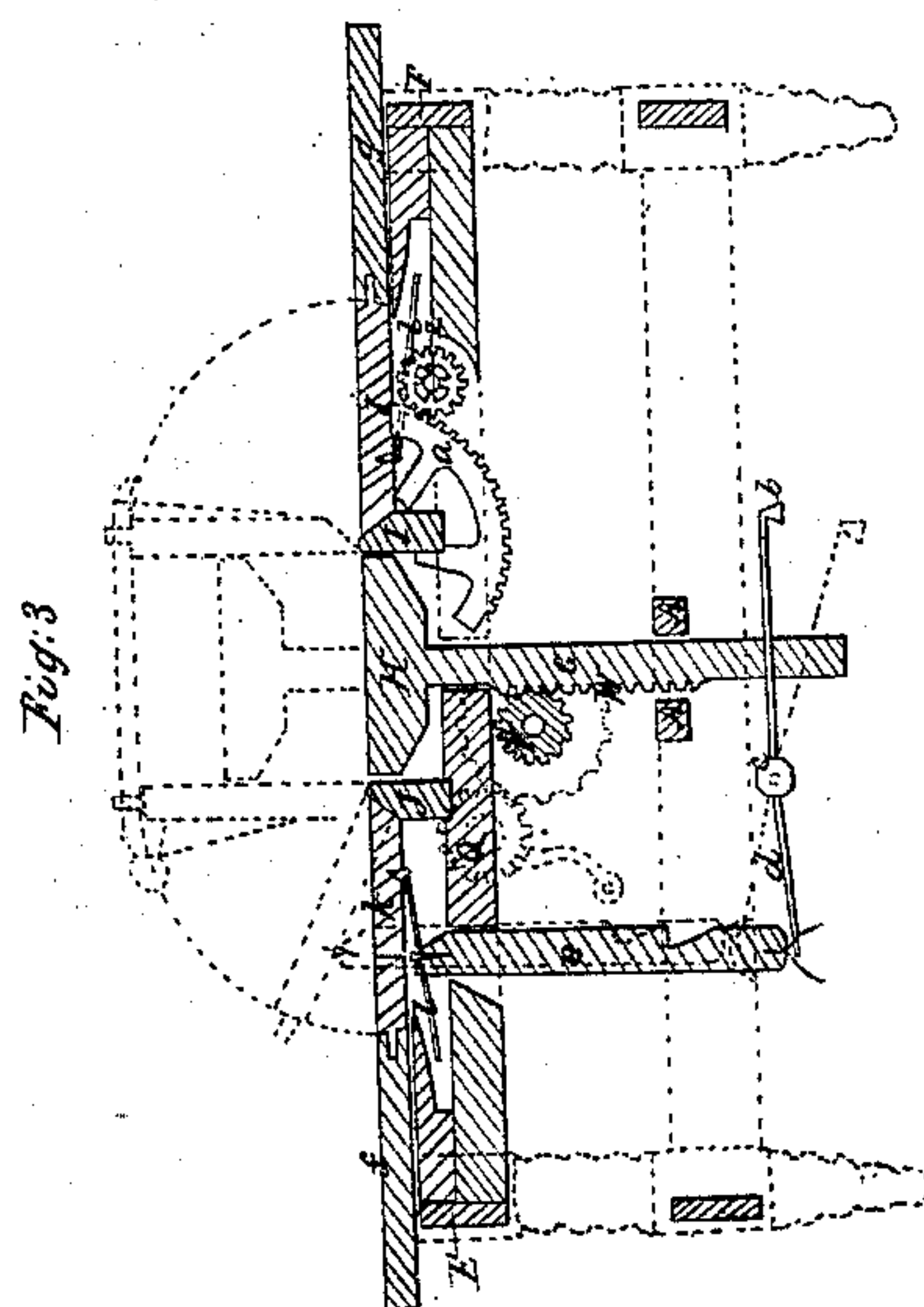
