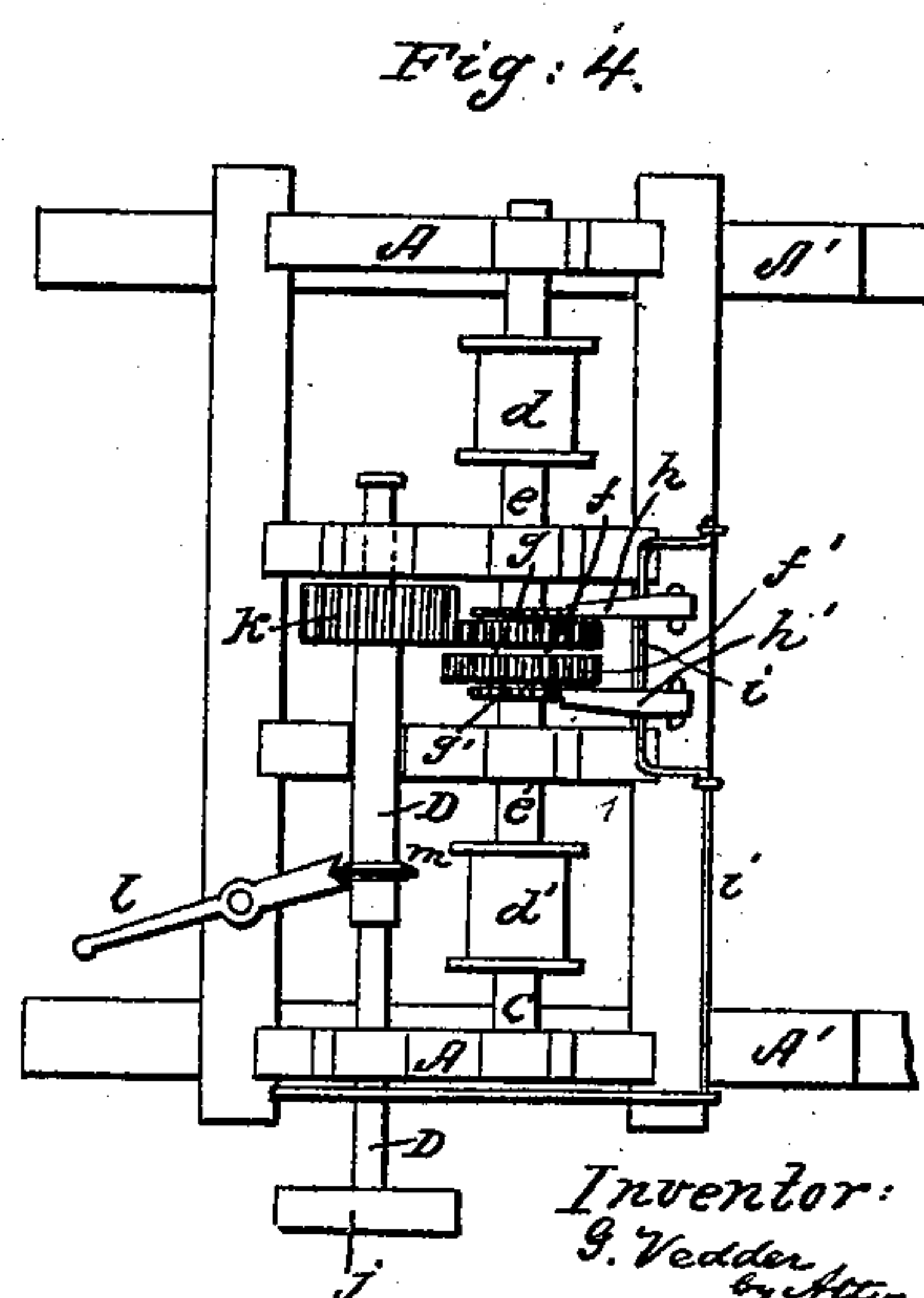
