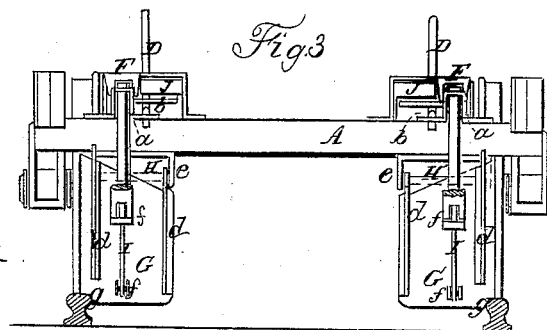
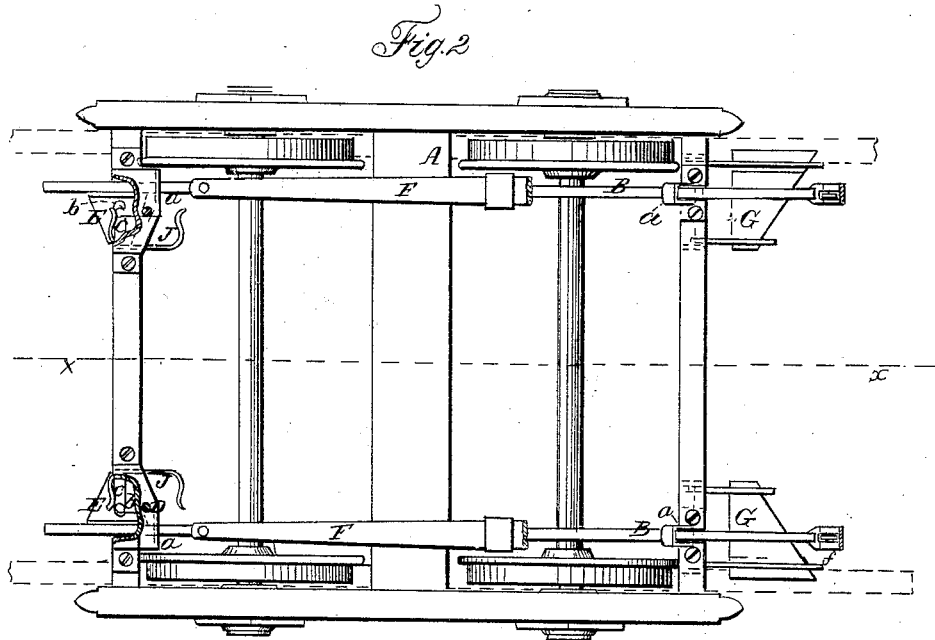
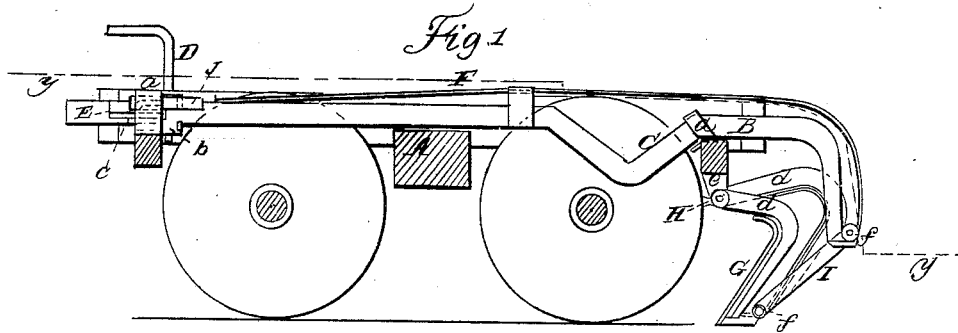


E. A. PUTNAM.
Car-Track Clearer.

No. 50,031.

Patented Sept. 19, 1865.



Witnesses
Thos Dusch
Wm Treurn

Inventor
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attys

UNITED STATES PATENT OFFICE.

E. A. PUTNAM, OF OAKFIELD, WISCONSIN.

IMPROVED SNOW-PLOW.

Specification forming part of Letters Patent No. 50,031, dated September 19, 1865.

To all whom it may concern:

Be it known that I, E. A. PUTNAM, of Oakfield, in the county of Fond du Lac and State of Wisconsin, 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 sectional view of a car-truck having my invention applied to it, *xx*, Fig. 2, indicating the line of section. Fig. 2 is a plan or top view of the same, partly in section, as indicated by the line *yy*, Fig. 1; Fig. 3, an end view of the same.

Similar letters of reference indicate corresponding parts.

This invention relates to a new and improved plow for removing the snow from the inner sides of the rails where the flanges of the wheels run.

The invention consists in applying plows to a car-truck in such a manner that they will be held down to their work with sufficient pressure to remove the snow, and at the same time be allowed to yield or give to obstructions—such, for instance, as a road-crossing or a switch-track.

A represents a car-truck, which may be constructed in the usual or in any proper manner, and *B B* are two sliding bars, which are placed on the truck *A*, one at each side of it, and are fitted in guides *a a*.

Each of the sliding bars *B B* is formed with a V-shaped portion, *C*, and these bars are moved by means of cranks *b* on vertical shafts *D*, said cranks being fitted in slots *c*, made at right angles to the bars *B*, in plates *E* attached thereto. (See more particularly Fig. 2.)

F F are springs, which are placed one on each bar *B*, and extend over the ends of the bars *B*, which are curved down at the rear end of the truck. (See Fig. 1.)

G G represent plows, the lower parts of which are inclined so as to present a raking or oblique position to the snow to be removed, as shown in Fig. 1, the upper parts of the plows being curved or rounded and attached to bars *d d*, which are fitted loosely on shafts *H*, the ends of the latter being fitted in pendants *e e*,

attached to the truck. By this arrangement the plows are allowed to rise and fall freely. The plows *G G* are connected to the lower ends of the springs *F F* by links *I I*, the latter being attached to the bars and plows by joints *f*. These springs have a tendency to keep the plows down to their work, and at the same time they will admit of the plows yielding or giving, so that they may pass over obstructions—such as a road-crossing or a switch-track, &c. The lower ends of the plows are notched, as shown at *g*, so that they bear upon the rails and extend down at the inner sides of the same, as shown clearly in Fig. 3.

In order to raise the plows up free from the rails when not required to work, the bars *B B* are moved backward through the medium of the cranks *b*, and the V-shaped portions *C* of the bars will elevate the rear ends of the same, and consequently the plows, and without meeting with any resistance from the springs *F*. The bars *B B* are prevented from casually moving by means of springs *J*, which serve as fastenings, by pressing against the ends of the cranks when the latter are turned, so as to throw the bars *B* fully forward or backward.

The bars *B* may be adjusted so as to enable the plows to run more or less deep, as desired, and any suitable means employed for retaining them in position.

I claim as new and desire to secure by Letters Patent—

1. The application, to a car-truck or railroad-car, of plows arranged in such a manner that they may swing or work on pivots or a shaft, and by means of springs or their equivalents be kept to their work and still allowed to pass over obstructions, substantially as set forth.

2. The bars *B*, provided with inclined surfaces, and having the springs and plows attached to them in such a manner that the plows may be raised by moving or sliding the bars and without meeting with any resistance from the springs, substantially as described.

3. Operating the sliding bars *B* through the medium of the cranks and slotted plates, substantially as set forth.

E. A. PUTNAM.

Witnesses:

NATHANIEL SILBEY,
OLIVER AUTEN.