

C. M. COMSTOCK.
Machine for Rolling Whips.

No. 226,495.

Patented April 13, 1880.

Fig. 1.

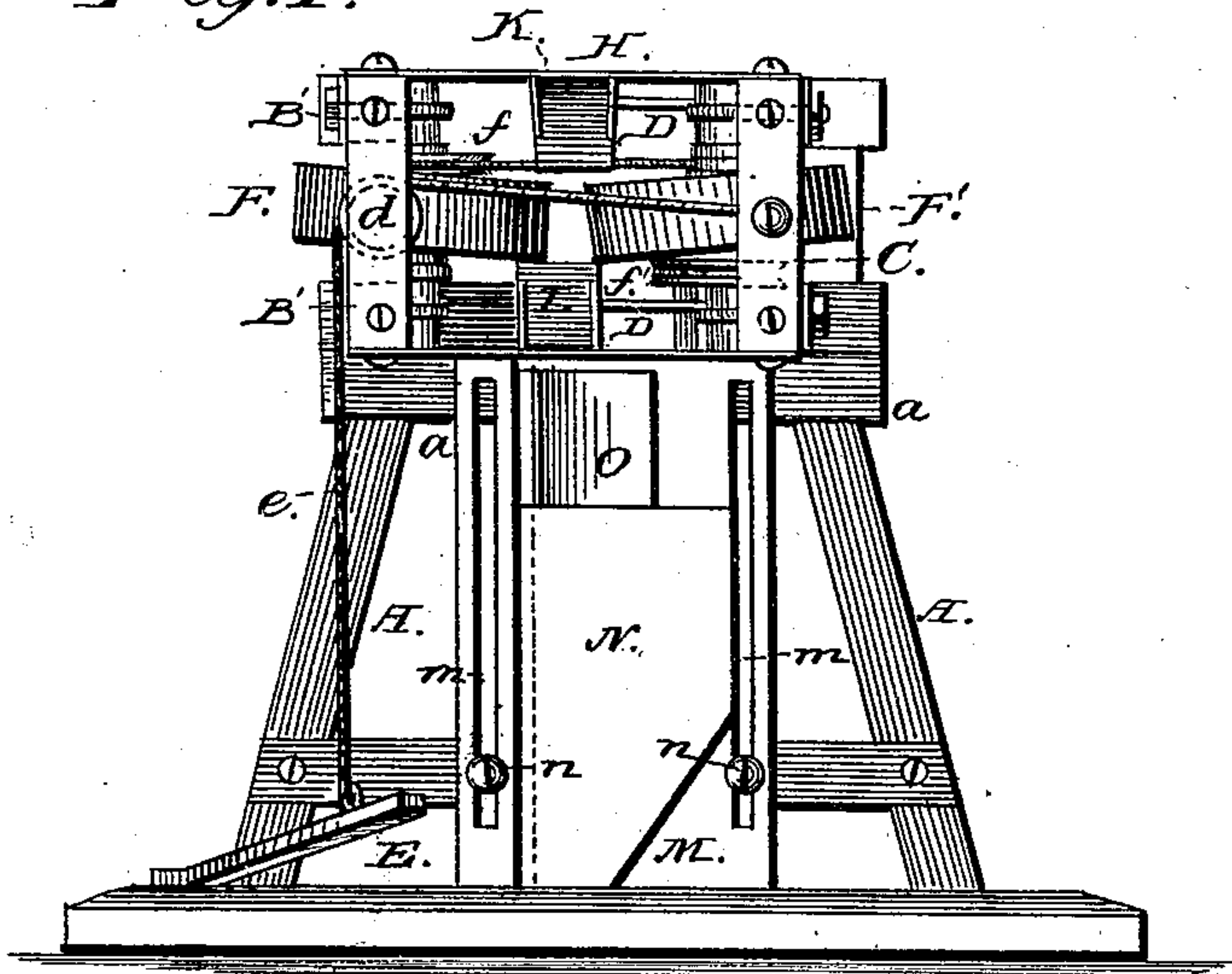


Fig. 2.

