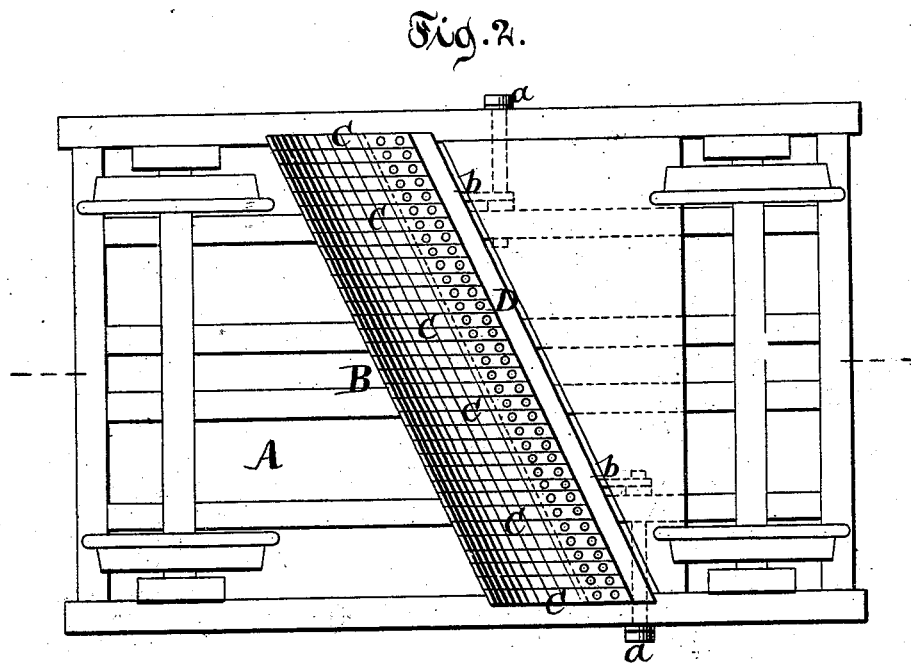
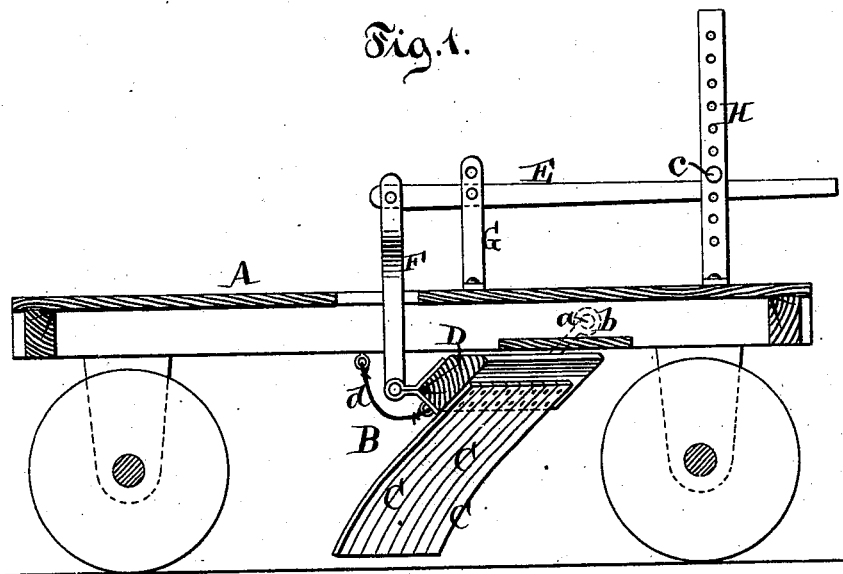


W. T. GRUNTNER.
Track-Clearer.

No. 204,031.

Patented May 21, 1878.



Witnesses.
Chas. Wahlers.
J. K. Wahlers

Inventor.
William T. Gruntner
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attys

UNITED STATES PATENT OFFICE.

WILLIAM T. GRUNTLER, OF TIVOLI, NEW YORK.

IMPROVEMENT IN TRACK-CLEARERS.

Specification forming part of Letters Patent No. **204,031**, dated May 21, 1878; application filed March 13, 1878.

To all whom it may concern:

Be it known that I, WILLIAM T. GRUNTLER, of Tivoli, in the county of Dutchess and State of New York, have invented a new and useful Improvement in Track-Clearers, which invention is fully set forth in the following specification, reference being had to the accompanying drawing, in which—

Figure 1 represents a longitudinal central section of a clearer embracing my invention. Fig. 2 is an inverted plan view thereof.

Similar letters indicate corresponding parts.

My invention relates to that class of track-clearers embodying a plow which is constructed of a series of spring-blades and a cross-head, to which such blades are attached, and which is hinged to a truck or car, so that the plow can be raised or lowered at will.

The object of my invention is to provide a device which is adapted not only to clear the track in a superior manner, but also to throw or deposit the snow or other matter alongside the track.

To this end it consists in the combination of a railroad car or truck with a plow which is constructed of a series of springs or elastic blades rigidly attached to a suitable head, which is hinged to the car obliquely to the draft-line, and in mechanism for raising and lowering such plow, so that, while the spring-blades are adapted to pass over immovable obstacles without danger of breakage and without danger of throwing the car off the track, any movable obstacles are caught thereby and deflected sidewise, so that the same are deposited alongside the track.

In the drawing, the letter A designates a railway car or truck, having a plow, B, combined therewith in manner according to my invention. C are the spring-blades, and D is the head of the plow.

I make the spring-blades C of steel or other metal, and prefer to curve the same, as shown in Fig. 1, while I arrange the same side by

side, as shown in Fig. 2, and fasten the same to the head D by nails or other suitable means.

The plow is hinged to the bottom of the car A by means of inwardly-extending pins *a*, which engage with eyebolts *b* secured to the head D, such pins being passed through the beams of the car, and being removable, so that the plow can be detached, if desirable.

I hinge the plow to the bottom of the car A in such a way that it extends obliquely to the draft-line, as clearly shown in Fig. 2, the pins *a* being to this end placed at different points, and by this arrangement any obstacles caught up by the plow are obviously thrown or deposited alongside the track, while at the same time the plow is not liable to be broken or to be thrown from the track by immovable obstacles, by reason of the inherent elasticity of the blades.

For the purpose of raising and lowering the plow, I make use of a lever, E, which is connected to the head D by means of a rod, F, and has its fulcrum in a standard, G, rising from the car-platform, this lever, together with the plow, being held in the desired position by means of a pin, *c*, passing through a guide, H, in which the lever is arranged to move. The lowest position of the plow is determined by chains *d*, which are suspended from the bottom of the car A, and connected to the head D of the plow in any suitable manner.

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

In combination with the truck of a car, a plow constructed of a series of curved metallic springs or elastic blades, C, rigidly secured to a head, D, hinged to the truck obliquely to the draft-line, and mechanism for raising and lowering said plow upon its hinges, substantially as and for the purposes specified.

WILLIAM T. GRUNTLER.

Witnesses:

JACOB VAN STEENBERGH,
GEORGE QUVERGUYT.