

(No Model.)

J. W. CHURCHILL.

LIFTING JACK.

No. 347,570.

Patented Aug. 17, 1886.

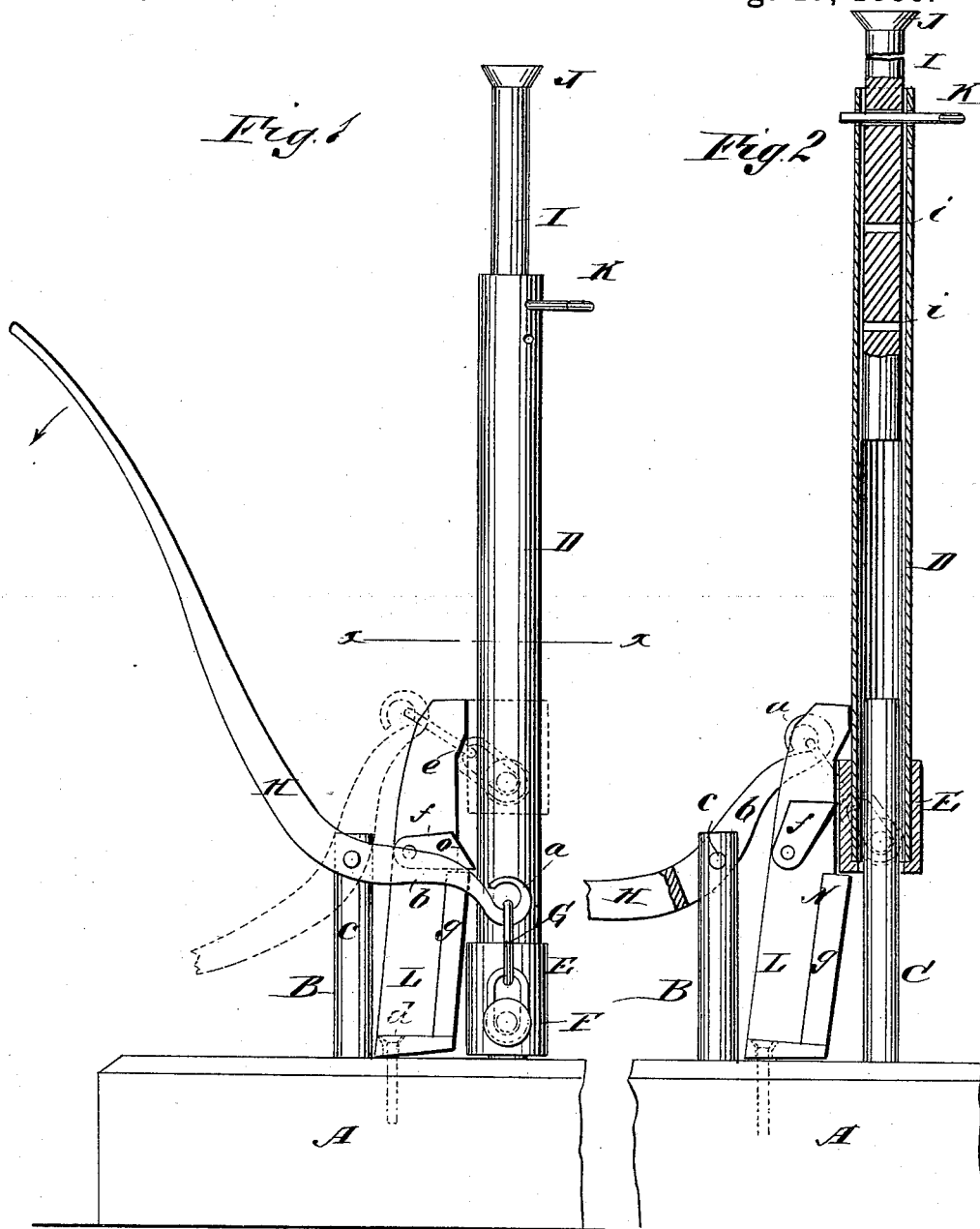
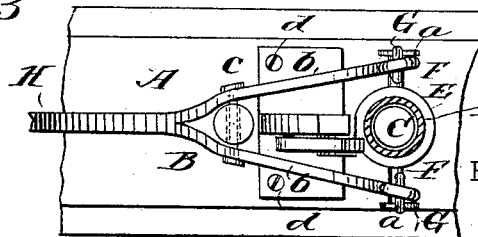


Fig. 3

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LIFTING-JACK.

SPECIFICATION forming part of Letters Patent No. 347,570, dated August 17, 1886.

Application filed March 23, 1886. Serial No. 196,252. (No model.)

