No. 702,920. Patented June 24, 1902.

W. E. BUSHNELL.

LEVER FOR LIFTING JACKS.

(Application filed Nov. 18, 1901.)

(No Model.)

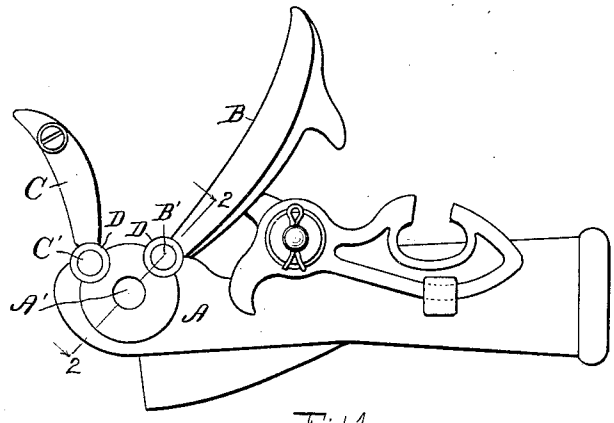


Fig. 1

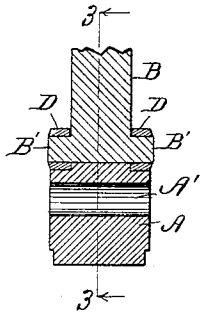


Fig. 2

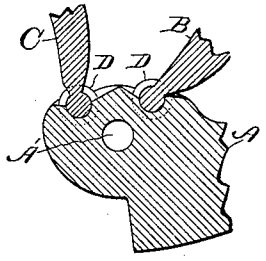


Fig. 3

Witnesses:
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UNITED STATES PATENT OFFICE.

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LEVER FOR LIFTING-JACKS.

SPECIFICATION forming part of Letters Patent No. 702,920, dated June 24, 1902.

Application filed November 18, 1901. Serial No. 82,732. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM E. BUSHNELL, a citizen of the United States, residing at the city of Kalamazoo, in the county of Kalamazoo and State of Michigan, have invented certain new and useful Improvements in Levers for Lifting-Jacks, of which the following is a specification.

This invention relates to new and useful improvements in levers for pawl lifting-jacks.

The object of this invention is to provide a simple and efficient pivotal connection for the pawls to the lever of the lifting-jack whereby there will be no weakening of either the lever or the pawls and yet the parts will be easily joined together and easily separated and still be very securely connected together when in use and the lower end of the pawl will have a broad seat equal to the entire width of the lever.

I accomplish the object of this invention by the devices and means described in this specification.

The invention is clearly defined and pointed out in the claims.

A structure fully embodying the features of my invention is fully illustrated in the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a side elevation view of a lever and pawls detached from the lifting-jack. Fig. 2 is a detail transverse sectional view through the lever and through the base of one of the pawls, taken on a line corresponding to line 2 2 of Fig. 1. Fig. 3 is a detail longitudinal sectional view through the end of the lever, taken on a line corresponding to line 3 3 of Fig. 2.

In the drawings all of the sectional views are taken looking in the direction of the little arrows at the ends of the section-lines, and similar letters of reference refer to similar parts throughout the several views.

Referring to the lettered parts of the drawings, A is the metal stem or shank of a jack-lever, the same being pivoted by a suitable journal extending through the bearing A'. The pawls B C are of a well-known form, having extended shafts B' B' C' C' at their lower ends, forming journals at that point. A transverse seat is formed across the lever in the proper position for the pawls, as appears in Figs. 1 and 3, and the lower ends of the pawls are rounded to fit these seats and swing within the same. The journals B' C' are embraced by the bushing-rings D D, which are driven into seats formed in each side of the lever A, the stock of the lever projecting above the center of the circles, so that these bushing-rings are embraced by the stock on each side, and are thus held in position. These bushings embrace the journals of the pawls and being themselves retained in position hold the pawls in position. The openings at the top of these circles are of sufficient width, so that the pawl-journals pass readily into the same when the bushings are driven into position, and consequently positively retain the same. When it is desired to take the pawl from the lever, the lever is removed from the jack and the pawl is driven to one side, which drives the bushing off, or the bushing can be otherwise forced out of position by driving it out by any suitable instrument. It will be observed that this method of retaining the pawl is entirely efficient, as it affords a seat for the pawl for the full width of the lever, and it is as easy to drive the bushing into place as it would be to drive a pin, and at the same time it avoids the necessity of side plates at each side to receive the journals of the pawl and avoids the necessity of either splitting the lever A to enable the same to embrace the journals of the pawls and entirely avoids the necessity of making a detachable side plate or a side plate of any kind for retaining the pawl, all of which structures are highly objectionable in that they multiply the parts and make it necessary to make in parts which should be strong in two or more pieces, which is obviously an objection to be avoided, as it will, first, make a weak structure, and, second, it will greatly add to the expense of manufacture.

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

1. The combination of a lever; pawls therefor with journals projecting to each side; and bushings to drive into suitable circular seats in the sides of the lever of more than a half-circle in extent.

2. The combination of a lever; a pawl resting in a suitable seat and having journals at each side; and bushings adapted to engage the said journals and be retained in seats in the sides of the lever of more than a half-circle in extent, for the purpose specified.

In witness whereof I have hereunto set my hand and seal in the presence of two witnesses.

WILLIAM E. BUSHNELL. [L. S.]

Witnesses:
S. ALICE EARL,
OTIS A. EARL.