bottom sheets being 5-16 in. thick, and the side and top sheets ½ in. thick. The under-framing is made up of 10-in. steel channels, and the trucks are of the 4-wheel center bearing style. The truck wheels are steel tired of 40 ins. diameter, the journals being $5\frac{1}{2}$ by 10 ins. The length of the frame over bumpers is 23 ft. $8\frac{1}{2}$ ins. The inside length of the tank is 22 ft. 7 ins., the inside width 9 ft. 4 ins., the height, not including wings, 5 ft. 7 1/4 ins. The total weight of the tender is 46,000 lbs. loaded and 16,000 lbs. light. The frames are of wrought iron ; driving

box brasses, Damascus nickel bronze; the crossheads of cast steel; the cab of steel, wood lined; the axles, hammered open-hearth steel. The brake equipment consists of Westinghouse-American combined brakes on drivers, tender and for train, with 9½-in. lefthand air pump, and two main reservoirs 20½ ins. by 84 ins., having 50,000 cu. ins. capacity. The foregoing particulars were compiled by the Railway and Engineering Review, from information furnished by E. A. Williams, Superintendent of Rolling Stock C.P.R. and the American Locomotive Co.

The American Locomotive Co. has recently shipped from its Schenectady works 15 locomotives for the Japanese Government railways, the first instalment of an order for 30. The locomotives were shipped in parts boxed. The American Locomotive Co. has now about 300 of its locomotives in Japan.

The equipment of the Bay of Quinte Ry. now consists of 6 locomotives, 119 flat cars, 20 box cars, 9 box and cattle combination cars, 1 flanger, 2 conductors' vans, 2 mail, baggage and express cars, 7 passenger cars, 2 second-class passenger cars.

The G.T.R. added to its passenger and freight equipment during Sept.: 1 mail and baggage car, 5 baggage cars, 11 2nd class cars, 225 box cars, 60,000 lbs.; 10 box cars, 40,000 lbs.; 162 flat cars, 60,000 lbs.; 1 flat car, 40,000.

The Algoma Central and Hudson Bay Ryadded 11 flat cars, 80,000 lbs., and 25 iron ore cars, 80,000 lbs., to its equipment during Sept

The Lake Erie and Detroit River Ry. has added to its equipment 300 gondola cars, 60,-000 lbs., for use on the car ferry line.

G.T.R. SEMI-ANNUAL REPORT.

The following report for the ½-year ended June 30, was submitted at the meeting in London, Eng., Oct. 13.

The following summary shows a comparison of the $\frac{1}{2}$ -year's revenue account with that of the corresponding 1/2-year, ended June 30, 1001:

June 30, 1901.		June 30, 1902.		
£2,287,795	Gross receipts	£2,377,201	- 10	3
1,544,612	Working expenses, being at the rate of 67.45%, as com- pared with 67.52 in 1901	1,603,612	9	6
743, 183	Net traffic receipts Add—	773.589	0	9
12,931	Received from International Bridge Co.	12,930	12	9
3,262 3,088	Interest on Toledo, Sagin- aw, and Muskegon bonds Interest on bonds of Central	192		6
56,271	Vermont Ry Interest on securities of con- trolled lines and on St.	6,506	14	3
	Clair tunnel bonds acquir- ed by issue of G.T. 4% de- benture stock	68,390	5	I

Pintsch System Car and Buoy Lighting.

This Company controls in the United States and Canada the celebrated Pintsch System of Car and Buoy Lighting. It is economical, safe, efficient, and approved by the railway managers and Lighthouse Board of the United States and Canada, and has received the highest awards for excellence at the World's Expositions at Moscow, Vienna, St. Petersburg, London, Berlin, Paris, Chicago, Atlanta and Buffalo. 112,000 cars, 4,500 Locomotives and 1,250 Buoys are equipped with this light. 160 Railroads in the United States and Canada have adopted this system of lighting, applied to over 19,000 cars.

Car Heating.

This Company's Systems have been adopted by 120 of the principal Railroads of the United States and by the great Sleeping Car Company. They consist of The Steam Jacket System of hot water circulation, The Direct Steam Regulating System and Straight Steam (plain piping).

Automatic Steam Couplers. Straight Port Type.

THE SAFETY CAR HEATING and LIGHTING CO., General Offices: 160 Broadway, New York.

Branch Offices: Chicago, 1017 Monadnock Building St. Louis, 1015 Union Trust Building.

Montreal, Stock Exchange Building.

JAS. W. PYKE & COMPANY CANADIAN REPRESENTATIVES FRIED. KRUPP, ESSEN, GERMANY. Steel Rails. FOR STEAM AND Wrought Iron Steel-Tyred Disc Wheels ELECTRIC RAILWAYS. Locomotive and Car Wheel Tyres. Axles, Crank Pins, Forgings, Etc. OFFICE: MERCHANTS BANK BUILDING MONTREAL.