

(No Model.)

W. H. GRAY.

WAGON JACK.

No. 301,229.

Patented July 1, 1884.

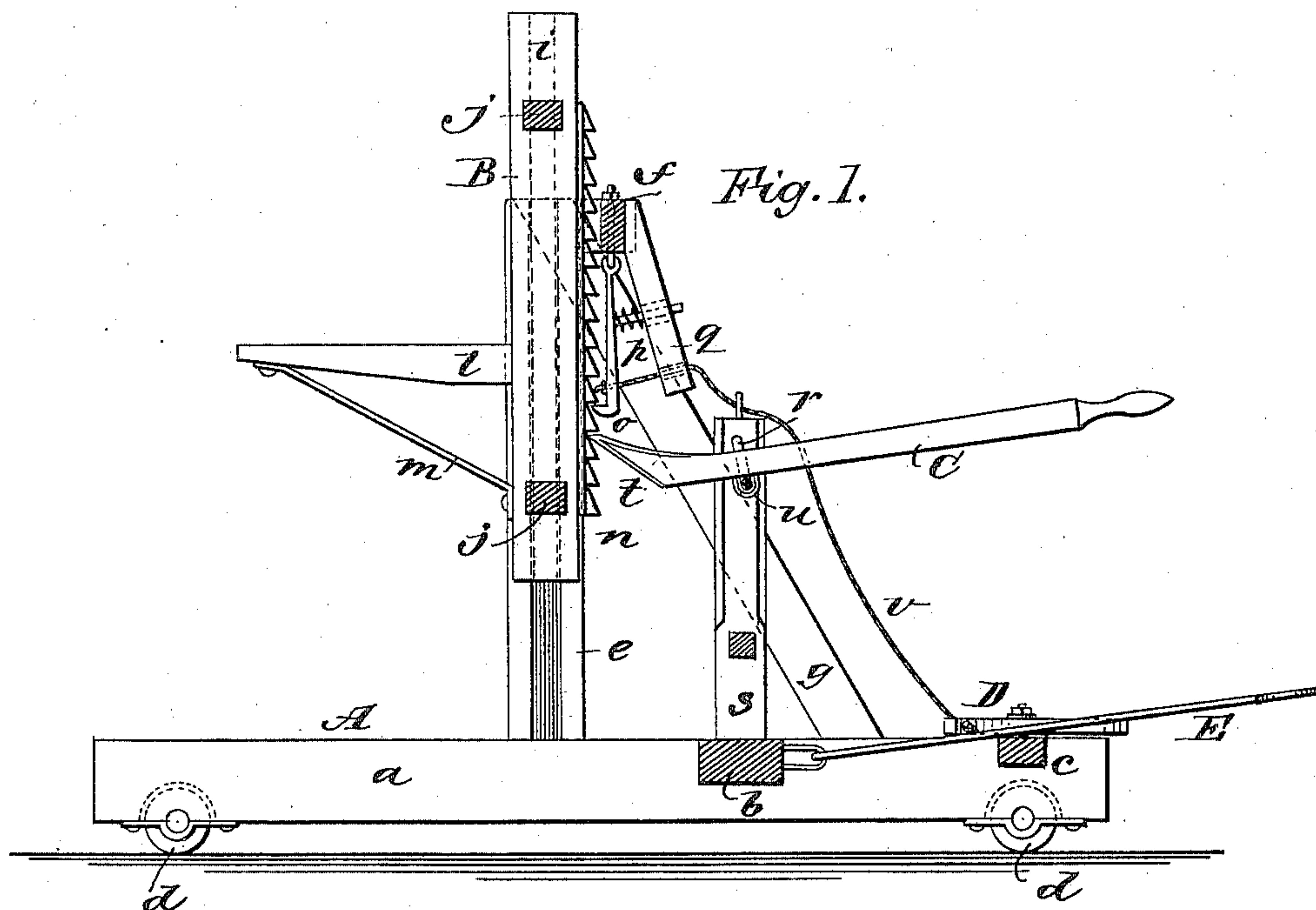
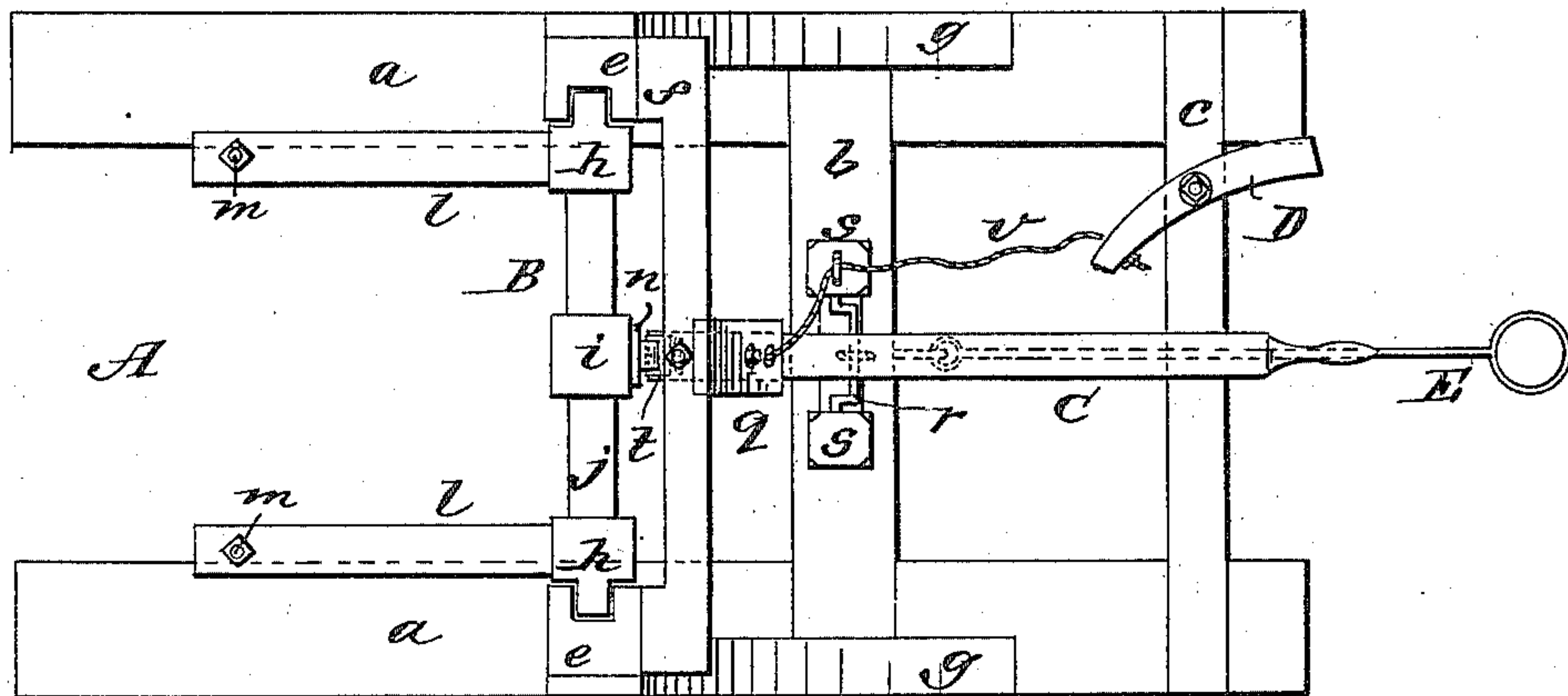


