

Railway Rolling Stock Orders and Deliveries.

Electro Metal Co. has ordered 2 flat cars from Canadian Car & Foundry Co. The Pacific Great Eastern Ry. is stated to be in the market for three Mikado type locomotives.

The Grand Trunk Pacific Ry. has received 157 repaired box cars from Canadian Car & Foundry Co.

Canadian National Rys. has received 4 repaired baggage cars from Canadian Car & Foundry Co.

Canadian National Rys. has ordered 350 stock cars, 30 tons capacity, from Canadian Car & Foundry Co.

The G.T.R. has received 7 dining cars, 7 steel mail cars, and 47 repaired box cars, from Canadian Car & Foundry Co.

Canadian National Rys. has received 6 dining cars of an order placed June 26, 1919, from Canadian Car & Foundry Co.

F. H. Hopkins & Co., Montreal, have ordered 6 sets of car trucks, 50 tons capacity, from Canadian Car & Foundry Co.

The G.T.R. has ordered 1,000 automobile cars, 50 baggage cars, and 15 express refrigerator cars, from Canadian Car & Foundry Co.

The G.T.R. has ordered 1,000 flat cars, 50 tons capacity, from National Steel Car Corporation. They will be approximately 40 ft. over end sills, 8 ft. 10 in. over side sills, with plate girder center and side sills, of 10 in. channel, pressed steel bolsters and cross ties, arch bar type of truck, journal bearings 5 1/2 x 10 in., standard M.C.B. class D couplers, Westinghouse air brakes, and 33 in. cast iron wheels.

C.P.R. orders.—Canadian Railway and Marine World was able to give in the April issue, some preliminary details of orders for rolling stock placed by the C.P.R. for delivery during this year. Since then, we have been officially advised of orders placed as follows: 3 dining cars, the bodies to be built complete by Canadian Car & Foundry Co., and the interior finishing to be done in the C.P.R. Angus shops; 43 sleeping cars, the steel frames for 18 to be built by National Steel Corporation, Ltd., and for 25 by Canadian Car & Foundry Co., the interior finishing to be done at C.P.R. Angus shops; 67 second hand air dump cars bought from Cook Construction Co., Montreal; 2,500 box cars, 60 tons capacity, 1,500 of these to be built by Canadian Car & Foundry Co. and 1,000 by National Steel Car Corporation; 500 refrigerator cars to be built at C.P.R. Angus shops, and 5 Santa Fe (2-10-2) locomotives to be built at Angus shops.

The C.P.R. 35 steel frames for sleeping cars which are being built by Canadian Car & Foundry Co., as mentioned in our last issue, will have underframes composed of 4 bottom flange angles 3 x 3 x 3/8 in., 2 top flange angles 6 x 4 x 5/8 in. with 5/16 in. webs and 9/16 x 30 in. top cover plates; depth over flange angles at center of cars 30 ft., and at each end there will be a steel buffer casting and a 2 ft. 9 in. platform. The end framing will consist of two 6 in. x 23.9 I beams at buffer beam and body end, with four 4 in. x 8.2 Z bars at each body end. The side construction will consist of 1/2 in. channel shaped pressed posts with side rail 3 3/4 x 15/16 x 1/2 in. rolled steel plates and 1/2 letter plate. The roof will be composed of 1/8 in. pressed Z shaped upper deck and channel shaped lower

deck carlines, 0.078 steel upper deck and 0.063 lower deck roof sheets, vestibule roof slats 0.109 thick. The chief details of the cars will be:—

Length inside coupler knuckles.....	83 ft. 10 1/2 in.
Length over end sills	75 ft. 6 in.
Truck centers	59 ft. 6 in.
Width over side sills	9 ft. 9 3/8 in.
Width over eaves	10 ft. 0 3/8 in.
Height, rail to eaves	11 ft. 1 3/8 in.
Height, rail to top of roof	14 ft. 0 3/8 in.
Height, rail to side sill	3 ft. 7 3/8 in.
Truck, wheel base	11 ft.
Truck, type	Commonwealth with clasp brakes
Journals	5 x 9 in.

