

T. O. Foot.

Sewing Mach^e for Quilting.

N^o 90354.

Patented May 25. 1869.

Fig: 1.

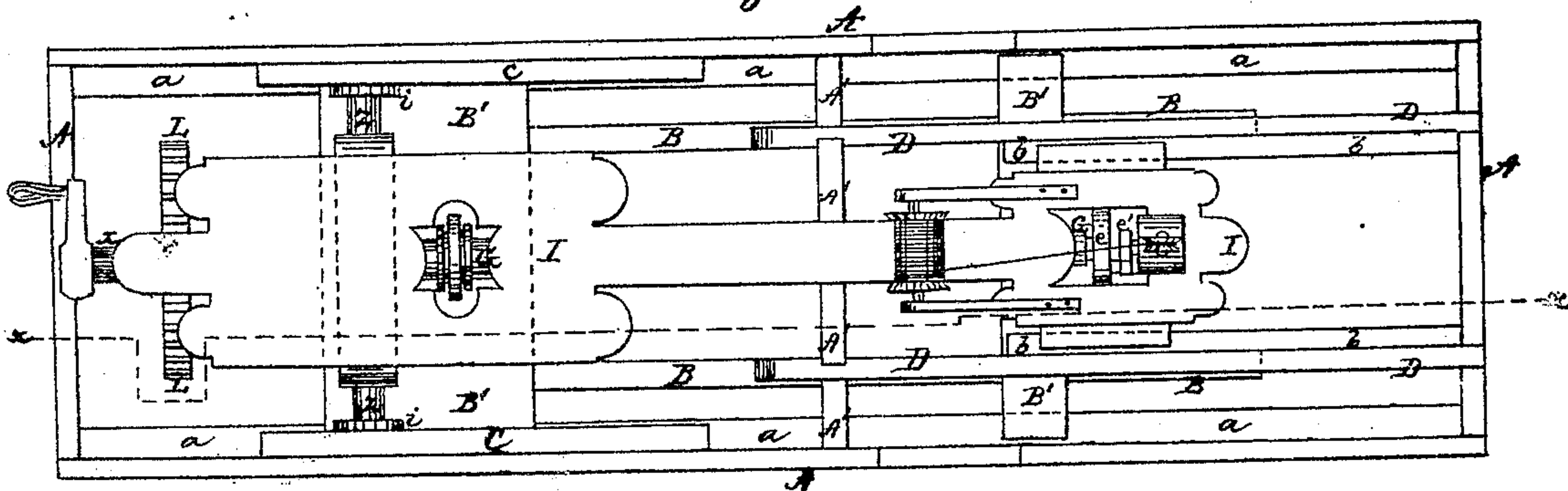


Fig: 2.

