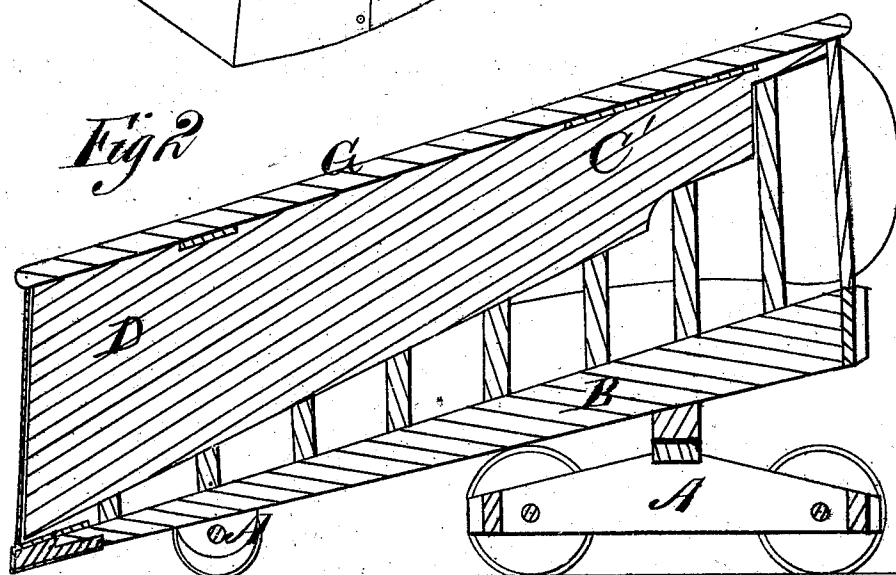
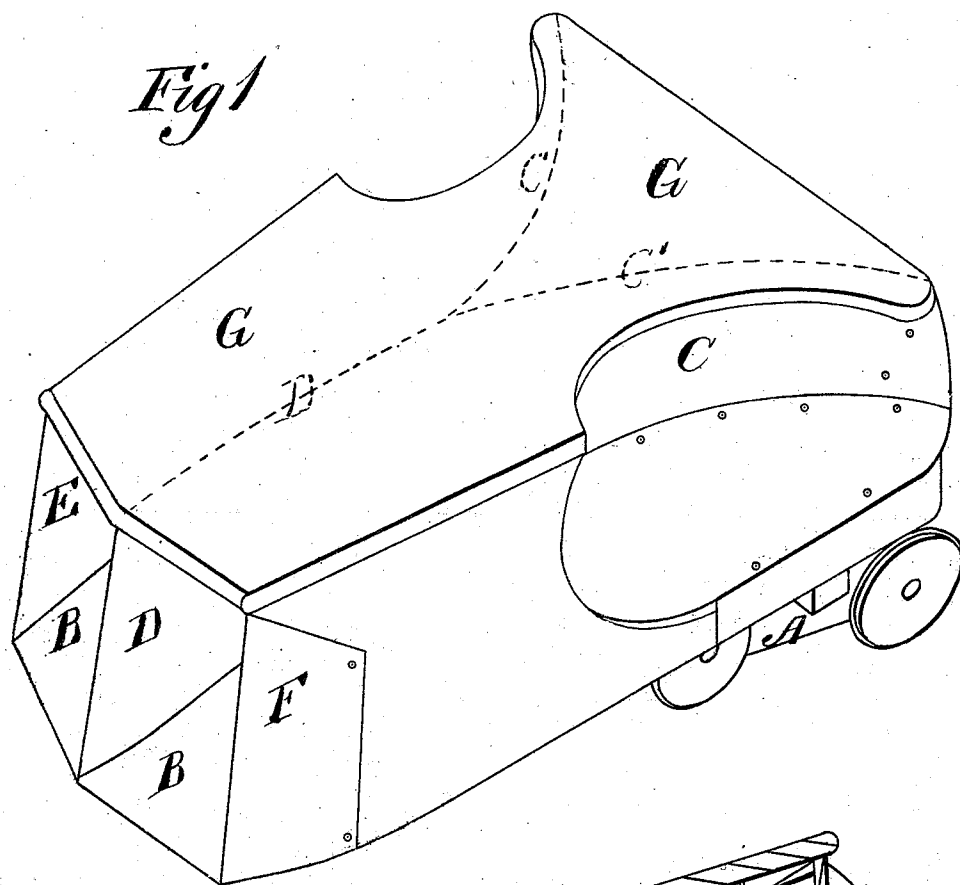


A. GAMBLE & D. E. SPERRY.

SNOW-PLOW.

