

J. OSGOOD & J. E. MORSE.

Snow-Plow.

No. 214,310.

Patented April 15, 1879.

Fig. 1.

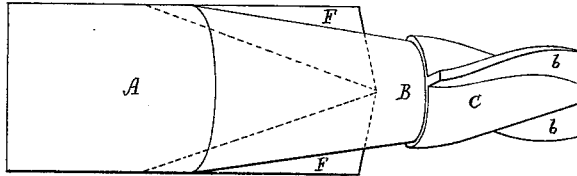


Fig. 2.

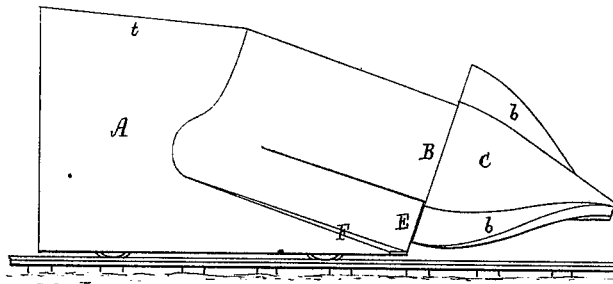


Fig. 3.

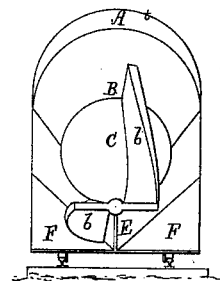


Fig. 5

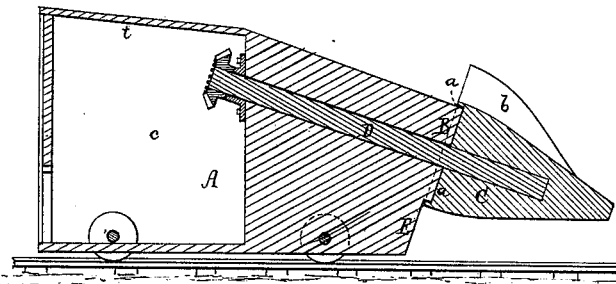
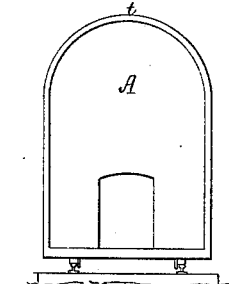


Fig. 4



Witnesses.
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UNITED STATES PATENT OFFICE.

JOSIAH OSGOOD AND JOSEPH E. MORSE, OF CHELSEA, MASSACHUSETTS.

IMPROVEMENT IN SNOW-PLOWS.

Specification forming part of Letters Patent No. **214,310**, dated April 15, 1879; application filed March 14, 1879.

To all whom it may concern:

Be it known that we, JOSIAH OSGOOD and JOSEPH EASTMAN MORSE, of Chelsea, of the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Railway Snow-Plows; and do hereby declare the same to be described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a top view, Fig. 2 a side elevation, Fig. 3 a front-end view, Fig. 4 a rear-end view, and Fig. 5 a longitudinal section, of a snow-plow embodying our invention.

The main body A of the plow is chambered, and has a semicircular arched top, *t*, from which there inclines downward a nose, B, in the form of a conic frustum. The smaller or front end of the nose is circular, and projects a short distance into a shallow circular chamber, *a*, made in the heel of a cone, C, provided with two or other suitable number of helical wings, *b b*, projecting from it, as shown. This cone is attached to a spindle or shaft, D, that projects into the chamber *c* of the cab or body, and is to have applied to it a steam-engine, placed within the cab, and to receive its steam from the boiler of a locomotive-engine when used for propelling the plow on a railway.

Beneath the conical nose is an auxiliary triangular nose, E, which is joined to the conical nose, and rests on or extends upward from an inclined plane, F, whose front end we prefer to have beveled from its middle each way, as shown.

The body of the plow is to be suitably mounted on wheels, to rest and run on the railway-track. The object of having the chamber *a* in the heel of the cone C is to prevent

snow, ice, or earth, or other extraneous matters, getting between the said heel and the end of the conical nose, so as to clog or impede the rotary nose or winged cone in its movements.

In operating with this plow the helically-winged cone, while revolving, is first driven forward against the bank of snow, and bores into it and breaks it up, so as to enable the inclined plane to pass into and under it. As the plow may advance, the snow will be driven up the inclined plane and against the auxiliary and primary noses, and by such will be deflected laterally and discharged off the track.

The peculiar form of the helically-winged rotary nose or cone causes it, while in operation, to break up and cast off the snow to very great advantage.

We are aware that it is not new to have a screw to the front of a snow-plow, and therefore we do not claim such as our invention.

We claim—

1. The snow-plow body made as described—viz., of the chambered arched cab, the primary or conical nose, the secondary or triangular or wedge nose, and the inclined plane, arranged and combined as set forth.

2. The combination of the conical rotary snow-breaker C *b b*, provided with the heel-chamber *a*, with the plow-body, composed of the cab, the conical and wedge noses, and inclined plane, and having the conical nose extended into the chamber *a*, as set forth.

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JOSEPH EASTMAN MORSE.

Witnesses:

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750 words