

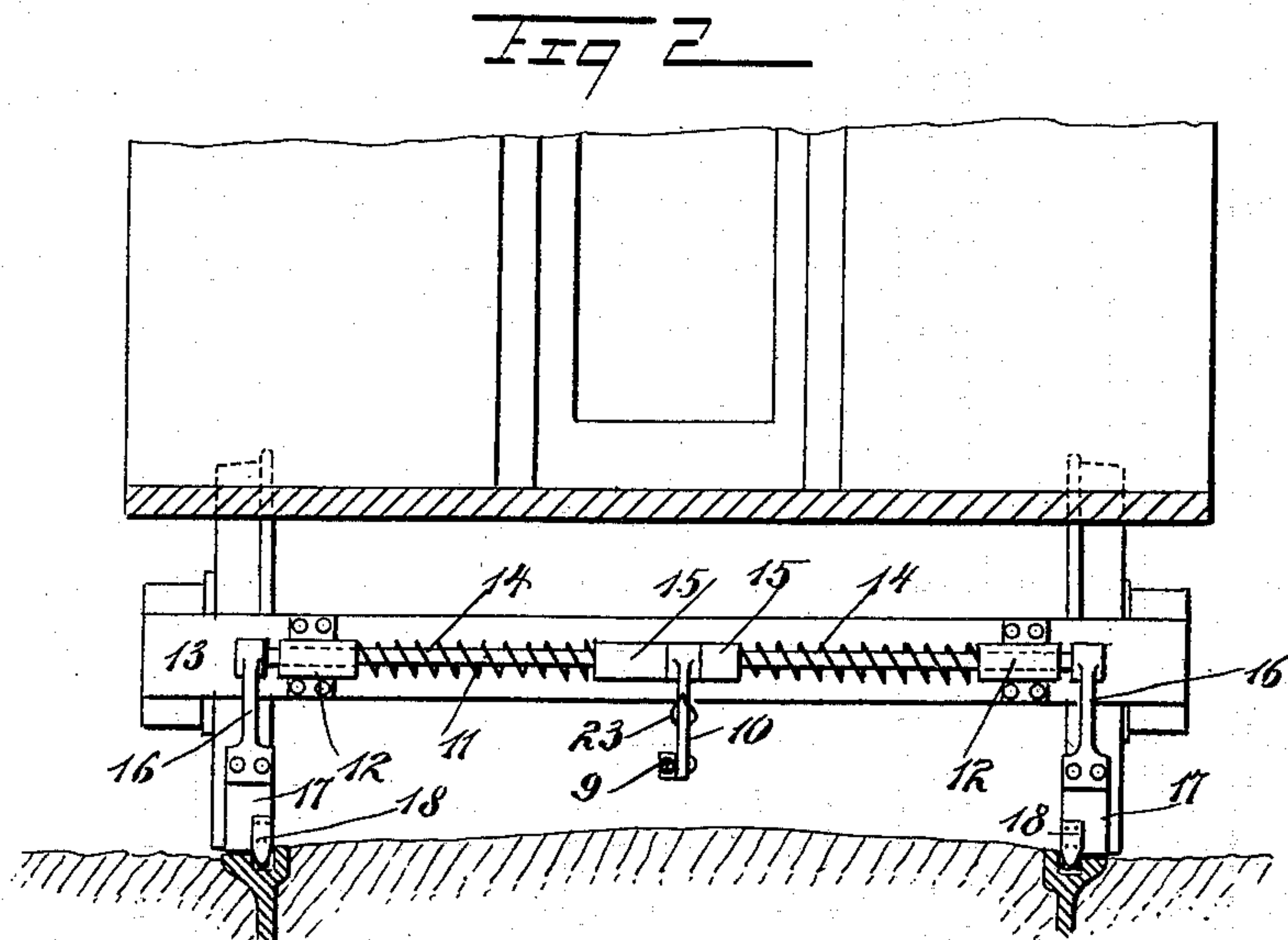