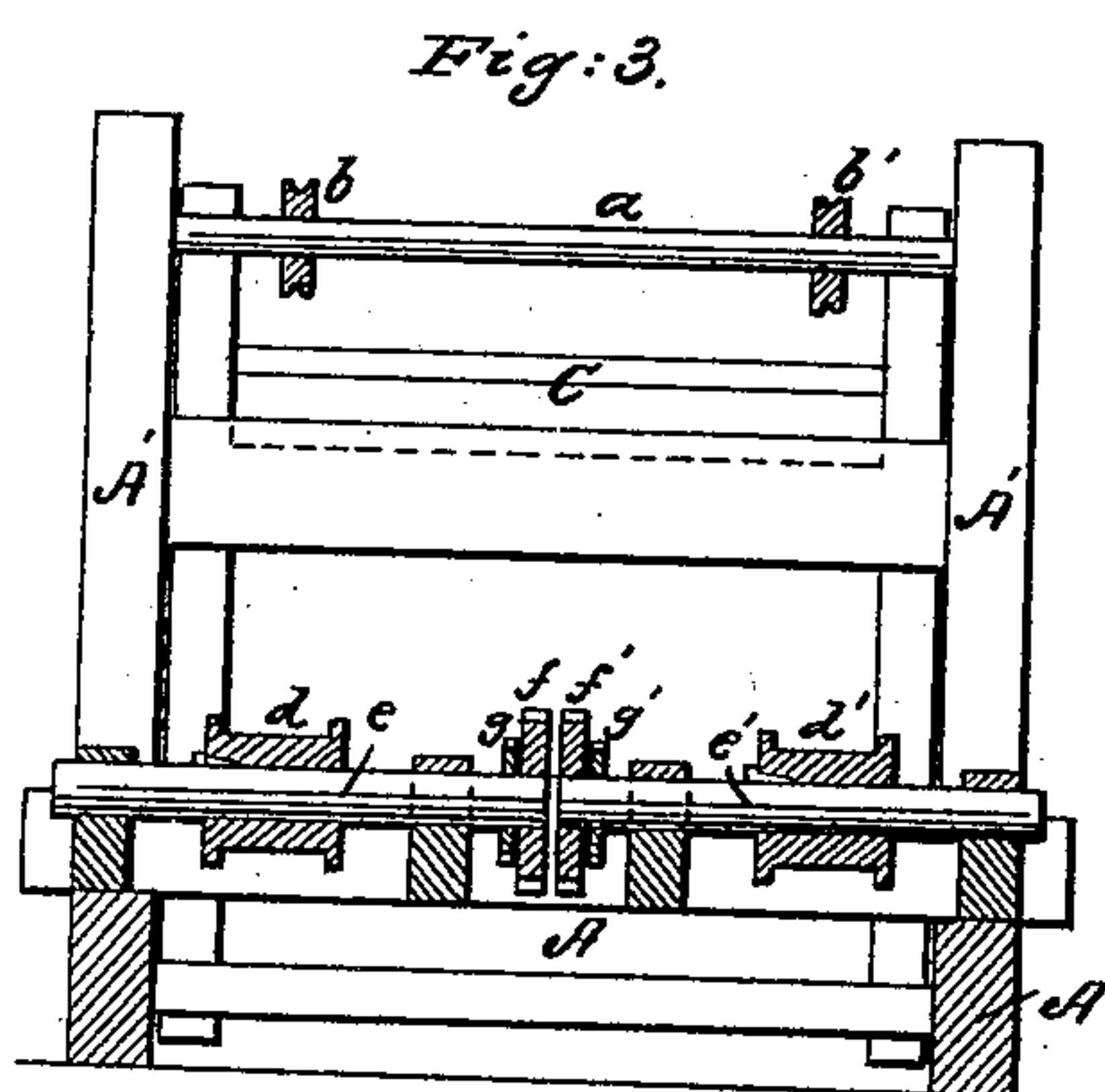
