

No. 876,957.

PATENTED JAN. 21, 1908.

C. H. FRICK.
GROOVE RAIL CLEANER.
APPLICATION FILED AUG. 21, 1907.

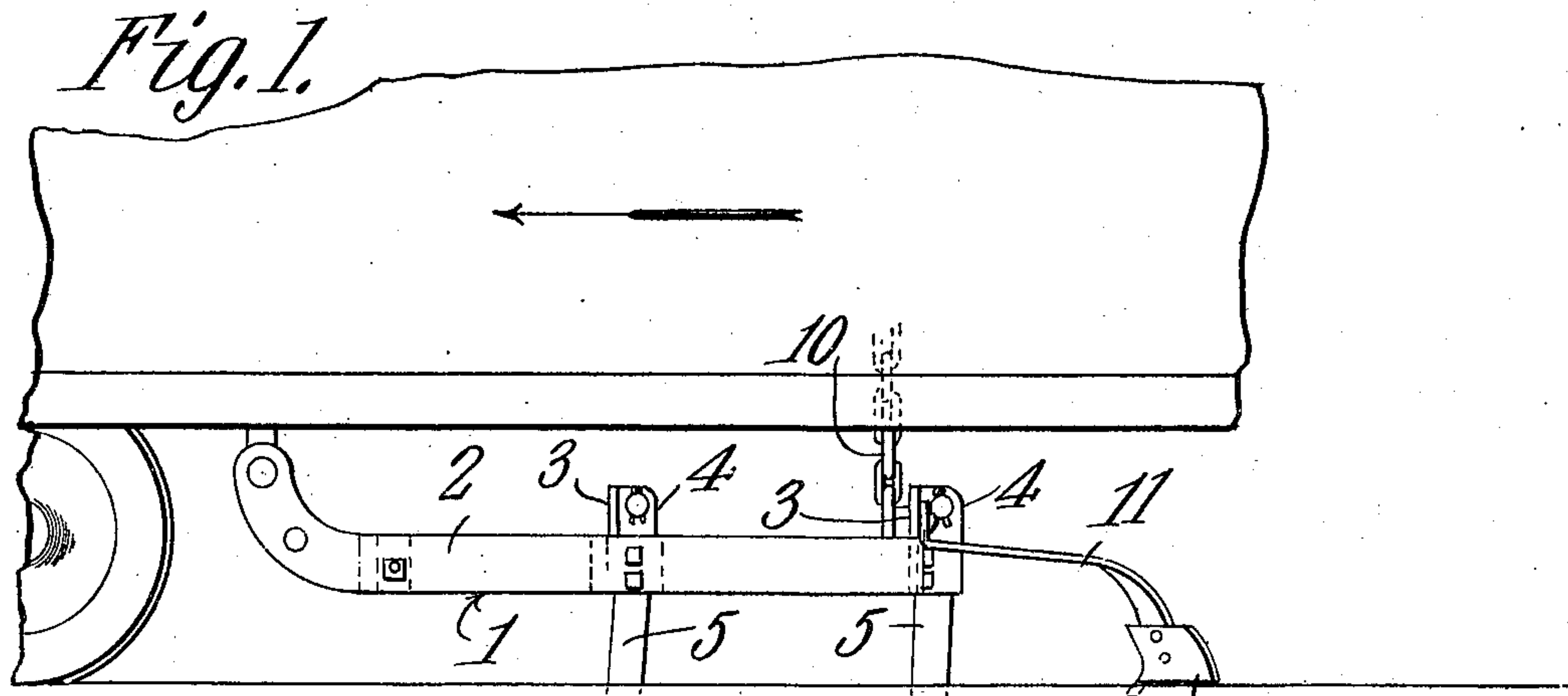


Fig. 2.

