

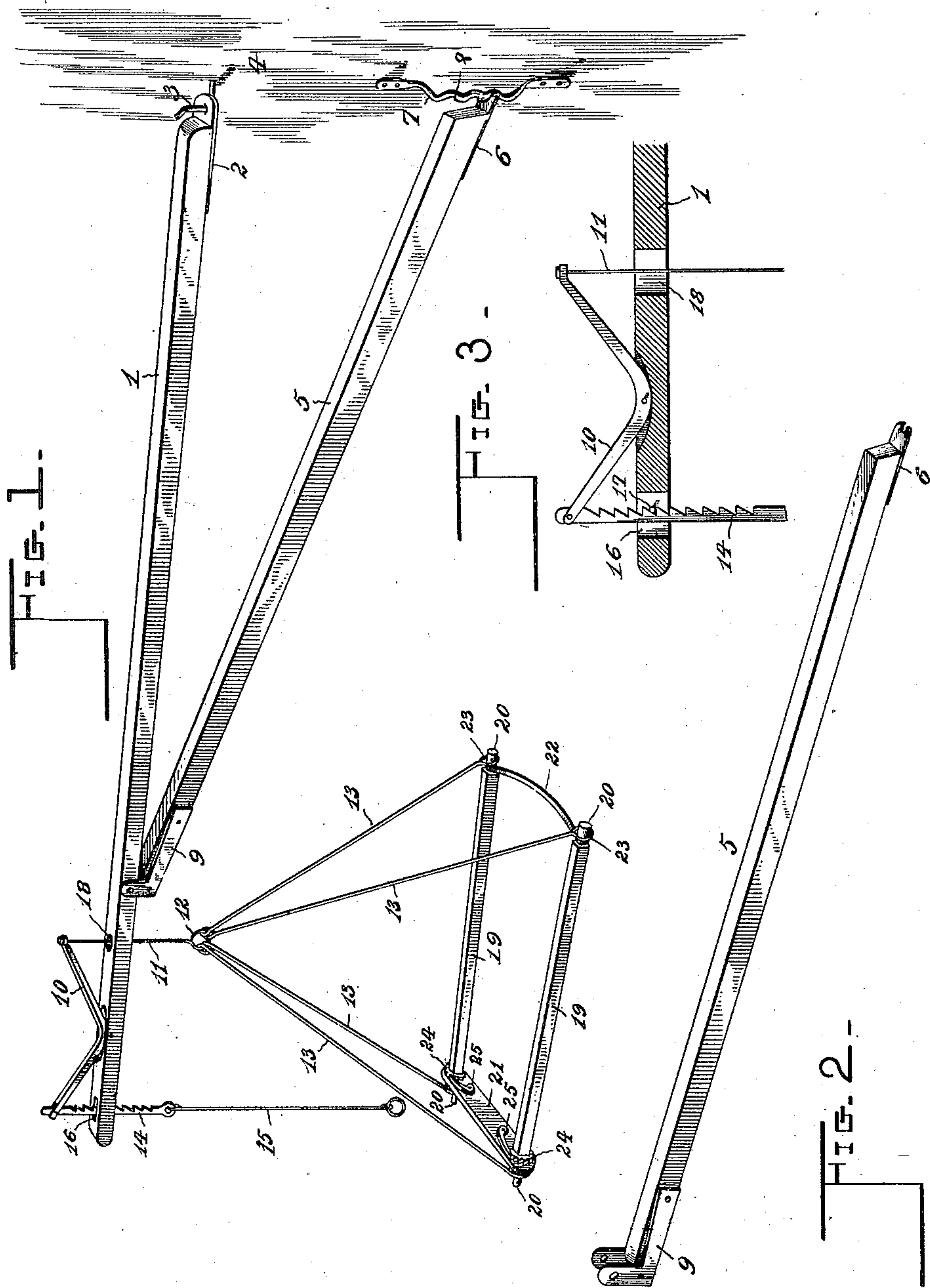
No. 634,930.

