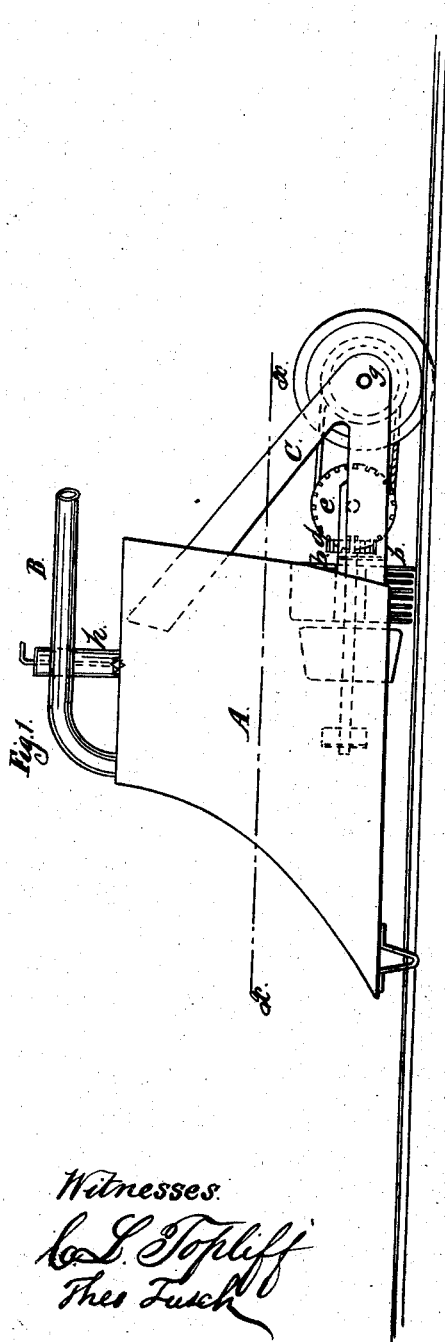
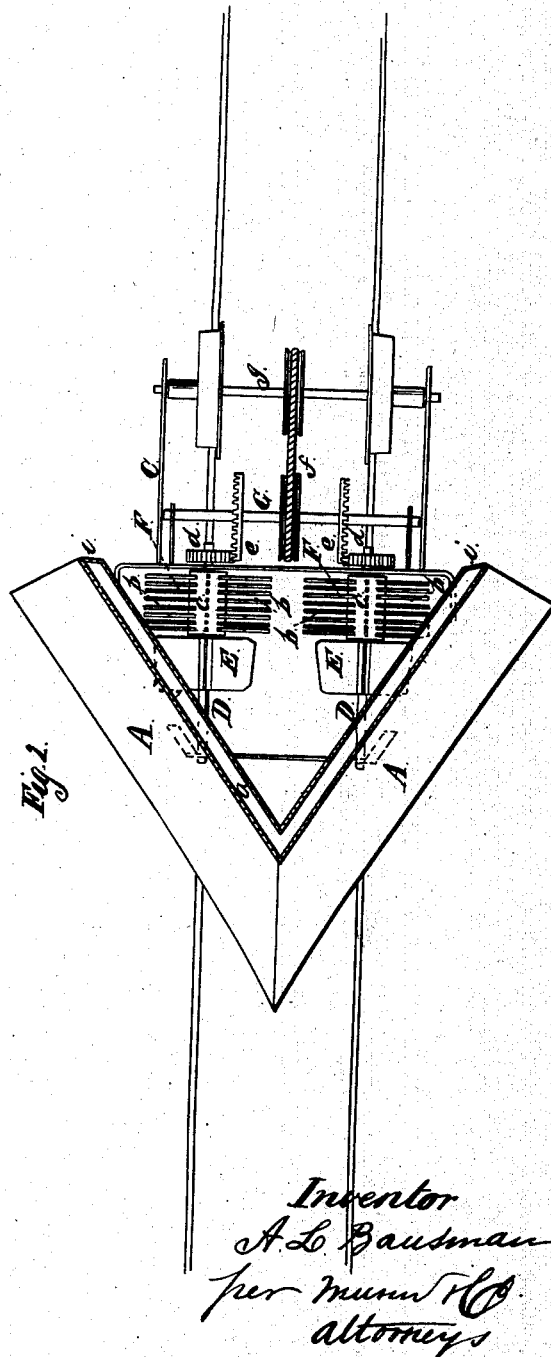


