

J. C. SMITH.
CAR STARTING DEVICE.
APPLICATION FILED APR. 1, 1912.

1,046,342.

Patented Dec. 3, 1912.

2 SHEETS-SHEET 1.

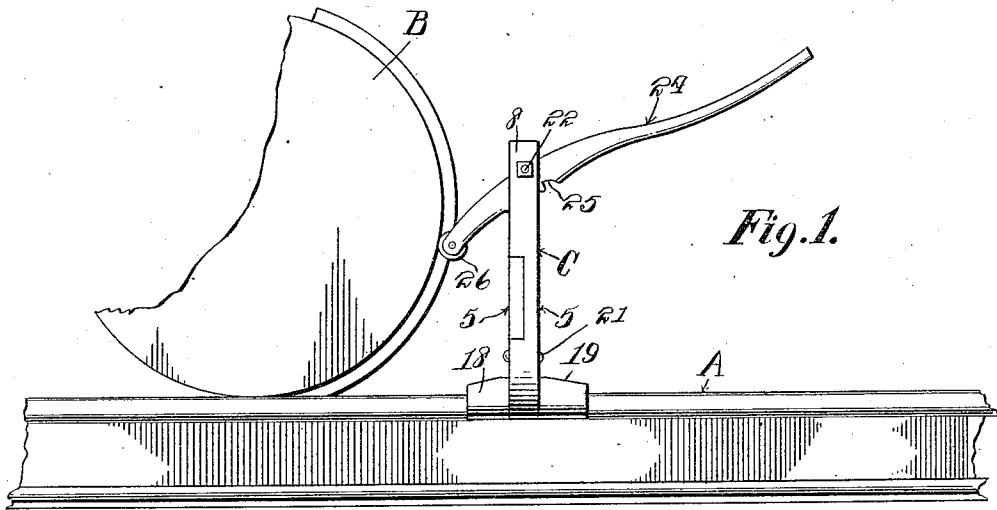


Fig. 1.

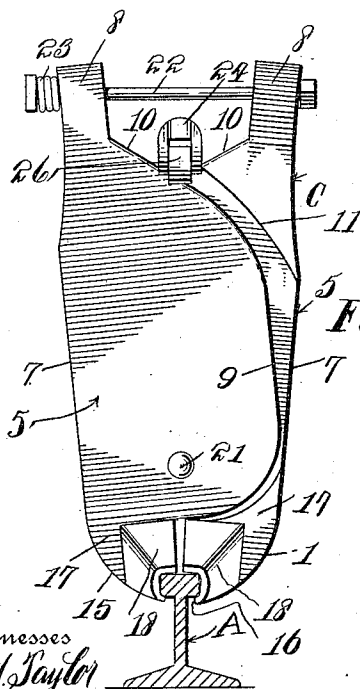


Fig. 4.

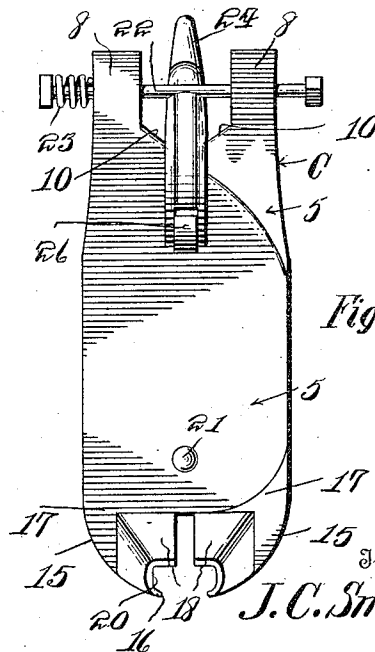


Fig. 3.

Witnesses

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2 SHEETS-SHEET 2.

