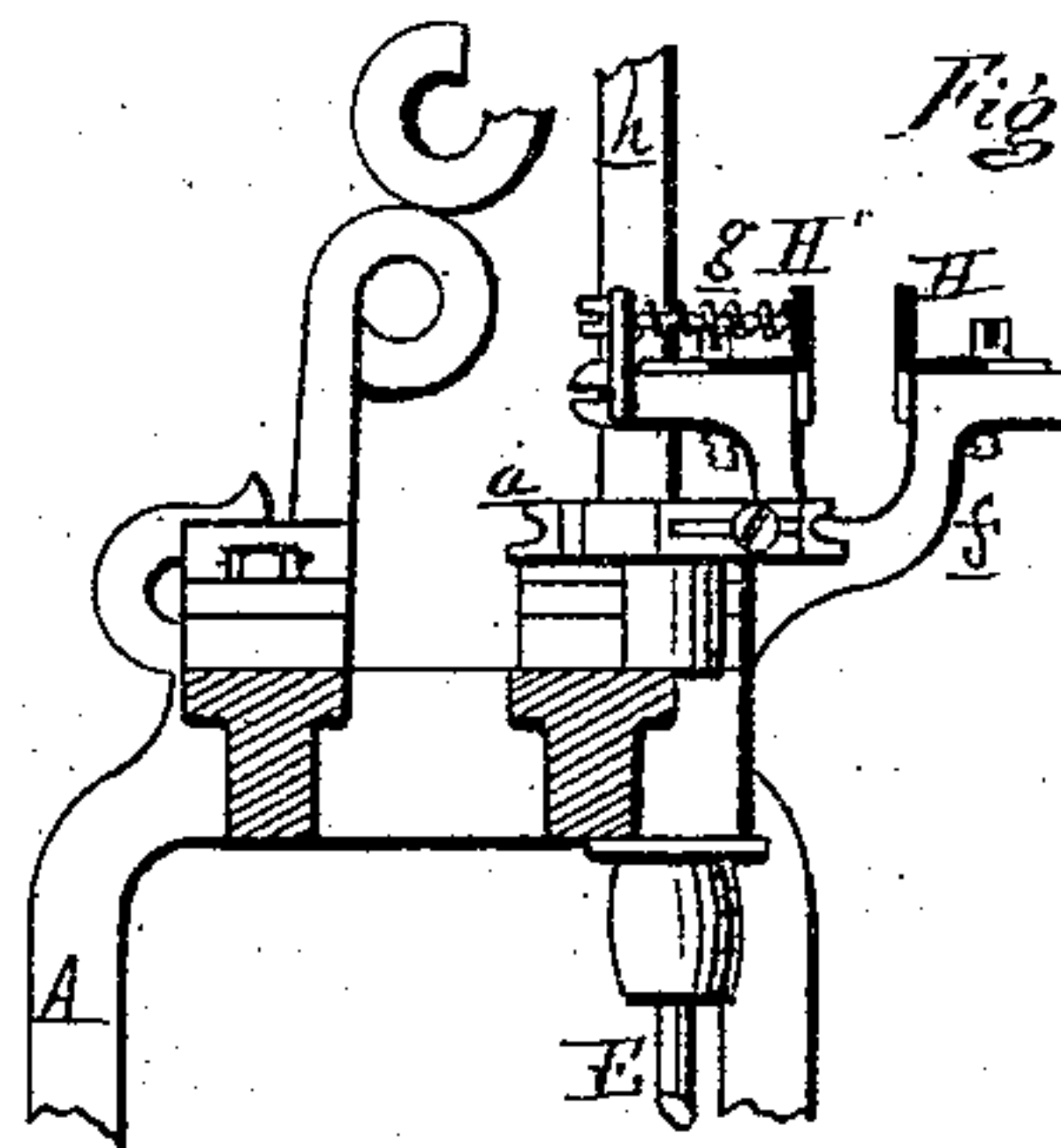
