2 Sheets.

Sheet N° 1.

P. A. Mower,
Hay-Fork.

N° 75,956. Patented Mar. 24. 1868.

Fig. 4.

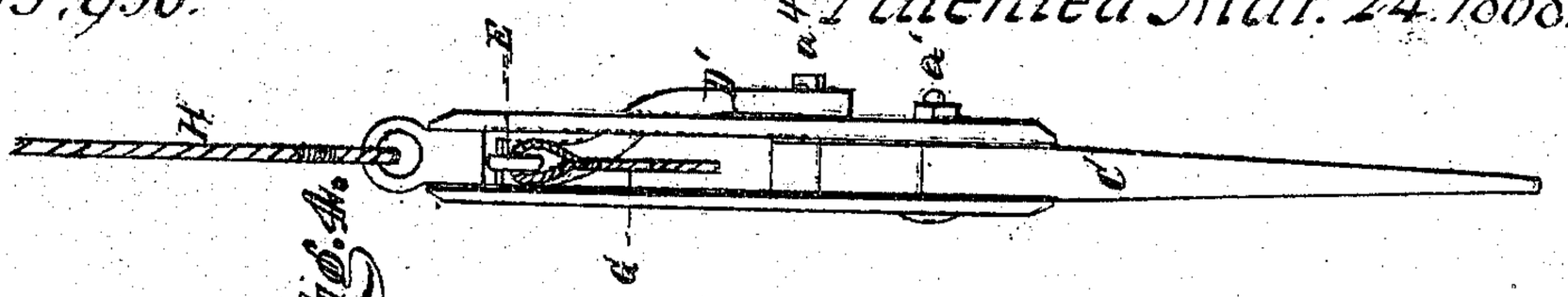


Fig. 3.

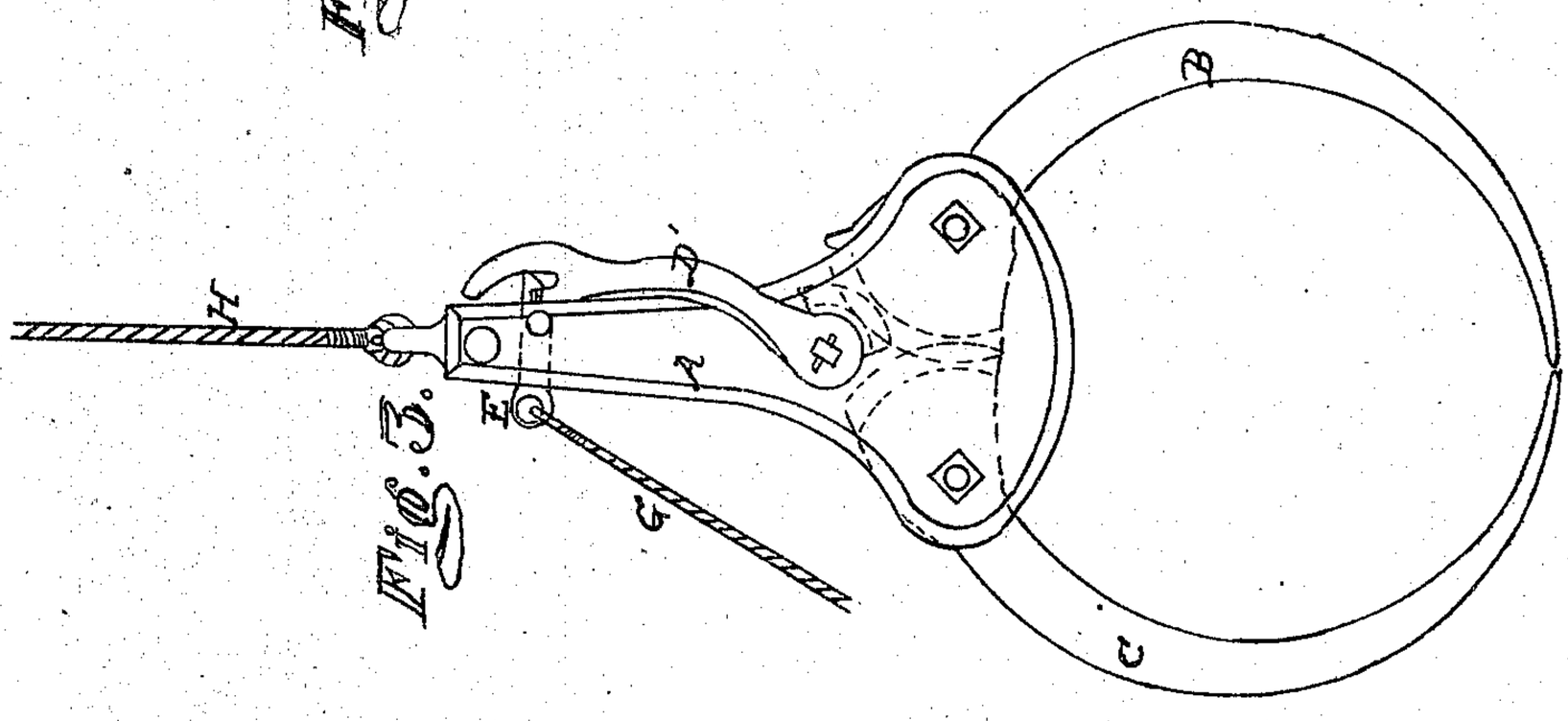


Fig. 2.

