

The Michigan Central has recently placed several new locomotives on its Canada Southern division to haul heavy passenger trains. Although the locomotives look low-set, the driving wheels are 63 inches diameter, and will readily make the running speed required for the heavy express trains. The traction force is so great that a heavy train can be lifted into running speed within remarkably short distance. The firebox, although placed above the frames, has a depth in front of 76½ inches, and at the back 63½ inches. The cylinder fastenings are remarkably strong, and the frames are of a very substantial character. The leading dimensions are:

Weight in working order—153,700 lbs. Weight on drivers—116,000 lbs. Wheel base—Driving, 15 ft.; rigid, 15 ft.; total, 25 ft. 10 ins.

Diameter of cylinders—19½ ins. Stroke of piston—26 ins. Horizontal thickness of piston—5¼ ins. Diameter of piston rod—¾ ins. Size of steam ports—18x1½ ins. Size of exhaust ports—18x2½ ins. Size of bridges—1½ ins. Greatest travel of slide valves—5½ ins. Outside lap of slide valves—½ ins. Inside of slide valves—Line and line. Lead of valves in full gear—Line and line.

Diameter of driving wheels outside of tire—63 ins. Material of driving wheel centers—Cast steel. Tire held by shrinkage. Driving box material—Cast steel. Diameter and length of driving journals—9x11 ins. Diameter and length of main crank-pin journals—6x6 ins.; main side, 6½x5 ins. Diameter and length of side rod crank-pin journals—4½x4 ins.

Engine truck Kind, four-wheel swing bolster; journals, 6x12 ins. Diameter of engine truck wheels—33 ins. Boiler: Style—Extended wagon top. Outside diameter of first ring—62½ ins. Working pressure—200 lbs. Thickness of plates in barrel and outside of firebox—¾, 23-32, ½, 7-16 and 11-16 in. Horizontal seams—Butt joint, sextuple riveted, with welt strips inside and outside. Circumferential seams—Double riveted.

Firebox—Length, 108 ins.; width, 41½ ins.; depth, front, 76½ ins.; back, 63½ ins.; material, steel. Firebox plates, thickness—Sides, 5-16 in.; back, 5-16 in.; crown, ¾ in.; tube sheet, ½ in. Firebox, water space—Front, 4½ in.; sides, 3½ in.; back, 3½ in. Firebox, crown staying—radial stays, 1½ ins. diameter. Firebox, staybolts—1 in. diameter.

Tubes—Material, charcoal iron; number, 314; diameter, 2 ins.; length over tube sheets, 176 ins. Fire brick—supported on water tubes. Heating surface—tubes, 2,397.64 sq. ft.; water tubes, 31.25 sq. ft.; firebox, 169.53 sq. ft.; total, 2,598.42 sq. ft.

Grate area—31.18 sq. ft. Ash pan—hopper, with sides operated by steam. Exhaust pipes—Single high. Exhaust nozzles—4½ ins. diameter.

Smoke stack—inside diameter, 16½ and 14 ins.; top above rail, 14 ft. 4½ ins.

Tender: Weight, empty—45,100 lbs. Wheels—number, 8; diameter, 33 ins. Journals—diameter and length, 5 ins. diam. x 9 ins. Wheel base—16 ft. 5½ ins. Tender frame—10-in. steel channels. Water capacity—5,100 U. S. gallons. Coal capacity—8 tons.

Total wheel base of engine and tender—52 ft. 8 ins. Engine supplied with: Westinghouse-American combined brakes on drivers; tender and for train, Westinghouse 9½-in. air pump; Westinghouse engineers' air signal.

The C.P.R. Co. has not received any new locomotives this year. Twelve simple switching locomotives are being built in the Co.'s shops at Montreal, and 12 heavy passenger locomotives, 6 simple and 6 compound, will be built there this fall. An order has been placed in the U.S. for 8 compound consolidation locomotives with wide fireboxes, and another order has been placed in Canada for 4 compound consolidation locomotives, the whole to be delivered before Oct. 31. An order has also been placed in the U.S. for another Shay locomotive, for use on heavy grades in the Kootenay, B.C., district. It is precisely similar to the one described and illustrated in our Jan. issue, pg. 11 and 13. It is not expected that any further orders for locomotives will be placed by the Co. this year. Following are the general dimensions:

SWITCHING LOCOMOTIVES.

Weight on drivers, 120,000 lbs.
Total weight, 120,000 lbs.
Diameter of cylinders, 18 in.
Stroke of pistons, 26 in.
Diameter of drivers, 51 in.
Type of boiler, Belpaire extended taper course.
Working steam pressure, 200 lbs.
Tubes, number, 239.
" material, charcoal iron.
" outside diameter, 2 in.
" length, 10 ft. 4 5-16 in.
Firebox, length, 8 ft. 10 7-8 in.
" width, 3 ft. 6 5-8 in.
" material, special steel.
Tank capacity, water, 3,500 impl. gals.
Coal capacity, 4 tons.
Air brakes, Driver and W.A.B.

SIMPLE AND COMPOUND PASSENGER LOCOMOTIVES.

Type, ten-wheeler.
Weight on drivers, 122,350 lbs.
Total weight, 160,850 lbs.
Diameter of cylinders, Simple 20 in., Compound 21½ and 32 in.
Stroke of pistons, 26 in.
Diameter of drivers, 69 in.
Type of boiler, Radial stayed extended taper course.
Working steam pressure, 210 lbs.
Tubes, number, 327.
" material, charcoal iron.
" outside diameter, 2 in.
" length, 13 ft. 2 1-16 in.
Firebox, length, 10 ft.
" width, 3 ft. 6 5-8 in.
" material, special steel.
Tank capacity, water, 5,000 impl. gals.
Coal capacity, 9 tons.
Air brakes, driver and W.A.B.

