

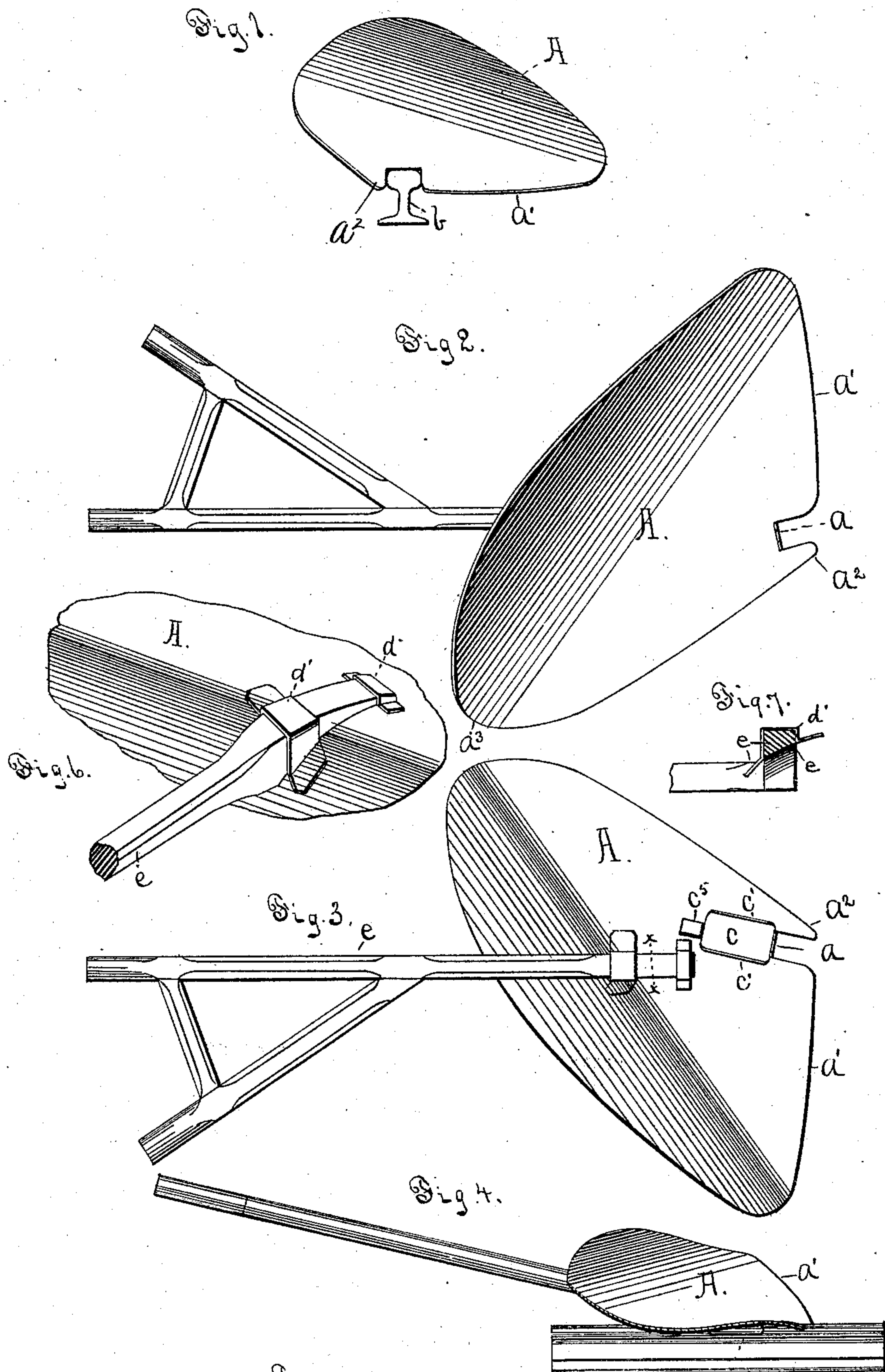
(No Model.)

