No. 870,987. PATENTED NOV. 12, 1907.

J. S. MULLENIX.

CAR MOVER.

APPLICATION FILED JUNE 15, 1907.

2 SHEETS—SHEET 1.

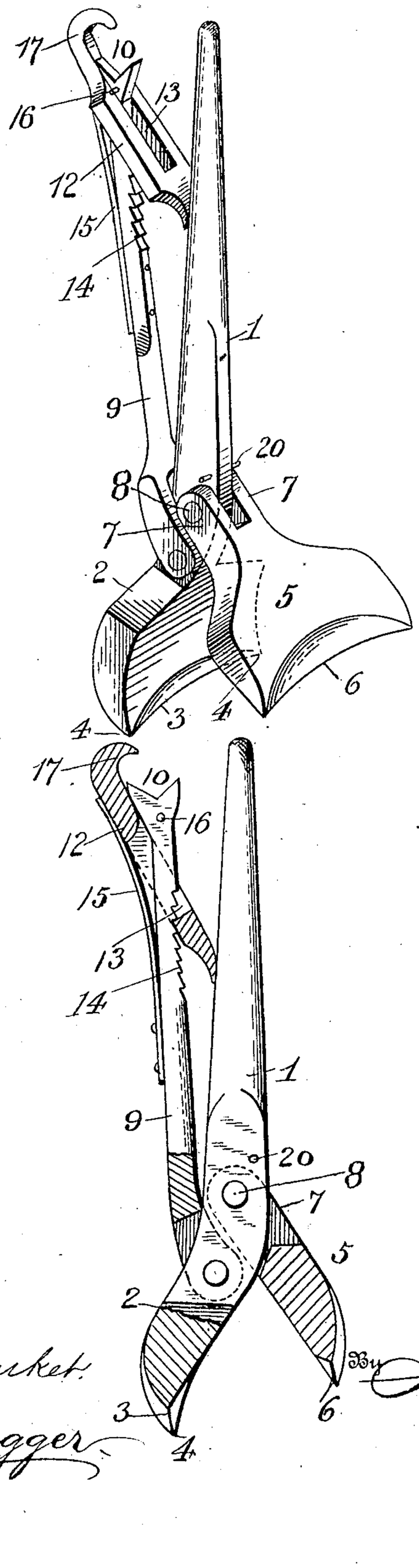

Fig. 1.

Fig. 2.

Witnesses:

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2 SHEETS—SHEET 2.

Fig. 3.

