

(No Model.)

J. T. FENTON.

GRAIN SEPARATOR FOR THRASHERS.

No. 388,483.

Patented Aug. 28, 1888.

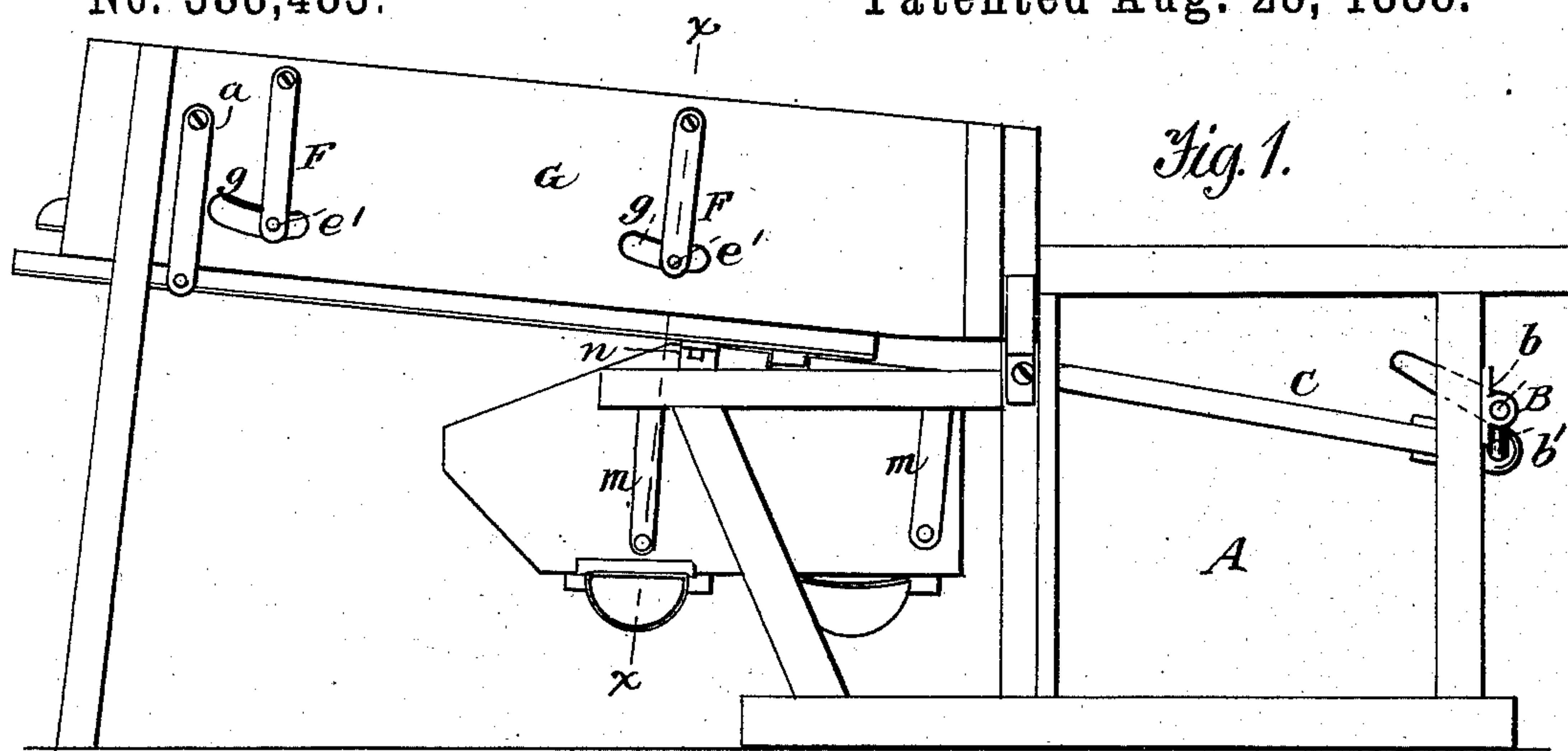


Fig. 1.

