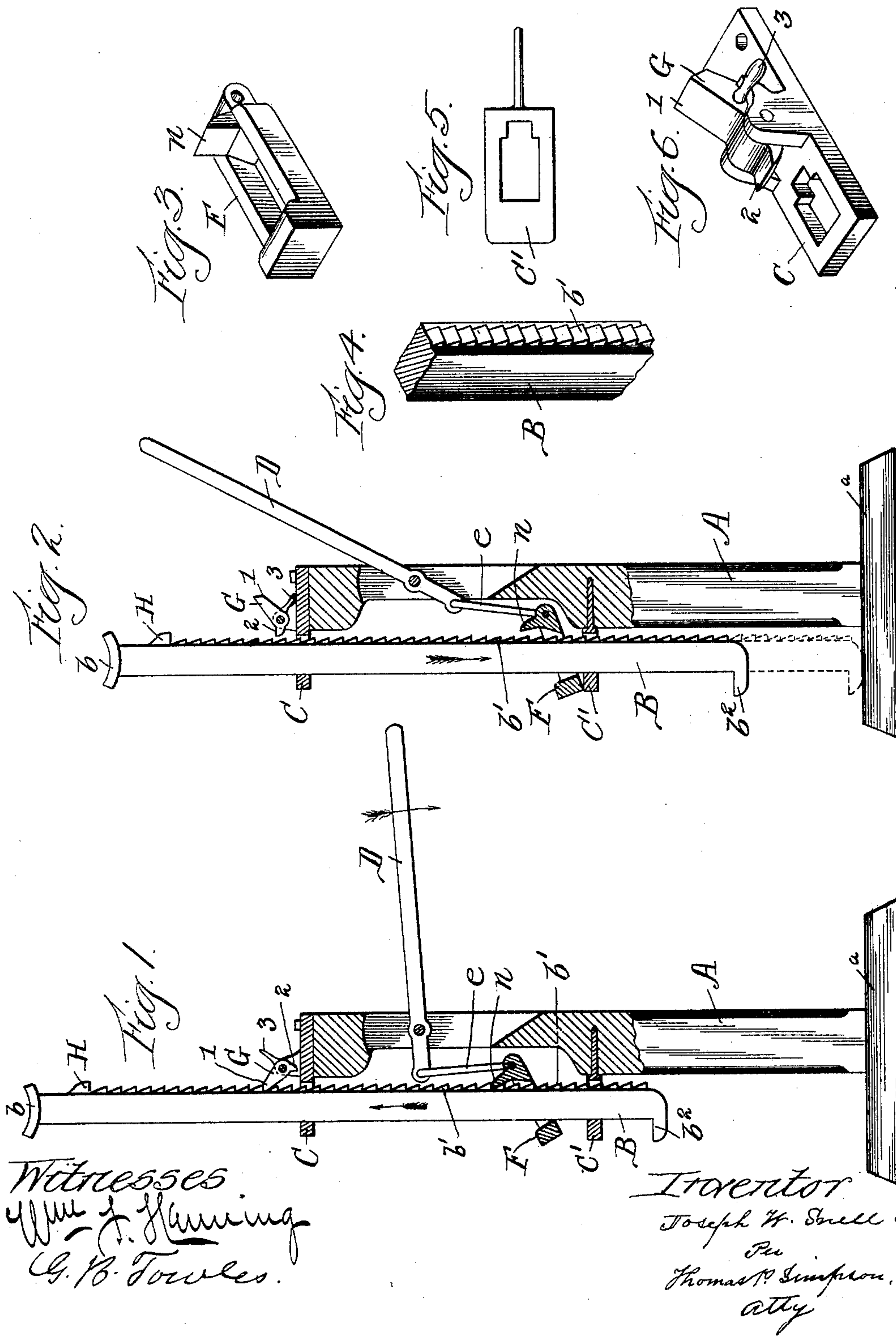


(No Model.)

J. W. SNELL, Jr.  
LIFTING JACK.

No. 595,216.

Patented Dec. 7, 1897.





# UNITED STATES PATENT OFFICE.

JOSEPH W. SNELL, JR., OF CHICAGO, ILLINOIS.

## LIFTING-JACK.

SPECIFICATION forming part of Letters Patent No. 595,216, dated December 7, 1897.

Application filed February 12, 1897. Serial No. 623,130. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH W. SNELL, Jr., a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Lifting-Jacks; and I 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 and figures of reference marked thereon, which form a part of this specification.

This invention relates to improvements in devices for lifting wagons, and has for its object to provide a device of this character which combines the advantages of simplicity of design and cheapness of construction, obtained by eliminating several unnecessary features heretofore employed in devices of a like character, thus rendering the same capable of more easy and quick assembling and adjustment of parts and at the same time increasing its efficiency and ease of operation.

