

(No Model.)

H. MIDWOOD.  
CARRIAGE AND WAGON JACK.

No. 327,096.

Patented Sept. 29, 1885.

Fig. 1.

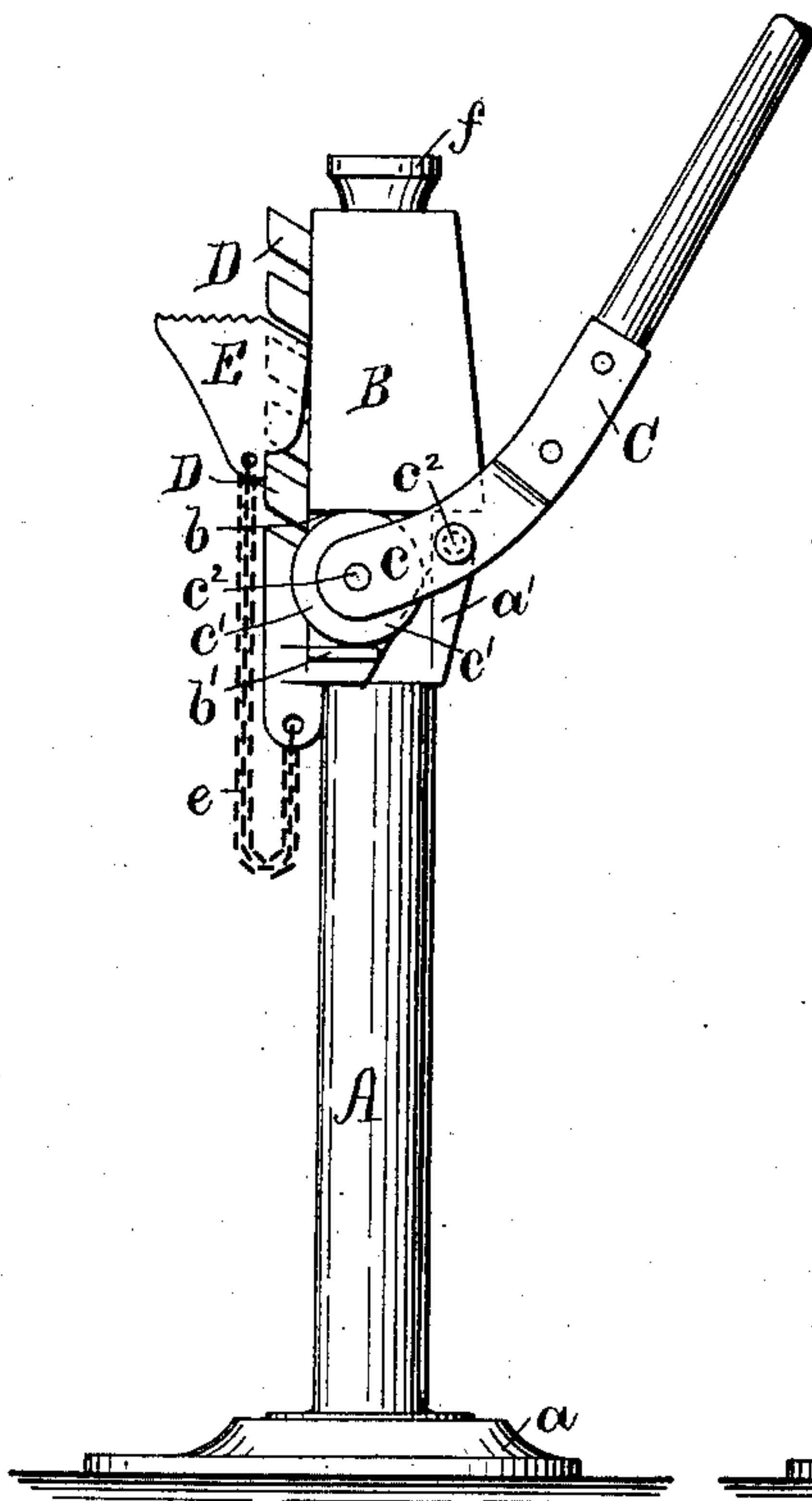


Fig. 2.