No. 173,613.

Patented Feb. 15, 1876.



WITNESSES

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UNITED STATES PATENT OFFICE

ALEXANDER GAMBLE AND DAVID E. SPERRY, OF SACKETT'S HARBOR, N. Y.

IMPROVEMENT IN SNOW-PLOWS.

Specification forming part of Letters Patent No. **173,613**, dated February 15, 1876; application filed June 12, 1875.

To all whom it may concern:

Be it known that we, ALEXANDER GAMBLE and DAVID E. SPERRY, both of Sackett's Harbor, in the county of Jefferson and State of New York, have invented a new and valuable Improvement in 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 marked thereon.

Figure 1 of the drawings is a representation of a perspective view of our snow-plow, and Fig. 2 is a longitudinal vertical sectional view of the same.

This invention has relation to improvements in railroad snow-plows, wherein two lateral colters and a double mold-board and shovel are employed; and the nature of the invention consists in the construction and arrangement of the parts, as will be hereinafter more fully set forth and claimed.

In the annexed drawings, A designates trucks, of the usual well-known construction, upon which our improved snow-plow is designed to be supported in an inclined position. The platform, B, of the plow is supported by a suitable frame-work, and it is smoothly sheathed with metal, for the purpose of protecting it from the wearing effects of ice and snow passing upward over its surface. Platform B is provided with mold-boards C C', near its upper edge, which converge in an arc, which is preferably outwardly concaved, and which are provided with a vertical colter, D, the front edge of which extends downward to the front edge of shovel-platform B, as shown in Fig. 1. This platform is considerably wider at its upper than at its lower end—that is to say, its lateral edges or sides form obtuse angles with the cutting-edge of the shovel and lateral colters E F, extending upward the same distance as the colter D, are rigidly secured to the said lateral edges, as shown in Fig. 1. Lateral colters E F are cut away at a point slightly in rear of the cutting-edge of mold-boards C C', and they are covered in by a roof, G, which may be of wood or of metal, which roof is rigidly secured to the upper edges of lateral colters E F, central colter D, and mold-boards C C', as shown in Fig. 1. By this means two conduits are formed,

one on each side of the central colter D, the inner walls of which diverge outwardly from each other, as shown in the drawings.

When the snow-plow above described is forcibly driven into a bank of snow, the front cutting-edge of the said plow being of the same width as the track, the snow will be confined by roof G until it reaches the concave surfaces of mold-boards C C', when it will be dashed upward and outward from the track in two separate and distinct streams, which will fall at a distance from the track proportionate to the speed at which the engine is driven. By this means also the snow, in ascending shovel-platform B, will be prevented from falling over the upper edges of lateral colters E F upon the track, and thus the rail will be prevented from becoming glazed with ice in consequence of a sudden lowering of temperature following a thaw. The inner rear edges of platform B are raised considerably above the corresponding outer edges thereof, so that it is made to describe a warped surface, the effect of which is to impart a twist to the stream of snow passing out at the rear lateral edges of the plow, and to increase the distance from the track at which it will be deposited beyond the trench cut therein.

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

In a snow-plow, the inclined shovel B, having the mold-boards C C' at its rear end, which diverge in arcs, with their concavities outward, in combination with the vertical colter D, extending from the junction of the mold-boards to the front end of the inclined shovel, lateral colters E F, extending upward at obtuse angles with the cutting-edge of the shovel, and provided with openings at their rear ends opposite the mold-boards, and roof G, whereby the snow raised by the inclined shovel is divided and packed in equal sections and discharged from the openings in each side of the snow-plow, substantially as described.

In testimony that we claim the above, we have hereunto subscribed our names in the presence of two witnesses.

ALEXANDER GAMBLE.
DAVID E. SPERRY.

Witnesses:

JAMES I. PHELPS,
R. GODFREY.