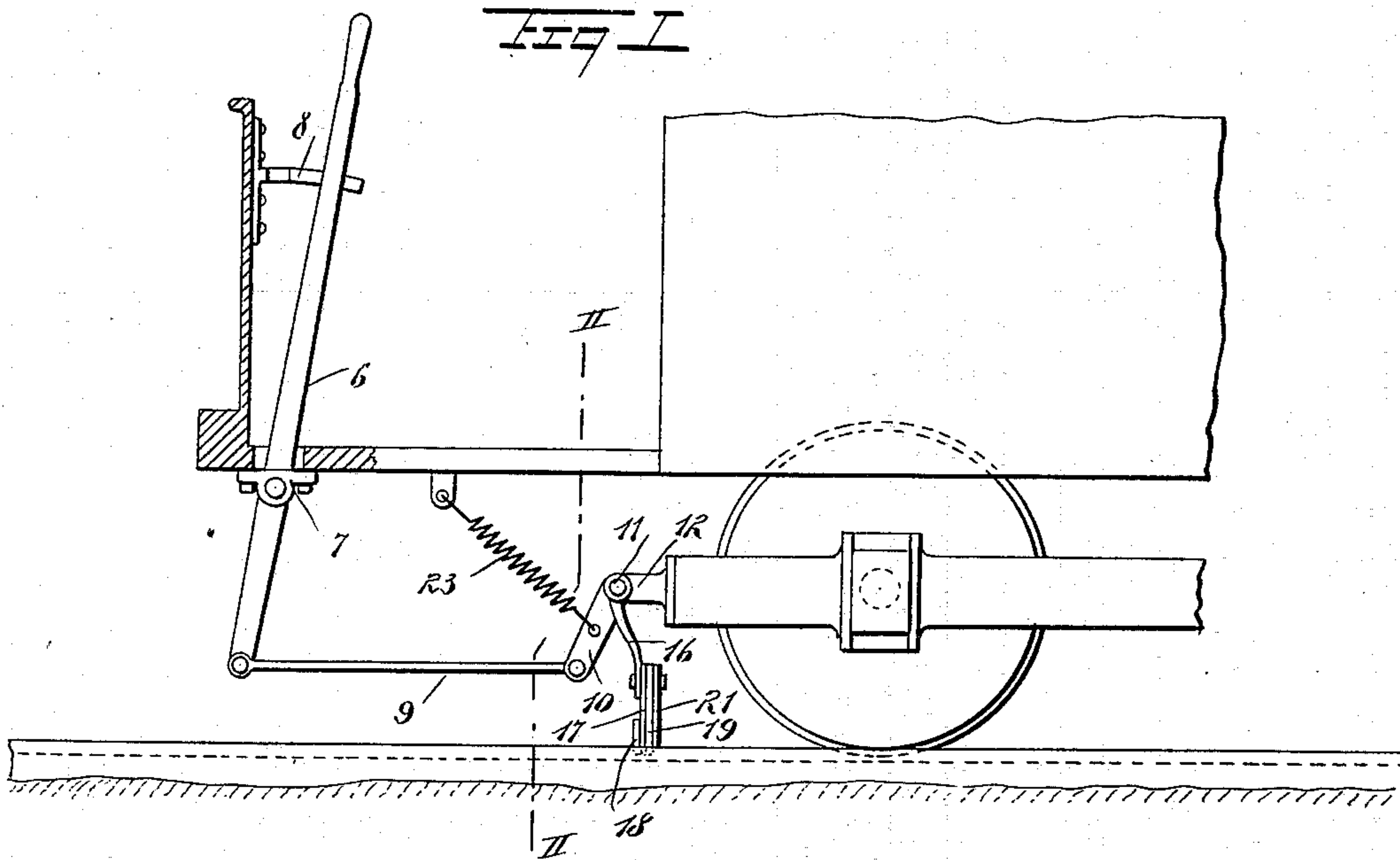
No. 615,580.