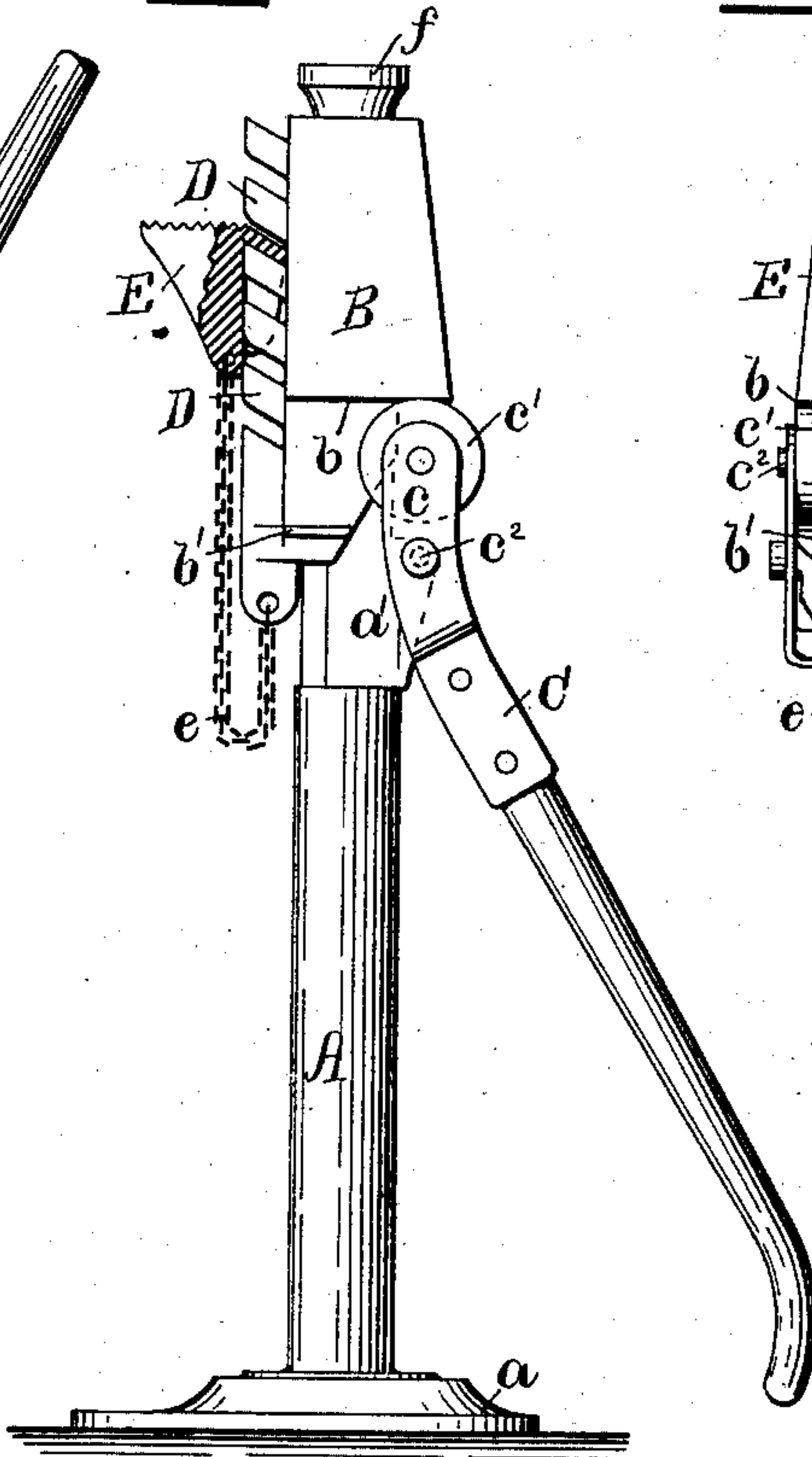


Fig. 3.