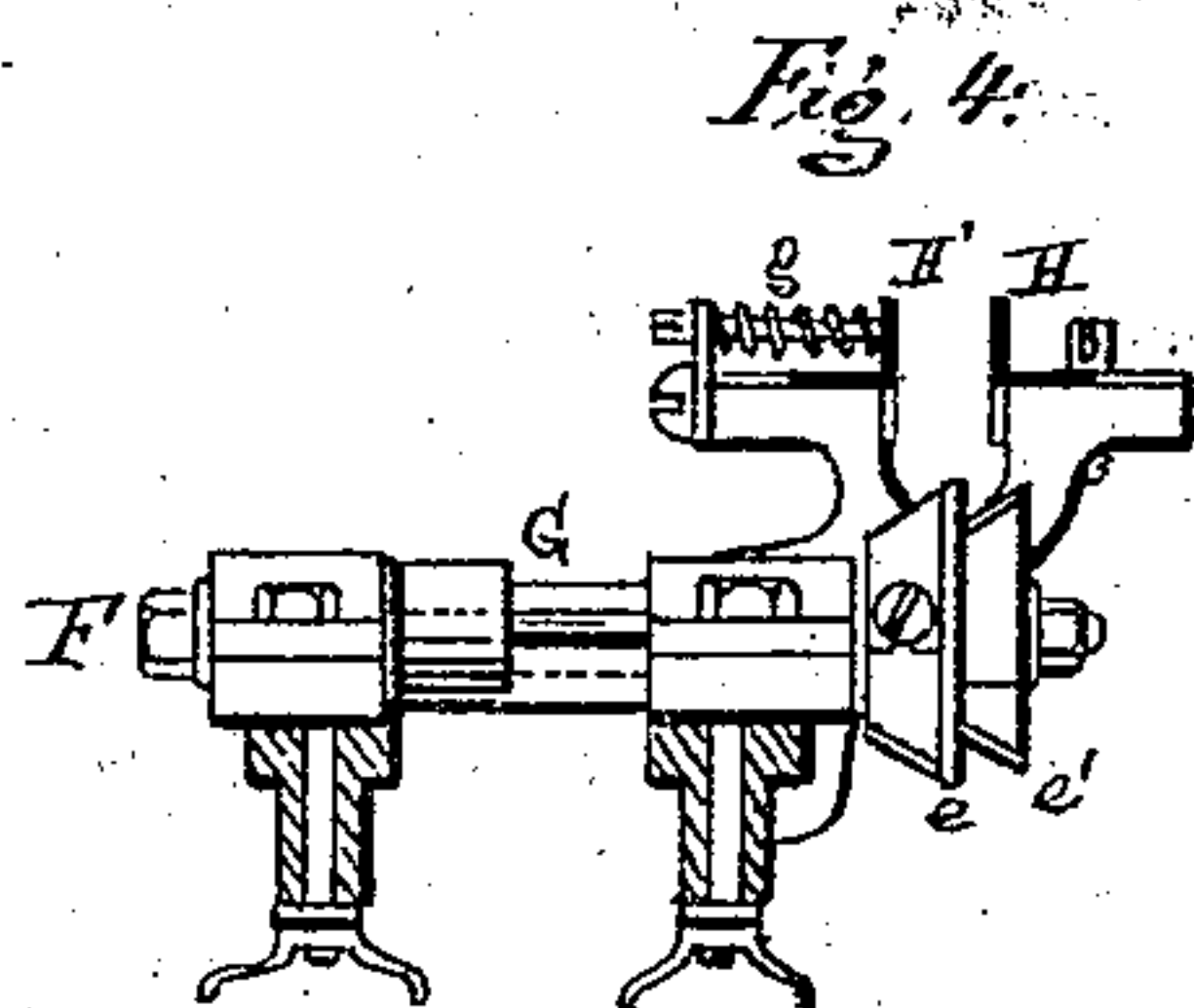
