

(No Model.)

2 Sheets—Sheet 1.

J. N. BUTLER.  
RAILROAD SNOW EXCAVATOR.

No. 332,876.

Patented Dec. 22, 1885.

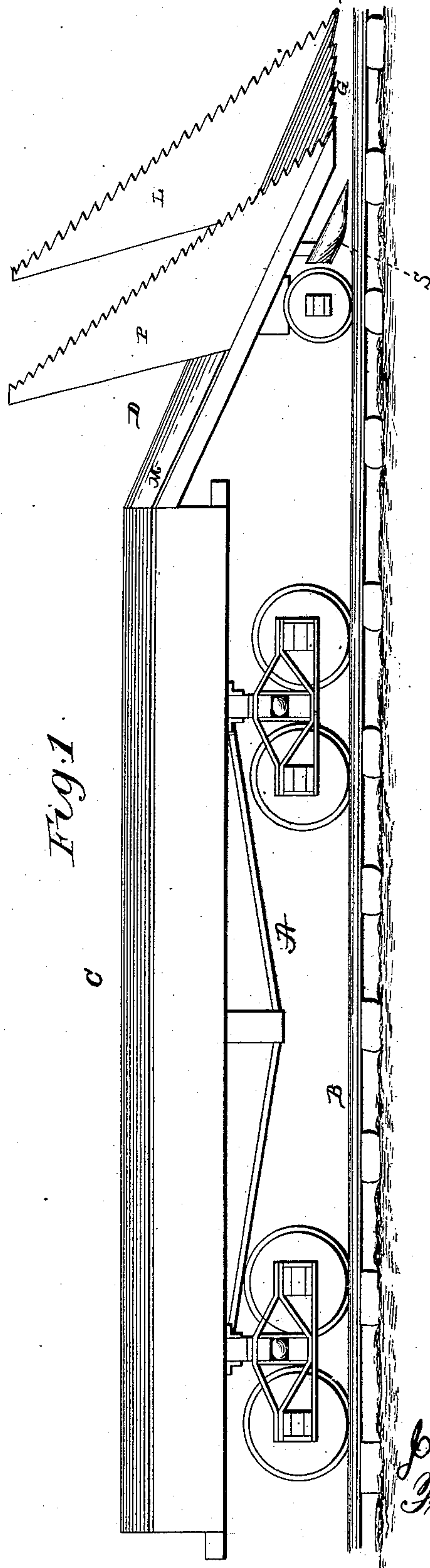


Fig. 1.

Witnesses:

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L. Gaspar

Inventor.

