W. D. CRIBBS.

QUILTING FRAME.

APPLICATION FILED APR. 26, 1912.

1,053,713.

Patented Feb. 18, 1913.

3 SHEETS—SHEET 1.

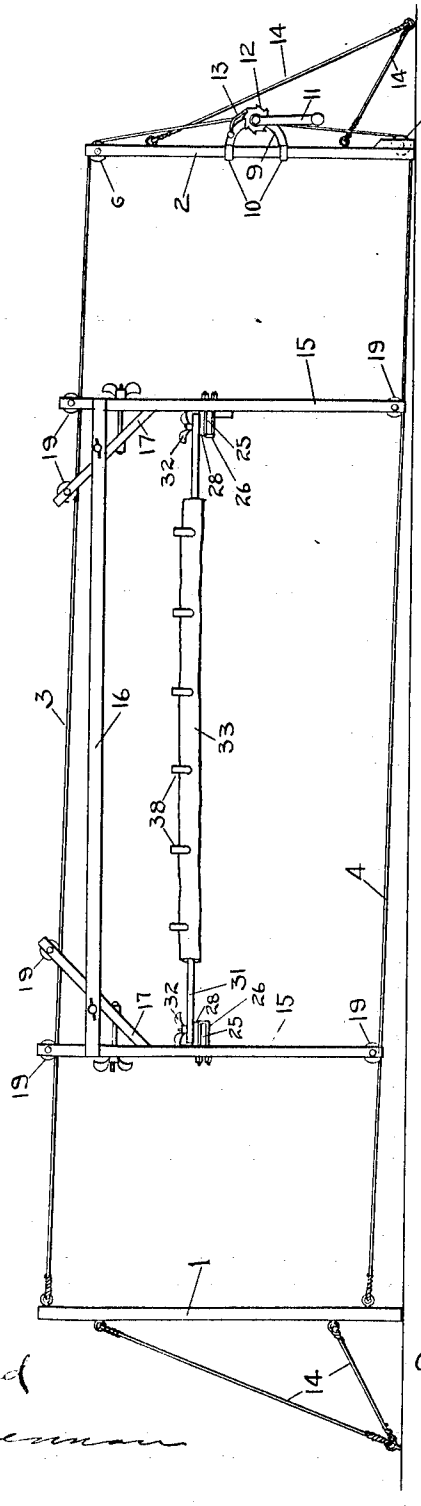

Fig. 1

WITNESSES:

E. M. Frankland

David Drennan

INVENTOR

William D. Cribbs.

BY John W. Gerlman

ATTORNEY

W. D. CRIBBS.

QUILTING FRAME.

APPLICATION FILED APR. 26, 1912.