J. A. CHISHOLM.

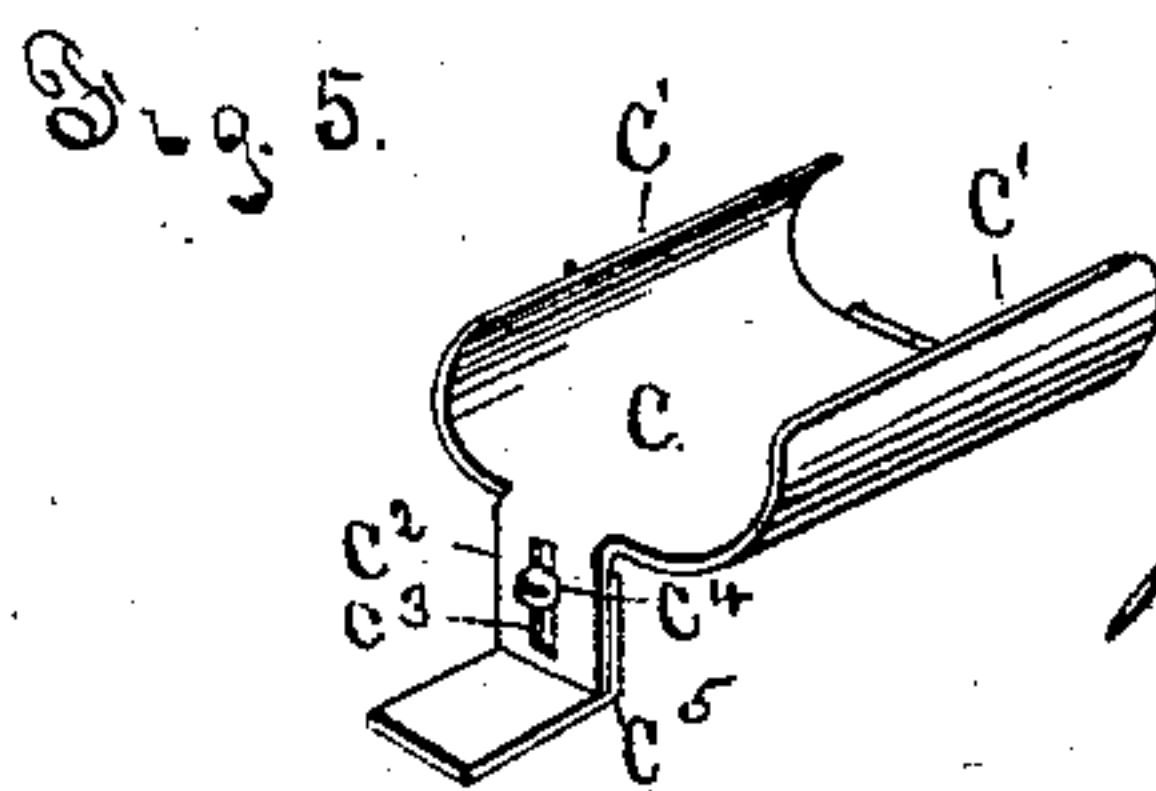
SNOW PLOW.

No. 286,779.

Patented Oct. 16, 1883.



Attest.  
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Atty. in



# UNITED STATES PATENT OFFICE.

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## SNOW-PLOW.

SPECIFICATION forming part of Letters Patent No. 286,779, dated October 16, 1883.

Application filed February 24, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, JNO. ALEX CHISHOLM, a citizen of the United States, residing at Sauk Centre, in the county of Stearns and State of Minnesota, have invented certain new and useful Improvements in Snow-Plows; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it ap-

10 pertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to improvements in snow-plows or track-clearers for use on rail-

15 ways.  
It consists in a mold-board having a slot for the rail in its forward edge and provided with a guide on its under side, the base-plate of said guide being joined immediately to the mold-board at the bottom of the slot, and held away from the mold-board at its rear end, as

20 and for the purposes hereinafter described.  
It consists, further, in the combination, with the mold-board, of a guide adapted to run on the rail, and having its forward end hinged immediately to the mold-board, and its rear end adjustable to and from the mold-board, and means for holding the guide at any suitable

