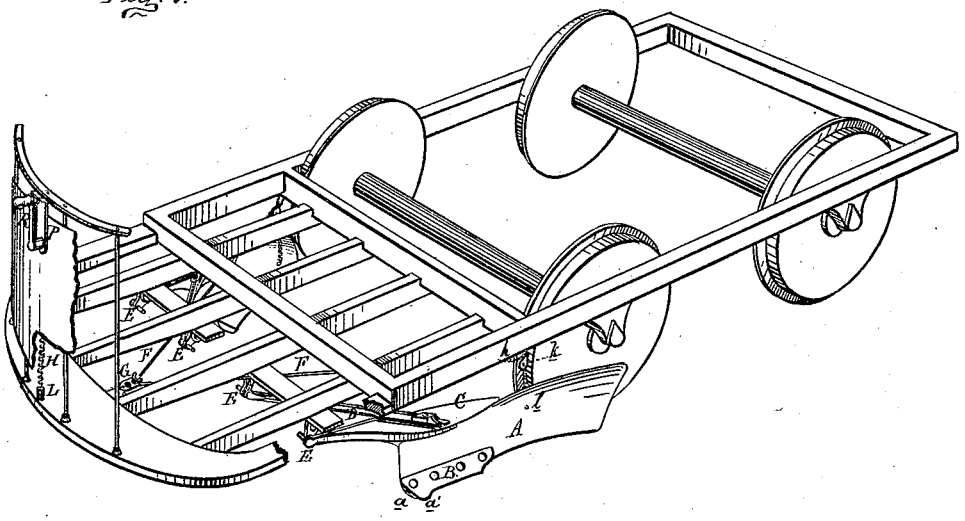
2 Sheets—Sheet 1.

A. DAY.

RAILWAY TRACK-CLEARER.

No. 190,563. Patented May 8, 1877.

Fig. 1.



Attest:
Edward Barthel
Rudolf Fehr.

Inventor:
A. Day
By Atty.
Thos. S. Sprague

2 Sheets—Sheet 2.

A. DAY.

RAILWAY TRACK-CLEARER.

No. 190,563. Patented May 8, 1877.

Fig. 2.

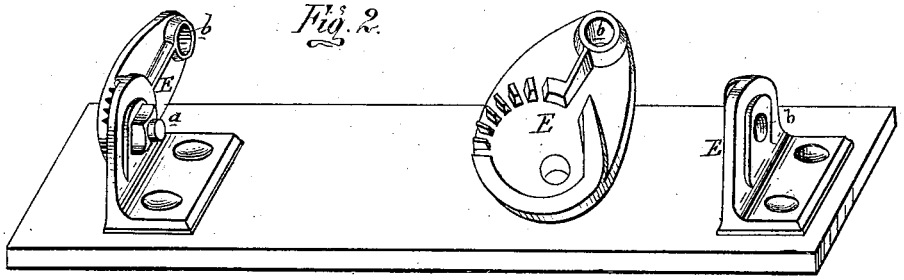


Fig. 3.

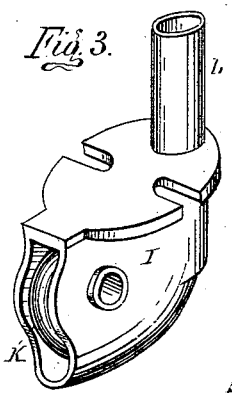


Fig. 4.

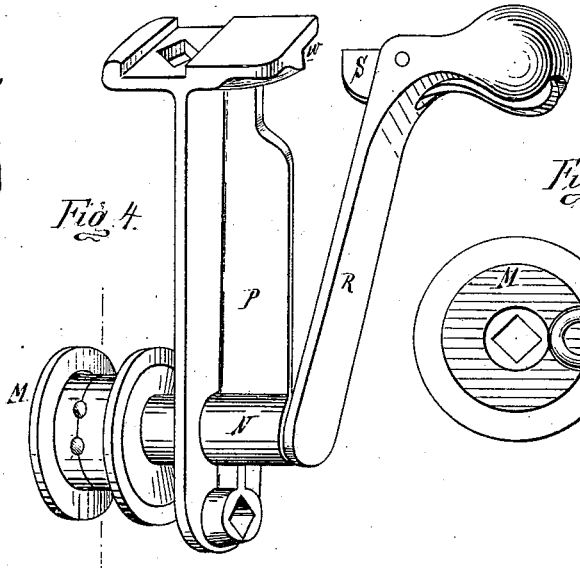


Fig. 5.

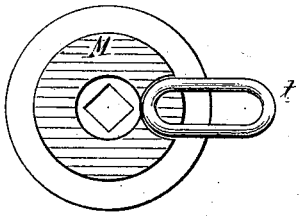
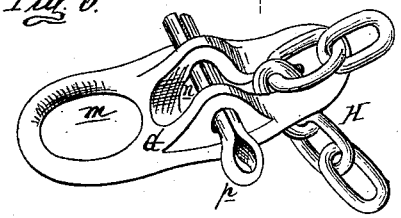


Fig. 6.



