

lect? Here is one reason; the railways haul freight as so low a figure that they feel they cannot afford to have the number of men necessary to give the cars the proper attention. What you can't do yourself you must trust in providence for, and providence does not look after box cars.

There are many other phases of this question apart from the above, and there is one that is most difficult to deal with. This is the car left at a way station, or siding, in winter until the dope is completely frozen, but the car is thrown on to a train and must get along as best it can. However, the better attention at divisional points hinted at above would help greatly in these cases. We cannot, I believe, totally eliminate the hot box on freight cars, but we can reduce the number 75% by spending the money to do it.

The foregoing few words will, I hope, introduce the subject of hot boxes on freight cars, but we still have the question of the same trouble on our passenger equipment. Some time ago I had the pleasure of looking into this matter, and after taking the statements of trainmen, trainmasters, superintendents, car men and others into account, and also watching the "passing of the buck" along the line, I came to the conclusion that here again we come down to that word neglect.

In a Canadian winter, our cars do have a hard time of it. Shoved into a yard with snow and ice often scraping the journal boxes, with the inside heated to 100 degrees and the outside frozen solid, they cannot be in good condition to give satisfactory service. The only answer to that problem is to have the cars placed in a building as locomotives are placed in locomotive houses. Such a building should be heated to about 60 degrees and no heat applied to inside of cars. Two hours after cars are placed in such a building all snow and ice falls away from trucks and running gear, leaving the car clean for proper inspection. The dope remains in the best possible condition, and the car goes out for its run in as good shape as we can make it. I have seen cars handled in this way, and I know that the results were good. Many people will say that it is impossible to house all of our passenger equipment, or not actually impossible, but that the cost would be prohibitive. I fully appreciate the fact that the cost would be great, that is the initial cost, but it is a question if it would not be quite as wise an investment as the locomotive house. It would not be necessary to place every passenger car, mail car and baggage car inside of a building. Many of the spare cars could be left outside as now, but I believe that we should have buildings to accommodate all cars on our regular trains, with room for a reasonable number of spare cars that should be available in case of accidents. The cost of such buildings would be considerable, but against this cost, what would we save? I believe that this building could be heated with less fuel than is now used for keeping the interior of cars warm while standing out of doors, and that the number of hot boxes could be greatly reduced, or practically eliminated. It is hard to tell just what a hot box costs, but we know that they cost considerable money. I also have statements from car men to the effect that in one year they have expended sufficient money in repiping cars that have been frozen to pay for a building to protect them. This may be

exaggerating, but if the saving in this direction in five years would pay for the building, I believe it would be a good investment.

There is another phase of this question that in my opinion has not received the attention that it deserves, and that is the extent to which we are using, by wear, our journal bearings. I have made several tests of this, and have found that the quantity of brass actually used up by wear is very small indeed. We are practically running on white metal. This does not apply to any particular road, but to many roads, as I have reports from different places on the continent all bearing out what I have said. Now, what is the trouble here? I think we can all remember when journal bearings were very much more worn in service than they are today. I can remember journal bearings that had never given trouble and were finally removed because they were worn so thin that there was fear of them breaking or being worn clean through, allowing the journal to come in contact with the wedge. Such a condition, so far as I know, is practically unknown today. It may be stated that in the days when journal bearings were so worn, our cars and loads were lighter, and this is true, but in those days our journal and journal bearings were smaller. In other words, they were designed to carry the loads of that day. The journals and journal bearings in use today are supposed to be designed to carry the loads of today. They are not doing it in a satisfactory manner. Is this another case of neglect, that is, have we neglected to provide journals and bearings large enough to carry the loads?

I believe that these matters are of vital importance and they deserve all of the attention we can give them, and that any man who has an idea on the subject should feel at liberty to advance that idea. He may be wrong, as I may be in some of my ideas, but by advancing his proposition or idea he may bring out a better one, and that is what we want.

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

Deliveries on Public and Private Sidings in Montreal and Toronto Terminals.

The G.T.R. has adopted the same regulations as those applying on the C.P.R. at Toronto and Montreal, covering carload traffic received at these two points. As is generally known, the railways in Toronto and Montreal have divided their delivery facilities into what are known as "sub terminals." For example, in Montreal there is Outremont, Place Viger, etc., and in Toronto, Parkdale, West Toronto, etc. All carload shipments consigned to Toronto, are accordingly taken to Simcoe St., and all shipments consigned to Montreal, to Place Viger on the C.P.R., and Bonaventure on the G.T.R. The new arrangement which has been in vogue on the C.P.R. for some time requires that carload shipments must be consigned direct to the sub terminal, where delivery is desired. For example, a shipment from John Jones, Kingston, to William Smith, located at the Don, should be shown on the bill of lading as "William Smith, Don," followed by the words "Toronto, Ontario," in brackets.

The following circular has been issued by the G.T.R. in connection with the matter:

"Effective Nov. 18, the general system of billing carload traffic to Montreal or Toronto, as the case may be, will be discontinued and agents must ascertain from shippers the specific Montreal or Toronto terminal or sub-station within which delivery is required and see that bills of lading and waybills are issued accordingly, "Montreal" or "Toronto" being shown in brackets beneath the sub-station both at the heading and in the body of the waybill. Waybills should be made in accordance with example given below:

Local Freight Waybill.				
From Kingston, Ont.	To Don, (Toronto)	Date Nov. 12, 1918	Waybill no. 1	
Consignor, connecting line reference, original car and way bill shipment	Marks consignee and destination	No. of packages	Articles and classification. Conditions (O.R., C.R., Rel. Gtd., etc.)	Weight
Jno. Jones	W. Smith, Don..... (Toronto)	1	Car oats.....	60,000

"Traffic must not be billed to any specific siding but to the sub-station. If consignees having more than one warehouse or receiving yard within the same sub-station, or in different sub-stations, notify the railway company of change of delivery required prior to arrival of the freight at the sub-station to which it is originally billed, no additional charge will be made, otherwise, if a change is desired from the original billed delivery, switching charges as provided in tariff S-108, C.R.C. no. E-3292 supplements thereto or reissues thereof will be assessed.

"Traffic placed for delivery at one sub-station and ordered to another sub-station, will be subject to current switching charges as per tariff S. 108 C.R.C. no. E 3292, supplements thereto or reissues thereof."

If shipments are billed merely to "Toronto" or "Montreal," they will be taken to the terminal which is considered by the railways as Toronto or Montreal, and any deliveries to any sub terminals will be charged for in addition to the rate. The Canadian Manufacturers' Association has, therefore, suggested that all interested manufacturers in these two cities should give instructions to all those from whom they receive shipments, so that the goods will be properly billed, and thus avoid additional expense.

C.P.R. Social Clubs.—During the past few years a number of social and athletic clubs have been organized at various points on the C.P.R. Western Lines for the benefit of employees. To consolidate the interests of these clubs, and bring about some uniformity of aims, etc., a convention was held recently in Winnipeg, at which delegates representing clubs having a total membership of over 4,000 were present. It was decided to form a central organization with headquarters at Winnipeg, the first officers elected were:—President, J. Bending, President of the Winnipeg club; Secretary, R. W. Beatty. It was decided that the presidents of the existing clubs form the central executive committee. Plans were discussed for the extension of the movement to other centers; the standardization of the clubs' efforts and activities; the establishment of sporting competitions, and other measures calculated to increase interest in, and to promote the welfare of the club movement. It was agreed to hold an annual convention of the clubs, different centers to be visited as agreed upon.