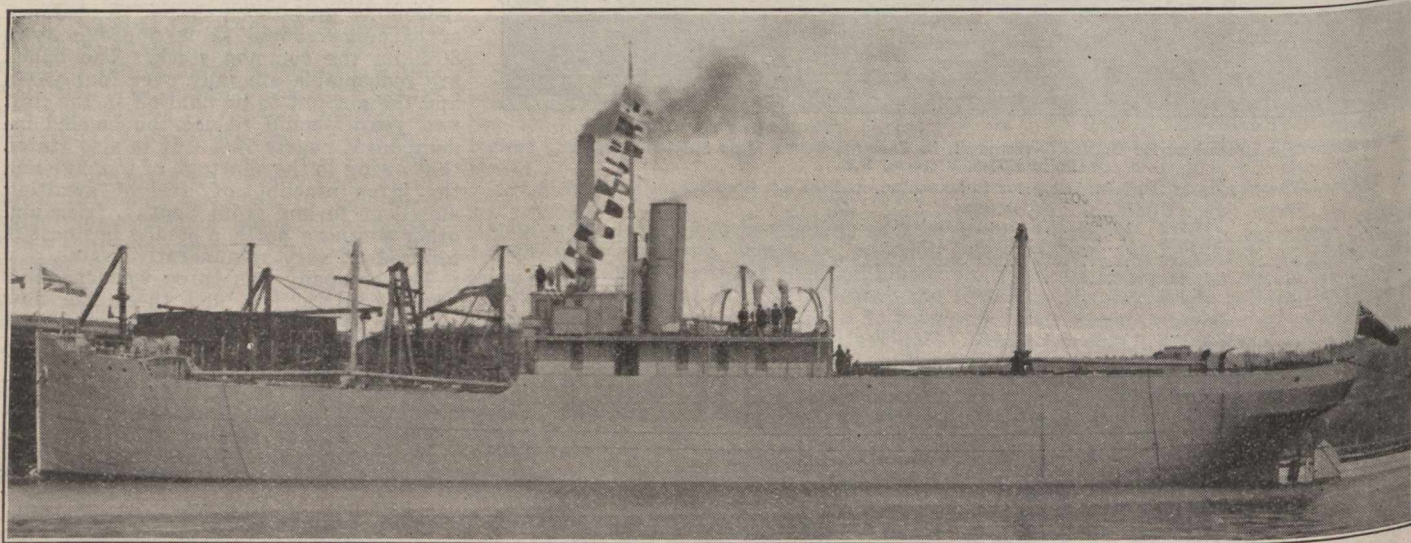
A report of the purposes and possible benefits of the ship welding test now being conducted by the United States Emergency Fleet Corporation, under the direction of A. J. Mason, has been made to C. Piez, Vice President of the corporation. Following are the principal portions of the report:—

The committee, of which Prof. C. A. Adams is chairman, has been enlarged and is active in bringing to bear all the knowledge and apparatus available. Electric welding in its various phases has for years been employed in shipyards and in the arts generally, but for a number of reasons the work has been confined to odd jobs and repairs. The proposal to extend its use to the major part of ship construction has met with gratifying approval from the shipbuilder. It remains for us through this large test to demonstrate its economy in time and money and its adequacy to build a staunch ship. The purpose of this test is to demonstrate these advantages—to do it in such a way that all may see and contribute, and finally to test the structure itself so completely that there will follow a heart-

pieces to fit on the ways. There lies in the above items an excellent likelihood to save a month's time in construction and a saving of no less than \$40 a ton in the cost of steel structure, at least \$100,000 a hull on a 10,000-ton vessel.

Briefly the programme is to assemble a hull rapidly by spot welding, tacking the ship together much as a tailor bastes his work in assembling a suit of clothes. The structure then becomes a house favorable for work in all weather, and at night, in which the completion of the ship may go on. After the material is thus assembled and fastened with spot welds, so that it is sufficiently strong to hold its shape, the work is completed by arc welding all seams, to insure strength and render the work watertight. Roughly we expect the spot welds to be about 10 in. apart. One quarter of the structure will be riveted and the other three fourths welded, so that the tests of strength will afford a basis of comparison.

Electric welding offers a great field for lightening a ship. In this design various views of this opportunity will be tried. The field here is very great—ultimately



Steel cargo steamship War Bee, built by Nova Scotia Steel & Coal Co. for British Government.

sions of these regulations shall be guilty of an offence and shall be liable upon summary conviction to a fine not exceeding \$5,000, and the sailing ship with respect to which such offence was committed shall be subject to forfeiture.

The order in council, P.C. 1184, passed Apr. 30, 1917, has been cancelled.

The committee referred to in the above order, consists of the Deputy Minister of Marine, chairman; Deputy Minister of Naval Service, the Deputy Minister of Trade and Commerce and the Commissioner of Customs.

