

iron, and has a grate 10 in. in diameter. The fire door of stove works vertically in slots and cannot be jarred open. The compartment containing the stove asbestos is in turn lined with sheet metal. The products of combustion pass directly upward through an iron flue passing through the car floor through the car, and out through the roof, so that the flue gases from the stove do not enter the car. The stove and smoke flue are jacketed with sheet metal, and the space between the flue and jacket is used for warming the air passing into the car. Fresh air from the outside of car enters this space through an opening directly under the stove. Still another metal jacket surrounds the inner jacket. The space between these two jackets produces the air circulation by creating a draft from the air spaces under floor of car. This outer jacket is protected from damage by a heavy metal guard firmly attached to floor and side of car. There is a grating provided which is placed inside the stove at outlet to pipe, so as to prevent any possibility of hot coals doing any damage should the car be overturned. The fuel used in the stove is pea coal. From the construction and design of heating system and from fuel used it is believed that this heating system is not likely to be a source of ignition of car or contents. It is of course not anticipated that inflammable liquids will be shipped in this car when heater is in operation."

The Underwriters' Laboratories put the device to an exacting test. The Engineer of Gases and Oils report shows, in table 1, that they started with a uniform temperature of 11° C. and gradually forced the fire until the air directly above the hot air inlet into car reached 220° C. or 396° F. without danger of igniting the car. These tests were for the purpose of determining the safety of the device from an insurance standpoint. It was not a theoretical determination. It was an actual trial. In table 2 the conditions were much the same as shown in table 1, except the ventilator door was closed. Although the temperature above the hot air inlet to car was forced to 210° C. or 378° F. and the temperature in the heater box about the stove to 180° C. or 324° F., no danger of ignition of car was discovered. Table 3 shows a representative service test. Here again the heat was forced as high as possible, or to 227° C. or 409.6° F., with no resulting danger from fire.

Of course, these temperatures do not represent the ordinary temperatures of the heater or air in car during ordinary operations, but they represent the highest temperatures to which the heater can be forced, or which it can at any time or under any conditions attain, and all with the result that it is safe. The size of the car was reduced to magnify or increase the heat effect.

Transportation Associations, Clubs, Etc.

The names of persons given below are those of the secretaries unless otherwise stated:

Canadian Car Service Bureau—W. J. Collins, Manager, 401 St. Nicholas Building, Montreal.

Canadian Electric Railway Association—Acton Burrows, 70 Bond Street, Toronto.

Canadian Freight Association (Eastern lines)—G. C. Ransom, Canadian Express Building, Montreal.

Canadian Freight Association (Western lines)—W. E. Campbell, 805 Boyd Block, Winnipeg.

Canadian Railway Association for National Defence, W. M. Neal, General Secretary, 263 St. James St., Montreal.

Canadian Railway Club—J. Powell, St. Lambert, Que. Meetings at Montreal 2nd Tuesday, each month, 8.30 p.m., except June, July and August.

Dominion Marine Association—F. King, Counsel, Kingston, Ont.

Canadian Ticket Agents' Association—E. de la Hooke, London, Ont.

Canadian Society of Civil Engineers—C. H. McLeod, 176 Mansfield St., Montreal.

Eastern Canadian Passenger Association—G. H. Webster, 54 Beaver Hall Hill, Montreal.

Engineers' Club of Montreal—R. W. H. Smith, 9 Beaver Hall Square, Montreal.

Engineers' Club of Toronto—R. B. Wolsey, 94 King Street West, Toronto.

Express Traffic Association of Canada—C. N. Ham, Montreal.

Great Lakes and St. Lawrence River Rate Committee—James Morrison, Montreal.

Hydro-Electric Railway Association of Ontario—T. J. Hannigan, Guelph, Ont.

International Water Lines Passenger Association—M. R. Nelson, New York.

Niagara Frontier Summer Rate Committee—James Morrison, Montreal.

Nova Scotia Society of Engineers—A. R. McCleave, Halifax, N.S.

Quebec Transportation Club—A. F. Dion, Quebec.

Shipping Federation of Canada—Thos. Robb, Manager, 42 St. Sacramento Street, Montreal.

Ship Masters' Association of Canada—Capt. E. Wells, 45 St. John Street, Halifax, N.S.

Toronto Transportation Club—W. A. Gray, 143 Yonge Street, Toronto.

Transportation Club of Vancouver—C. E. Blaney, 2337 Third Ave. West, Vancouver, B.C.

Twin Cities Local Freight Agents' Association—E. J. Travers, Fort William, Ont.

Winnipeg Traffic Club—James Gehrey, Bannatyne Avenue, Winnipeg, Man.

CANADIAN PACIFIC RAILWAY COMPANY.

Dividend Notice.

At a meeting of the Board of Directors held today a dividend of two and one-half per cent. on the Common Stock for the quarter ended 30th September, last, being at the rate of seven per cent. per annum from revenue and three per cent. per annum from Special Income Account, was declared payable on 31st December next, to shareholders of record at 1 p.m. on 1st December next.

By order of the Board,

ERNEST ALEXANDER,

Secretary.

Montreal, 12th November, 1917.

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