A. L. Bausman.
Track Clearer.
N^o 49,216 Patented Aug. 8, 1865.



Witnesses:
L. S. Topliff
Thos. Tutch



Inventor
A. L. Bausman
per Munroe & Co.
attorneys

UNITED STATES PATENT OFFICE.

ABNER L. BAUSMAN, OF MINNEAPOLIS, MINNESOTA.

IMPROVEMENT IN SNOW-PLOWS.

Specification forming part of Letters Patent No. 49,216, dated August 8, 1865.

To all whom it may concern:

Be it known that I, ABNER L. BAUSMAN, of Minneapolis, in the county of Hennepin and State of Minnesota, have invented a new and Improved Snow-Plow; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side view of my invention; Fig. 2, a horizontal section of the same, taken in the line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts.

This invention relates to a new and improved snow-plow to be applied to locomotives or railroad-cars in order to remove snow from the rails; and it consists, first, in constructing the mold-boards or wings of the plow with double walls, so as to form a steam or hot-air chamber, by which the mold-boards or wings may, when the plow is in use, be kept in a heated state and the snow prevented from adhering thereto.

The invention consists, second, in the employment or use of rotary shovels and brushes placed at the rear of the plow and over the rails, and constructed and arranged to operate in such a manner as to effectually clear the rails from snow after the plow has removed the superincumbent mass therefrom.

The plow is composed of two mold-boards or wings, *A A*, arranged or placed in *V* form, as shown in Fig. 2, the angle formed by their junction being over the center of the space between the two lines of rails of the road, the wings projecting some distance over the rails. These wings are constructed with double walls, so as to form a space or chamber, *a*, between them, into which exhaust-steam or hot air is admitted from the locomotive through a pipe, *B*.

To the rear side of the plow there is secured a framing, *C*, constructed in any proper manner to support two shafts, *D D*, parallel with and directly over the two lines of rails of the road. These shafts *D D* at their front parts are provided with radial blades *E*, which may be of cast-metal or heavy rolled-metal plates. Four blades to each shaft will probably be suf-

ficient. These blades serve the office of shovels, and directly behind these blades on each shaft *D* there is a brush, *F*, constructed of flat wires *b*, driven or otherwise fitted in wooden cylinders *c*. These brushes, however, may be constructed in various ways.

On the rear of each shaft *D* there is keyed a pinion, *d*, and into these pinions wheels *e e*, on a shaft, *G*, gear, the latter being at right angles to the shafts *D D*, and receiving its motion by a belt, *f*, or by gearing from the axle *g* on the forward truck of the locomotive or car. The shafts *D D* rotate in reverse directions, and the rotary shovels and brushes cast the snow from the rails to each side of the road, while the plow removes and casts aside the superincumbent mass in front.

In consequence of keeping the whole area of the plow in a warm or heated state by means of the steam or hot air introduced into the space *a* between the walls of the wings the snow is prevented from adhering thereto and caused to slide freely off, thereby enabling the plow to work efficiently at all times.

A safety-valve, *h*, may be employed at the top of the plow, or the rear of the wings may be perforated with small holes *i*, for the escape of the steam or hot air.

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

1. A snow-plow for railroads constructed with double walls to admit of a steam or hot-air chamber between its exterior surfaces for the purpose of keeping said surfaces in a heated state to prevent the snow adhering thereto, substantially as set forth.

2. The employment or use of rotary shovels and brushes placed at the rear of the plow and over the two lines of rails, and arranged to operate in the manner substantially as and for the purpose set forth.

3. The combination of the double-walled plow and rotary shovels and brushes, all arranged to operate substantially as and for the purpose specified:

ABNER L. BAUSMAN.

Witnesses:

THOS. GARDINER,
H. B. HANCOCK.