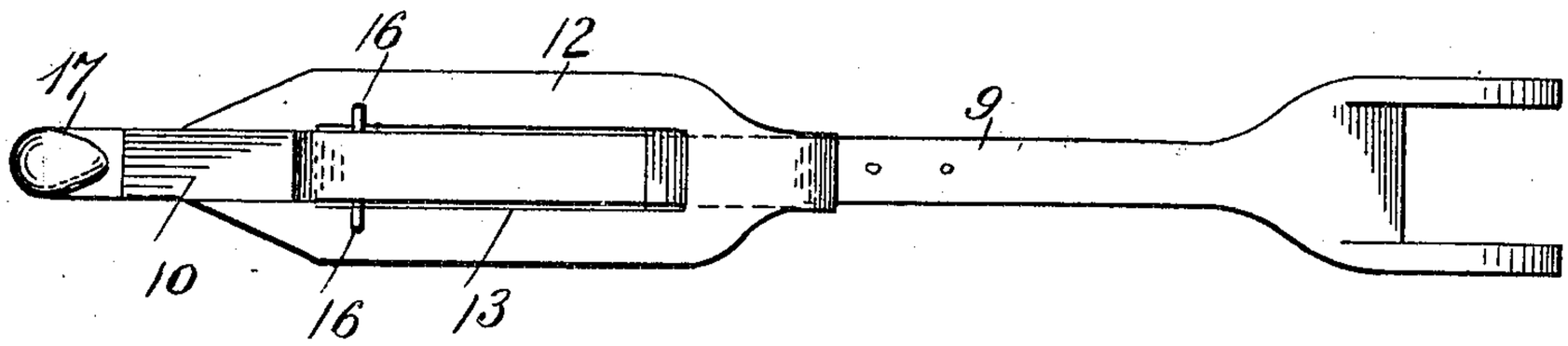


Fig. 4

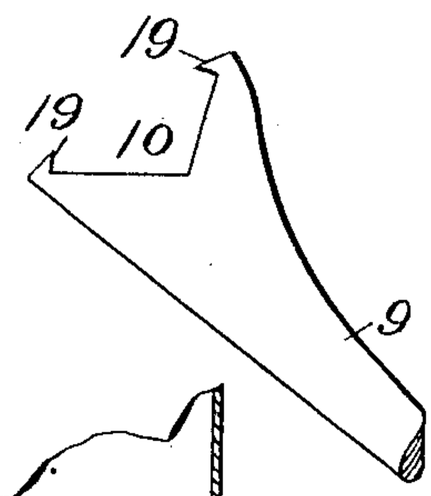
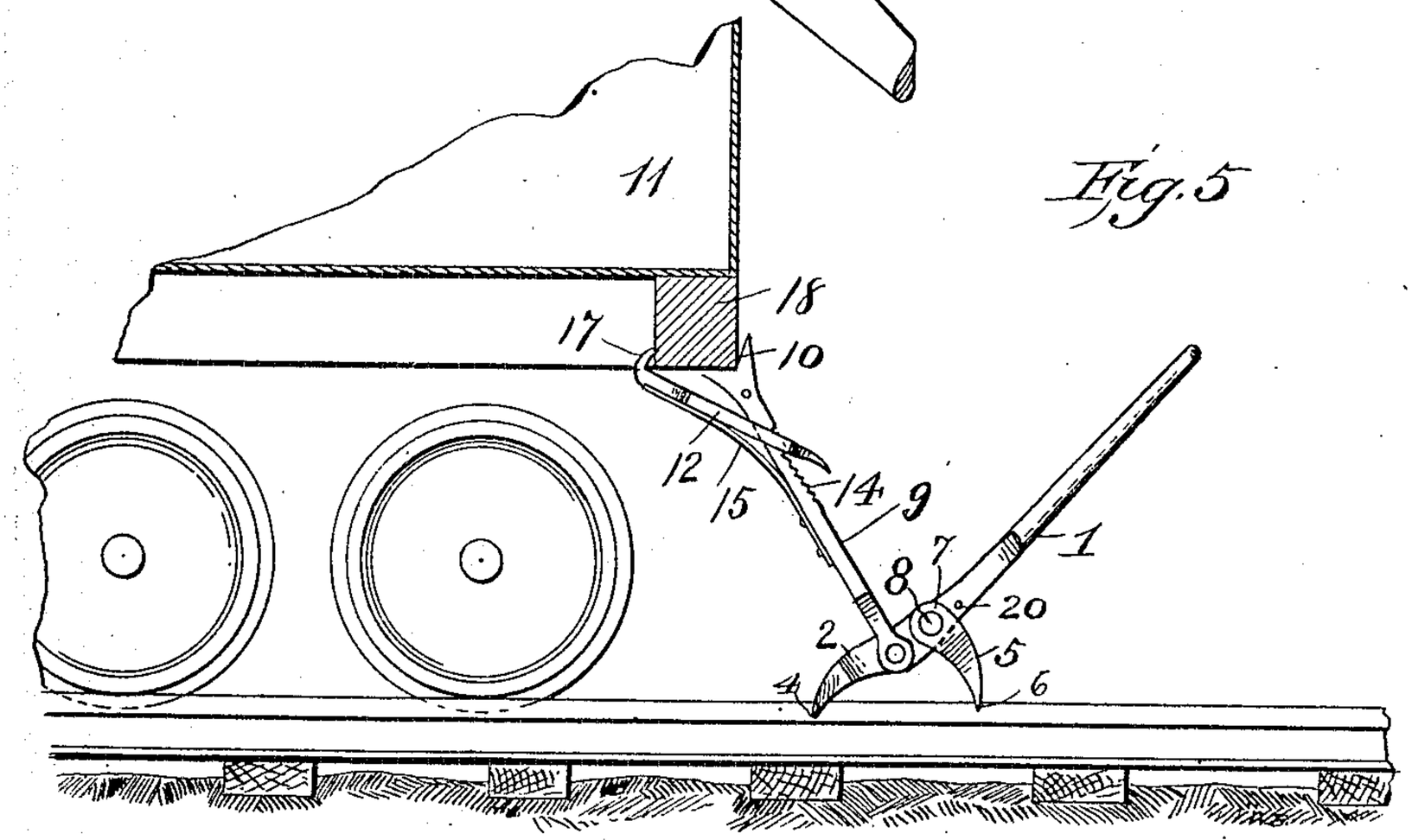


Fig. 5



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UNITED STATES PATENT OFFICE.

