lighting by electricity, practically elim-inates the danger of fire. The all steel car is probably more fireproof, but when we consider that upholstering material and varnish and other details are inflammable, this car is comparatively as fireproof as an all steel car, and the tem-perature in this car will not be subject to such sudden changes in weather con-

ditions as the all steel car. It will be warmer in winter and cooler in summer, and will not develop any sweating, which is so obnoxious in all steel cars. I am, therefore, convinced that this type of car is the most satisfactory to all concerned from every point of view.

The foregoing paper was read before the Canadian Railway Club recently.

## **Railway Rolling Stock Notes.**

The G.T.R., during January, received one box car, which had been built at its Elsdon, Ill.. shops.

The Canadian Northern Ry. has received three 75 ton wrecking cranes from the United States.

The Intercolonial Ry. has received 2 consolidation locomotives from -C.nadian Allis-Chalmers Ltd.

The Canadian Pacific Ry. h-s decided to change the lighting of 62 passenger cars from gis to electricity.

The Nova Scotia Steel & Coal Co., has ordered 200 steel mine cars of 2 000 lbs., capacity from the Estern Car Co.

The Acadia Coal Co. has ordered 200 composite and 150 steel mine cars of 2,000 lbs. capacity from the Eastern Car Co.

The Timiskaming and Northern Ontario Ry. has received two steel first class passenger cars, nos. 244 and 245, and two steel baggage and express cars, nos. 213 and 214, from the Pullman Co.

The Eastern Car Co. has shipped 1,878 of 2,000 freight cars, which the Russian Government ordered recently for use on the State Railways. The balance was expected to have been shipped by the end of February.

The Canadian Pacific Ry. will probably place an order outside its own works in the near future for 6 Pacific type pas-senger locomotives which will be more powerful than any others of that type in Canada at present.

The Imperial Oil Co. has ordered 25 two compartment, and 20 three compartment tank car underframes and trucks, from Canadian Car and Foundry Co. They will be delivered at Sarnia, Ont., where they will be equipped with tanks, etc., by the owners.

The Canadian Locomotive Co., between Jan. 1 and Feb. 12, shipped 15 decapod locomotives for the Russian Government. These are part of an order for 50 which were fully described and illustr ted in Canadian Railway and Marine World for Jan.

The French Government has ordered an additional 2,000 freight cars from the Eastern Car Co., for use on the St te Railways, but whether these are to be the same type as those now under conof which are given on this page, his not been definitely announced.

The Canadian Pacific Ry. is about to build at its Angus shops, Montreal, in addition to the cars mentioned in Canadian Railway and Marine World for Feb., 825 standard box cars, with steel underframes, wooden body and steel ends; 100 automobile cars, 200 freight refrigerator cars, 50 passenger refrigerator cars, 30 stock cars, 3 furniture cars, 25 steel coal and ore cars.

Following are the chief details of the 150 steel underframes for flat cars of 50 tons capacity, which the Michigan Central Rd. have ordered from the Can-

adian Car & Foundry Co., as mentioned in our last issue:-

Height from rail to top of brake mast..... 5 ft. 10 ins.

The fish belly and side sills will be built up with plates and angles. The draft gear will be arranged for class G springs, and the couplings will be of the bottom operating type with patent uncoupling device.

The Canadian Northern Railway is said to be contemplating ordering from 16 to 20 Pacific type passenger locomotives and 30 consolidation locomotives. The following are the probable dimensions, etc.

PACIFIC TYPE. Gauge \_\_\_\_\_\_A ft. 8½ ins. Fuel \_\_\_\_\_\_Bituminous coal Weight on drivers in working order...153,000 lbs. Capacity of tender, coal \_\_\_\_\_\_A000 lbs. Capacity of tender, water .....6,000 imp. gals. Driving wheelbase ......13 ft. 

Gauge ... Cylinders 

The Eastern Car Co. is building 1,000 four-wheeled freight cars for the French State Railways, the contract for which was made in June 1915. These cars will be of material to C.P.R. specifications, with the exception of the screw coupling, drawbar hook and all springs, which are to a modified French specific tion suitable for American practice, especially regarding tests. All rolled sh pes of American standard are interch ngeable with the French as far as possible, and the side end stakes and floor stringers are of French section. The siding, ending and sheathing for cabin is of yellow pine, and the floor and cabin framing of oak. The buffers are of cast steel, and the brake of the usual clamp type with counterweights operated from the cabin. Brakeshoes are of cast iron with trussed type brake beam; journal boxes of malleable iron with drop forged wedges, lead lined bearings and special oil lubricator. The wheels are of solid forged steel, interchangeable with the French wheels of spoked type, and are on French type axle with journals 140 by 250 m.m. Following are the chief dimensions:-

## Canadian Northern Railway Construction, Betterments, Etc.

The Toronto, Niagara & Western Ry. Co., which is the title of the company under which C.N.R. interests have power to build a railway from Toronto to the Niagara frontier, and generally westerly of To-ronto, is asking the Dominion Parliament to increase its bonding powers to \$75,000 a mile, and to extend the time limit for the building of the following lines of rail-way: from Toronto to Hamilton, along Burlington Beach; from Hamilton to the International Boundary at Grand Island or Niagara Falls, N.Y., and from Hamil-ton to Windsor, Ont. Power is also asked to repeal the statutory prohibition of the use of steam for the operation of the railway.

Toronto Terminals.—A 32 stall locomo-tive house will probably be built at Lea-

side, Toronto, this year. Canadian Northern Ry.—M. H. Mac-Leod, Chief Engineer and General Manager, is reported to have said in a recent interview that the work in contemplation during this year includes the keeping up of the line to the standard and the making of improvements at various points where necessary to meet increasing traf-fic necessities. Track will probably be laid on several branches where grading has been completed, but it is not likely that any new grading will be done.

The Canadian Northern Alberta Ry-has been granted power by an order-incouncil to occupy a portion of the bed of the Athabaska River in the n.  $\frac{1}{2}$  of sec. 1, Tp. 51, range 26, west 5th meridian, for building a bridge across the river.

Vancouver Terminals. — Negotiations are in progress between the C. N. Pacific Ry., the Great Northern Ry., the City of Vancouver and the British Columbia Government respecting the provision of joint terminals on the reclaimed False Creek flats, Vancouver. The city wants immediate progress to be made in accordance with the terms of the agreements with the two railway companies. The G.N.R. has filed its independent plans under the agreement, which the city and the B. C. Government do not consider to involve the expenditure promised. The C.N.P.R. has agreed to accept the new frontage line for its building, which is not the same as that on which the G.N.R. pro-poses to build. With the city pressing the companies to build, and the refusal of the B. C. Government to endorse the G.N.R. plans, it is thought that some definite action will be taken in the direction of the provision of a joint station which will suit the conveniences of the companies, with the requirements of the city as to the frontage line, and give the full value demanded by the agreement. M. H. MacLeod, Chief Engineer and General Manager, C.N.R., is reported to have said in Vancouver, Feb. 15, that while the company is prepared to go ahead with the work necessary to full the terms of the agreement, it is undesirable from many points of view to abandon the project of a union station.

M. H. MacLeod, General Manoger and Chief Engineer, C.N.R., had an interview with the Mayor of Vancouver Feb. 12, when he discussed the question of station building, dealing with the question of a separate building, and a joint building with the Great Northern Ry. The plans for a separate station are estimated to for a separate station are estimated to cost \$1,000,000 to carry out, while those for the union station would involve the expenditure of \$1,500,000. It is claimed that the adoption of the plans for a joint building will not interfere with anything