CANADIAN
PACIFIC
GAS-ELECTRIC
CARS IN
SOUTHERN
QUEBEC.

in service on Waltham Subdivision, Ottawa Division, Quebec District, between Ottawa and Waltham, Que., 79.1 miles, and the other on Hamilton-Goderich Subdivision, London Division, Ontario District, between Hamilton and Goderich, 114.7 miles. The second two, ordered from International Equipment Co., Montreal, and received in the early autumn

wheat to China have be On the basis of 705, the total world import season, weekly shipmer flour should average sl 13,500,000 bush. weekly 10 weeks of the seaso ments were 100,200,000 of slightly more than 1 A year ago the total bush, for the first 10 1,500,000 in excess of age for the season. confirm the report that purchasing more than is while awaiting more de of the outcome of grow Southern Hemisphere.

The peak of the move to country elevators in has passed, deliveries I very markedly during weeks. From Aug. 1 to tember, 131,000,000 bus 9,500,000 bush of coarse

### ADIAN RAILWAY AND MARINE WORLD

555

otof 1931, were fitted with model 148, 400
ben
h.p. engines, the bodies being built by
les, Ottawa Car Manufacturing Co. They
ubwere described and illustrated in our
lisoct., 1931, issue, pg. 640, and were sent
ich, to Western Lines, one being placed in
red operation between Winnipeg and Arborg,
ntMan., 74.3 miles, and the other between
Regina and Weyburn, Sask., 125.4 miles.

The next two, ordered from International Equipment Co., the bodies being built by Ottawa Car Manufacturing Co., delivered in Jan., 1932, and placed in operation on Farnham Division, Quebec District, were described and illustrated in our issue of February, pg. 73, and March, pg. 123. The two cars described in the foregoing article complete the eight ordered.

trucks are of rolled steel type, so in. diam.

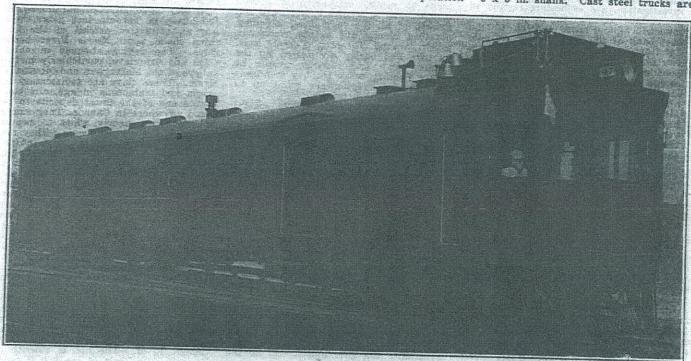
These two cars, which were ordered from International Equipment Co., Montreal, and the hodies of which were built by Ottawa Car Manufacturing Co., make eight gas-electric cars placed in operation by the C.P.R., beginning with 1930. The first two, bought from St. Louis Car Co., were described in our Aug., 1930, issue, pg. 495. One of them was placed

### Gas-Electric Motor Rail Cars, Canadian Pacific Railway.

The Canadian Pacific Ry. received recently two gas-electric rail motor cars, for passenger service on branch lines, which have been numbered 46 and Their principal dimensions are as follows:-Length inside coupler knuck-les 74 ft.; truck centers 52 ft. 10 in., width over side sheeting 9 ft. 9% in.; height, rail to top of floor, 4 ft. 4 in., height, rail to top of noor, 4 ft. 4 in., height, rail to top of roof, 13 ft. 1½ in.; length of engine room, 15 ft. 10 in.; length of baggage room, 20 ft. 2½ in.; length of smoking room, 8% ft.; length of main room 23 ft. 4 in. The under frame consists of 7 in.

phragm with light vestibule face plate. The interior of the car presents a pleasing appearance, the passenger end being appearance, the passenger end being finished in mahogany, and the baggage room with corrugated steel sheets. The floor is painted, and is furnished with an aisle strip of standard red and green diamond inlaid rubber with brass binding strips. The headling is 0.06 binding strips. The headlining is 0.06 in. sheet aluminum finished in cream enamel. A total seating capacity of 50 is provided, the main room accommodating 36 and the smoking room 14 pas-sengers. The seats are fixed, as the car is intended for front end operation

ates on the trailing truck. A Miner drop handle hand brake is located in the cab, braking the front truck; a Lindstrom hand brake in the rear vestibule operates the brakes on the rear truck. Westinghouse Co.'s type M signal equipment is used. The car is fitted with a 2 bell Pneuphonic horn, also with a 12 in. locomotive type bell internal ringer. Draft gear is of light construction, suitable for cars of this type, and is composed of 6% x 8 in twin Harvey friction springs. The coupler is a light weight A.R.A. coupler with 5 x 5 in shapk. Cast steel trucks are 5 x 5 in. shank. Cast steel trucks are



Gas-electric Motor Rail Car, Canadian Pacific Railway.