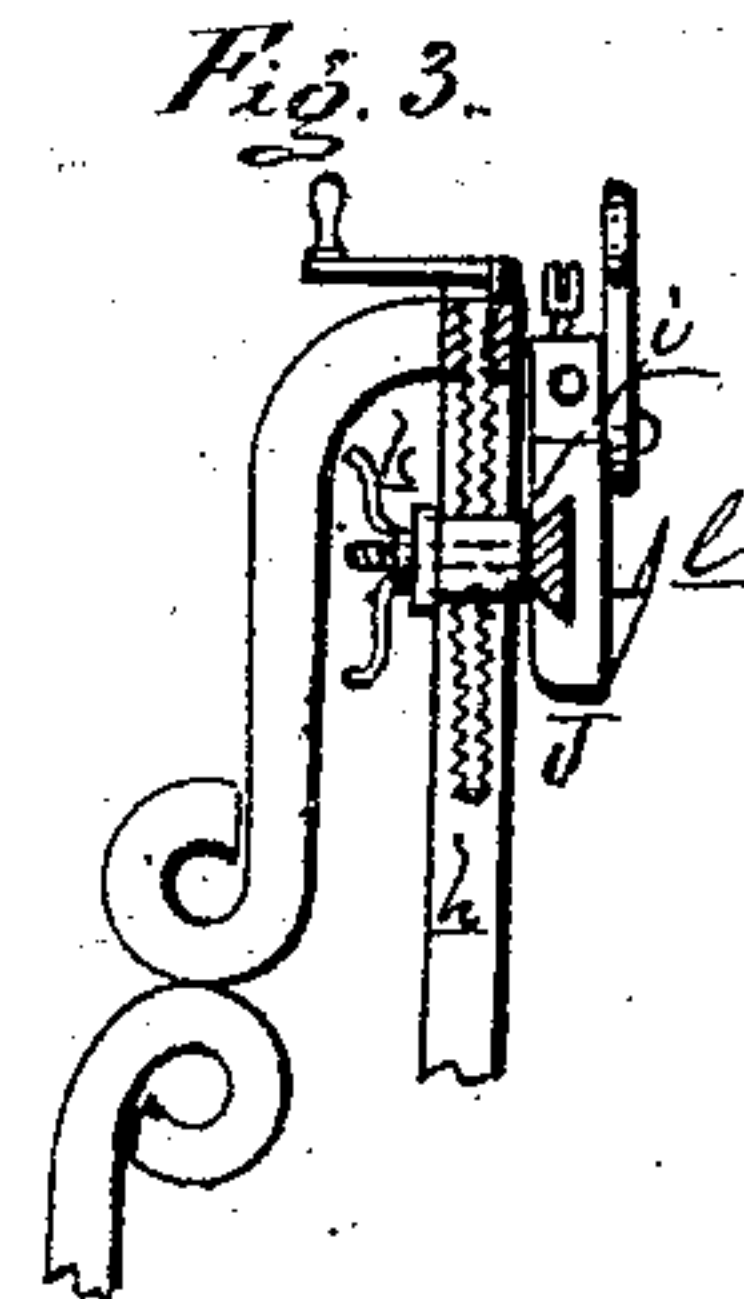
