

(No Model.)

J. W. CLARKE.

LIFTING JACK.

No. 303,120.

Patented Aug. 5, 1884.

Fig. 1

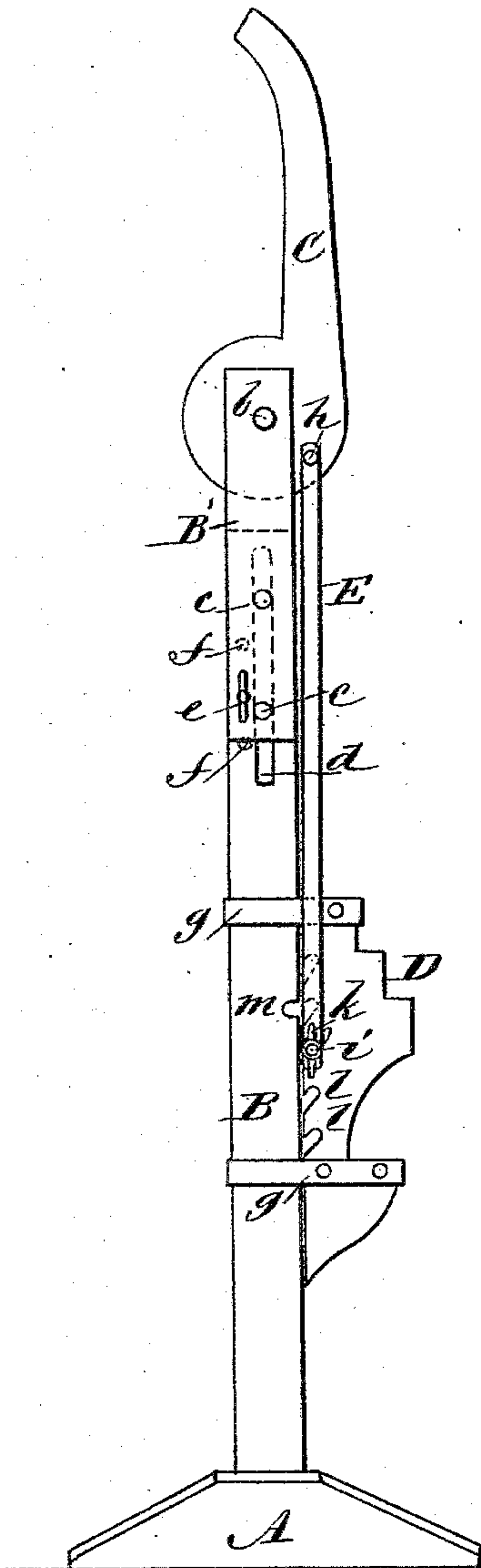


Fig. 2

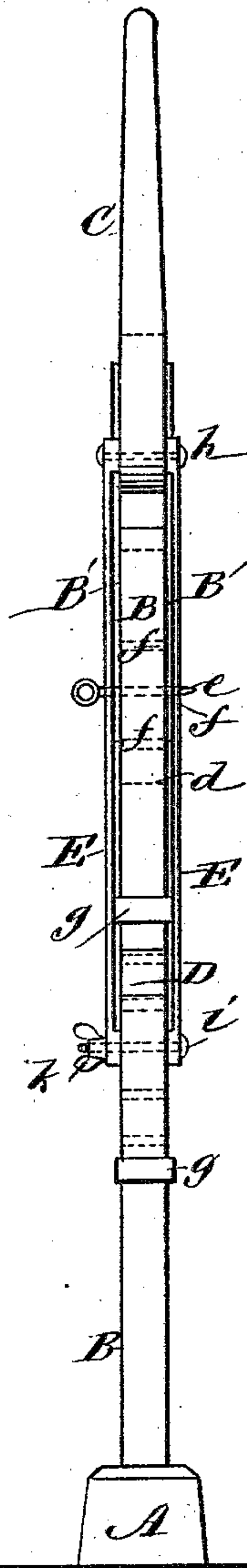


Fig. 3

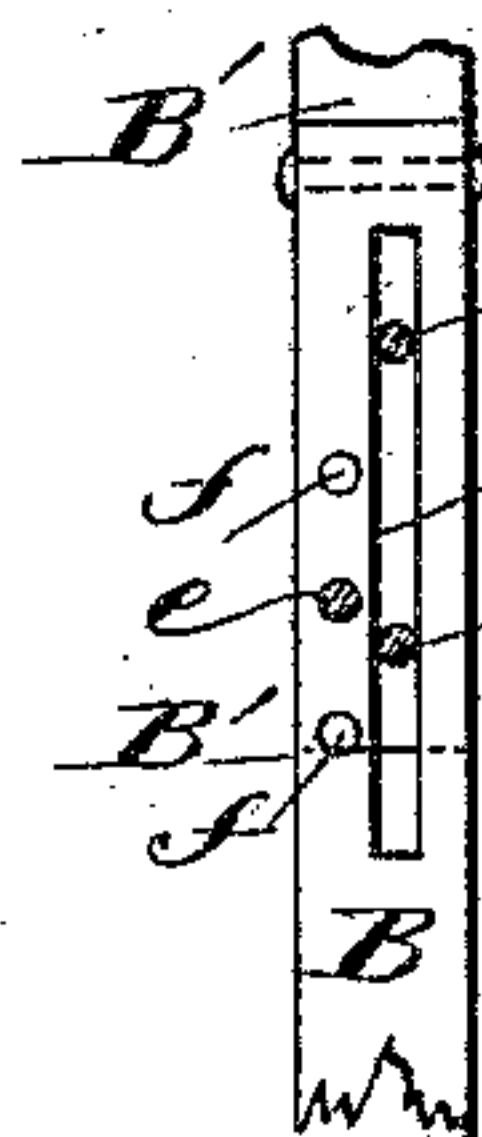