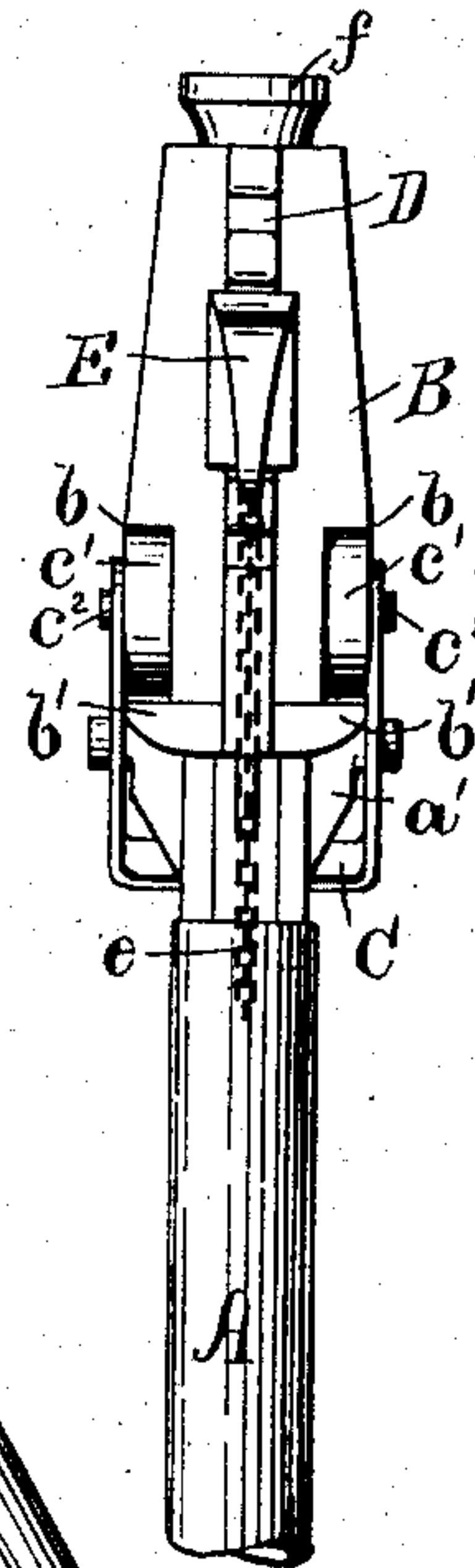


Fig. 4.

