

### Conversion of Canadian Pacific Freight Cars.

As stated in Canadian Railway and Marine World for September, the C.P.R. is converting 336 single insulated refrigerator cars to vegetable cars, half at Angus shops, Montreal, and half at Weston shops, Winnipeg, and is also converting 1,161 steel side dump ballast cars to coal cars, and 600 stone cars to coal cars at Angus shops.

The 336 vegetable cars being converted from standard single insulated refrigerator cars are 38 ft. 8 in. long over end sills and have standard refrigerator doors. After removing the ice bunkers, floor slats and meat racks, the side and end walls are covered with refrigerator insulating paper, and on the inside of this, vertical strips are spaced about 2 ft. centres along the sides of the car. These vertical strips are 2 in. square, fastened to 1 in. blocks, providing a total of 3 in. air space. The linings on the inside of the strips consists of  $\frac{3}{8}$  in. t. and g. insulation, 1 layer of insulating paper and 13/16 in. standard t. and g. car lining. This inside lining extends to within 6 in. of the car floor and to within about 12 in. of the ceiling, leaving an opening at top and bottom, so that the heat, supplied from the charcoal heaters, located at the centre of the car, may be circulated freely all along the sides and ends of the load, and return to the centre of the car through a space 5½ in. high provided by a false floor, which is made of two courses of t. and g. lumber with insulating paper between. The floor is in sections, about 4 ft. wide, extending between inside linings. This permits of the floor being taken up, whenever necessary, for cleaning underneath, and for repairs to underframe, draft timber bolts, etc.

At each end of the car there is a bulkhead, just in front of the hatch opening, constructed in the same manner as the side linings. The open space, above the side lining and end bulkhead, is covered with heavy wire mesh, to prevent consignees throwing culled vegetables over into the air spaces. At the bulkhead this mesh also prevents theft through the hatch opening. Hatch openings are equipped with standard insulated plugs, attached to chains, so that they can be lowered into the space back of the bulkheads when the car is operating under ventilation. Hatch covers are hinged so as to open towards the centre of the car. It is believed that this arrangement provides the best distribution of fresh air throughout the interior of the car.

The heating of each car is to be accomplished by means of standard no. 2 charcoal heaters. In moderate weather one or two heaters may be used in the collapsible galvanized iron heater cages attached to the inside of the car doors. These cages are so arranged that, when the heater requires to be recharged with fuel, it is not necessary to enter the car, and the exchange of air from the outside to the inside of the car is reduced to a minimum by one side of the heater cage being secured in a position to close the aperture of the open car door in much the same manner as revolving doors in public buildings. In severe weather additional heaters may be used suspended from the ceiling from substantial fastenings provided for the purpose.

The company has 1,161 50-ton steel side dump ballast cars that are to be fitted with end gates and extension sides so as to carry their maximum tonnage in bituminous coal. The extension sides consist of planks, 30 in. high, secured to stakes

that pass through openings in the top channel of the steel side construction, and secured at the bottom in malleable blocks provided for the purpose. To prevent the wooden sides bulging near the centre of the car, tie rods are provided, reinforced against bending, by means of a cross timber, 3 x 8 in., securely supported and fas-

tened at the ends to the extension sides. In order that these cars may meet the safety appliance requirements, additional hand holds are required, and the brake mast, originally located on the corner, is removed, and a new brake mast and fittings are applied about 18 in. from the centre of the car.

