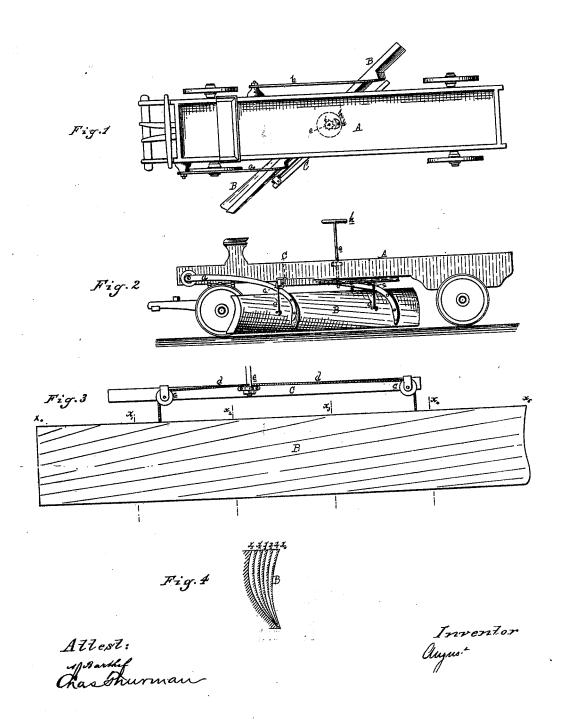
A. DAY. Snow-Plow.

No. 220,812.

Patented Oct. 21, 1879.



UNITED STATES PATENT OFFICE

AUGUSTUS DAY, OF DETROIT, MICHIGAN.

IMPROVEMENT IN SNOW-PLOWS.

Specification forming part of Letters Patent No. 220,812, dated October 21, 1879; application filed May 24, 1879.

To all whom it may concern:

Be it known that I, Augustus Day, of Detroit, in the county of Wayne and State of Michigan, have invented an Improvement in Snow-Plows, of which the following is a specification.

The nature of my invention, which is designed as an improvement on track-clearers as patented to me May 28, 1878, relates to certain new and useful improvements in devices for clearing railway-tracks of snow and other similar obstacles, by means of which such tracks can be readily and easily kept free of snow for the passage of cars, and at the same time the space or road-bed between the rails can be cleared, and the snow deposited outside the track.

The invention consists in the peculiar construction of the mold-board of the plow, as

more fully hereinafter described.

Figure 1 is a plan view of my improved snow-plow. Fig. 2 is a side elevation of the same. Fig. 3 is a detached elevation of the mold-board and its attachments for elevating or lowering it. Fig. 4 is a cross-section of the mold-board, showing the different curves on the lines x^0 , x', x^2 , x^3 , x^4 , and x^5 in Fig. 3.

In the drawings which accompany this and form a part board x^4

form a part hereof, A represents a platform of a truck with four wheels, and of the construction described and shown in my afore-

said patent.

B is a mold-board, of the form shown in the various figures of the drawings and in varying curved lines at different points in crosssection, as shown in Figs. 3 and 4. mold-board is supported diagonal to and beneath the floor of the truck by means of the shorter draw-bar, a, and the longer draw-bar, b, both of which are pivotally secured, as shown, one to each side of the platform. The rear ends of these draw-bars are curved to fit the curvature of the mold-board at their point of contact, and are secured to the rear and convex side of said mold-board, thereby strengthening the same and making the draft

C is a bar secured diagonal and on a parallel line with the top of the mold-board to the under side of the platform. To this bar, and near each end thereof, are secured sheaves or pulleys c.

Cords or chains d are secured at one end to the mold-board, and thence pass over the pulleys c, and are then secured to the lower end of the staff e, which passes up through the platform, and is provided at top with a hand-wheel, h. A ratchet-wheel, i, is secured to the staff just above the platform, and a pawl, k, is pivoted to the latter.

By means of this staff and its attachments, as described, the mold-board is supported at

any desired height from the track.

It will be noticed that the mold-board is not a true curve in parallel lines in its whole length, but has what I call a "torsional twist and projects some distance on each side of the truck.

By this construction and manner of attachment the forward-projecting end of the moldboard enters the snow on one side of the truck, and the forward motion of the latter with the diagonal position of the mold-board compels the snow to be discharged beyond the track upon the opposite side.

Were the mold-board straight, or nearly so, in cross section, it would pack the snow in front of it, and render great power necessary

to propel the device.

The peculiar curvature of my mold-board rolls the snow over in its advance, and with but little power required compels it to follow the diagonal course of the mold-board to a discharge at the opposite end.

The manner of supporting the scraper from the truck and the means for raising and lowering the same are shown in Patent No. 204,205, granted to me May 28, 1878, and are

therefore not claimed herein.

What I claim as my invention, and desire to

secure by Letters Patent, is-

In a snow-plow or track-cleaning device, the mold-board B, constructed with a convex front face upon varying curved lines in crosssection, as shown and described, and supported beneath and diagonally across the platform of a truck, substantially as and for the purposes set forth.

AUGUSTUS DAY.

Witnesses: H. S. SPRAGUE, CHAS. THURMAN.