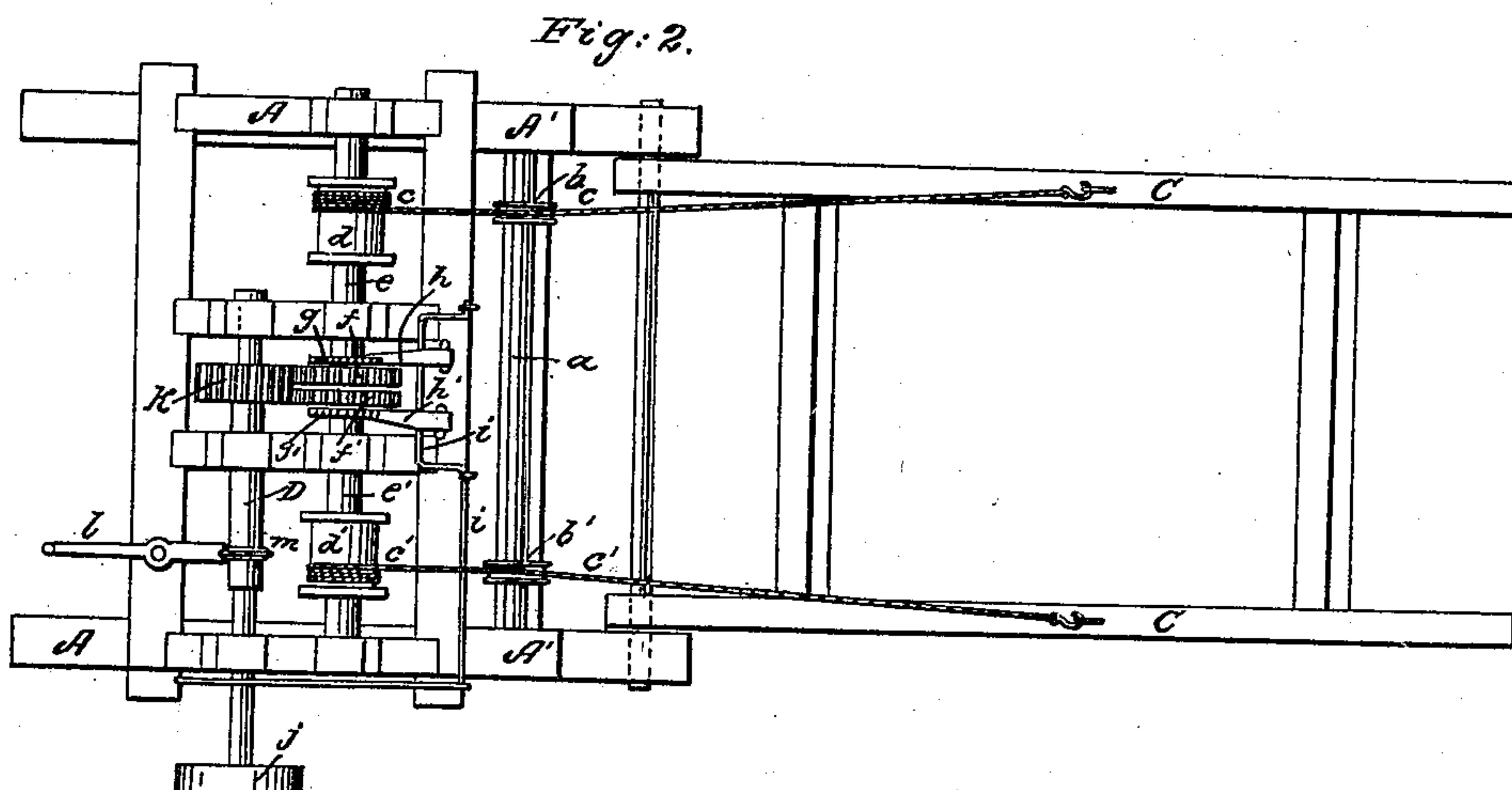
