

(No Model.)

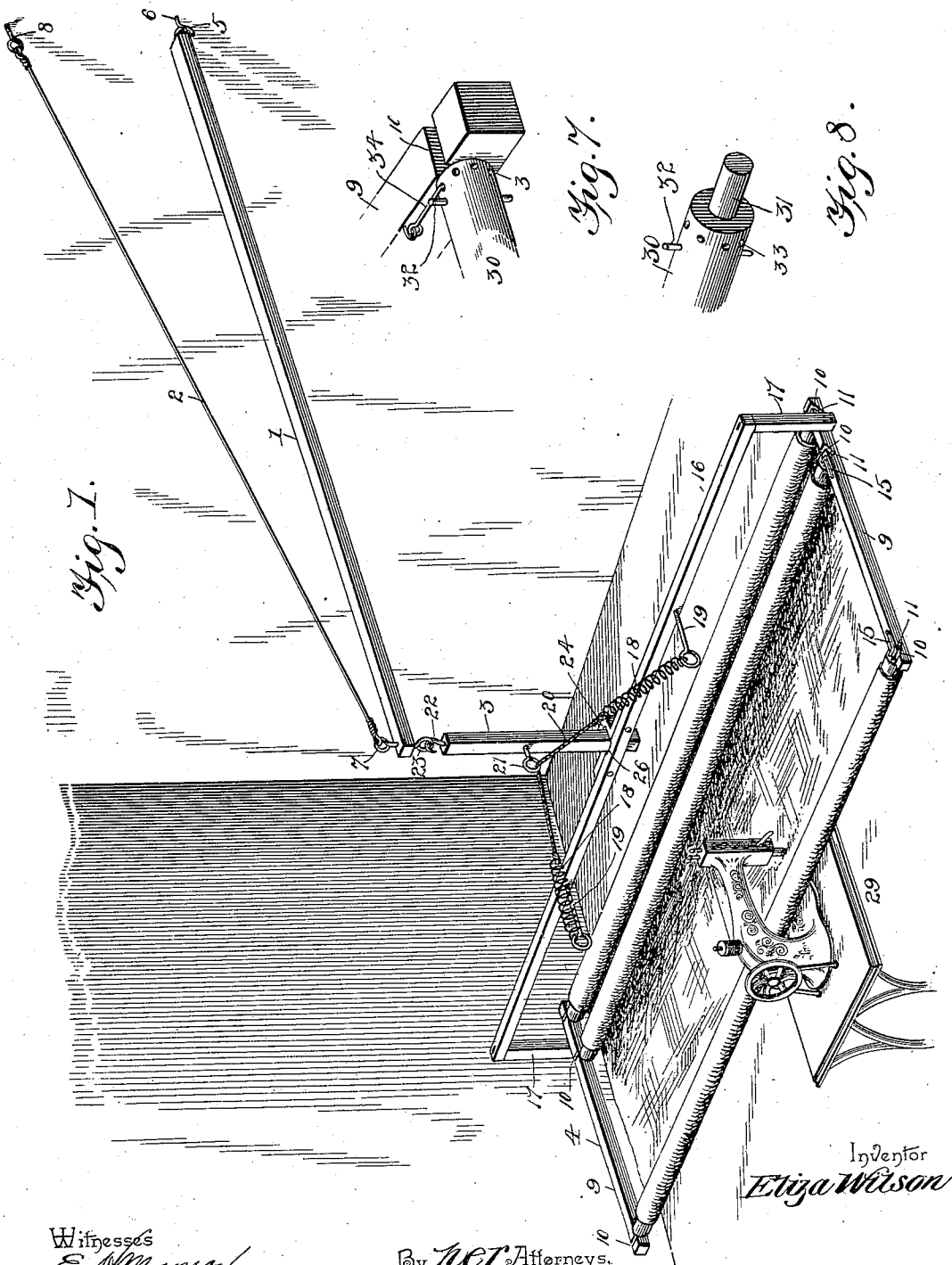
2 Sheets—Sheet 1.

E. WILSON.

QUILTING ATTACHMENT FOR SEWING MACHINES.

No. 575,764.

Patented Jan. 26, 1897.



Witnesses
E. Monroe.
V. B. Hillyard.