To this end my invention consists in the construction and arrangement of parts, as shown in the accompanying drawings and set forth in the following specification.

In the drawings, Figure 1 is a view of my device shown in vertical section. Fig. 2 is a similar view of the same, showing tongue thrown out of engagement with main bar, thus permitting main bar to drop in the position shown by dotted lines. Fig. 3 is a view of tongue F. Fig. 4 is a view of main bar, showing rabbet on each side of ratchets  $b'$ . Fig. 5 is a view of guide-collar  $C'$ . Fig. 6 is a view of guide-collar C and lever-detent G.

Of the parts represented in the figures, B denotes the main bar. This bar may be either round or rectangular in cross-section. It is provided at its top end with the concave  $b$ . Its inner surface is provided with ratchets  $b'$ , and at lower end is enlargement  $b^2$ . Near upper end, on inner surface, is tip H. The bar B is rabbeted on each side of the ratchets  $b'$ . Extending parallel with this bar is supporting-post A, provided at its lower end with base  $a$ , with guide-collar C at upper end and a guide-collar  $C'$ . Pivoted to supporting-post A is lever D. Encircling main bar B

and having sliding connection thereon is tongue F. On tongue F is tip  $n$ . Connecting lever D and tongue F is link  $e$ . Pivoted to guide-collar C is lever-detent G. Detent G is provided with lip 1, a shorter and under lip 2, and lever-handle 3. (See Fig. 6.)

Having now indicated the various elements composing my device and the manner in which they are connected, the mode of operation is as follows: The main bar having been inserted through the perforations in guide-collars C and  $C'$  and tongue F, as shown in drawings, the jack is set under article to be raised. The operator then works lever. As lever D is pushed down the rear part of tongue F is raised, engaging tip  $n$  in ratchet of main bar B. Thus as lever is shoved down main bar B is raised. As main bar B is raised lip 1 of lever-detent G drops in notches of bar B, preventing said bar from sliding back. As outer end of lever is raised tongue F slides down on main bar. By raising and lowering lever D rod B is raised to any desired height to the point where enlargement  $b^2$  hits guide-collar  $C'$ .

To lower main bar B, raise bar slightly with lever to relieve pressure from lever-detent G. This will allow lip 1 of lever-detent to be thrown back from ratchets of bar by handle 3. This throws lip 2 in toward ratchets of main bar, but not touching them. Lever-detent is so balanced that it will remain in the position thrown. Then to lower main bar raise lever D till outside edge of tongue F hits guide-collar  $C'$ , causing inside edge of tongue F to lower, disengaging tip  $n$  from ratchets of main bar. Bar B will then drop down to position shown by dotted lines in Fig. 2. In dropping, tip H hits under lip 2 of lever-detent and throws lip 1 forward on ratchets  $b'$  ready for action. The perforations of the two guide-collars C  $C'$  are so arranged to fit main bar that main bar will pass through them in either direction without ratchets  $b'$  catching on edge of said perforations.

What I claim as new, and desire to cover by Letters Patent, is—

1. In the lifting-jack, in combination with the supporting-post A, the lever-detent G, said detent having the lips 1 and 2 and side handle-lever 3, the main bar B provided



with ratchets  $b'$ , concave  $b$ , enlargements  $b^2$  and tip  $H$ , the two guide-collars engaging main bar, the tongue  $F$  provided with tip  $n$  and perforation for entrance of main bar  $B$ ,  
5 and means for raising main bar above supporting-post substantially as described.

2. In the lifting-jack, the combination of the supporting-post  $A$ , perforated guide-collars  $C$   $C'$ , the main bar  $B$  having ratchets  $b'$   
10 and being rabbeted each side of ratchets  $b'$  to fit the perforations in guide-collars  $C$  and  $C'$ , the balanced lever-detent  $G$  pivoted to guide-collar  $C$ , tongue  $F$  engaging main bar and also having sliding connection therewith  
15 and provided on its upper inner surface with tip  $n$ , said tip engaging in ratchets  $b'$  of bar  $B$ , substantially as described.

3. In a lifting-jack, in combination with

the supporting-post  $A$ , main bar  $B$  having ratchets  $b'$ , and lever  $D$  with connecting-link 20  $e$ , tongue  $F$  having tip  $n$  on inner surface engaging with ratchets  $b'$  of main bar, and having a backwardly-extending lug, link  $e$  by which tongue is connected to lever  $D$ , the lever-detent  $G$  pivoted to guide-collar  $C$ , hav- 25 ing lip 1 which engages in ratchets of main bar, under lip 2 for throwing said detent back, and thumb-lever 3 on top of lever-detent, substantially as described.

In testimony whereof I affix my signature 30 in presence of two witnesses.

JOSEPH W. SNELL, JR.

Witnesses:

WARD B. SAWYER,  
W. H. PATTON.