

(No Model.)

J. McFARLAND.  
CAR MOVING BAR.

No. 545,372.

Patented Aug. 27, 1895.

Fig. 1

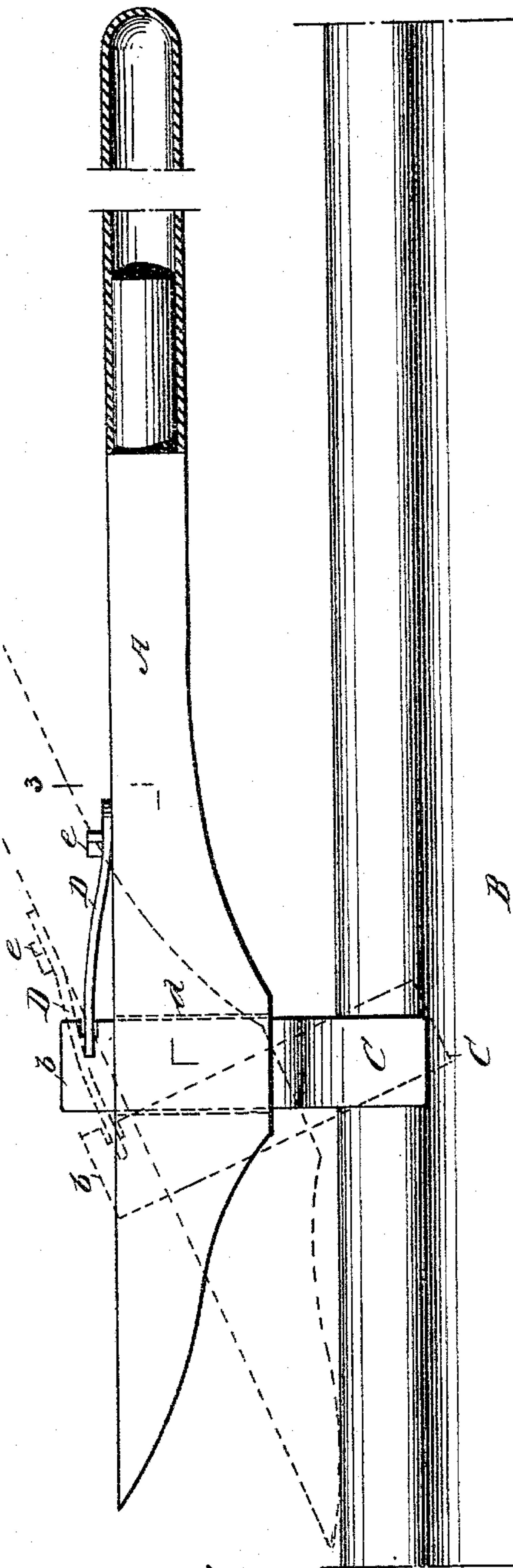


Fig. 2

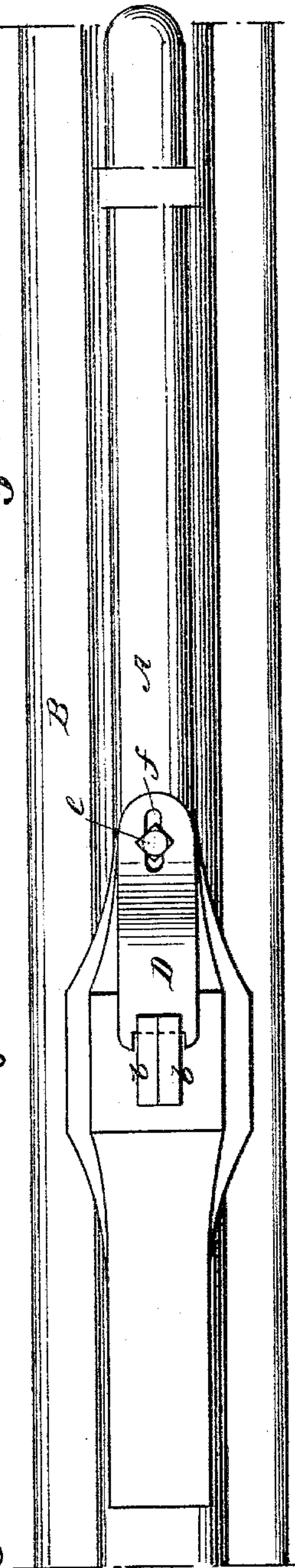
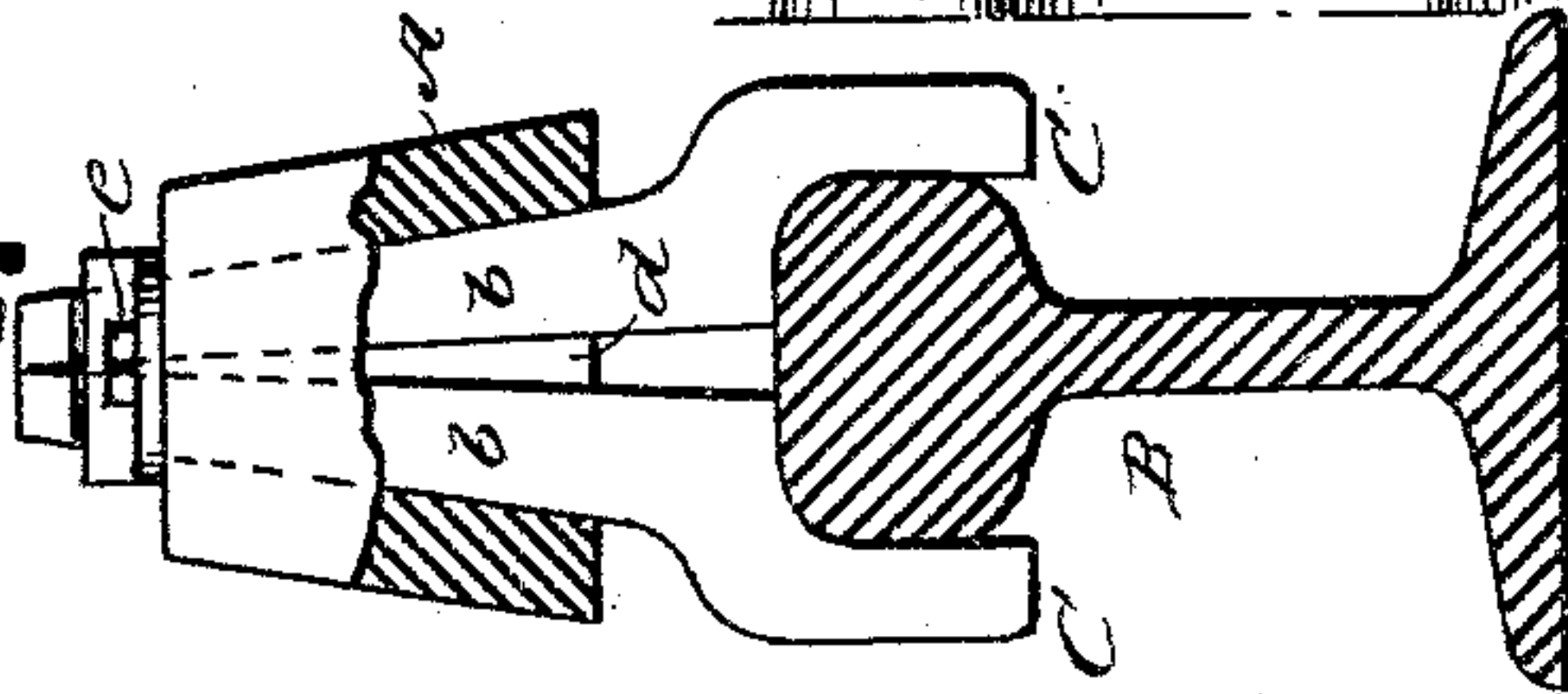


Fig. 3



WITNESSES:

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# UNITED STATES PATENT OFFICE.

JOHN MCFARLAND, OF AUSTIN, CANADA.

## CAR-MOVING BAR.

SPECIFICATION forming part of Letters Patent No. 545,372, dated August 27, 1895.

Application filed January 9, 1895. Serial No. 534,304. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN MCFARLAND, of Austin, in the Province of Manitoba, Dominion of Canada, have invented new and useful  
5 Improvements in Car-Moving Bars, of which the following is a full, clear, and exact description.