Attest:
Edward Barthel
Rudolf Tahr

Inventor:
A. Day
by Atty
Thos. S. Sprague

UNITED STATES PATENT OFFICE.

AUGUSTUS DAY, OF DETROIT, MICHIGAN.

IMPROVEMENT IN RAILWAY-TRACK CLEARERS.

Specification forming part of Letters Patent No. **190,563**, dated May 8, 1877; application filed February 17, 1877.

To all whom it may concern:

Be it known that I, AUGUSTUS DAY, of Detroit, in the county of Wayne and State of Michigan, have invented new and useful Improvements in Machines for Cleaning Railway-Tracks, of which the following is a specification:

The nature of this invention relates to certain new and useful improvements in the construction of machines for cleaning street-railway tracks from snow, sand, stones, and other obstructions; and the invention is especially designed as an improvement on a machine for a similar purpose for which Letters Patent were issued to me on the 9th day of April, 1872, and numbered 125,547.

The drawings are shown upon two sheets, and in six figures, in which—

Figure 1 is a perspective view of the invention as attached to the frame-work of a street-railway car and platform. Fig. 2 is a plate, to which the adjustable brackets are secured, and which, when the whole device is in place, is secured to the under side of the floor-sill of either the car or the platform. Fig. 3 is a shell, block, and pipe, through which the chain leads, by means of which the scrapers are elevated when desired. This device is secured under the front sill of the platform, with the pipe passing upward through said sill. Fig. 4 is a view of the barrel upon which the chain is wound when the scrapers are elevated, of the standard which supports the barrel-shaft, and the handle and latch by which the barrel is rotated, and the latch secured to prevent the chain from unwinding. Fig. 5 is a cross-section, on the dotted line in Fig. 4, showing the manner in which the end of the chain is secured, as shown, between the inner faces of the two halves of the barrel. Fig. 6 is the adjustable clamp and eye, to the former of which the elevating-chain is secured, as shown, while to the latter are secured the hook-shaped forward ends of the draft-rods.

In the drawings, A is the scraper, made of cast metal, substantially of the form shown, with its front lower edge cut away, and recessed to receive the cast-steel shoe B, the forward end of which terminates in an outwardly-projecting lip, *a*, which enables the scraper to pass over inequalities in the abutting ends of the rails of which the track is made. The lower edge of this shoe presents a projection, *a'*, which clears obstructions from the flange side of the rail.

C is a cast-metal leader, and D a brace, both of which are bolted to the scraper, while their free ends are journaled through the bearing-holes *b* in the brackets E. These latter are formed of two pieces, as shown in Fig. 2, with their inner faces toothed or corrugated, and held together by bolts *d*, provided with suitable nuts. By loosening these nuts the fore part of the bracket may be turned to any desired pitch, thereby securing a correct presentation of the scraper to the face of the rail, and adjustable to suit the varying height of car-floors from the rail. This adjustability prevents the necessity of using brackets of different lengths, as has heretofore been required.

F are draw and lifting bars or rods, to the rear ends of which are secured chains *h*, which, passing over blocks *k*, secured to the sills of the car, are secured to the scrapers at *l*. The forward ends of these rods terminate in hooks which engage with the eye *m* of the clamp G.

H is a chain, one end of which passes through the slot *n* in the clamp G, where it is held in place by the spring-key *p*. It will be seen that by the removal of the key the chain may be lengthened or shortened by one or more links, as may be desired. From this clamp the chain leads forward through the shell I, around the block K, and upward through the pipe L to the barrel M. The shell with the block is secured to the under side of the front sill of the platform, with the pipe projecting upward through said sill, as shown in Fig. 1. The barrel is made in two parts, each half being recessed to receive the end link *t* of the chain, as shown in Fig. 5. A nut on the end of the barrel-shaft secures the two halves together and to the shaft.

The shaft N is journaled through the standard P, as shown in Fig. 4, and its outer end is provided with a crank, R. The standard P is rigidly secured to the front of the dash of the platform in such a manner that the barrel will project from the inner face of the dash, where it may be covered by any suitable shield. In

the upper end of the crank there is secured a gravity-latch, S, which engages with the notch *w* in the upper end of the standard. By these means the scraper may be elevated, at will, by the driver on the platform, and nothing is found projecting above the rail of the dash.

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

1. The adjustable brackets E, in combination with the leader C and brace D, and scraper, substantially as and for the purposes described.

2. The eye and clamp G, provided with slot *n* and key *p*, substantially as and for the purposes set forth.

3. The barrel M, made in two parts, and recessed, as described, in combination with the chain H, shaft N, crank R, and standard P, substantially as and for the purposes specified.

4. In combination, the eye and clamp G, chain H, rods F, chain *h*, block *k*, and scraper A, substantially as and for the purposes described.

AUGUSTUS DAY.

Witnesses:
THOS. S. SPRAGUE,
H. S. SPRAGUE.