1,053,713. **Patented Feb. 18, 1913.**

3 SHEETS—SHEET 2.

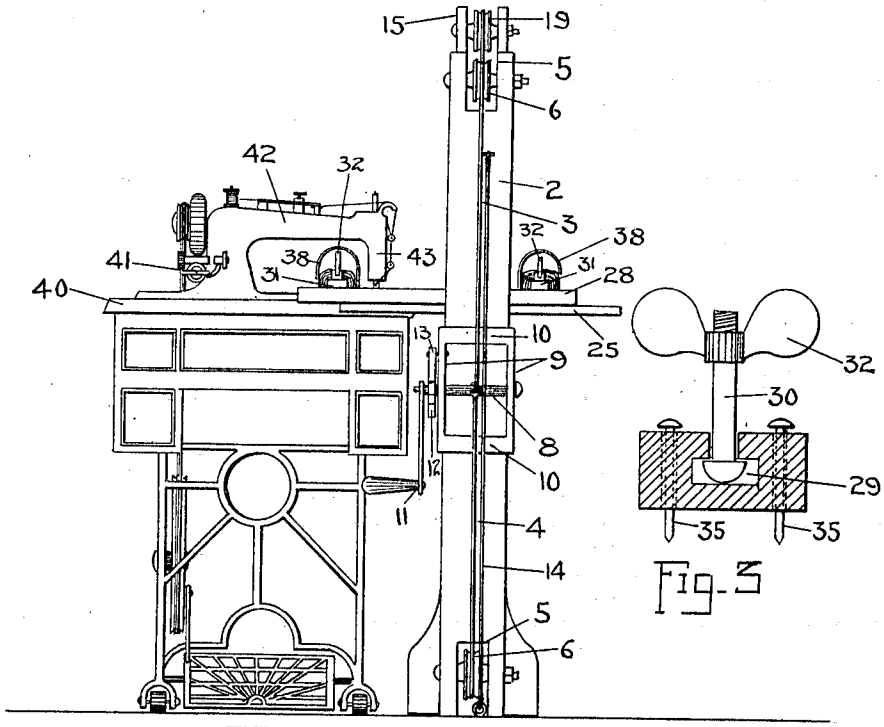

Fig. 2

Fig. 3

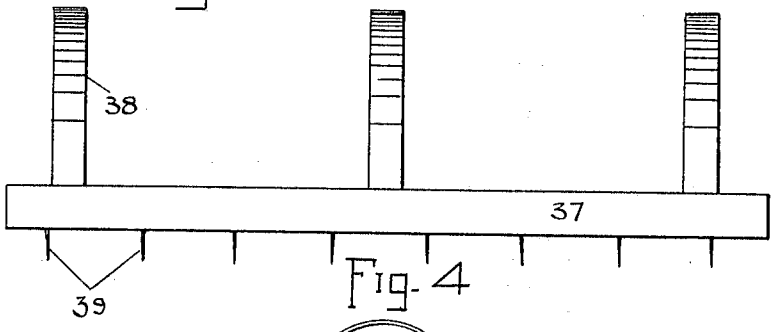

Fig. 4

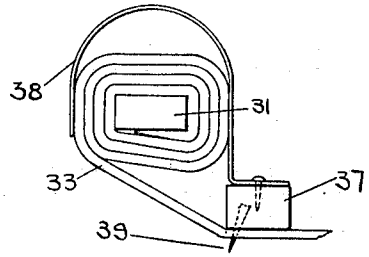

Fig. 5

WITNESSES:

E. M. Frankland

Harry J. Drennan

INVENTOR

William D. Cribbs

BY John M. Shellman

ATTORNEY

W. D. CRIBBS.

QUILTING FRAME.

APPLICATION FILED APR. 26, 1912.

1,053,713.

Patented Feb. 18, 1913.