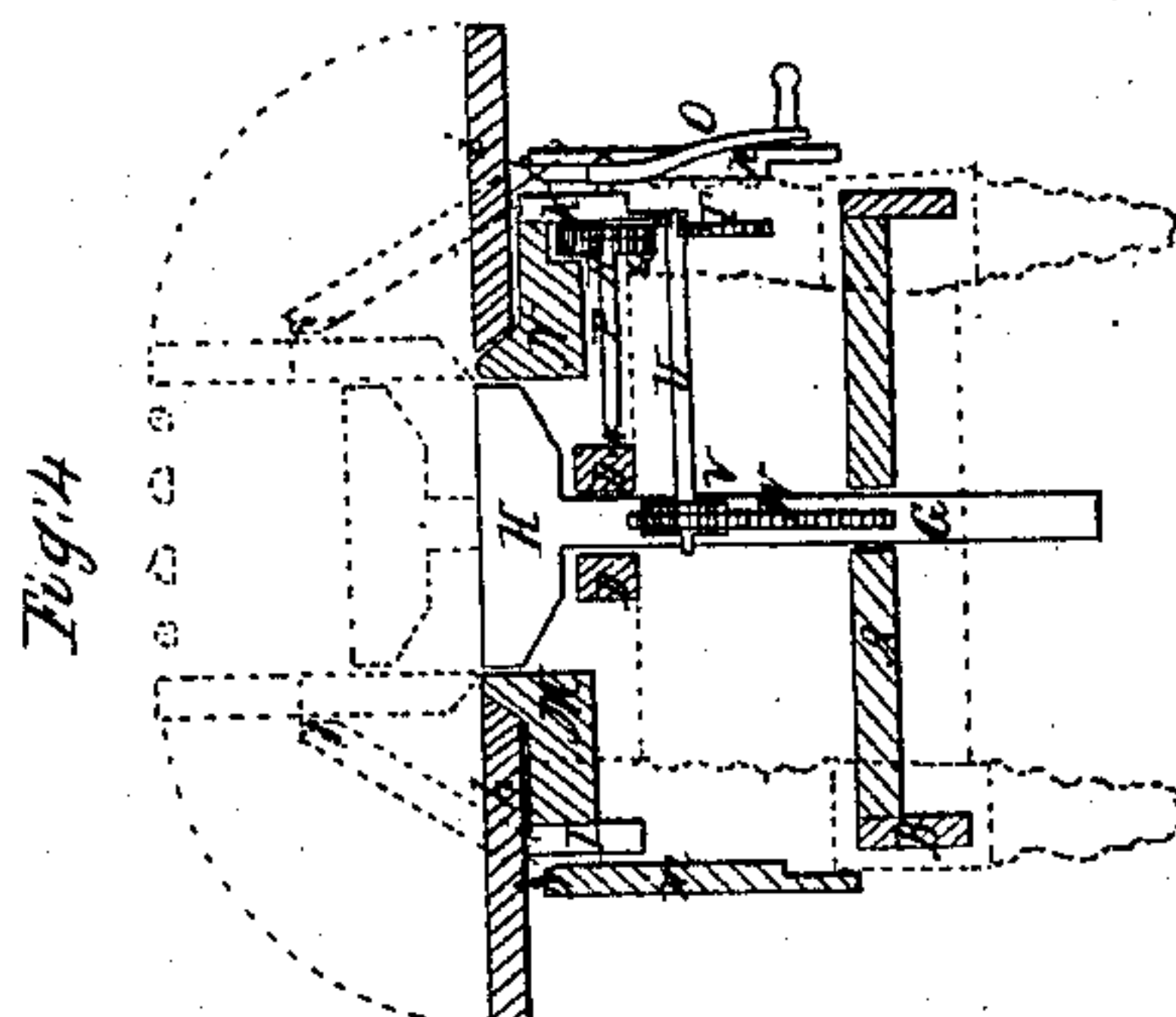
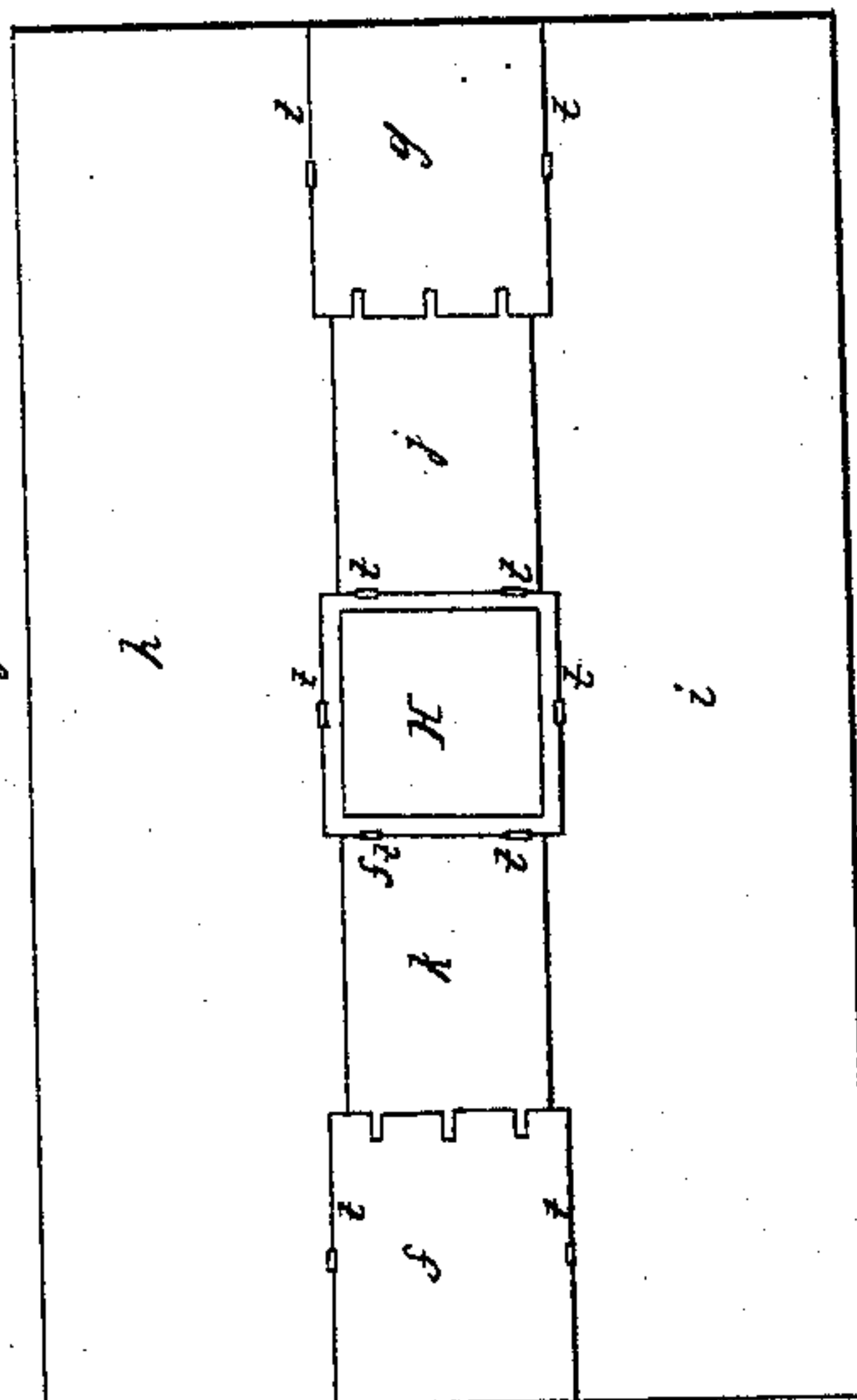
