

H. TWITCHELL & G. E. PARSONS.
Snow-Plow.

No. 159,866.

Patented Feb. 16, 1875.

Fig. 1.

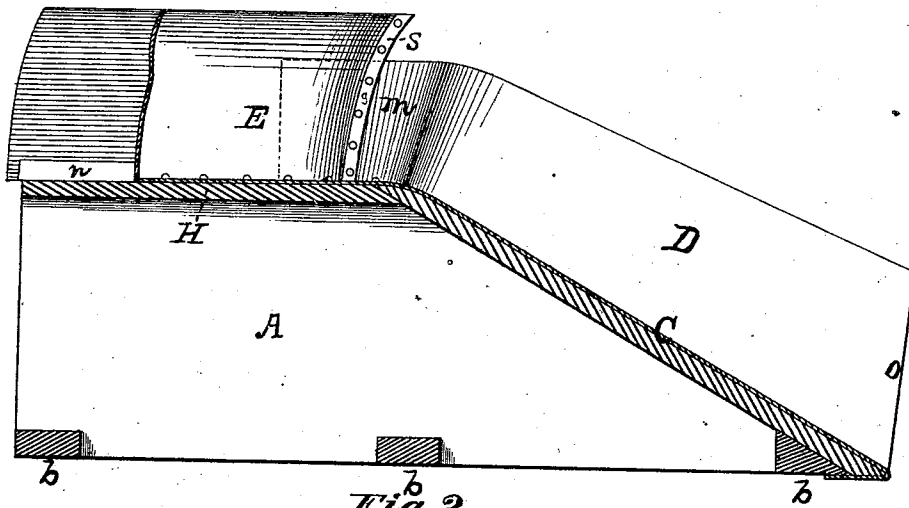
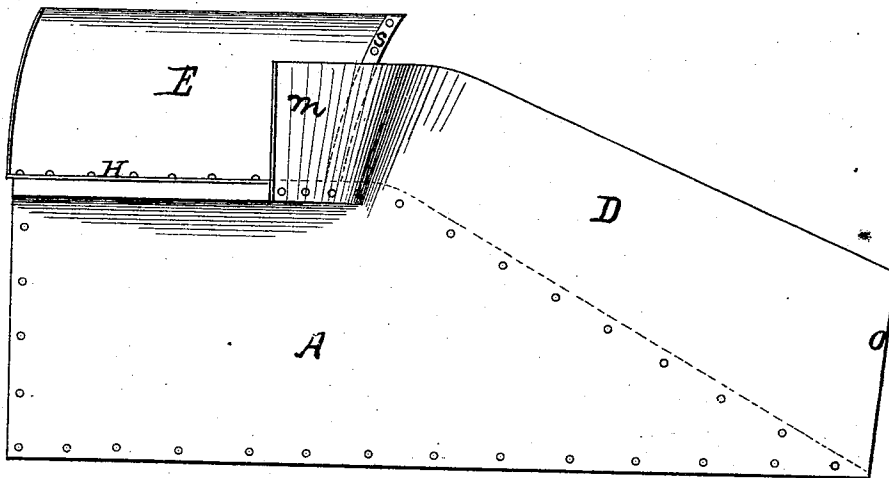


Fig. 2.



Witnesses.

James W. Patton.
Robert D. Gillespie.

Inventors.

Henry Twitchell.
George E. Parsons.

UNITED STATES PATENT OFFICE.

HENRY TWITCHELL AND GEORGE E. PARSONS, OF PULASKI, NEW YORK.

IMPROVEMENT IN SNOW-PLOWS.

Specification forming part of Letters Patent No. **159,866**, dated February 16, 1875; application filed March 12, 1873.

To all whom it may concern:

Be it known that we, H. TWITCHELL and G. E. PARSONS, of Pulaski, in the county of Oswego and State of New York, have invented a new and valuable Improvement in Railroad Snow-Plows; and we do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings making a part of this specification, and to the letters and figures of reference thereon.

Figure 1 of the drawing is a representation of a longitudinal vertical section. Fig. 2 is a side view of the invention.

Our invention has relation to snow-plows; and the novelty consists in the employment of an inclined plane provided with perpendicular sides, up which the snow is made to pass to a horizontal plane, where it is divided by two inclined plates or surfaces, between which and similarly-inclined surfaces, forming parts of the vertical sides of the inclined plane, chutes are formed, through which the snow is forced, in the forward movement of the car, backward and outward from the tracks, so that there will be no liability of the snow falling back upon the tracks by its gravity, as hereinafter more fully set forth.

In the accompanying drawings, A A are the sides of the plow, connected together by the transverse pieces *b b*. The forward end C of the plow is inclined. D D are vertical plates, preferably made of boiler-iron, attached to the sides of the plow, the front edges *o o* of which serve to divide the snow which is carried up the chute, having for its sides the vertical plates D D, and for its base or bottom the inclined plane C. The upper part of the inclined plane C terminates in a horizontal plane, H, which projects on each side over the sides A A of the plow. E E are securely attached to the horizontal plate H of the plow, intersecting each other near the forward end of the horizontal plane, and about midway between the sides D D. The forward end of the line of intersection *s* is curved, as are also the upper edges of the mold-boards E E. The rear upper ends of the surfaces D D are inclined outwardly, as seen at *m*, chutes being thus formed between the surfaces E E

and *m m*, having for their bottom or bases the horizontal plane H, made to project beyond the sides of the plow. The whole outer surface of the plow is preferably covered with boiler-iron.

The operation of our improved snow-plow attached to a locomotive is as follows: The front edge of the inclined plane rests upon the tracks, the sides D D projecting a short distance beyond the tracks. In the forward movement of the plow the snow is divided and carried up the inclined plane, there being no obstruction to its passage. When the snow reaches the upper end of the inclined plane C it is brought upon the top or horizontal part of the top of the plow, where it is divided by the inclined cutter *s*, and carried in opposite directions in the chutes, rearward and outward, clear of the tracks.

It will be seen by our construction that the snow is densely packed in the chutes, and is carried well away from the tracks, so that there will be no liability of the snow thrown off the plow falling by gravity back on the tracks.

We are aware that a snow-plow has heretofore been constructed having an inclined plane with vertical sides, and having at its upper end a snow-divider, as shown in Letters Patent granted to T. S. Brown, dated September 12, 1871, and we therefore lay no claim to such invention, which differs from ours in not being provided with side chutes, in which the snow is compacted and condensed, and discharged at some distance, comparatively, from the tracks, so as to prevent its falling by gravity back upon the tracks.

What we claim as our invention, and desire to secure by Letters Patent, is—

The combination, in a snow-plow, of the inclined plane C, mold-boards E E, having dividing-cutter *s*, and vertical sides D D, provided with continuous inclined surfaces *m m*, made in one piece, and vertical sides D D, and cutters *o o*, substantially as and for the purposes set forth.

HENRY TWITCHELL.
GEORGE E. PARSONS.

Witnesses:

JAMES W. FENTON,
ROBERT D. GILLESPIE.