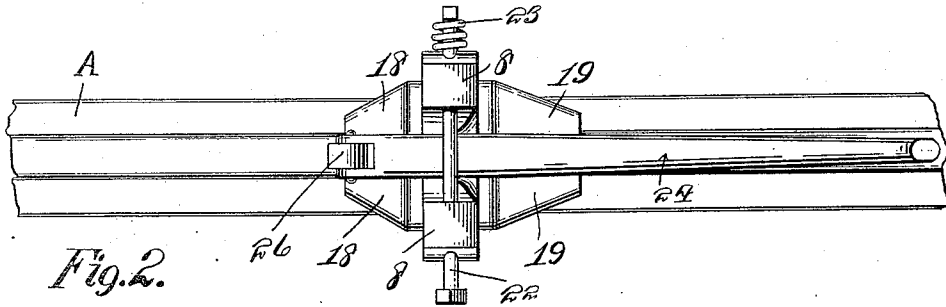


Fig. 2.

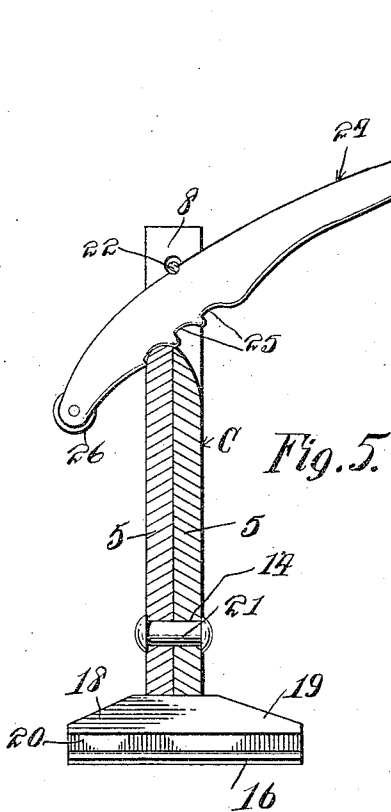


Fig. 5.

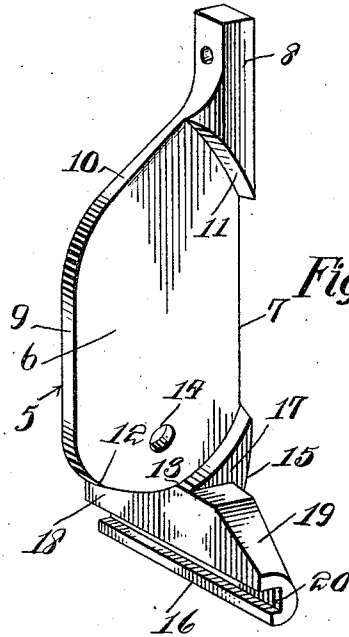


Fig. 6.

Witnesses
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UNITED STATES PATENT OFFICE.

JOHN C. SMITH, OF AMBOY, WASHINGTON.

CAR-STARTING DEVICE.

1,046,342.

Specification of Letters Patent.

Patented Dec. 3, 1912.

Application filed April 1, 1912. Serial No. 687,603.

To all whom it may concern:

Be it known that I, JOHN C. SMITH, a citizen of the United States, residing at Amboy, in the county of Clarke, State of Washington, have invented certain new and useful Improvements in Car-Starting Devices; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in car starting devices.

The principal object of the invention is to provide a device of the character described which can be easily and conveniently carried from place to place for use and operation, and one which can be quickly and securely applied to or detached from the rail for the purpose intended.

Another object of the invention is to provide a car starting device which is composed of a minimum number of parts, is therefore simple in construction, and is cheap to manufacture.

With these and other objects in view, the invention consists in the construction and novel combination of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claim here-to appended; it being understood that various changes in the form, proportion, size and minor details of construction within the scope of the claim may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings: Figure 1 is a side elevation showing the application of a car starting device constructed in accordance with my invention, Fig. 2 is a top plan view thereof, Fig. 3 is a front elevation of the device detached from the rail and showing the jaws in their normal positions, Fig. 4 is a similar view but showing the device in its operative position, the rail being shown in section, Fig. 5 is a central longitudinal sectional view through the device, and Fig. 6 is a perspective view of one of the jaws.