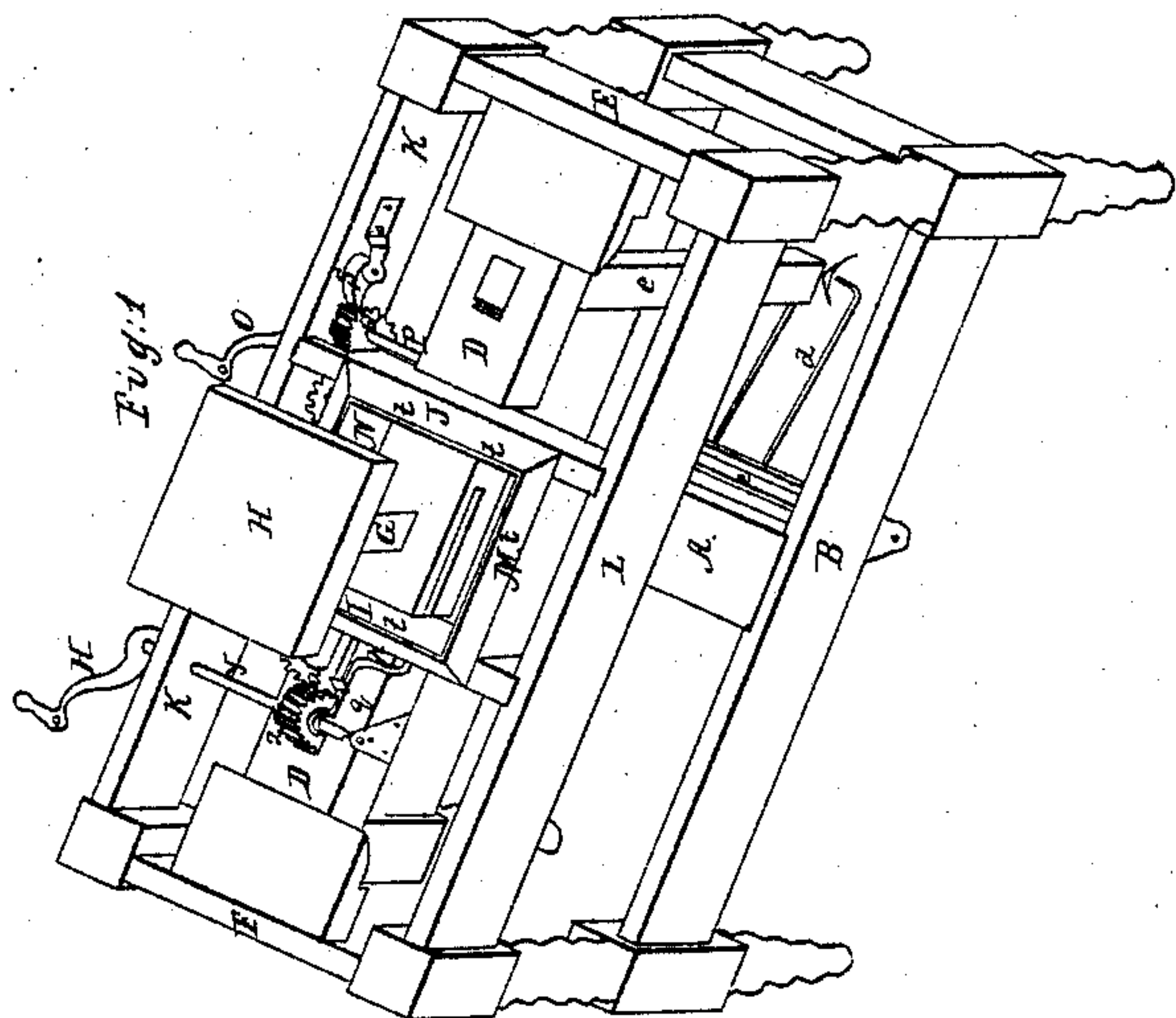