To all whom it may concern:

Be it known that I, JOSHUA WILLIAMS CHURCHILL, of Clark's Green, in the county of Lackawanna and State of Pennsylvania, have invented a new and Improved Wagon-Jack, of which the following is a full, clear, and exact description.

My invention relates to an improved form of adjustable wagon-jack constructed so as to be semi-automatic in its operation, as will be hereinafter explained.

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

Figure 1 is a side view of my improved wagon-jack. Fig. 2 is a central vertical sectional view of the same, and Fig. 3 is a sectional plan view taken on line *xx*, of Fig. 1.

In constructing such a wagon-jack as is illustrated in the drawings above referred to I provide a heavy base-block, A, and to this block I rigidly secure two vertical standards, B and C, the standard C being somewhat higher than the standard B. A tube, D, is arranged about the standard C, being stepped in and rigidly fixed to a sleeve, E, formed with lugs or ears F F, and upon these ears there are arranged two chains, G G, the upper links of which are engaged by hooks *a a*, formed at the ends of the arms *b b* of the bifurcated lever H, which lever is pivotally connected to the standard B by means of a bolt or rivet, *c*.

In the upper end of the tube D there is arranged an adjustable rod, I, formed with an enlarged head, J, and provided with transverse apertures *i i*, similar apertures being formed in the tube D, in order that a pin, K, may be inserted, as best shown in Fig. 2, the idea being to make the rod I adjustable.

From the construction described it will be seen that by depressing the lever H in the direction of the arrow shown in connection therewith, the tube D, and with it the rod I, will be elevated; and in order that the parts may be held in the position shown in Fig. 2 I provide a catch-arm, L, that is loosely connected to the base A by screws or bolts *d d*, and at a proper distance above the said base A this arm L is formed with a shoulder, N. The inner face of the arm L normally rests against the sleeve E, and as the tube D is

raised to the position shown in Fig. 2 the arm L will drop forward, so that the shoulder N will fall in below the lower edge of the sleeve E, the lower face of the arm being beveled off to permit the movement described.

Near the upper end of the arm L there is an inclined face, *e*, and upon one side of the arm there is arranged a cam-faced guide, *f*, said guide being pivotally connected to the arm L, and arranged so that its lower edge will project outward beyond the face of the shoulder N when the parts are in the position shown in full lines in Fig. 1, a rib or lug, *g*, being formed on the side of the arm L in position to support the guide F, as is clearly shown in the drawings.

The operation of the jack is as follows: The rod I having been adjusted to the proper height, its head J is placed beneath the axle of the wagon, and the lever H is then thrown in the direction of the arrow, which movement of the lever will raise the tube D to the position shown in Fig. 2, the top of the sleeve E striking against the guide *f*, raising said guide so that when the tube has been sufficiently elevated the arm L will drop in toward the tube, so that the shoulder N will be beneath the sleeve E, after which, if the pressure upon the lever is relaxed, the weight of the wagon and the elevated portion of the jack will be sustained by the said shoulder N. When it is desired to lower the tube D, the lever H is depressed to the position shown in dotted lines in Fig. 1, and in being so moved will cause the sleeve E to strike against the inclined face *e* of the arm L, thus throwing the said arm L out from the sleeve E, so that the guide *f* will be free to drop to the position shown in Fig. 1, after which, when the lever H is allowed to return to the position shown in full lines in Fig. 1, the sleeve E will strike upon the cam-face *o* of the guide *f*, so that as the sleeve and tube are descending the arm L will be forced backward upon its loose connection with the base A and the parts will be free to return to the position shown in full lines in Fig. 1.

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

1. The combination, with a base, of standards B and C, tube D, mounted in a sleeve, E,

a lever, H, and connections between the said lever and sleeve, substantially as described.

2. The combination, with a base, of standards B and C, a bifurcated lever H, formed with hooked arms *b*, chains G G, sleeve E, formed with lugs F, tube D, mounted in the sleeve E, substantially as described.

3. In a wagon-jack, the combination, with a base, A, of standards B C, a bifurcated lever H, connected by chains G, with lugs formed on the sleeve E, a tube, D, arranged within said sleeve, the tube and sleeve being arranged on the standard C, an arm, L, loosely connected to the base A, and formed with a shoulder, N, substantially as described.

4. In a wagon-jack, the combination, with a

base, A, carrying standards B C, of a bifurcated lever, H, pivotally connected to the standard B, and connected by chains or links G with lugs formed on a sleeve, E, a tube, D, arranged within said sleeve, both sleeve and tube being mounted on the standard C, an arm, L, formed with a shoulder, N, and loosely connected to the base A, a cam-faced guide, *f*, pivotally connected to the arm L, which arm is formed with an inclined face, *e*, substantially as described.

JOSHUA WILLIAMS CHURCHILL.

Witnesses.

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