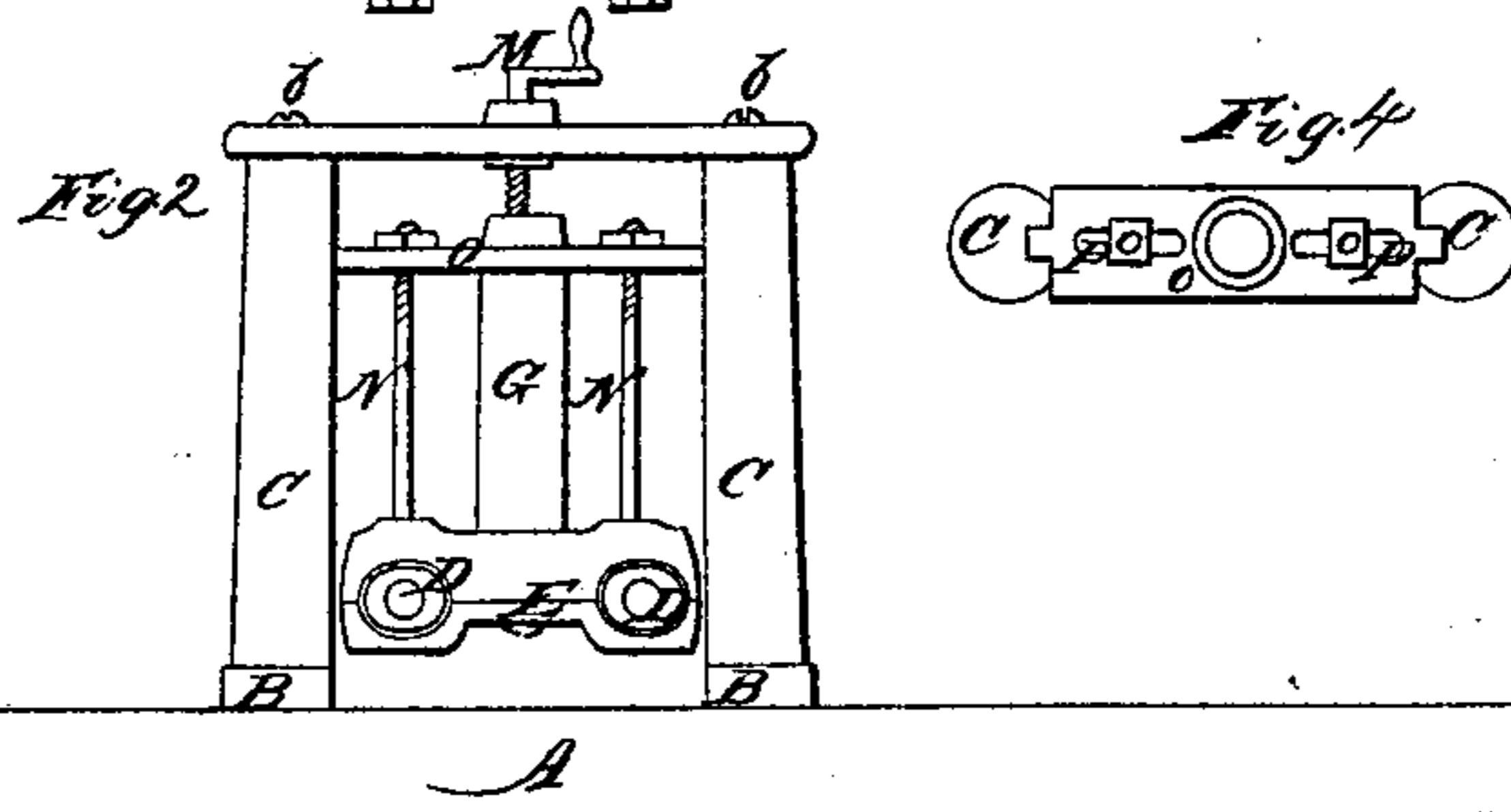
