Oct. 17, 1950 S. A. LAHNER 2,525,916

LABEL-STITCHING MACHINE

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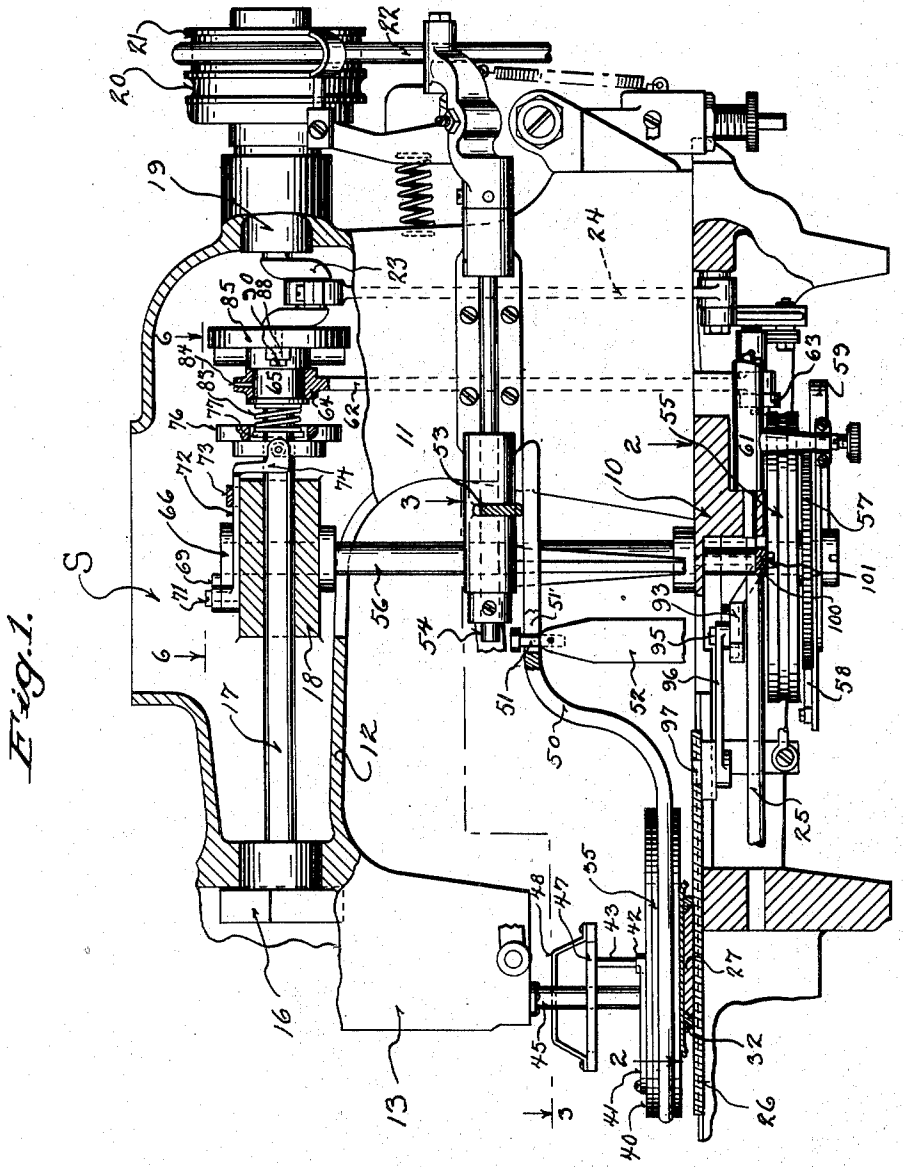


Fig. 1.

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Fig. 9.

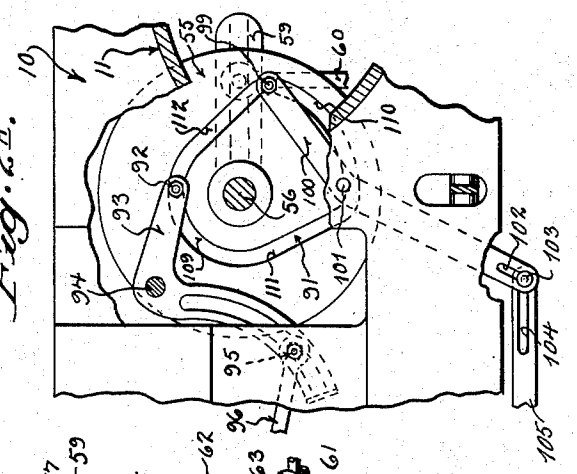


Fig. 2A.

