

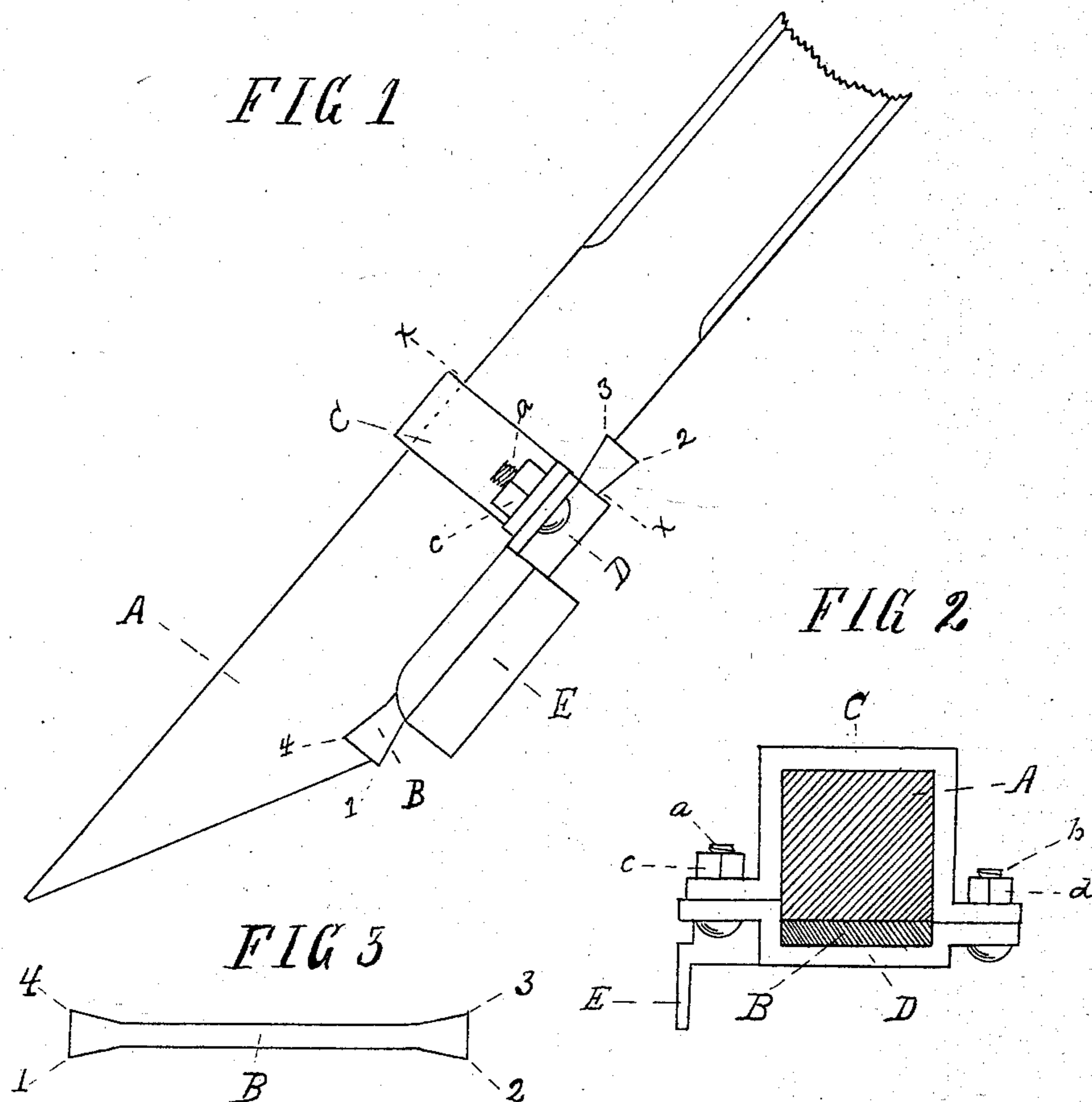
(No Model.)

A. STOCKDALE.

PINCH BAR.

No. 388,461.

Patented Aug. 28, 1888.



Witnesses:
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UNITED STATES PATENT OFFICE.

ALEXANDER STOCKDALE, OF WOLCOTT, IOWA.

PINCH-BAR.

SPECIFICATION forming part of Letters Patent No. 388,461, dated August 28, 1888.

Application filed June 7, 1888. Serial No. 276,410. (No model.)