By *HER* Attorneys,

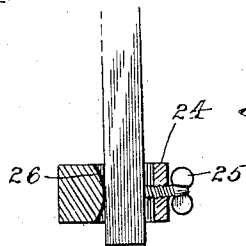
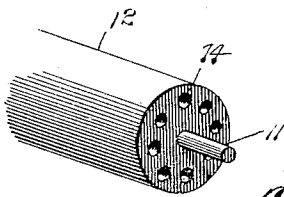
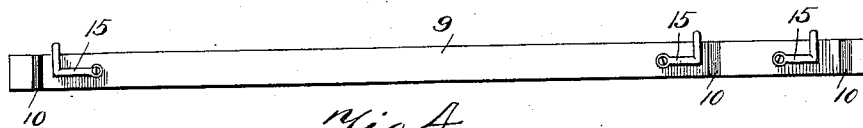
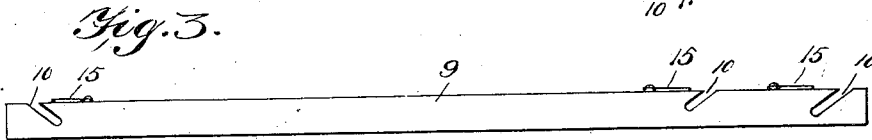
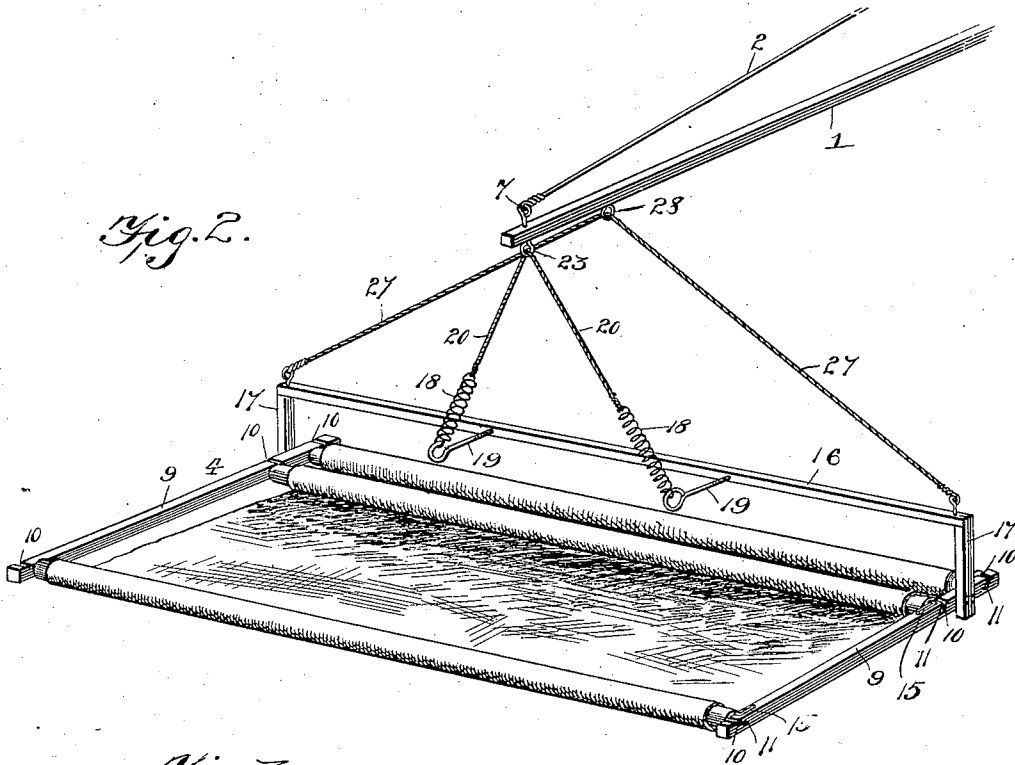
Ca Snow Geo.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

2 Sheets—Sheet 2.

QUILTING ATTACHMENT FOR SEWING MACHINES.

Patented Jan. 26, 1897.



E. A. Monroe.
V. B. Hillyard.

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Inventor
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UNITED STATES PATENT OFFICE.

ELIZA WILSON, OF WILLOW SPRINGS, MISSOURI.