The Troja Steamship Co., Ltd., the incorporation of which, with office in Montreal, was announced in our last issue, was formed chiefly for the purpose of taking out a charter for the operation of the s.s. Troja, built recently by Thor Iron Works, Ltd., Toronto, for Norwegian interests. Reports indicate that the vessel is to be requisitioned by the Dominion Government and placed in service. She was built originally under an order from James Playfair, President and General Manager, Great Lakes Transportation Co., Midland, Ont., and sold subsequently to a Norwegian party resident in the U.S.

whole and unanimous belief in the method. The test itself will take the form of building part of a hull at the Federal Shipbuilding Co.'s plant at Newark.

It has been necessary to design a ship to suit the material available, without encroaching on that needed for the regular ship construction at the plant. This has been done. The hull will have the outline, dimensions and strength conforming to the ships the Federal Co. is building. It has been thought best to conduct the work at a site apart from the shipways, so as not to interfere with that programme.

A 10,000-ton ship, costing \$2,000,000, now costs but \$70,000 to rivet. It must be plain that if electric welding only promises to modify this amount there would be no very substantial gain. Splendid benefits we all feel do offer themselves in the possible change in the whole regime of shipbuilding. Our test has in view abolishing or greatly diminishing: 1. The railway journey from rolling mill to fabricating plant when the latter is not at the shipyard. 2. The template-makers' work. 3. The markers' work. 4. The punching. 5. Much of the work of the fitters and bolters who flog and pull the

10% of the steel may be eliminated. One derrick will bring material and the other derrick will support the spot-welding yoke, whose function is to tack the material together, fastening the plates either to the frames or to the adjoining plates. If one visits the ways at any shipyard it becomes obvious that at any time only a portion of the men are for the moment at work. This is unavoidable under the present system. We hope to establish a plan of assembling with more continuity and less waiting of one another. Only a fifth of the men on a hull are riveters. The spot-weld yoke will forthwith pull the parts to place with a much vigorous agency than flogging and pulling to place by numerous bolts, now done by the other four-fifths.

The problems of fitting in place the parts of a hull are almost wholly problems arising out of the necessity to make a number of little holes in a plate made by one man at one time and place match a number of little holes made by another man at another time and another place. Once all holes are left out of the material all parts fit. The creeping and kindred problems so perplexing to the shipbuilder disappear. Every plate becomes a closer.

Every plate justifies itself.

An adequate system of testing the work when done is under consideration. The primary test will consist of filling the hull with water and shifting the points of support under continual and close scrutiny. As one quarter of the whole will be riveted in the normal manner, there will be always a gauge of comparison with that portion which is welded. Likewise there will be a chance for comparison of the two forms when subjected to abuse by pumping with rams and in various other ways.

other shipping facilities which the Government is endeavoring to establish at Halifax.

While it is natural that Halifax citizens should feel somewhat nervous regarding the handling of vessels containing high explosives within the harbor, it should be remembered that these vessels sail into ports in Europe, which are most crowded, with less room for the handling of vessels, and therefore much more risk of accident, and yet without casualty. It is evident that if no vessels containing high explosives were allowed to enter Halifax har-

Merchant Service Dress.

A majority of a committee appointed by the British Board of Trade has recommended a national standard uniform for the British mercantile marine, as follows:

The officer's cap to be of blue cloth, and the badge oval on a dark blue background, with a center medallion bearing an anchor. Embroidered gilt leaves to surround the medallion, which would be surmounted by a naval crown. The King, it is suggested, should be asked to sanction the naval crown for the exclusive use of the mercantile marine, as the Admiralty is willing to transfer its use to them.

Right to wear the uniform to be limited to holders of Board of Trade certificates and to surgeons, pursers and cadets or apprentices, as well as uncertificated junior officers.

It is argued by two members who sign minority reports that the change cannot be carried out during the war, and that after peace is declared officers will prefer the old companies' uniforms.

Requisition Charter Rates on U.S. Vessels.

