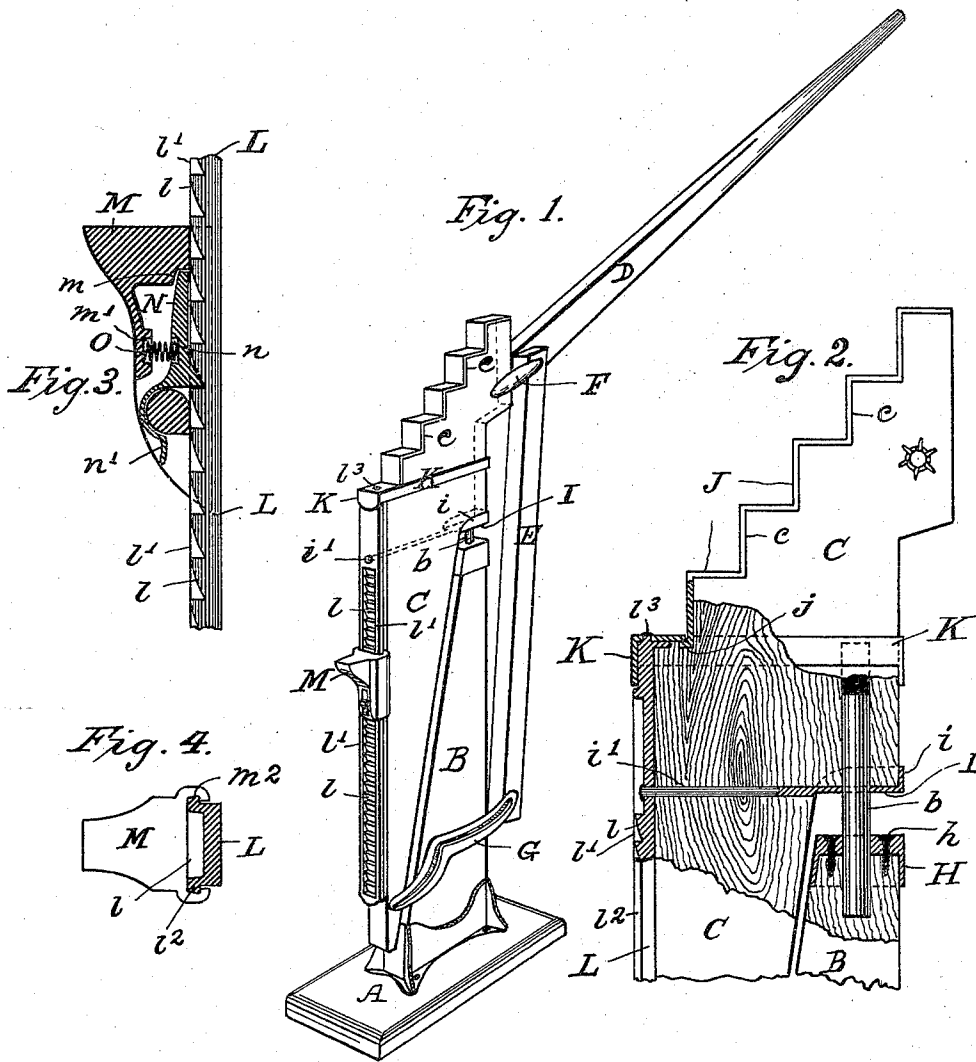


(No Model.)

S. S. JOY.
LIFTING JACK.

No. 526,153.

Patented Sept. 18, 1894.



Witnesses

F. S. Berry
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Inventor

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UNITED STATES PATENT OFFICE.

SAM S. JOY, OF NEW MARKET, NEW HAMPSHIRE.

LIFTING-JACK.

SPECIFICATION forming part of Letters Patent No. 526,153, dated September 18, 1894.

Application filed June 18, 1894. Serial No. 514,831. (No model.)

To all whom it may concern:

Be it known that I, SAM S. JOY, a citizen of the United States, residing at New Market Junction, in the county of Rockingham and State of New Hampshire, have invented certain new and useful Improvements in Wagon-Jacks; 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:

The foundation for this invention is found in the patents to A. P. Joy, No. 298,980, dated May 20, 1884, and No. 493,031, issued to myself, dated March 7, 1893; my present invention consisting in additions and improved construction, to be fully set forth in the following specification, and claims, and clearly illustrated in the accompanying drawings, forming a part of the same.

