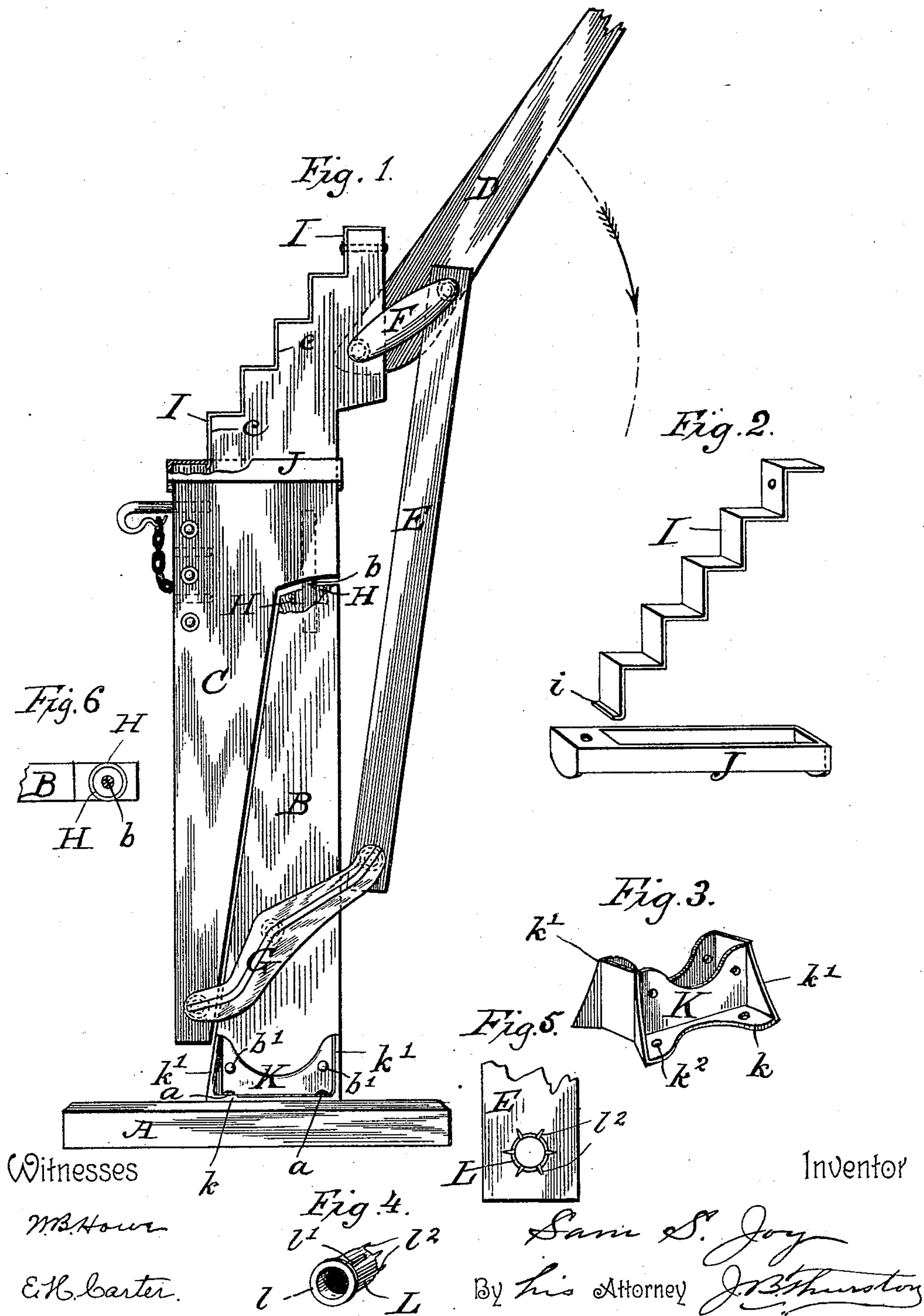


(No Model.)