To all whom it may concern:

Be it known that I, ALEXANDER STOCKDALE, a citizen of the United States, residing at Wolcott, in the county of Scott and State of Iowa, have invented a new and useful Pinch-Bar, of which the following is a specification.

My invention relates to improvements in pinch-bars wherein the sharpened end is used for thrusting between the tread of a wheel of a railway car or carriage and the face of the rail, and the bar operated as a lever in forcing the wheel to move or travel upon the rail; and the objects of my improvements are, first, to provide an anchorage in the face of the rail to hold that part of the pinch-bar coming in contact with the face of the rail from slipping or sliding backward when being operated, and, second, to provide a side guard to render difficult the sliding or slipping of the pinch-bar off the rail sidewise when the same is being operated or moved thereon. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a side view of the lower or sharpened end of a pinch-bar with my device attached, the continuation or handle of bar not being shown. Fig. 2 is a view of the cross-section of same on lines *x x*, shown in Fig. 1; and Fig. 3 is a side view of the plate B.

Similar letters refer to similar parts throughout the several views.

A is a pinch-bar, its end sharpened and a portion of its under surface channeled or cut out crosswise to conveniently accommodate therein the plate B. Plate B is rectangular in form and made of very hard steel, its ends being formed like the base of a wedge, so as to be provided with the sharp corners 1, 2, 3, and 4. Plate B is placed against the under surface of pinch-bar A in the place channeled or cut out crosswise, as shown in Fig. 1, and held in position by a stirrup consisting of the parts C and D, which encircle the pinch-bar A and plate B, and are secured together by the threaded bolts *a* and *b* and nuts *c* and *d*, which bolts pass through perforations in the flanges or projections upon the parts C and D, and which are more clearly shown in Fig. 2.

In operating my device the sharpened end of the pinch-bar A is forcibly thrust between the tread of the car-wheel and face of the rail,

and the arm of the bar then forced downward, so one of the sharpened corners of plate B, which would be 1, as shown in Fig. 1, bears against or on top of the rail, and being pressed downward the sharp corner bites or cuts into the face of the rail, thus anchoring the pinch-bar upon the rail, so that it will not slide or move backward on the rail when being operated. When the sharp corner 1 becomes dull and worn, the plate B may be reversed endwise, so corner 3 will occupy the position formerly occupied by 1, and corners 2 and 4 may be alternately used by reversing plate B sidewise.

To the part D of the stirrup I attach at one side the vertical plate E, preferably making it integral with part D. The vertical plate E is sufficiently wide, so that when the sharpened end of the pinch-bar A rests upon the face of the rail and the sharpened corner of plate B, being 1, as shown in Fig. 1, is slightly above the face of the rail by the elevation of the handle of the bar, the bottom of plate E is at one side of the rail below its face, thus acting as a guard or guide to assist in preventing the sharpened end of the pinch-bar from slipping off the face of the rail sidewise when moved thereon or while being operated. The plate E, as shown in Fig. 2, projects sufficiently from the side of the pinch-bar as not to interfere with its sharpened point, being easily placed upon the center of the face of the rail in a line crosswise.

I am aware that using a steel piece underneath the pinch-bar, or underneath a shoe to which the pinch-bar is attached, so that a sharp corner or point of such steel piece may bite into the rail when in use, is old, and such are shown in Letters Patent No. 354,778, to Felter, dated December 21, 1886, and No. 384,502, to Bird, dated June 12, 1888, and I do not broadly claim such device.

The advantage in my device is in the form of construction of the steel plate, its ends being formed like the base of a wedge, and in the method of its attachment, so its respective ends are at right angles to an imaginary line passing lengthwise through the pinch-bar. In the other constructions referred to the piece of steel is so formed and attached as to be like the tapering end of a wedge, and hence is more

liable to slip or slide backward upon the rail without biting into it than is the construction I have described.

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

1. In combination with the pinch-bar A, the plate B, with its sharpened corners 1, 2, 3, and 4, secured to said pinch-bar by the stirrup C D, bolts *a* and *b*, and nuts *c* and *d*, substantially as described.

2. In combination with the pinch-bar A and plate B, the stirrup C D, with vertical plate E, secured upon said pinch-bar by the bolts *a* and *b* and nuts *c* and *d*, substantially as described. 15

ALEXANDER STOCKDALE.

Witnesses:

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