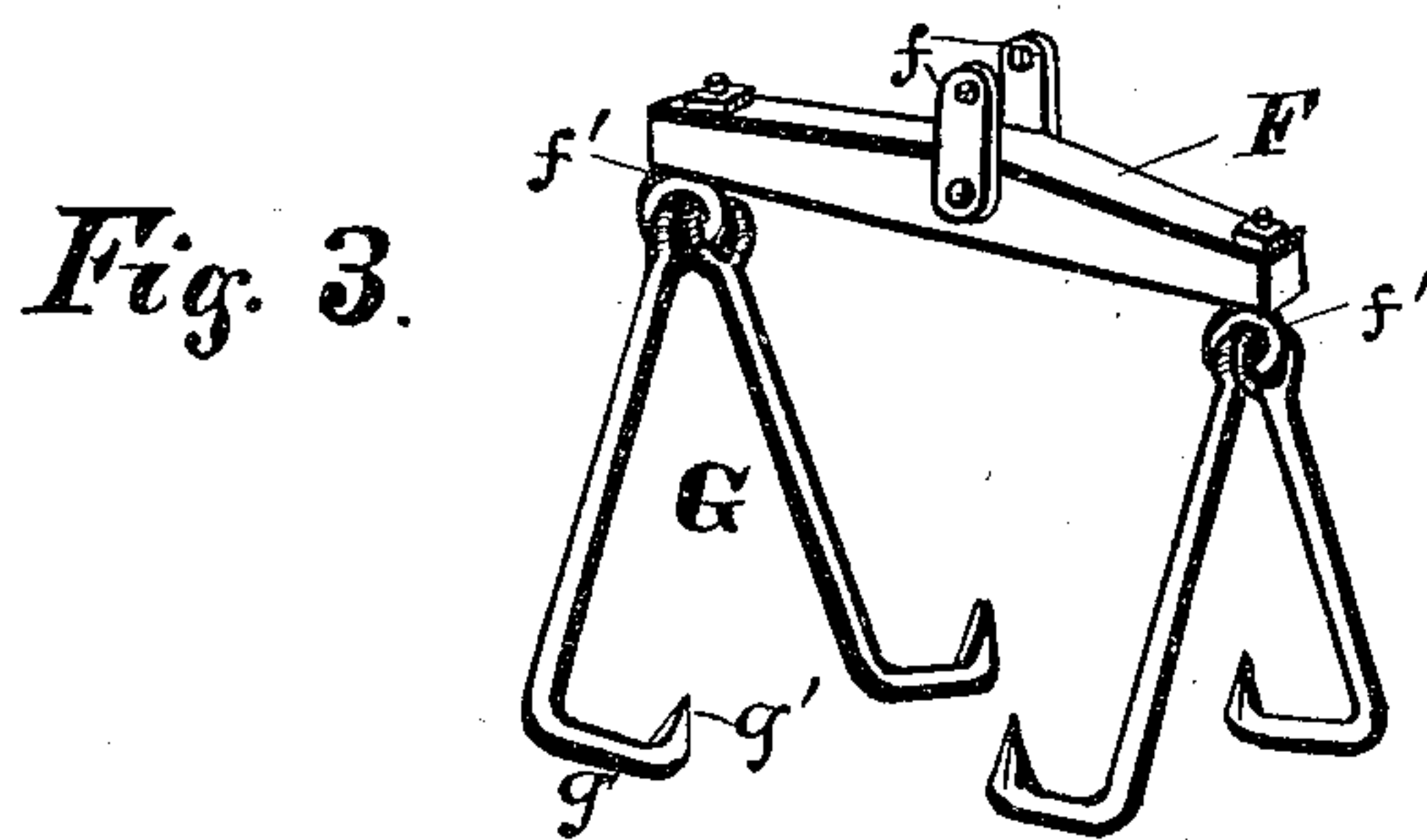