3 SHEETS—SHEET 3.

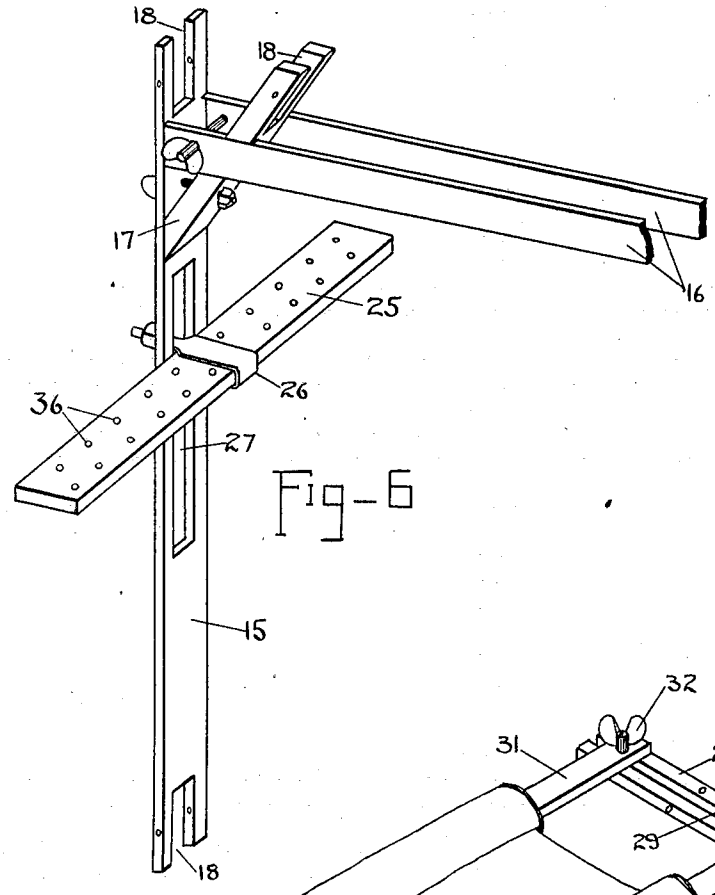

Fig-6

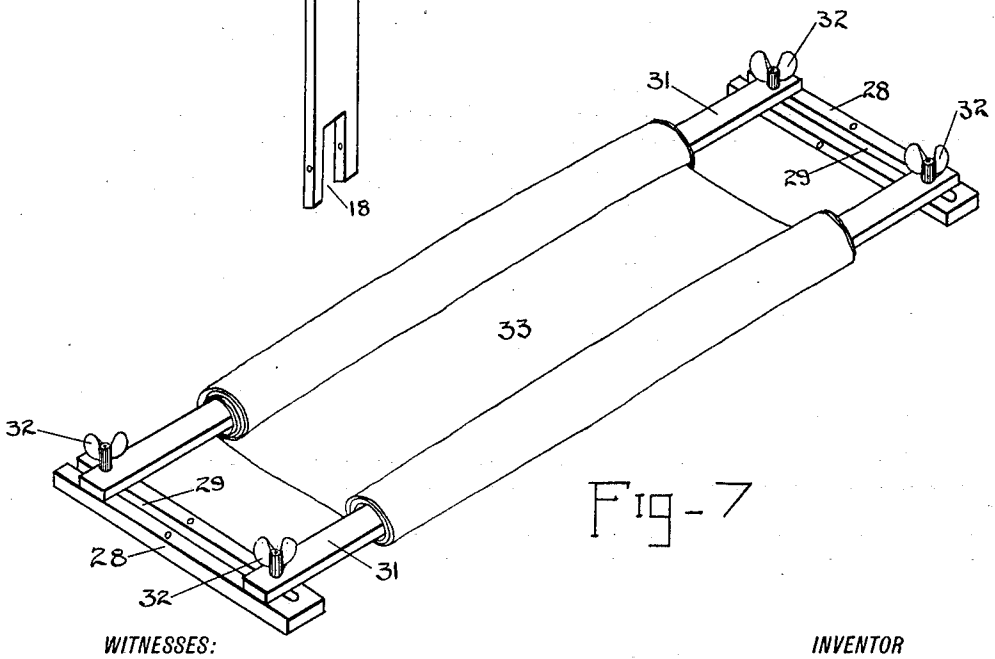

Fig-7

WITNESSES:

E. M. Frankland

Harry Drennan

INVENTOR

William D. Cribbs

BY John M. Spellman

ATTORNEY

UNITED STATES PATENT OFFICE.

WILLIAM D. CRIBBS, OF GRAPE VINE, TEXAS.

QUILTING-FRAME.

1,053,713. Specification of Letters Patent. Patented Feb. 18, 1913.

Application filed April 26, 1912. Serial No. 693,340.

To all whom it may concern:

Be it known that I, WILLIAM D. CRIBBS, citizen of the United States, residing at Grape Vine, in the county of Tarrant and State of Texas, have invented certain new and useful Improvements in Quilting-Frames, of which the following is a specification.

My invention relates to new and useful improvements in quilting frames, and relates more particularly to a type of quilting frame, especially adapted for use in conjunction with an ordinary sewing machine.

The object of the invention is primarily to render the work of making quilts less laborious, and to save time in accomplishing such work, through the provision of a frame that will make possible the use of a sewing machine to put the necessary seams in a quilt.

Another object is to provide a pair of wires slightly inclined from the horizontal, and to provide the quilting frame with trolley wheels adapted to travel upon said wires, thus giving the frame the nature of a carriage, which will be gradually shifted from the higher to the lower ends of the wires as the quilt is fed to the sewing machine needle.

A further object is to provide means for quickly shifting the quilt transversely of the seams through a distance which will determine the space intervening between the seams.

Other objects are to provide a suitable means to take up slack in the quilt, and also to provide for taking all slack out of the wires, upon which the frame is mounted.