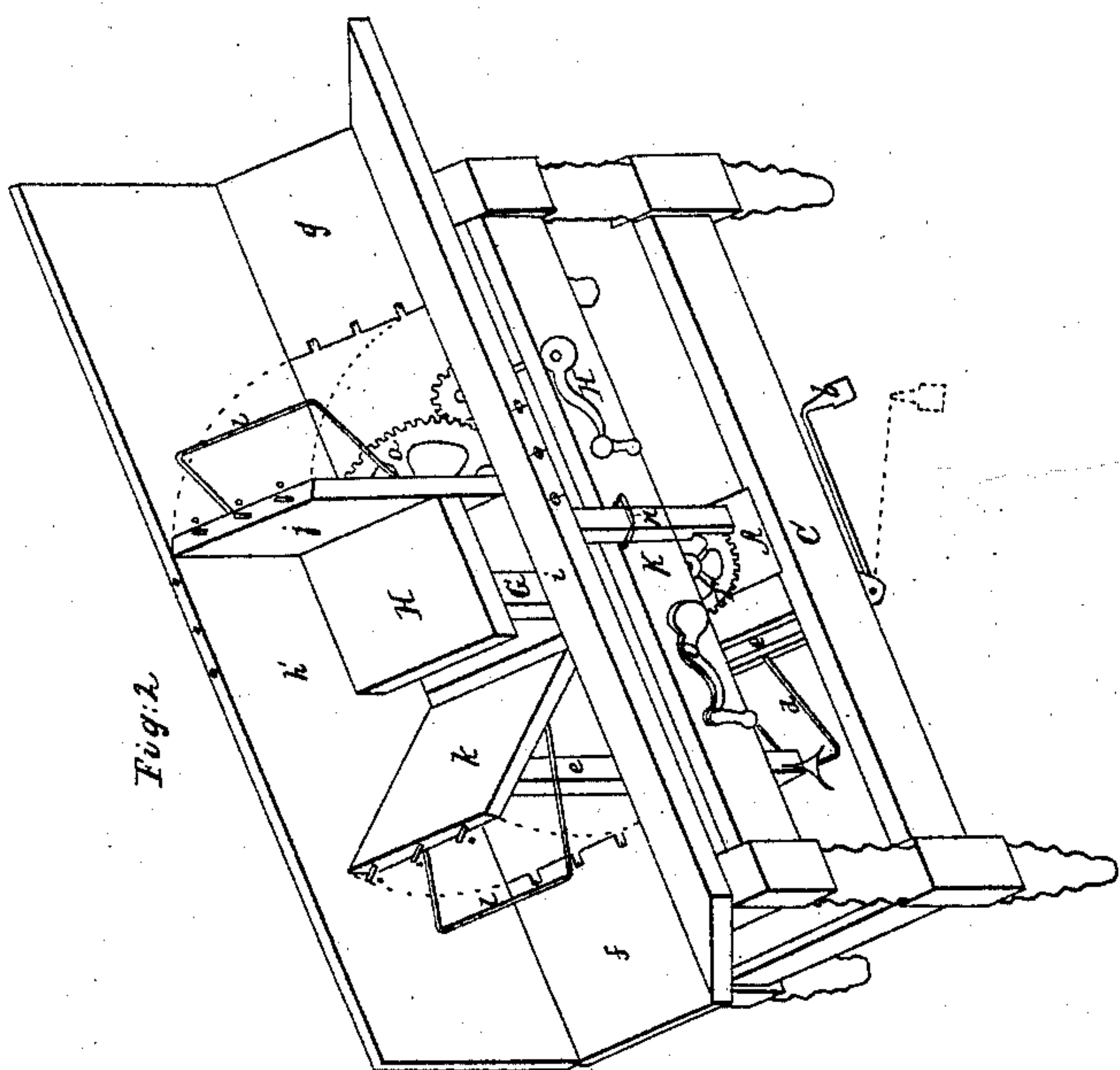
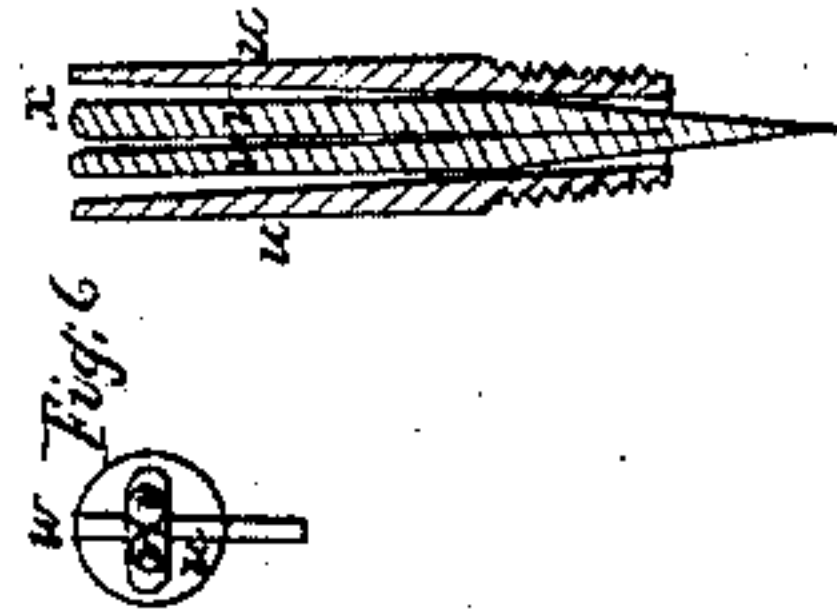