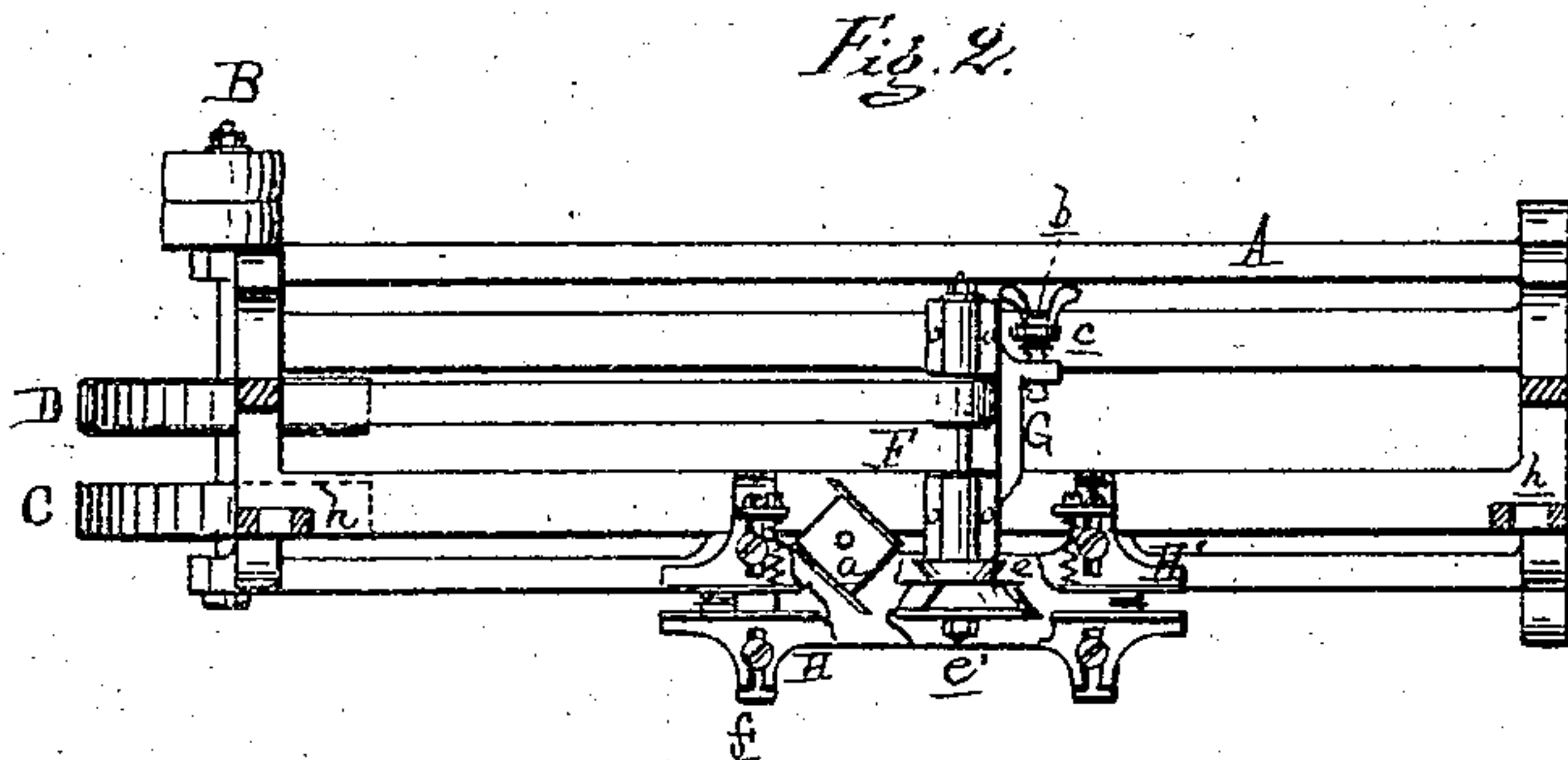