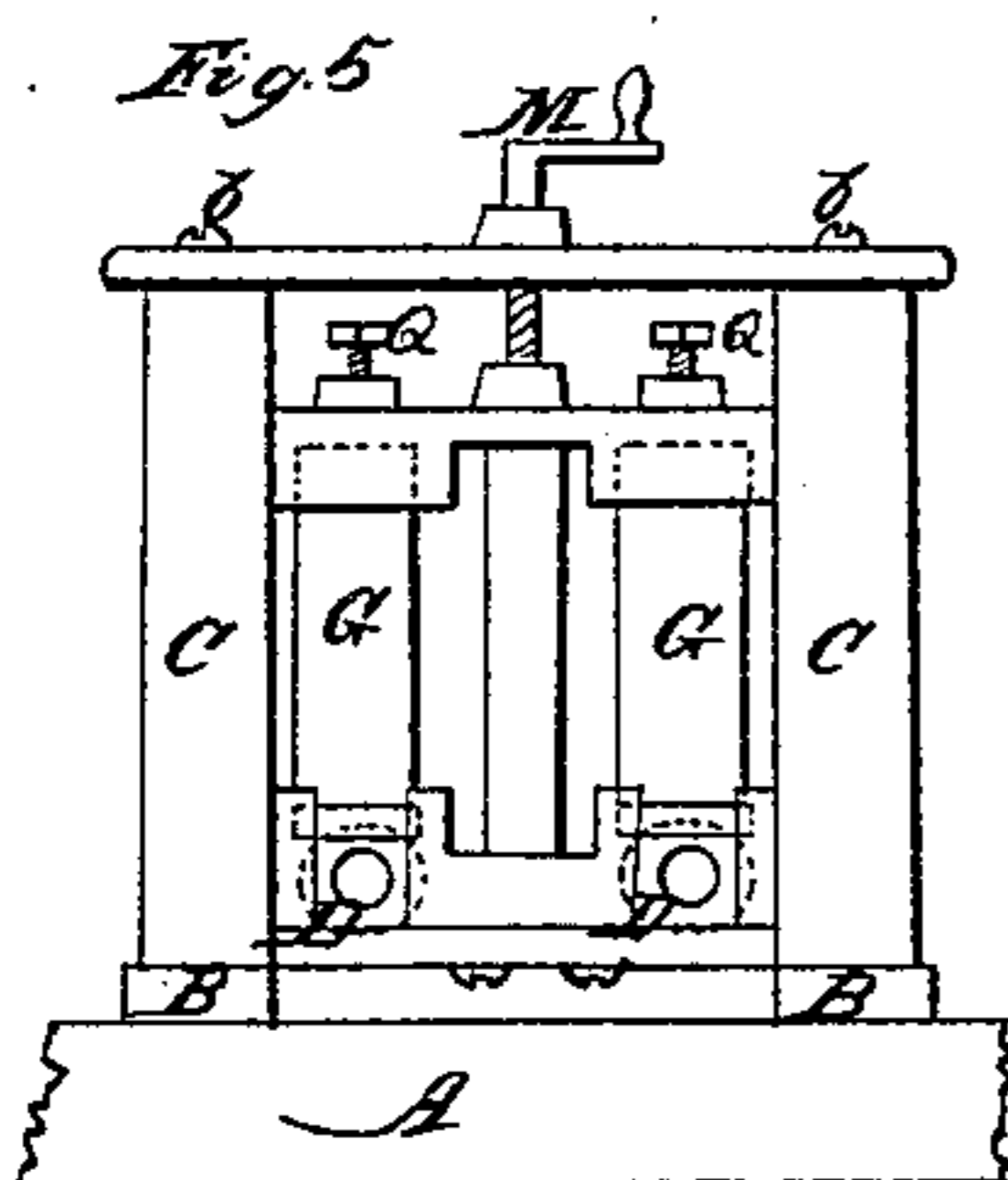