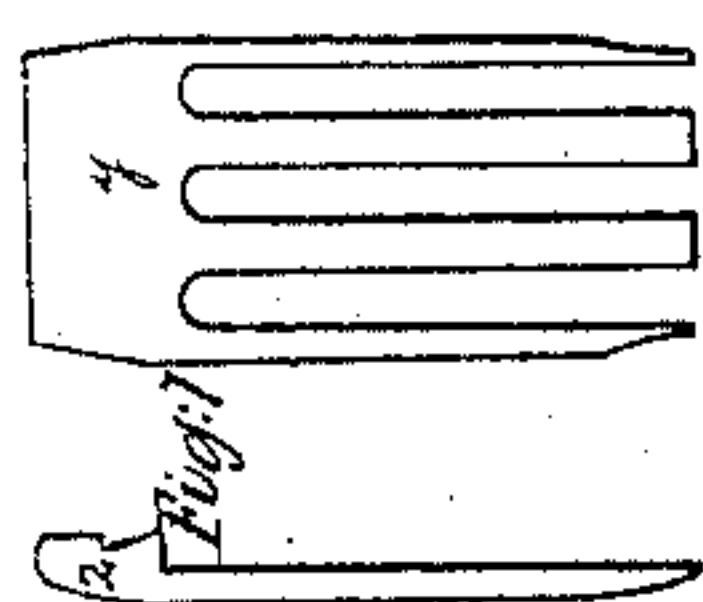