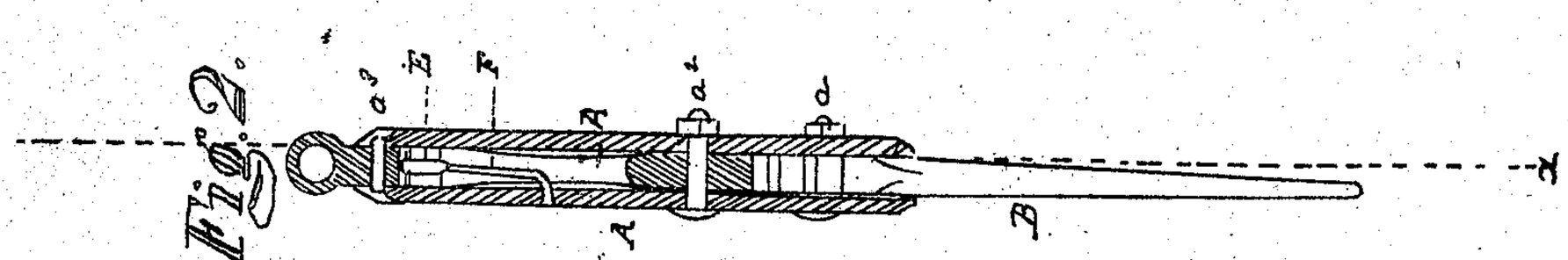
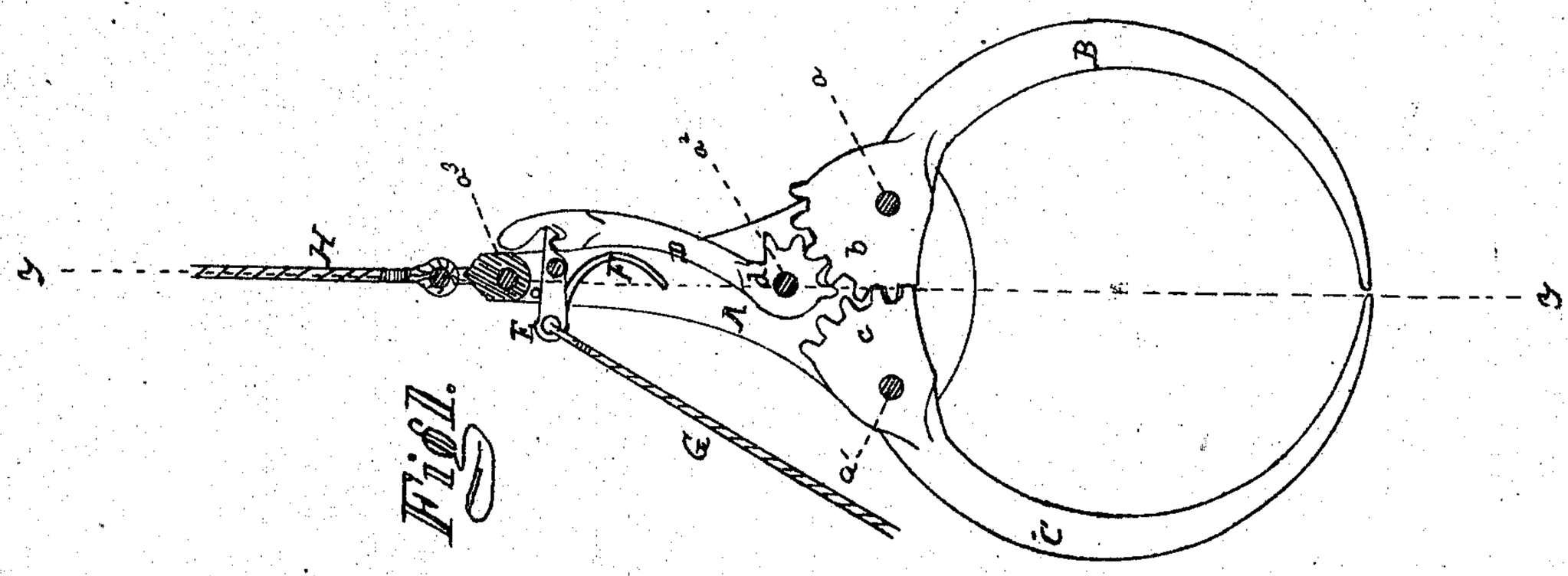


Fig. 1.



