W. F. ARNOLD.

Lifting-Jacks.

No. 134,625. Patented Jan. 7, 1873.

Fig. 1.

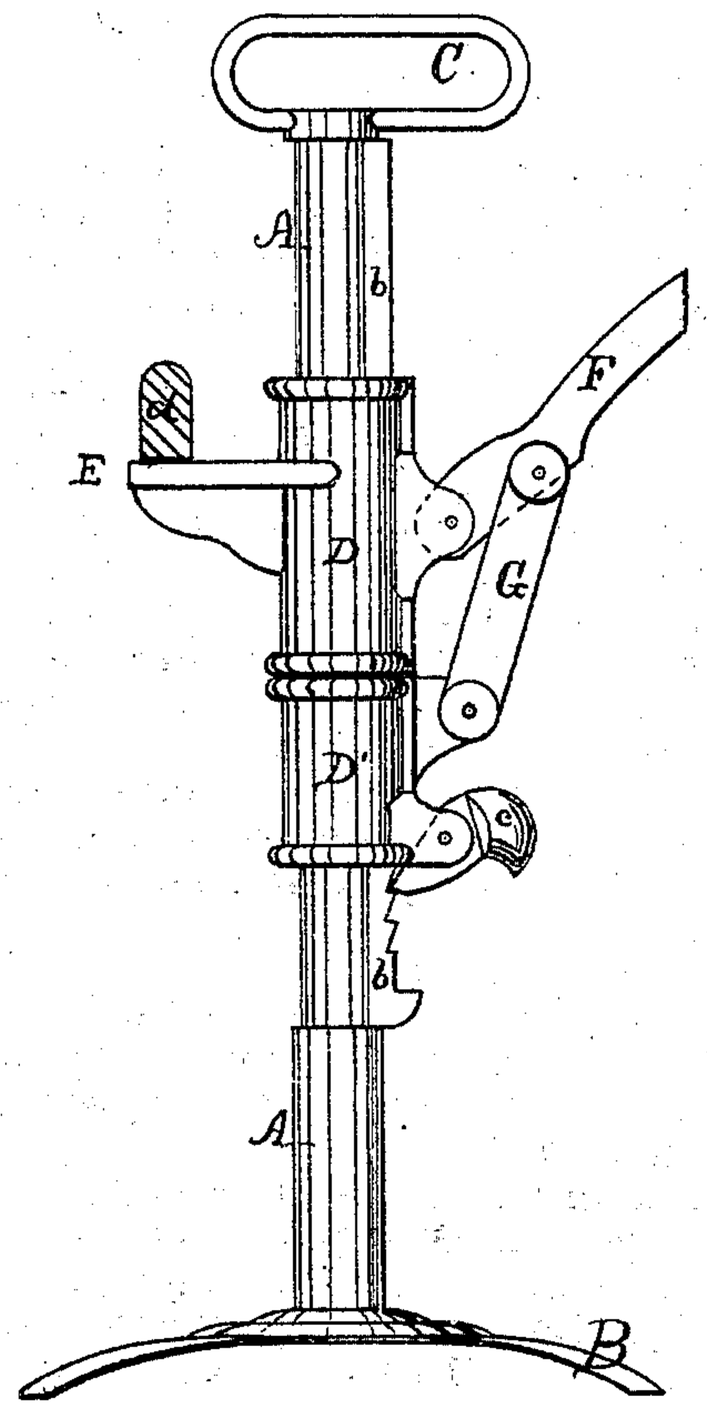
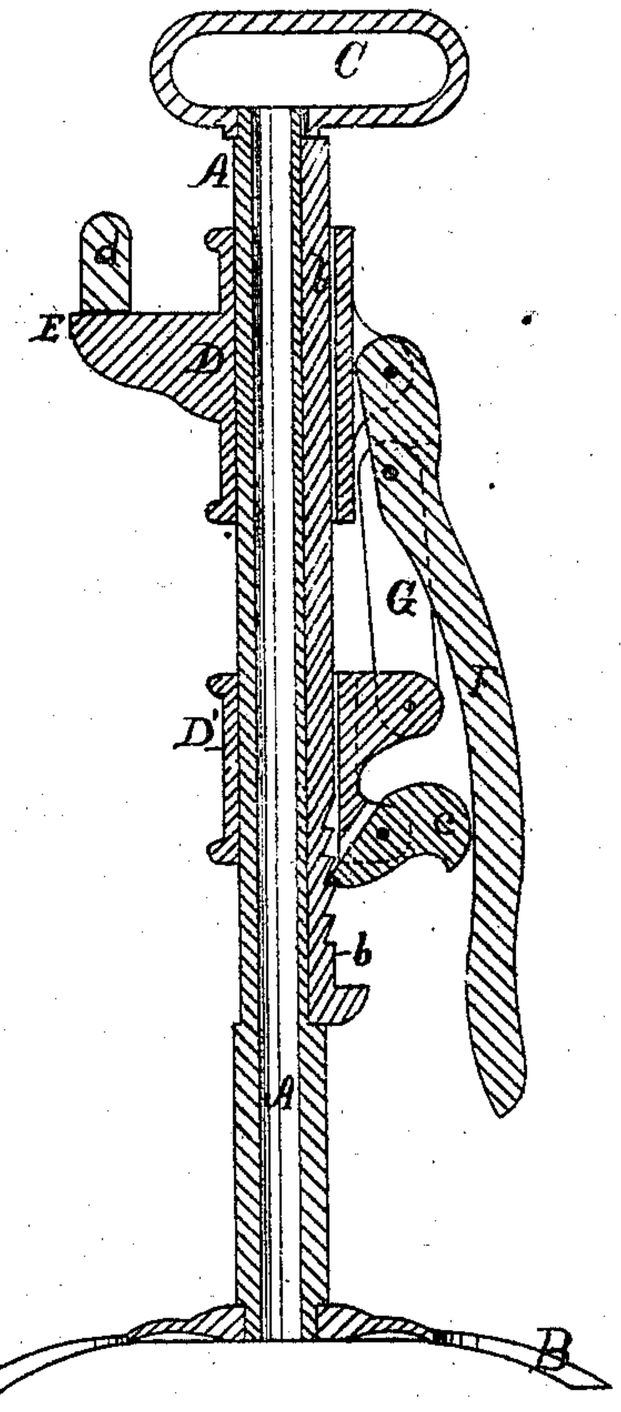