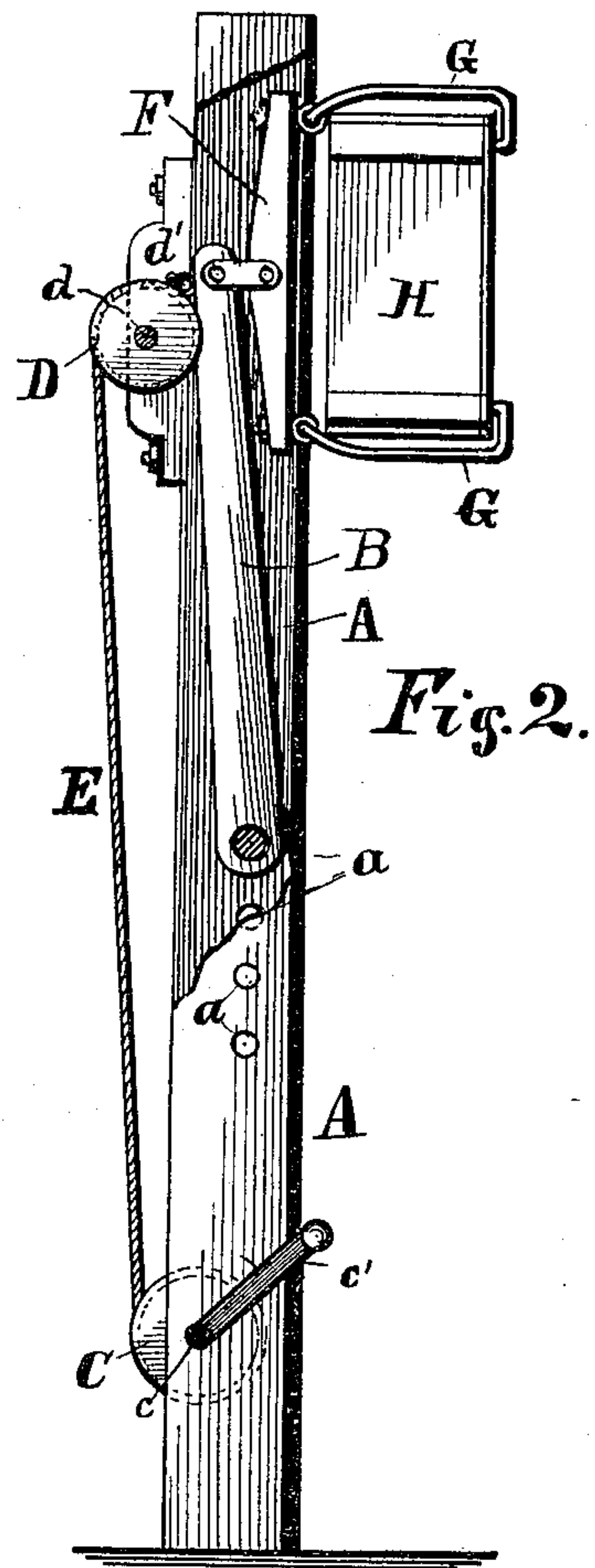
