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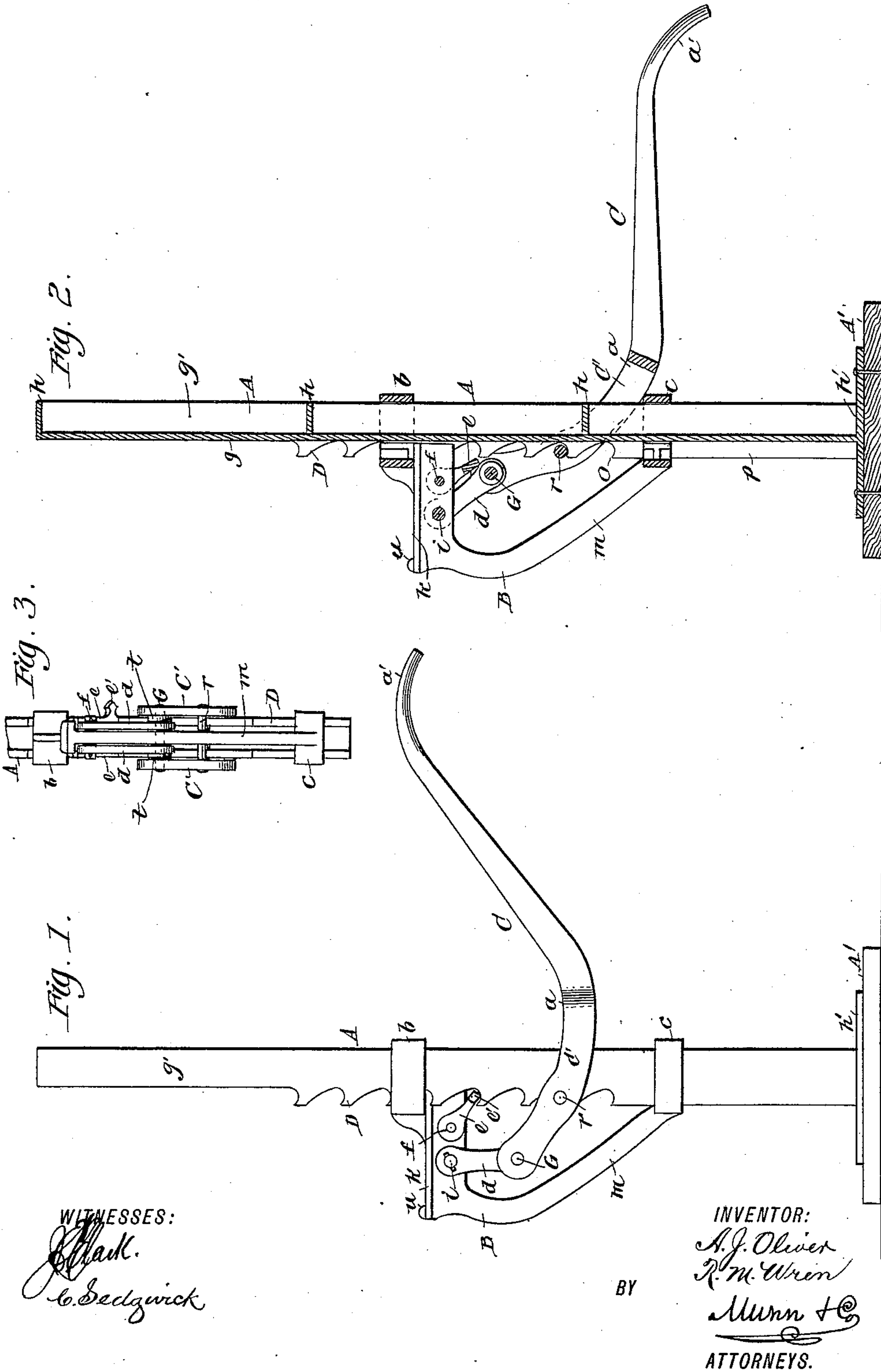
2 Sheets—Sheet 1.

A. J. OLIVER & R. M. WREN

WAGON JACK.

No. 428,350.

Patented May 20, 1890.



WITNESSES:

Chas. C. Sedgwick

INVENTOR:

A. J. Oliver
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BY

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(No Model.)