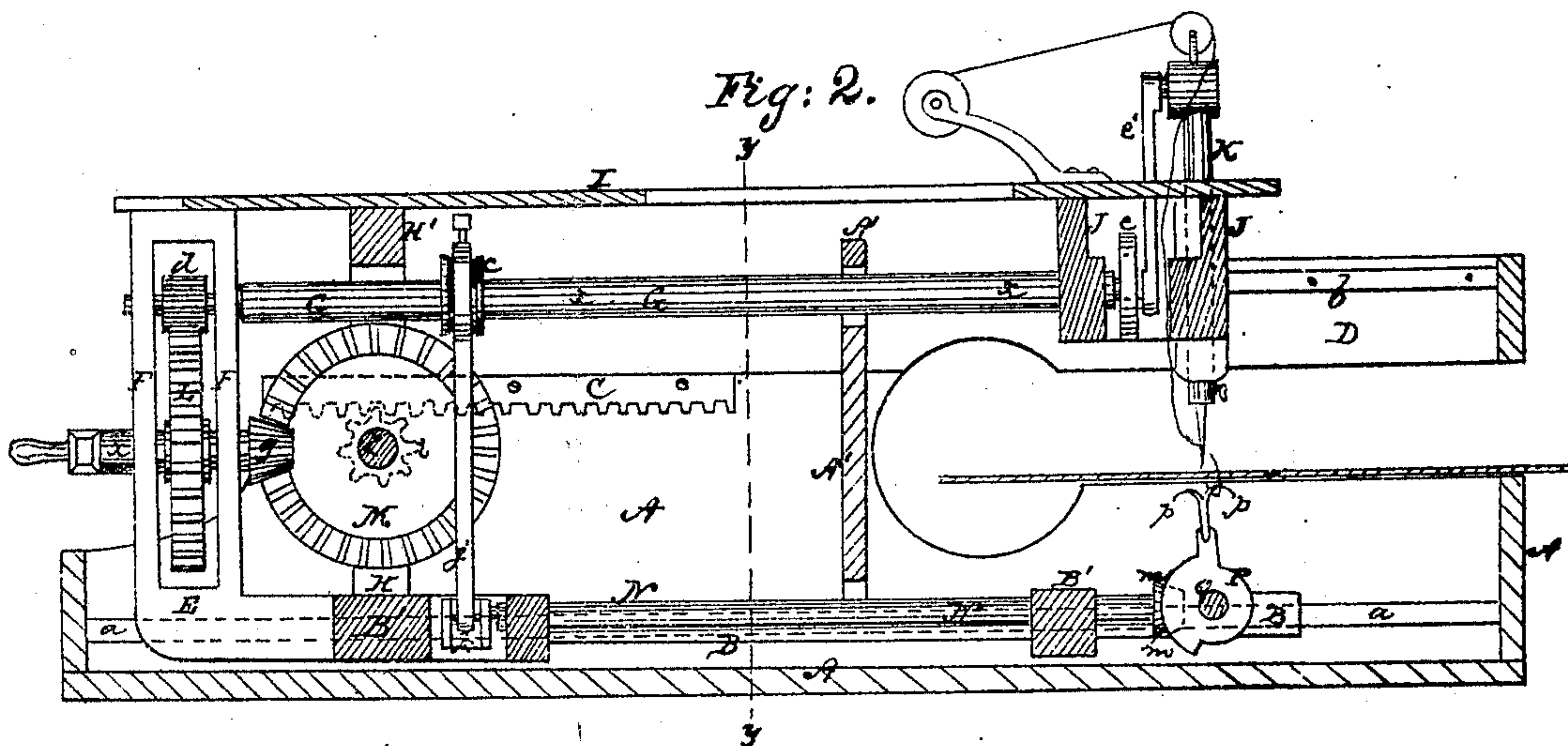
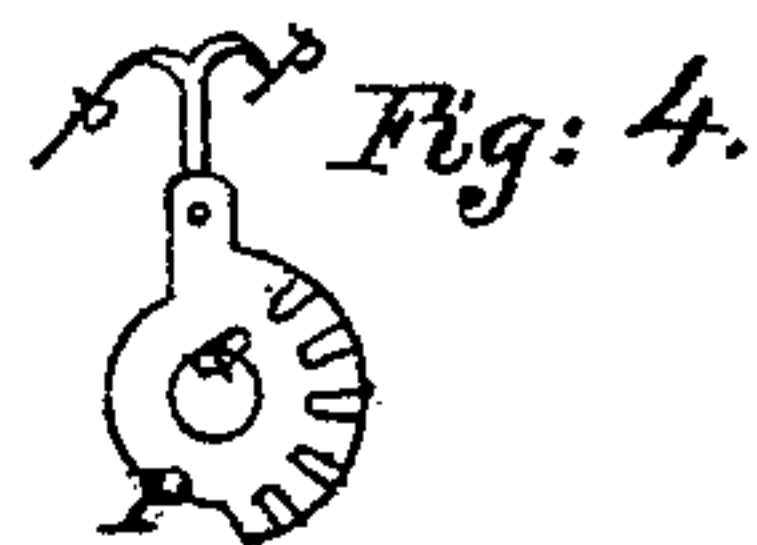
