

(No Model.)

J. M. TAYLOR.
RAILWAY LOCOMOTIVE.

No. 261,786.

Patented July 25, 1882.

Fig. 1.

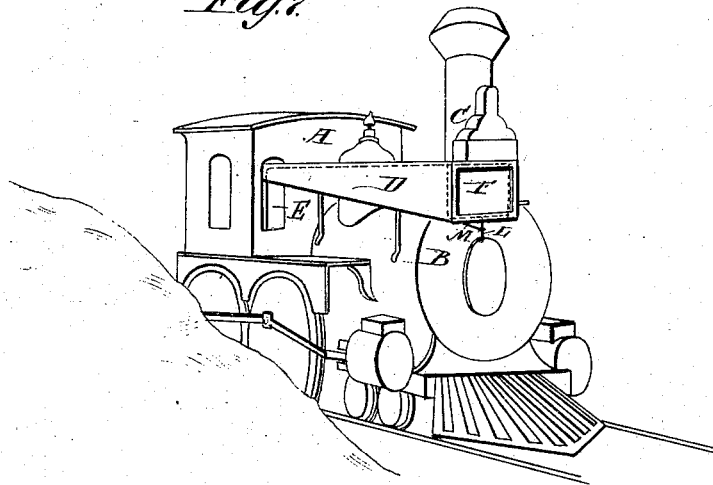


Fig. 2.

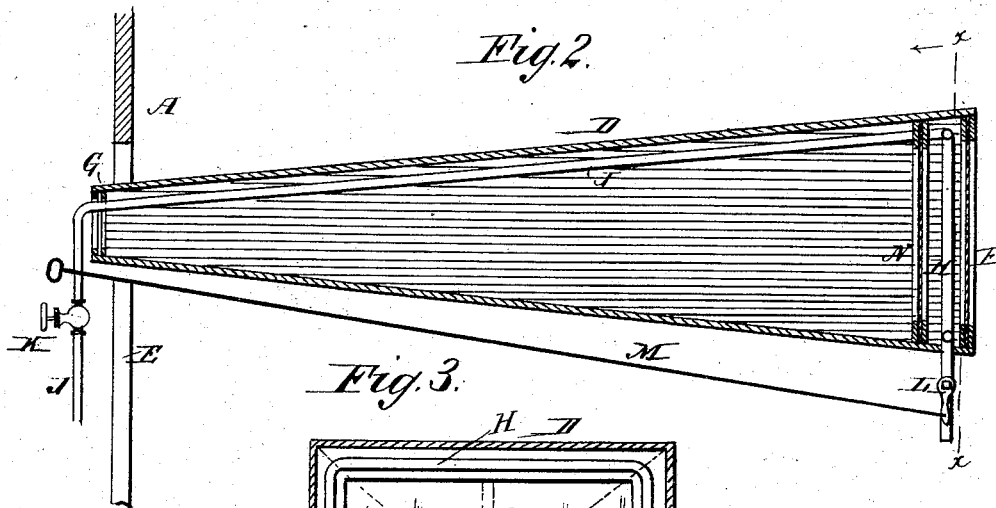
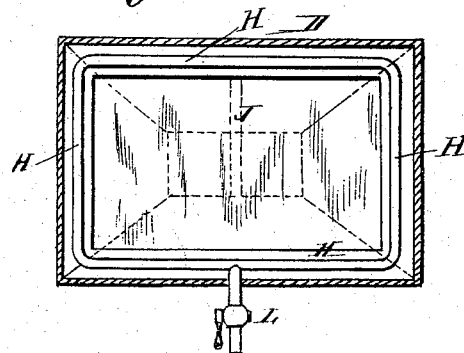


Fig. 3.



WITNESSES:

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UNITED STATES PATENT OFFICE.

JOHN M. TAYLOR, OF FREDERICTON, NEW BRUNSWICK, CANADA.

RAILWAY-LOCOMOTIVE.

SPECIFICATION forming part of Letters Patent No. 261,786, dated July 25, 1882.

Application filed March 29, 1882. (No model.) Patented in Canada March 8, 1882, No. 14,367.

To all whom it may concern:

Be it known that I, JOHN MORRISON TAYLOR, of Fredericton, Province of New Brunswick, Canada, have invented a new and useful Improvement in Railway-Locomotives, of which the following is a full, clear, and exact description.

This invention consists of a lookout-tube attachment to locomotives, the object of which is to enable the engineer to see ahead clearly when the engine is enveloped in smoke and steam, or when the cab-window is obstructed with frost or snow, the said lookout-tube being a long funnel-shaped tube located on the engine, with the large end projected ahead of the smoke-pipe sufficiently to prevent the snow thrown up by the plow from obscuring the front, which in winter is closed with a window, the small end extending back into the cab, preferably through the front cab-window near the top, so that, besides looking through the tube, the engineer can also see under it along the track when not obstructed.

To prevent the front window from being obscured by frost in the winter, a steam-pipe is arranged in the tube for heating the window, and the said window is preferably made double to facilitate the heating of it, the pipe being suitably coiled within the space between the windows. The front portion of the double window will preferably be made of mica; but any preferred transparent substance is to be employed, all as hereinafter more fully described.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of a locomotive with a lookout-tube attached substantially as I propose. Fig. 2 is a longitudinal sectional elevation of the tube, and Fig. 3 is a transverse sectional elevation on line *x x*, Fig. 2.

A represents the cab, and B the boiler, of a locomotive-engine, to which I propose to apply a lookout-tube, D, substantially as shown, or in any approved way, whereby the object sought may be accomplished, the said tube being located along one side of the engine and reaching from within the cab—say at the top of the front window, E—to a point some distance ahead of the front end of the engine far enough to prevent the light entering through the front end of said tube D from being

obscured by smoke or steam from the engine, or by snow thrown up from the track by the scraper or other attachment, also to protect the window F in the front of the tube from being broken by ice, snow-crusts, and other objects liable to be thrown up by the track-clearer attachment to the engine.

The rear end, G, of tube D, which enters the cap, is to be of small size, suitable for the sight end; but the front flares sufficiently to take in as wide a field of observation as may be needed.

To melt the snow, frost, or sleet that might collect on and obscure the front window, F, I arrange a coil, H, of steam-pipe, in the form of a frame, behind the window F, said coil having a connecting-pipe, J, from the boiler, having a valve, K, at the command of the engineer for admitting the steam, also a waste-cock, L, for regulating the circulation, the latter being beyond the coil H and connected with the cab by a working-rod, M, or other suitable means.

To facilitate the heating of the window F, I prefer to inclose the coil H by another window, N, behind it to confine the heat, and make it more effective on the window F in cold weather.

Instead of the heating-coil here described, any other suitable form of heating device may be employed for the purpose I have specified.

In summer both windows may be removed, if desired, and a smaller one may be put in the small end of the tube to prevent the air from blowing through, if necessary.

I have in this example represented the tube of rectangular form; but it may be round, if preferred. It may be made of sheet metal, wood, paper, or other material, as found best.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination, with a locomotive, of a lookout-tube extending from the cab forward beyond the front end of the engine, substantially as specified.

2. The combination, with the lookout-tube, of a heating device, substantially as and for the purpose described.

3. The heating-coil H, in combination with the lookout-tube D and window F, substantially as herein shown and described.

JOHN MORRISON TAYLOR.

Witnesses:

JEREMIAH A. BARRY,
WESLEY VAN WORT.