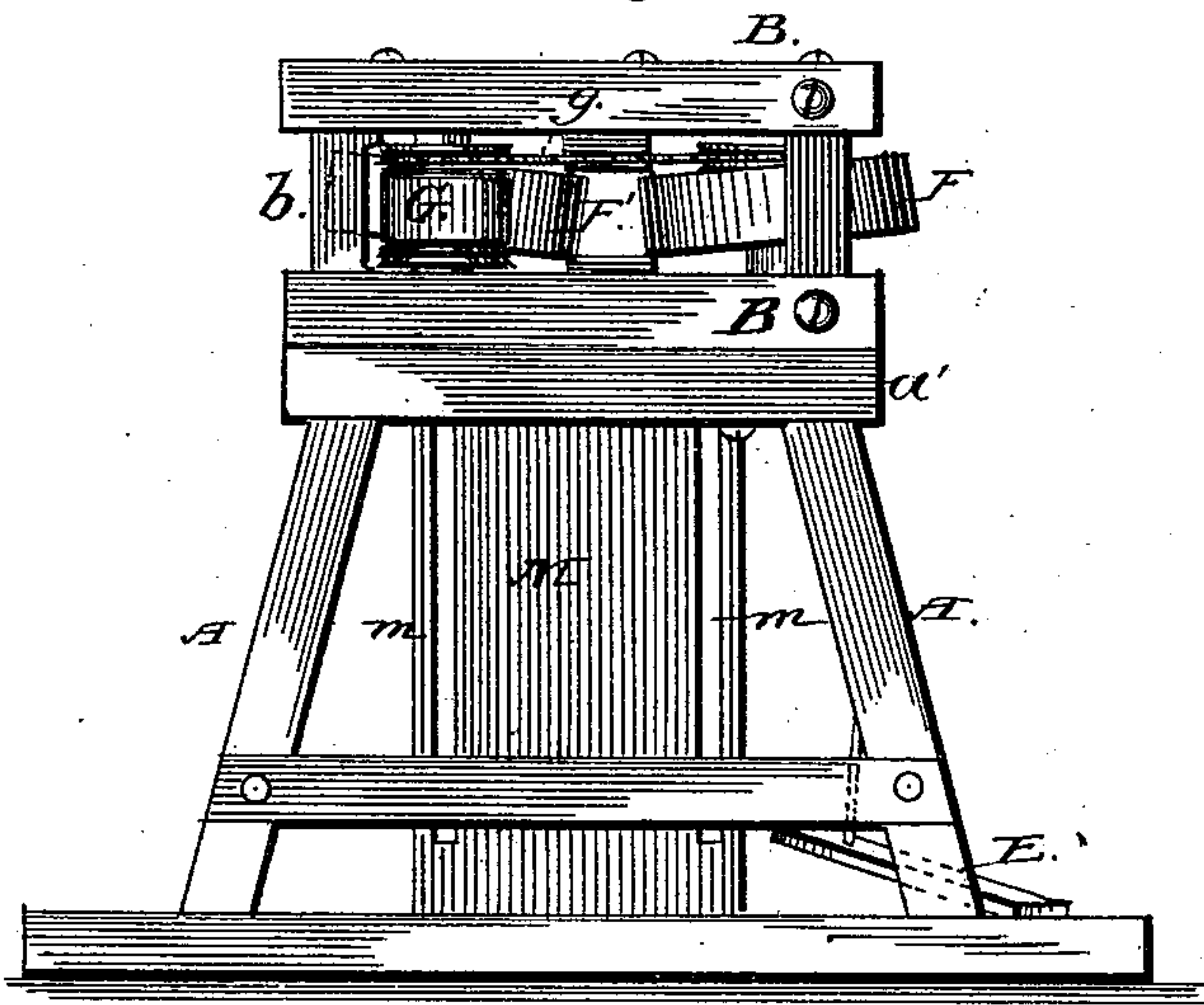
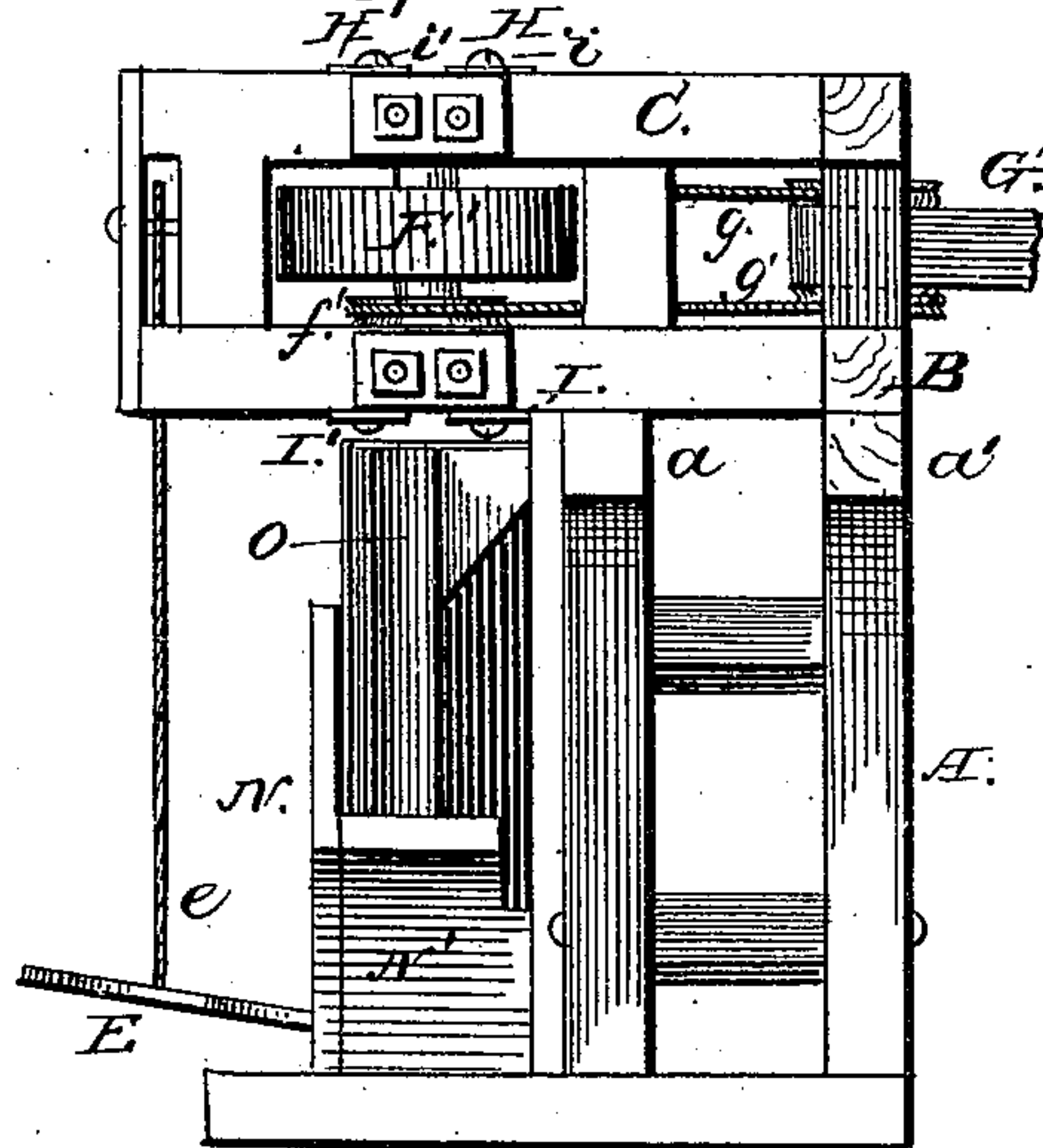