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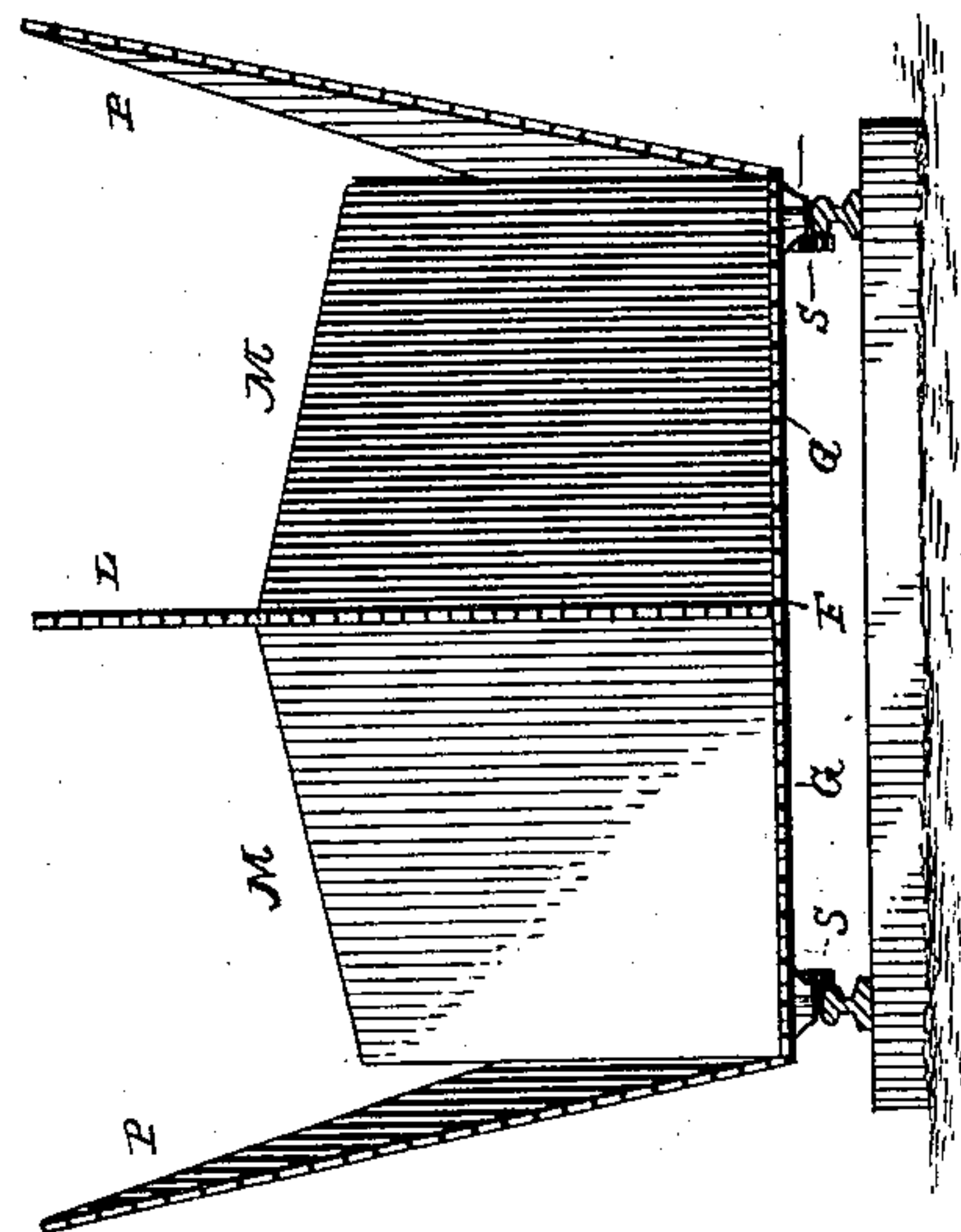
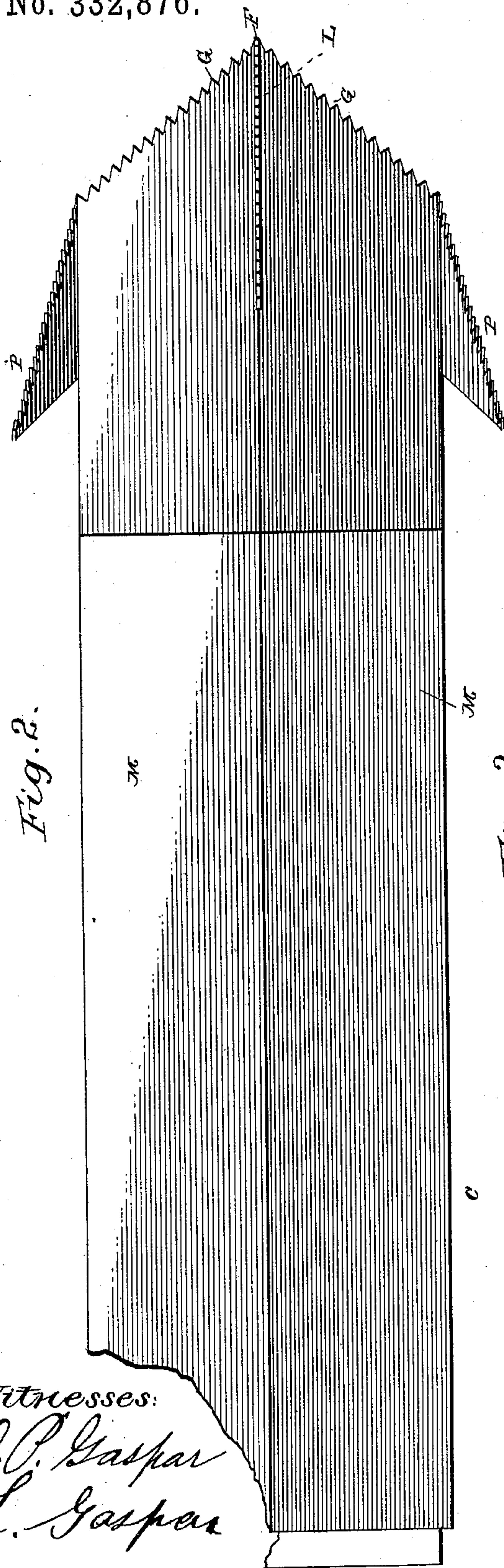
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2 Sheets—Sheet 2.