This invention relates to bars or levers, usually called "pinch-bars," for moving or shifting cars in railway-yards and on other portions of railroad-tracks by the bar or lever at its forward end bearing under and against a wheel of the car and being operated or depressed at its back end to move the car, and  
15 by repeated similar movements to follow up the car on the track, as required. The ordinary pinch-bar for this purpose has usually a sharpened projection on its under side to bite into the top of the rail and form a fulcrum  
20 for the action of the bar; but such bar is apt to slip and requires constant watching by the operator, endangering accident, besides having other disadvantages and having nothing to guide and keep it on the rail while pushing it forward to follow up the car. As an  
25 improvement on this bar, the latter has been constructed with side lugs or jaws for gripping the sides of the rail, and to this class of self-guiding car-moving bars my invention  
30 more particularly relates; and it consists in a car-moving bar of novel construction and which is largely automatic in its action and has many advantages, substantially as hereinafter shown and described, and pointed out  
35 in the claims.

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

40 Figure 1 represents a partly-sectional side view of my improved car-moving bar, shown by full and dotted lines in two different positions, and of a railroad-rail in part, to which it is applied. Fig. 2 is a plan view of the same,  
45 and Fig. 3 is a mainly-sectional transverse view upon the line 3 3 of Fig. 1.

In the drawings, A indicates the car-moving bar proper or lever, B the rail, and C C the jaws which grip the rail upon its opposite  
50 sides. These jaws are not fixtures on the le-

ver, but are made with upwardly-tapering shanks *b b*, which pass up through a slot *d* in the head portion of the lever that is made of suitable dimensions for the purpose.

D is a spring connecting the lever with the upper end of the shanks *b b* of the jaws and held to its place upon the lever by a set-screw *e* passing through an elongated slot *f* in the spring to admit of the adjustment of the spring, as hereinafter described. 55 60

The jaws C C act as the fulcrum on the rail in the operation of the lever, and as pressure is applied to the handle end of the lever it forces down on the shanks of the jaws, which latter are thus tightened against the sides of the rail. The spring D prevents the jaws from binding and exerts a constant tendency to raise the lever up to the upper and thinner portion of the jaws or their shanks, and this action is called into play as soon as the pressure at the handle end of the lever is released by the operator, the spring D raising the lever one-fourth of an inch and releasing the grip sufficiently. 65 70

When the operator wishes to push the bar or lever forward to follow up the car, all that is necessary is to release the pressure and shove the bar or lever ahead, the jaws keeping it from slipping off the rail. If for any reason it is desired to release the jaws from the lever, the set-screw *e* is loosened, and the spring D, by means of the slot *f* in it, is slid back from its engagement with a grooved portion in the upper ends of the shanks of the jaws. This allows the jaws to drop out. By making the spring D adjustable its tension may be regulated as required. 75 80 85

In the operation of the device by putting the lever on or over the rail and taking hold under the car-wheel, then when the handle end of the lever, which, if desired, may be made tubular to give lightness, is pressed slightly down the lever acts in a wedge-like manner on the jaws and causes all the weight bearing down on the rail to be converted into grip on the rail. Upon removing weight from the handle end of the lever and raising it slightly, then the spring D immediately raises the lever, thus releasing the grip automatically by the action of the spring. 90 95 100



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

5 1. In a railroad car-moving bar or lever, the combination, with the lever proper, of independent jaws fitting loosely in said lever and adapted to rest on the rail carrying the car and to grip it upon opposite sides, substantially as specified.

10 2. The combination with the car-moving bar or lever, of the independent jaws provided with upwardly tapering shanks fitting loosely in said lever, essentially as and for the purposes described.

15 3. The combination, with the car-moving bar or lever, and the independent jaws having up-

wardly tapering shanks fitting loosely in said lever, of a spring connecting said lever with said shanks, essentially as specified.

4. The combination, with the car-moving bar 20 or lever and the independent jaws having upwardly tapering shanks fitting loosely in said lever, of a spring connecting said lever with said shanks, said spring being adjustable relatively to said jaws and lever and capable of 25 disconnection from said jaws, substantially as and for the purpose or purposes herein set forth.

JOHN MCFARLAND.

Witnesses:

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