

Atlantic Type Locomotives.

The Record of Recent Construction No. 20, issued by the Baldwin Locomotive Works, is devoted to Atlantic type locomotives. Since its introduction in 1895 this type has proven its special fitness for fast passenger service, & has been employed for some of the most notable high-speed trains running. The "Record" referred to is devoted to the illustration of this type, giving, so far as possible, in each instance, records of actual performance in regular service.

The Atlantic type of engine came into existence to meet the conditions essential to the modern high-duty express engine, which are summed up in the expression "sustained speed." Not the burst of speed which a little 18 by 24 in. engine occasionally makes over a level stretch, nor the rushing along of an "extra" with 3 or 4 cars, on a special schedule; but the speed that tells, the steady pull day after day, regardless of weather conditions or of extra cars, at a scheduled 50-mile gait, that can be forced 50% when there is lost time to make up. For such work steam is needed & lots of it, but every pound of water evaporated requires a certain quantity of coal, & every pound of coal burnt needs a certain

The weight on the driving wheels is not necessarily increased by the added heating surface, because the weight of the overhanging fire box is carried on the trailing wheels. These are equalized with the driving wheels, to give a smooth, easy motion when running at maximum speed.

If the tractive effort required exceeds the limit of adhesion which can properly be obtained from two pairs of driving wheels, the 10-wheel type should be selected, but it is not necessary nor desirable to use the 10-wheel type merely to obtain greater heating surface. By omitting the coupling rods to the rear wheels, thus reverting to the Atlantic type, better results can be obtained with less friction, & consequently less cost of maintenance.

The "Record" No. 20 contains illustrations of a number of notable Atlantic type locomotives, with the principal dimensions, for the purpose of affording a basis of comparison of the heating surface & weight on driving wheels in locomotives of the 8-wheel or American type & of the Atlantic type. Among those illustrated are two of the Atlantic type recently built for the Canada Atlantic for fast passenger service between Montreal & Ottawa.

The Freight Train of Life.

Men are like a train of cars
That rumble on the track,
With many curves and many jars,
And many drawing back.

Some are the engines that must pull
Upon the heavy grade,
And some are empty, some are full—
Each for its uses made.

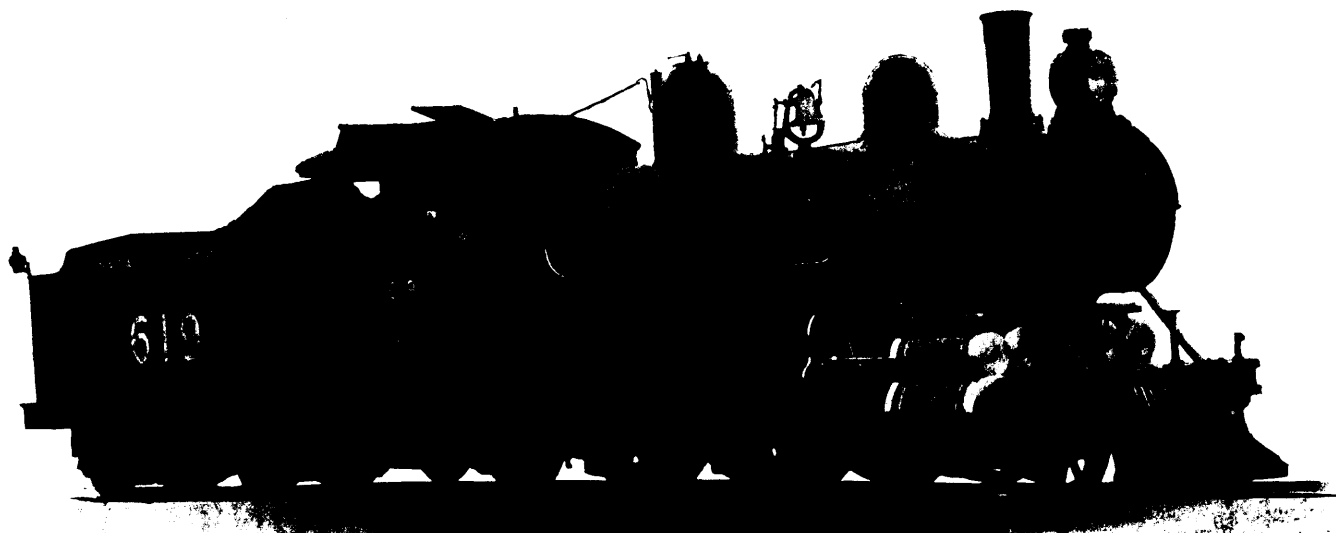
Some seem to slide along the way
With never a squeak or jolt,
And some go creaking, as if they
Were sore in every bolt.

