

C. H. Paine,
Lifting Jack,

No. 42,050,

Patented Mar. 22, 1864.

Fig. 2.

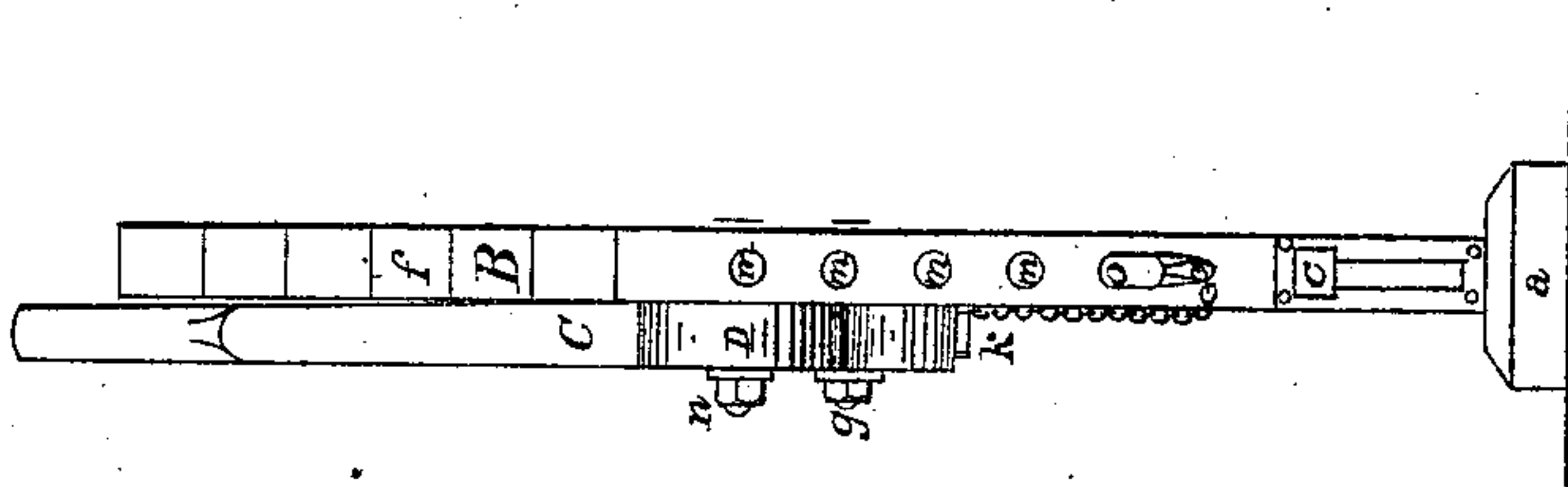


Fig. 3.