Fig. 2.



WITNESSES:

*Wm. Beyer*  
*C. Sedgwick*

INVENTOR:

*W. H. Gray*  
BY *Munn & Co*  
ATTORNEYS.

# UNITED STATES PATENT OFFICE.

WILLIAM H. GRAY, OF NEAPOLIS, OHIO.

## WAGON-JACK.

SPECIFICATION forming part of Letters Patent No. 301,229, dated July 1, 1884.

Application filed April 2, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM H. GRAY, of Neapolis, county of Lucas, Ohio, have invented a new and Improved Wagon-Jack, of which the following is a full, clear, and exact description.

The object of my invention is to provide a wagon-jack for lifting racks and wagon-boxes from the running-gear of wagons; and it consists of a horizontal bed-frame and vertical guides, in combination with a vertically-sliding frame carrying two brackets for engaging the rack or wagon-box, and in a pawl-and-ratchet mechanism for raising the said sliding frame and maintaining it in an elevated position.

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 both figures.

Figure 1 is a side sectional elevation of my improved jack, and Fig. 2 is a plan view.

The bed-frame A, composed of side bars *a* and cross-bars *b c*, is mounted upon rollers *d*, for convenience of moving. At or near the centers of the side bars *a* are erected two grooved posts, *e*, connected together at the top by the cross-bar *f*, and stiffened by braces *g*, connected with the bed-frame. A frame, B, composed of tongued side bars *h*, adapted to the grooved posts *e*, center bars, *i*, and cross-bars *j*, is placed between the posts *e*, and carries two brackets, *l*, projecting from the side bars *h* and stiffened by braces *m*. On the opposite side of the frame B a ratchet-bar, *n*, is secured to the center bar, *i*, of the frame B, and a hooked pawl, *o*, pivoted to the cross-bar *f*, is pressed forward into engagement with the ratchet-bar *n* by a spiral spring, *p*, abutting against an arm, *q*, extending downward from the cross-bar *f*. A crank-shaft, *r*, is journaled in posts *s*, secured to the cross-bar *b*, and supports a lever, C, whose shorter arm is curved upward, and is provided with an iron shoe, *t*, capable of engaging the ratchet-bar *n*. The lever C is secured to the crank-

shaft *r* by a staple, *u*. A foot-lever, D, pivoted to the bar *c*, is connected by a cord, *v*, extending through a staple in the top of one of the posts *s* and through a hole in the arm *q*, with the hooked pawl *o*. A draw-rod, E, is connected by a staple with the cross-bar *b*, and is used in pulling the jack from one place to another.

The jack is moved forward so as to bring the brackets *l* under the object to be lifted when the shoe *t* of the lever C is brought into engagement with the ratchet-bar *n*. A downward pressure of the lever C raises the ratchet-bar and frame B, connected therewith, and the hooked pawl *o* retains the frame B and its load while the lever C is moved to secure a new bite on the ratchet-bar *n*. The crank-shaft *r* admits of the necessary longitudinal motion of the lever C. When it is desired to lower the frame B, the lever C is pressed downward, so as to release the hooked pawl *o*, when the said hooked pawl may be withdrawn from the ratchet by the pressure of the foot against the lever D.

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

1. In a wagon-jack, the combination, with the vertically-sliding frame B, of brackets *l* and pawl-and-ratchet mechanism for raising the said frame, as described.

2. The combination, with the vertically-sliding frame B, provided with a ratchet-bar, *n*, of the lever C and crank-shaft *r*, as described.

3. The combination, with the grooved posts *e*, connected by the cross-bar *f*, provided with the arm *q*, and the sliding frame B, provided with the rack *n*, of the hooked pawl *o*, pivoted to the said cross-bar, the spring *p*, interposed between the arm *q* and pawl *o*, the cord *v*, and the foot-lever D, substantially as herein shown and described.

WILLIAM H. GRAY.

Witnesses:

T. P. MEREDITH,  
J. H. METKEFF.