

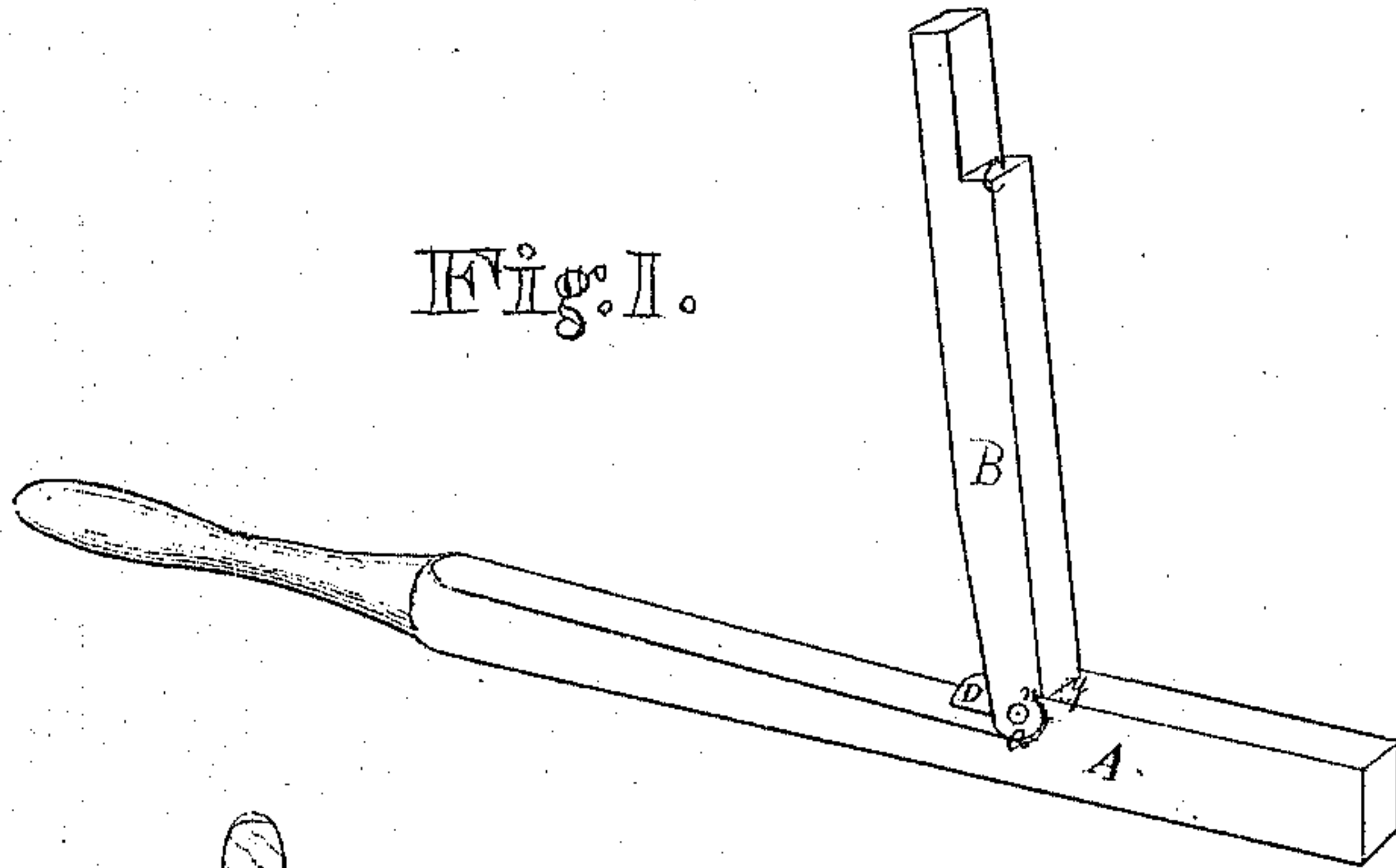
*A. R. Giles,*

*Lifting Jack.*

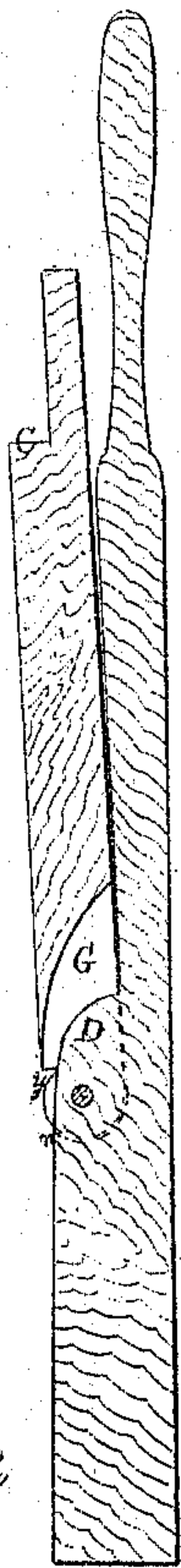
*No. 106,050.*

*Patented Aug. 2, 1870.*

*Fig. 1.*

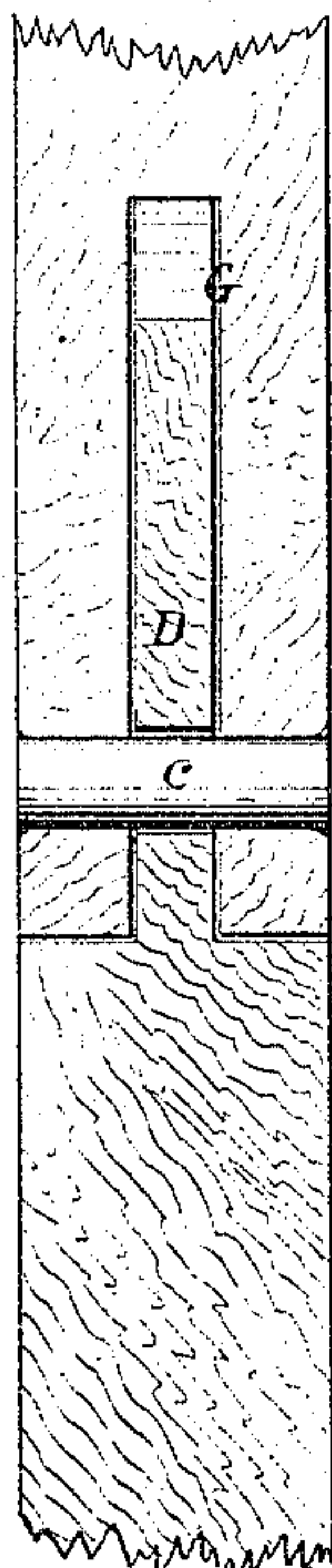


*Fig. 2.*



*Witnesses:*  
*Chas. K. Lyon*  
*Govt. Man.*

*Fig. 3.*



*Inventor,*  
*A. R. Giles,*  
*Chipman & Co.*  
*Attorneys*



# United States Patent Office.

ABNER R. GILES, OF ADAMS, NEW YORK.

Letters Patent No. 106,050, dated August 2, 1870.

## IMPROVEMENT IN CARRIAGE-JACKS.

The Schedule referred to in these Letters Patent and making part of the same.

*To all whom it may concern:*

Be it known that I, ABNER R. GILES, of Adams, in the county of Jefferson and State of New York, have invented a new and valuable Improvement in Wagon-Jacks; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1, of the drawing, is a perspective view of my invention.

Figure 2 is a vertical section of the same.

Figure 3 is a detailed sectional view.

My invention relates to that class of lifting-jacks which are constructed of two parallel bars of unequal length, united together by a tongue-and-groove joint; and

It consists in constructing and arranging such tongue-and-groove joint in such manner that, when the unhinged end of said shorter bar is brought to an angle of about ten degrees from a right angle with the longer bar, its hinged end becomes rigidly fixed by shoulders, so constructed and arranged as to prevent said bars, respectively, from approaching more nearly to a right angle than the ten degrees mentioned, thereby giving great strength and firmness to the said uniting joint.

A, of the drawing, represents the longer of two bars that constitute my lifting-jack, and

B, the shorter bar thereof.

This bar B is formed with a set-off or shoulder at C, to enable the operator to apply it to a load nearer the ground than would be possible if the end of said bar was relied on only for that purpose.

D represents the tongue of the uniting joint, by which the bars A and B are united, and which tongue I form in the longer bar, as shown.