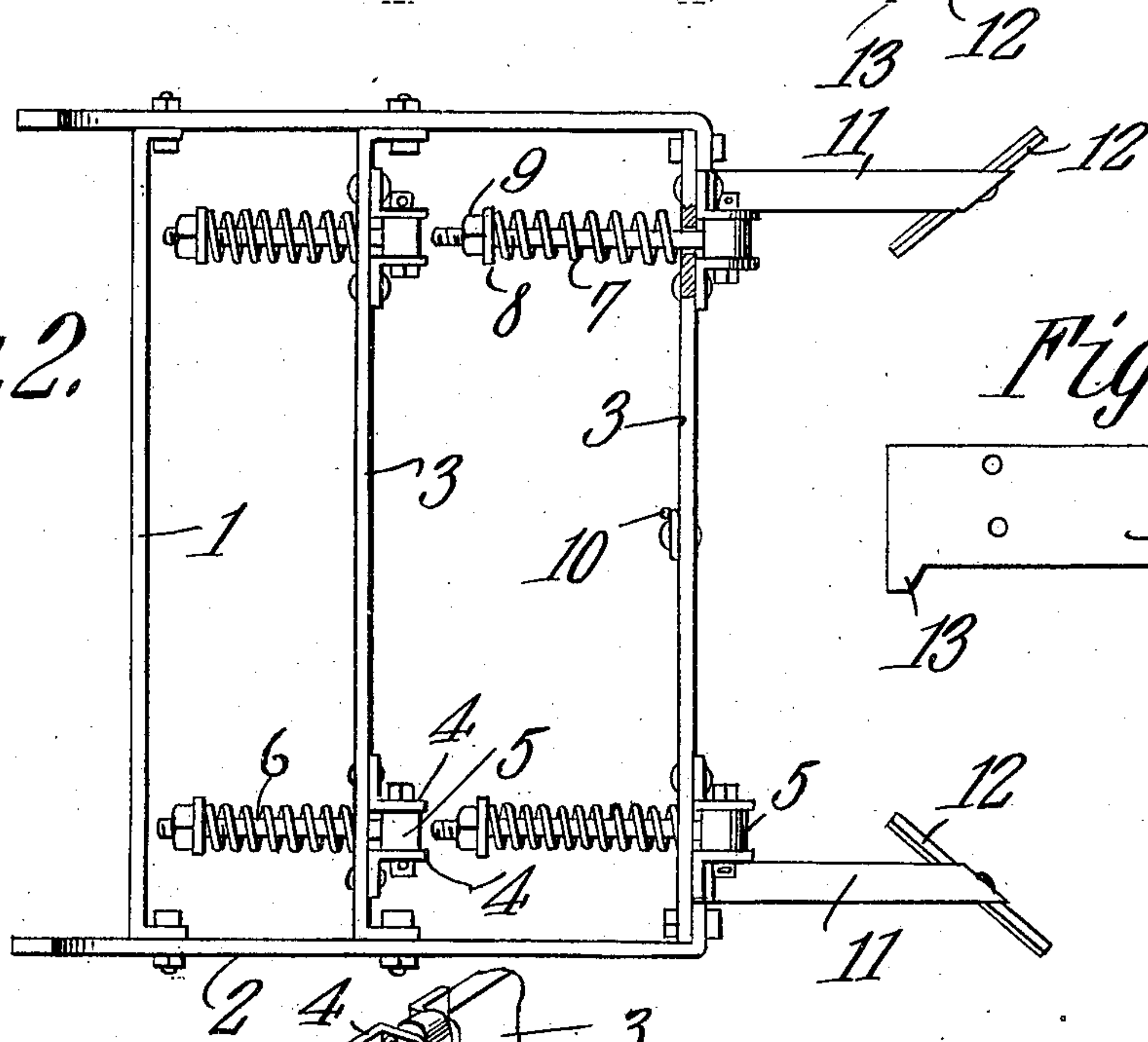


Fig. 4.