Patented Oct. 17, 1899.

O. R. F. WHITTEN.
QUILTING FRAME FOR SEWING MACHINES.

(Application filed Feb. 9, 1898.)

(No Model.)



Witnesses

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UNITED STATES PATENT OFFICE.

ORLANDO RANDOLPH FICKLIN WHITTEN, OF PRESCOTT, ARKANSAS.

QUILTING-FRAME FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 634,930, dated October 17, 1899.

Application filed February 9, 1898. Serial No. 669,670. (No model.)

To all whom it may concern:

Be it known that I, ORLANDO RANDOLPH FICKLIN WHITTEN, a citizen of the United States, residing at Prescott, in the county of Nevada and State of Arkansas, have invented a new and useful Quilting Attachment for Sewing-Machines, of which the following is a specification.

This invention relates to means for suspending a frame during the operation of quilting, so as to admit of the frame and quilt being moved longitudinally, laterally, and in any direction, according to the design or pattern of the quilting.

The primary object of the invention is the provision of suspending means which can be quickly placed in position, readily taken apart, and capable of being stored in a small space when not required for immediate use. The suspending means also comprise devices whereby the quilting-frame proper is at all times under the control of the operator or seamstress to admit of it being adjusted vertically to suit the increasing diameter of the roll, whereby the portion being quilted may be on a level with the sewing-machine table, so as to be directed to follow the various lines of the design.

For a full understanding of the merits and advantages of the invention, reference is to be had to the accompanying drawings and the following description.

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 of the quilting attachment. Fig. 2 is a detail view of the brace. Fig. 3 is a detail section of the outer end of the crane, showing the adjusting device connected therewith.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

The crane or swinging arm 1 is provided at its inner or rear end with a plate 2, which is secured thereto in any substantial manner and projects a short distance in the rear of

the crane and has the projecting end apertured to receive the vertical member of an angle-hook 3, secured to a wall, partition, post, or support 4, whereby a hinge-joint is formed for the crane to swing horizontally upon. A brace 5 has pivotal connection at its upper end with the crane or arm 1 near its outer end and is provided at its inner or lower end with a plate 6, which is forked, the forked end making adjustable connection with a bracket 7, secured to the wall, partition, post, or support 4 at a point below the angle-hook 3 and in vertical alinement therewith. This bracket 7 has its vertical portion provided with a series of stops, buttons, or teeth 8, which are engaged by the forked end of the plate 6, so as to hold the inner lower end of the brace 5 in an adjusted position, according to the required elevation of the crane 1. By having the plate 6 forked detachable connection thereof with the bracket 7 can be readily effected, thereby providing for the placing of the device in position or taking it down at a moment's notice. The outer end of the brace 5 has elbow-shaped irons 9 applied to its sides, the crane being received between the upright members thereof and pivoted thereto.

An elbow-lever 10 is fulcrumed at the point of flexion to the crane 1 and extends longitudinally thereof. A rod 11 is loosely connected with the extremity of the inner member of the lever 10, so as to turn freely therein, and is provided at its lower end with an eye 12, to which the upper ends of wires 13 or like connections are secured by having their extremities formed into eyes and looped into the eye 12. A ratchet-bar 14 has pivotal connection with the extremity of the other member of the lever 10, and a pull-cord, chain, or wire 15 has connection with its lower end and extends within convenient reach of the operator, so as to be grasped when it is required to adjust the quilting-frame vertically to the required elevation. This ratchet-bar operates through an opening 16 in the outer end of the crane 1, and its toothed portion is adapted to make adjustable connection with a pin or other stop 17 extending across the opening 16. The rod 11 also passes through an opening 13 in the outer portion of the crane, and the quilting-frame suspended therefrom

is moved up or down according to the adjustment of the elbow-lever 10, which is effected by grasping the lower end of the cord, chain, or part 15 and pulling outward thereon, so as to disengage the ratchet-bar from the pin or stop 17, after which a lowering or an upward movement of the part 15 will cause a corresponding movement of the quilting-frame and effect the desired adjustment, the parts being retained in an adjusted position by moving the ratchet-bar into engagement with the pin or stop 17.

