

THE RAILWAY & SHIPPING WORLD,

With which is incorporated
The Western World, Established 1890.

AN ILLUSTRATED PERIODICAL DEVOTED TO STEAM AND
ELECTRIC RAILWAY, SHIPPING, EXPRESS, TELEGRAPH
AND TELEPHONE INTERESTS.

The Official Organ of
The Canadian Freight Association.
The Canadian Roadmasters' Association.
The Canadian Ticket Agents' Association.

PUBLICATION OFFICE,
33 MELINDA STREET, TORONTO, CANADA.
Bell Telephone, Main 3301.

SUBSCRIPTION PRICE, postage prepaid to Canada and
the United States, \$1 a year; to Great Britain and other
countries in the Postal Union, \$1.25 (5 shillings sterling).
The best and safest way to remit is by express or post
office money order payable at Toronto.

ADVERTISING RATES furnished on application.

Sole Advertising Agents in the United Kingdom, W.
L. ERWOOD, LTD., 30 Fleet Street, London, E.C.

TORONTO, CANADA, APRIL, 1904.

Canadian Association of Masters and Mates.

MASTER, Capt. Jas. Wilson, Collingwood, Ont.;
FIRST OFFICER, Capt. Milligan, St. Catharines, Ont.;
SECRETARY, W. Ireland, Parry Sound, Ont.; TREASURER,
Capt. M. McKay, Owen Sound, Ont.

Canadian Excursion Agreement Meeting.

CHAIRMAN, J. H. Walsh, Sherbrooke, Que.
SECRETARY, care of Passenger Department, C.P.R.,
Montreal.

Canadian Freight Association.

PRESIDENT, W. P. Hinton, Ottawa, Ont.; 1st VICE-
PRES., C. Howe, Buffalo, N.Y.; and VICE-PRES., W.
R. MacInnes, Montreal; SEC.-TREAS., J. Earls, Tor-
onto.
OFFICIAL ORGAN.—THE RAILWAY & SHIPPING WORLD,
Toronto.

Canadian Pacific Railway Club.

PRESIDENT, W. J. Brown; SECRETARY, pro tem, W.
J. Miller; TREASURER, J. D. Scott.
REGULAR MEETINGS, 1st Monday each month, in club
rooms, Toronto Junction.

Canadian Railway Club.

PRESIDENT, T. A. McHattie, Montreal; 1st VICE-
PRESIDENT, S. King, Moncton, N.B.; and VICE-PRES-
IDENT, W. E. Fowler, Montreal; SECRETARY, W. H.
Rosevear, Jr., St. Lambert, Que.; TREASURER, S. F.
Underwood, Montreal.
MEETINGS at Windsor Hotel, Montreal, 1st Tuesday
of each month, 8 p.m., except June, July and Aug.

Canadian Roadmasters' Association.

PRESIDENT, A. McAuley, Toronto Jct., Ont.; VICE-
PRESIDENT, J. R. Brennan, Ottawa, Ont.; SECRETARY-
TREASURER, J. Drinkwater, Winchester, Ont.
OFFICIAL ORGAN.—THE RAILWAY & SHIPPING WORLD,
Toronto.

Canadian Society of Civil Engineers.

PRESIDENT, Col. W. P. Anderson, Ottawa; VICE-
PRESIDENTS, C. E. W. Dodwell, C. H. Keefer, E. Mar-
ceau; TREASURER, H. Irwin; SECRETARY, C. H.
McLeod; LIBRARIAN, E. G. M. Cape.
MEETINGS at 877 Dorchester St., Montreal, every
alternate Thursday, 8 p.m.

Canadian Ticket Agents' Association.

PRESIDENT, M. McNamara, Walkerton, Ont.; FIRST
VICE-PRESIDENT, W. H. C. Mackay, St. John, N.B.;
SECOND VICE-PRESIDENT, C. E. Morgan, Hamilton,
Ont.; THIRD VICE-PRESIDENT, W. H. Harper, Chatham,
Ont.; CHAIRMAN EXECUTIVE COMMITTEE, W. Bunton,
Peterboro', Ont.; SEC.-TREASURER, E. de la Hooke,
London, Ont.
OFFICIAL ORGAN.—THE RAILWAY AND SHIPPING
WORLD, Toronto.

Dominion Marine Association.

PRESIDENT, C. F. Gildersleeve, Montreal; VICE-
PRESIDENT, J. J. Long, Collingwood, Ont.; SEC-
TREASURER, F. King, Kingston, Ont.

Engineers' Club of Toronto.