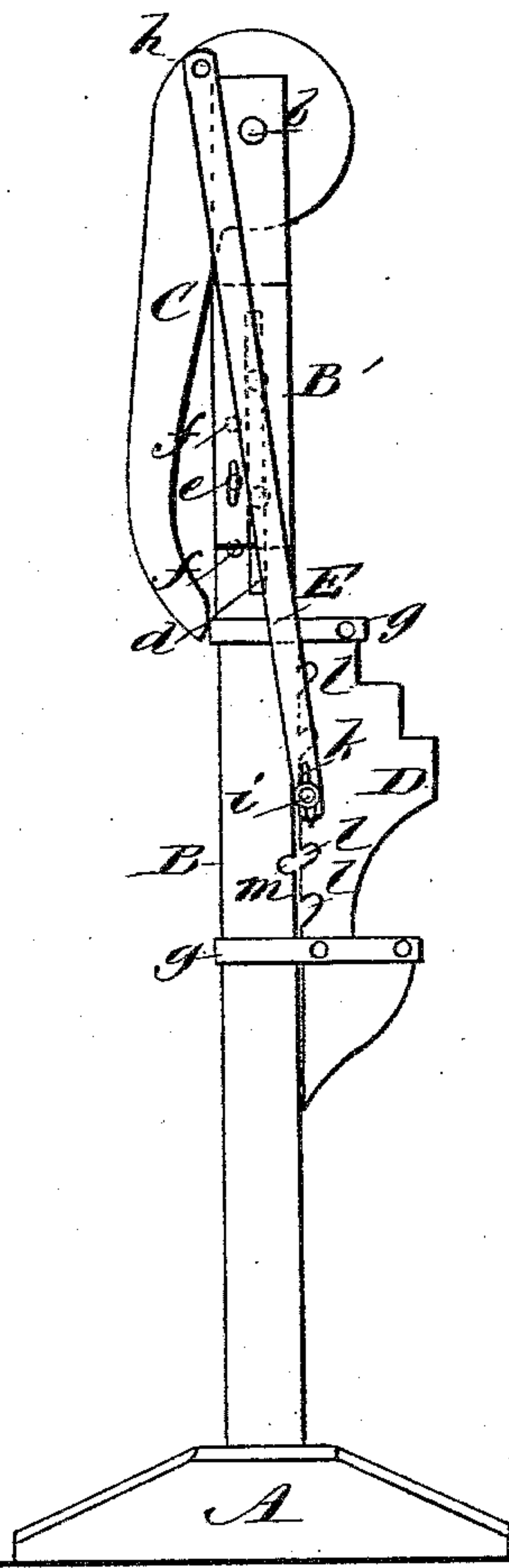


Fig. 4

WITNESSES:

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UNITED STATES PATENT OFFICE.

JOHN W. CLARKE, OF HALLOWELL, MAINE.

LIFTING-JACK.