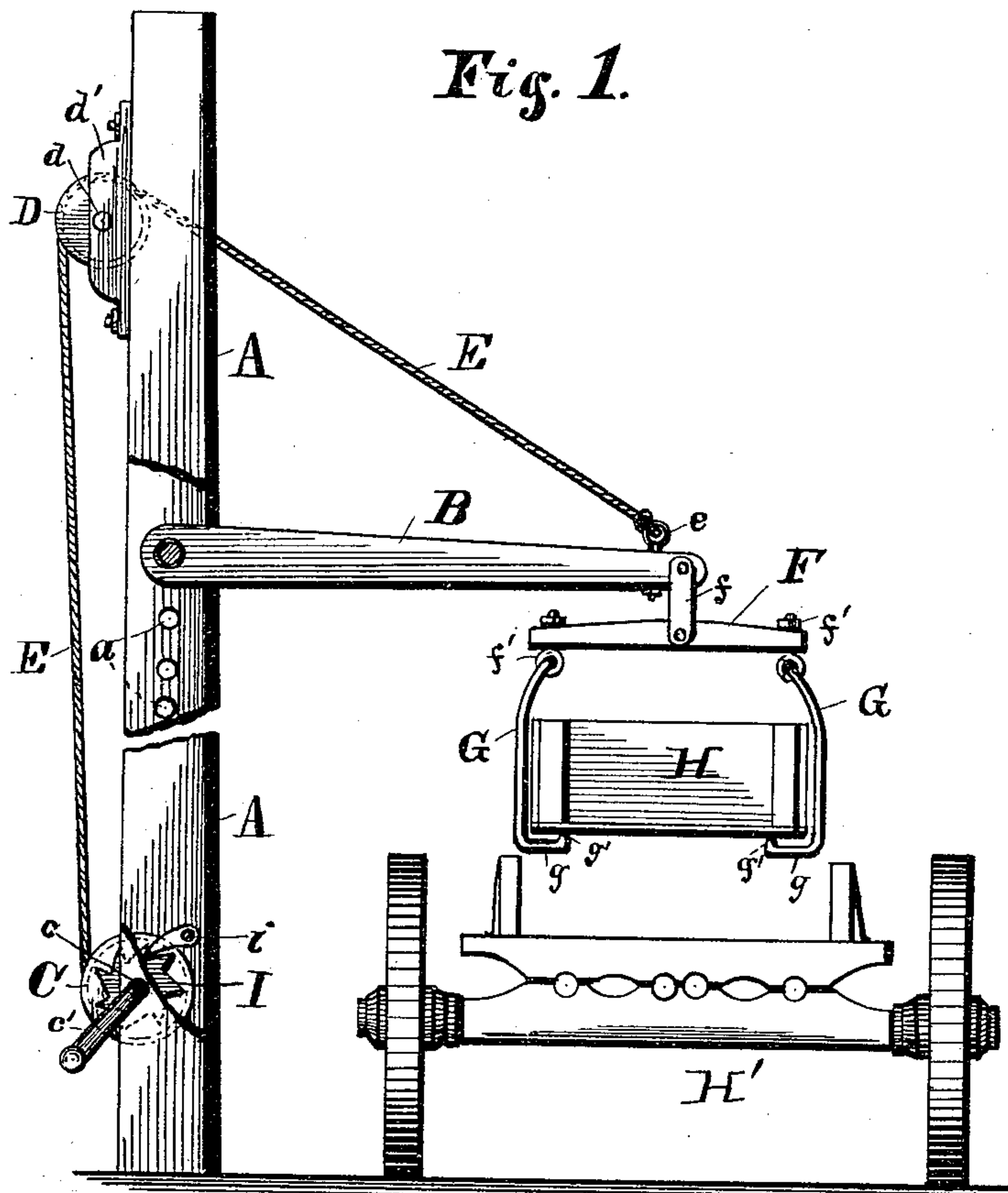