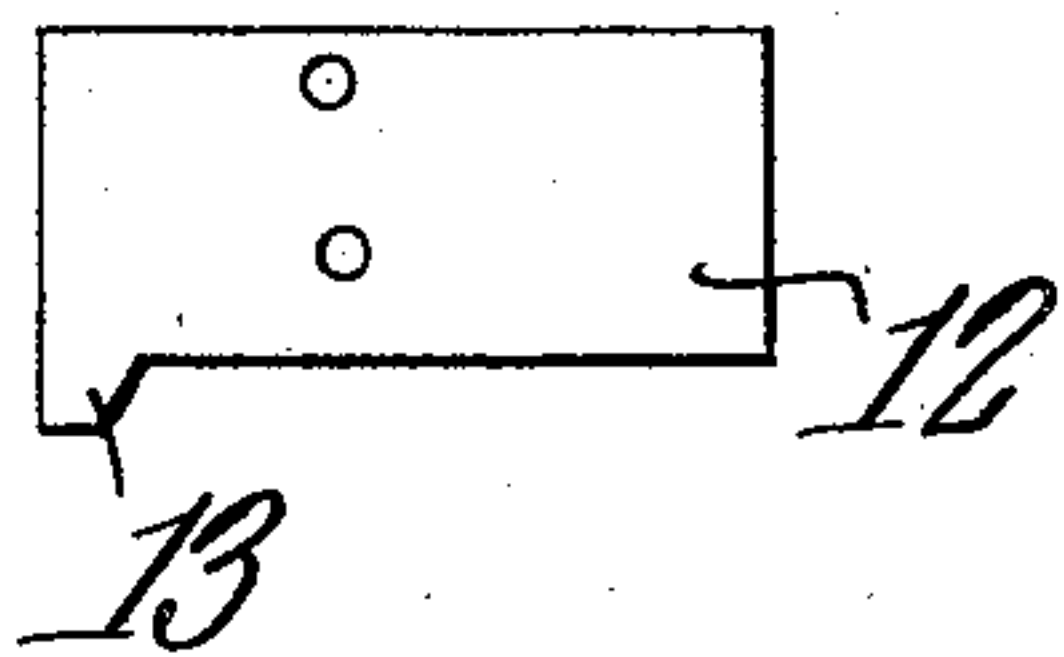
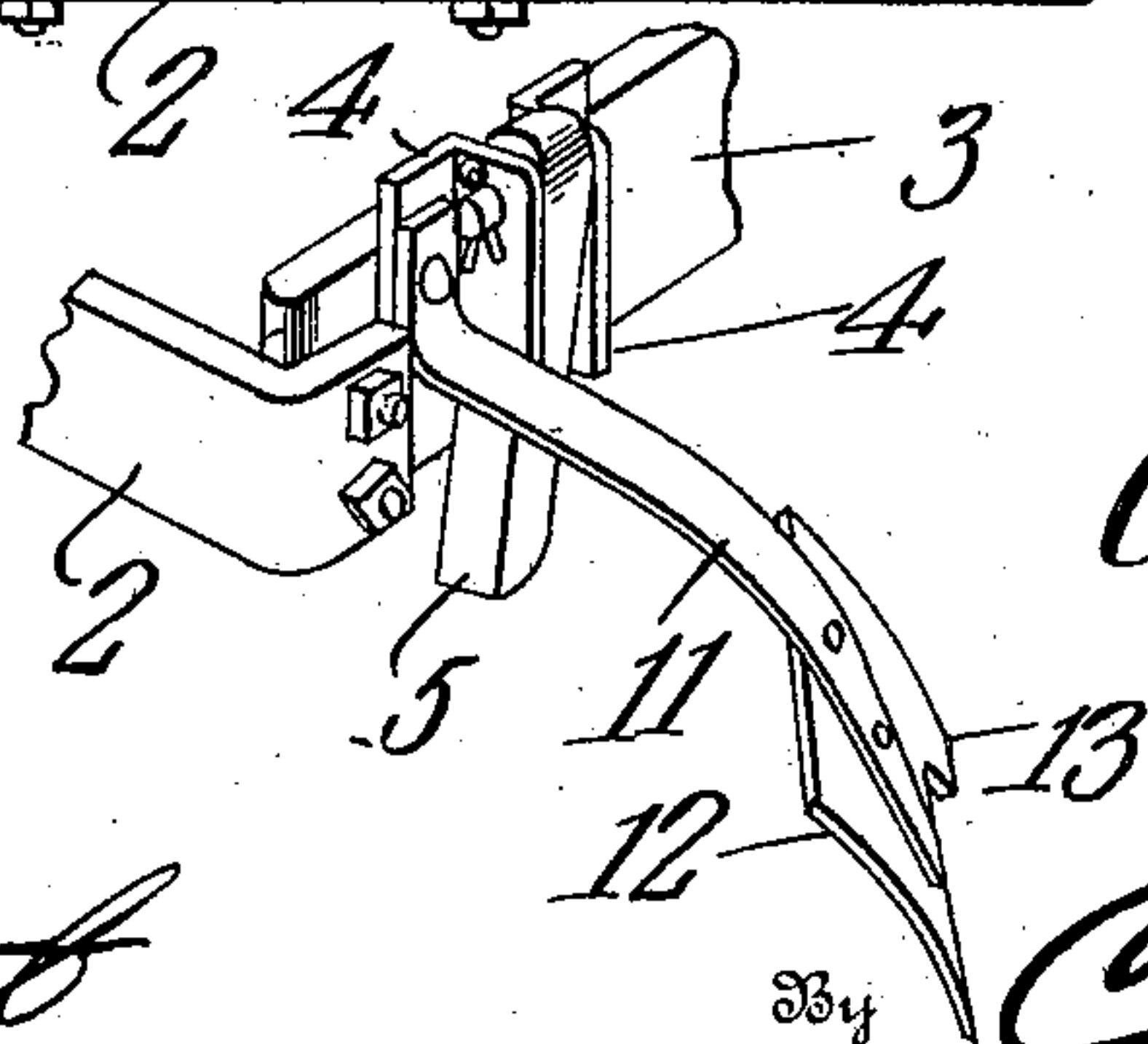


Fig. 3.