### Canadian Pacific Railway Honor Roll 27.

Amos, Alfred V. H.	Clerk	Vancouver	Wounded
Anderson, Henry T.	Machinist	Ogden	Wounded
Baxter, George L.	Brakeman	Lethbridge	Wounded
Bingham, William H.	Bridgeman	Sutherland	Wounded
Blakey, Harold A.	Bell boy	Victoria	Wounded
Breeze, Jack	Locomotive fireman.	Kenora	Wounded
Brundrett, Walter	Clerk	Calgary	Died of wounds
Bryan, John W.	Locomotive fireman	Strathcona	Wounded
Burns, Archibald	Brush hand	Ogden	Wounded
Campbell, R. H. M.	Checker	Smelter	Wounded
Caprani, Joseph	Carpenter	Winnipeg	Wounded
Cassidy, Patrick J.	Switchman	Brandon	Wounded
Chapman, Horace	Angus	Winnipeg	Wounded
Clarke, Joseph V.	Yardman	Winnipeg	Wounded
Cochrane, Robert H.	Watchman	Strassburg	Wounded
Collins, Lewis	Chef	Toronto	Killed in action
Curveon, James L.	Conductor	B. C. District	Wounded
Dallas, Donald	Conductor	Calgary	Gassed
Daly, James R.	Clerk	Maniwaki	Killed in action
Davies, Edward V. H.	Clerk	Weyburn	Wounded
Devlin, William T.	Trainman	Minnedosa	Presumed dead
Douglas, William	Checker	Coquitlam	Wounded
Eades, Robert	Constable	Montreal	Died of wounds
Ellinson, Joseph G.	Clerk	Calgary	Wounded
Farrow, Thomas	Car repairer	West Toronto	Wounded
Fergie, Richard H.	Linen handler	Winnipeg	Presumed dead
Ferguson, John	Fitter	Winnipeg	Wounded
Ferguson, Thomas	Car repairer	Place Viger	Gassed
Forrest, Thomas	Clerk	Calgary	Wounded
Gaff, Wilfred J.	Clerk	Winnipeg	Killed in action
Grant, John C.	Wiper	Swift Current	Wounded
Gray, Donald H.	Clerk	Montreal	Wounded
Hall, Samuel	Helper	Winnipeg	Believed killed
Henderson, William M.	Locomotive man	Bay Shore	Presumed dead
Herron, Jack	Tracer	Toronto	Died of wounds
Hewitt, Henry	Boilermaker	Calgary	Presumed dead
Hillman, George C.	Craneman	North Bay	Killed in action
Hook, James A.	Seaman	Victoria	Wounded
Hornsby, John	Machinist	Angus	Killed in action
Hutchinson, W. K.	Clerk	Fort William	Wounded
Irvine, Earl	Transitman	Schreiber	Wounded
Jackson, Edward J.	Blacksmith	Calgary	Presumed dead
James, Harold C.	Clerk	St. John, N.B.	Wounded
Jarvis, Arthur H.	Boilerwasher	Kenora	Wounded
Johnson, Peter	Checker	Innisfail	Wounded
Kay, John T.	Yardmaster	Medicine Hat	Wounded
Kelly, George	Chef	Vancouver	Wounded
Kelly, Michael J.	Clerk	North Bay	Wounded
Kinnear, Alfred	Helper	Angus	Wounded
Kirkbride, William B.	Wiper	Kamloops	Wounded
Kubota, James	Wiper	Swift Current	Wounded
Leslie, David	Wiper	Regina	Wounded
Lewis, Jesse S.	Operator	Moose Jaw	Wounded
Lucas, Albert J.	Fitter	Winnipeg	Wounded
McBurnie, John	Helper	Winnipeg	Killed in action
McCalden, John	Locomotive fireman	West Toronto	Wounded
McCubbin, Alexander	Apprentice	Angus	Killed in action
McDonald, John H.	Operator	Minnedosa	Wounded
McGibbon, James R.	Operator	Weyburn	Presumed dead
McGowan, Anthony	Clerk	Vancouver	Wounded
McNamee, Leslie B.	Assistant agent	Canmore	Died of wounds
McVeigh, Charles H.	Clerk	Kenora	Wounded
Mallin, Patrick	Inspector	Angus	Wounded
Miller, Harry	Stover	Calgary	Wounded
Milne, John D.	Clerk	Fort William	Presumed dead
Minshull, Charles E.	Cleaner	Montreal	Killed in action
Moir, Lyall T.	Laborer	Field	Wounded
Olden, Fred	Trimmer	Toronto	Wounded
Owens, Thomas	Apprentice	Winnipeg	Wounded
Parks, Andrew	Car repairer	Calgary	Wounded
Parnell, Harold	Trucker	Toronto	Killed in action
Paterson, John S.	Locomotive man	Winnipeg	Wounded
Pearce, Harry J. L.	Clerk	Calgary	Wounded
Pearce, Leo Elmira	Checker	Camrose	Wounded
Phipps, Frank	Locomotive fireman	Midway	Wounded
Poole, John	Brakeman	Kenora	Killed in action
Porritt, Stanley	Locomotive fireman	Revelstoke	Wounded
Post, Fred	Cashier	Havelock	Wounded
Prizeman, George A.	Locomotive man	Shaunavon	Killed in action
Raymer, Harold J.	Car repairer	Weyburn	Wounded
Richards, Thomas	Locomotive fireman	Victoria	Wounded
Roberts, George	Stenographer	Calgary	Killed in action
Rumsey, Francis C.	Porter	Calgary	Killed in action
Salter, William	Carpenter	Brandon	Killed in action
Scott, Andrew	Punch hand	Ogden	Wounded
Simpson, Alexander	Chief clerk	Angus	Wounded
Smith, Duncan G.	Storekeeper	Moose Jaw	Wounded
Smith, Joseph	W...ter	Brooks	Wounded
Summers, Charles	Laborer	Vancouver	Wounded
Surtees, Andrew	Clerk	Calgary	Killed in action
Swansborough, G. E.	Clerk	Saskatoon	Wounded
Teape, George F.	Clerk	Edmonton	Killed in action
Turner, Alfred W.	Clerk	Pembroke	Wounded
Underwood, Arthur	Laborer	Calgary	Wounded
Weber, Andrew	Trucker	Sudbury	Presumed dead
Wilson, Charles	Locomotive man	Medicine Hat	Killed in action
Wilson, Harold W.	Timekeeper	Vancouver	Wounded
Wilson, Stanley	Yardman	Lethbridge	Wounded
Wiltshire, William H.	Clerk	Montreal	Killed in action

Shown on Honor lists to date: Killed, 487; wounded, 1,064; Total, 1,551.