

(No Model.)

J. H. FRANK.
TRACK CLEANER.

No. 552,661.

Patented Jan. 7, 1896.

FIG. 1.

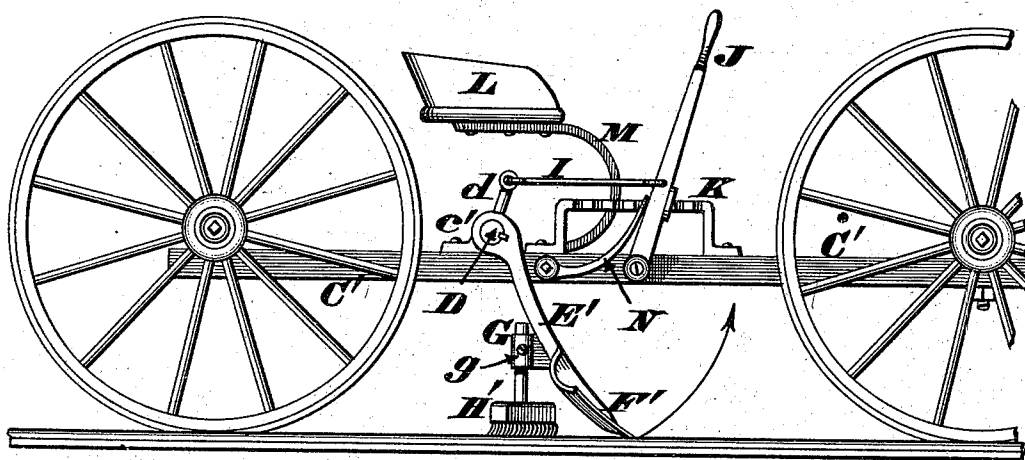


FIG. 2.

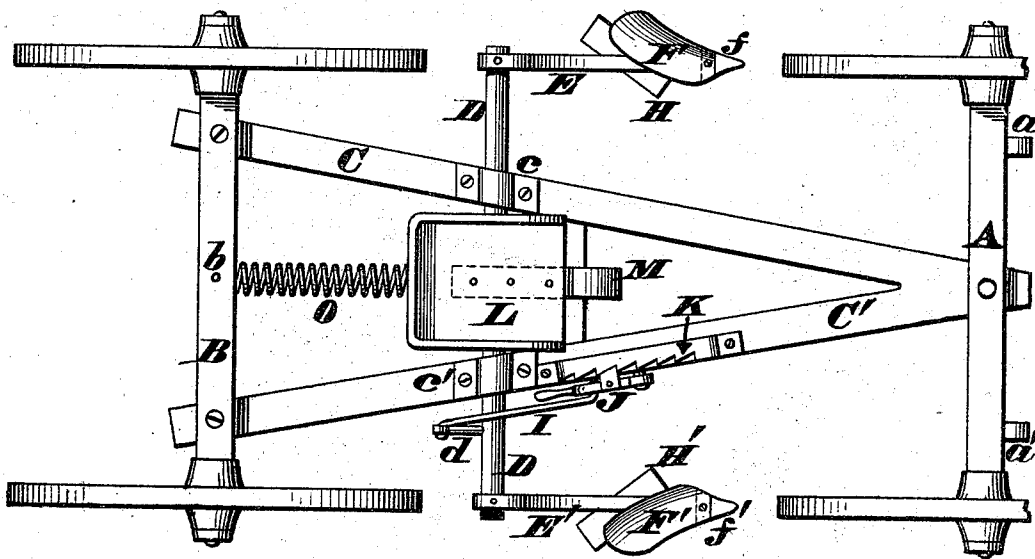
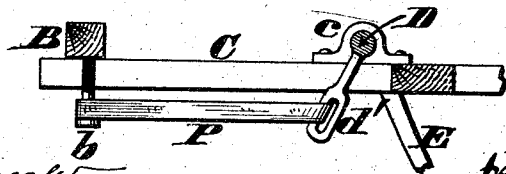


FIG. 3.



Attest.

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UNITED STATES PATENT OFFICE.

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TRACK-CLEANER.

SPECIFICATION forming part of Letters Patent No. 552,661, dated January 7, 1896.