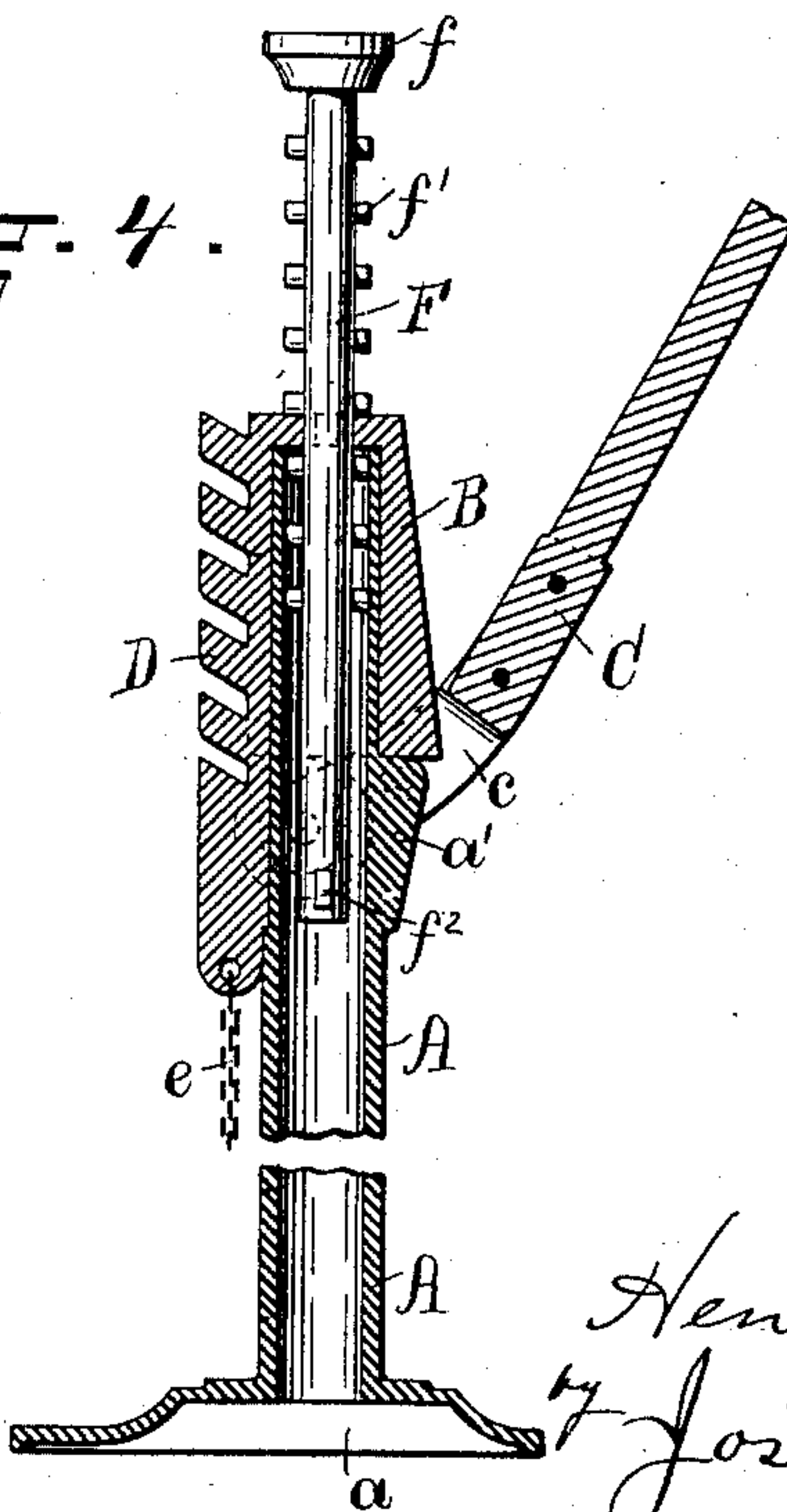
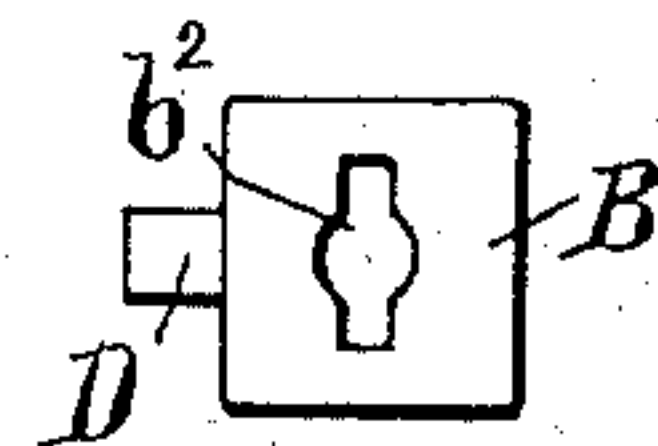


Fig. 5.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

HENRY MIDWOOD, OF PROVIDENCE, RHODE ISLAND.

## CARRIAGE AND WAGON JACK.

SPECIFICATION forming part of Letters Patent No. 327,096, dated September 29, 1885.

Application filed June 10, 1885. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY MIDWOOD, of the city and county of Providence, and State of Rhode Island, have invented a new and useful Improvement in Carriage and Wagon Jacks, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

My invention relates to jacks for supporting the axles of carriages and wagons during the operation of greasing the spindles; and the object of my invention is to produce a jack of greater simplicity and cheapness than has heretofore been produced, and to render the same capable of use upon vehicles of various styles and sizes.