Fig. 2.



Witnesses.

Josiah T. Peck.

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UNITED STATES PATENT OFFICE.

WILBUR F. ARNOLD, OF NEW BRITAIN, CONNECTICUT.

IMPROVEMENT IN LIFTING-JACKS.

Specification forming part of Letters Patent No. **134,625**, dated January 7, 1873.

To all whom it may concern:

Be it known that I, WILBUR F. ARNOLD, of New Britain, in the county of Hartford and State of Connecticut, have invented certain Improvements in Lifting-Jacks, of which the following is a specification:

My invention consists in the peculiar combination of parts, as hereafter described.

In the accompanying drawing, Figure 1 is a side elevation of a lifting-jack which embodies my invention; and Fig. 2 is a central vertical section of the same.

A designates an upright or standard, mounted upon any suitable base B, and provided with a handle, C, at its upper end. I prefer to make the standard A of wrought-iron tubing. I fit two sliding sleeves, D D′, upon this round standard A, and prevent them from turning thereon by means of the rack *b*. The upper sleeve D is provided with an arm, E, on which to support the axle *d* of the carriage when the jack is applied for use. The two sleeves D D′ are connected together by a lifting-lever, F, and short lever G, so pivoted together as to form a toggle-joint. The sleeve D′ is provided with a pawl, *c*, which engages with teeth formed in the lower end of the rack *b*. The outer end of the pawl *c* is made heavy, so as to cause it to engage with the rack by its own gravity; but, if desired, it may be operated with a spring.

The operation is as follows: The jack is placed under the axle, the lifting-lever elevated, and then with the two sleeves it is raised until the arm E strikes the axle *d*, as shown in Fig. 1, when the pawl *c* will hold the lower sleeve D′ in its place. The lifting-lever is then depressed, which will raise the upper sleeve D, straighten the toggle-joint, and hold the axle in its elevated position, as shown in Fig. 2.

It is, of course, evident that in case the lower sleeve D′ were rigidly affixed to the standard A the operation of all the other parts would be the same as now shown and described, except their adjustability.

By my invention I produce a lifting-jack which is very compact, is very readily adjusted to axles of different heights, and can be produced at a small cost.

I claim as my invention—

1. The combination of the standard A and sleeve D, with the toggle-joint formed by the levers F G, all substantially as and for the purpose described.

2. The combination of the two movable and adjustable sleeves D D′, rack *b*, pawl *c*, levers F G, and standard A, all operating together substantially as and for the purpose described.

WILBUR F. ARNOLD.

Witnesses:

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