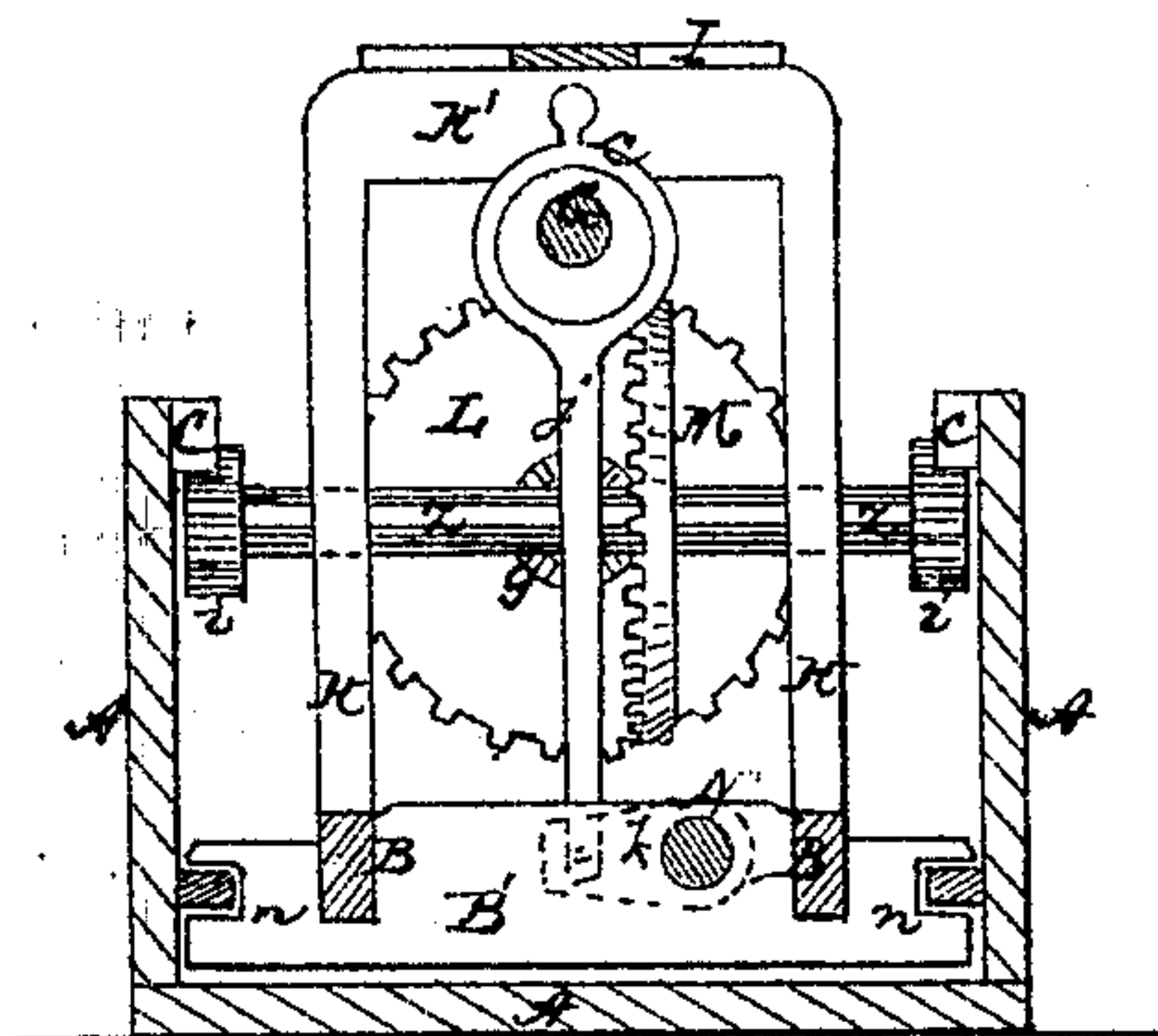