SPECIFICATION forming part of Letters Patent No. 303,120, dated August 5, 1884.

Application filed May 15, 1884. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. CLARKE, of Hallowell, in the county of Kennebec and State of Maine, have invented certain new and useful Improvements in Lifting-Jacks, of which the following is a full, clear, and exact description.

This invention relates to lifting-jacks for use on carriages or wagons to raise their wheels from the ground, and for other purposes or uses in which a lever in eccentric connection with an adjustable lifting-block is employed; and it consists in certain novel constructions and combinations of parts, whereby simplicity and compactness are combined with great lifting-power and little weight, and which admits of the jack being used from either the front or back of a carriage-wheel without losing time to change or remove it, and which has a double or extended provision for adjusting the jack to work at different heights, substantially as hereinafter described.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 represents a side view of the jack with its parts in position before making the lift; Fig. 2, a front view of the same with the parts in like position; Fig. 3, a side view of the jack with its parts in position after making the lift, and Fig. 4 a side view of an upper adjustable portion of the standard in which the operating-lever has its fulcrum.

A is the base or foot of the jack, on which the standard B is erected. This standard is constructed with an upper extension composed of metal straps B' B', within which the operating-lever C, that may be of cam shape, has its fulcrum *b*. Said straps, which serve to hold the lever in place, are adjustable up or down the main portion of the standard B—as, for instance, by fitting them to slide on or over the exterior surfaces of the sides of the standard, subject to their guidance by pins or bolts *c*, which connect them, passing through a vertical slot, *d*, in the standard, and locking them, when adjusted, with the standard by a draw-pin or bolt, *e*, passed through the straps and through any one of a series of holes, *f*, arranged one above the other in the standard at one side of the slot *d*. This virtually makes

the standard an extensible one, consisting of a lower fixed portion, B, and upper extension one, B' B', by which the fulcrum *b* of the lever may be raised or lowered to suit different heights of work.

D is the notched block, that is placed under the axle of a carriage to raise it, or under any other object to be lifted, which block is fitted to slide up and down the forward side or edge of the standard, and is held in sliding connection therewith by free loop-straps *g g*, passing round the standard. This block is attached to the lever C by side straps or rods, E E, pivoted or bolted at their upper ends, as at *h*, to said lever on one side of or in eccentric relation with the fulcrum *b*, and connected at their lower ends with the block D by means of a pin or bolt, *i*, having a thumb-nut, *k*, and arranged to enter any one of a series of notches, *l*, placed one above the other in the portion or edge of the block which is next contiguous to the standard, that has a recess, *m*, in it for entering or slipping the bolt *i* when changing it from one notch *l* to another. This construction also provides for adjusting the lifting-block to give choice of heights from which to work said block, as in the case of other jacks; but when combined with the adjustable straps B' B' of the standard it forms a double or extended means of adjusting the jack to different heights of axle or work, or, in other words, gives an increased range of adjustment to the jack. The eccentric connection *h* of the straps E with the lever C is so arranged that when said lever is lowered, as in Fig. 3, said connection passes back of the fulcrum *b*, thus throwing it off the center and locking it in position to securely support the raised axle or work.

A very powerful lift may be obtained by the jack without any liability of its slipping or getting out of order.

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

1. In a lifting-jack, the combination, with the fixed portion B of the standard and lifting-block D, fitted to slide up and down thereon, of an upper standard-extension capable of adjustment up and down, the operating-lever C, having its fulcrum in said adjustable extension, and one or more straps or rods arranged

to connect the lifting-block with said lever, substantially as specified.

2. The combination, with the fixed portion B of the standard, of the lifting-block D, with its attached straps *g*, the extension-straps B' B', and means, as described, for guiding and adjusting them up and down the fixed portion B of the standard, the lever C, having its fulcrum *b* in said extension-straps, and the side straps, E E, arranged outside of the extension-straps and connecting the lifting-block with the lever by a pivot, *h*, in eccentric relation with the fulcrum *b*, and whereby in lowering

the lever it is passed back of said fulcrum, essentially as shown and described.

3. In a lifting-jack, the combination, with an adjustable or extension standard, of the lever for operating the lifting-block, and straps or cords in adjustable connection with said lever and block, whereby a double adjustment is obtained for raising or lowering the jack to its work, substantially as specified.

JOHN W. CLARKE.

Witnesses:

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A. F. MORSE.