(No Model.)

S. MÜTTI.  
WAGON BODY LIFTER.

No. 335,233.

Patented Feb. 2, 1886.



WITNESSES  
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# UNITED STATES PATENT OFFICE.

SAMUEL MÜTTI, OF MISHAWAKA, INDIANA.

## WAGON-BODY LIFTER.

SPECIFICATION forming part of Letters Patent No. 335,233, dated February 2, 1886.

Application filed September 30, 1885. Serial No. 178,669. (No model.)

*To all whom it may concern:*

Be it known that I, SAMUEL MÜTTI, of Mishawaka, in the county of St. Joseph and State of Indiana, have invented certain new and useful Improvements in Wagon-Body Lifters; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification, in which—

Figure 1 is a side elevation of my improved wagon-body lifter and holder. Fig. 2 is a similar view, partly in section, showing the body raised. Fig. 3 is a detail.

This invention relates to improvements in wagon-body lifters, its main object being to raise and hold the wagon-body against one or more posts, so that it may not be swung and injured by the wind or other disturbing cause; and it consists in the construction and novel arrangement of parts hereinafter explained, and pointed out in the appended claims.

Referring to the accompanying drawings by letter, A A designate two vertical posts situated side by side, and provided at a proper point with the opposite series of adjusting-holes *a a*.

B is a lever-arm having its inner end pivoted between the posts A in any two opposite holes *a a* by a proper pin, and therefore adjustable upon the said posts. The holes *a* are at a convenient height to allow the grappling and lifting mechanism attached to the outer end of the lever-arm, and hereinafter described, to reach the wagon-body.

C is a drum secured between the posts A to a shaft which turns in bearings in said post, and is rotated by means of a crank-handle, *c*, on one of its outer ends. The said drum is situated at a suitable height to be easily operated by a person standing on the ground.

D is a pulley secured between the posts to a shaft, *d*, turning in bearings made in brackets *d'*, firmly fixed to the edges of the posts, as shown. The pulley is situated a suitable distance above the arm B.

E is a rope which has its lower end secured to the drum, and passes thence over the pulley, having its upper end secured to the eye of a ring-bolt, *e*, screwed into the upper edge

of the lever-arm near the outer end of the same.

F is a beam or yoke lying in the same plane as the lever-arm, and having secured centrally upon each of its sides the vertical links *f*, the upper ends of which pivot on the outer ends of the lever-arm by means of a rod passing through proper openings in said ends. Through each end of the beam F passes vertically a ring-bolt, *f'*, having its eye downward, and a nut on its upper end to hold it firmly in place.

G is a double-armed grappling-hook bent into V shape with the bend resting in the eye of the ring-bolt *f'*. The lower part of each arm *g* of the grappling-hooks is bent inward at right angles, and ends in an upwardly-turned point, *g'*, as shown. These grappling-hooks are intended to stand on each side of the wagon-body to be lifted, the points *g'* engaging the lower surface of the floor of the same, as shown.

H, Fig. 1, represents a wagon-body partially lifted from the running-gear H', and the same letter, Fig. 2, represents the body drawn up and held against the posts A.

By using brackets provided with bearings for one end of the shafts *d* and *c* but one post A will be necessary; but the described construction is preferable, as it gives greater strength and security.

The mode of operation is apparent from the drawings and the foregoing description, a ratchet-wheel, I, secured to the end of the drum, and a pawl, *i*, pivoted on the surface of one of the posts A, being used to prevent the arm B from falling when the wagon-body is brought up against the posts.

Having described my invention, I claim—

1. The combination of the vertical posts, the lever-arm having its inner end pivoted thereon, the drum and pulley, each secured to shafts turning in bearings in or secured to the vertical posts, the rope having one end secured to the drum passing over the pulley, and with the other end secured to the lever-arm, and mechanism, substantially as described, attached to the outer end of the lever-arm, and adapted to grapple and hold a wagon-body while being lifted, substantially as specified.



2. The combination of the vertical posts, the lever-arm having its inner end pivoted thereon, the grappling device composed of the V-shaped grappling-hooks G, provided with the points  $g'$ , the beam F, having said hooks swung to its ends, and the links  $f$ , pivoted on the outer end of the lever-arm, and lifting mechanism, substantially as described, attached to the vertical posts and adapted to lift and hold the lever-arm with the wagon-body against the vertical posts, substantially as specified.

3. In a wagon-body lifter, the combination of the vertical posts A, the pulleys D, secured to a shaft turning in bearings secured to the posts A, the drum C, secured to a shaft having bearings in said posts and having the ratchet-wheel I on one end, and the pawl  $i$  pivoted on

a post A and commanding the ratchet-wheel, with the arm B, having its inner end pivoted to and between the posts A, and made adjustable thereon by means of the holes  $a$  and a proper pin, and the grappling-device pivoted to the outer end of the lever-arm B, and composed of the links  $f$ , beam F, and grappling-hooks G, all constructed and arranged substantially as and for the purpose specified.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

SAMUEL MÜTTI.

Witnesses:

JAMES DU SHANE,  
CHAS. W. WILEY.