

(No Model.)

2 Sheets—Sheet 1.

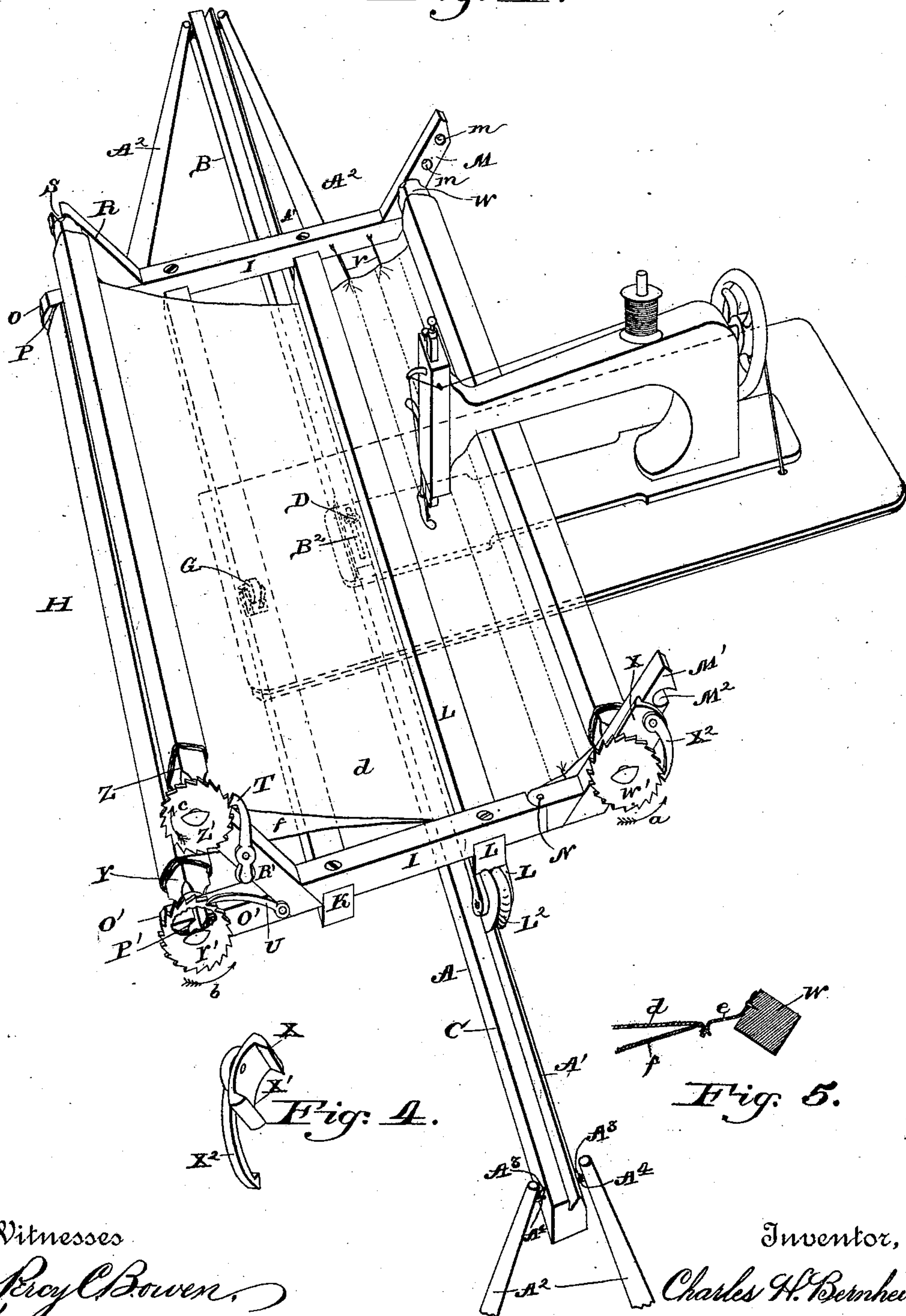
C. H. BERNHEIM.

# QUILTING FRAME FOR SEWING MACHINES.

No. 360,846.

Patented Apr. 12, 1887.

*Fig. 1.*



Witnesses

Roy C Bowen,  
 J W Garner

Inventor,

Charles H. Bernheim;

By his Attorneys

*to* C. Snow H.

C. H. BERNHEIM.

QUILTING FRAME FOR SEWING MACHINES.

No. 360,846.

Patented Apr. 12, 1887.

Fig. 2.