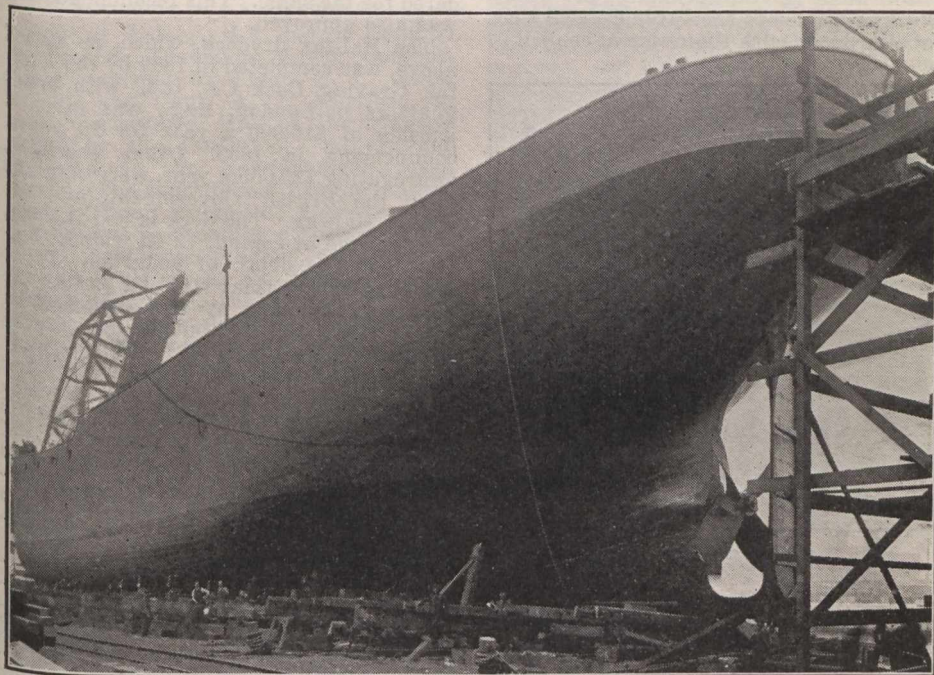
The U.S. Shipping Board has issued an order providing that the "bare boat" charter rate for all steamships under the U.S. flag, requisitioned under Act of Congress of June 15, 1917, shall be, as follows:—

Cargo ships, including tankers, up to and including 11 knots, per deadweight ton per month	\$3.65
For each knot or part of a knot over 11 knots . . . . .	.50
Passenger ships, up to and including 11 knots per ton gross register per month	\$5.25
For each knot or part of a knot over 11 knots . . . . .	.50

These rates apply to all such vessels now operating under the "bare boat" form of requisition. Those operating under the "time form" of requisition charter are not affected.

Electric Welding for Shipbuilding.

Canadian Railway and Marine World for June mentioned some experiments which had been authorized in the U.S. respecting the extensive use of various forms of arc welding for shipbuilding purposes. Advices from England state that the first

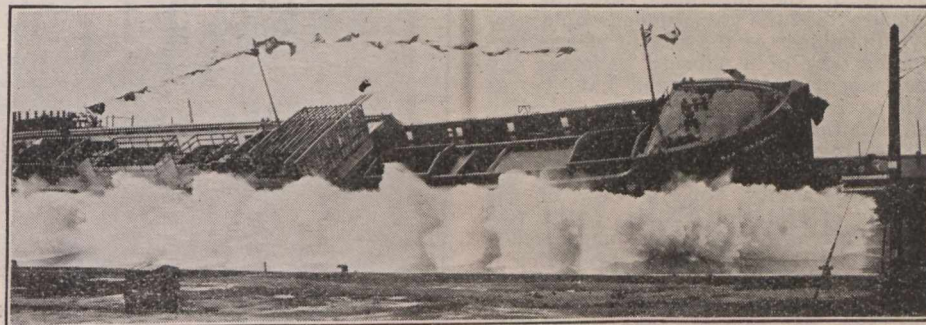


Wooden cargo steamship War Ontario, for British Government, just prior to launching by Toronto Shipbuilding Co.

Munition Vessels and Halifax Harbor.

The Mayor of Halifax complained to the Minister of Marine recently that vessels loaded with high explosives were constantly entering and leaving Halifax harbor, and requesting that in view of the disastrous explosion of Dec. 6, the Naval Service Department be ordered not to permit any more vessels so loaded to enter the harbor. Subsequent to the disaster mentioned, the then mayor communicated with the Minister of Marine to the same effect, and received a reply indicating that his communication was virtually a request that no convoys or munition ships should thereafter use the port of Halifax, and doubting whether he realized the inevitable consequences that would result from the policy he advocated. It was pointed out that the strategical position of Halifax plays an important part in the prosecution of the war, and the view that no munition ships should be laden or unladen at any pier in the port would undoubtedly retard very seriously its successful conclusion, and have a considerable effect on the future of the port. The Government's policy was clearly stated that every possible precaution must be taken to ensure safety and to prevent any danger or disaster from munition or other ships entering the port, such precautions of course being equally essential in the lading and unloading of dangerous cargoes. If the request were acceded to, it would mean the removal of the Atlantic naval base from Halifax, and the building up at some other port of the repair and

bor, traffic there would cease. The disaster of December, 1917, was of course a lamentable one, but it must be remembered that it was the result, chiefly, of a disregard of rules and regulations provided for the safeguarding of the port, and therefore not an inevitable corollary of such traffic using the port. No doubt, with the extra precautions being taken there, and the more efficient superintend-



Launching of wooden cargo steamship War Ontario, by Toronto Shipbuilding Co.

ence of the port and of the handling of vessels generally, there is little room for fear of any repetition of the disaster, and it is possible that the request for the removal of that traffic will not be persisted in. The projects at present in view for the development of Halifax are such as to give those immediately concerned every hope in the future of the port and nothing should be done derogatory to the port's interests, nor which would render nugatory the efforts for its rehabilitation.

steel vessel built without rivets, so far as known, has just been launched on the south coast there, the plates being fused together by electric welding in one process. No details have been received, but it is stated that the U.S. Shipping Board has kept in close touch with the experiments. Electric Welding & Shipbuilding Co. of Canada, Ltd., was incorporated recently at Montreal to carry on shipbuilding and to use electric and other welding processes.