Claus H. Frick,
Inventor

Witnesses

E. H. Stewart
Jas. M. Walker

By

C. A. Snow & Co.
Attorneys

UNITED STATES PATENT OFFICE.

CLAUS HENRY FRICK, OF SAN ANTONIO, TEXAS.

GROOVE-RAIL CLEANER.

No. 876,957.

Specification of Letters Patent.

Patented Jan. 21, 1908.

Application filed August 21, 1907. Serial No. 389,526.

To all whom it may concern:

Be it known that I, CLAUS HENRY FRICK, a citizen of the United States, residing at San Antonio, in the county of Bexar and State of Texas, have invented a new and useful Groove-Rail Cleaner, of which the following is a specification.

This invention has relation to cleaners especially adapted to be used for removing dirt, etc. from grooved rails and it consists in the novel construction and arrangement of its parts as hereinafter shown and described.

The object of the invention is to provide a device of the character illustrated which is of simple construction and positive in its operation.

The device consists primarily of a frame which is adapted to be pivotally swung from the running gear of a car or truck means being provided for raising and lowering the same. The frame carries at each side a series of pivotally mounted bits which are under spring tension and which are adapted to enter the rail grooves and loosen up the dirt therein. Resilient arms are attached to the rear portion of the frame and carry at their rear ends scrapers which are adapted to cast the material loosened by the said bits beyond the sides of the rails.

In the accompanying drawing:—Figure 1 is a side elevation of the rail cleaner. Fig. 2 is a top plan view of the same. Fig. 3 is a perspective view of a corner portion of the same, and Fig. 4 is a front elevation of a scraper plate used upon the cleaner.

The cleaner consists of a frame composed of the side bars 2 which are adapted to be pivoted at their forward ends to the running gear of a car or truck. The forward ends of side bars 2 are upwardly curved. The rear portions of the side bars 2 are connected together by the cross bars 3. The binate cleats 4 are mounted upon the cross bars 3 in the vicinity of the ends thereof. The bits 5 are pivoted between the cleats 4 and each bit is provided with a screw-threaded rod 6 which passes through the cross bar 3 and is disposed toward the forward end of the frame 1. The coil springs 7 bear at their rear ends against the forward sides of the cross bars 3 and at their forward ends engage washers 8 which may be adjusted longitudinally of the rods 6 by means

of the nuts 9 which engage the threads thereof. Thus means is provided for adjusting the tension of the springs 7. The chain 10 is attached to the rear portion of the frame 1 and serves as a means for raising or lowering the said frame which swings upon its pivotal connections with the running gear. The resilient arms 11 are attached to the rear portion of the frame 1 and the scrapers 12 are attached to the rear ends of the arms 11. The said scrapers 12 are so positioned as to cross the head of the rails obliquely and each scraper is provided with a lug 13 which is adapted to enter the groove of the rail.

In operation the bits 5 move along the grooves of the rails and loosen up any foreign matter contained therein. Should a bit strike an obstruction it will swing back upon its pivot against the tension of the coil spring 7 which will bring the bit into its proper position after the obstruction has been passed. The material that is loosened by the bits is removed from the rail groove by the lugs 13 of the scrapers 12 and the said scrapers will cast the said material beyond the sides of the rails. By reason of the fact that the scrapers 12 are mounted upon the resilient arms 11 the said scrapers may readily pass over rail joints, crossings, switches and the like without damage to the track or the cleaner.

Having described my invention what I claim as new and desire to secure by Letters-Patent is:—

1. A cleaner comprising a frame adapted to be pivotally attached to a moving object, said frame having cross bars, bits pivotally mounted upon said cross bars, resilient means for holding the bits in operative position, and scrapers carried by the frame and being located behind the bits.

2. A rail cleaner comprising a frame, bits pivotally mounted thereon and being subjected to spring tension, resilient arms attached to the frame, and scrapers carried by the arms.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

CLAUS HENRY FRICK.

Witnesses:

M. DREYFUSS,
H. J. HUPPERTZ.