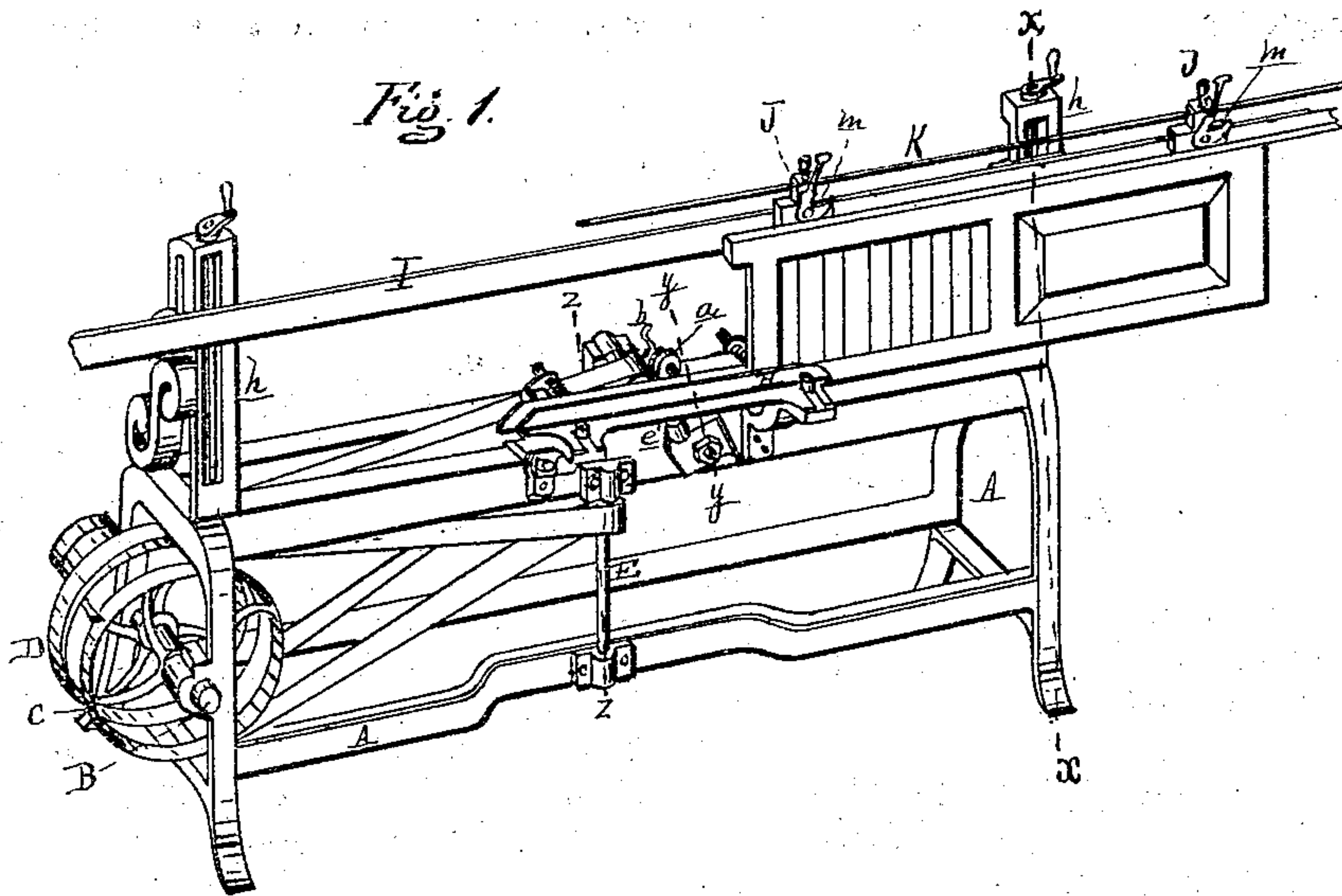