18.8 lb. channel center sills, continuous 18.8 ib. channel center sills, continuous from end to end of car, with ½ x 21 in. top cover plate in one piece between draft lngs. The side sills are 5 x 3 x % in. angles, body bolsters are built up with % in. drawn steel webs, 20 x % in. top cover, and 20 x % in. bottom cover, with cast steel center braces. Side nosts are no. 12 center braces. Side posts are no. 12 drawn steel, and the side plate a 3 x 3 x % in angle. The roof over the car portion is 1/2 in. poplar, canvas covered, supported by metal carlines. The engine room is covered by a 1/16 in. steel roof. The floor consists of a steel floor sheet .04 in. covered by a layer of 3-ply Salamander insulation, the subfloor is 11/16 in thick, laid on fir stringers; the top floor is 13/16 in thick, gers; the top hoor is 13/10 in thick, with a layer of slaters' felt between; this acts as insulation and also helps to reduce vibration. The floor in the engine room is 2% in thick, laid on a % in, steel plate. The side sheets consist of no. 12 stretcher levelled steel, and the layer of 2 also Selmann. with a double layer of 3-ply Salaman-der insulation. A wide vestibule is pro-vided at the rear end, with side and trap doors, and a two-fold canvas dia-

only, and are arranged to seat 3 per-sons on one side of the aisle and 2 on the opposite side. Standard green plush the opposite side. Standard green plash upholstery is applied in the main room and black leather in smoking room. Two lavatory rooms are provided, each with flushing hoppers and folding washbasins, with gravity water supply from overhead tanks. All sash in the pas-senger end of the car is of brass, poplar being used in the baggage room and cab. Window curtains are of the C.P.R. Co.'s standard double faced Pantasote. The car is heated by hot water, using a Vapor Co.'s no. 557 coal fired heater, which is located in the baggage room; fin piping is used throughout the car, and the circuit is connected to the radiator circulating system of the en-gine. A 32-volt lighting system is used, with Exide m.v.a.h. cells, which also provide current for engine starting.

Both air and hand brakes are provided. The air brake is the Westinghouse Air Brake Co.'s AML combined automatic and straight air brake equipment, with 2 brake cylinders. A 14  $\times$  12 in. cylinder operates the brakes on the motor truck and a 12 x 12 in. operused, the front truck, carrying the en-gine and motors, is fitted with 6 x 11 in. journals; the rear truck has 5 x 9 in. journals. The rolled steel wheels are 36 in diam. Journal bearings and wedges are A.R.A. standard.

The power plant consists of a 400 h.p. engine, 8 cylinder, 8 in. bore, 10 in. stroke, model 148, Winton Engine Co. Special winding built into the generator makes it adaptable for starting the engine from the batteries. Provision is also made to use an air starting system when the air reservoirs on the car are charged. Two gasoline tanks are lo-cated under the car, each holding 200 U.S.A. gall. The light weight is 136,-600 lb.

The cars were built by St. Louis Car Co., and supplied through International Equipment Co. They have been placed in regular service as follows:—car 47 on Waltham Subdivision, Ottawa Division, Quebec District, between Ottawa and Waltham, Que., 79.1 miles; car 46 on Hamilton-Goderich Subdivision, London Division, Ontario District, between Hamilton and Goderich, Ont., 114.7 miles.

U.S.A. gall. The light weight is 136,-

The cars were built by St. Louis Car Co., and supplied through International Equipment Co. They have been placed in regular service as follows:—car 4? on Waltham Subdivision, Ottawa Division, Quebec District, between Ottawa and Waltham, Que., 79.1 miles; car 46 on Hamilton-Goderich Subdivision, London Division, Ontario District, between Hamilton and Goderich, Ont., 114.7 miles. miles.