Halifax Drydock and Shipbuilding Plant.

Canadian Railway and Marine World for July contained all the particulars then available in reference to the shipbuilding plant to be built at Halifax, N.S., by Halifax Shipbuilders, Ltd., since which the following additional information has been obtained:—

On May 24 the Minister of Public Works reported to the Privy Council as follows:—In the disastrous explosion of a munitions ship in Halifax harbor on Dec. 6, 1917, the dry dock which was built by the Halifax Graving Dock Co., Ltd.,

for the expropriation and for the direction and control, for reasons declared to arise out of the present war, of the business, property and rights of, or connected with the operations of the dry dock, and that the question of compensation for the property, etc., be submitted to the Exchequer Court for adjudication. This report and recommendation was approved by the Privy Council on May 27.

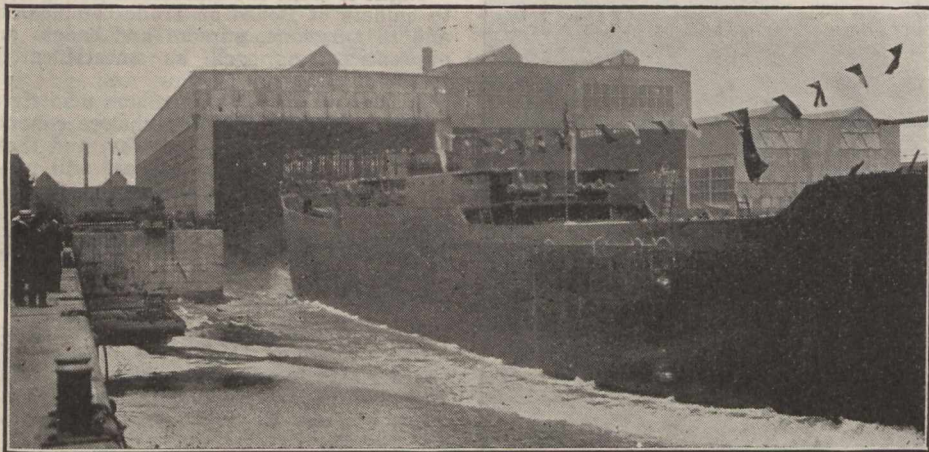
On June 4, the Minister of Public Works reported to the Privy Council that, in accordance with the order in council of

the Halifax drydock property and plant to the company for one year at a rental of \$62,500, the company to pay all taxes, etc., and to agree to purchase the drydock property and plant outright at any time during the term of the lease for \$1,250,000.

On June 24, the Minister of Public Works reported to the Privy Council that it was necessary for the company's purposes that a parcel of land in the center of the site should also be expropriated, and that \$11,484, which he considered a fair and reasonable compensation, be tendered for the same. This recommendation was also approved.

The Halifax drydock, which, as stated above, was completed in 1889 by the Halifax Graving Dock Co., Ltd., with headquarters in London, Eng., was given a subsidy of \$10,000 a year for 20 years, commencing in 1890. Other subsidies, aggregating \$20,000 a year, were obtained from the British Government and the city of Halifax. The dock is 585 ft. long, 102 ft. wide at coping, 72 ft. wide at bottom, and the depth of water on sill at ordinary spring tides is 30 ft. After the dock was wrecked by the explosion on Dec. 6, 1917, the Dominion Public Works Department took over the work of repairing and reconstructing it, the work being done directly by the department, which up to May 29, had expended about \$60,000 thereon, under the superintendence of Alex. McMurray, engineer in charge. As soon as arrangements were made to expropriate the property and lease it to Halifax Shipbuilders, Ltd., the department discontinued work on it.

Tenders were received by Halifax Shipbuilders, Ltd., to July 3, for work connected with the establishment of the shipbuilding yard and covering the piling and grading of three shipways, each 530 ft. long; the excavating, filling and grading of the shipyard for buildings, tracks and storage; excavation for Canadian Government Railways relocation and grading, track laying and ballasting same, equal to about a mile of double track railway; construction of 580 ft. of concrete sea wall and back filling same; construction