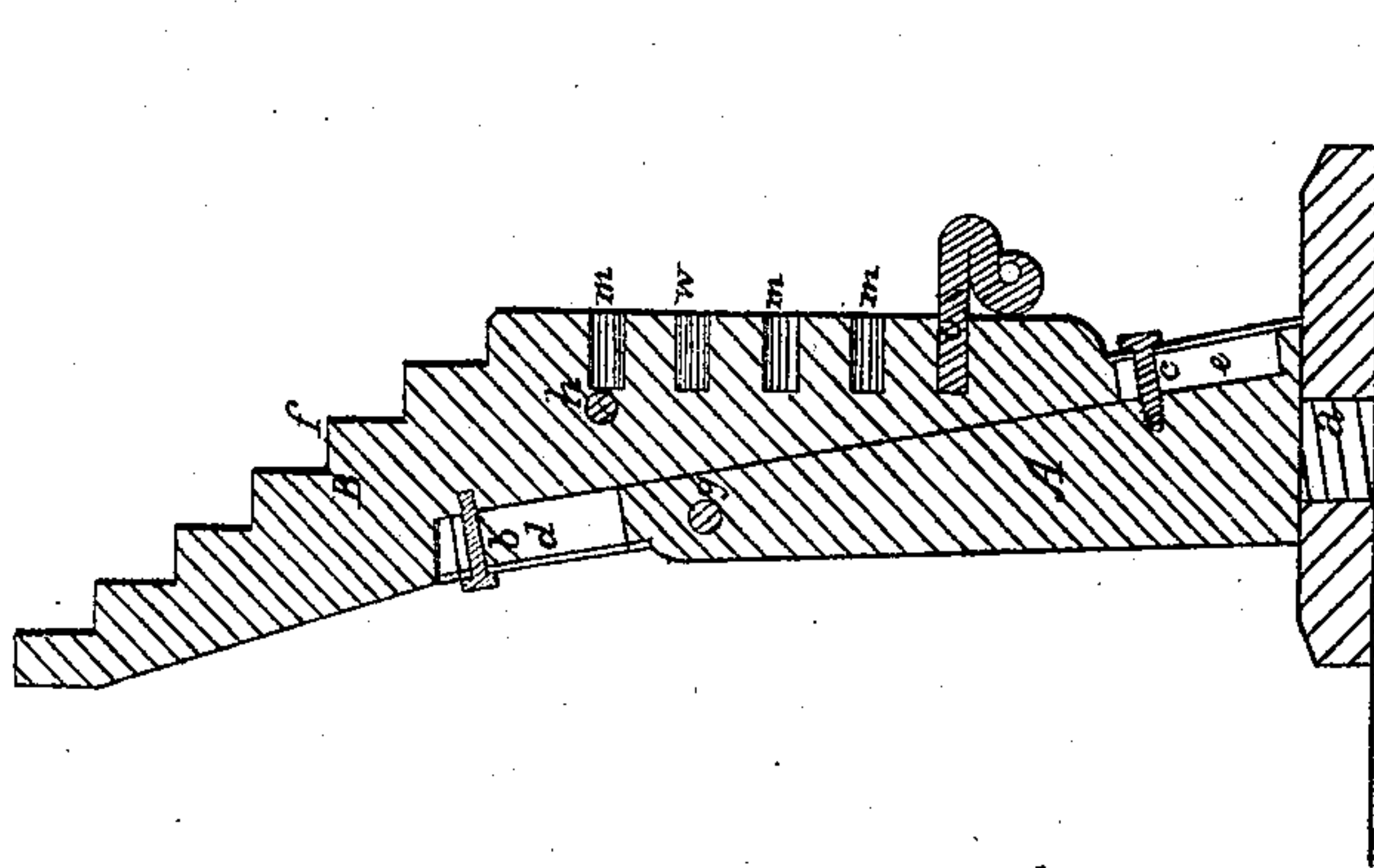
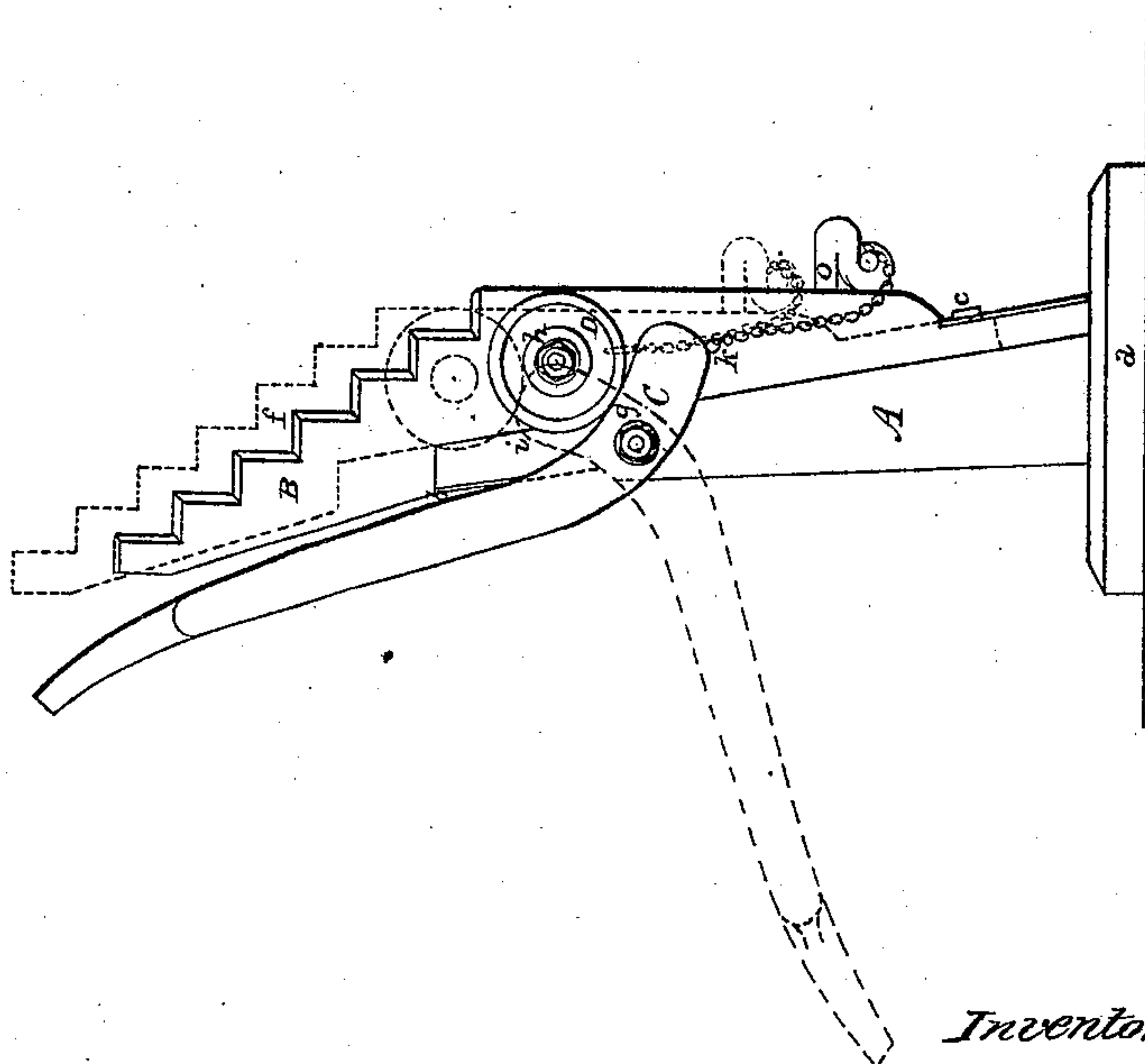


Fig. 1.