With these and various other objects in view, my invention has relation to certain novel features of the construction and operation, an example of which is described in the following specification, and illustrated in the accompanying drawings, wherein:

Figure 1 is a view of the complete invention in side elevation. Fig. 2 is an end view of the device showing also a sewing machine properly disposed to be used in conjunction with the quilting frame. Fig. 3 is a detail cross-section view of a slotted bar, the function of which is hereinafter explained. Figs. 4 and 5 are respectively an elevation and an end view of a spring clamping member adapted to grip one of the rolls into which the end portions of the quilt are formed. Fig. 6 is a perspective view, showing one end of the carriage portion of the frame, the trolley wheels provided at the top and bottom of said end being omitted in this view to avoid concealing the slots provided to receive said wheels. Fig. 7 is a perspective, detail view showing that particular portion of the frame which holds the quilt.

Referring now more particularly to the drawings, wherein like reference characters designate similar parts in all the figures, the numerals 1 and 2 denote two posts held vertical by brace wires and spaced a distance approximately equal to twice the length of an ordinary quilt, the post 1 being slightly higher than the post 2. From the upper and lower extremities of the post 1, wires 3 and 4 are respectively extended to the upper and lower extremities of the post 2, said wires being inclined gradually downward from the former to the latter post. The upper and lower ends of the post 2 are provided with slots 5, in each of which a pulley wheel 6 is rotatably mounted. The wires 3 and 4, after having been respectively passed around the correlated pulleys 6, are extended toward each other, their adjacent ends being secured to a drum 8, mounted in a vertically adjustable frame, formed by a pair of semi-circular members 9, serving as bearings for the ends of the drum 8, and rigidly connecting two collars 10, slidably mounted upon the post 2. When rotation is manually applied to the drums 8 by means of a crank 11, provided for that purpose, the wires 3 and 4 will be wound upon the drum to a sufficient extent to remove all slack from said wires. Since the frame supporting the drum is free to move up and down, said frame will automatically adjust itself to such a position that the two wires will be equally taut. In order to hold the drum in any position of rotary adjustment, a pawl and ratchet mechanism is correlated therewith, comprising a ratchet wheel 12 rigidly carried by the drum and a pawl 13, pivoted upon one of the members 9, just above the ratchet wheel, and engaging the teeth thereof. Each of the posts 1 and 2 is attached to the floor by a pair of guy wires 14 so disposed as to counteract the strain exerted upon the posts by the wires 3 and 4. The wires 3 and 4 respectively support the upper and lower extremities of

a carriage member adapted to travel upon said wires, which member will now be described.

The carriage member of the quilting frame comprises primarily two upright bars 15, having their upper portions rigidly connected by a pair of adjacent, horizontal bars 16, a diagonal brace member 17 being employed at the juncture of the bars 16 with each bar 15 to strengthen the construction. Each bar 15 has a slot 18 in its upper and lower extremities, receiving a small trolley wheel 19 and a similar slot is provided in the upper end of each brace member for the same purpose. The trolley wheels carried at the top of the quilting frame carriage are mounted upon the uppermost wire 3, and the two wheels at the bottom of said carriage are mounted upon the lower wire 4. Upon the middle portion of each bar 15, a horizontally disposed plate 25 is transversely mounted, being thus supported by a U-shaped bracket 26 receiving the middle portion of the board and having its extremities threaded and projecting through a vertically elongated slot 27 provided in the middle portion of the correlated bar 15. The threaded extremities of the bracket 26 are provided with nuts, which may be clamped close against the bar 15 to hold the plate 25 in various positions of vertical adjustment. The two oppositely disposed plates 25 serve to support the extremities of an elongated frame, separable from the carriage frame and adapted to hold a quilt. This quilt-receiving frame, which is shown in Fig. 7, will now be taken up for description.