G represents the groove for my joint, which I form in the shorter bar, as shown, and a pin, c, is passed through the lips of the shorter bar, formed by the

groove, and also through the tongue holding said parts firmly together.

The tongue D is constructed in a circular form, as shown on fig. 2, and that portion of bar A adjoining and immediately below said tongue is also made circular, as shown at *a* on figs. 1 and 2, thereby forming a shoulder on said bar, as represented at *n*.

On the bar B I form the lips of the hinge in a circular form, as the drawing represents, and I cut a shoulder therein, as shown at *y*, which, when on duty, fits closely upon the shoulder *n* of the longer bar, in the manner represented on fig. 1, and prevents said bar from reaching a point more nearly a right angle than about ten degrees.

The above-described arrangement of constructing shoulder *n* upon the bar A, and shoulder *y* upon the bar B, secures great strength and firmness to the joint, and serves to relieve the connecting-pin from unnecessary strain.

I also consider my method of constructing the tongue D in such manner that its upper side or edge shall not be raised above the line of the upper surface of the bar in which it is formed, as of great utility in economizing timber in the construction of such jacks.

I do not claim broadly the construction of lifting-jacks of two bars united by a tongue-and-groove joint, for I am aware that such jacks are not uncommon; but

What I claim as my invention, is—

In the lifting-jack herein described, formed of the bars A and B, the half-rule joint, constructed of tongue D on the bar A, and corresponding lips on bar B, united by pin *c*, and so arranged that the shoulders *n* and *y* shall operate together, substantially as specified.

In testimony that I claim the above, I have hereunto subscribed my name in the presence of two witnesses.

ABNER R. GILES.

Witnesses:

T. O. CHITTENDEN,  
T. P. SAUNDERS.