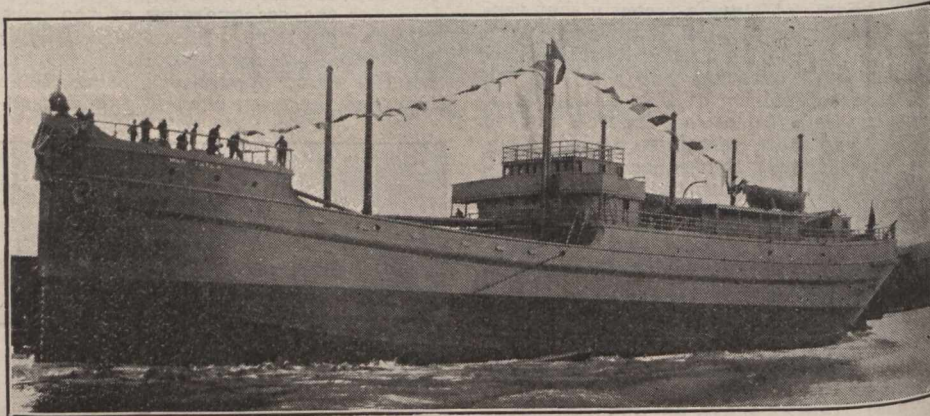


Launching of steel cargo steamship War Duchess, for British Government, by Canadian Vickers, Ltd.

and completed in 1889, was badly damaged and the repair shops and plant connected therewith were practically destroyed. In view of the great importance of Halifax as a naval base, and of the fact that the port is very largely used by war ships and war craft of all kinds and by the allied governments' transports, and also as a rendezvous for ships needing convoy, it is urgently necessary for the purposes of the war that all facilities for the repairing of ships should be effectively available with the least possible delay. In order to attain this object, an agreement was entered into with the owners of the dock, in which they agreed to proceed with the reconstruction of the dock and to furnish \$111,000, which was the amount of the insurance, towards the cost, provided the government would supply the balance of the cost of reconstruction by way of a subsidy, relieving the government of any alleged liability, as well as responsibility for the operation and maintenance of the dock.

The progress made by the company in the reconstruction of the dock has not been satisfactory and in view of the urgency of restoring Halifax to its former status as a naval base and rendezvous during the war, and of preparing it to meet the greatly increased needs of shipping after the war, it is necessary that the government take immediate measures to enter into possession of the dock at once and to proceed with its reconstruction. From reliable information it would seem that \$1,100,000 is a fair estimate of the value of the dock as it stands at present, and the Minister recommended that authority be given to offer this sum to the Halifax Graving Dock Co. for the property as it stands at present, including all work of reconstruction done up to the present, and that if this offer is refused, authority be granted, pursuant to the powers conferred by the War Measures Act, 1914, and all other powers vested in the Governor in council,

May 27, the drydock, etc., had been expropriated and vested in the Crown. He further reported as follows: "The Halifax Shipyards, Ltd., has been formed to carry on shipbuilding and repairing on a large and modern scale, and intends proceeding at once with the erection of the necessary plant and equipment, on which it contemplates an expenditure of about \$3,000,000. The company has acquired the property immediately adjoining the drydock, known as the Acadia Sugar Refinery



Wooden cargo steamship War Tatla, built by Western Canada Shipyards, Ltd., Vancouver, B.C.

property, where three shipbuilding berths will be laid down, upon which steel ships of approximately 10,000 tons may be constructed. The first of these, the largest ever built in Canada, will be ready for service inside of 15 months. It is considered advisable, under existing circumstances, when the provision of additional tonnage is so urgent and important in the public interest, to lease the property to the Halifax Shipbuilders, Ltd., to be operated by it in connection with its new enterprise. The Minister therefore recommended that authority be given to lease

of reinforced concrete retaining wall along the right of way of the railway relocation, and the extensions to sewers, water mains, etc. The work will require approximately 270,000 cu. yds. of earth and rock, dry excavation, and 20,000 cu. yds. of concrete. It was stated subsequently that the contract has been awarded to the Bedford Construction Co., successors to Cavicchi & Pegano, general contractors, who were to commence work immediately, and that it was anticipated that the first of three shipbuilding berths will be completed within four months.

The Minister of Marine has, we are officially advised, agreed to give the company an order for three steel cargo steamships of approximately 10,000 tons d.w. capacity each, when the yard is ready to start work.

Wreck Commissioner's Enquiries and Judgments.

Enquiries have been held recently into the following casualties, and judgments delivered:—

Stranding of s.s. Hochelaga.

Held at Sydney, N.S., before Capt. L. A. Demers, Dominion Wreck Commissioner, assisted by Lieut. H. C. Owen, R.N.R., and Capt. A. J. Morrison, as nautical assessors. The s.s. Hochelaga is owned by the Dominion Coal Co. and grounded on the Newfoundland coast, June 6. The court found that the master, George Tudor, committed a grave error of judgment in assuming a position which he could not exactly define, owing to atmospheric conditions and the absence of a log to determine the distance run, the log having been lost on the previous night. From the loss of the log he presumed to establish the speed of the ves-

overtaken by fog, and for not stopping the vessel, instead of merely stopping the engines, just prior to the stranding, and was reprimanded very severely and cautioned to exercise all prudence in future, and not assume that because previous voyages were effected successfully, the same results must always be expected. The court recommended that it be made an inflexible rule that the master, or the company, issue written and printed instructions that the officers on watch be obliged to take observations of whatsoever nature and register same as soon as possible, and that the navigation of the vessel should not be a one-man occupation, but one in which all officers are interested, and they should be called upon to check each other's calculations as to compasses, charts, speed, etc., which, after all, is but an elementary recommendation.