PRESIDENT, K. Gamble; 1st VICE-PRESIDENT, R. F.
Tate; and VICE-PRESIDENT, Jas. McDougall; SECRE-
TARY, W. Chipman.
Rooms, 96 King St. West, Toronto.

Great Lakes and St. Lawrence River Rate Committee.

CHAIRMAN, C. E. Markham, Buffalo, N.Y.
SECRETARY, G. C. Wells, Montreal.

International Water Lines Passenger Association.

PRESIDENT, A. A. Schantz, Detroit, Mich.; VICE-
PRESIDENT, J. Berolsheim, Chicago, Ill.; SECRETARY,
M. R. Nelson, Buffalo, N.Y.

NEXT MEETING, Buffalo, N.Y., Feb. 8th, 1905.

National Association Marine Engineers of Canada.

PRESIDENT, T. J. S. Milne, Kingston, Ont.; VICE-
PRESIDENT, N. Dupac, Montreal, Que.; SEC.-TREAS.,
N. J. Morrison, St. John, N.B.; SECRETARIES OF LO-
CAL COUNCILS—Toronto, R. Beals; St. John, N.B.,
G. T. G. Blewett; Collingwood, Ont., A. McDougall;
Kingston, Ont., J. Gillie; Montreal, N. Dupac; Vic-
toria, B. C., P. Gordon; Vancouver, B. C., T. M.
Heard; Levis, Que., E. Belanger; Sorel, Que., A. L. de
Martigny; Owen Sound, J. M. Wilson; Windsor, Ont.,
N. Maitland.

NEXT ANNUAL MEETING of the Grand Council, in
Collingwood, Ont., fourth Tuesday in Jan., 1905.

Niagara Frontier Summer Rate Committee.

CHAIRMAN, H. H. Gildersleeve, Kingston, Ont.
SECRETARY, G. C. Wells, Montreal.

The Shipping Federation of Canada.

PRESIDENT, H. A. Allan; CHAIRMAN OF EXECUTIVE
COMMITTEE, W. I. Gear; MANAGER, T. Robb; SECRE-
TARY, T. B. Odell. Office, 526 Board of Trade, Montreal.

Back Numbers for Sale.

THE RAILWAY AND SHIPPING WORLD:

March to December, 1898, price.....\$1.00
January to December, 1899, ".....1.10
January to December, 1900, ".....1.10
January to December, 1901, ".....1.10
January to December, 1902, ".....1.10
January to December, 1903, ".....1.10
including postage.

Address

THE RAILWAY AND SHIPPING WORLD,
33 Melinda St., Toronto, Canada.

Cuts For Sale.

With few exceptions, all cuts which appear
in THE RAILWAY AND SHIPPING WORLD as
illustrations are for sale.

For prices, etc., address

THE RAILWAY AND SHIPPING WORLD,
33 Melinda St., Toronto, Canada.

Subscription Agents Wanted.

We want an agent at each railway and
shipping centre in the Dominion to secure
new subscriptions to the RAILWAY AND SHIP-
PING WORLD, for which we will pay liberal
commissions.

The work is easy, the paper recommending
itself; and is specially adapted for clerks in
transportation offices. It can be done at odd
times without interfering with other duties.

For terms and other particulars, address
THE RAILWAY AND SHIPPING WORLD,
Toronto.

The Canadian Pacific Ry. Shops.

(Continued from page 109.)

transfer table assisting the movement. The
iron work for freight cars is forged in the
blacksmith shop, or cast in the grey iron
foundry and machined in the car machine
shop, whence it goes to the truck shop or the
freight car shop for final use. In the truck
shop the trucks for the freight cars, as well as
for the coaches, are put together. The chill-
ed wheels are to be cast in the well-equipped
wheel foundry, with a capacity of 300 wheels
a day. The wheels are bored and pressed on
the axles in the west end of the truck shop,

Alphabetical List of Advertisers.