JOHN S. MULLENIX, OF BRADFORD, OHIO, ASSIGNOR OF ONE-HALF TO NATE IDDINGS, OF BRADFORD, OHIO.

CAR-MOVER.

No. 870,987. Specification of Letters Patent. Patented Nov. 12, 1907.

Application filed June 15, 1907. Serial No. 379,244.

To all whom it may concern:

Be it known that I, JOHN S. MULLENIX, a citizen of the United States, residing at Bradford, in the county of Miami and State of Ohio, have invented certain new and useful Improvements in Car-Movers, of which the following is a specification.

This invention relates to car moving devices of that class which are sometimes known as pinch-bars; and it has for its object to provide a device of this class which shall possess superior advantages in point of simplicity, durability and general efficiency.

A further object of the invention is to provide a car moving device which may be conveniently operated by one man to shift the position of cars, either loaded or empty, upon tracks and sidings.

A further object of the invention is to construct a car moving device comprising a lever having a rail-engaging head and provided with a pivoted, gravity operated rail-engaging jaw, which grips or engages the rail alternately with the head of the lever so that the device may be continuously operated to shift the position of the car; the lever being connected with the car by means of a push bar having an engaging hook.

Further objects of the invention are to simplify and improve the construction and operation of this class of devices.

With these and other ends in view which will readily appear as the nature of the invention is better understood, the same consists in the improved construction and novel arrangement and combination of parts which will be hereinafter fully described and particularly pointed out in the claims.

In the accompanying drawings has been illustrated a simple and preferred form of the invention; it being, however, understood that no limitation is necessarily made to the precise structural details therein exhibited, but that changes, alterations and modifications within the scope of the invention may be resorted to, when desired.

In the drawing—Figure 1 is a perspective view of a car mover embodying the invention. Fig. 2 is a longitudinal vertical sectional view of the same. Fig. 3 is a detailed plan view, enlarged, of the end of the push bar having the attaching device. Fig. 4 is a side elevation, in detail, showing the end of a modified form of push bar whereby the separate attaching device is dispensed with. Fig. 5 is a side elevation, partly in section, showing the improved car mover applied for operation to the end of a railroad car.

Corresponding parts in the several figures are denoted by like characters of reference.

The improved implement comprises a lever 1 having a head 2 of ample width to enable it to engage an ordinary railroad rail; said head being provided with a transversely disposed engaging edge 3 of curved or arcuate shape and having depending terminal points 4, 4.

Pivotally mounted upon the lever 1 adjacent to the head 2 is a rail-engaging jaw 5 having a curved or arcuate engaging edge 6 similar to that of the head 2; the jaw 5 is provided with lugs 7 engaging opposite side of the lever 1 for the passage of the pivotal pin 8 whereby the jaw is connected with the lever.

Pivotally mounted upon the lever 1 adjacent to, and preferably below the jaw 5, is a push bar 9 which is provided at its free end with an angular notch 10 adapted to form a seat for the end of the box or body 11 of an ordinary railroad car. In the preferred form of the invention, the push bar is provided with an attaching member consisting of a plate 12 having a slot 13 for the passage of the end of the push bar which extends through said slot; said push bar being provided near the end thereof with a plurality of beveled or inclined ratchets 14 adapted for engagement with one end of the slot 13; a flat spring 15 secured to the underside of the push bar bears upwardly against the underside of the plate 12 so as to hold the latter in engagement with the teeth or ratchets 14; the push bar being provided near its free end with a transverse pin or stop member 16 whereby the plate 12 is retained in position. The plate 12 is provided with a terminal hook 17 adapted for engagement with the underside of the car body, which is usually provided with cross pieces 18, shown in Fig. 5 of the drawings for the purpose of supporting the floor of the car; one of said cross pieces affording a convenient connecting medium for the attachment of the hook 17.

