

F. JAKOB.
 QUILTING FRAME.
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957,561.

Patented May 10, 1910.

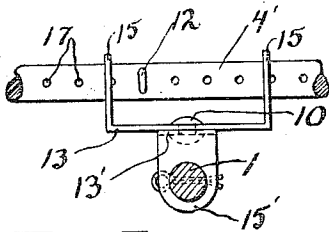
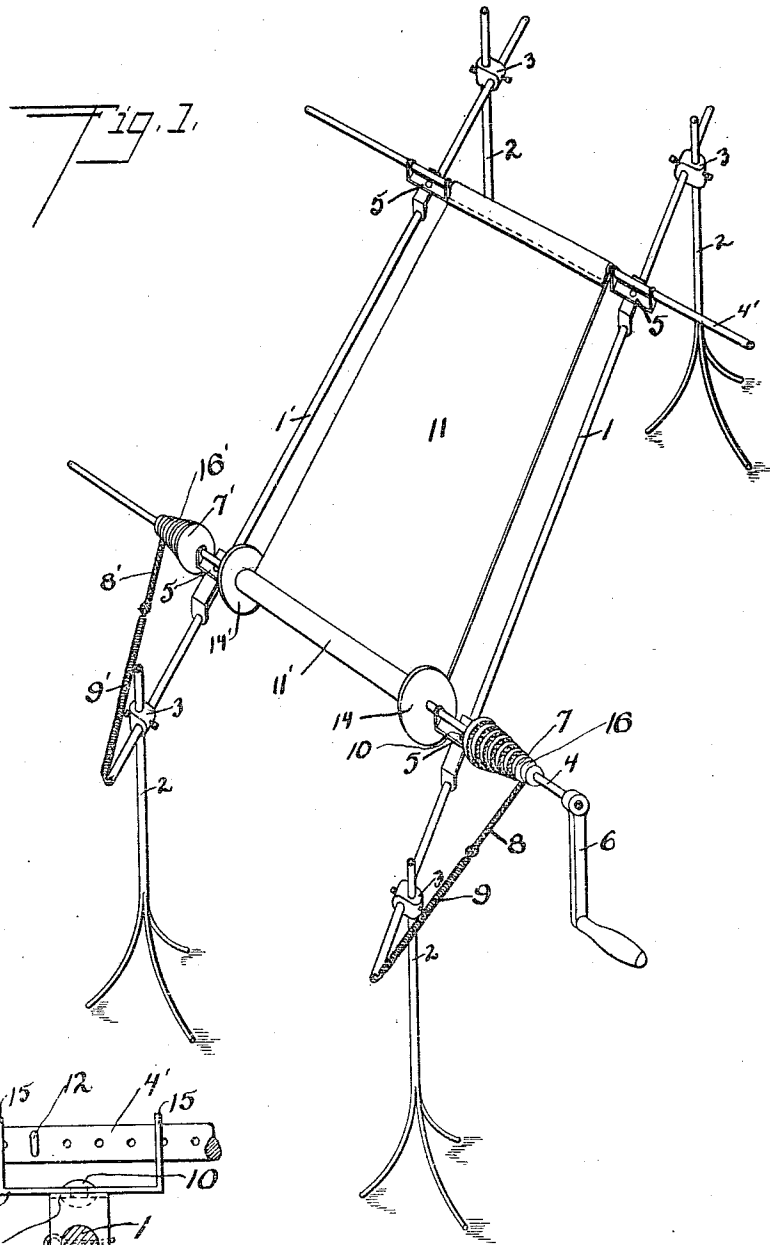


Fig. 2.

Witnesses
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UNITED STATES PATENT OFFICE.

FRED JAKOB, OF BARTLEY, NEBRASKA.

QUILTING-FRAME.

957,561.

Specification of Letters Patent.

Patented May 10, 1910.

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To all whom it may concern:

Be it known that I, FRED JAKOB, of the town of Bartley, county of Red Willow, and State of Nebraska, have invented certain new and useful Improvements in Quilting-Frames, which improvements are described in the following specification and are illustrated by the accompanying drawings.

My invention relates in general to that class of quilting frames in which a pair of laterally adjustable, straight and normally parallel and horizontal side rods and a like pair of end rods, are arranged one pair across the other rectangularly, and are united by sliding connections; and relates in particular to the character of such sliding connections, to the mechanism whereby such end rods are adjusted, relatively to each other, and to mechanism for producing and maintaining the tension of the work.