The Timiskaming & Northern Ontario Ry. has invited tenders for supplying 4 Mikado (2-8-2) locomotives and two 8-wheel switching locomotives of the following general specifications:—

Cylinders	25 x 30 in.	23 x 28 in.
Driving wheel diar.	63 in.	53 in.
Boiler pressure	180 lbs.	180 lbs.
Weight on drivers	197,000 lb.	202,000 lb.
Weight on front truck	29,500 lb.
Weight on rear truck.....	31,600 lb.
Weight on engine, total.....	268,000 lb.
Driving wheel, base	16 ft. 6 in.	16 ft. 6 in.
Engine wheel, base	34 ft. 8 in.
Fire box, length and width	96x75 1/4 in.	89 1/2x75 1/4 in.
Grate area	50 sq. ft.	46.26 sq. ft.
Boiler, diar., front end.....	71 in.	71 in.
Boiler, diar., back end.....	78 in.	78 in.
Tubes, no. and diar.	202 2 in.	202 8 in.
.....	32 5 1/2 in.	32 5 1/2 in.
Tubes, length	20 ft.	14 ft. 6 in.
Arch tubes, no. and diar.	4 3 in.	4 3 in.
Heating surface, tubes	3,016 sq. ft.	2,186 sq. ft.
Heating surface, fire box.....	208 sq. ft.	153 sq. ft.
Superheating surface	757 sq. ft.	570 sq. ft.
Weight of tender loaded	143,000 lb.	143,000 lb.
Coal capacity	12 tons	9 tons
Water capacity	6,500 imp. gal.	6,500 imp. gal.

Canadian National Rys. 12 dining cars ordered from Canadian Car & Foundry Co. will be C.N.R. standard, except when non vestibule ends are to be applied, making a more simplified arrangement. The interior finish will be quarter cut oak, except in the kitchen and pantry, which will be painted; the air pressure water system will consist of longitudinal tank 96 x 26 in. diar., connecting with 2 overhead copper tanks in the kitchen. Following are the chief details:—

Length over end sills	79 ft. 1 in.
Length between truck centers	57 ft. 6 in.
Width over all at eaves	10 ft. 7 7/8 in.
Width over side posts	9 ft. 9 3/8 in.
Width over upper deck at eaves	5 ft. 11 1/4 in.
Height, track to roof at center.....	14 ft. 2 in.
Height, rail to side at eaves	11 ft. 2 1/2 in.
Height, track to sill at track centers.....	3 ft. 7 3/8 in.
Heating	Vapor Car Heating Co.
Lighting	Electric
Couplers	Sharon bottom end operating
Draft gear and buffing device	Friction
Airbrake	Westinghouse
Hand brake	Miner ideal staff at both ends
Trucks	Commonwealth 6 wheel type with clasp brake

Canadian National Rys. 20 baggage cars ordered from Canadian Car & Foundry Co. are to be built to the C.N.R. standard. Following are the chief details:—

Length over end sills	73 ft. 6 in.
Length between truck centers	55 ft. 7 in.
Length over buffers, approximate.....	77 ft. 6 in.
Width over side sills	9 ft. 9 3/8 in.
Width overall at eaves	10 ft. 1 7/8 in.
Width at clerestory	5 ft. 11 1/4 in.
Height, track to center of roof.....	14 ft. 2 in.
Height, over smoke jacks, approximate.....	14 ft. 5 in.
Height rail to eaves	11 ft. 2 1/2 in.
Height, track to sill at end	3 ft. 7 3/8 in.
Height, track to sill at center	3 ft. 9 in.
Couplers	Sharon bottom operating
Draft gear	Miner friction
Buffing device	Miner B-10
Side bearings	Miner roller
Heating system	Vapor Car Heating Co.
Lighting	Safety Car Heating & Lighting Co.
Air brakes	Westinghouse K1
Hand brake.....	Miner double acting for non vestibule cars
Trucks	Commonwealth 6 wheel type with clasp brake
Wheel, diar.....	Steel tire 36 1/2 in.
Journal boxes	McCord