In the form of the invention illustrated in Fig. 4 of the drawings, the attaching device comprising the plate 12 is dispensed with; and the push bar is provided adjacent to the recess 10 with sharp pointed lugs or spurs 19 adapted to engage the body of the car for the purpose of retaining the push bar in engagement therewith for operation.

In the manufacture of the improved device the several component parts, namely the lever 1, the jaw 5 and the push bar 9 are to be made of any proper dimensions, and of sufficient strength and weight to enable them to resist the strain to which they will be subject. The engaging edges of the head 2 and of the jaw 5 are also to be maintained in a sharp condition, so that they will readily engage and bite upon the head of a rail. The pivoted jaw 5 operates by gravity to grip or engage the rail; and a transverse pin or stop member 20 is preferably provided for the purpose of limiting the swinging movement of the jaw in an upward direction.

The operation and advantages of this invention will

be readily understood from the foregoing description, taken in connection with the drawings hereto annexed. The lever 1 is adjusted at a convenient distance from the car that is to be moved, with the sharp edge 3 of the head 2 straddling and engaging the head of one of the track rails, the push bar 9 being adjusted with the notch 10 seating the end of the car body, with which the push bar may be connected by the attachment including the hook plate 12 or by the lugs or spurs 19, as the case may be; the sharp edge of the pivoted jaw 5 is permitted to rest loosely upon the head of the rail. By lifting the free end of the lever, the car will be pushed in the direction indicated by an arrow, while the jaw 5 will slide over the rail. When the limit of the upward movement of the lever has been reached, the free end of the lever is depressed, and the edge of the jaw will now grip and bite upon the rail while the head 2 of the lever is lifted from contact with the rail, and the pushing movement of the car is continued. Thus, by alternately lifting and depressing the free end of the operating lever, with a pump-like action, the operator, walking behind the car, may conveniently push the lever forwardly to any desired extent.

The improved car mover is simple in construction; readily applied for operation or removed from operative position as may be required; and it has been demonstrated to be thoroughly efficient for the purposes for which it is provided.

I claim—

1. In a car moving device a lever having a rail engaging head, a rail-engaging jaw pivoted upon the lever, and a push bar pivotally connected with the lever adjacent to the jaw.

2. In a car moving device a lever having a rail-engaging head, a rail-engaging gravity jaw pivoted upon the lever, and a push bar pivotally connected with the lever intermediate the head and the jaw.

3. In a car moving device a lever having a rail-engaging head, a rail-engaging gravity jaw pivoted upon the lever, a push bar pivotally connected with the lever and having a terminal notch, and a hook member adjustably engaging the free end of the push bar.

4. In a car mover a lever having a rail-engaging head, a rail-engaging gravity jaw pivoted upon the lever, a push bar pivotally connected with the lever and having a terminal notch and a plurality of ratchet teeth, a slotted plate slidable upon the push bar and having a terminal hook, and a spring connected with the push bar and engaging the hooked plate to hold the latter in operative engagement with the ratchet teeth.

5. In a car moving device a lever having a rail-engaging head, a rail-engaging gravity jaw pivoted upon the lever, a push bar pivotally connected with the lever and having a terminal notch constituting a seat, a hook member adjustably connected with the push bar, and a pin extending transversely through the push bar and constituting a stop to limit the movement of the hook member upon the push bar.

6. In a car moving device a lever having a head provided with a transversely disposed, curved or arcuate sharp engaging edge, a gravity jaw pivoted upon the lever and having an engaging edge similar to that of the head, a push bar pivotally connected with the lever, and means for connecting the free end of said push bar with a car body.

7. In a car moving device a lever having a head provided with a rail gripping edge, a gravity jaw pivoted upon the lever and having a rail gripping edge, means for limiting the swinging movement of the jaw in an upward direction, a push bar connected pivotally with the lever intermediate the head and the jaw, and means for connecting the free end of the push bar with a car body.

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

JOHN S. MULLENIX.

Witnesses:
NATE IDDINGS,
NAN IDDINGS.