

(No Model.)

M. R. & A. H. BELL.

QUILTING ATTACHMENT FOR SEWING MACHINES.

No. 300,678.

Patented June 17, 1884.

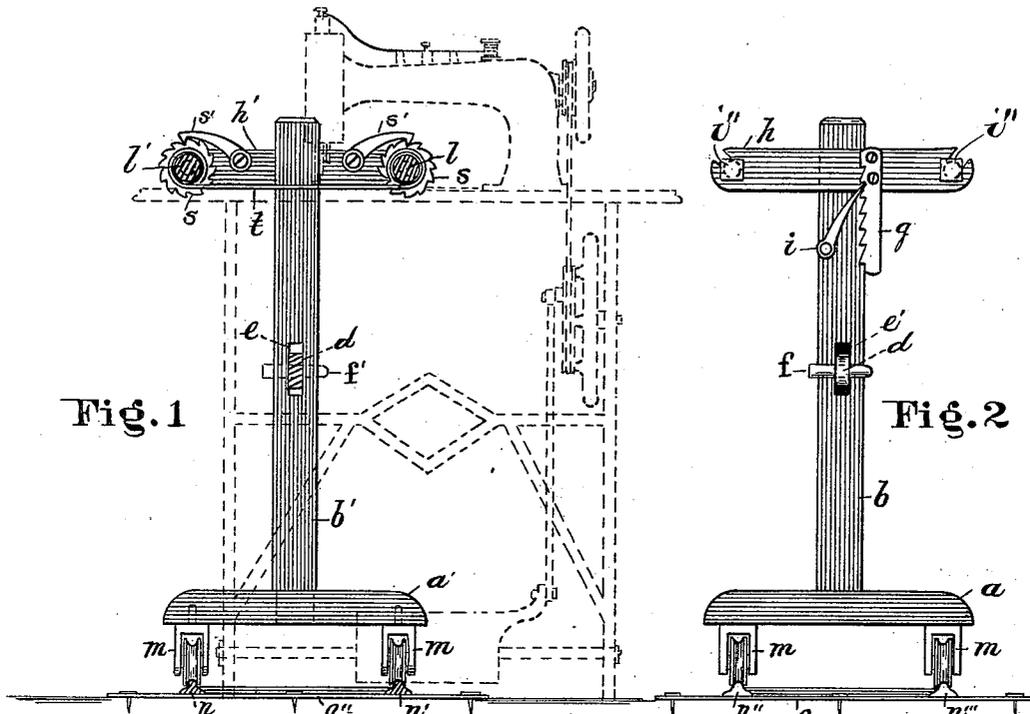


Fig. 1

Fig. 2

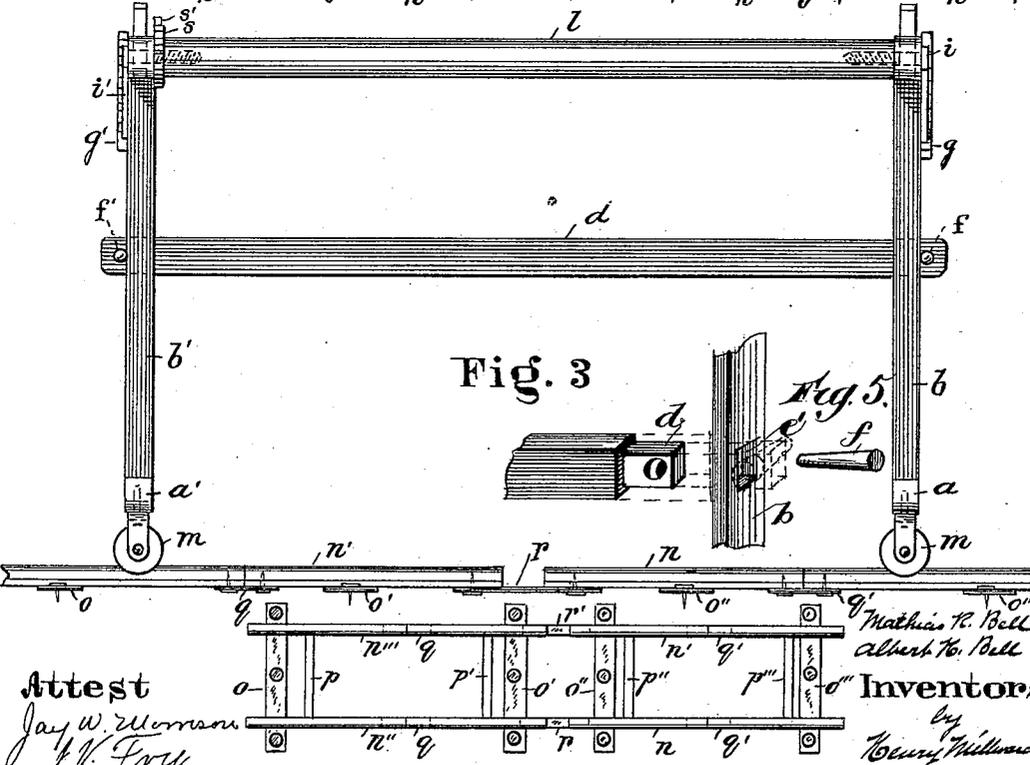


Fig. 3

Fig. 5

Fig. 4

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QUILTING ATTACHMENT FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 300,678, dated June 17, 1884.

Application filed September 8, 1883. (No model.)

To all whom it may concern:

Be it known that we, MATHIAS R. BELL and ALBERT H. BELL, of Springfield, county of Clark, State of Ohio, have invented a new and useful Improvement in Quilting Attachments for Sewing-Machines, of which the following is a specification.