Witnesses.

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UNITED STATES PATENT OFFICE

CALVIN H. PAINE, OF PROVIDENCE, RHODE ISLAND, ASSIGNOR TO
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IMPROVEMENT IN CARRIAGE-JACKS.

Specification forming part of Letters Patent No. 42,050, dated March 22, 1864.

To all whom it may concern:

Be it known that I, CALVIN H. PAINE, a resident of South Providence, in the county of Providence and State of Rhode Island, have invented an Improved Carriage-Jack; and I do hereby declare the same to be fully described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a side elevation, Fig. 2 a front edge view, and Fig. 3 a vertical section, of it.

My invention is an improved carriage-jack, as not only constructed with its notched lifter arranged with and applied to its standard, so as to be capable of sliding upward and downward thereon, as hereinafter specified, but as provided with an operating-lever and a roller or wheel, or their equivalents, arranged together and with respect to the standard and lifter, and applied thereto, in manner and so as to operate substantially as hereinafter explained; and my invention further consists in the jack as so made, and as having a series of holes and an adjustable pin, or the mechanical equivalents therefor, arranged with respect to or applied to its lifter in manner and for the purpose and so as to operate substantially as hereinafter set forth.

In the said drawings, A denotes the standard, which may be provided with a supporting-foot, *a*. Against the front edge of the said standard the rear edge of the notched lifter B is placed, and is connected therewith by two bolts, *b c*, one of which goes through a slot, *d*, and through the standard A. The other of the said bolts goes through a slot, *e*, made through the lifter, the same being so as not only to connect the lifter with the standard, but to enable such lifter to be moved or slid either upward or downward thereon, as occasion may require, the said lifter being provided with a notched rack or series, *f*, of notches arranged on it, as shown in Fig. 1. There is applied to one side of the standard A, and by means of a fulcrum-pin, *g*, a lever, C, formed as shown in Fig. 1. This lever operates with a wheel or roller, D, which is arranged on the side of the lifter, and so as to be capable of being freely revolved on a center pin, *h*, projecting from the lifter. Furthermore, two studs or pins, *i k*, project from the sides of the standard-lifter, and have the

shorter arm of the lever between them. The lower of these pins serves for the lever to work against, in order to effect a downward movement of the lifter relatively to the standard. The upper pin is a stop for the lever, and is to be so situated that any carriage or weight, while resting on a notch of the lifter and pressing the lifter downward, shall cause the shorter arm of the lever when against the pin to be borne or pressed against it, so as to prevent any further downward movement of the lifter, the lever, the roller, and the pin co-operating to maintain the lifter in an elevated position. By laying hold of the longer arm of the lever, when the lifter is in its lowest position on the standard, and forcing such arm downward, the shorter arm of the lever will be borne against the periphery of the roller, and will force it and the lifter upward, the roller revolving more or less in the meantime. As the other arm of the lever may approach the pin *i*, such arm will operate as a toggle or with great power in effecting the elevation of the lifter.

Instead of the roller, a connection-bar may extend from the pin *g* to the pin *h*, and be applied to them so as to turn freely on them. This, notwithstanding it may be viewed as an equivalent to a certain extent for the roller, will not, however, operate to so good advantage, as the roller acts with less friction, and as the point of bearing of the lever on the periphery of the roller is constantly being changed more or less while the jack may be in use, the wear on the roller occasioned by the pressure of the lever will be spread over its whole circumference instead of being confined to any one place. A series of holes, *m m m m*, may be made transversely through the lifter and toward the standard, and so that a pin, *o*, may be inserted in either of them and project from the lifter in manner as shown in Figs. 1 and 3. This pin serves as a support for a carriage-axle when it may be so low as not to be capable of being received into one of the notches of the rack of the lifter, the holes being for the purpose of enabling the pin to be adjusted to the height required to adapt it to an axle.

I claim as my invention—

1. The above-described improved carriage-jack, as not only constructed with its notched lifter B, arranged with and applied to its

standard A, so as to be capable of being slid either upward or downward thereon, but as provided with an operating-lever, C, and a roller, D, or their equivalents, arranged together and with respect to the standard and lifter, and applied thereto in manner and so as to operate substantially as explained.

2. The improved jack as so made, and as

provided with the series of holes *m m* and the adjustable pin *o*, (or the mechanical equivalents therefor,) arranged or applied to the notched lifter, as specified.

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Witnesses:

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