Fig: 3.



Witnesses

*Francis Key
Nathan Kelly*

Tallmadge & Foot

United States Patent Office.

TALLMADGE O. FOOT, OF NEWBURG, ILLINOIS.

Letters Patent No. 90,354, dated May 25, 1869.

IMPROVEMENT IN SEWING-MACHINE FOR QUILTING.

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, TALLMADGE O. FOOT, of Newburg, in the county of Pike, and State of Illinois, have invented certain new and useful Improvements in Quilting-Machines; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a top view of my improved quilting-machine;

Figure 2, a longitudinal vertical section, taken in the line *x-x*, fig. 1;

Figure 3, a transverse vertical section of the machine, taken in the line *y-y*, fig. 2; and

Figure 4, a view of the double-hooked looper detached, showing the opposite face of the same from that shown in fig. 2.

Similar letters of reference denote like parts in all of the figures.

The nature of my invention consists in the construction and arrangement of a traversing needle-boxing and bed-frame, for supporting the mechanism employed to impart motion to the needle-bar and hooks or loopers, in combination with stationary serrated bars and traversing-pinions, for propelling the machine over the fabric to be quilted or stitched, all hereinafter more fully described.

To enable others skilled in the art to make and use my improved quilting-machine, I will proceed to describe its construction and operation.

The lower stationary frame A, composed of two side and two end pieces, and a transverse bar A', is provided on its inner sides, near the bottom thereof, with two longitudinal ways *a a*, running the entire length of the inside of said frame, which serve to support and guide the reversible bed-frame B, supporting the mechanism when propelled either backward or forward.

Frame A is further provided with two stationary horizontal serrated bars C, for giving the reversible frame B motion back and forth.

The centrally-located transverse bar A' extends sufficiently above the two side pieces of the main frame A to have secured to either side of it the two longitudinal bars D, which are furnished, on their inner faces, with suitable ways *b*, for the boxing supporting the needle-bar to move on.

The reversible frame for supporting the mechanism employed to work the needle and looper, and to move itself over the fabric, consists of two longitudinal bars B, provided with suitable cross-bars, or braces B', the ends of which have grooves *n n*, for guiding said frame along the ways *a*, and a central head-block, E, which is curved or extended upward, so as to form the two vertical supports F, for the bearings of the crank-shaft *x*

and pinion *d*, which latter is secured to one end of shaft G.

This bed-frame B is further provided with two vertical standards H, in which the transverse shaft *z* has its bearings.

The upper longitudinal bar I, also forming a part of the movable frame, is secured, at one end, to the top of the head-block E, and to the upper cross-brace H', connecting the two vertical standards H.

The other end of bar I serves to suspend the boxing J, supporting the needle-bar K, in which boxing the eccentric *e* has its bearings.

Secured to crank-shaft *x* is a cog-wheel, L, and bevelled pinion *g*. The cog-wheel L, meshing into pinion *d*, imparts motion to shaft G, which, in turn, gives the required motion to the eccentrics *c* and *e* thereon.

The pinion *g*, being in gear with the bevelled-cog wheel M, imparts motion to the transverse shaft *z*, which, in turn, rotates the pinions *i i*, secured on each end of said shaft, causing them to traverse the serrated bars C, and thereby impart a forward or backward motion to the machine, in accordance with the direction in which the crank may be turned.

The needle-bar K receives its up-and-down motion by means of the eccentric *e* and pitman *e'*.

The eccentric *c*, on shaft G, is provided with a pitman, *j*, which connects with a crank, *k*, secured to one end of shaft N, the other end of said shaft having a bevelled pinion, *m*, gearing into the segments on the reversible looper P, secured to a transverse shaft, Q, having its bearings in the two longitudinal bars B.

Thus, when the shaft G revolves, motion is imparted first to the eccentric *c*, which, in turn, moves the pitman *j* and crank *k*, giving the required motion to the rock-shaft N, thereby causing the looper, or hook-bar P to bring either one or the other of its hooks *p* to catch the thread, in whichever way the mechanism may be moved.

The reel for the spool, and the required device for giving proper tension to the thread, I design locating as shown in the accompanying drawings, or at any convenient point on the upper part of the movable frame.

The lower or main frame A of the machine should be stationary, either furnished with suitable supports, or secured to a table or stand, and the quilt, or other article to be stitched, may be placed in the relative position shown by red lines in fig. 2 of the drawings.

My improved quilting-machines, four feet two inches long, nine inches wide, and eleven inches high, make three hundred stitches in moving sixteen inches one way, and by simply adjusting the looper or hook-bar,

and reversing the movement of the crank, the frame moves back over the quilt, making the same number of stitches either way.

Having thus fully described my invention,

What I claim therein as new, and desire to secure by Letters Patent, is—

The reversible looper P and hooks *p p*, in combination with traversing-frame B and stationary serrated bars C, when constructed and arranged substan-

tially in the manner and for the purpose herein set forth.

The foregoing specification signed by me, this day of , 186 .

TALLMADGE O. FOOT.

Witnesses:

R. M. ATKINSON,
J. S. ROBERTS.