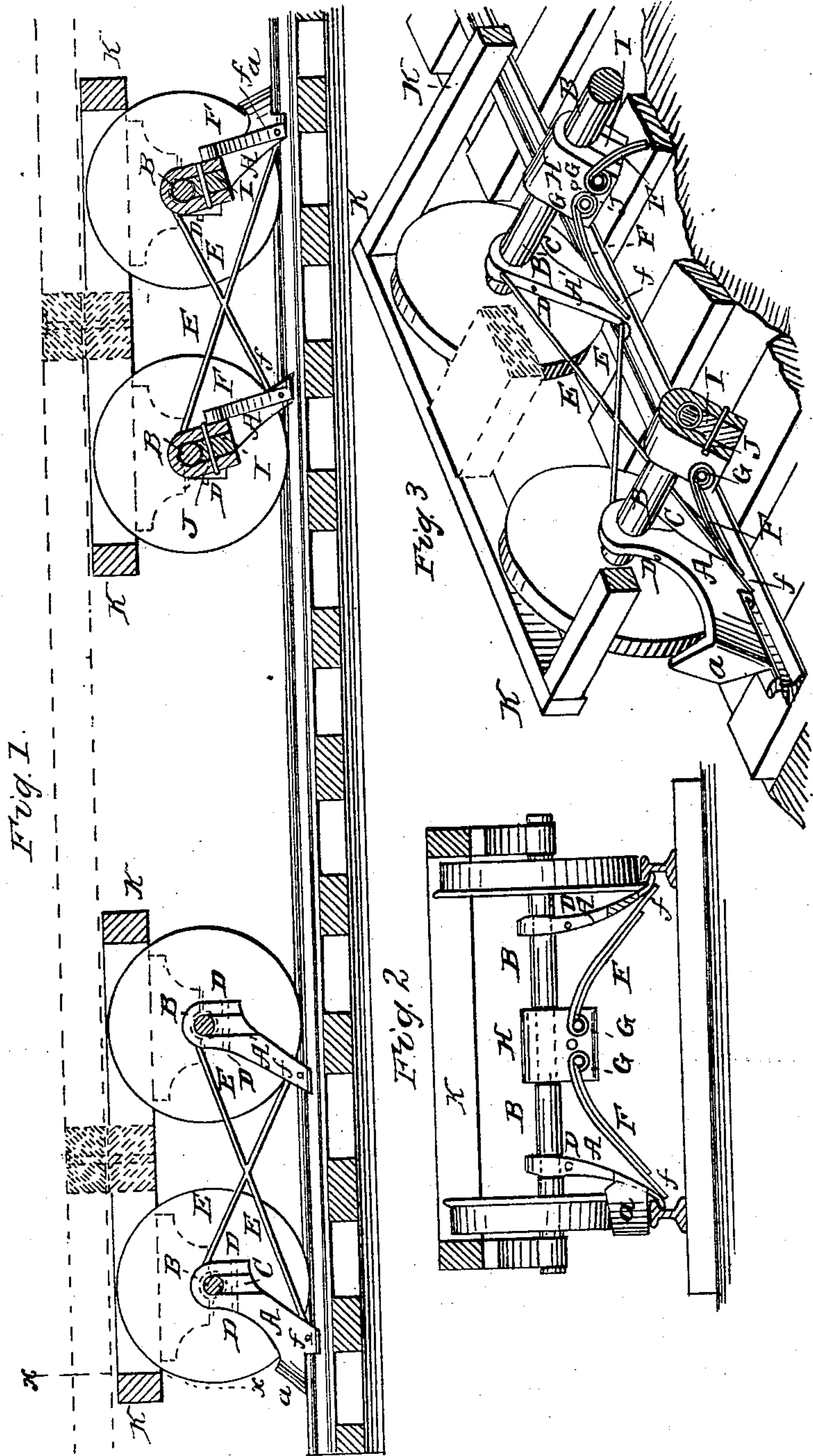


A. STRAUSS.
Railroad Track Clearer.

No. 110,602.