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2 Sheets.

Sheet No 2.

P. A. Mower
Hay Fork.

No 75,956

Patented Mar 24. 1868.

Fig. 6.

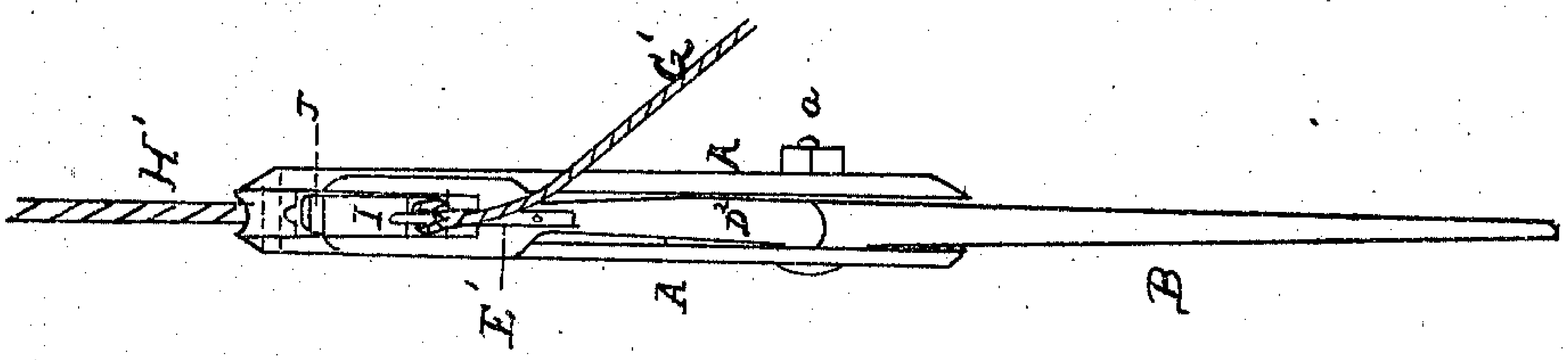
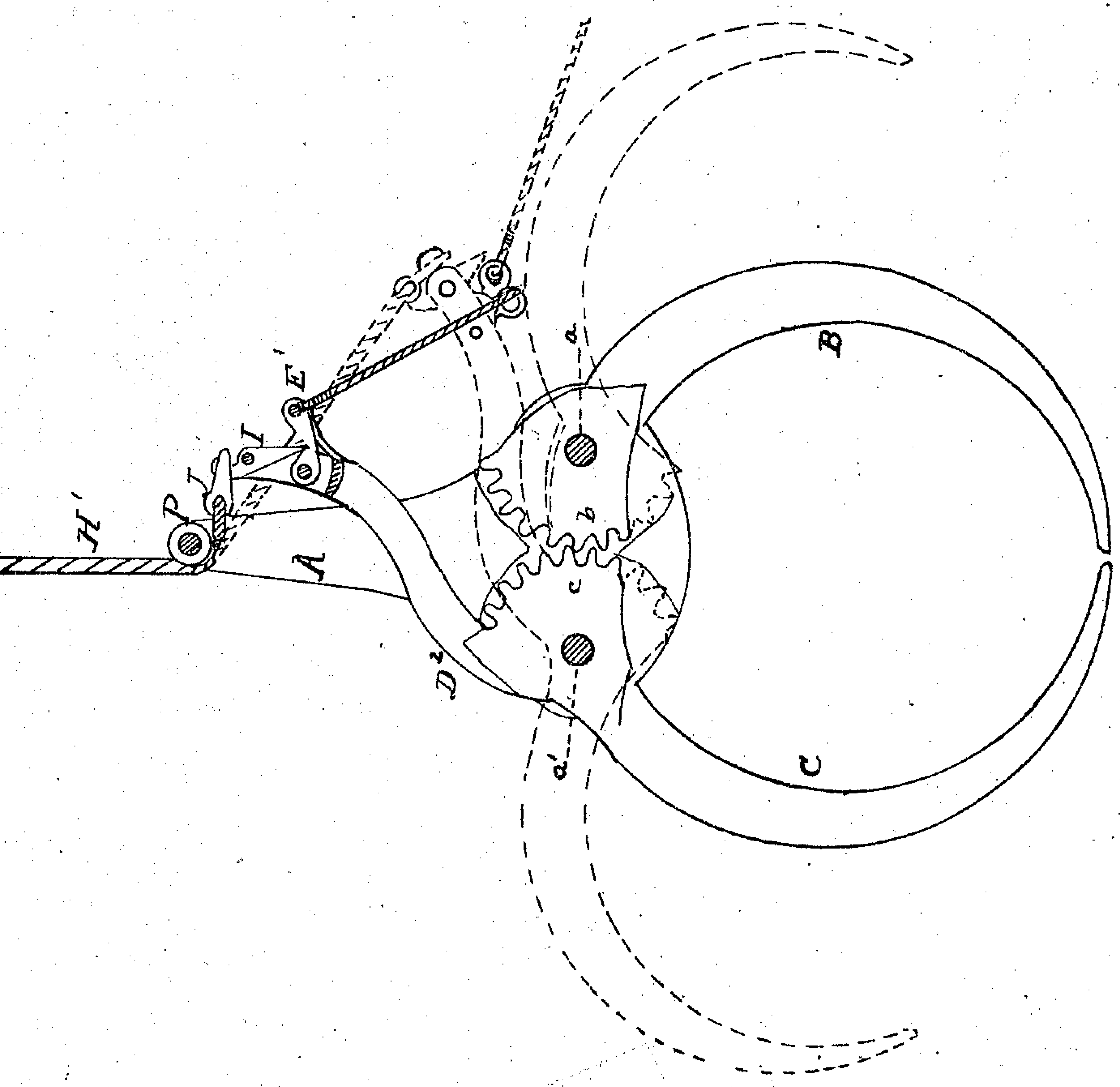