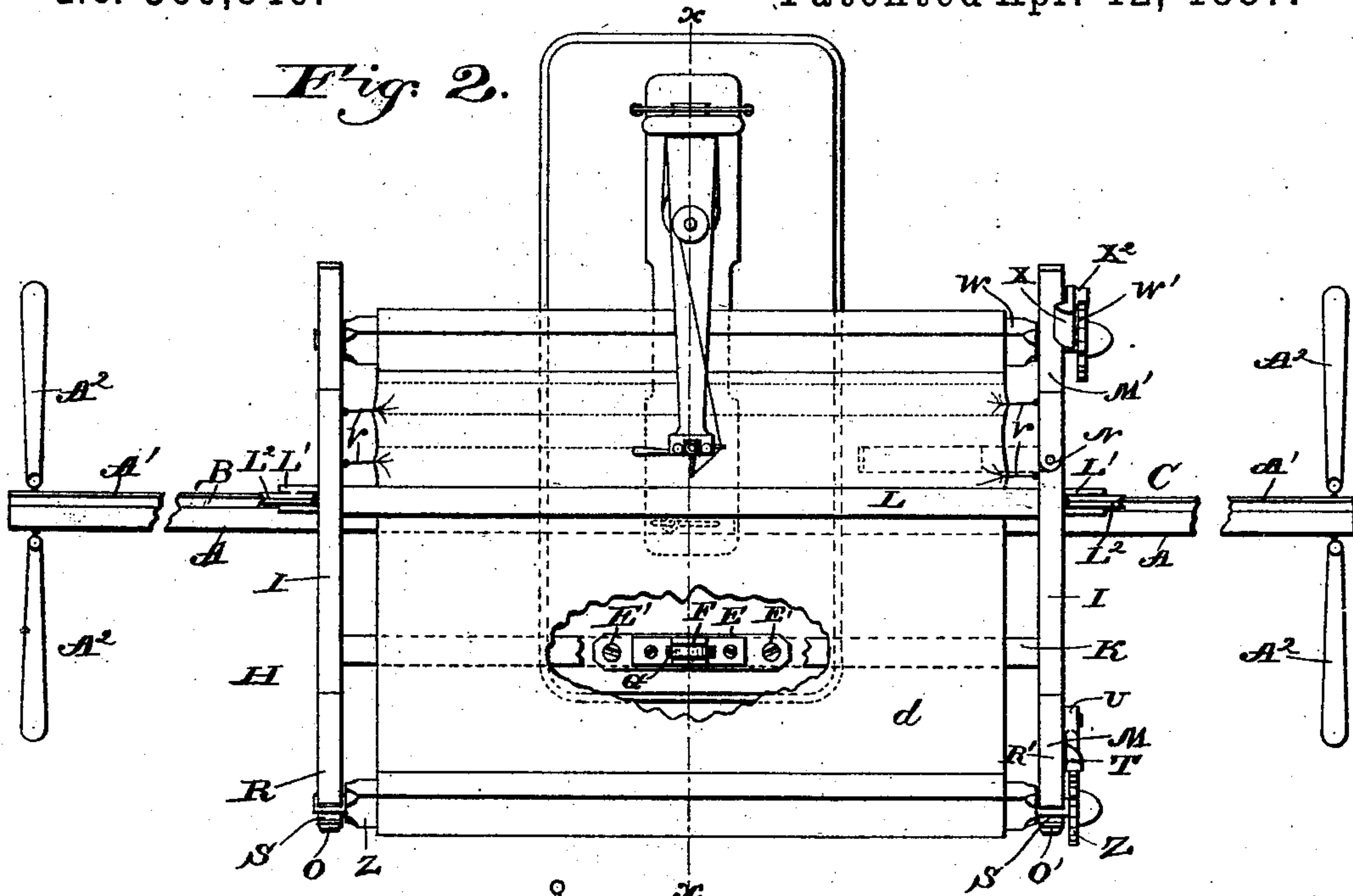
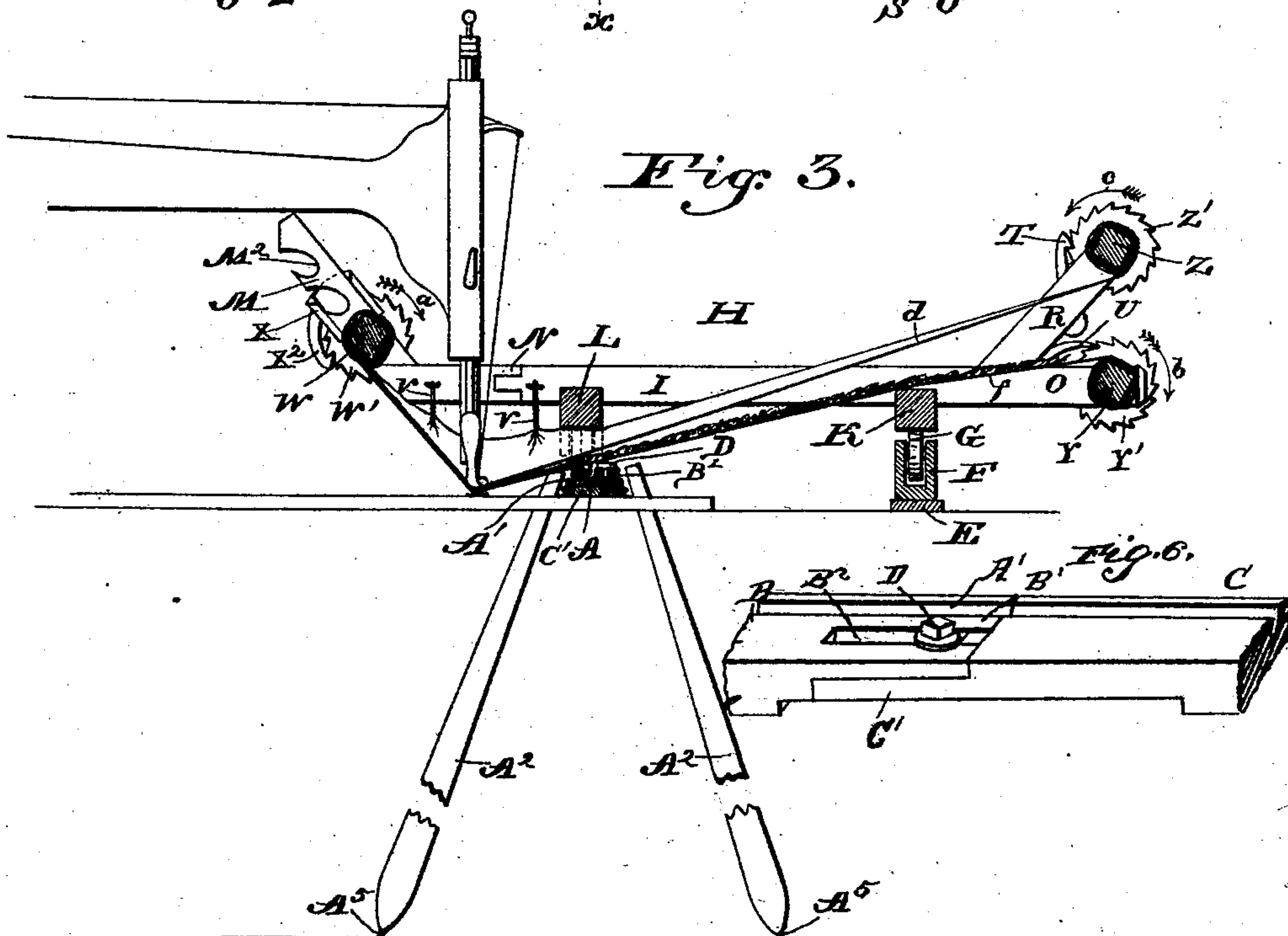