Stranding of s.s. Aikoku Maru.

Held at Victoria, B.C., before Capt. J. D. Macpherson, British Columbia Wreck Commissioner, assisted by Capt. D. S. Jones-Evans and A. O. Cooper, as nautical assessors. The court came to the conclusion that the s.s. Aikoku Maru stranded on Kelp Reef, Haro Straits, B.C., owing to a combination of unusual and unavoid-

English speaking member, conveyed messages between the master and the pilot, and there can be no question that on him must be placed the blame for having named the deviation easterly instead of westerly, though, without doubt, unintentionally.

The vessel grounded very easily, owing to the skilful handling of the pilot, and released herself after about eight hours, with comparatively slight damage.

Stranding of s.s. Sewalls Point.

At Halifax, N.S., July 16, an investigation was held into the causes of the stranding of the s.s. Sewalls Point, during a heavy fog at Five Fathoms Harbor, near Halifax, July 1. After hearing the evidence, the court held that the master, Capt. R. M. French, was in default, through over confidence, and a copy of the finding was sent to the British Board of Trade.

The Consolidated Whaling Co. Ltd.

The incorporation of this company was announced in a recent issue, with a capital of \$2,500,000 and head office in Toronto. The operating office is in Victoria, B.C., and S. C. Ruck is General Manager. The company has taken over the Victoria Whaling Co., with fisheries and factories at Sechart, Kyuquot, Rose Harbor and Naden Harbor, B.C., and also the American Pacific Whaling Co. and North Pacific Sea Products Co.

The Victoria Whaling Co. owned 8 steam whalers and one vessel of 850 tons, used as a tender. The whalers are named Black, Blue, Brown, Green, Orion, St. Lawrence, W. Grant, and White, and the tender is named Gray. The whalers are about 92 ft. long, 16 ft. beam, and are equipped with triple expansion engines of about 300 i.h.p.

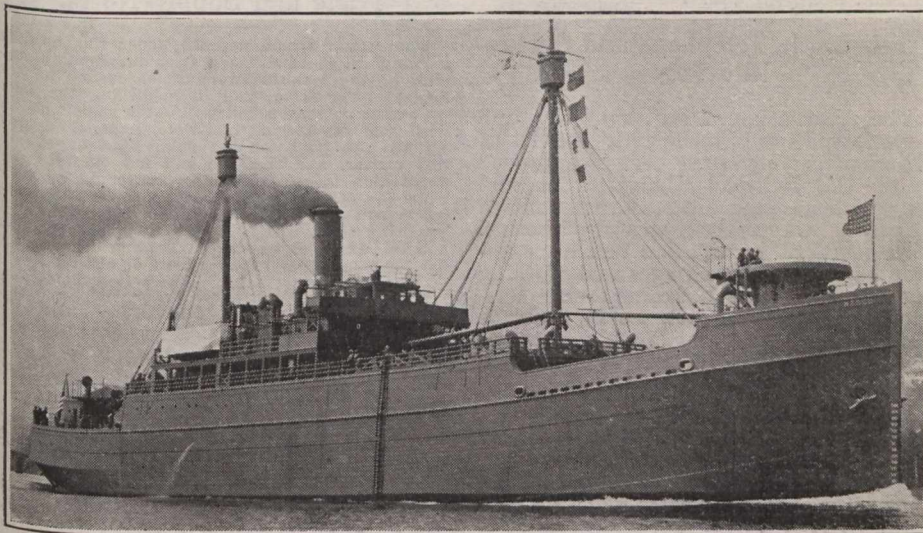
The American Pacific Whaling Co. has a station at Bay City, Wash., from where four vessels are operated, all of a similar type, and named Aberdeen, Moran, Paterson and Westport, and another station at Akutan in the Aleutian Islands, from where three vessels, the Kodiak, Tangynak and Unimak are operated. These three vessels are all somewhat larger than the other vessels mentioned, one, the Tangynak, being driven by twin screws. All the U.S. vessels burn fuel oil and the Canadian ones coal.

The company purchased recently the s.s. Elihu Thomson, 1,000 tons, from the Pacific Cold Storage Co., Tacoma, Wash., and is having it fitted out with cold storage compartments with capacity of about 600 tons, for the conveyance of whale meat from the northern station to cold storage at Tacoma. The auxiliary powered schooner Halcyon is also owned by the company. She is 72 ft. long and is fitted with gasoline engine of 100 h.p. She is engaged in halibut and cod fishing at the Aleutian Islands.

Canadian Express Co. Withdraws from United States Business.

Jno. Pullen, President, Canadian Express Co., issued the following circular to officers and agents in the States of Maine, New Hampshire, Vermont and Michigan, on June 28:—

The United States Railroad Administration having taken over for operating purposes certain of the lines of the Grand Trunk Ry. of Canada located within the U.S., viz.: Portland, Me., to Norton Mills, Vt.; Lewiston Jet., Me., to Lewiston, Me.; South Paris, Me., to Norway, Me.; and Port Huron, Mich., to Detroit, Mich., over



The United States Steamship Wasco.