A. Dorr,
Wool Press,

No 18,328,

Patented Oct. 6, 1857.



UNITED STATES PATENT OFFICE.

ALBERT DORR, OF ORLEANS, MICHIGAN.

MACHINE FOR PACKING WOOL.

Specification of Letters Patent No. 18,328, dated October 6, 1857.

To all whom it may concern:

Be it known that I, ALBERT DORR, of Orleans, in the county of Ionia and State of Michigan, have invented a new and useful Machine for Packing Fleece-Wool; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a perspective view of the frame had from the back side. Fig. 2 is a perspective view had from the front side; Fig. 3, a longitudinal elevation; Fig. 4, a transverse elevation; Fig. 5, a plan view of the surface of the table; Fig. 6, a view of the twine holders, full size—*w*, end view; *x*, side view; Fig. 7, the slide—*y*, side view; *z*, view of the edge.

The frame of said machine has four posts 3 inches square and 26 inches in height. Eight rails $1\frac{1}{2}$ inches thick and 5 in width are framed into said posts, *i. e.* 2 in each side and 2 in each end, making a frame 4 feet in length and 2 feet in width. The upper edge of the upper set of rails is even with the top of the posts and the upper edge of the lower set is 12 inches below. The transverse piece A is 6 inches in width and 2 thick and lies flatwise from the center of the rail B to the center of rail C with its upper side even with the upper edge of said rails. The longitudinal center piece D, Figs. 1 and 3, extends from the center of the rail E to the center of F and is 6 inches in width and 2 inches thick and its under side is even with the under edge of said rail. The rack rod G is 3 inches square and slides perpendicularly through mortises through the center of A and D. The press follower H is attached firmly to the upper end of the rack rod G. The pieces I and J, Figs. 1 and 3, are $1\frac{1}{2}$ by 4 inches and are framed into the side rails K and L $4\frac{1}{2}$ inches each way from their centers with their lower edge resting upon D, to which they are fastened with screws, and their upper edge 1 inch above the side rails. The pieces M and N, Figs. 1 and 4, are let into I and J $4\frac{1}{2}$ inches each way from their centers. The said 4 pieces I and J and M and N form a place in the center of the frame