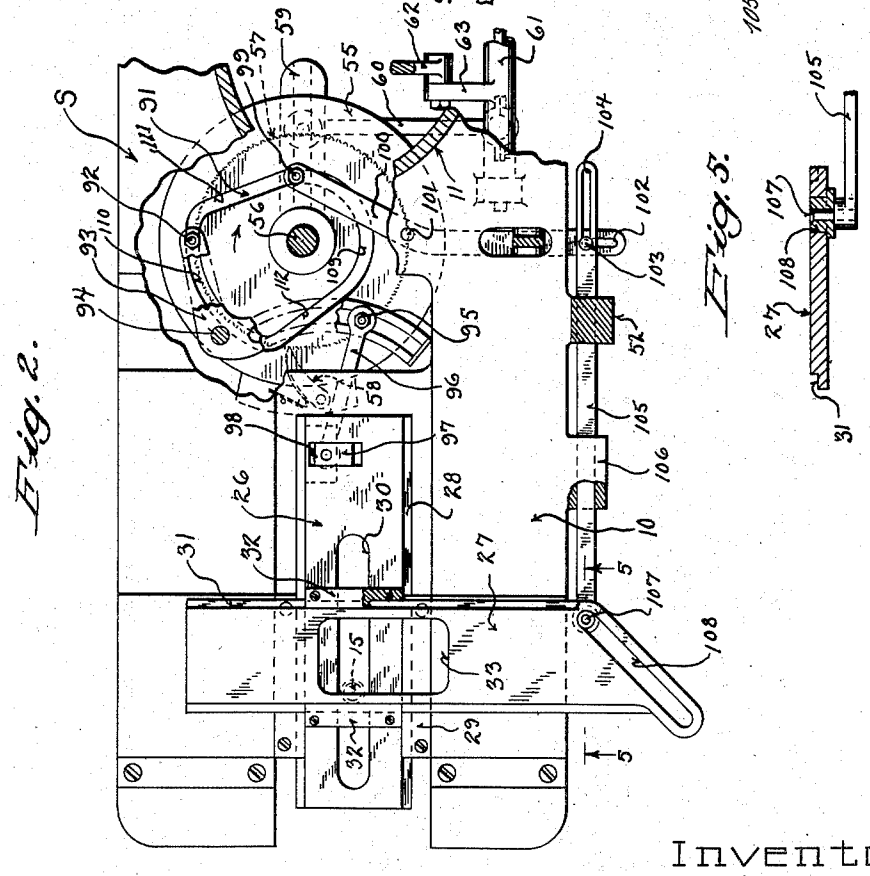


Fig. 2.

Fig. 3.

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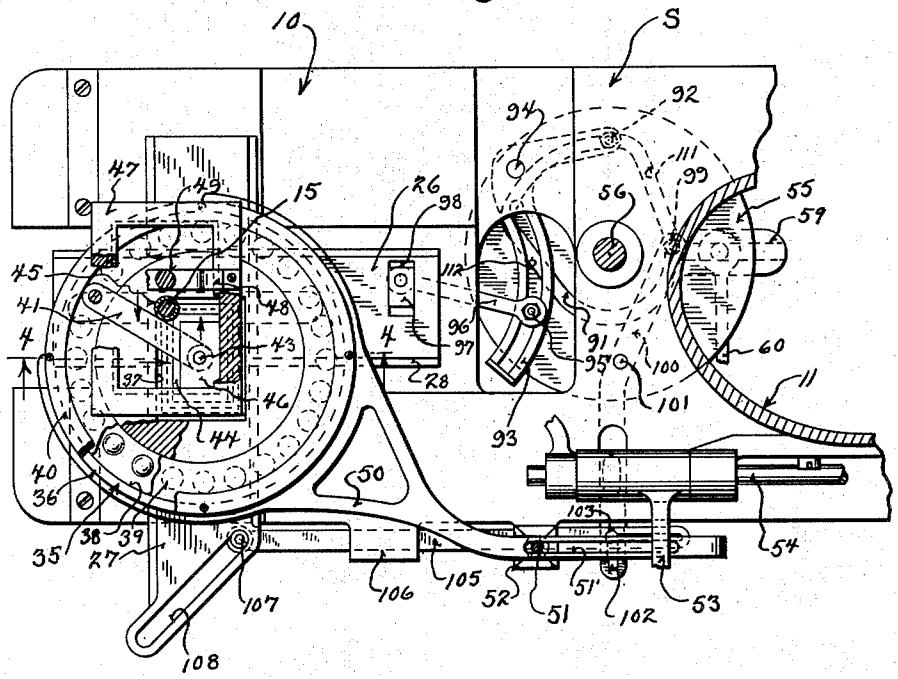
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LABEL-STITCHING MACHINE

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Fig. 3.



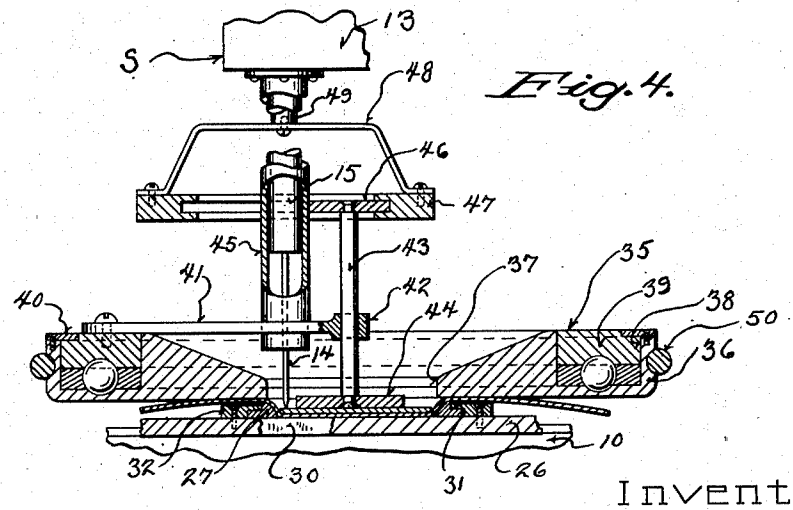


Fig. 4.