Fig. 3.



Witnesses.

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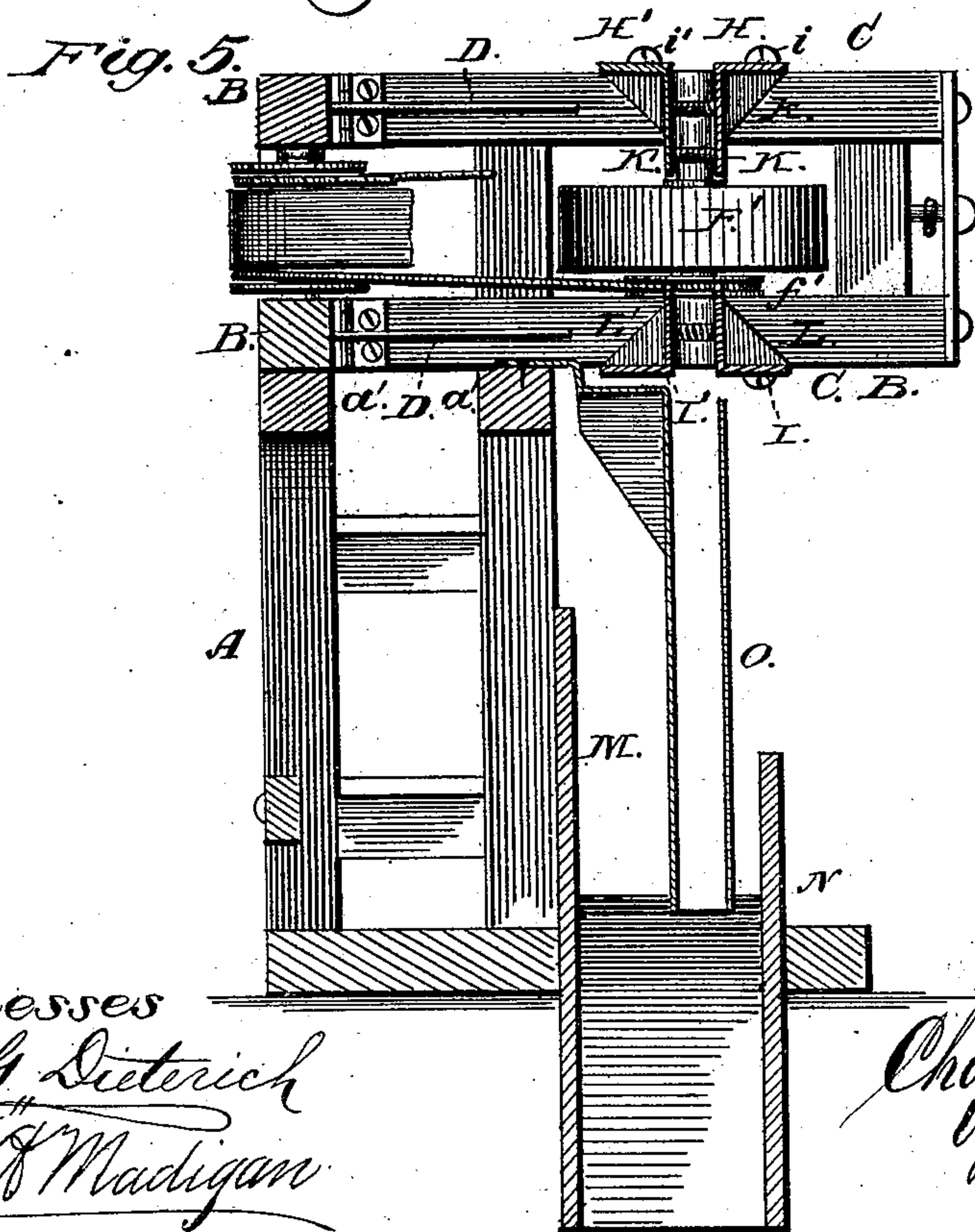
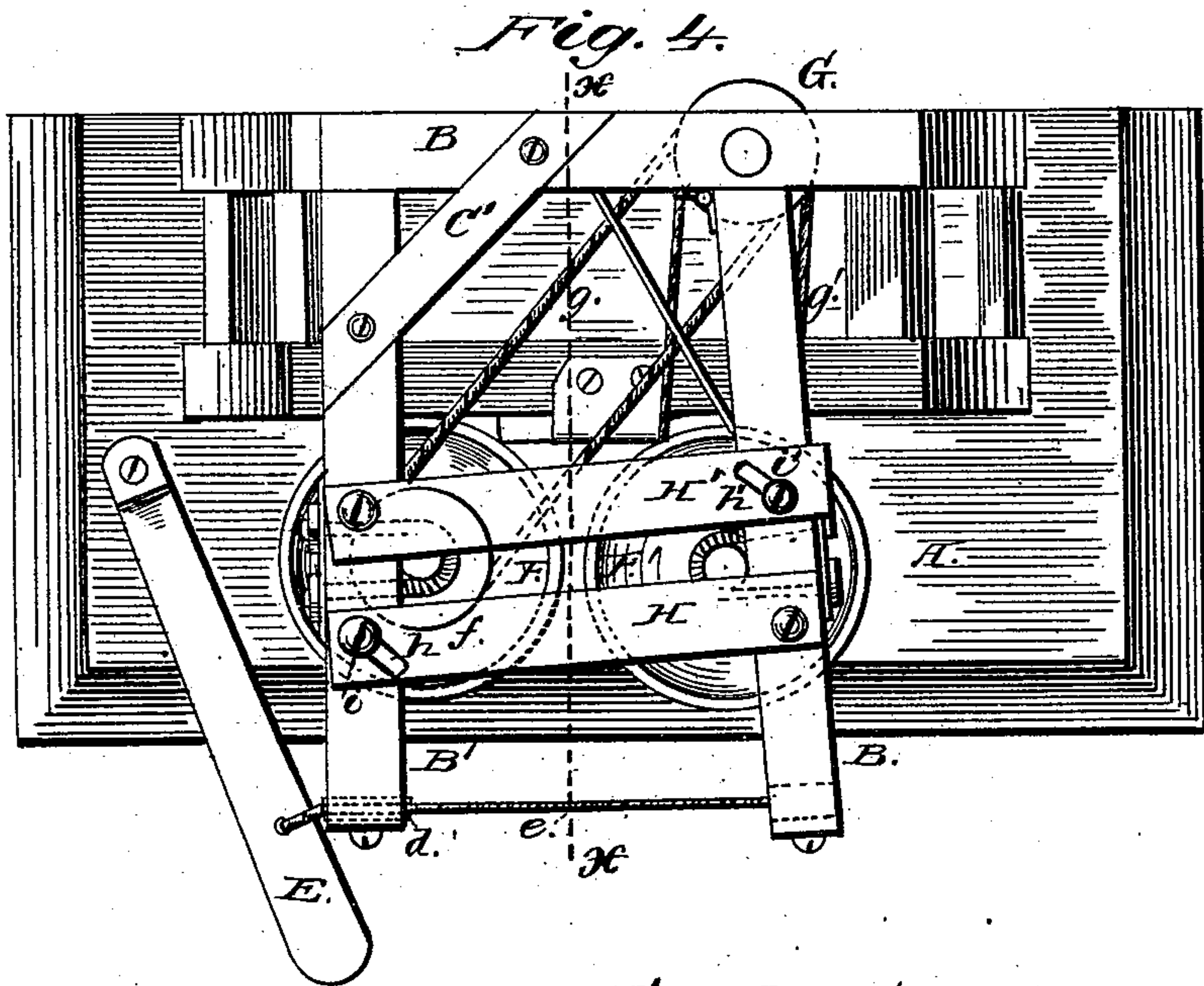
Inventor