The end members of the quilt-receiving frame are formed by bars 28, each having a slot 29 longitudinally provided in its top surface. One extremity of each slot 29 is spaced from the adjacent extremity of the bar containing said slot, the other end of the slot terminating at the correlated end of the bar. As is clearly shown in Fig. 3, the side walls of the slots 29 are undercut, giving the bottom portions of said slots an increased width and adapting said portions to receive the heads of bolts 30, which bolts project vertically through the slots. The side members of the quilt-receiving frame are formed by two elongated bars 31, through the ends of which, the bolts 30 are passed and made to receive winged-nuts 32 by means of which the side members may be clamped in a rigid relation to the end members. Upon each bar 31 is rolled one end portion of the material 33 from which a quilt is to be made. It is of course to be understood that the bars 31 will be detached from the end members 28 when the quilt is being rolled upon said bars. When the quilt-receiving frame is mounted in its proper relation to the carriage portion, the two bars 28 will rest longitudinally respectively upon the plates 25. To prevent displacement of the quilt-receiving frame from this position, a pair of headed pins 35 are passed vertically through each bar 28 and the end portions of said pins which project beneath the correlated bar may be made to enter any pair of a plurality of apertures 36 uniformly distributed along each plate 25.

In order to hold taut that portion of the quilt which is being worked at any time it is necessary to restrict the rolled-up end portions against any tendency which they may have to unroll slightly as the members 31 are moved apart in order to stretch that portion of the quilt which extends between the two rolls. In order to counteract any such tendency, each roll is acted upon by a spring clamping member, comprising a bar 37, to which are attached a plurality of springs 38 substantially U-shaped. The bar 37 of this member is disposed parallel with the roll and contiguous with the quilt as it leaves the roll, and the U-shaped springs 38 are made to grip the roll at several points. To assist in holding this clamping member in place, the bar 37 is provided with a row of prongs 39 projecting downward at a slight angle toward the correlated roll and adapted to pass through the quilt. The clamping members may be readily removed at any time.

Referring now to the sewing machine shown in Fig. 2, the table thereof is designated by the numeral 40. Upon this table is mounted the usual standard 41, from which a horizontal arm 42 is extended longitudinally of the table, and is made to carry upon its free end a depending slide bearing 43, in which is mounted the usual reciprocating member to support the machine needle.

In the operation of the above-described invention, the first step to be taken is to mount the quilt upon the rectangular frame (see Fig. 7) especially provided for that purpose. Two opposite edges of the quilt will be respectively secured upon the members 31, and will be rolled upon said members until only a comparatively small portion of the quilt remains stretched between the two rolls. By mounting the bolts 30 in the elongated slots 29, it is made possible to quickly adjust the members 31 apart, so as to stretch the quilt sufficiently and thereafter the wing-nuts 32 may be quickly clamped down upon the ends of the members 31 to hold them in a fixed relation to the end members 28. After the quilt has been placed in its frame and stretched taut, the quilt-receiving frame is mounted in the carriage portion of the quilting frame, and is so adjusted that the sewing machine needle will be adjacent to one of the rolls. The pins 35 are then each dropped into one of the holes 36, and the carriage is shifted manually along the wires to the higher ends

of said wires, until the needle of the sewing machine is adjacent to one edge of the quilt, ready to begin working a seam. The operator now starts the sewing machine and while keeping the machine running at the same time manually propels the carriage at a slow and constant rate of speed toward the lower ends of the wires 3 and 4. This is continued until the seam has been completed across the quilt. The pins 35 are then raised and the quilt-receiving frame is shifted sufficiently to permit said pins to each enter another of the holes 36. Another seam is then produced in the manner already described. After the proper number of seams has been produced in the exposed portion of the quilt, this portion is taken up by one of the rolls carried by the members 31, and from the other roll another portion of the quilt is let out to be worked upon. Thus by working upon comparatively small portions of the quilt at a time, an entire quilt may be finally completed in the manner described. While it will ordinarily be found more convenient in using the above-described quilting frame to begin at the center of a quilt, and work gradually toward either end, it is obvious that by first rolling almost the entire quilt on one of the members 31, the quilt may be started at one end rather than at the middle.

The invention is presented as including all such modifications and changes as come within the scope of the following claim.

What I claim is:

In a device of the character described, the combination with two upright posts, of a pair of slightly inclined wires respectively connecting the upper and lower extremities of said post, means for simultaneously taking up the slack in said wire, a carriage adapted to travel on said wire, a quilt-receiving frame removably mounted upon said carriage, and a sewing machine so positioned that the quilt may be fed to the needle thereof through the travel of the carriage upon the wire.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM D. CRIBBS.

Witnesses:
H. E. Dodge,
H. E. Husin.