Fig. 3.



Witnesses

Percy Bowen,  
J. V. Ganner

Inventor,

Charles H. Bernheim;

By his Attorneys

C. A. Snow & Co.



# UNITED STATES PATENT OFFICE.

CHARLES H. BERNHEIM, OF CONOVER, ASSIGNOR TO BAXTER SHEMWELL,  
OF LEXINGTON, NORTH CAROLINA.

## QUILTING-FRAME FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 360,846, dated April 12, 1887.

Application filed September 17, 1886. Serial No. 213,785. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES H. BERNHEIM, a citizen of the United States, residing at Conover, in the county of Catawba and State of North Carolina, have invented a new and useful Improvement in Quilting-Machines, of which the following is a specification.

My invention relates to an improvement in quilting-machines; and it consists in the peculiar construction and combination of devices, that will be more fully set forth hereinafter, and particularly pointed out in the claims.

The object of my invention is to provide a quilting-machine which is adapted to be used in combination with a sewing-machine, and to automatically operate with the latter, whereby the labor of quilting may be entirely performed on the sewing-machine; and this object I attain by the construction illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of a quilting-machine embodying my improvements attached to a sewing-machine. Fig. 2 is a top plan view of the same. Fig. 3 is a transverse vertical section taken on the line *x x* of Fig. 2. Figs. 4 and 5 are detail views. Fig. 6 is a detailed perspective view of the lap-joint of the track.