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Witnesses:

*J. P. Gaspar*  
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Inventor:

*John N. Butler*  
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# UNITED STATES PATENT OFFICE.

JOHN N. BUTLER, OF KINGSLEY, IOWA.

## RAILROAD SNOW-EXCAVATOR.

SPECIFICATION forming part of Letters Patent No. 332,876, dated December 22, 1885.

Application filed April 30, 1885. Serial No. 164,047. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN N. BUTLER, a citizen of the United States, residing at Kingsley, in the county of Plymouth and State of Iowa, have invented a certain new and useful Improvement in Railroad Snow-Excavators, of which the following is a specification.

This invention has relation to improvements in devices for clearing snow and ice from railroad-tracks; and it consists in the construction, novel arrangement, and adaptation of parts, as will be hereinafter more fully set forth and claimed.

In the accompanying drawings, to which similar letters of reference are made indicating corresponding parts in the several views, Figure 1 is a representation of a side elevation of a flat-car on a section of track with my improvements applied. Fig. 2 is a plan view of the device removed from the car, and Fig. 3 is a front view of the device in position on the track.

Referring by letter to the said drawings, A indicates a freight-car of the class known as a "flat-car," and may be of any ordinary approved construction, and B is a section of a railroad, the car being arranged thereon. Any number of cars may be employed, according to the amount of snow to be removed from the track. I provide such cars with a frame or bed, covering the entire top of the car, and inclining to opposite sides from a longitudinal central point, which is elevated sufficiently to give the same a lateral pitch of about a foot or more, so that the snow or ice, as the car leaves the cut, will slide down the incline from the car and unload itself. This frame may be made of boards or other suitable material, faced with sheet metal, and removably secured to the car, so that it may be readily removed therefrom when it is desirable to use the car for other purposes. This attachment may be applied to cars at a very small expense, and will not impair the usefulness of the latter in any manner whatever.

D indicates the excavator, which consists of a rearwardly-inclined frame, connected at its upper rear end by any suitable means to the forward end of the bed C on the car A, and is of a substantially similar form in cross-section to that of the said bed, being inclined to op-

posite sides from a longitudinal central point. The base of these inclines may be bounded by a narrow longitudinal ledge or vertical flange, to guide the snow as it is taken from the roadway to the top of the cars and prevent the same from falling over the sides during the elevation thereto. The forward transverse edge of this excavator is serrated or toothed, as shown, and tapers rearwardly from a central point, as more fully shown in Fig. 2 of the drawings. From the central point, F, of this serrated edge G extends a sufficient distance rearwardly a vertical rearwardly-inclined cutter, L, and at the rear ends of these tapering sides G and base of the inclines M are similar and diverging cutters, P P. This excavator is supported on the track in front of the car by means of a small truck of any suitable construction so as to bring the cutting-edge of the said excavator a slight distance above the track-rails.

S S indicate shoes arranged in front of the truck-wheels, and flange the track so as to clear the same in advance of said wheels during operation.

Having described this invention, what I claim is—

1. A snow-excavator for railroads, consisting of an upwardly and rearwardly inclined frame having a pitch to opposite sides from a longitudinal central point, and a forward cutting-edge tapering rearwardly from its center, and provided with lateral and an intermediate vertical cutter, the whole supported on a truck and adapted to serve in front of a car, substantially as specified.

2. A snow-excavator for railroads, consisting of an inclined frame having a forward cutting-edge tapering rearwardly from a central point, a vertically-inclined cutter rising from the said point, and similar cutters arranged at the rear ends of the said tapering edge, the whole mounted upon wheels and adapted to serve in front of a car having an oppositely-inclined top, substantially as specified.

JOHN N. BUTLER.

Witnesses:

J. P. GASPARD,  
L. GASPARD.