The Wasco, which was completed June 8, was the first of the U. S. Emergency Fleet Corporation's orders to be turned out at Portland, Oregon. The is 286 ft. long and 46 ft. wide and sailed June 10 on her first voyage.

sel from the records of previous voyages. He was aware of uncertain currents existing, both as to direction and velocity, and the court considered that his position should have been checked by a cast. Also when the shouts of fishermen were heard, instead of only stopping the engine, the vessel should have been brought to a stop by full speed astern. It is fortunate that the vessel was not lost. The master's evidence was somewhat contradicted by the first mate, but corrected afterwards, which created a better impression on the court. The court felt that in view of the master's successful career, and relying on the evidence that in other circumstances he has attended seriously to his navigation duties, it could deal leniently with him. It was also evidenced that some measure of prudence was taken, though unfortunately it was not of the thoroughness that the situation demanded, but a clever feat of seamanship was performed after the grounding, in order to bring the vessel to a somewhat sheltered beach to wait for assistance. He was found in default for not taking a sounding when off Cape George; for not sounding when

able circumstances, unfortunately all working in the same direction, the result of which, under the then conditions, was inevitable. These circumstances were:— a very strong ebb tide acting on the vessel's starboard bow, a grave error in the naming of the deviation, and a dense fog. No single one of these would have led to the casualty, but the three combined were fatal, more especially as the first two erred in the same direction. In the court's opinion, after the fog set in, the vessel was navigated in an efficient and proper manner, and with the one exception of the maximum speed being maintained, which the court considered, under the circumstances, not only excusable, but essential, every regulation was strictly adhered to, and an ample and efficient lookout was kept. No blame was therefore attached to J. C. Foote, pilot. So far as the master, T. Yoshira, was concerned, the court saw no reason to blame him. He seemed to have attended to his duties in an intelligent and efficient manner. No other member of the crew was held worthy of blame, with the exception of M. Machikake, an apprentice, who, as the only

which the Canadian Express Co. now operates the express service, and having entered into a contract with the American Railway Express Co. giving that company the exclusive privileges of conducting express service thereon, effective July 1, 1918, the offices of the Canadian Express Co. in the states named will be closed at midnight June 30. On July 1, the express operations will be carried on by and in the name of the American Railway Express Co. Suitable instructions will be issued by the officers of that company as soon as possible. Meanwhile, until such instructions have been received, the present employes of the Canadian Co. will continue to perform their duties as usual, using the present books and forms until new ones have been supplied.

The Canadian Express Co.'s accounts must be balanced and closed as of June 30, and new accounts or books started for the new company July 1. All equipment and office supplies are to be transferred to the American Railway Express Co. on July 1. Agents will make a special list of all undelivered goods on hand at midnight June 30, showing charges thereon, and send same to the superintendent.

At Buffalo, N.Y., Suspension Bridge, N.Y., Port Huron, Mich., and Detroit, Mich., where the Canadian Express Co. has heretofore been operated jointly with the American Express Co. or National Express Co., the offices will on, and after July 1, become exclusive offices of the American Railway Express Co.

The management of the Canadian Express Co. desires to take this opportunity of thanking its employes in the states named for their services, and to bespeak for the new company their co-operation.

The Western Express Co. and U.S. Business.

The Western Express Co., which is owned by the Dominion Ex. Co. and which carries on express business on C.P.R. controlled lines in the U.S., has issued the following circular to employes:—

It is the wish of the Director General of Railroads that there shall be in the U.S., during the period of federal control of railroads, but one express company. To accommodate that wish, the Western Ex. Co. will, at the close of business on June 30, retire from the express transportation business for the period of federal control of railroads. A new express company will be organized, which will, as the Agent of the Director General of Railroads, transact the express business upon all the railroads in the U.S., commencing July 1. The management of the Western Ex. Co. has agreed with the management of the new express company to promote, in every way possible, the employment by the new company of the employes of the Western Ex. Co. It is understood that Western Ex. Co. employes accepting employment with the new company will retain their service records for participation in the pension system of the new company. The details of the transfer of the business and of the property will be set forth in a subsequent circular. The management of the Western Ex. Co. gratefully acknowledges your loyal support and co-operation which has enabled the company to establish a reputation for efficiency and fair dealing. The management has provided for employment by the new company of all employes wishing to accept such employment. The management hopes you will accept employment with the new company and that you will accord to the Director General through the new company, that same de-

gree of efficiency and that wonderful spirit of loyalty which the Western Ex. Co. has enjoyed, to the end that the public may be properly served and the desires of the Government may be fully realized.

We are officially advised that the above does not apply to Maine and Vermont, where the Western Ex. Co. will continue to operate over C.P.R. lines in Maine and Vermont, as hitherto.

Among the Express Companies.