A represents a track, which is attached to the front end of the sewing-machine table and extends transversely across the machine in a line parallel with the path of the feeder of the sewing-machine and slightly on the outer side thereof. The said track is made of two sections, B and C, which are secured together by a lap-joint comprising the member B' of the section B and the member C' of the section C. The member B' is provided with a longitudinal groove, B<sup>2</sup>.

D represents a clamping-screw, which extends through the slot B<sup>2</sup> and enters the member C' near the outer end thereof, and the function of the said clamping-screw is to secure the members of the lap-joint together and permit the same to be adjusted longitudinally to correspond with the width of the sewing-machine table. On one side of the track is made a flange, A'.

E represents a block, which is adapted to be attached transversely on the end of the sewing-machine table and parallel with the

track by means of screws or clamps, which extend through openings E', that are made in the ends of the block and enter or clamp the sewing-machine table. To the upper side of the block E, at the center thereof, is attached a vertically-projecting bracket, F, in which is journaled a bearing-roller, G.

H represents a rectangular bed or frame, comprising the end bars, I, and the longitudinal connecting-bars K and L. From the inner ends of the end bars, I, project upwardly and inwardly inclined arms M and M'. The arm M' is hinged or pivoted to the bar I, as at N, and is provided on one side with a vertical series of open slots, M<sup>2</sup>. The arm M is provided with a series of openings, *m*, (see Fig. 1,) which align with the slots M<sup>2</sup>. The outer ends of the end bars, I, project outwardly beyond the longitudinal bar K, to form the horizontally-extended arms O and O'. The arm O is provided at its outer end with a transverse opening, P, and the arm O' is provided at its outer end with a transverse slot, P', which is open on its upper side.

R and R' represent inclined arms, which project upwardly from the end bars, I, and extend in the opposite direction from the arms M and M', and in the upper ends thereof are made open slots S.

T represents a pawl or detent, which is pivoted to the outer side of the arm R', at the center thereof, and U represents a similar pawl or detent, which is pivoted to the lower end of the said arm R'. On the inner sides of the end bars, I, between the bar L and the inner ends of the said bars I, are secured hooks V, the function of which will be hereinafter explained. From the ends of the bar L project brackets L', in which are journaled rollers L<sup>2</sup>. The peripheries of the said rollers are grooved, and they are thereby adapted to bear upon the flange A' of the track, and the roller G bears under the bar K, which is parallel with the bar L.

W represents a roller, which has its ends reduced to form spindles, which are adapted to enter the openings *m* and the slot M<sup>2</sup>, and thus journal the said roller between the arms M and M' of the quilting-frame. There being a series of the said openings and slots for the reception of the spindles of the roller, it will



be readily understood that the latter may be adjusted vertically in the arms. To the outer end of one of the spindles of the roller W, which projects beyond the arm M', is attached a ratchet-wheel, W'.

X represents a locking-block, (see Fig. 4,) which is provided on its inner side with a groove, X', adapted to receive the outer side of the arm M', (see Fig. 1,) and the said block is thus adapted to move up or down on the said arm.

X<sup>2</sup> represents a pawl or detent, which is pivoted to the outer side of the block X and is adapted to engage the teeth of the ratchet-wheel W', to prevent the roller W from rotating in the reverse direction to that indicated by the arrow a.

Y represents a roller, (see Fig. 3,) which is provided with spindles that have their bearings in the openings P and P' (see Fig. 1) of the quilting-frame, and to one end of the said roller is attached a ratchet-wheel, Y', that is engaged by the detent U, so as to prevent the said roller from rotating in the reverse direction to that indicated by the arrow b.

Z represents a third roller, which has spindles adapted to enter the open slots S at the upper ends of the arms R and R', and the said roller is provided at one end with a ratchet-wheel, Z', that is engaged by the detent T, to prevent the said roller from rotating in the reverse direction to that indicated by the arrow c.

In order to support the outer ends of the track in a horizontal position when the track is attached to the sewing-machine table, I provide supporting-legs A<sup>2</sup>, which are provided at their upper ends with hooks A<sup>3</sup>, that engage eyes A<sup>4</sup>, with which the ends of the track are provided. The lower ends of the supporting-legs are provided with projecting pins A<sup>5</sup>, which are adapted to enter the floor, and thus secure the supporting-legs firmly in position thereon.

