N. DEMARY, Jr.

Car-Track Clearer.

No. 18,882. Patented Dec. 15, 1857.

Fig. 2.

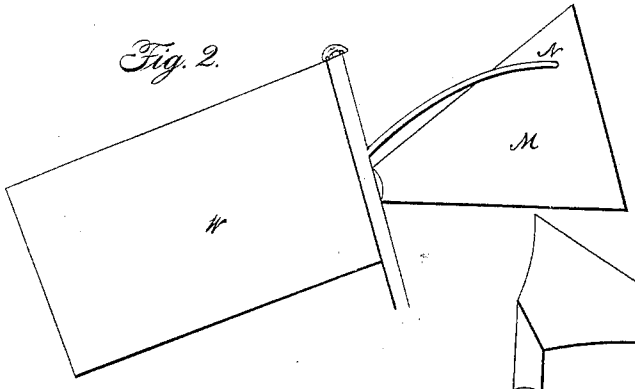
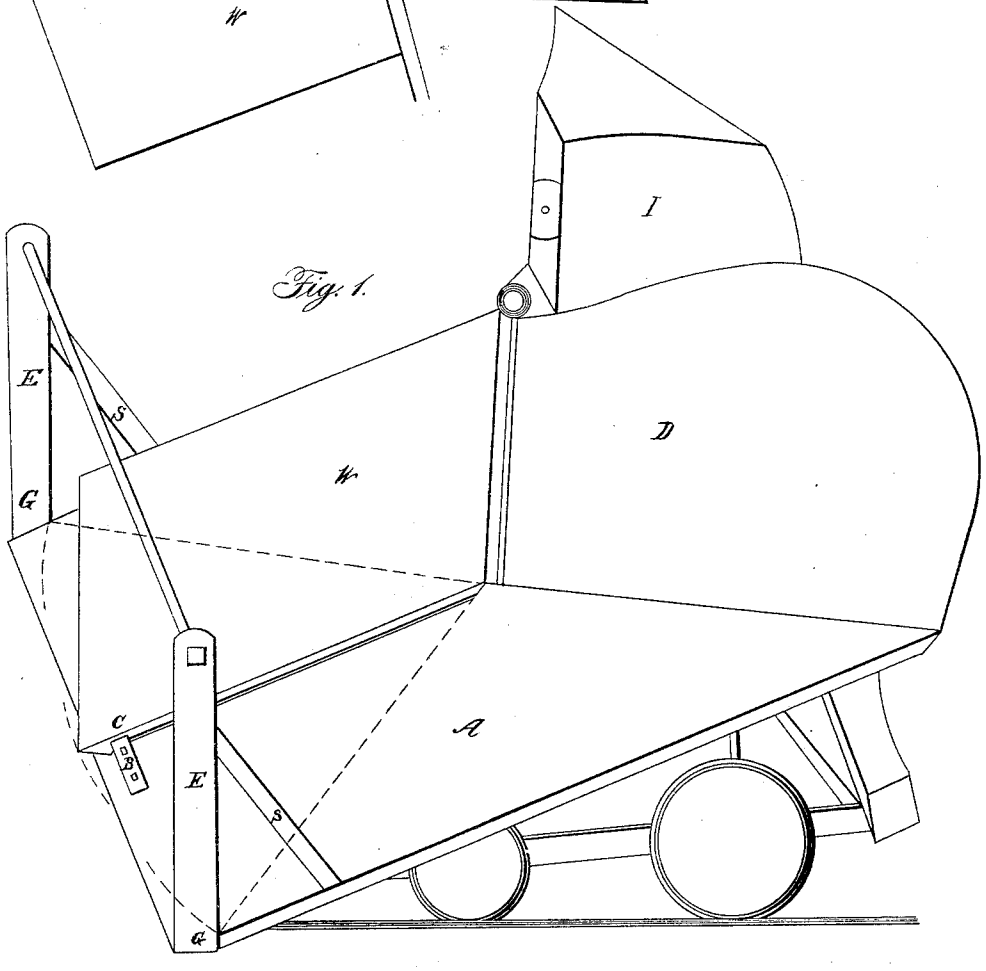


Fig. 1.



Witnesses:

John Dodge

W W Rowley

Inventor:

Newcomb Demary Jr.

AM. PHOTO-LITHO. CO. N.Y. (OSBORNE'S PROCESS.)

UNITED STATES PATENT OFFICE.

NEWCOMB DEMARY, JR., OF ATTICA, NEW YORK, ASSIGNOR TO JAMES YATES, OF PHILADELPHIA, PENNSYLVANIA.

SNOW-PLOW.

Specification of Letters Patent No. 18,882, dated December 15, 1857.