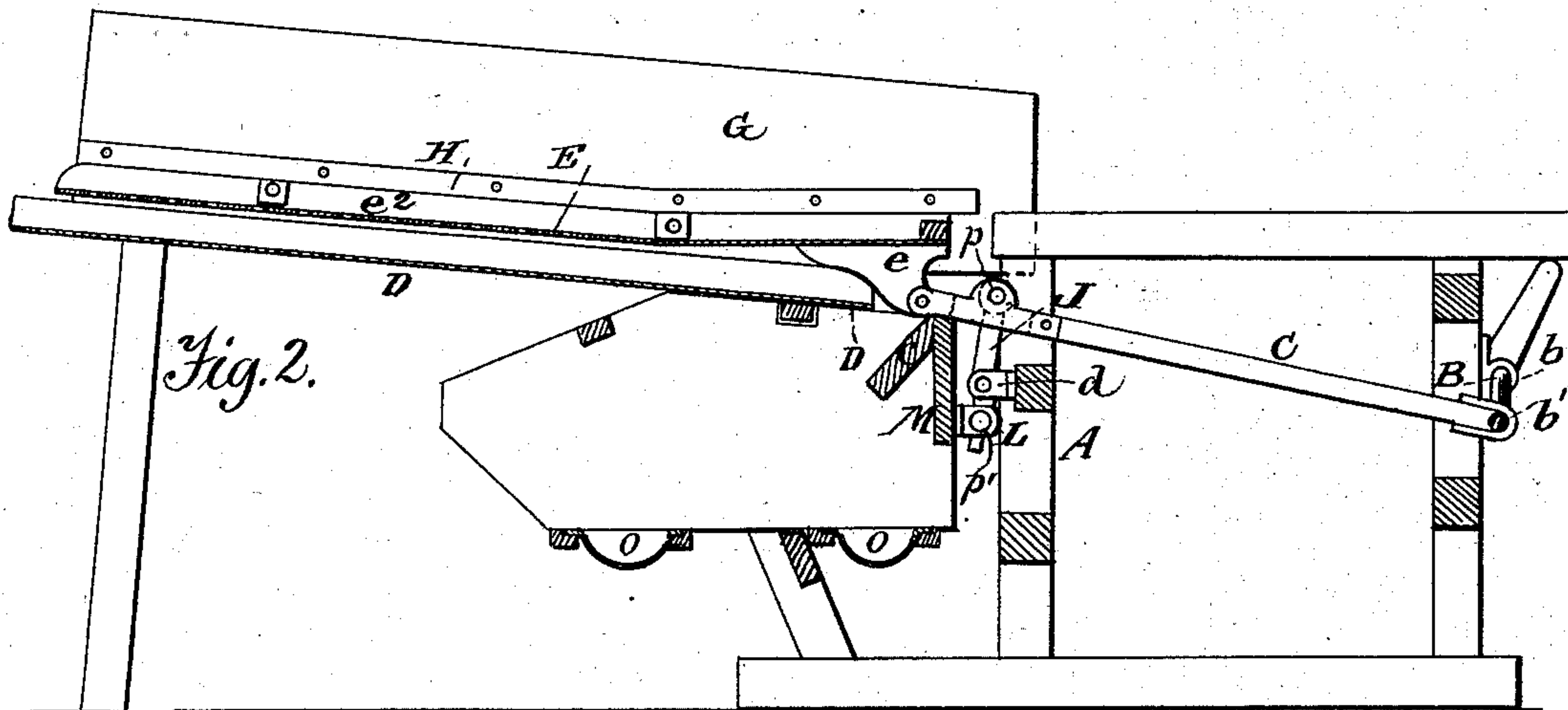


Fig. 2.