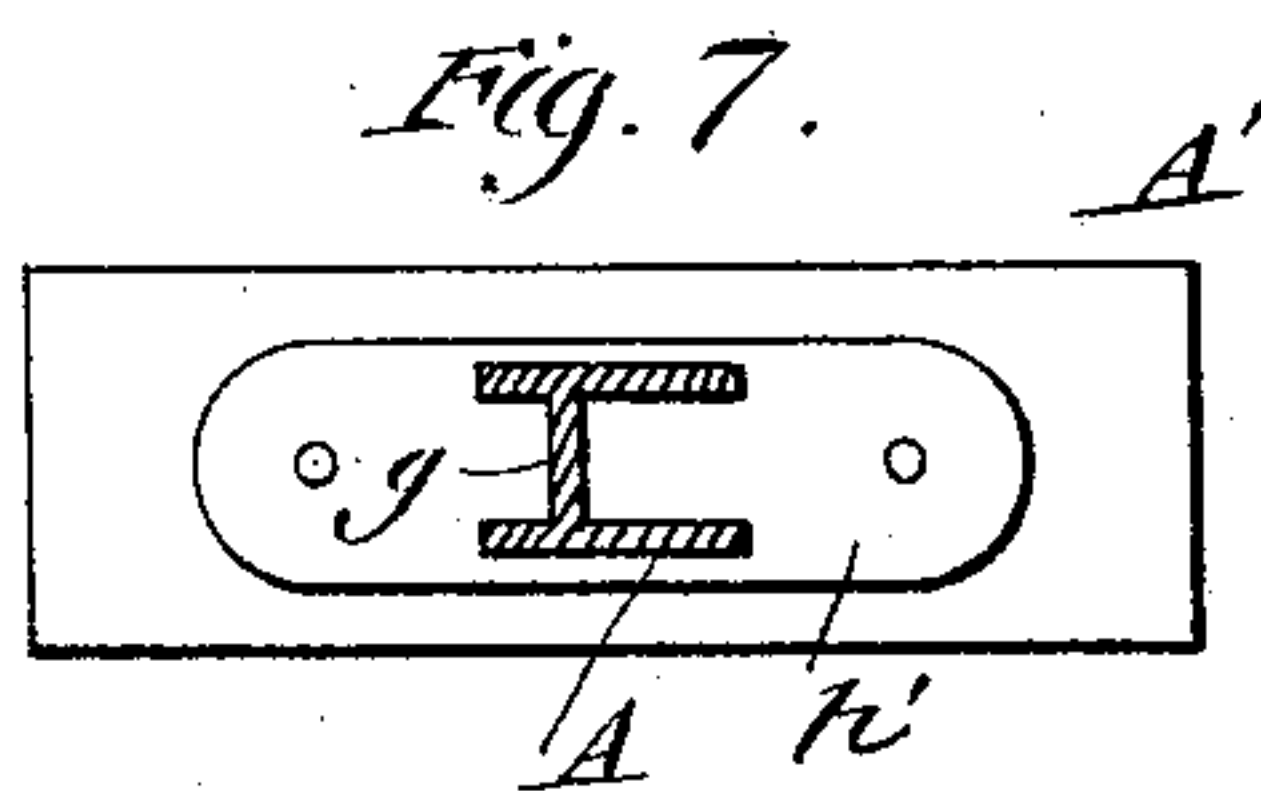
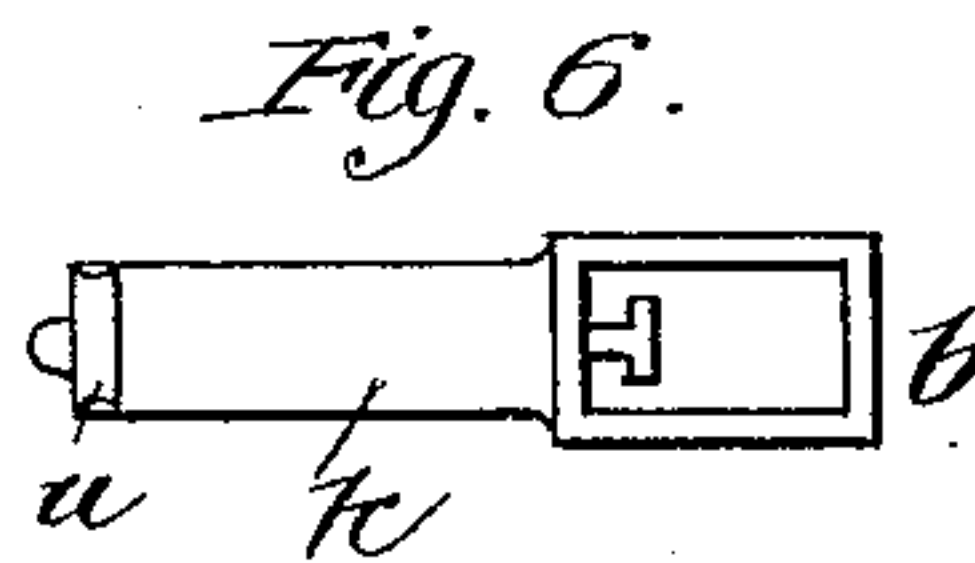