#### Gasoline-Electric Cars, Canadian Pacific Railway.

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The two gasoline-electric self propelled cars ordered by the Canadian Pacific Ry., from Ottawa Car Mfg. Co., as mentioned in our Sept., 1931, issue, pg. 583, were delivered, one on Jan. 16 and the other on Jan. 22. They are duplicates of the two delivered to the C.P.R. by the same builder last year, which were described and illustrated in our Oct., 1931, issue, pg. 640. They are 74 ft. long inside coupler knuckles, with truck centers at 52 ft. 10 in., width over side sheathing being 9 ft. 95 in., and height 13 ft. 1% in. from rail to top of roof. The framing is of steel construction throughout. The interior is divided into a main passenger compartment, 23 ft. 4 in. long, smoking room, 8% ft. long, baggage room, 20 ft. 21/2 in. long, and engine room, 15 ft. 10 in. long. The trucks are of cast steel type, with the front one carrying engine and motors. engine is a 400 h.p., 8 cyl. one, with cylinders 8 in. bore x 10 in. stroke.

We are advised officially that the first of the two cars delivered began operation, Jan. 18, on St. Guillaume Subdivision, Farnham Division, Quebec District, between Farnham and St. Guillaume, 46.7 miles, as trains 261, 262, 263 and 264, replacing steam trains. Train 262 leaves St. Guillaume 7.50 a.m., arrives Farnham 9.35 a.m.; train 261 leaves Farnham 10.30 a.m., arrives St. Guillaume 12.20 p.m.; train 264 leaves St. Guillaume 2.50 p.m., arrives Farnham 4.40 p.m., and train 263 leaves Farnham 5.35 p.m., arrives St. Guillaume 7.20 p.m.

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Harbor Commissioners of Quebec for a ruling on the matter of absorption of switching and wharfage charges by the Canadian National Rys. in its rate of 18.34c per 100 lbs., on export grain, all rail, from Fort William to Quebec; and the application of the City of Quebec, in the matter of switching and wharfage charges absorbed by Canadian National Rys. in its rate of 18.34c per 100 lbs. on export grain, all rail, from Fort

is 70 ft. The substructure of the bridge is completed, and the steel has been erected completely. The bridge will be ready for operation early in the spring. The construction of all substructures is being done by Beauharnois Construction Co. The steel for the superstructures is being supplied and erected by Dominion Bridge Co.

United States Railways Grain

mission had vacated its order reducing the rates and that it would allow the carriers to file tariffs re-establishing the original rates. (Sept., 1931, pg. 578.)

Gasoline-Electric Cars, Canadian Pacific Railway. The two gasoline-electric self propelled cars ordered by the Canadian Pacific Ry., from Ottawa Car Mfg. Co., as mentioned

The second of two gasoline-electric self-propelled cars ordered by Canadian Pacific Ry. from Ottawa Car Mfg. Co. was delivered Jan. 30, and placed in operation on Drummondville Subdivision, Farnham Division, Quebec District, Feb. 1, between Sutton and Drummondville, 58.8 miles, as trains 251 and 254, replacing steam trains of the same numbers. As train 251, the car leaves Sutton 8 a.m., arriving at Drummondville 12.40 p.m.; as train 254, it leaves Drummondville 2.10 p.m., arriving Sutton 7.20 p.m. Delivery of the first car of this order for two was mentioned in our February issue, pg. 73, it being stated that it had been placed in operation on the St. Guillaume Subdivision, Farnham Division, Quebec District, between Farnham and St. Guillaume.

syst gin car vide wat dur use coil on ' as ! tion wat to Wa in I one ota having been described and illustrated in Canadian Railway and Marine World for Aug., 1930, pg. 495. One of those cars, numbered 46, operates between Hamilton and Goderich, Ont., as trains 637 and 640; the other, numbered 47, operates on Maniwaki Subdivision, Smiths Falls Division, Quebec District, between Ottawa and Maniwaki, 80.7 miles, as trains 531 and 534, on Mondays, Wednesdays and Fridays, on Waltham Subdivision, Smiths Falls Division, Quebec District, between Ottawa and Waltham, 77.5 miles, as trains 541 and 544, on Tuesdays, Thursdays and Saturdays, and on Prescott Subdivision, Smiths Falls Division, Quebec District, between Ottawa and Prescott, 51.8 miles, as trains 552 and 553, on Sundays.

All of the six gasoline-electric cars are capable of hauling trailers, standard passenger cars being used when traffic demands make a trailer necessary.