QUILTING ATTACHMENT FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 575,764, dated January 26, 1897.

Application filed January 6, 1896. Serial No. 574,461. (No model.)

To all whom it may concern:

Be it known that I, ELIZA WILSON, a citizen of the United States, residing at Willow Springs, in the county of Howell and State of Missouri, have invented a new and useful Quilting Attachment for Sewing-Machines, of which the following is a specification.

This invention relates to quilting attachments for sewing-machines, and aims to provide a simple, inexpensive, and effective device for the purpose aforesaid, and which will dispense with the friction resulting from the traveling of a carriage upon an overhead track, and which can be swung longitudinally and laterally upon pivot-bearings to enable the quilting of any design in straight or curved lines or any conceivable combination of straight and curved lines to produce any required design.

The improvement consists, primarily, of a crane having pivotal connection with the wall of an apartment, a frame suspended from the free end of the crane and provided with a series of rollers upon which the goods or material entering into the formation of the quilt is to be wrapped, and yielding connections intermediate of the crane and the frame to sustain the latter in an approximately horizontal position and admit of its various movements to the proper presentation of the goods to be quilted to the needle of the sewing-machine, whereby the required design can be stitched with the greatest ease and despatch.

The improvement also consists in certain details of construction, novel features, and peculiar combinations of the parts which hereinafter will be more fully set forth, illustrated, and claimed, and which possess advantages other than those herein set forth, and which will appear as the nature of the invention is fully understood.

The improvement is susceptible of various changes in the form, proportion, and the minor details of construction without departing from the principle or sacrificing any of the advantages thereof, and to a full disclosure of the invention an adaptation thereof is shown in the accompanying drawings, in which—

Figure 1 is a perspective view showing the invention applied. Fig. 2 shows a different manner of suspending the quilting-frame

from the crane. Fig. 3 is an elevation of a side bar of the quilting-frame. Fig. 4 is a top plan view thereof. Fig. 5 is a detail view showing the means for adjustably connecting the quilting-frame with the suspension-bar. Fig. 6 is a detail view of the end portion of a roller. Figs. 7 and 8 are detail views of a modified form of roller.

Like numerals of reference denote similar and corresponding parts in all the figures of the drawings, and in the latter 1 indicates the crane; 2, a brace or stay therefor; 3, a suspension-bar, and 4 the quilting-frame proper, which receives and supports the goods to be quilted together.

The crane 1 is a rod or bar of suitable length, either of wood or metal, and is supplied at its inner end with a hook 5, which engages an eye 6, secured into the wall, partition, or other support, thereby forming a pivotal connection for the said crane to swing laterally upon.

The stay 2 is preferably of wire, although a cord, chain, or like connection may be employed, and is secured at its outer end to an eye or other fastening 7 at the outer end of the crane and at its inner end to a similar fastening 8, secured to the wall above the eye 6. This stay causes the crane to swing in a substantially horizontal plane.

The quilting-frame is composed of similar side bars 9, having oblique slots 10 near their ends to receive the journals 11 of the rollers 12, one roller being provided at one end of the frame and two rollers at the opposite end, the single roller receiving and having the quilted portion of the goods rolled thereon and the pairs of rollers receiving the upper and the lower covering, between which is placed the batting prior to the quilting. Each roller has one end provided with a circular series of openings 14, and hooks 15 are located adjacent to the slots 10 and are adapted to be engaged with any one of the openings 14, so as to hold the rollers against turning after the goods have been properly stretched. The side bars 9 are connected near one end by means of an arch which consists of a horizontal bar 16 and end bars 17, the latter being attached in any substantial way at their lower ends to the side bars 9. This arch is preferably located at the rear end of the frame and

opposite the pair of rollers, and arms 19 extend forwardly from the bar 16, and yielding connections have attachment with the outer ends of the said arms 19, so as to hold the frame in an approximately horizontal or working position. These yielding connections consist of coil-springs 18 and a cord 20, the lower ends of the springs 18 having engagement with the arms 19 and the cord 20 being secured at its ends to the upper terminals of the said springs 18 and passing intermediate of its ends through an eye 21, provided on the suspension-bar 3.