And some are billed to go through straight,
And one is here and there,
To be left on some switch and wait
In gloomy days or fair.

Men are as cars that rumble past,
Each has its place and use;
The engine at the head, and, last,
The pitiful caboose.

S. E. KISER.

A movement is on foot among the employees of the C.P.R. & the G.T.R. which may lead to united representations among different classes of workers, with a view to the establishment of a fortnightly instead of a monthly pay day throughout the systems.



CANADA ATLANTIC RY. LOCOMOTIVE, BUILT BY THE BALDWIN LOCOMOTIVE WORKS.

amount of grate area, & thus the problem has resolved itself into two controlling elements: grate area, & muscle wherewith to supply the same with coal.

To maintain great speed high horse-power must be developed, requiring large heating surface & grate area, but for ordinary passenger traffic except on severe grades the adhesion usually necessary to move the train is not great. It is desirable, for the sake of the most perfect combustion, to have as deep a fire box as possible, & not to increase proportionately the weight on the driving wheels by the increase of the heating surface. These desirable features are obtained in the Atlantic type. The boiler can be made of a size suitable to give the required heating surface. A fire box of ample depth & grate area extends back of the two pairs of coupled wheels, the overhanging weight being supported by a single pair of trailing wheels. These trailing wheels are made smaller in diameter than the driving wheels, in order to give the maximum depth of fire box. The coupled wheels are placed as close together as possible, in order to give coupling rods of minimum length, & the boiler can be set as low as the proper clearance above the driving wheels will admit.

The Florida East Coast Ry., whose interests in Canada are looked after by W. A. Fletcher, Western Passenger Agent at Chicago, is sending out a lot of handsome advertising to ticket agents in Ontario & Quebec. In addition to attractive hangers & an hotel list & information folder, there is an album of views, containing over 30 beautiful half-tones of Florida scenery, which is one of the most superb pieces of railway advertising ever put out. The distribution is being made by the Railway & Steamship Folder Display Co., of Toronto, which means that it is being systematically done.

A contract is said to have been entered into between the Canada Atlantic & the Intercolonial railways for the carriage of Western grain to the seaboard at St. John N.B. The contract price is stated to be the same as to Boston, though the distance to St. John is a little longer.

A number of existing electric railway companies & a number of companies intending to apply for incorporation at the coming session of the Ontario Legislature will ask for exemption from the statute prohibiting the running of the cars on Sunday. These requests will be fought by the Lord's Day Alliance.

Among 600,000,000 passengers carried only 206 persons lost their lives on steamboat vessels within the jurisdiction of the U.S. during the last fiscal year, of which 44 were passengers & 162 members of the crews. During the same year there were 383 boiler explosions on land, which killed 298 persons & wounded 456 others.

The Michigan Central R.R. is testing the use of oil to lay the dust along its roadbed. Experiments are being made near Battle Creek, where a stretch of nine-mile track has been sprinkled. Crude petroleum is used at the rate of 1,800 galls. to the mile, the cost being about \$80 a mile. If these tests prove satisfactory next summer the entire roadbed will be kept dustless.

Track Inspection on the N. Y. Central.

By Axel Ames, Jr., Supervisor of Tracks, 2nd Sub-Div. N. Y. C. & H. R. R. R.

One does not need to have lived long enough to have acquired many grey hairs, to be aware, through his everyday observation, of the great changes which have within his