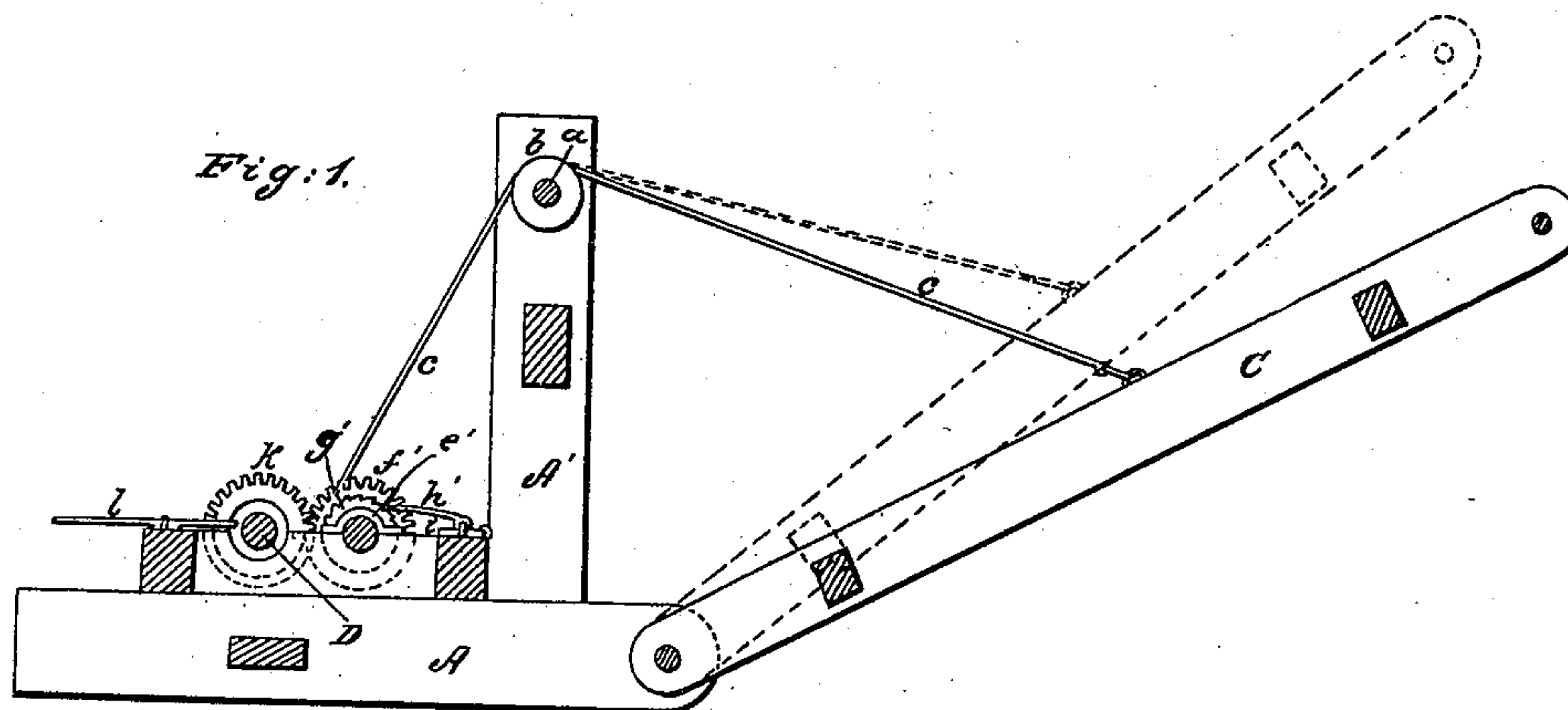