The suspension-bar 3, of wood or other suitable material, has a hook 22 at its upper end, which engages with an eye 23 at the outer end of the crane 1, and its lower end is adjustably connected with the bar 16 in any suitable way, preferably by extending through a keeper 24, attached to the rear side of the bar 16, and held therein by means of a binding-screw 25, operating in a threaded opening of the said keeper 24 and bearing against the suspension-bar 3. That portion of the bar 16 opposite to the suspension-bar is made rounding, as shown at 26, to admit of the rocking movements of the bar 16 when swinging the frame laterally to stitch the laterally-extending lines of the design.

In some instances it may be advisable to dispense with the suspension-bar 3, and in Fig. 2 is shown an arrangement which will admit of the attainment of this end. A cord or like connection 27 passes loosely through an eye 28 near the outer end of the crane 1 and is secured at its ends to the bar 16, and the cord 20 passes loosely through the eye 23, thereby admitting of the frame being tilted longitudinally, so as to maintain an approximately horizontal position when moving the goods beneath the needle of the sewing-machine 29, employed to do the quilting.

In Figs. 7 and 8 the rollers 30 have a portion reduced near one end to form a journal 31, which obtains a bearing in the slot 10 of the side bar and is supplied with a pin 32, forming a handle to be grasped when it is required to turn the roller to tighten the goods. A series of openings 33 are formed contiguous to the journal 31, and a hook 34 is disposed to take into any one of the openings 33, so as to secure the roller in the adjusted position.

The springs 18 normally serve to hold the quilting-frame in an approximately horizontal position and admit of tilting the same both longitudinally and laterally simultaneously with the longitudinal and lateral movement of the frame when following the lines of the design of the quilting. This will be obvious when it is remembered that the crane swings horizontally to admit of moving the quilting-frame its full length beneath the arm of the sewing-machine, and the said frame swings laterally from its point of suspension from the said crane when it is required to follow

the lateral lines during the quilting process. If the parts were rigid and the frame were swung laterally from its point of suspension 23, it would receive an arcuate movement; but by reason of the springs 18 this movement is compensated for by depressing the front end of the frame, thereby maintaining the horizontal position thereof, which is essential to the successful quilting operation.

A quilting attachment of the construction herein set forth can be successfully used in a comparatively small room, since the crane can be attached to the wall or partition near a corner of the room and one end portion of the quilt can be stitched at a time. Moreover, by reversing the position of the frame with respect to the crane and changing the relation of the sewing-machine so that it and the operator will occupy a position beneath the crane 1 instead of in front of it the attachment can be used in a comparatively narrow room, as will be readily understood.

Having thus described the invention, what is claimed as new is—

1. In a quilting attachment for sewing-machines, the combination of a quilting-frame, suspending means therefor comprising a crane and a suspending device having connection with the quilting-frame near one side, arms having rigid connection with the said suspending device and projecting from the plane thereof toward the far side of the quilting-frame, and elastic or spring connections for counterbalancing the quilting-frame attached at their upper ends to the suspending means and having positive attachment at their lower ends with the extremities of the said arms, for sustaining the quilting-frame in an approximately horizontal position under all conditions, substantially as and for the purpose set forth.

2. In combination, a quilting-frame, a suspending means having connection with the quilting-frame near one side, arms having rigid connection with the suspending means and extending therefrom toward the far side of the quilting-frame, and springs united at their upper ends and having sliding connection with the said suspending means, and having positive connection at their lower ends with the extremities of the said arms for maintaining the quilting-frame in a substantially horizontal position under all conditions, substantially as set forth.

3. In combination, a quilting-frame, a suspending device comprising an arch secured to the quilting-frame near a side, arms extending from the arch toward the far side of the quilting-frame, and elastic or spring connections having attachment at their ends with the said arms and slidingly supported at an intermediate point, substantially in the manner and for the purpose specified.

4. In combination, a quilting-frame having an arch at or near one end, a suspension-bar having adjustable connection with the arch,

arms extending forwardly of the arch, a connection having positive and slidable connection with the suspension-bar intermediate of its ends, and springs interposed between the
5 terminals of the said connection and the front ends of the said arms, substantially as shown and for the purpose specified.

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

ELIZA WILSON.

Witnesses:

ELLA KEMPER,
ARENIA P. FERGUSON.