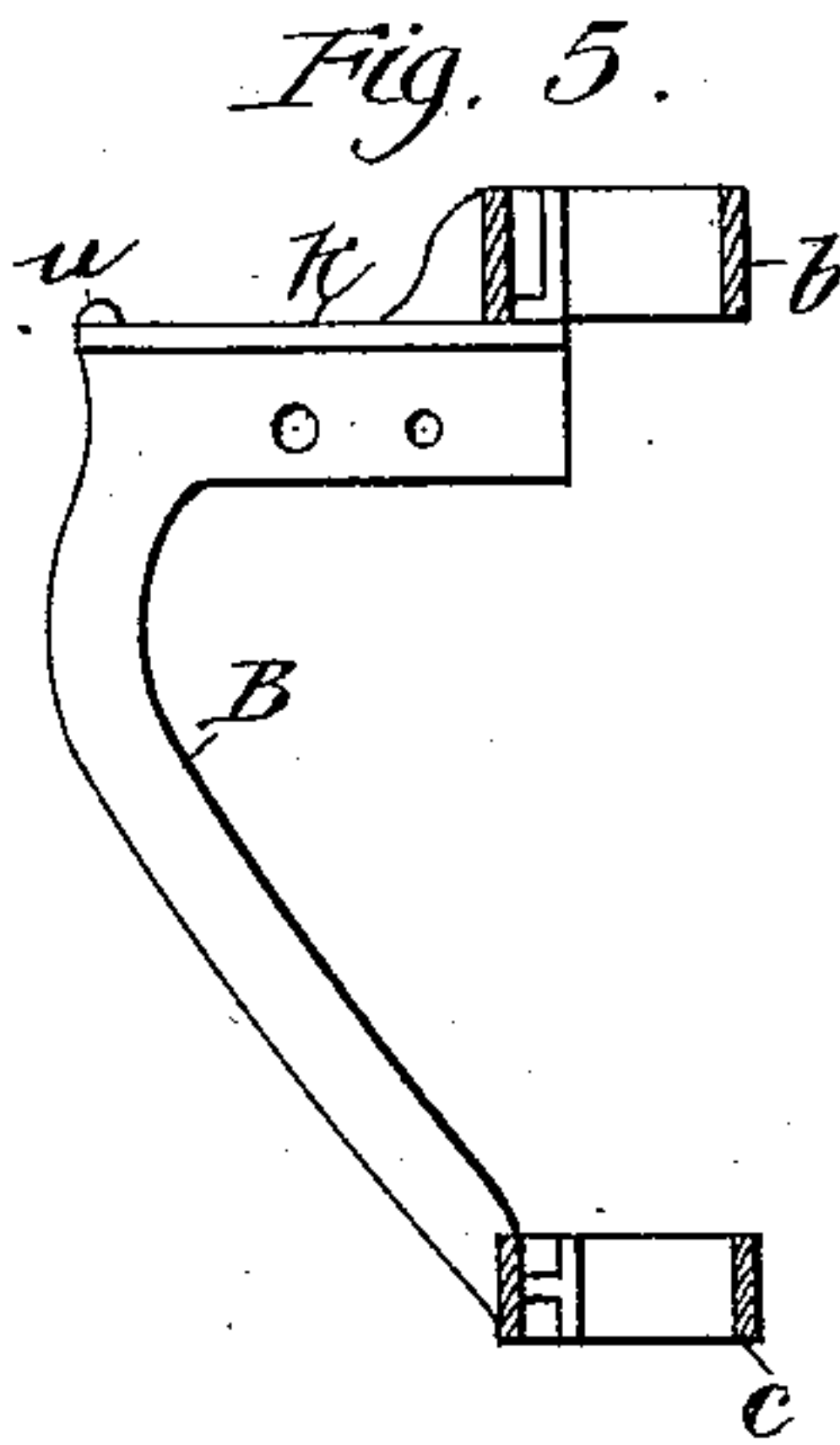
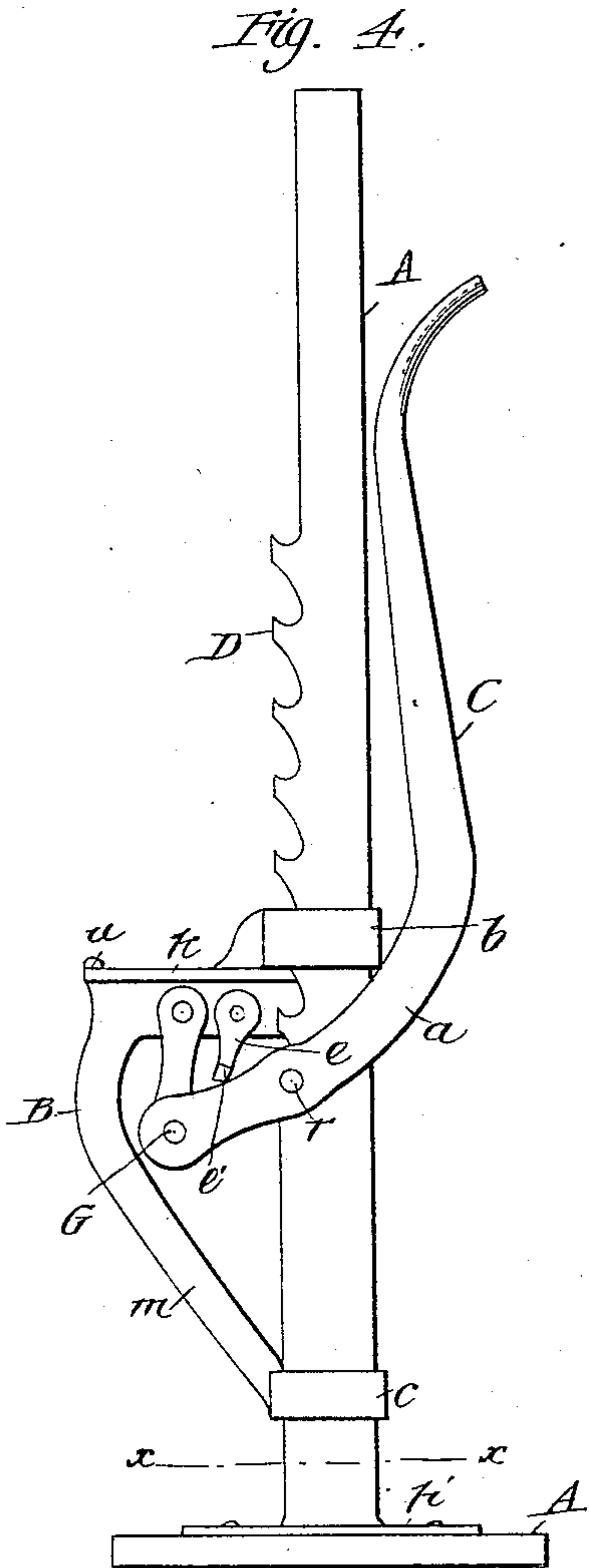
2 Sheets—Sheet 2.