The operation of my invention is as follows: In order to make a quilt, one edge of the fabric *d*, which forms the cover, is attached to a strip of cloth, *e*, (see Fig. 5,) that projects from the roller W, and one edge of the lining *f* of the quilt is also attached to the said cloth *e* by stitching. The outer edge of the cover *d* is attached by stitching to a similar cloth, that is secured to the roller Z, and the outer end or edge of the lining is attached in the same manner to the roller Y. The roller W is passed between the bars K and L and under the latter, and is journaled in the lower openings and slots, *m* and M<sup>2</sup>, respectively. The roller Y is journaled in the openings P and P', and the roller Z is journaled in the open slots S. This causes the lining and the cover to pass under the bar L and over the bar K, and the outer sides of the said lining or cover are diverged from each other and held out of contact by reason of the roller Z being in a higher plane than the roller Y. This enables the cotton wadding to be readily placed between the lin-

ing and the cover of the quilt when they are stretched on the frame, and this stretching is done by turning the rollers Y and Z in the direction indicated by the arrows *b* and *c*. When the said lining and cover are stretched to the requisite tension, the detents T and U are caused to engage the ratchet-wheels of the rollers, so as to lock the latter and prevent rotation thereof. The hooks V are attached to the free edges of the cover and lining at the ends of the frame, so as to stretch the said cover and lining longitudinally, and prevent the same from being puckered while the quilting is being done.

In order to attach the quilting-frame to the sewing-machine, the track and the block E are first secured to the latter, as previously described, and the quilting-frame is placed upon the track, with its pulleys L<sup>2</sup> bearing thereon and the roller G bearing under the bar K. The roller W is then detached from the arms M and M', and the latter is turned at right angles to its arm I, and the quilting-frame is rolled toward the operator on the track, and the arm M' passes beyond the outer end of the arm of the sewing-machine, after which it is turned outwardly to its normal position, and the roller W is journaled in the lower opening of the arms M and M', as before described. The quilting-frame is caused to move rearwardly until the front edge of the quilt rests between the feeder of the sewing-machine and the presser-foot thereof, and the latter is then lowered onto the quilt. The machine is then set in operation, and is caused to stitch in a line parallel with the bar L, and at a slight distance to one side thereof. The frame is so light and offers so little friction that the movement of the feeder of the sewing-machine is sufficient to urge the frame forward as the quilting is done, and thus requires no attention on the part of the operator other than to keep the sewing-machine in motion.

When the first line of quilting-stitches has been made, the pawls T and U are released from the wheels Z and Y, and the rollers Z and Y are turned so as to partly unroll the cover and lining, and the roller W is then turned so as to roll up the quilted end of the quilt and take up the slack therein. This moves the quilt laterally far enough for a new line of quilting-stitches, and the operation before described is then repeated, and so on until as many lines of quilting-stitches have been made as is desired. The quilt is then removed from the rollers on the frame and is secured thereto at right angles to its former position, and a second series of quilting-stitches are then made therein exactly at right angles to those which were previously formed, and the operation of quilting is then finished.

By arranging the roller which carries the free edge of the cover on a higher plane than the roller which carries the free edge of the lining, the cotton wadding may be easily introduced between the said lining and cover



during the operation of quilting, and the said wadding lies upon the lining and is held firmly thereon by the tension of the opposing under side of the cover, and the wadding is thus prevented from getting misplaced. As the quilt is rolled upon the roller W from time to time, the latter is adjusted vertically in the arms M and M' sufficiently to cause the under side of the roller to clear the top or table of the machine.

The function of the locking-plate *x* is to prevent the roller W from becoming accidentally disengaged from the opening M<sup>2</sup>, in which it may be journaled.

A quilting-frame thus constructed is extremely cheap and simple, is easily and automatically operated, is not likely to get out of order, and will be found of great convenience and utility to ladies.

Having thus described my invention, I claim—

1. The combination of the track-section B, having the member B', provided with the slot B<sup>2</sup>, the section C, having the member C', and the clamping-screw working in the slot B<sup>2</sup> and secured to the member C', for the purpose set forth, substantially as described.

2. The combination of the quilting-frame having the openings *m* and the open slots M<sup>2</sup>, the roller W, journaled in the said openings and open slots, and having the ratchet-wheel W', and the sliding block X, adapted to close the outer ends of the slots M<sup>2</sup>, for the purpose set forth, substantially as described.

3. The combination, in a quilting-frame having the arms M and M', provided, respectively, with the openings *m* and the open slots M<sup>2</sup>, of the roller W, having the spindles journaled in the said openings and open slots and provided with the ratchet-wheel W', and the block X, adapted to slide on the arm M', to close the outer ends of the openings M<sup>2</sup>, and provided with the pawl X<sup>2</sup>, to engage the wheel W', substantially as described.

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

CHARLES H. BERNHEIM.

Witnesses:

JOHN H. SIGGERS,  
M. E. FOWLER.