9 inches square into which the follower falls when it let down. The outer edge of these pieces are beveled off, leaving the upper edge $\frac{1}{4}$ of an inch thick and the ends of I and J are trimmed down even with the side rails. The crank O turns the shaft P, Figs. 1 and 4, which passes through the side rail K, and has its bearing at the other end in the center piece D. Pinion Q, Figs. 1 and 4, is fastened on the shaft P near the inside of rail K and a small ratchet wheel R, Fig. 4, near the pinion S, Fig. 1, is the ratchet that works in the ratchet wheel.

T, Figs. 2 and 4, is a spur cog wheel which works in pinion Q and is fastened on the shaft U, which has one of its bearings below and attached to side rail K. Its other bearing is below and attached to the farther side of center piece D. Pinion V, Figs. 3 and 4, is on the same shaft and works in the rack W, Figs. 3 and 4, which is let into and firmly fastened to the rack rod G, so that when the crank O is turned right handed it raises the rack rod G and follower H. The crank H turns the shaft Y, Fig. 1, which passes through side rail K and has its other bearing above and attached to the farther side of center piece D. Pinion 3, Figs. 1 and 3, is on the shaft Y near its farther end and works in segment *a* for the purpose of raising the leaf *j* to which it is attached.

The treadle *b*, Figs. 3 and 4, is made of $\frac{3}{8}$ round iron and is fastened to the treadle roller *c* and operates the arm *d*, Figs. 1, 2 and 3, which strikes against rod *e* and thereby raises the leaf *k*.

The table, Fig. 5, is made of two stationary leaves *f* and *g* and 4 movable leaves *h*, *i*, *j* and *k* and the press follower H, making a table 5 feet long and 3 feet 1 inch in width. The stationary leaves *f* and *g* are each $12\frac{1}{2}$ inches in length and $9\frac{1}{2}$ inches in width and are fastened with screws to the edge of the upper end rails one at each end of the frame and have each 3 notches in the inside ends, into which the twine holders *o o o* fall. The movable leaves *h* and *i*, Figs. 2 and 5, are each 14 inches in width and 5 feet in length and are attached by hinges to the stationary leaves *f* and *g* and the cross pieces M and N at *t t t*, Figs. 1 and 2, in such a manner as to be raised or turned up perpendicularly. The

leaves *j* and *k*, Figs. 2 and 5, are 9 inches in width and $12\frac{3}{4}$ in length and are attached with hinges to the transverse pieces I and J, Fig. 1, at *t t t t*, so as to be raised the same as *h* and *i*. These 4 leaves form a box 9 inches square and 14 inches deep, of which the press follower H is the bottom.

The slide, Fig. 7, is made of hard wood and is $\frac{3}{4}$ of an inch thick, 8 inches wide and 18 in length. A cleat is fastened across one end 3 inches in width to keep it from splitting. It has 3 slits extending from the cleat to the other end of the slide $\frac{5}{8}$ of an inch in width and the edges of each part is rounded off on one side to an edge. The slits correspond with the twine holders *o o o* in the edge of the leaves *j* and *k*. The slide is to be placed over the box and rests upon the edge of the leaves *j* and *k* to hold the wool in its place and is held in its place by the bails *l l*, which pass over its ends. The bails *l l*, Figs. 2 and 3, are made of $\frac{3}{8}$ round iron and pass through an eye or loop in the end of the hinges with which the leaves *j* and *k* are hung and the ends are turned out in such a manner as to prevent the bail from falling down too low.

The rod *e*, Fig. 3, is attached to the leaf *k* with a joint and extends down through a mortise in D low enough to rest on the arm *d* and has a notch that rests on the edge of the mortise when *k* is raised to a perpendicular position. Rods *m* and *n*, Fig. 4, are attached to leaves *h* and *i* with a joint and hold the leaves in a perpendicular position by resting upon the rails K and L and are kept in their place by iron staples.