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WAGON JACK.

No. 428,350.

Patented May 20, 1890.



WITNESSES:

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UNITED STATES PATENT OFFICE.

ANDREW J. OLIVER AND ROBERT M. WREN, OF OAKLAND, CALIFORNIA.

WAGON-JACK.

SPECIFICATION forming part of Letters Patent No. 428,350, dated May 20, 1890.

Application filed March 6, 1890. Serial No. 342,878. (No model.)

To all whom it may concern:

Be it known that we, ANDREW J. OLIVER and ROBERT M. WREN, of Oakland, in the county of Alameda and State of California, have invented a new and useful Improvement in Wagon-Jacks, of which the following is a full, clear, and exact description.

Our invention relates to an improvement in wagon-jacks; and it consists in the peculiar construction and combination of parts, which will be hereinafter specifically described, and indicated in the claims.

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 elevation in perspective. Fig. 2 is a side elevation in section. Fig. 3 is a front elevation of the main portion of the device. Fig. 4 is a side elevation of the jack in lowered adjustment. Fig. 5 is a vertical section of the bracket-frame of the jack detached from other parts. Fig. 6 is a top plan view of the bracket-frame, and Fig. 7 is a plan view in section of the device, taken on the line *xx* of Fig. 4.

A is the standard of the jack. It consists of a hollow three-walled structure, there being two parallel side walls *g'* and a front wall *g*. The web-pieces *h* are cast integral with the walls mentioned, and serve to stiffen the whole, affording a light and very strong metallic standard. The lower web or foot piece *h'* is extended to afford a foot whereby the standard is attached to the base. The standard A is mounted upon a base-board A', preferably made of hard wood, rectangular in form and of suitable dimensions to secure stability and avoid excessive weight, the foot-piece *h'* being fastened thereto by bolts or other means.

From the front wall *g* a series of hook-shaped teeth D are projected. Two sets of these teeth are located oppositely upon the side edges of the front wall, said teeth being evenly spaced apart and directly paired for the reception of another piece of the jack, as will be further explained.