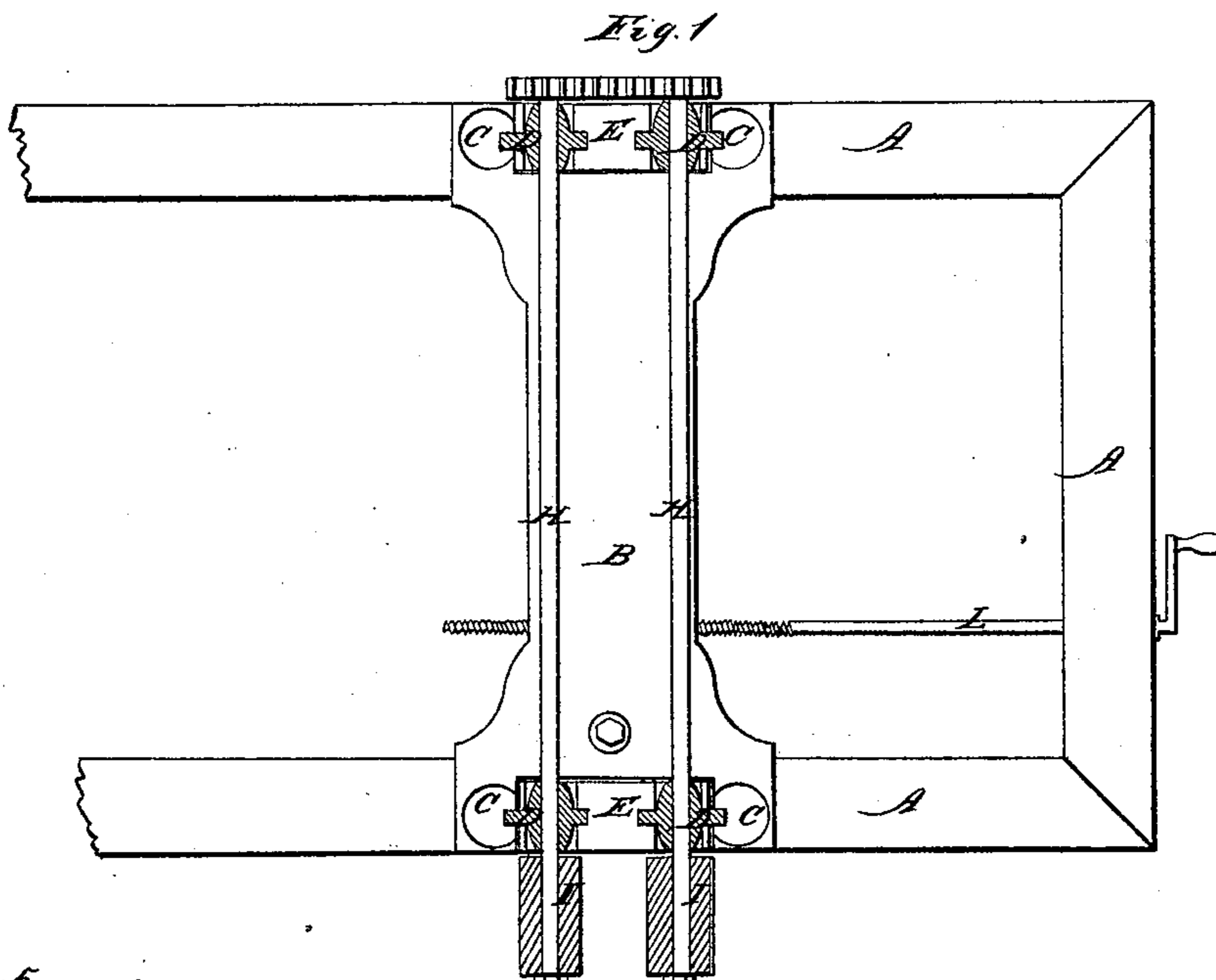