Canadian National Rys. 18 drawing room sleeping cars, ordered from Cana-

dian Car & Foundry Co. will be built to C.N.R. standard, with the latest standard air pressure water system, having a 26 x 96 in. water tank, with a temperature control device for heating water for wash stand; standard system of hot water heating and piping in addition to the Vapor heating system. The electric light system will consist of a body hung, belt driven, generator of 4 k.w. capacity and one 350 ampere hour battery. Following are the chief details:—

Length over end sills	73 ft. 6 in.
Length between truck centers	57 ft. 6 in.
Length over buffing, approximate	82 ft. 4 1/2 in.
Width over side sills	9 ft. 9 3/8 in.
Width overall at eaves	10 ft. 1 7/8 in.
Width at clerestory	5 ft. 11 1/4 in.
Height, track to roof at centers	14 ft. 2 in.
Height over smoke jacks, approximate.....	14 ft. 5 in.
Height, rail to eave moulding	11 ft. 2 1/2 in.
Height, track to sill at end	3 ft. 7 3/8 in.
Height, track to sill at center	3 ft. 9 in.
Heating	Vapor Car Heating Co.
Couplers	Sharon bottom operating
Draft gear and buffing device.....	Miner friction
Trap doors	National steel
Air brakes.....	Westinghouse
Hand brakes.....	Miner ideal staff type at both ends
Trucks.....	Commonwealth 6 wheel type with clasp brake

Canadian National Rys. 600 refrigerator cars ordered from Canadian Car & Foundry Co. will have La Flare insulation and Miner door fixtures. The floor will have removable floor racks, built of 3 x 1 1/4 in. stringers, and to each will be fastened 3 3/4 x 1 1/2 in. thick wood slats. They will be equipped with 4 brine tanks at each end, supported by Union Railway Equipment Co.'s Ureco brine tank supports, handhole and brine valve. The height of one brine tank at each end will be reduced to leave room for a heater, to be used when transporting perishable products during winter. Brine tanks will be iced from hatches in the roof, and ventilators will be operated from outside of the roof. The underframes will be of wood, with 5 x 8 side sill, and center of intermediate sills, reinforced by a center sill construction of two 7 in. 21.8 lb. ship channels, with 5/16 in. thick covered plates top and bottom. The sides and underframing will be of wood, and the body bolster and cross bar of built up steel construction. Following are the chief details:—

Capacity	60,000 lb.
Length over end sills	36 ft.
Width over side sills	8 ft. 11 in.
Top of sill to underside of plate	7 ft. 8 in.
Length inside between brine tanks	28 ft. 9 1/4 in.
Width inside	8 ft. 2 1/4 in.
Height, top of floor to underside of ceiling	7 ft. 6 3/8 in.
End sill, outside to center of body bolster	5 ft.
Width of side door opening	5 ft.
Height of side door opening	6 ft. 3 in.
Height, top of rail to center of coupler	2 ft. 1 1/2 in.
Trucks, center to center	26 ft.
Draft gear	Miner tandem spring
Couplers	M.C.B. type D
Air brakes	Westinghouse K.C.-1012
Trucks	Diamond arch bar
Bolsters and brake beams	Simplex
Side bearings	Miner balance
Journal boxes	McCord

Canadian National Rys. 1,000 box cars, 40 tons capacity, ordered from Canadian Car & Foundry Co., will have underframes of two 15 in. 33 lb. journals with one 19 1/2 x 1/4 x 33 in. top cover plate, side sills 8 in. 11 1/4 lb. channels, end sills 10 in. 15 lb. channels, floor stringers 3 in. 6.7 lb. Z bars running longitudinally and spaced equidistant between centers of side sills. The corner posts of the superstructure will have 5 x 5 x 3/8 in. angles, door post, front 86 x 3 1/2 x 5/16 in. angles, door post, rear, 4 x 3 1/2 x 5/16 in. angles and the door will be Camel improved type top hung. The roofs on 500 of these cars will be Chi-