Segment *a* is a little more than a $\frac{1}{4}$ part of a circle and is attached to leaf *j* and has cogs on its outer edge that work in pinion Z in such a manner as that when crank H is turned right handed it raises *j* to a perpendicular position, where it is held by a nose *q*, Fig. 1 on the back side of the segment, that catches on the spring *p* which is fastened to timber D and passes around the shaft *y*, resting against a shoulder and pressing the shaft laterally toward the crank and keeps the pinion Z in gear with segment *a*; but when the shaft is pressed back it shoves the spring *p* from under the nose *q* and carries the pinion Y beyond the segment and lets the leaf fall back to a horizontal position. Shaft P has a similar spring *v* which keeps pinion Q in gear with spur wheel T and when it is pressed back it carries the pinion beyond the spur wheel and lets the follower fall back to its place.

Fig. 6 represents the twine holders *o o o* in the leaves *j* and *k*, full size. The tube *u* is 2 inches in length and screws into the edge of the leaves $\frac{3}{4}$ of an inch. The spring *v* is made by doubling a piece of $\frac{1}{8}$ wire and is driven through the tube into the wood below. The tube has a notch in the end $\frac{3}{8}$ of an inch

deep to receive the twine and the spring holds it fast. The twine holders in *h* and *i* are similar to those in *j* and *k* only the tube is only $\frac{3}{4}$ of an inch long and is driven in even with the edge of the leaf and the leaves have notches in their edges corresponding to the notch in the tube.

The manner of using my machine is as follows: The leaves being spread out and the follower let down 3 pieces of strong wool twine 3 feet 4 inches in length are placed in the twine holders in *h* and *i* and 3 more in those in *j* and *k*. The fleece of wool is spread on with the clipped side down and shoved as close together as convenient, the loose edges turned over and loose locks placed in the middle. The leaves *h* and *i* are raised till the notches in the rods *m* and *n* rest on the side rails, the end of the fleece to the left hand or on *f* is rolled in with the left hand even with the end of leaf *k*. The post is then placed upon the treadle, which raises *k*, so as to be conveniently reached with the hand and raised up till the notch in rod *e* rests on the edge of the mortise in D. The other end of the fleece is then rolled even with the end of leaf *j* and the crank H is turned until the nose *q* on segment *a* rests upon the spring *p*. The slide is placed on the top and secured by bringing the bails *l l* up over its ends. The crank O is turned until the wool is sufficiently compact. The twines from *j* to *k* are pulled up and tied and then those from *h* to *i* are pulled up and tied over the slide. The press is let down by pressing back the crank O, which throws the pinion out of gear, as has been described, the bails are thrown off and the slide drawn out and the leaves let down. The fleece is laid one side and 3 more twines put across *j* and *k*, the fleece is replaced with the side that was against *h* or *i* on the follower, the table is again folded up and the slide again put on the follower, raised and the twine tied and the operation is ended.

The machine as above described is the right size for fleeces weighing from 3 to 8 pounds, but may be made larger or smaller as required.

Having thus described my machine for packing wool I do not claim the movable or folding leaves *h i j* and *k* as my invention, but

What I do claim and for which I wish to obtain Letters Patent is—

1. The press follower H as in combination with said leaves or any other box or apparatus for folding or holding wool and being the bottom of the same and so constructed as to be raised up for the purpose of pressing the wool and may be operated by rack W pinions V and Q spur wheel T and crank O as herein set forth or in any other convenient way.

2. I claim the rack W pinions V and Q

spur wheel T ratchet S ratchet wheel R the
spring *r* crank O with the shafts P and U
and the rack rod G as herein described for
the purpose of operating the follower H as
5 herein set forth.

3. I claim the crank H shaft Y pinion Z
segment *a* and spring *p* substantially in the
manner and for the purposes herein set
forth.

10 4. I claim the treadle *b* arm *d* and the

rods *e m* and *n* or their equivalents for the
purposes herein set forth.

5. I claim the slide twine holders *o o o*
and bails *l l* as herein described and for the
purposes set forth.

ALBERT DORR.

Witnesses:

HORACE WHIPPLE,
GILBERT RUSSELL.