

M. C. Boyer,
Track Cleaner for Railway Cars.

116673

FIG. 1.

PATENTED JUL 4 1871

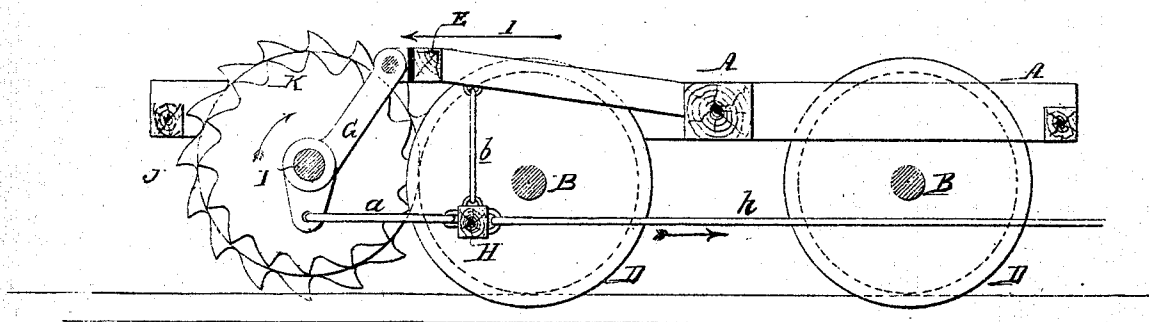
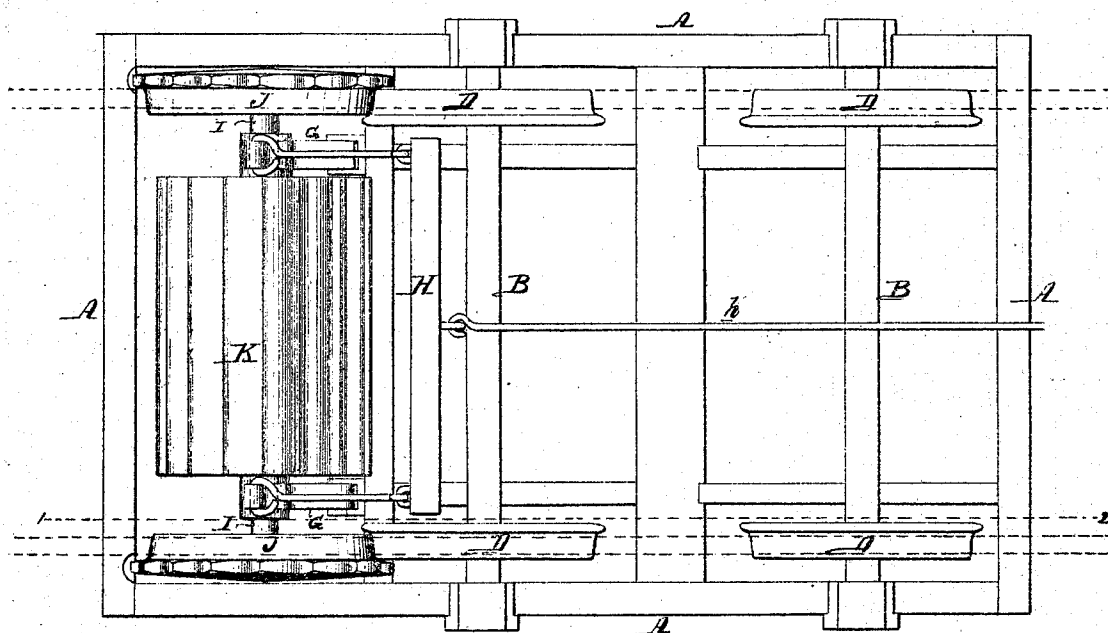


FIG. 2.



WITNESSES {

Geo. B. Harding.
John Parker

M. C. Boyer

by his attys
Howson and Son

UNITED STATES PATENT OFFICE.

MICHAEL CROLL BOYER, OF NORRISTOWN, PENNSYLVANIA.

IMPROVEMENT IN TRACK-CLEARERS FOR RAILWAY CARS.

Specification forming part of Letters Patent No. 116,673, dated July 4, 1871.

To all whom it may concern:

Be it known that I, MICHAEL CROLL BOYER, of Norristown, county of Montgomery, State of Pennsylvania, have invented a Track-Clearer for Railway Cars, of which the following is a specification:

My invention consists of a device, too fully explained hereafter to need preliminary description, whereby railroad tracks are cleared of obstructions, and accidents to the cars, or to those falling in front of the same, are prevented.

Figure 1 is a vertical section of my improved track-clearer for railway cars, and Fig. 2 an inverted plan view of Fig. 1.

A represents part of the frame of a city-railway car; or it may be supposed to represent part of the frame of a coal or freight-car, or of the truck of a railroad car, the frame being provided with the usual axles B B and flanged wheels D D. To a cross-bar, E, of this frame are hung two levers or arms, G G, which are connected, at their lower ends, by rods *a a*, to a transverse bar, H, suspended from the frame by links *b*, and connected to a rod, *h*, to be operated by a lever or other devices, by which the said rod can be pulled in the direction of the arrow, or released, at pleasure. A shaft, I, has its bearings in the two levers G G; and to this shaft are secured the wheels J J, so situated that their treads shall coincide with those of the adjoining flanged wheels D D; and to the same shaft, between the said wheels J J, is secured a drum, K, fluted or ribbed in the manner shown in the drawing, or in any other appropriate manner, the wheels J having teeth similar in shape to the ribs or flutes of the drum.

When the car is moving in the direction of the arrow 1, Fig. 1, and sufficient force has been applied to the rod *h* to bring the wheels J into tight frictional contact with the adjoining flanged wheels D D, the shaft I will revolve in the direction of its arrows, and its wheels J J and drum K will consequently clear from the track

any obstruction which might impede the progress of the car, or cause the latter to leave the track, the drum clearing the track between the rails, and the wheels J performing the same duty as regards the rails themselves.

It is not absolutely necessary that the roller should be ribbed or fluted, or that the wheels J J should have projections; for they will perform their duties if made plain, but not so effectually as if made in the manner described.

My invention is especially applicable to street cars, as no serious accident could occur to any one accidentally falling in front of the car.

The wheels J J may consist of old car-wheels; and it will be seen that while the rod *h* may be used, yet under ordinary circumstances the weight of the wheels and of the drum will maintain the said wheels in sufficient frictional contact with the adjoining flanged wheels D D to insure the transmission of a rotary motion to the shaft I without the necessity of depending on the uncertain action of springs or of devices operated by the driver. The wheels J J will of themselves serve to prevent many accidents, but they are rendered more effectual by the presence of the drum. Both the wheels and drum should revolve so near the track as to remove ordinary obstructions, without, however, being in actual contact either with the rails or ground.

I claim—

1. The wheels J, suspended by swinging arms G so as to be maintained in contact with and operated by the flanged wheels of a car, as specified.

2. The combination of the above with the drum K on the shaft I.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

M. C. BOYER.

Witnesses:

WM. A. STEEL,
LOUIS BOSWELL.