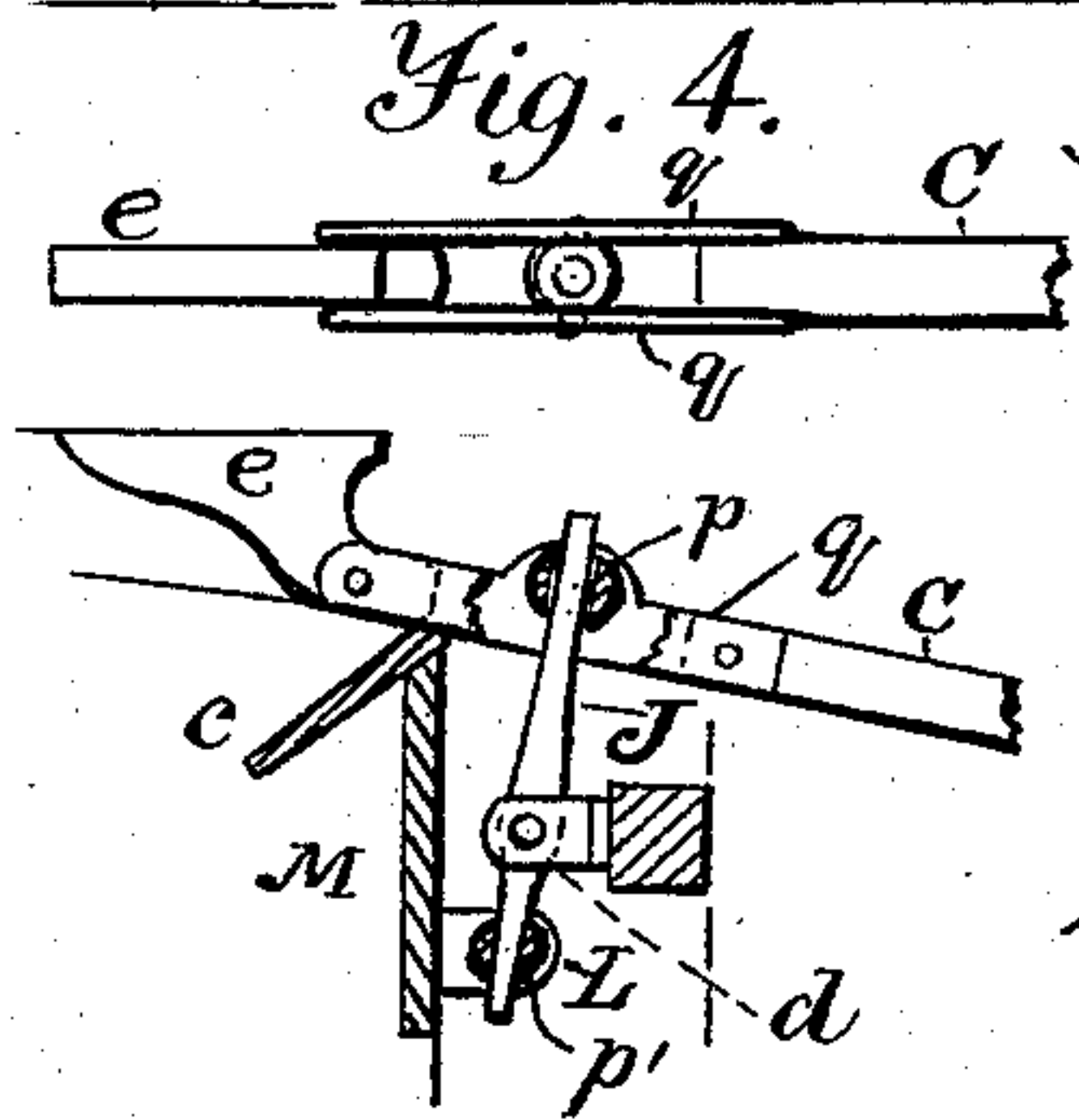


Fig. 4.