Patented Dec. 27, 1870.



Witnesses
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IMPROVEMENT IN SAFETY ATTACHMENTS FOR RAILWAY-TRUCKS.

Specification forming part of Letters Patent No. **110,602**, dated December 27, 1870.

To all whom it may concern:

Be it known that I, ARNOLD STRAUSS, of New York, in the county and State of New York, have invented certain Devices for Preventing Railroad Disasters, of which the following is a specification, reference being had to the drawings hereto annexed.

This invention relates to railroad cars or trucks used upon the common H-shaped rails of railroads or street-rails; and it consists in providing the axles, near the inner sides of the wheels, with hooks or claws pressed by springs working from the middle of the axles toward the rails, and sliding loosely in the recess formed between the tread and the base of the rails. At the two foremost and hindmost wheels of each car or vehicle these hooks are combined with devices (in their appearance similar to plowshares) sliding over the top of the rails in front of the wheels, and shaped in such a manner that all obstacles lying on the rails are pushed or swept off toward the outside of the track.

The object of my invention is to prevent any railroad disaster caused either by obstacles (stones, sticks, &c.) lying upon the track or by the centrifugal power developed at curves, or any lateral power, which either cause is apt to throw a railroad-car, locomotive, &c., off the track. The pushing or sweeping devices will clear the track of the obstacles lying upon it, and the hooks pressed by the springs will catch as much of the tread of the rails in its inner recess that the car is perfectly secured to its track, and cannot be overthrown by any lateral power. The upper parts of the hooks or claws are shaped in such a manner that the pressure against the inner side of the shank of the rail is limited, and the hooks are removed or discharged from their service by an unlocking device hung in a recess at the middle of the axles of the wheels.

In the drawings, Figure 1 is a longitudinal section of a railroad-car, representing its two trucks under a platform indicated in dotted lines. Fig. 2 is a cross-section of a truck, taken in the line *xx* of Fig. 1. Fig. 3 represents a section of a truck, given in a perspective view. Similar letters refer to like parts.

A and A' are the devices holding the trucks

K on the track. They are hung over the axles B, and secured to the latter by the pieces C and the bolts D. In order to obviate curves in constructing the clamps A A', said clamps are placed in an incline position verging from the axle to the front and base of the periphery of the wheel, and are held in this position by cross-bars or braces E E. The parts *a* of the hooks A serve as pushers, scrapers, sweepers, or cow-catchers before the end wheels. Fig. 2 shows but one of these scrapers in its front view; the other one being cut off in order to show clearly the shape of the hooks.

The axles B are provided with recesses to receive the yokes of the hooks A and A', the yokes being beveled on their sides in both directions from a central point, as shown in Fig. 2, and bearing against the shoulders of the recesses in such a manner as to limit the pressure of the hooks against the rails, as also to allow them to fall back as soon as this pressure is suspended.

The springs F, when in position, as Fig. 2 represents, have a tendency to press the hooks A and A', to which they are joined by the bolts *f*, toward the inner sides of the shanks of the rails, below the tread of the same. They are pivoted by the bolts G to the yoke H, which is hung in a recess in the middle of the axles B, and locked by the piece I and bolt J. When this bolt J and the piece I are removed, the yoke H becomes unlocked and the springs F are deprived of their power, thus enabling the truck to be removed from the track, if it should be required.

What I claim as my invention is—

1. The sliding hooks A and A', hung in recesses of the axles near the inner sides of the wheels, and braced by the crossing bars E and kept in position by the springs F, substantially as and for the purposes set forth.

2. The scrapers *a*, in combination with the hooks A, as and for the purpose set forth.

3. The springs F, in combination with the yoke H, the piece I, and the bolt J, as and for the purpose described and shown.

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Witnesses:

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