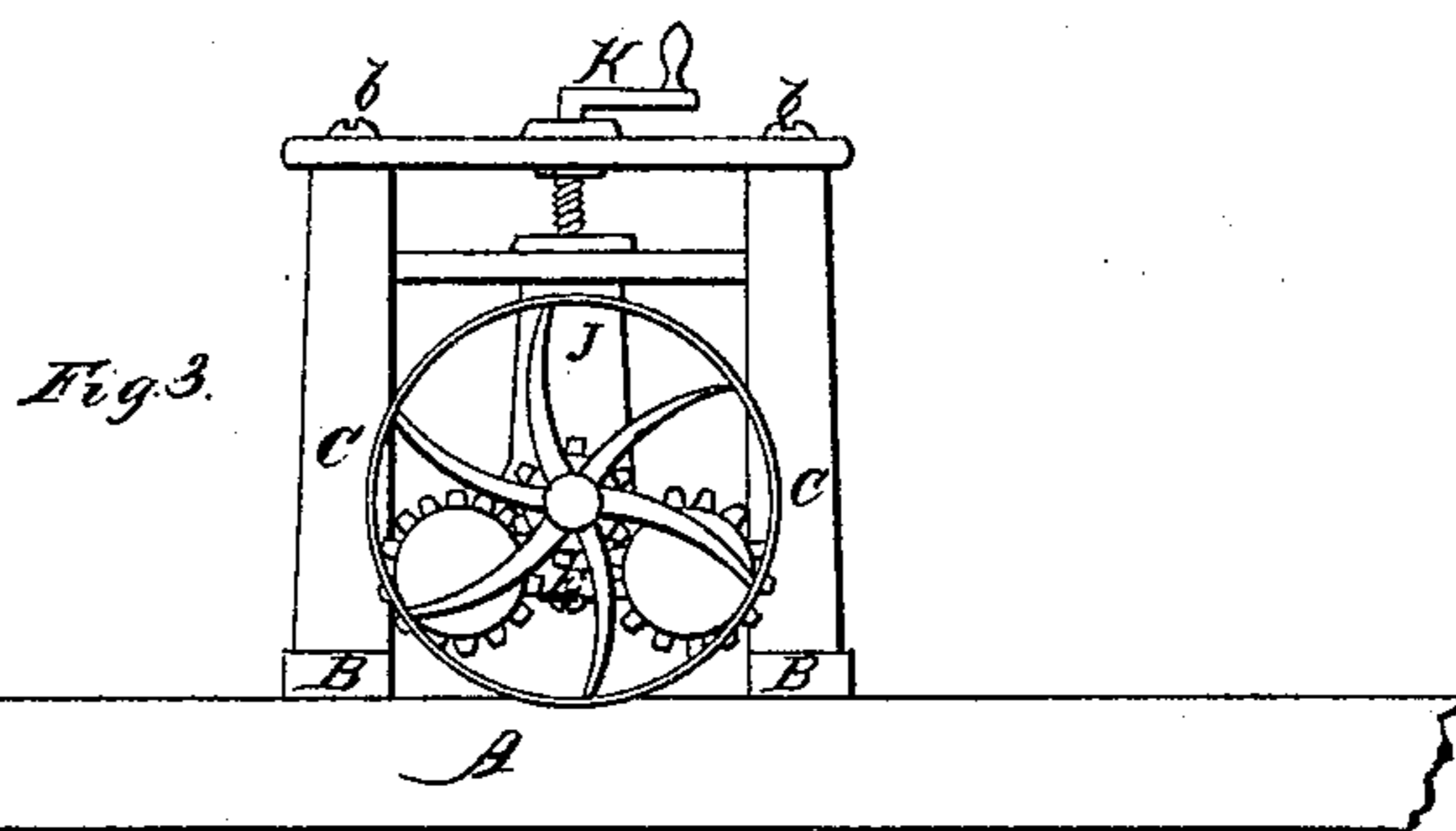