The cars operating on the Farnham Division are the second two gasolineelectric self-propelled cars secured by the Canadian Pacific from the Ottawa Car Manufacturing Co., two others having been bought in 1931, and described and illustrated in Canadian Railway and Marine World for Oct., 1931, pg. 640. The cars delivered in 1931 were placed in operation on Western Lines, one between Winnipeg and Arborg, Man., and the other between Regina and Weyburn, Sask. But later the one which had been placed in operation between Winnipeg and Arborg was transferred to Portal Subdivision, Regina Division, Saskatchewan District, where it was placed in operation between Portal and Moose Jaw. These two cars, numbered 48 and 49, are still operating on those runs, one as trains 315 and 316 between Moose Jaw and Portal, and the other as trains 307 and 308 between Regina and Weyburn. The car operating on St. Guillaume Subdivision is numbered 9007; the one operating on Drummondville Subdivision is

and August 1945

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Transferred short of Brunswick 9008

Transferred run Now

Now 951 for Now

Road on the south, the latter road leading about four miles south to the Pacific Highway. Prime Minister Tolmie, of British Columbia, is quoted as saying that if the bridge is built it will be without obligation of any kind on the part of the B.C. Government. A New Westminster, B.C., recent press dispatch stated that the Dominion order in council approving the plans for the bridge, mentioned in our January issue, makes it clear that approval was given only upon condition that the C.N.R., the riparian owner of the site, would consent to acquisition of

the area required. The dispatch added that the C.N.R. had given its consent, but on the understanding that it is not interested in the railway bridge facilities to be provided. It had been reported previously that plans for the bridge had been made upon the basis of the C.N.R. using it as part of a new main entry into Vancouver.

Cowichan Subdivision Bridge.—The Board of Railway Commissioners has passed order 47,959, approving C.N.R. plans relating to reconstruction of bridge over Koksilah River at mile 51.1, Cowichan Subdivision, Vancouver Island.

# Gasoline-Electric Cars, Canadian Pacific Railway.

The second of two gasoline-electric self-propelled cars ordered by Canadian Pacific Ry. from Ottawa Car Mfg. Co. was delivered Jan. 30, and placed in operation on Drummondville Subdivision, Farmham Division, Quebec District, Feb. 1, between Sutton and Drummondville, 58.8 miles, as trains 251 and 254, replacing steam trains of the same numbers. As train 251, the car leaves Sutton 8 a.m., arriving at Drummondville 12.40 p.m.; as train 254, it leaves Drummondville 2.10 p.m., arriving Sutton 7.20 p.m. Delivery of the first car of this order for two was mentioned in our February is sue, pg. 73, it being stated that it had been placed in operation on the St. Guillaume Subdivision, Farnham Divis-

during severe weather. Fin piping is used in the car heating system. Cooling Water from all radiators, whether cut in or out, is drained to the storage tank on the car roof, and can be cut in or out tions. When a section is cut out, the gine provides hot water for heating the car under mild weather conditions, and vides for heating the engine's cooling water when the car is not in operation, coils for summer operation are located as required, according to weather condiwater is drained automatically from it to a storage tank in the engine room. are combined; the car heating hot water system uses coal for fuel, but-by connection of the hot water heating system with the engine cooling system, the enthe coal-fired car heating system pro-

having been described and illustrated in Canadian Rallway and Marine World for Aug., 1930, pg. 495. One of those cars, numbered 46, operates between Hamilton and Goderich, Ont., as trains 637 and 640; the other, numbered 47, operates on Maniwaki Subdivision, Smiths Falls Division, Quebec District, between Ottawa and Maniwaki, 80.7 miles, as trains 531 and Fridays, on Waltham Subdivision, Smiths Falls Division, Quebec District, between Ottawa and Waltham, 77.5 miles, as trains 541 and 544, on Tuesdays, Thursdays and Saturdays, and on Prescott Subdivision, Smiths Falls Division, Quebec District, between Ottawa and Prescott Subdivision, Smiths Falls Division, Quebec District, between Ottawa and Prescott, 51.8 miles, as trains 552 and 553, on Sundays.

All of the six gasoline-electric cars are capable of hauling trallers, standard passenger cars being used when traffic demands make a trailer necessary.

### Additional Cars Ordered.

We are advised that the C.P.R. has ordered from Ottawa Car Manufacturing Co. two gasoline-electric mail and baggage cars, to be 76 ft. long. The power plants will be duplicates of those in the cars delivered to the C.P.R. recently by the same builder, and the bodies will each have a 30 ft. mail compartment and a 30 ft. baggage compartment.