Fig. 5.



Witnesses
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United States Patent Office.

PETER A. MOWERS, OF CLEVERSBURG, PENNSYLVANIA.

Letters Patent No. 75,956, *dated March* 24, 1868.

IMPROVEMENT IN HORSE HAY-FORKS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, PETER A. MOWERS, of Cleversburg, of Crawford county, and State of Pennsylvania, have invented a new and improved Horse Hay-Fork; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing, which forms part of this specification.

The subject of my invention is a fork constructed with two or more hinged prongs, geared together so as to cause them to move in unison, and adapted to clasp the body of hay which they enter.

The necessary motion is communicated to the prongs by a suitable lever, which may be rigidly attached to one of the prongs themselves, or to a segment-pinion gearing with the cog-segments or their heels. In the drawings—

Figure 1 represents a vertical section at *x x*, fig. 2; and

Figure 2 a vertical section at *y y*, fig. 1, of a two-pronged fork illustrating my invention.

The two parts, A A, of the frame are connected by any suitable number of bolts, as *a* a^1 a^2 a^3. B C are a pair of prongs fulcrumed upon the bolts *a* a^1, and formed on their heels with cogged segments *b c*, gearing with a segment-pinion, *d*, upon a lever, D. E is a latch, acted on by a spring, F, and serving to hold the lever when the prongs are closed, as shown in the drawing. G is the tripping-cord, to retract the latch E, and thus release the lever D when the load is to be discharged. H represents the hoisting-rope.

Figures 3 and 4 are respectively a front and a side elevation of a similar fork, in which the operating-lever, D^1, is not attached directly to its pinion, *d'*, but is mounted upon a square upon the projecting end of the pivot a^4, on which the said pinion is rigidly keyed. This lever D^1 is bent, as represented in fig. 4, so as to engage with the catch E within the frame, and the operation is the same as before described.

Figure 5 is a vertical section, and

Figure 6 a side elevation of a fork, in which the same invention is embodied, but the pinion entirely dispensed with, the lever D^2 being rigidly attached to the heel of the prong B.

The latch E′ may be mounted on the lever, and hold a trigger, I, also pivoted in the end of the lever, and hooking into a link, J, attached to the end of the hoisting-rope H′.

P is a pulley, under which the rope works. In this case the load is discharged by pulling the cord G′, which releases the trigger I, and causes it to let go the rope H′, when the fork is opened by the gravity of the hay and discharges the load. The position of the parts at this time is shown in red. The blue lines represent the parts in position to seize the hay.

The points being once inserted will be driven into the hay by the power of the horse drawing on the hoisting-rope H, so that the fork is set or fed into the hay, as well as elevated, by horse-power.

In the other illustrations the fork is driven into the hay by the hand of the operator applied to the lever D or D^1.

A three or four-pronged fork may be made on precisely the same principle, by keying the prongs in pairs or to one or both of the shafts *a* a^1.

Instead of having the segments *b* and *c* gear together, the pinion *d*, gearing with the segment *b*, may turn the segment *c* in the opposite direction through an intermediate pinion.

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

The pair of grasping-prongs B C, operated in unison by means of cogged segments *b c*, in combination with a lever to open or close them, substantially as and for the purposes explained.

To the above specification of my improvement in hay-forks, I have signed my hand, this 23d day of January, 1868.

P. A. MOWERS.

Witnesses:

GEORGE A. MOWERS,

JOHN HAWK.