The bracket-frame B, which is designed to sustain the load lifted by the jack, is formed essentially as shown, having a horizontal foot-plate K, on which a rectangular sleeve *b*

is formed, that is of a size in its orifice to fit loosely upon the standard A, and thus be free to slide on it. From the outer edge portion of the foot-plate K an arm *m* depends and curves inwardly, terminating at its lower end in a sleeve *c*, which is also adapted to fit loosely and slide upon the standard.

It should be stated that upon the standard A, from the point *o* below the two lower teeth D, two parallel projecting flanges *p* extend downwardly, said flanges adding strength to the lower portion of the standard, where it is needed to prevent lateral deflection of the same.

The lever C of the jack is curved at its outer end *a'* to afford a proper hand-hold while operating the same. At *a* the lever is forked, its parallel limbs C' being separated sufficiently to loosely embrace the side walls of the standard A. A cross-bar *r* is inserted in perforations formed in the links C' at such a point as to allow said cross-bar to engage the hook-shaped teeth D when the lever C is properly adjusted. Perforations that align with each other are formed in the links C' near their ends for the reception of another rounded cross-bar G, which latter receives the perforated lower ends of the links *d*, that extend upwardly and are pivoted upon opposite sides of the foot-plate K at *i*. Spacing-washers *t* are introduced between and on each side of the lower ends of the links to retain them in operative position with regard to the lever C and bracket-frame B. Upon the foot-plate K a pendent locking-dog *e* is pivoted at *f*, said dog being forked to provide two laterally-projecting ears, which embrace the foot-plate loosely, so that the pivot-bolt *f*, which holds the dog in place, allows it to swing freely toward the teeth D of the standard A and interlock therewith when required.

To prevent the axle of a vehicle from slipping off of the foot-plate K, a rib *u* is formed on its front edge.

In operation the bracket-frame B is lowered and the device placed in position, with the foot-plate K transversely located beneath the axle of the vehicle, the lever C being elevated, as shown in Fig. 4. The bracket-frame is now elevated sufficiently to engage its foot-plate with the axle. (Not shown.) The cross-bar *r* should be made to engage a pair of

teeth D and the lever C depressed, as shown in Fig. 2. When the parts are in this position, the cross-bar G will be thrown inward toward the standard in such a relative position with regard to the pivot-bolt *i* and cross-bar *r* that a lock is produced, which weight on the foot-plate renders more secure. If a higher elevation of the axle is required, the dog *e* is vibrated manually by means of its projecting thumb-piece *e'*, (shown in Fig. 3,) and made to engage the teeth D nearest to it. The lever C is lowered slightly, throwing the weight upon the dog and standard engaged by it. The lever C may now be elevated suitably to effect a proper elevation when it is depressed, it being important that said lever be depressed fully to lock the parts, as shown in Fig. 2 and previously explained. A continuation of the operation will elevate the bracket-frame B with any weight thrown upon its foot-plate as high as the capacity of the jack will permit. In lowering the axle to remove the jack a reversal of operation is necessary, and as this is obvious it need not be explained.

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

1. In a wagon-jack, the combination, with a standard having three walls and two rows of hook-shaped teeth formed on its front face, and a base-piece, of a forked lever, a bracket-frame adapted to have sliding engagement with the standard, a cross-bar which can rest in the hooked teeth of the standard, two parallel links, and a dog pivoted to the foot-plate

of the bracket-frame, substantially as set forth.

2. In a wagon-jack, the combination, with a standard having three walls which are stiffened by web pieces, two rows of hook-shaped teeth which project from its front face in opposite pairs, and a base-piece, of a bracket-frame, sleeves attached to the bracket-frame and adapted to slide on the standards, a forked lever, a cross-bar, two pivoted parallel links loosely connected to the ends of the forked lever, and a dog which can be made to mesh with two opposite teeth of the standard, substantially as set forth.

3. In a wagon-jack, the combination, with a standard having three walls which are stiffened by transverse webs, two rows of hook-shaped teeth arranged vertically on the front of the standard and projecting therefrom in opposite pairs, and a base-piece, of a bracket-frame having attached sleeves which slide on the standard, a forked lever, a cross-bar located transversely between the limbs of the forked lever and adapted to engage the hooked teeth of the standard, two links pivoted to the limbs of the forked lever and also to the bracket-frame below its foot-plate, these parts being so relatively connected as to cause the cross-bar G to lock the bracket-frame B from depression when the lever C is in lowered adjustment, substantially as set forth.

ANDREW J. OLIVER.
ROBERT M. WREN.

Witnesses:

CHAS. O'HARE,
A. W. P. LADD.