Application filed March 25, 1895. Serial No. 543,088. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. FRANK, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Track-Cleaners; and I do hereby declare the following to be a full, clear, and exact description of the invention, reference being had to the annexed drawings, which form a part of this specification.

My improved track-cleaner comprises a wheeled vehicle having a horizontal rock-shaft journaled in it and sheaths secured to the ends of said shaft, the sheaths being provided with scrapers and vertically-adjustable brushes, a spring being arranged to enable said scrapers and brushes to act with a yielding pressure, and a lever attachment being supplied for the purpose of rendering said mechanism inoperative when occasion requires, as hereinafter more fully described.

In the annexed drawings, Figure 1 is a side elevation of my improved track-cleaner, the scrapers or cleaners proper being in their normal or operative positions. Fig. 2 is a plan of the vehicle, the scrapers being swung up and thereby rendered inoperative. Fig. 3 is a detail view.

My track-cleaner is a four-wheeled vehicle, consisting essentially of a front axle A, rear axle B, and hounds C C', which latter have boxes c c' that carry a rock-shaft D, to whose ends are rigidly secured sheaths E E' armed with the scrapers or cleaners proper F F'. These scrapers or shovels are shaped somewhat like plowshares and so arranged as to throw obstructions outwardly or away from the rails, the hardened points F F' of said scrapers being usually detachable and capable of ready renewal when occasion requires.

Projecting rearwardly from the sheath E', and preferably integral therewith, is a tubular holder G provided with a clamp-screw g that retains the handle of a brush H' at any desired adjustment in said holder. By this arrangement the brush can be readily shifted vertically to compensate for any wear of its bristles or to increase or diminish its pressure upon the rails, while at the same time

said brush is free to swing up and down with the scraper F'.

H in Fig. 2 is another brush applied in a precisely similar manner to the sheath E.

Projecting laterally from the rock-shaft D is a short arm or lug d, connected by a rod I to a lever J, pivoted to the hound C', the lever being retained in any desired position by a rack K, secured to the same hound and being so located as to be readily grasped by the driver, who occupies a seat L, supported upon a curved spring-bar M.

A weight or other means must be employed to hold the scrapers down with a yielding pressure, and, as seen in Fig. 1, this result is effected by attaching a plate-spring N to the hound C' and causing the free end of said spring to bear against one side of the lever J; but, as seen in Fig. 2, a coiled spring O is used, one end of which is connected to a pin b, projecting downwardly from the rear axle B, while its other end is attached to a lateral arm or lug d' of the rock-shaft D. This lower arm d' is seen only in Fig. 3, which illustration shows also that a rubber spring P may be used if preferred.

My track-cleaner is usually drawn by one or more horses, the shafts or pole of the vehicle being attached to the front axle at a a'.

When all the operative parts of the vehicle are in their normal positions, (seen in Fig. 1,) the points f f' of the scrapers F F' enter the rail-grooves, and are retained therein by the stress of the spring or springs, which yielding devices will give sufficiently to permit an upward swing of the scrapers when they come in contact with a spike or other serious obstruction; but snow and ice and other similar obstacles will be instantly scraped out of the grooves the moment the points traverse the latter, the loose fragments thus thrown up being caught by the shovels or cleaners F F' and deflected outwardly or away from the rails; but all the finer particles of snow and ice that escape the action of the shovels will be swept aside by the brushes H H', and thereby afford clean and unobstructed rails for the car to run on.

To render the scrapers inoperative, it is

necessary only to throw back the lever J and engage it with one of the rear ratchet-notches, as seen in Fig. 2, which act swings up the sheaths, scrapers and brushes, as indicated
5 by the arrow in Fig. 1.

I claim as my invention—

A track-cleaner combining a wheeled vehicle; a horizontal rock shaft D, journaled transversely in the frame of said vehicle;
10 sheaths E, E', attached to the ends of said shaft; scrapers F, F', secured to the front of said sheaths; tubular holders G projecting from the rear of said sheaths, and provided

with clamp screws g; brushes H, H', having handles that traverse said holders; a spring 15 that retains said scrapers and brushes in yielding contact with the rails; and a lever attachment for operating said rock-shaft, in the manner described, and for the purpose stated.

In testimony whereof I affix my signature
in presence of two witnesses.

JOHN H. FRANK.

Witnesses:

JAMES H. LAYMAN,
H. RUPRECHT.