## Freight Rates on Grain From the

### Gasoline-Electric Cars, Canadian Pacific Railway.

The second of two gasoline-electric self-propelled cars ordered by Canadian Pacific Ry. from Ottawa Car Mfg. Co. was delivered Jan. 30, and placed in operation on Drummondville Subdivision, Farnham Division, Quebec District, Feb. 1. between Sutton and Drummondville, 58.8 miles, as trains 251 and 254, replacing steam trains of the same numbers. As train 251, the car leaves Sutton 8 a.m., arriving at Drummondville 12.40 p.m.; as train 254, it leaves Drummondville 2.10 p.m., arriving Sutton 7.20 p.m. Delivery of the first car of this order for two was mentioned in our February issue, pg. 73, it being stated that it had been placed in operation on the St. Guillaume Subdivision, Farnham Division, Quebec District, between Farnham and St. Guillaume.

The two cars' chief dimensions are as follows:-Length inside coupler knuckles, 74 ft.; truck centers, 52 ft. 10 in.; width over side sheathing, 9 ft. 9% in.; height, rail to top of floor, 4 ft. 4 in.; height, rail to top of roof, 13 ft. 14 in.; length of engine room, 15 ft. 10 in.; length of baggage room, 31 ft. 61/2 in.; length of main room, 17% ft. The car framing is of steel construction throughout. A wide vestibule is provided at the rear end with side and trap doors, and a two-fold canvas diaphragm with light vestibule face plate. The passenger room is finished in mahogany and the baggage room in corrugated steel sheets. The headlining is 0.06 in sheet aluminum finished in cream enamel. The main room has seating capacity for 25 passengers. The seats are fixed, the car being for front end operation only, and are arranged to seat three persons on one side of the aisle and two on the other. All sash in the passenger end of the cars is of brass. A 32-volt lighting system is employed, with Exide cells, which also provide current for engine starting.

The trucks are of cast steel type, the front one carrying the engine and the two motors and having 6 x 11 in. journals. The rear truck, a trailer, has 5 x 9 in. journals. The wheels are of rolled steel type, 36 in. diam. The power plant consists of a 400 h.p. 8-cyl. Winton engine, with cylinders 8 in. bore and 10 in. stroke, special winding built into the generator making it adaptable for starting the engine from the batteries. Provision is also made to use an air starting system when the air reservoirs on the car are charged. There are two gasoline tanks each of 160 gall, capacity. The light weight of car is about 139,-000 lb.

The cars are equipped with the "dead man" feature, under which, if the pressure on the control levers is released, the brakes apply immediately. The engine cooling and car heating systems

are combined; the car heating hot water system uses coal for fuel, but by connection of the hot water heating system with the engine cooling system, the engine provides hot water for heating the car under mild weather conditions, and the coal-fired car heating system provides for heating the engine's cooling water when the car is not in operation, during severe weather. Fin piping is used in the car heating system. Cooling coils for summer operation are located on the car roof, and can be cut in or out as required, according to weather conditions. When a section is cut out, the water is drained automatically from it to a storage tank in the engine room. Water from all radiators, whether cut in or out, is drained to the storage tank once the engine stops running. The radiators are not only cooled by natural air circulation when the car is in motion, but are also fitted with high efficiency cast aluminum disc type fan motors. The car is equipped with a motor-driven air compressor fitted with a reservoir of sufficient capacity for air brake operation and for supplying air for starting the engine. Control of the car is entirely automatic, the control handles consisting of hand-lever for control of the engine throttle and engine speed, an airstarting valve for starting the engine, and a master controller for forward and reverse operation. The large fuel tanks give the car a range of about 480 miles at an average speed of 30 m.p.h. The maximum speed attainable is from 60 to 65 m.p.h.

The cars operating on the Farnham Division are the second two gasolineelectric self-propelled cars secured by the Canadian Pacific from the Ottawa Car Manufacturing Co., two others having been bought in 1931, and described and illustrated in Canadian Railway and Marine World for Oct., 1931, pg. 640. The cars delivered in 1931 were placed in operation on Western Lines, one between Winnipeg and Arborg, Man., and the other between Regina and Weyburn, Sask. But later the one which had been placed in operation between Winnipeg and Arborg was transferred to Portal Subdivision, Regina Division, Saskatchewan District, where it was placed in operation between Portal and Moose Jaw. These two cars, numbered 48 and 49, are still operating on those runs, one as trains 315 and 316 between Moose Jaw and Portal, and the other as trains 307 and 308 between Regina and Weyburn. The car operating on St. Guillaume Subdivision is numbered 9007; the one operating on Drummondville Subdivision is numbered 9008.

The C.P.R. now has six gasoline-electric cars in operation, two which were bought from St. Louis Car Co. in 1930

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