Patented Dec. 6, 1898.

L. R. SHELL.  
TRACK CLEANER.

(Application filed Nov. 19, 1897.)

(No Model.)



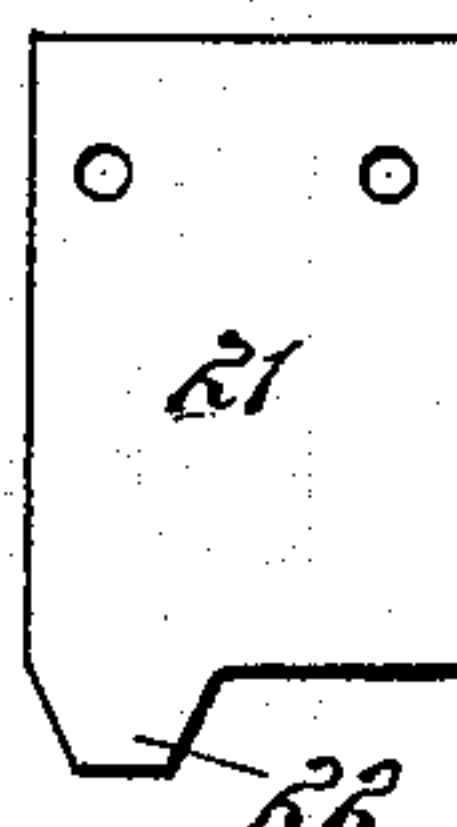
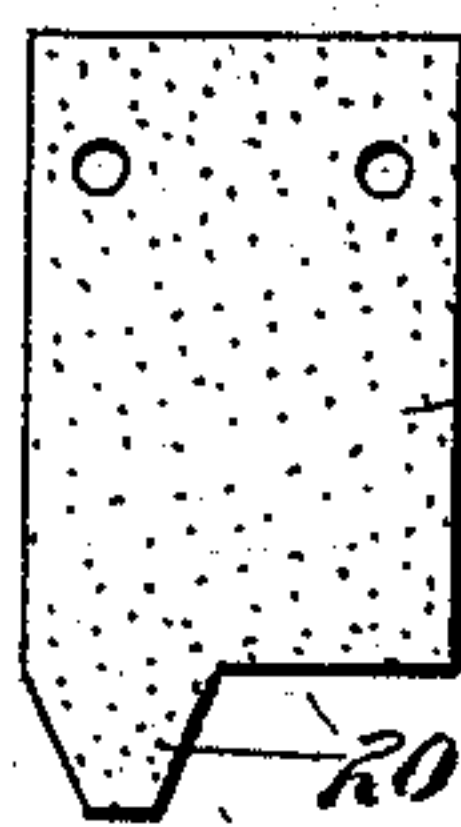
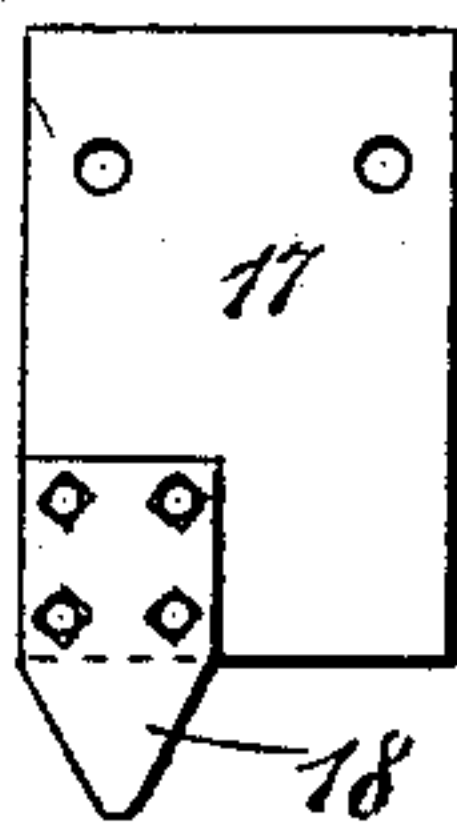
*Fig 3*

*Fig 4*

*Fig 5*

WITNESSES:

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INVENTOR

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BY

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ATTORNEYS.