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By A. Peterson
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UNITED STATES PATENT OFFICE.

CHARLIE M. COMSTOCK, OF WINDSOR, NEW YORK.

MACHINE FOR ROLLING WHIPS.

SPECIFICATION forming part of Letters Patent No. 226,495, dated April 13, 1880.

Application filed February 14, 1880.

To all whom it may concern:

Be it known that I, CHARLIE M. COMSTOCK, of Windsor, in the county of Broome and State of New York, have invented certain new and useful Improvements in Machines for Rolling Whips, &c.; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a front elevation. Fig. 2 is a rear elevation. Fig. 3 is a side view. Fig. 4 is a plan or top view; and Fig. 5 is a vertical section on line *x x*, Fig. 4.

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

This invention relates to machines for rolling whips or similar articles; and it consists in the construction and combination of parts, as hereinafter described, and particularly pointed out in the claims.

In the two sheets of drawings hereto annexed, A is the bed or support of the machine, of suitable height, and with its upper part formed of two parallel beams, *a a'*. The frame of the machine consists of two parallel beams, B B, united at one end by a vertical cross-piece, *b*, and their other ends secured at right angles in two other beams, B' B', the two upper beams, B B', being further united and strengthened by a brace, C', so that the whole will form one rigid and substantial frame.

The lower beam, B, is bolted upon the bed-beams *a'* in such a manner that the whole upper frame may be detached from its support by withdrawing these bolts, and placed vertically upon this in such a manner that the two beams B B will rest upon the bed-beams *a a'*, respectively, upon which they may be secured by bolts or equivalent means, the distance between the beams *a a'* corresponding to the distance between beams B B, so that when the frame is arranged upon its support in this vertical position, instead of the horizontal position shown in the drawings, the frame and its support will be firmly united.

C C is a frame, the rear end of which is hinged upon beams B B, from which it pro-

jects forward about parallel to the beams or arms B' B'.