COMPOUND CONSOLIDATION LOCOMOTIVES.

Weight on drivers, 144,000 lbs.
Total weight, 162,000 lbs.
Diameter of cylinders, 22 in. and 35 in.
Stroke of pistons, 28 in.
Diameter of drivers, 57 in.
Type of boiler, Radial stay.
Working steam pressure, 200 lbs.
Tubes, number, 306.
" material, charcoal iron.
" outside diameter, 2 in.
" length, about 13 ft.
Firebox, length, 97 in.
" width, 66 in.
" material, not decided.
Tank capacity, water, 5,000 impl. gals.
Coal capacity, 10 tons.
Air brakes, Westinghouse.
Axles, steel.

Passenger Traffic Matters.

The New York Central Rd. has opened an uptown ticket office at 2263 St. Catherine st., Montreal, in charge of A. J. Hebert.

It is estimated that the railways operating between Chicago and Buffalo will have expended at least \$200,000 on advertising for the Pan-American Exposition before it is closed.

It is rather a curious paradox that, while the railway advertising man always dwells upon the scenic beauties of his route, he is also especially stressful upon the rapidity with which he can carry you over it.

The Vancouver and Sidney Ry. Co. has issued a booklet containing information regarding a trip over its line and by the steamer Iroquois from Sidney, calling at the Gulf Islands on the way to Nanaimo. It contains a number of excellent illustrations.

The Michigan Central has put on two additional fast trains on the main line between Detroit and Buffalo. They are known as the Michigan Pan-American Flyers. One train leaves Buffalo at 9 a.m., arriving in Detroit at 3.50 p.m., and the other leaves Detroit at 12.35 p.m. arriving at Buffalo at 7.10 p.m.

Daily press reports recently stated that the C.P.R. proposed to increase the present continental service next year to two trains a day each way, one of them fast for through business and the other for local traffic. We are advised that nothing definite has been decided, but that a change will be made if traffic warrants it.

The train service on the newly opened Inverness and Richmond Ry. between Hastings and Broad Cove, N.S., consists of one train daily each way. A connection is made at Mulgrave with the Intercolonial, and passengers and mails are carried between Hastings and Port Hawkesbury by steamer, pending completion of the line between these points.

A new folder recently issued by the G.T.R. describing the attractions of the Orillia and Couchiching portions of the highlands of Ontario, brings to notice a number of quiet holiday resorts not too far away from Toronto, and yet not too extensively patronized by tourists. The illustrations are good and the hotel and the boarding-house information is complete.

The annotated time table of the C.P.R. is a valuable and interesting guide to the coun-

try through which the trans-continental line and its ramifications pass. It now includes for the first time the route of the Crow's Nest Pass line. Two editions are now published, a west bound and an east bound, which makes it much more convenient than formerly, when passengers from the west were obliged to adopt the Chinese manner of reference.

The Intercolonial Ry. has just issued a new illustrated booklet which is superior not only in regard to its description of the points reached by the line, but also in its illustrations and general get-up, to anything that has yet been sent out by that line. There are 34 illustrations giving glimpses of the places reached by the I.C.R. in Quebec, New Brunswick, Nova Scotia and Prince Edward Island, with interesting descriptive notes of each. The front page of the cover is strikingly simple, but most effective. It may be pointed out that the Prince Edward Island views are of places on the P.E.I. Ry., not on the I.C.R., as stated in the booklet.

A new method of depositing round trip special rate excursion tickets, issued on the certificate plan, was put in operation in Chicago recently during the session of the Baptist Young People's Union. Instead of having a central headquarters in the down-town district, where visitors might deposit their tickets and get them when they were ready to depart, the conductor of each train entering the city, took up each ticket before reaching the city. He gave a receipt, with instructions on the back telling the name of the road on which the ticket was good to return and in what railway ticket station the original ticket was held. When the visitor was ready to start for home all he had to do was to make an early start for his train, present his receipt to the ticket agent of a specified road, and get the return portion of his transportation.

Newfoundland's Railway Settlement.

The bill to give effect to the new contract between R. G. Reid and the Newfoundland Government, brought before the Legislative Assembly, July 22, was given a third reading July 27, duly passed the Legislative Council, and assent was given to it by the Governor on Aug. 3.

The Premier, in referring to the new contract, said in the Legislature: Mr. Reid has met the public demand in a manly manner, he has respected the vox populi, he therefore is entitled to justice, respect and honor at the hands of the public. He relinquishes his title to the railway for what he paid for it; he might have insisted upon compensation for the loss of its prospective value. He hands back the lands obtained under the 1898 contract for the value that the Government places upon its public lands; he might have insisted upon their value being fixed by arbitration. He does this in the interest of peace and good-will, and in order to secure the co-operation of the Government and of the people of this colony in making his enterprises a success. Unless I am mistaken as to the character of the people of Newfoundland, he shall receive that co-operation; and if the spirit of sentiment that I have just expressed is caught up by this House and applied, we may look forward to a great and striking and permanent improvement in this colony before many years shall have rolled away.

Under the new contract Mr. Reid re-sells and re-conveys to the Government the Newfoundland railway and system as sold and conveyed to him under the contract of 1898, the Government repaying him the \$1,000,000 which he then paid to secure ownership of the line, with interest at the rate of 6% a year. Mr. Reid agrees to operate the railway for a period of 50 years from Aug. 1, 1901, on the terms mentioned in the agreement of 1898. At the end of this term the Government has