L. DUENNISCH.

Machines for Making Window Blinds.

No. 153,323.

Patented July 21, 1874.



Attest:
 Chas J Hunt
 F. V. Anderson

Inventor:
 L. Duennisch
 per Attorney
 Thos. S. Sprague

UNITED STATES PATENT OFFICE.

LOUIS DUENNISCH, OF SANDUSKY, OHIO.

IMPROVEMENT IN MACHINES FOR MAKING WINDOW-BLINDS.

Specification forming part of Letters Patent No. **153,323**, dated July 21, 1874; application filed April 28, 1874.

To all whom it may concern :

Be it known that I, LOUIS DUENNISCH, of Sandusky, in the county of Erie and State of Ohio, have invented a new and useful Machine for Making Window-Blinds, of which the following is a specification :

The nature of this invention relates to a two-sided sticking-machine having a horizontal arbor whose frame is laterally adjustable, and the combination therewith of certain attachments, whereby a window-blind may be jointed and rabbeted on its meeting edge and beaded in once passing through the machine.

The invention consists, first, in a laterally-adjustable frame for the horizontal arbor; secondly, in the peculiar devices for holding the blind while being jointed; and, thirdly, in the peculiar guide for the blind, arranged to yield for one of greater thickness; also, in the general construction and arrangement of the various parts, as more fully hereinafter set forth.

Figure 1 is a perspective view of the machine. Fig. 2 is a sectional plan of the same, the guide-bar being removed. Figs. 3, 4, and 5 are cross-sections at *xx*, *yy*, and *zz*, respectively.

In the drawing, A is the frame of the machine, across one end of which is journaled the driving-shaft B, provided with the usual fast and loose pulleys, and carrying two driving-pulleys, C D, the former of which drives a vertical arbor, E, by means of a quarter-twist belt. The arbor E is journaled in bearings in the sides of the frame, and to its top is secured a cutter-head, *a*, carrying a bead tool or cutter. F is a horizontal arbor, driven by a belt from the pulley D, and is journaled in a frame, G, seated across the top of the frame A in ways cast thereon, and is laterally adjustable by a screw, *b*, passing through a lug, *c*, in the frame A, and tapped into a projection on the frame G. On the overhanging end of the arbor F two cutter-heads, *e e'*, are secured, the inner one, *e*, of less diameter than the other, and its knife or cutter joints the edge of a blind-stile passing over it, while the outer one, *e'*, rabbets it. *f* are brackets on the side of the main frame, on which is adjustably secured a flanged guide-plate, H, which may be adjusted to guide any

thickness of blind-stile. H' is a similar guide-plate on the other side of the brackets, and is pushed toward the other by two spiral springs, *g*, on its guide-rods, the object of which is to keep the face of the blind in contact with the guide H, while it will also yield to slight variations in thickness. The arbor-frame may be laterally adjusted to enable the cutter-head to rabbet any thickness of blind. The ends of the frame A extend vertically up the front of the machine to form the slotted standards *h*, in each of which is a sliding block, *i*, which may be raised and lowered by a screw, *k*, journaled in each standard. I is an iron bar, beveled on both edges, and secured to the blocks *i i*. J J are two rests, with dovetail ways in their backs, fitted to the bar I, on which they slide, being adjustably connected by a metal spacer-rod, K, passing through the head of each, and secured by a set-screw. The bar has one or more thin spots filed in it to make it flexible and not cause the rests to bind on the bar. These rests are adjusted apart far enough to enable a projecting spur, *l*, on the face of each to engage with the inner edge of the "hanging" stile of a blind near the end rails thereof, the blind being held firmly on the rests by turning down a lever-cam, *m*, pivoted on each rest. The rests being run back on the bar, a blind is hung on the spurs by its "hanging" or hinge stile and clamped fast; it is then pushed forward between the guides, when the cutter-head *e'* will joint the lower edge, while the larger one, *e*, will rabbet it. As the blind passes along the cutter-head *a* beads the face, and the work is done, the blind being removed from the rests, which are then run back to receive another blind. By removing the rests, running off the belt of the beading-arbor, and replacing the cutter-heads *e e'* with others of equal diameters, and provided with edge and side cutters, the machine can be used as a panel-raiser, the panel-boards being run between the guides H H'.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The cutter-heads *e e'*, mounted on the arbor F in the arbor-frame G, laterally adjustable across the frame A, substantially as and for the purpose set forth.

2. In combination, the laterally-adjustable arbor-frame G, arbor F, beading-arbor E, vertically journaled in the frame A, with the adjustable guide-plate H and spring guide-plate H', all constructed and arranged as described and shown.

3. The combination, with the frame A and arbors E F, of the brackets *ff* and guides H H', substantially as described.

4. The bar I, adjustably secured to the stand-

ards *h h*, the rests J J sliding thereon, and the rod K, all constructed and arranged substantially as described, in combination with a sticker-frame having a jointing and rabbeting cutter-head and a guide, substantially as and for the purpose set forth.

LOUIS DUENNISCH.

Witnesses:

JAY C. BUTLER,
W. BERRIGAN.