Figure 1, is a perspective view of my improved jack. Fig. 2, is a sectional elevation, showing certain parts of the same. Fig. 3, is a detached vertical sectional view of an adjustable step attachment. Fig. 4, is a sectional plan view of the parts shown in Fig. 3.

The base, A, standard B, adjustable step piece C, operating or adjusting lever D, connecting bar E, the link F, connecting the lever D, and bar E, and the lever G, connecting the lower ends of the step piece C, and bar E, with the standard B, are similar to those parts shown in my previous patent, mentioned above, as well as other parts to be hereinafter described; but the principal features of my present invention are, an improved detachable and adjustable step, and certain other improved constructions, which add greatly to the strength and utility of my improved wagon-jack, among the important of which is, the metal collar, or socket H, which is driven on to the upper end of the standard B, and secured by screws *h*,—the object of which is to prevent the top of said standard from splitting, which, previous to my using this metal socket, was a frequent occurrence. The top of said standard has a longitudinal perforation. So also has the adjacent portion of the step piece C, for the reception of the guide pin *b*, the said pin or stud being driven tightly into a perforation

formed for the purpose in the top of the socket H, and passing through the same and into the said standard, as shown in Fig. 2.

Another important feature of the present invention is a socket, or flanged plate piece I, fitting that portion of the step piece C, adjacent to the socket H, serving good purposes, to wit: It has a perforation loosely fitting the guide-pin *b*, through which the latter passes to enter the perforation formed for it in the said step piece C. Its flanges *i*, fitting three sides of said step-piece, prevent the latter from splitting, and its stem *i*, *l*, passes entirely through the step piece, and being firmly headed, on the opposite side of same, prevents its splitting in any other place, as it is otherwise liable to do, when subjected to a severe strain.

The notches *c*, which form the steps proper, of the step piece C, have a metal facing consisting of the parts J—K, the former covering all but the lower notch or step *c*, and the latter comprising a facing for said lower step, a socket to receive the lower bent end *j*, of the part J, securing the same against lateral displacement, and a binding strap or collar, to further strengthen said step piece, as shown.

The detachable and adjustable step is best shown in Fig. 3, and is supported upon a serrated rack L, which is secured at its top by the strap K, and by the headed end of the stem *i*, *l*, of the flanged plate I, and by screws to the front edge of the step piece C. The detachable step consists of cored casting M, substantially of the form shown in the drawings, and chambered for the reception of a spring actuated pawl N, for engagement with the serrations *l*, of the rack L; the pivotal end of said pawl resting in a notch *m*, formed for this purpose in said step M, and bearing partly upon the smooth edges *l'*, of the rack L. A helical spring O, one end of which rests in a socket *m*, *l*, on the inner front edge of said step M, and the other in a socket *n*, formed for the purpose in the pawl N, holds said pawl normally in engagement with the serrations *l*, of the rack L;—and when necessary to adjust the step M, the pawl may be disengaged from the rack by drawing the curved arm *n*, *l*, outward.

The step M, is provided with internally

grooved flanges m^2 which are made an easy sliding fit for the guide-ways, or tongues 1, 2, of the rack L.

Having described my improved construction, what I claim is—

- 5 1. In a wagon-jack of the construction shown, a metal cap or socket piece fitting over the top of the standard and secured thereon by screws and having a central perforation, a flanged plate piece secured to the under side of the step piece provided with a stem extending through and headed on the opposite edge of the same, and a guide pin which extends downward through said perforated cap into said standard, and upward through said flanged plate piece, all substantially for the purpose set forth.
- 15 2. The combination of the step piece having

the strap K, and the flanged plate piece provided with a stem extending through the step piece, of a serrated rack, partially secured thereon by the said strap and stem, and a cored adjustable step, having internally grooved flanges fitting tongues or ways formed upon said rack, and a spring actuated pawl, the pivotal end of which rests in a notch formed for the purpose in said step and bears upon the smooth face of said rack at each side of said serrations.

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

SAM S. JOY.

Witnesses:

J. B. THURSTON,
NATHANIEL E. MARTIN.