L. Gould.

Wood Plane Attachment,

Nº 39,226,

Patented July 14, 1863.



Witnesses
Arthur Gayer
John A. Morgan

Inventor.
Lyman Gould

UNITED STATES PATENT OFFICE.

LYMAN GOULD, OF NORWICH, CONNECTICUT.

MOLDING-MACHINE FEED.

Specification forming part of Letters Patent No. 39,226, dated July 14, 1863.

To all whom it may concern :

Be it known that I, LYMAN GOULD, of Norwich, in the county of New London and State of Connecticut, have invented a new and Improved Mode of Molding Machine Feed; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference being marked thereon, making a part of this specification, in which—

Figure 1 is a horizontal view through the feed-rolls on a section of machine-frame A. Fig. 2 is a front perpendicular view of the boxes with the feed-rolls removed, showing the arrangement for raising the same in connection with one spring. Fig. 3 is a rear perpendicular view showing the manner of gearing the rolls and raising them. Fig. 4 is a sectional view through the cross-bar O, showing the long mortises P P, to accommodate the throw of the rods N N, by the rise and fall of the feed-rolls separately in connection with one spring. Fig. 5 is a front sectional view showing the arrangement for using two springs, the feed-rolls working independent of each other for heavy work.

Letters of reference apply to similar parts on all figures.

To enable others skilled in the art to make and use my invention or improvement, I will proceed to describe its construction and operation.

B is the bed upon the section of the frame A upon which the feed-rolls are placed.

H H are the feed-rolls passing through the boxes D D D D, which lie in the beds E E, the feed-roll boxes showing the pivots *a a a a a a a a*, on which they oscillate, by raising or lowering the opposite end of rolls, and the manner of being held in a perpendicular position by the pivot on the out end of each box sliding in a groove in the posts C C C C. The frame A is first planed on the top and on the inner edges. The frame B, to which my improvements are attached, is planed across each end, so as to fit the frame A, and is secured in its place by an L-bolt, hooking under the edge of frame A, and, passing up through the frame B, is held in place and tightened by the nut R on the top of the frame B, and by turning the hand-screw L the frame is moved horizontally with all its appendages, which con-

sist in what is shown by Figs. 2, 3, and 4, and including my improvements. On each corner of the bed B are columns C C C C, each cast with a hole through them for bolts, and on the top of these columns is placed another frame, S, which by means of bolts passing up through the columns and nuts *b b b b*, at each corner, confine the whole improvement in a neat and compact form. On the inner sides of these columns is a groove planed the whole length, as shown by *c c*, Fig. 4, for the purpose of guiding the cross-bars O O and the pivots *a a a a* of the boxes D D D D, as shown in Fig. 1. The feed-rolls H H show their relative position connected with the oscillating or adjustable boxes D D D D.



I I shows the lower half of the feed-heads, which are serrated  thus, and may be of any desirable size for practical use, and also of any length required.

Fig. 3 shows the manner of connecting the feed-rolls, also the intermediate gear and pulley, by which the power is applied from another counter and pulley below, and in order to allow this end of the rolls to be raised or lowered at pleasure, a slack belt is used and tightened by means of a friction-pulley and weight, such as are in common use. We would further state in explanation that feed-rolls are in use where each end of a single roll is raised separate, or both ends together, by means of a connecting-shaft and bevel-gears, either above or below, but in all these cases, so far as I know, the stuff to be worked is passed under the rolls between the boxes or bearings, and are for purposes requiring the rolls to be kept very nearly level; but the raising of two feed-rolls combined, each end separately, and for purposes that require one end to be much higher than the other, thus tilting the rolls on any desired angle, and also when the feed part of the rolls is outside of the boxes, instead of being between them—this plan I believe to be original, as herein described. This kind of rolls have been long in use, both single and in pairs, but in all cases the back-end boxes have been confined to the frame, so as not to be adjustable, the front end being held by guides with a saddle on the top and held down by a spring, thus allowing that end to rise but little as the stuff passes under the rolls, and cannot be adjusted to any other position, and in order to allow the front end to rise any, the journals in the back-

end boxes have been made oval  and only have a perfect bearing in the middle, and are thus liable to be filled with dust and bad oil.

G G G are rubber springs that give pressure to the feed-rolls, which is increased or diminished by turning up or down the nuts on the rods N N in Fig. 2, and by the set-screws Q Q, Fig. 5. The whole are raised or lowered by means of the crank and screw M, Fig. 2, and the opposite end, Fig. 3, by the crank and screw K.

What I claim as my invention or improvement is—

1. The raising of the feed-rolls combined, each end independent of the other, by the use of the crank-screws M and K, by which the rolls are tilted to any required angle from a horizontal position in order to bear on beveled

stuff to feed it through under the rolls and cutters.

2. The combination of the frame B with the columns C C C C, the top frame, S, the bolts, and nuts *b b b b*, with the arrangement for holding, guiding, and giving pressure to the rolls, substantially as and for the purposes specified, the whole forming a neat and convenient frame for use in the manner and for the purposes herein specified.

3. The arrangement of the boxes D D D D, the spring G, and the rods N N, sliding in the slots P P, to adjust themselves to any position of the rolls.

LYMAN GOULD.

Witnesses:

C. B. ROGERS,
GEO. W. ROGERS.