(No Model.)

J. S. THAYER & H. L. MICHAEL.

SHACKLE BAR FOR DRAWING DRIFT BOLTS.

No. 564,122. Patented July 14, 1896.

Fig. 2.

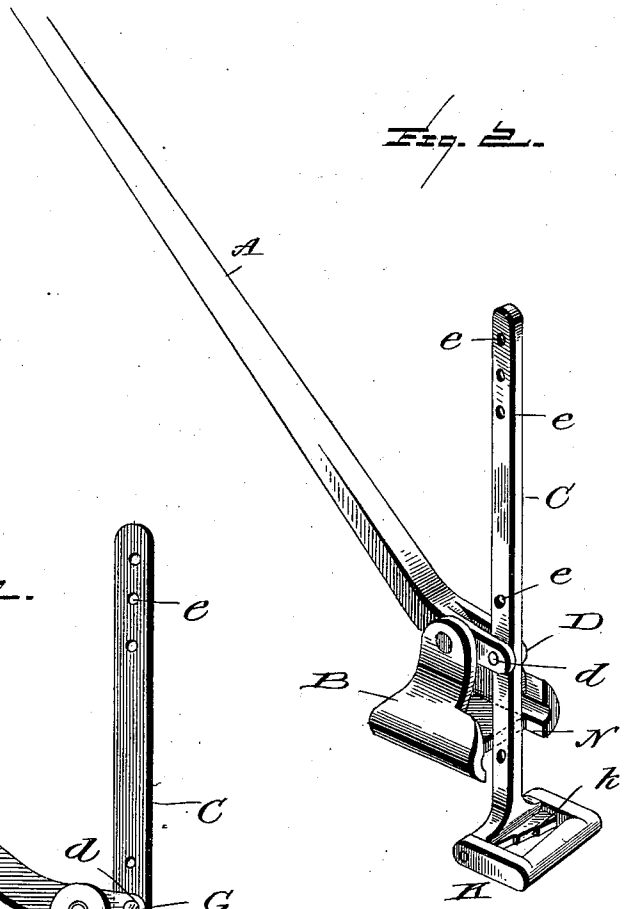
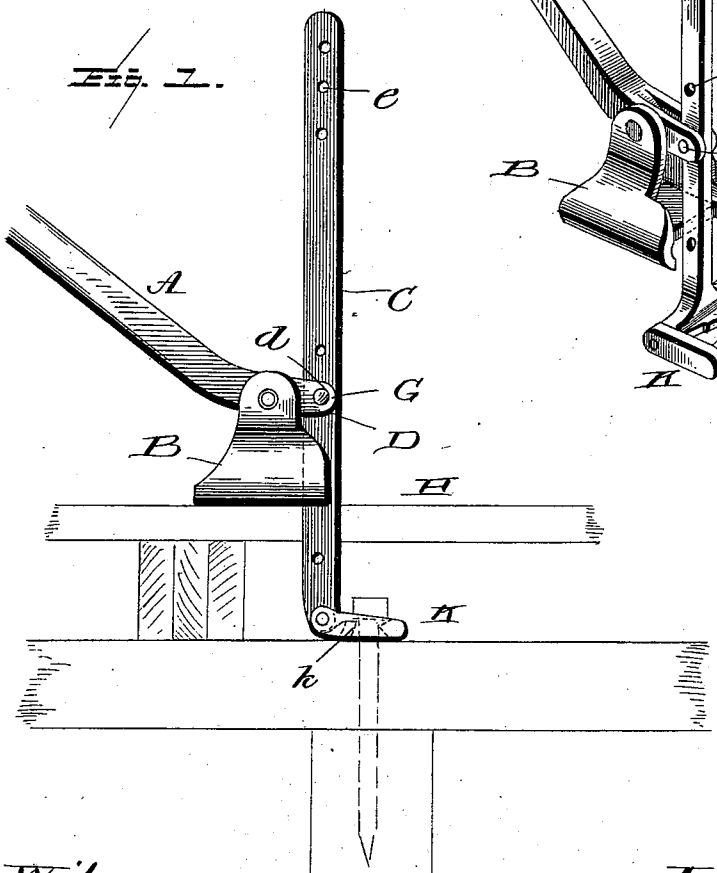


Fig. 1.



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UNITED STATES PATENT OFFICE.

JOSEPH S. THAYER AND HENRY L. MICHAEL, OF PARSONS, KANSAS.

SHACKLE-BAR FOR DRAWING DRIFT-BOLTS.

SPECIFICATION forming part of Letters Patent No. 564,122, dated July 14, 1896.

Application filed February 26, 1896. Serial No. 580,782. (No model.)

To all whom it may concern:

Be it known that we, JOSEPH S. THAYER and HENRY L. MICHAEL, citizens of the United States, residing at Parsons, in the county of Labette and State of Kansas, have invented certain new and useful Improvements in Shackle-Bars for Drawing Drift-Bolts; and we do 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, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to certain new and useful improvements in shackle-bars for withdrawing drift or other bolts in bridge and trestle work, and the especial object of the invention being to provide a tool of this character, in which the drawing-bar is adjustable whereby bolts at various distances below the level of the fulcrum may be engaged by the lower pivoted claw-engaging member carried by the said bar.

To these ends and to such others as the invention may pertain, the same consists, further, in the novel construction, combination, and adaptation of the parts as will be hereinafter more fully described, and then specifically defined in the appended claim.

We clearly illustrate our invention in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which drawings similar letters of reference indicate like parts throughout both views, in which—

Figure 1 is a side elevation of our invention as applied to a drift-bolt, the fulcrum resting on the framework of a bridge. Fig. 2 is a perspective view of the tool.

Reference now being had to the details of the drawings by letter, A designates a hand-lever pivoted to a fulcrum B, which has a flattened bottom and is adapted to rest on a framework, trestle, or track. The lower short end of the said lever A is bifurcated and is slightly bent upward, as seen at D. Between the arms of said short end is pivoted the adjustable shackle-bar C, having a series of apertures *e*, through which the pin *d* may be inserted when it is desired to withdraw bolts at various distances below the rail H or the surface on which the said fulcrum B rests.

To the lower end of the bar C is pivoted the bolt-engaging member K, having a substantially V-shaped aperture with its sides beveled, as seen in dotted lines in Fig. 2. One side of the said V-shaped aperture has a series of steps or shoulders *k*, whereby the bolt-engaging member may be more readily adjusted to bolts of various sizes.

The lower front face of the fulcrum is recessed back at N to allow the bar C to work perpendicularly, the rear side of the said bar bearing against the recessed portion to steady the said bar.

From the foregoing it will be seen that by our improved tool drift-bolts may be withdrawn at various distances below the fulcrum by simply adjusting the bolt in the various apertures of the bar.

Having thus described our invention, what we claim to be new, and desire to secure by Letters Patent, is—

A shackle-bar for drawing drift or other bolts consisting of a fulcrum having its lower forward end recessed, a lever A pivoted to said fulcrum, combined with a bar C having a series of apertures disposed throughout its length, and the bolt-engaging member K pivoted to the lower end of said bar C, and having a substantially V-shaped aperture, one side of which is stepped, and having beveled faces, designed to engage with bolts of various sizes, substantially as shown and described.

In testimony whereof we affix our signatures in presence of two witnesses.

JOSEPH S. THAYER.
HENRY L. MICHAEL.

Witnesses:
I. A. GNARTER,
JAMES E. DONOVAN.