D is a stout spring, which impinges upon the inner face of frame C C, so as to force it away from the arms B' B', in the forward end of which is pivoted a sheave or pulley, *d*, over which a cord, *e*, is passed, one end of which is fastened in the forward end of the hinged frame C C, while its other end is fastened in a treadle, E, pivoted in the floor.

Arranged vertically in each of the frames B' B' C C are shafts, upon which are journaled rollers F F', provided with circumferentially-grooved hubs or pulleys *f f'* on opposite sides or faces. These pulleys are operated by endless bands *g g'*, passing around a double-grooved drum, G, journaled vertically between beams B B, and operated by an endless belt or band, G'. The rollers F F', with their operating-pulleys, are set slightly oblique upon their respective shafts, for the purpose of moving the article rolled lengthwise between them during the process of rolling. The distance between the rollers may be adjusted to the taper of the whip by unscrewing the bearings of the roller-shafts and placing wedges or thin strips of wood between them and the frame.

H H' are guide-plates pivoted upon the rigid frame B' B' and hinged frame C C, respectively, with their opposite ends slotted obliquely, as shown at *h h'*, Fig. 4, to enable them to slide on headed guide-pins *i i'*. Similar plates I I', attached and operating in like manner, connect the under side of frames B' C. Projecting downward from each of the upper guide-plates, H H', and facing each other, are vertical guides K K', which reach down to the upper rims of the rollers, and corresponding guides L L' project upward from the lower set of pivoted connecting-plates I I', reaching to the lower rims of the rollers. Both the upper and lower guides are secured rigidly upon and at right angles to their respective plates by triangular brace-pieces *k*, as shown in Fig. 5.

Upon the front side of the frame-support A is secured a board, M, having two parallel vertical slots, *m m*, which slide on set-screws *n n*, by means of which board M may be adjusted vertically upon the support A. Upon the front

face of this adjustable board M is placed a hopper or receptacle, N, one side of which is open above its inclined bottom N', and by moving board M up and down the hopper, of which it forms a part, is moved also. To admit of the vertical adjustment of the hopper, as described, an opening must be made in the floor upon which the machine is placed.

O is a vertical chute bracketed upon the upper cross-beam, a, of the support, and projecting down into hopper N. This chute is so placed that its upper end or mouth will be just under the lower vertical guides, L L', which form, so to speak, an upper adjustable continuation of the chute, the lower open end of which is cut off obliquely to fit the inclined bottom N' of the hopper when this is in its most elevated position.

The whips to be rolled are fed to the rollers from the top between the upper guides, K K', with their butt or widest part downward when used vertically. The operator, by placing his foot upon the treadle E, causes the rollers F F' to clamp the whips or other articles placed between them, which, on account of the inclination or obliquity of the rollers at the point of contact with the article that is being rolled, causes them to be fed automatically downward during the process of rolling. The pressure upon the treadle enables the hinged arm C and roller F' to adjust themselves to the taper of the whip-stock, and in like manner the upper and lower guides, K K' L L', will adjust themselves to the taper of the article guided between them, so as to prevent oscillation or play of the whips or articles while being rolled. After the whip has passed through the roller and guides it is delivered through chute O into the hopper N N', the inclined bottom of which causes it to fall sidewise, so that it will be out of the way for the next whip-stock passing

through the rollers. The hopper may be adjusted in the manner described, according to the length of the whips, so that the upper ends of these will, in all cases, drop down into the hopper free of the lower guides after rolling.

By arranging the frame with its operating parts vertically upon the support A in the manner hereinbefore set forth the whip-stocks may be fed through the machine horizontally instead of vertically.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. The combination, with the rigid angle-frame B B', provided with the sheave, spring D, and slotted guide-plates H' I', of the hinged frame C, provided with guide-plates H I, cord e, and treadle E, substantially as set forth.

2. The combination, with the rigid and stationary angle-frame B B', provided with the oblique roller F, having pulley f and operating-drum G, of the hinged and adjustable frame C, provided with the oblique roller F', having pulley f', substantially as set forth.

3. The combination, with the stationary roller F and adjustable roller F', of the upper and lower adjustable guides, K K' L L', arranged and operating substantially as and for the purpose set forth.

4. The combination, with the rollers F F' and guides K K' L L', of the stationary chute O and vertically-adjustable hopper M N N', substantially as and for the purpose set forth.

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

CHARLIE M. COMSTOCK.

Witnesses:

IRA G. OWEN,
WHITING S. SMITH.