The quilting-frame proper consists of longitudinal rollers 19, having journals 20 at their ends, and yokes 21 and 22, the yoke 21 being rigid and the yoke 22 resilient and capable of springing, and adapted to secure the requisite tension upon the goods being quilted. The journals 20 of the rollers 19 pass through openings in the extremities of the respective yokes and project beyond the said yokes a short distance, so as to receive and make connection with the lower ends of the suspending wires or parts 13, the latter having eyes 23 at their lower ends, into which the journals 20 extend. The rollers at the ends adjacent to the ridged yoke 21 are provided with ratchet-wheels 24, which coöperate with pawls 25, secured to the yoke 21, whereby the rollers are prevented from turning to permit of the unwinding of the goods after the latter have received the proper tension by being wound upon the rollers in the manner commonly practiced when using devices of this character.

When the parts are assembled, the attachment will appear as illustrated in Fig. 1. The quilting-frame is adjusted vertically by moving the inner end of the brace 5 up or down and securing it in an adjusted position by having the notched or forked end of the plate 6 engage with any one of the series of stops, buttons, or teeth 8 of the bracket 7. The goods to be quilted are secured to the rollers 19 in any of the usual ways, and the desired tension thereon is had by turning one or both of the rollers so as to wind the goods up thereon. Should that portion of the goods remote from the rigid yoke 21 tend to sag, the looseness will be taken up by the spring of the yoke 22, because, it must be remembered, that the goods are wound upon the rollers until the portion adjacent to the rigid yoke is sufficiently taut. This operation will tend to compress the yoke 22, which is slightly longer than the yoke 21 and is bowed between its ends, and when the goods are wound properly the spring-yoke will be normally under tension and serve to hold the portion of the goods adjacent thereto stretched and smooth. As the quilting progresses the goods are unwound from one roller and wound upon the opposite roller, and as the diameter of the quilted roll

increases the quilting-frame is raised by means of the part 15 in the manner as set forth.

Having thus described the invention, what is claimed, and desired to be secured by Letters Patent, is—

1. In a quilting attachment, the combination of a horizontal arm or crane having a pivotal support at its inner end, and adapted to swing horizontally and vertically upon said pivotal support, a quilting-frame suspended from the outer end of the said arm, a vertical series of stops about in vertical alinement with the pivotal support of the arm, and a brace pivoted at its outer end to the outer portion of the arm and having adjustable and pivotal connection at its inner end with the said vertical series of stops to admit of the outer end of the arm being raised and lowered and swinging horizontally in any adjusted position, substantially as described.

2. In a quilting attachment, the combination with an arm and a vertically-disposed elbow-lever having pivotal connection at the elbow with the said arm and having its end portions upwardly divergent, of a quilting-frame suspended from one end of the lever, a ratchet-bar having loose connection at its upper end with the opposite end of said lever and adapted to swing at its lower end to make adjustable and positive connection with a stop applied to the aforesaid arm, and a pull-cord or the like applied to the lower end of the ratchet-bar and extending within convenient reach to be drawn upon to operate the ratchet-bar to adjust the quilting-frame vertically, substantially as specified.

3. In a quilting attachment, longitudinal rollers having their ends reduced forming journals, and yokes connecting the rollers and slipped upon the journals thereof, in combination with upwardly-convergent rigid suspending devices, having eyes at their lower ends receiving the ends of the journals projecting beyond the yokes and confining the latter between them and the shoulders formed at the base of the journals, substantially as specified.

4. A quilting-frame comprising longitudinal work-supporting devices, two yokes connecting said devices and one of said yokes being flexible, and means for preventing retrograde movement of said work-supporters when the work is thereon, substantially as described.

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

ORLANDO RANDOLPH FICKLIN WHITTEN.

Witnesses:

J. T. WILLINGHAM,
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