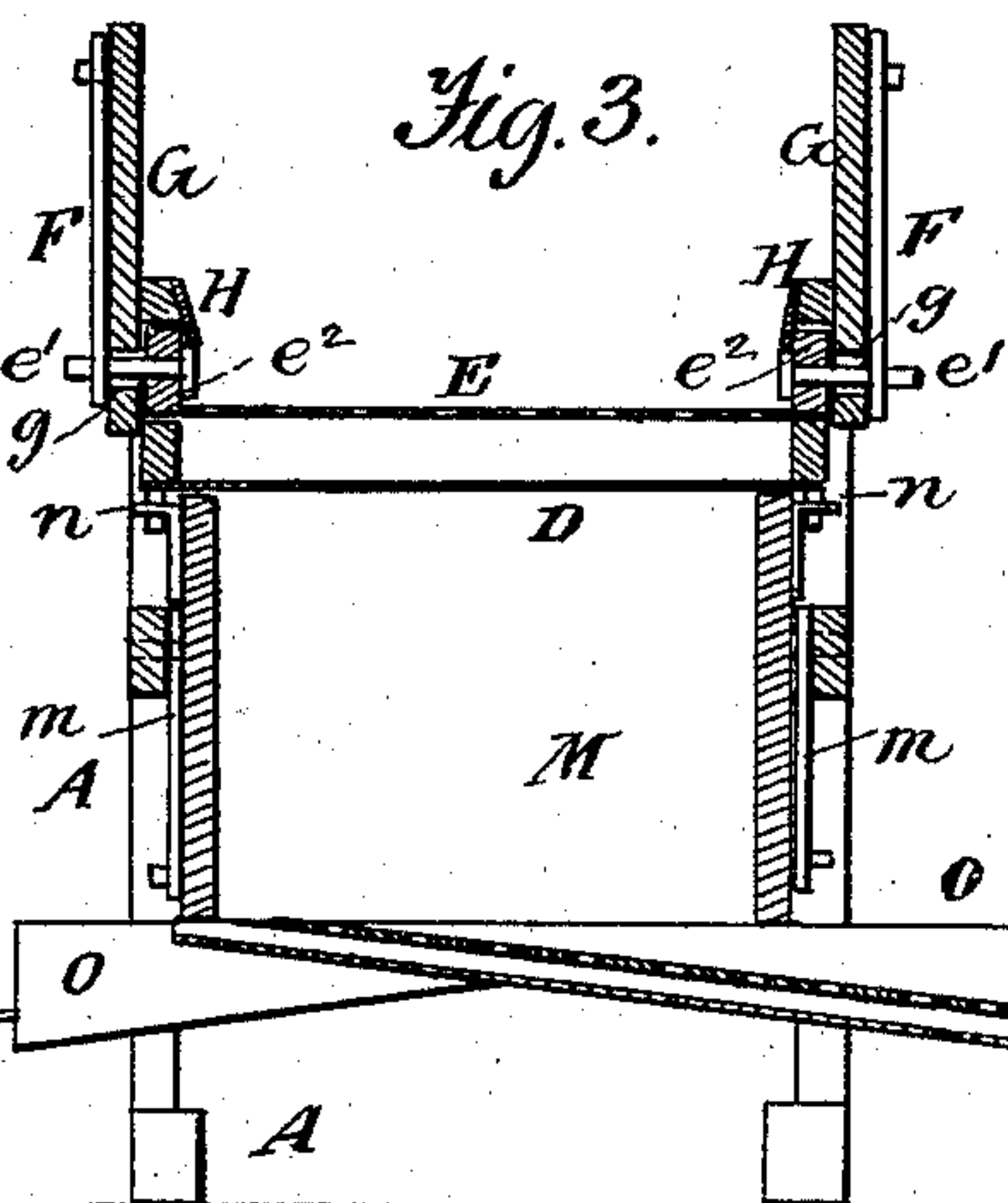


Fig. 3.

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JOSEPH T. FENTON, OF NEWTOWN, PENNSYLVANIA.

GRAIN-SEPARATOR FOR THRASHERS.

SPECIFICATION forming part of Letters Patent No. 388,483, dated August 28, 1888.