A further object of my invention is to produce a jack which shall possess great power and at the same time work with the utmost ease.

To the above purposes my invention consists in a carriage or wagon jack having a peculiar and novel construction and arrangement of the adjustable head operating on the standard, as hereinafter described and claimed.

My invention further consists in the provision of an adjustable extension to sustain either the axle or the wagon-body, as hereinafter described and claimed.

In order that my invention may be fully understood, I will proceed to describe it with reference to the accompanying drawings, in which Figure 1 is a side elevation of my improved jack in normal position. Fig. 2 is a similar view of the same with the head raised. Fig. 3 is a front elevation of the same in similar position to Fig. 2. Fig. 4 is a central vertical section of the same, the extension being shown in elevation. Fig. 5 is a top view of the jack with its extension removed.

In the said drawings, A designates the column of the jack, which is preferably a hollow casting, as shown, and formed with a base or foot, *a*, at its lower end, and with a projecting shoulder, *a'*, at a point nearer to its upper end.

B designates the head of the jack, which is hollow, so as to surround the upper part of

column A and slide upward and downward thereon.

C designates the operating-lever, which is pivoted at *c*<sup>2</sup> upon the projecting shoulder *a'*, and the inner end of which is bifurcated, so as to extend along both sides of head B. Each arm *c* of lever C carries a friction-roller, *c'*, which works between shoulders *b b'* on head B. The proportions of the arms *c* to the shoulders *b* and the pivotal point of lever C should be such that when the outer end of said lever is depressed to raise head B the rollers *c'* will travel a distance at least equal to their diameter, whereby a powerful but easy action is attained, and the arms *c* are brought to a perpendicular position when the lever is fully depressed, so as to prevent the head B from falling.

Upon its front the head B carries a rack, D, the teeth of which extend upwardly.

E designates a shoe or dog, one side of which is recessed to admit the teeth of rack D, and the purpose of which is to sustain the axle. In order to operate upon axles of varying heights, the shoe E is set upon one of the upper or lower or middle teeth of rack D, as required. The dog E may be attached to the lower end of the rack by a chain, *e*, so as to prevent displacement.

F designates a stem which works in the bore of the head B and column, and which is formed with a head, *f*, at its upper end. To a suitable distance downward from head *f* this stem is provided with radial spines or studs *f'*, and the stem F extends through an opening, *b*<sup>2</sup>, in the upper end of head B, of such form that by turning the stem in one direction it may be raised, and by turning said stem in the opposite direction, or farther in the same direction, it will be supported by any two of the studs *f'*. The purpose of this arrangement is to afford a support for very high axles, or for the vehicle-body, it being evident that when the head is raised or lowered by the lever the stem will be carried with it. This stem is really an extension of the jack to increase or vary its height.

Thus it will be seen from the above description that the jack is simple, cheap, and durable in construction, and that it may be used

for various purposes upon almost all kinds of vehicles.

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

5 1. In a lifting-jack, the combination, with the tubular column A, the head B, lever C, and dog E, of the independently-adjustable head *f*, substantially as described.

10 2. In a lifting-jack, the combination, with the tubular column A, the head B, constructed to slide on the column A and provided with the rack D, dog E, and lever C, of the independently-adjustable head *f*, supported on the head B by the stem F, provided with the studs  
15 *f'*, as described.

3. In a lifting-jack, the combination, with the hollow column A, having the foot *a* and shoulder *a'*, the hollow head B, having the shoulders *b b'*, opening *b<sup>2</sup>*, rack D, and shoe E, of the lever C, having the arms *c*, provided 20 with the rollers *c' c'*, the stem F, with the projections *f'* and head *f*, constructed substantially as described.

In witness whereof I have hereunto set my hand.

HENRY MIDWOOD.

Witnesses:

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J. A. MILLER, Jr.