# UNITED STATES PATENT OFFICE.

LEONIDAS R. SHELL, OF RICHMOND, VIRGINIA, ASSIGNOR OF ONE-HALF TO  
JOSEPH H. MIDDENDORF, OF SAME PLACE.

## TRACK-CLEANER.

SPECIFICATION forming part of Letters Patent No. 615,580, dated December 6, 1898.

Application filed November 19, 1897. Serial No. 659,123. (No model.)

*To all whom it may concern:*

Be it known that I, LEONIDAS R. SHELL, of Richmond, in the county of Henrico and State of Virginia, have invented a new and Improved Track-Cleaner, of which the following is a full, clear, and exact description.

This invention relates to a track-cleaner of the class which has scraping and brushing tools mounted to swing toward and from the track and to project into the grooves thereof, so that as the car progresses the grooves will be cleaned of snow, ice, dirt, and other foreign matter. The invention resides particularly in the scraping and brushing tool.

This specification is the disclosure of one form of my invention, while the claim defines the actual scope of the invention.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of the invention with parts in section. Fig. 2 is a sectional view on the line II II of Fig. 1, and Figs. 3, 4, and 5 are elevational views of the several parts of the scraping and brushing tool.

The scraping and brushing tools are supported in operative position by means of the following-described devices: A hand-lever 6 is fulcrumed in a box 7, held by the platform of the car and coacting with a notched segment 8. The lever 6 is pivoted to a link 9, which in turn is pivoted to a crank-arm 10, fast on a shaft 11. The shaft 11 is mounted to rock and slide in bearings 12, secured to the truck-beam 13. Two expansive spiral springs 14 encircle the shaft 11 and are arranged, respectively, between the boxes 12, and loose sleeves or collars 15 are mounted on the shaft 11, one on each side of the crank-arm 10, which collars receive the impact of the springs 14 at the crank-arm 10.

The scraping and brushing tools each comprise an arm 16, the arms being respectively fast on the ends of the shaft 11 outside of the boxes 12. Each arm 16 is riveted to a rigid plate 17, which carries a removable scraping point or tool 18. Back of the plate 17 a heavy gum sheet 19 is bolted, such sheet having a

downwardly-projected portion 20, lying along-side of the tool 18. The sheet 19 is backed by a rigid plate 21, also having a projection 22, which bears against and reinforces the tongue or projection 20. This tool is arranged so that the plates 17, 19, and 21 run directly above the rail and in close proximity with the upper surface thereof. The projections or tongues 18, 20, and 22 extend into the groove of the rail. The scraping-tool 18, being rigid, advances through the groove and dislodges all foreign matter. Then the gum tongue 20 follows and brushes out the groove. The tongue 22 is smaller than the tongues or tools 18 and 20, so that it does not hinder the operation of the tongue 20, while at the same time it reinforces this tongue.

Owing to the manner of hanging the shaft 11 the shaft may slide transversely in its boxes 12, so as to accommodate the scrapers to curves and other inequalities in the rails and road-bed. The scrapers are applied and withdrawn by the operation of the lever 6. A retractile spiral spring 23 is made fast to the arm 10 and to the under side of the platform, so as to tend to draw said arm forward and keep the scraping-tools applied to their work.

My invention is intended to clean rails where the inner side of the rail is from one-half inch to one inch higher than the tread of the rail, upon which the car-wheels run, especially on curves.

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

A track-cleaning tool, consisting in a rigid plate, a tongue or scraper attached to the plate and projecting downward therefrom, a resilient sheet secured against the plate and having a brushing-tongue projecting downward at the rear of said tongue or scraper, and a backing-plate secured against the resilient sheet and having a downwardly-projecting tongue reinforcing the brushing-tongue of the resilient sheet.

LEONIDAS R. SHELL.

Witnesses:

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