To all whom it may concern:

Be it known that I, NEWCOMB DEMARY, Jr., of Attica, in the county of Wyoming and State of New York, have invented a new and useful Machine for Removing Snow from Railroad-Tracks; and I do hereby declare that the following is a full and exact description of the construction and operation of the same, reference being had to the annexed drawing, making part of this specification, in which—

Figure 1 is a perspective view. Fig. 2 is a view of a part called the rudder.

Fig. 1 represents the machine which is placed upon wheels like a common snow plow and is to be attached in the same manner to the front of the engine and to be propelled by it in the same manner, but differing from the snow plow in the following points viz: Whereas the snow plow now in use pushes the snow from the track on either side pressing it together leaving it solid and unyielding and making it impossible to pass again after another fall of snow or a wind. Also crowding the same against the banks where the road runs below the surface of the earth. Also where double track is laid it pushes the snow from one track to the other. While my snow plow acts so as to cut a square track through the snow a little wider than the train which is to pass, and it also takes up the entire body of snow from the track and discharges it laterally on top of the surrounding snow clear from the track. It can be so constructed also as with a rudder under the entire control of the tender who can cause the body of snow thus raised to be thrown to the right or left of the track, thereby obviating the difficulty experienced on double tracks and along side hill cuttings and places where the snow drifts on one side of the track.

This machine or shovel consists of the following principal parts, viz, the elevator and the mold board, the rudder and the cutter.

The elevator marked A Fig. 1 consists of a strong smooth faced platform or inclined plane covered with iron or some other metal raised to the proper pitch either in the construction of the frame work or by placing larger wheels under the hind of the machine or in both these ways. This inclined plane is entirely open at the sides behind the cutters and acts as an elevator to elevate the snow from the track. The lower end of the elevator is placed upon the wheels so as to run near the track like the front edge of the cow catcher. The edge or lower end is provided with a heavy iron bar the front edge made sharp which acts as a cutter at the bottom and by the force of the engine the snow is carried up upon the elevator.

The snow is cut at the sides by the cutter marked E Fig. 1. These consist of two heavy upright bars of iron attached to the front end of the elevator one on each corner the front edges beveled. These cutters are rather an extension of the iron bar running along the front edge of the elevator simply turned up at the corners. These cutters are fastened together by an iron rod marked P. Fig. 1 which acts as a brace to the cutters and this bar is also beveled so as to act as a cutter when necessary. The cutters are also braced by two bars of iron running back and fastening to the sides of the elevator. These braces are marked S Fig. 1. These cutters must not extend back along the sides of the inclined plane nor project in front of it because in the former case they would accumulate the snow in front and in the latter case they would obstruct its lateral escape from the elevator.

The mold board marked D, Fig. 1 consists of a smooth curved surface resembling the two mold boards of a plow placed upon the upper or back end of the elevator one on each side coming together at the center and turning off each way; the point of intersection of these mold boards being fixed at such a point on the elevator that the snow shall be raised up to the level of the surrounding snow before it is pressed laterally by the mold board. The object of these mold boards is to turn the snow off from the elevator when it has been raised sufficiently high. The snow is discharged at T, T.

The rudder marked W Fig. 1 is movable and works something like the helm of a ship. It is hung upon a hinge or heavy upright iron bolt marked R and is intended to be used whenever it is desired to throw all the snow off to one side. When the rudder is attached and used it is worked by the tender standing in the cabin marked I Fig. 1, by a lever marked N shown in Fig. 2 while he stands upon the floor of the cabin marked M, Fig. 2. The rudder is hung in the center of the inclined plane at the point

where the wings or mold boards come together and extends to the lower edge of the elevator, and when the snow is not drifted nor any other impediment in the way the point of the rudder marked C should be dropped into a notch at B, when thus set the body of the snow is divided and one half falling on the right and the other on the left of the train. But suppose the snow to be drifted on the right hand side or a side hill cut where the bank is steep on the right hand side. The rudder is thrown around against the right hand cutter which supports it from top to bottom, then you have erected upon the elevator A a breast work, with a smooth surface extending from G to T, T where the snow is conducted and discharged on the left hand side and so it may be shifted at pleasure.

My inclined plane elevator may be used without the rudder and without the knives or it may be used in combination with them.

Now what I wish to claim as my invention and desire to secure by Letters Patent is—

1. The combination of the mold board and of the inclined plane elevator open at the sides and so arranged as to elevate the snow from the track about to the level of the top of the surrounding snow before it is pressed laterally by the mold board.

2. The side cutters E, E, arranged so as not to project in front of the elevator or to obstruct the lateral escape of snow at the side of the elevator in the manner and for the purpose substantially as above described.

NEWCOMB DEMARY, JR.

Witnesses:

JOHN DODGE,

W. W. ROWLEY.