

(No Model.)

C. NAGEL.
APPARATUS FOR REMOVING OBSTRUCTIONS FROM STREET CAR TRACKS.
No. 442,994.

Patented Dec. 16, 1890.

Fig. 1.

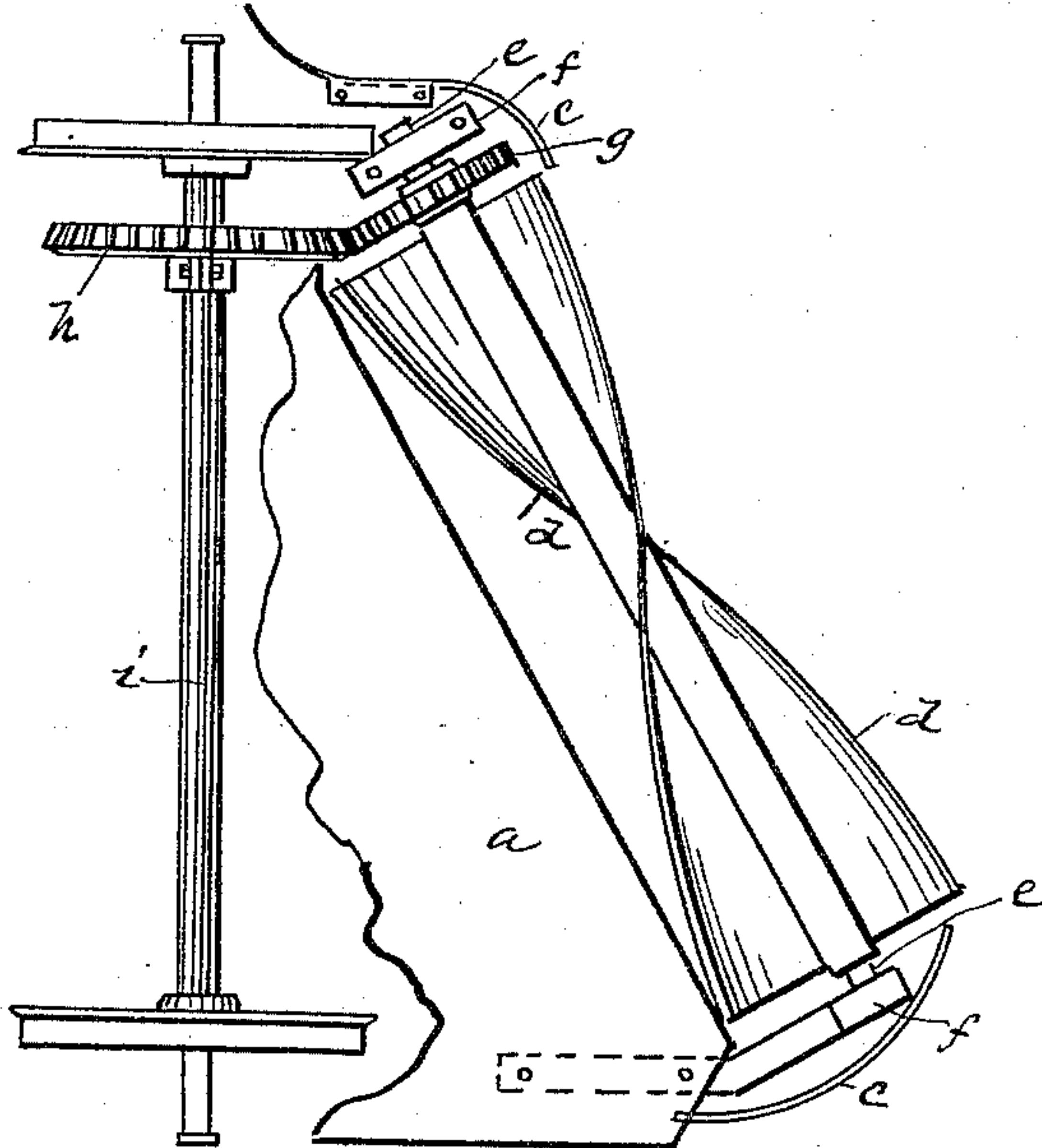
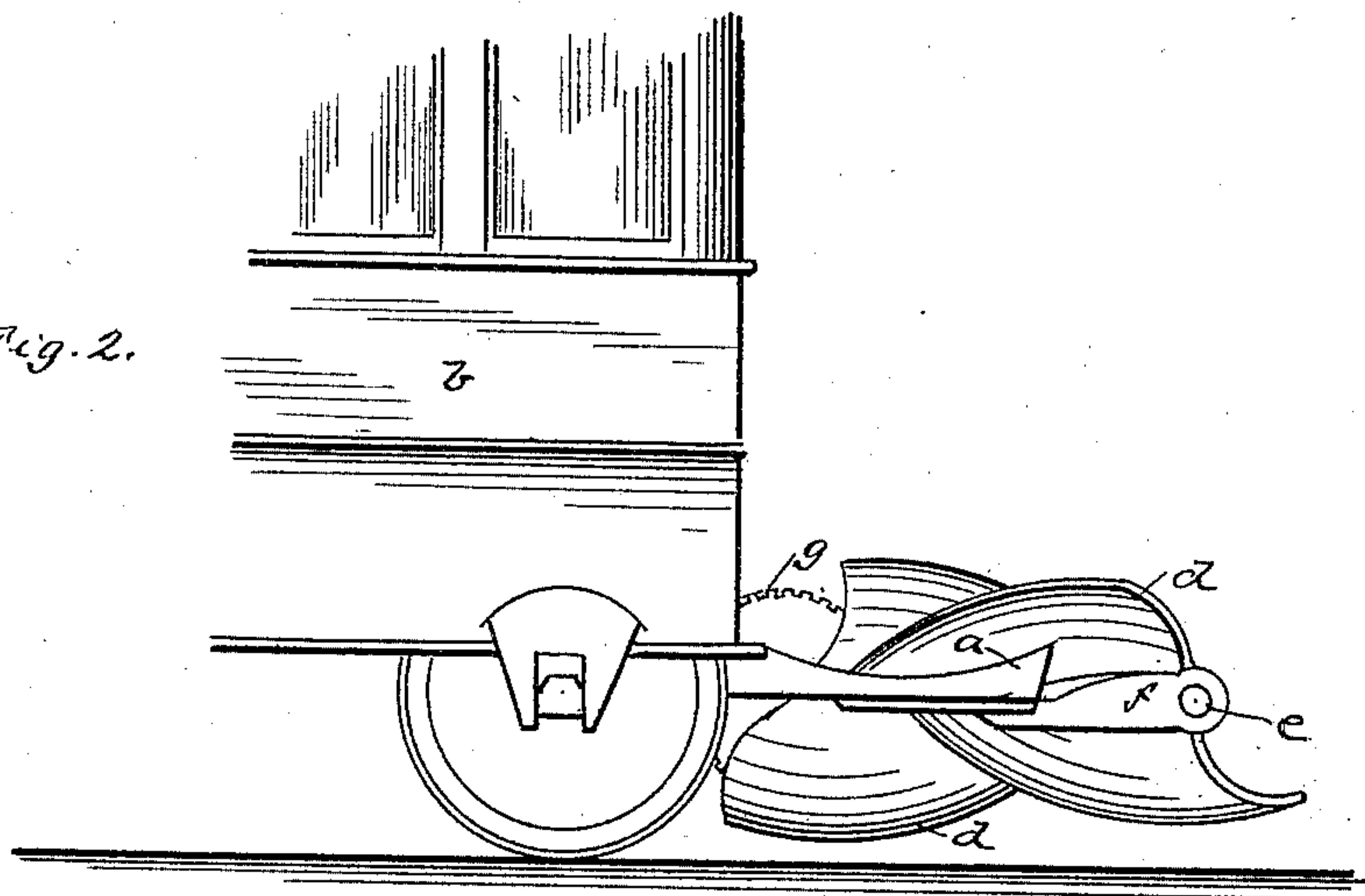


Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

CHARLES NAGEL, OF PITTSBURG, PENNSYLVANIA.

APPARATUS FOR REMOVING OBSTRUCTIONS FROM STREET-CAR TRACKS.

SPECIFICATION forming part of Letters Patent No. 442,994, dated December 16, 1890.

Application filed August 7, 1890. Serial No. 361,349. (No model.)

To all whom it may concern:

Be it known that I, CHARLES NAGEL, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Apparatus for Removing Obstructions from Street-Car Tracks; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to an improved means for removing obstructions from the front of street-cars; and it consists in a spiral-shaped revolving sweep located at an angle at the front of the car, a platform secured to the car in rear of the revolving sweep, and a means for rotating the sweep from one of the axles, together with certain other details of construction and combination of parts, as will be fully set forth hereinafter.

In the accompanying drawings, Figure 1 is a plan view of my improved device. Fig. 2 is a side elevation of the same.

To put my invention into practice with a street or other car *b*, I form at the front of the same a platform *a*, which extends in a diagonal manner across the entire front of the car *b* and is provided at either end with a fender *c*, constructed of wood or of a thin sheet-iron. This platform *a* is hollowed or dished at the center, so that obstructions thrown onto the same will not roll off. At the front of this platform *a* and projecting below and above the same is a spiral-shaped roller *d*, the webs of which are preferably of rubber or other like material. This roller *d* is mounted on a shaft *e* in suitable bearings *f*,

and is also arranged diagonally across the front of the car to correspond with the platform *a*. Attached to this shaft *e* is a gear-wheel *g*, which meshes with another *h*, rigidly secured to the forward axle *i* of the car.

In operation, when the car is in motion, the gear-wheel *g h* drives the roller *d*, and should the latter meet with any obstruction, such as a small child, the same will be lifted by the webs of the roller *d* and thrown upward on the platform *a*. Small objects, if not thrown onto the platform *a*, will be moved along the roller *d* and finally thrown off the track and away from the wheels.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The herein-described apparatus for removing obstructions from street-railways, consisting of a spiral roller *d*, arranged diagonally across the front of the car, a platform *a*, located at the rear of the roller *d*, and suitable gear-wheels *g h*, connecting the roller-shaft *e* with one of the axles *i* of the car, substantially as and for the purpose set forth.

2. The combination, with a car, of the platform arranged diagonally across the front of the car, and the revoluble sweep arranged in front of the platform and geared to one of the axles of the car, said sweep being provided with the flexible spiral web, substantially as shown and described.

In testimony that I claim the foregoing I hereunto affix my signature this 6th day of May, A. D. 1890.

CHARLES NAGEL. [L. s.]

In presence of—

M. E. HARRISON,
A. A. HEINER.