	PAGE
W. Abbott, Montreal.....	140
The Accident and Guarantee Co. of Canada.....	142
American Locomotive Co., New York.....	Cover 4
Babcock & Wilcox (Ltd.), Montreal.....	144
Baldwin Locomotive Works, Philadelphia, Pa.....	146
Bell Telephone Co. of Canada.....	148
Bradstreet Company.....	149
The Acton Burrows Co., Toronto.....	Cover 1
Canadian Locomotive Co., Kingston, Ont.....	Cover 1
Canadian Northern Railway.....	118
Canadian Pacific Railway Land Department.....	130
Canadian Railway Accident Insurance Co.....	Cover 1
Canadian Shipbuilding Co.....	134
Canadian Steel and Wire Co., Hamilton.....	136
W. H. Coddington, Hamilton.....	142
B. J. Coghlin & Co., Montreal.....	148
James Cooper, Montreal.....	152
Dominion Bridge Co., Montreal.....	154
Dominion Steamship Line.....	156
Dominion Wire Manufacturing Co., Montreal.....	158
Dominion Wire Rope Co., Montreal.....	159
E. L. Drewry, Winnipeg, Man.....	161
Drummond, McCall & Co., Montreal.....	160
Expanded Metal and Fireproofing Co., Toronto.....	162
Firstbrook Box Co., Toronto.....	164
Galena Signal Oil Co., Franklin, Pa.....	166
J. J. Gartshore, Toronto.....	168
Government of Manitoba.....	170
The B. Greening Wire Co., Hamilton, Ont.....	172
Gutta Percha and Rubber Mfg. Co. of Toronto.....	174
Holland Portable Light Works, Montreal.....	176
Holt, Renfrew & Co., Toronto.....	178
Hudson's Bay Company.....	Cover 4
Hunter, Rose Co., Toronto.....	182
James Hutton & Co., Montreal.....	184
Illinois Central Railroad.....	186
Imperial Bank of Canada.....	188
Intercolonial Railway.....	190
International Mercantile Marine Co.....	192
Wm. Jessop & Sons (Ltd.), Sheffield, Eng.....	194
Lima Locomotive & Machine Co. Lima, Ohio.....	196
Lehigh Valley Railroad.....	198
Rice Lewis & Son, Toronto.....	Cover 1
Locomotive and Machine Co. of Montreal.....	200
London Guarantee and Accident Co., Toronto.....	202
Mail Job Printing Co., Toronto.....	204
McCaskill, Dougall & Co., Montreal.....	Cover 1
John S. Metcalf Co., Chicago, Ill.....	208
Mica Boiler Covering Co., Montreal.....	210
Midland Towing and Wrecking Co.....	212
Montreal Steel Works, Montreal.....	214
James Morrison Brass Mfg. Co., Toronto.....	216
T. A. Morrison & Co., Montreal.....	218
W. H. C. Mussen & Co., Montreal.....	220
New York Central Railroad.....	222
Northern Electric and Manufacturing Co., Montreal.....	224
A. O. Norton, Coaticook, Que.....	226
Ontario Wind Engine and Pump Co., Toronto.....	228
Page Wire Fence Co., Walkerville.....	230
Eugene F. Phillips Electrical Works, Montreal.....	232
The Hiram L. Piper Co., Montreal.....	234
N. L. Piper Railway Supply Co., Toronto.....	236
Place Viger Hotel, Montreal.....	238
Polson Iron Works, Toronto.....	240
J. W. Pyke & Co., Montreal.....	242
Queen City Oil Co., Toronto.....	244
Rhodes, Curry & Co., Amherst, N. S.....	246
Russell House, Ottawa.....	248
St. Thomas Brass Co., St. Thomas, Ont.....	250
Safety Car Heating & Lighting Co., New York.....	252
Saxon Engine Works, Chemnitz, Germany.....	254
Simplex Railway Appliance Co., Montreal.....	Cover 2
Sonne Awning, Tent & Tarpaulin Co., Montreal.....	258
J. & J. Taylor, Toronto.....	260
Toronto Engraving Co., Toronto.....	262
Travelers' Insurance Co., Montreal.....	Cover 2
Westinghouse Manufacturing Co., Hamilton.....	Cover 2
Wire & Cable Co., Montreal.....	264

which is provided with all necessary machin-
ery for this purpose. The completed truck
goes to the freight car shop where the car
bodies are erected on it. There are four
tracks for erecting purposes, each 540 ft. long,
and two intermediate tracks for bringing in
supplies. Six travelling cranes fitted with air
hoists will handle the heavier material.

The material for the passenger car shops
is prepared in the mill and the cabinet shop;
the mahogany and other hard woods being
dried in the small kiln and stored in the hard-
wood storage, which forms the first floor of
the upholstery shop. The coach shops are
served by an electric transfer table 75 ft.
long, operated through an overhead trolley
by a 20 h.p. alternating current motor. The
coach shops are 100 ft. wide; each shop has
28 tracks, spaced 24 ft. apart, centre to cen-
tre.

The locomotive shop is of the longitudinal
type, with three bays, each 1,165 ft. long, of
which about 300 ft. is devoted to the boiler
and tank work. There are three bays: the
erecting bay, 80 ft. wide; an adjacent ma-
chine shop bay, 50 ft. wide, and a third bay,