Canadian Ex. Co. employes are stated to have been granted an increase in wages, and a new time schedule. The new graded scale of pay is said to be \$100 a month after 5 years service.

The Board of Railway Commissioners has extended the express collection and delivery limits at Rossland, B.C., to include the nortion on Earl St. from Fourth Ave. to the West Kootenay Power & Light Co.'s works.

A press dispatch from Washington, D.C., states that the operation of eight interstate express companies for January, resulted in a deficit of \$1,637,757. One company, the Southern Ex. Co., showed a profit, the operating income being \$89,630. The largest deficit was that of the American Ex. Co., \$752,645.

Telegraph, Telephone and Cable Matters.

The Association of Railway Telegraph Superintendents is included in the list of associations which have been disapproved by the U.S. Railroad Administration, and for which no expenditures are permitted by any railway without special authority.

A board of conciliation has been appointed to deal with wages and working conditions of C.P.R. commercial telegraphers. Judge Scott, Perth, Ont., is chairman, N. W. Tilley, K.C., represents the company, and D. Campbell, Regina, Sask., the men.

The U.S. President has, by proclamation, taken over the operation of all telegraph and telephone lines throughout the U.S., as from July 31, and has placed them under the Postmaster General's control. Wireless telegraph and cable lines are not included.

The Great North Western Telegraph Co. has deposited plans, etc., with the Public Works Department, for laying and landing a submarine telegraph cable in the Straits of Juan de Fuca, the proposed landing being at the foot of Douglas St., Victoria, B.C.

M. H. Clapp, Superintendent of Telegraph, Northern Pacific Ry., St. Paul, Minn., and President of the Association of Railway Telegraph Superintendents, has been appointed Manager of the Telegraph Section of the U.S. Railroad Administration, reporting to C. R. Gray, Director of Operation, with office at Washington, D.C.

The Great North Western Telegraph Co. has opened offices at Grand Anse, N.B.; Abenakis Springs, Little Metis Beach, Manoir Richelieu, Perthuis station, Pointe au Pic and Woodlands, Que.; Bala Park, Chaffey's Locks, Dunnville, Dwight, Lake Joseph, Sellwood and Sparrow Lake, Ont.; and Alberta Beach, Alta.; and has closed its offices at Les Eboulements wharf, Que., Atherley, Ont., and Durban and Langruth, Man.

A few weeks ago certain charges were preferred against two operators employed by the Great North Western Telegraph Co. at Toronto, alleging wrongful use of the company's wires in connection with horse racing news. These men were ac-

quitted of fraud in the local court, but the company dismissed them. The telegraphers' union intervened and demanded that the men be reinstated, eventually serving the company with notice that unless they were unconditionally reinstated, a general strike of the employes would occur at 10 a.m., July 16. After some negotiations, the matter was adjusted by the re-employment of the men, and a strike was averted.

The Dominion Telegraph Co.'s 49th annual meeting was held at Toronto, July 10, when the report for the year ended June 30 was adopted. It was announced that payment had been made quarterly in advance, for the past 39 years, of the guaranteed interest at 6%, on the company's capital stock, by the lessees, the Western Union Telegraph Co., the lease being for 99 years from July 1, 1879. The assets are given as \$1,309,720.82, and the liabilities as \$1,017,490.10, the balance at credit of profit and loss being \$292,230.72. The directors for this year are: Sir Henry M. Pellatt, President; Aemilius Jarvis, Vice President; F. Roper, Secretary and Treasurer; G. W. E. Atkins, R. C. Clowry, E. Y. Gallaher, Sir John M. Gibson, and C. O'Reilly.

Trade and Supply Notes.

The matter which appears under this heading is compiled, in most cases, from information supplied by the manufacturers of, or dealers in, the articles referred to, and in publishing the same we accept no responsibility. At the same time we wish our readers distinctly to understand that we are not paid for the publication of any of this matter, and that we will not consider any proposition to insert reading matter in our columns for pay or its equivalent. Advertising contracts will not be taken with any condition that accepting them will oblige us to publish reading notices. In other words, our reading columns are not for sale, either to advertisers or others.

Johnson & Higgins.—P. L. Roberts has been appointed Manager, Montreal Branch, Johnson & Higgins, average adjusters and insurance brokers, New York, with office in Board of Trade Building, Montreal.

The Canadian Ingersoll-Rand Co. has issued a catalogue of direct lift vertical air hoists, giving complete details, with illustrations, of the different types of valve used for various classes of work up to 5 tons capacity, the dust proof single acting, the dust proof air balanced, and the dust proof double acting. Complete tables are given, including one of the free air consumption of the hoists.

The Ohio Brass Co. has issued a booklet, "Guarding the Grade Crossings," which describes the national trolley guard, which consists of a wire mesh formed into an inverted trough mounted above the trolley wire. Among the illustrations are views showing installations on the Hull Electric Co.'s railway, London St. Ry., Sudbury-Copper Cliff Suburban Electric Ry., Toronto & York Radial Ry. and Toronto Ry.

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