Like reference numerals designate corresponding parts in all the figures of the drawings.

Referring to the drawings, A designates a portion of a rail of a railroad track, and B a portion of a car wheel.

My invention comprises a car starting de-

vice which is designated as a whole by the reference letter C. This device includes a pair of opposed levers 5—5 which are identical in construction and therefore the description of one of said levers is deemed to be sufficient.

Each lever includes a flat body portion 6 having an outer longitudinal edge 7, said body terminating at one end in a longitudinally projecting arm 8, the outer edge thereof forming a continuation of the longitudinal edge 7. The inner edge 9 of the body terminates at one end in an upwardly and outwardly inclined edge 10 which merges with the inner edge of the arm 8. The arm 8 is enlarged to form a consequent shoulder 11 which is disposed at an angle directly opposite the upper edge 10 of the body portion. The lower end of the inner edge 9 of the body portion curves inwardly, as at 12, and terminates at a point 13 which is disposed slightly to one side of a transverse opening 14 formed in the lower portion of said body portion. The lower portion of the outer wall 7 curves inwardly, as at 15, and terminates as at 16 at a point below the point 13 above mentioned to form a resultant offset portion 17. Projecting from the offset portion 17 and at right angles to the body portion 6 are laterally extending front and rear jaws 18 and 19 respectively. The inner faces of said jaws are recessed, as at 20, to properly engage the head of a rail.

The levers 5 are positioned one against the other so as to dispose the arms 8 in the same plane, and these levers are pivotally mounted upon a pivot pin 21 which is suitably secured within the openings 14 of the body portion 6. It is to be observed in this connection that the gripping jaws 18 and 19 are normally disposed in spaced relation, and when the jaws are thus disposed the shoulders 11 of the levers 5 abut one another.

In order to normally hold the respective gripping jaws 18 and 19 in spaced relation so as to permit the device to be readily attached to a rail, the arms 8 adjacent their upper ends are respectively formed with aligned openings wherein a bolt 22 is mounted. This bolt is of such a length as to permit of the levers 5 swinging upon the pivot 21 for a sufficient distance to permit the clamping jaws to engage the rail. Disposed around the bolt between one arm

8 and the head of said bolt is a coil spring 23 which yieldingly holds the levers 5 in their normal position.

My invention further comprises an operating lever 24 which is formed on its underface with a plurality of transverse notches 25. The forward end of this lever is bifurcated to form resultant ears, and between these ears is loosely mounted a roller 26.

In operation, the starting device C is positioned upon a rail directly in rear of a car wheel, the clamping jaws 18 and 19 of each lever 5 engaging the head of the rail. The operating lever 2 is then positioned so as to have any of its transverse notches 25 engageable with the inclined edges 10 of the levers 5, and the roller 26 is engaged with the periphery of the car wheel. Upon downward pressure upon the free end of the operating lever, the upper ends of the levers will be caused to swing apart against the tension of the coil spring 23. This movement of the lever 5 causes the jaws 18 and 19 thereof to tightly grip the head of the rail and thereby lock the

device against movement. Upon the continued application of the operating lever, the car will be easily started, the roller 25 of said lever minimizing the friction between the wheel and the lever, as will be readily understood. By providing the forwardly extending clamping jaws 18, the device will be securely retained in its upright position.

What is claimed is:

In a car starting device, a pair of opposed pivoted rail gripping jaws, each jaw including oppositely inclined upper edges, tensioning means for holding the jaws in their inoperative positions; in combination with a lever engageable with the inclined edges of the jaws to swing the upper ends thereof outwardly against the tensioning means upon movement in one direction of the lever.

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

JOHN C. SMITH.

Witnesses:

ELMER GERBER,
GEO. H. CURTICE.