Application filed May 13, 1887. Serial No. 238,069. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH T. FENTON, a citizen of the United States, residing at Newtown, in the county of Bucks and State of Pennsylvania, have invented certain new and useful Improvements in Grain Separators for Thrashers; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

The special object of the invention is to facilitate the working of grain-separators in connection with thrashers, and the means for accomplishing this will be pointed out in the claims after being described in connection with the drawings.

Figure 1 is a side elevation of a grain-separator having my improvements. Fig. 2 is a vertical longitudinal section of the same. Fig. 3 is a transverse section taken on line *xx* of Fig. 1. Fig. 4 illustrates in plan and side views the pitman connected with the driving-shaft and other details.

In the drawings, A designates the supporting-frame, and B the driving crank-shaft, having bearings *b*.

C indicates a pitman, by which the crank *b'* is connected with a lug or projection, *e*, on the screen E, which screen is hung by means of the straps F and pins *e'*, the straps being pivoted at their upper ends to the sides G and the said pins extending through slots *g*, as shown.

H indicates longitudinal guides fixed to the sides G and lapping over the side parts, *e''*, of the screen E, which moves back and forth under the guides. Under the shaking screen E, and extending a little farther forward than said screen, is the floor D, which is hung at its forward end by straps *a*, both the screen and the floor being inclined rearward.

M indicates a shaking-shoe, which is suspended by pivoted straps *m* from the frame A, the said shoe being somewhat inclined toward the front and detachably connected with the floor D on each side, as indicated at *n*. The pitman C being connected, as before stated, with

the shaking screen E, also has connection with the shoe M through a rocking lever, J, which is pivoted at *d* between lugs fastened to a cross-bar of the frame. The upper end of lever J extends through an aperture in a pivot, *p*, which is carried by the plates *q*, which connect pitman C with the part *e* of screen E, and the lower end of the lever extends through a pivot, *p'*, in lugs L, which are fastened to the end of the shoe M, as shown. These pivots are usually enlarged at their middle parts and perforated to admit the ends of the lever, as seen in Fig. 4, and the ends of the lever move loosely in them during operation. The plates *q* form a part of the pitman, leaving a slot or opening between them, across which the pivot *p* extends.

Across the bottom of the shaking-shoe M are placed in inclined positions the discharge-spouts O, in each of which is placed a perforated slide, P, which extends somewhat beyond the discharge end of the spout and rests above the bottom of the spout, as shown. These perforated slides serve to catch any heads or bits of straw falling into the spouts, so that the grain passes from them well sifted and clean, the refuse matter being conducted out on the slides.

It will be seen from the construction of the pitman C and its connection with the screen E, the rocking lever, and shoe M, the latter being connected with the floor D, that motion is imparted to the several shaking devices by means of the said pitman and rocking lever, the movement of shoe M and the floor D being in a direction opposite to the direction of the movement of screen E, and the screen and shoe have each a movement, the movement of the shoe differing from that of the screen only in extent.

I claim—

1. In a grain-separator, in combination with a supporting-frame, a shaking screen suspended therefrom, a shaking-shoe suspended from said frame, a pitman connected with said screen and with driving mechanism, and a pivoted rocking lever fulcrumed on the frame, one end of which is loosely connected with the pitman and the other end loosely connected with the said shoe, substantially as and for the purposes described.

2. In combination with a shaking screen, a pitman provided with a perforated pivot, substantially as shown, a shaking-shoe provided with a perforated pivot, and a lever, J, fulcrumed to the frame and with each of its extremities extending into a perforation in one of said pivots, substantially as described, for the purposes set forth.

3. In combination with a supporting-frame, a shaking screen, E, shaking-shoe M, shaking floor D, connected with said shoe, a pitman, C, connected with the screen and with driv-

ing mechanism, and a rocking lever, J, fulcrumed to the frame and having its upper end loosely connected with the pitman and its lower end loosely connected with said shoe, substantially as set forth and described. 15

In testimony whereof I affix my signature in presence of two witnesses.

JOSEPH T. FENTON.

Witnesses:

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