G. VEDDER.

Device for Elevating Straw from Thrashing Machines.

No. 54,449.

Patented May 1, 1866.



Witnesses:
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UNITED STATES PATENT OFFICE.

GERRET VEDDER, OF BATTLE CREEK, MICHIGAN.

IMPROVEMENT IN DEVICES FOR ELEVATING STRAW FROM THRASHING-MACHINES.

Specification forming part of Letters Patent No. 54,449, dated May 1, 1866.

To all whom it may concern:

Be it known that I, GERRET VEDDER, of Battle Creek, in the county of Calhoun and State of Michigan, have invented a new and Improved Hoisting Device for the Straw-Carriers of Thrashing-Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a vertical section taken longitudinally through the improved hoisting device. Fig. 2 is a plan view of the device. Fig. 3 is a vertical transverse section through the device, taken in the plane indicated by red lines *x x*, Fig. 2. Fig. 4 is a plan view, showing the driving spur-wheel and its shaft in a different position from that shown in Fig. 2.

Similar letters of reference indicate corresponding parts in the several figures.

This invention relates to a device for elevating or depressing the upper end of the straw-carrier of a thrashing-machine, and for keeping such straw carrier or stacker level at whatever height the latter may be adjusted.

My invention is intended to be applied to any of the well-known thrashing-machines which are provided with endless carriers for conducting the straw from the thrasher and depositing it upon a stack at some distance from the machine.

My invention provides for raising the outer or discharging end of the stacker as the height of the stack is increased, and at the same time supporting such stacker in the desired position, as will be hereinafter described.

To enable others skilled in the art to understand my invention, I will describe its construction and operation.

My invention is applicable to any portion of a thrashing-machine where it can be most conveniently used. It can be arranged on top, at the bottom, or at either end of a thrashing-machine, or it may be spiked to the ground alongside of any thrashing-machine employing an adjustable straw-stacker.

In the accompanying drawings, A represents a horizontal frame having two posts, A' A', projecting perpendicularly from its side beams and carrying a horizontal transverse rod, *a*, near their upper ends. Upon this rod *a* two grooved pulleys, *b b'*, are loosely placed,

over which pass ropes or chains *c c'*, that connect with the hinged section C of the straw-carrier. The opposite ends of the ropes or chains *c c'* are attached to flanged drums *d d'*, which drums are secured to horizontal transverse shafts *e e'*, that have their bearings in the frame A, and that are arranged so that their axes coincide with each other.

The shafts *e e'* carry on their inner ends spur-wheels *f f'*, and also ratchet-wheels *g g'*, which latter are acted upon so as to stop either one or both of the shafts *e e'* by means of pawls *h h'*. (Shown clearly in Figs. 2 and 4.) The pawls *h h'* can both be disengaged from their ratchet-wheels by means of a lifter, *i*, having a lever-handle applied on one end.

D represents a horizontal transverse shaft, which has its bearings on the frame A in a line parallel to the axes of the shafts *e e'*, and which is allowed to have an endwise movement besides a rotary movement. This shaft D carries on its outer end a crank or hand wheel, *j*, by which it is turned or moved in a direction with its length, and it also carries a large spur-wheel, *k*, which is of sufficient width to engage with both of the spur-wheels *f f'* and to turn these wheels when in the position shown in Fig. 1.

A lever, *l*, which is pivoted to the frame A, and constructed with a forked end, engages with a fixed disk, *m*, on the shaft D, so that by vibrating said lever the shaft D can be moved in a direction with its length and the spur-wheel *k* thus made to engage with either one or both of the wheels *f f'* on the drum-shafts *e e'*.

The operation of my invention is as follows: As the straw is delivered from the thrashing-machine stacker upon the stack it is frequently necessary to elevate the outer end of the stacker, so as to build up the stack beneath its outer end. This is done by adjusting the shaft D so as to cause its spur-wheel to act upon both shafts *e e'* of the drums *d d'* simultaneously. Should the stacker sag on one side, the wheel *k* is adjusted so as to engage with that wheel, *f* or *f'*, which is on the sagging side of the stacker; then by turning the shaft D the stacker can be adjusted in a level position. Thus the stacker can be raised to any desired height, supported, and adjusted in a level position by simply moving the shaft D.

By disengaging the pawls *h h'* from their respective ratchet-wheels the stacker can be lowered again to any desired position.

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

1. The means, substantially as herein described and shown, for leveling the straw carrier or stacker of thrashing-machines.

2. The combination of the spur-wheels *f f'*

and ratchet-wheels *g g'* with the adjustable spur-wheel *k* and the winding-drums *d d'*, separated and independent, arranged and operating in conjunction with an adjustable straw-stacker, substantially as described.

GERRET VEDDER.

Witnesses:

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