25 distance from the mold-board, as will be described.  
In the drawings, Figure 1 represents a front view of the mold-board placed on the rail. Fig. 2 is a top view, and Fig. 3 is an under side view, of the plow complete; and Fig. 4 is a side view of same, with the mold-board in section. Fig. 5 is a detail view of the guide. Fig. 6 is a detached view, in perspective, of the mold-board and handle and means of connect-

30 ing same; and Fig. 7 is a cross-section of the handle on line *x x*, Fig. 3, all of which will be described.  
A is the mold-board, which is provided in its forward edge with a slot, *a*, which rests over the rail *b*, as shown. This mold-board is formed of a single thin metal plate cut to provide the straight forward edge, *a'* and it is bent into almost a U shape in cross-section, as shown in Fig. 4. The slot *a* is cut near the outer end of the edge *a'*, leaving only a sufficient portion of the metal to provide the point *a''*, which clears

the snow from along the outer side of the rail, as will be understood on reference to the drawings. When placed on the rail, the edge *a'* will be at approximately right angles to the rail, and the body of the mold-board will rest at an angle to the rail, with its rear end, *a''*, considerably behind the edge *a'*, so that the snow gathered by the front portion of the mold-board will readily pass off at its rear end as it is pushed forward in the operation of the device.

C is the guide, consisting of the base-plate *c*, having its sides turned down to provide flanges *c'*, which rest on opposite sides of the rail. The forward end of the plate *c* is hinged to the mold-board A at the base or bottom of the slot *a*, as shown in Fig. 3, and it extends back in line with the slot *a* and the direction of motion of the device; and it has the plate *c''* turned up from its rear edge and constructed with the slot *c''*, through which projects the head of clamping-screw *c'''*, which turns in a threaded opening in lug *c''''*, which extends down from the under side of the mold-board, so that the rear end of the guide may be set nearer the mold-board or farther off from same, as may be desired.

*d d'* are staples secured on the under side of the mold-board. The staple *d* is secured well under the mold-board and in advance of the staple *d'*, which is secured on the bend or at the point of greatest curvature of the same, and, being arranged at an angle to the line of curvature of the mold-board, it is made higher on one side than the other, as shown in Fig. 6.

*e* is the handle, having its forward end curved on its upper side to correspond to the curvature of the mold-board A, and inserted in the staples *d d'*, where it may, when so desired, be secured by bolts or screws, or in other suitable manner. The curve on the upper side of the handle *e* extends back beyond the staple *d'*, and the force exerted against the said handle is directed, therefore, against a considerable portion of the mold-board, greatly reducing the liability of the same to be bent, as when force is exerted against a small area. The curved portion of the handle is made V-shaped in cross-section, as shown in Fig. 7, to correspond to the shape of the staple *d'*.

By having the guide fixed immediately to the



mold-board, a sharp scraping portion may be had, and by holding the rear end of the guide down from the mold-board the mold-board may always be operated at the desired angle, and may be moved along the rail with a certainty not attained where the angle of the mold-board is to be determined by the "feel" or judgment of the operator. By hinging the guide immediately to the forward edge of the mold-board and making it adjustable at its rear end, the mold-board may be thrown up or down at its rear end, to adapt it to snows of different depths, and the handles will be set correspondingly higher or lower, as desired, by the operator. I therefore prefer the latter construction.

My device is intended, primarily, for use as a hand implement for operation by section hands or laborers employed on the roads. It may, however, have its handle or staff made fast to or be otherwise connected with a locomotive or other moving truck, so as to remove the snow as the said locomotive or truck moves forward.

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

1. In a snow-plow, the combination, with the mold-board having the rail-slot in its forward edge, of the rail-guide having its front edge secured immediately to the mold-board at the base of the rail-slot, and having its rear end extended under and held off from the said mold-board, substantially as set forth. 25
2. In a snow-plow, the combination, with the mold-board, of the rail-guide having its front end hinged immediately to the front edge of the mold-board, and means whereby the rear edge of said rail-guide may be adjusted to and from the mold-board, substantially as set forth. 30

In testimony whereof I affix my signature in presence of two witnesses.

JOHN ALEX CHISHOLM.

Witnesses:

MICHAEL CLARITY,  
DANIEL BUCKLEY.