It is the object of the invention to prevent the side and end rods of such a frame from binding in their sliding connections, to render such a frame easily taken apart or assembled, to utilize an end rod of such a frame as a sliding and rotatory member on which the quilted portion of a piece of work may be rolled up, and out of the way, from time to time, as the quilting proceeds, and to maintain a uniform tension of the unquilted work, regardless of such rolling up. To accomplish this object I incorporate in such a quilting frame a pair of conical spools, or drums, which are mounted upon an end rod of the frame and are rotatable therewith, flexible members which are attached to said spools, springs which are attached to such flexible members, and swivel connections between said rods.

The best manner in which I have contemplated applying the principles of my invention, is illustrated by the said drawings.

Figure 1 is a perspective view of a quilting frame which is constructed in accordance with these principles. Fig. 2 is a detail of the clevis slide.

In Fig. 1 the side rods of the frame are denoted by the numerals 1 and 1', while the end rods between which the work 11 is stretched are denoted by the numerals 4 and 4'. These rods, or bars, may be either solid or tubular, and are preferably metallic and of uniform circular cross-section. The frame is supported in a horizontal position by four vertical legs, or tripods, 2, which

are adjustably connected with rods 1 and 1' by the four perforated connection blocks 3, provided with setscrews, as shown.

The sliding connections 5, perforated to accommodate the described rods, and holding them together as shown, consist severally of two duplicate clevis slides, which are centrally pivoted together by a pin, or bolt, 10. These slides are indicated in Fig. 2 by the numerals 13 and 13'. Still further to prevent the rods from binding in said slides, the two arms 15 of such pivoted slide 13 are separated from each other by a distance greater than the thickness of the rod on which it slides, while the arms 15' of slide 13' are similarly separated. Rod 4 is provided with a terminal crank 6 for rolling up the work, and with two conical spools, 7 and 7', duplicates of each other, which are keyed to said rod. These spools have the circumferential spiral grooves 16 and 16', respectively, in which may be wound the attached cords, wires, or other flexible members, 8 and 8', which are held at tension by coiled springs 9 and 9'. Rod 4 also carries two laterally adjustable disks, or guards, 14 and 14', which prevent slides 5 from coming into contact with the work 11 as it is wound between them. Spools 7 and 7' are removable from rod 4; and other spools are provided, which are not shown in the drawings, but which are of the same shape and of different size. Such other spools may be substituted for spools 7 and 7', as the due operation of the apparatus may require in view of a greater or less thickness of the piece of work in hand. Through each of the side and end rods of the frame are numerous radial or transverse pin-holes 17, in which pins 12 may be inserted as stops between said arms of each described clevis to limit the movement of slide 5 from any assigned position on said rods.

The operation of the invention requires but little explanation. The piece of work which is to be quilted is attached to the free rod 4 and pinned rod 4', and is stretched at a suitable tension between them by the energy of springs 9 and 9' exerted through spools 7 and 7' and cords 8 and 8'. As the quilting proceeds, the completed portion of the work is wound up from time to time, in a roll 11' on rod 4 by turning crank 6. By such winding, the rod 4, together with its

sliding connections 5, is drawn toward rod 4' through a space which increases with the increasing size of roll 11', at each successive turn of crank 6. By the same operation the cords 8 are unwound from the conical spools 7 at a correspondingly increasing rate, so that the uniform tension of the work, derived from the action of springs 9, remains undisturbed until the quilting is finished.

10 I claim as my invention:—

1. In a quilting frame, a pair of side rods, a pair of end rods, swivel-jointed connections between said pairs of rods, means for rotating one of said rods, conical spools, 15 which are mounted on such rotating rod, and flexible members, which are adapted to be wound spirally upon said conical spools, in combination with springs, which hold said flexible members at tension.

20 2. Four straight rods, which are of uniform cross-section, four swivel-jointed and sliding connections, which hold said rods together as a quadrilateral frame, means for rotating one of said rods, two conical spools 25 which are mounted on such rotating rod, and two cords, which are adapted to be wound spirally upon said spools respectively, in combination with two springs which are at-

tached to said cords respectively and to said frame severally. 30

3. In a quilting frame, a pair of side rods, perforated by longitudinal lines of pin-holes, a pair of transverse end rods, one of which is similarly perforated, and adjustable connections between said pairs of rods, 35 each of said connections comprising two clevis slides, pivoted together, in combination with stop pins which are adapted to be inserted in said pin-holes selectively.

4. In a quilting frame, a pair of parallel 40 side rods, a pair of parallel end rods, crossing said side rods, a sliding connection between said side rods and said end rods at each point of crossing, means for rotating one of said rods, conical spools, which are 45 mounted on said rotating rod, and flexible members, which are adapted to be wound spirally upon said spools, in combination with springs, which hold said flexible members at tension. 50

In testimony whereof I hereunto set my name in the presence of two witnesses.

FRED JAKOB.

Witnesses:

EUGENE A. DUTCHER,
OLIVER S. VAN DOREN.