In the accompanying drawings, Figure 1 is a transverse sectional elevation of a quilting-frame embodying our invention, and illustrating in dotted lines the position a sewing-machine would occupy when used on a quilt adjusted to our improved frame. Fig. 2 is a transverse elevation of the same. Fig. 3 is a longitudinal elevation of the quilting-frame and track; and Fig. 4 is a plan view of the track and flexible straps, by means of which it is secured to the floor. Fig. 5 is a detail of a part of the cross-tie and detail of wedge-fastening.

In each of these figures letters of like character indicate corresponding parts.

The invention consists in the construction and arrangement of parts hereinafter fully specified, and pointed out in claim.

In order that others skilled in the art to which our invention belongs may be able to make and use the same, we will proceed to describe its construction and operation.

The quilting-frame is constructed with base-pieces *a a'*, uprights *b b'*, rollers *l l'*, cross-beams *h h'*. The uprights *b* and *b'* are slotted at *e e'* for the reception of the ends of the cross-tie *d*, said slots being much longer than the depth of the cross-tie, in order that the latter may be adjusted vertically to suit the varying heights of sewing-machine tables. The cross-tie *d* is tenoned at the ends, so as to form shoulders that will bear against the sides of the uprights when the tenons are inserted in the slots of the uprights, and is secured to the uprights by means of wedge-shaped pins *f f'*, which are passed through the tenons of the rail, so as to bear against the outside of the uprights *b b'*, and thereby clamp and hold the uprights and cross-tie to each other at any point to which the cross-tie may be vertically adjusted, the adjustment being made so as to avoid striking any of the braces of the machine. The adjustment of the frame to suit the sewing-machine is accomplished through

the agency of racks *g g'*, that are secured to the cross-beams *h h'*, and pawls *i i'*, secured to the aforesaid uprights. The cross-beams *h h'* are mortised, and the ends of the uprights *b b'* passed through the mortises, so that the cross-beams may be lifted, when they will be held to their adjustment by the racks and pawls.

i' i' are screw means, which connect with the ends of the rollers *l*, as shown. By screwing up such means the rollers and uprights will be drawn together and the rolls clasped in their bearings, so that thereby they will be made to run even and with regularity if they become too loose and wobbling from continued use.

The quilt is wound around the rollers *l l'*, that are journaled to the cross-beams *h h'* by passing their journals into the oblique slots *i'*, formed in the cross-beams. The quilting-frame is provided with four grooved rollers, *m*, upon which it may be moved on a track, *n n' n'' n'''*, for the purpose of feeding the work to a sewing-machine, as represented by Fig. 1. The track *n* to *n'''* is provided with flexible straps *o o' o'' o'''* and distance-braces *p p' p'' p'''*, and by means of the aforesaid straps the track can be readily tacked to a floor in a position suitable to the quilting-frame and sewing-machine, the flexibility of the straps permitting them to adjust themselves to any inequality in the floor, so as to obtain a firm and steady support. The track is also provided with hinges *q q'* and flexible straps *r r'*, which permit the two sections of track to be folded into a compact form when not in use, the straps also permitting the tracks to be adjusted longitudinally when necessary or desirable from any cause. The rollers *l l'* are provided with the customary ratchets and pawls *s s'*, by means of which the quilt is held taut upon the frame. By this arrangement of rollers and track we are enabled to adjust the quilting-frame to a sewing-machine in a very short time, and without damage to the floor or carpets, and at the same time have ready means for any adjustment of frame to sewing-machine.

When the quilting-frame is being adjusted to a sewing-machine, the cross-tie is disconnected from the uprights *b b'* until the frame is placed in the desired position. It and the rollers *l l'* are then again placed in position

and held fast by the pins *f f'*, the rollers *l l'* serving as distance-pieces. This cross-tie can be adjusted vertically to miss any braces of the sewing-machine, and the quilt *t* can be adjusted to the table of the sewing-machine by means of the racks *g g'* and pawls *i i'*.

While quilting, the operator moves the frame upon the track to suit the feed of the sewing-machine, the rollers and track making this movement easy, and after one line of sewing is completed the quilt is adjusted for another line by means of the ratchets and pawls *s s'*, and so on until the whole quilt is completed.

We are aware of the patent granted to J. W. Scarborough, August 22, 1882, No. 262,987, in which is shown a bar connecting the two side uprights; but the construction of the parts is such that said bar cannot be applied where the sewing-machine has cross-brace rods, whereas our construction permits the attachment of the frame with the cross-bar to any machine, whether it has brace-bars or not at such points, and in that particular differs from said patent.

We are also aware of the patent granted to J. E. Beatty, April 24, 1883, No. 276,337, in which the side uprights are formed with notches, with which a spring-pawl secured to the fixed base of the uprights engages to hold the frame at various adjustments; but under

such construction the said uprights, as well as the cross-frame, must be raised to effect the adjustment, whereas under our construction no part of the side uprights is raised but only the cross-frame, and in that particular our construction differs from said patent.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

In a quilting-frame attachment for sewing-machines, the combination of the uprights having vertically-elongated slots formed through them, the cross-beams to the uprights, the rolls supported by said beams, the cross-tie formed at both ends with tenons adapted to pass through and be adjusted vertically in the slots of the uprights, said tenons being perforated at a point that will bring the perforations at the outer faces of the uprights, and wedge-shaped pins entering said perforations and bearing against the outer faces of the uprights, substantially as described.

In testimony whereof we have hereunto set our hands this 16th day of August, 1883.

MATHIAS R. BELL.
ALBERT H. BELL.

Witnesses:

HENRY MILLWARD,
CHASE STEWART.