S. S. JOY.  
WAGON JACK.

No. 493,031.

Patented Mar. 7, 1893.





# UNITED STATES PATENT OFFICE.

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

## WAGON-JACK.

SPECIFICATION forming part of Letters Patent No. 493,031, dated March 7, 1893.

Application filed September 24, 1892. Serial No. 446,751. (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, 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.

This invention relates to wagon-jacks composed of wood and iron, and the object of the invention is to construct a jack as light and durable as possible, and in a manner which shall be inexpensive.

The invention consists in the peculiar construction and combination of the several novel parts to be hereinafter fully explained, in the specification and claim, and clearly illustrated in the accompanying drawings forming a part thereof, of which,—

Figure 1. represents a broken elevation of a wagon-jack to which my improvements are applied. Fig. 2. is a detached perspective view, showing the metallic step facings, the lower step being shown separated from the others, to more clearly represent their construction. Fig. 3. is a perspective view representing a casting which unites the wooden standard to the wooden base. Fig. 4. is a perspective view of one of the metal boxes or bushings which I use in the various wooden parts as bearings for the pivot pins of the metal link and lever. Fig. 5. is a broken view showing the manner of securing the metal boxes or bushings in the various wooden parts of my improved jack. Fig. 6 is a detail.

Similar reference letters denote corresponding parts.

The general features in the construction of the wagon-jack, viz.—the base A, standard B, the adjustable step piece C, operating or adjusting lever D, connecting bar E, the link F, connecting the lever D, and bar E, with the step piece C, and the lever G, connecting the lower ends of the step C, and bar E, with the standard B,—were invented and patented by A. P. Joy, the Letters Patent bearing date the 20th of May, 1884, and numbered 298,980.

Around the dowel or guide pin b, connect-

ing the upper end of the standard B, with the step piece C, I sink a metallic ring H, as shown in Fig. 1; as without this ring the pin is pretty sure to split the wooden parts it connects.

The notches c, in the top of the piece C, which form the steps proper, have a metal facing consisting of the parts I—J, the former covering all but the lower notch or step c, and the latter comprising a facing for said lower step, and a socket to receive the lower bent end i, of the part I, securing the same against lateral displacement. The part J, being in the form of a band or collar as seen best in Fig. 2, also prevents the piece C, from splitting and working; by its use the facing I, requires to be fastened to the piece C, only at its top, as seen in Fig. 1.

To obviate the necessity of a mortise and tenon connection of the base A to the standard B, I also provide the metal socket piece K, which receives the lower end of the said standard, and is secured by rivets b', thereon, and which is provided with horizontal and vertical flanges respectively k—k', the flanges k, having perforations k<sup>2</sup>, for receiving rivets a which pass through and secure said socket K, to the base A.

All pivotal points in the parts B, C, D, and E, are fitted with a metal bearing or bushing L, constructed as shown in Fig. 4, and fastened in their place as seen in Fig. 5.

The bushing is provided at one end with a flange l, and one or more flanges l', on its cylindrical sides to prevent its turning when in place, and the opposite end is provided with a few prongs l<sup>2</sup>, which, after the bushing has been driven through its perforation, are turned down with a hammer thus holding it firmly in position. These bushings, as well as all the iron work, are preferably malleable castings, and the whole jack is convenient on account of its light weight and durable for the reason that all wearing surfaces are of metal.

Having described my invention, what I claim is—

The combination with a step-piece having a series of notches or steps, of a metallic facing for said steps formed in two parts, one

portion extending over all but the lower step,  
and having at its lower end a narrow hori-  
zontal flange, and the other comprising a col-  
lar or band extending around said step-piece  
5 and provided with a cap for the said lower  
step resting upon the said horizontal flange  
of the other portion of step-facing.

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

SAM S. JOY.

Witnesses:

J. B. THURSTON,  
CARRIE E. EVANS.