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Fig. 6.

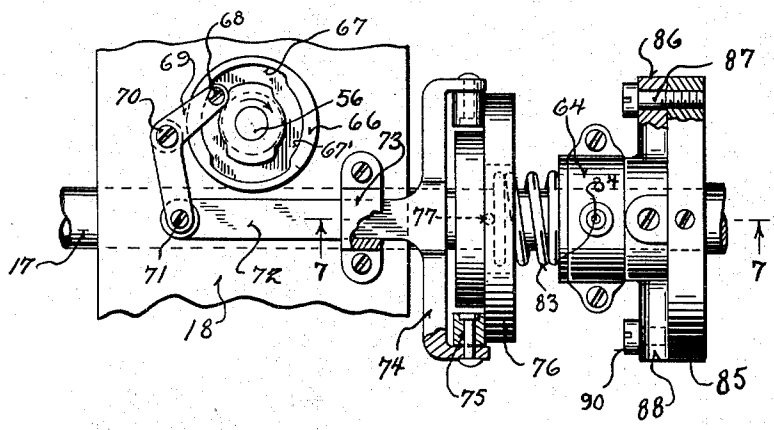


Fig. 7.

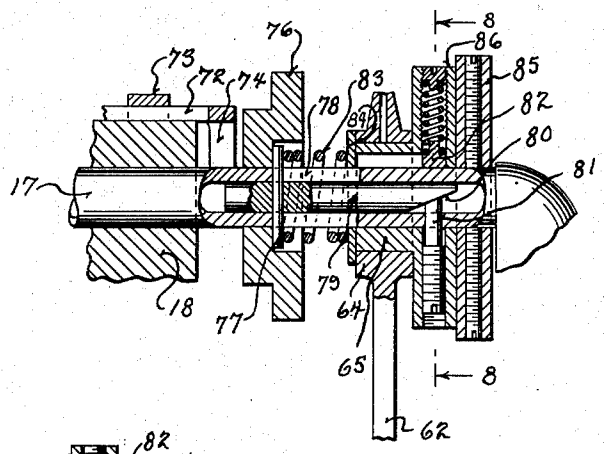
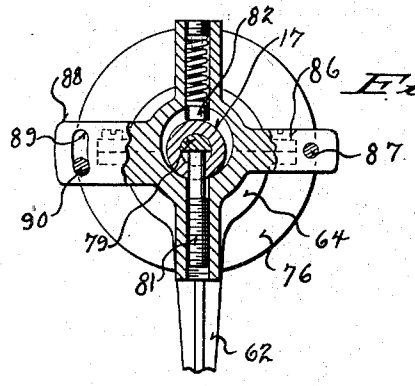


Fig. 8.



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UNITED STATES PATENT OFFICE

2,525,916

LABEL-STITCHING MACHINE

Sherman A. Lahner, Milwaukee, Wis.

Application March 22, 1945, Serial No. 584,056

12 Claims. (Cl. 112—104)

1

This invention appertains to sewing machines, and more particularly to machines of the type utilized for sewing labels or other fabric pieces on garments and the like.

One of the primary objects of my invention is to provide a novel attachment for sewing machines for effectively holding the label securely on a piece of goods or on a garment during the sewing of the label in place, whereby a quick and neat job may be accomplished.

Great difficulty has been experienced in holding labels in place during the sewing operation, and in all of the holders with which I am familiar, the holder is lifted off the label and moved out of the way of the needle during the completion of the sewing at the end of the label. This allows the unheld part of the label to pucker (particularly if the garment is made of knitted material) during the finishing of the sewing operation.

It is, therefore, another salient object of my invention to provide means whereby the label is held down securely throughout the entire sewing operation, so that all puckering of the label is eliminated, the label-holder bracket merely moving in advance of the needle bar during the advancing of the goods.

A further object of my invention is to provide a label-holder embodying a presser foot, which effectively engages the label over the greater part of the area thereof, leaving only the margin of the label exposed for sewing, whereby the label will lie flat and smooth over its entire face.

A still further important object of my invention is to provide means for automatically governing the stroke of the carrier or slide plates on the long and short sides of the rectangular labels, whereby a uniform stitch can be made entirely around rectangular labels.

A still further important object of my invention is the provision of novel means for operating the slide plates in a novel manner from a single feed wheel to obtain a compact and durable construction.

With these and other objects in view, the invention consists in the novel construction, arrangement, and formation of parts, as will be hereinafter more specifically described, claimed, and illustrated in the accompanying drawings, in which drawings:

Figure 1 is a fragmentary side elevational view of a sewing machine constructed in accordance with my invention, parts of the machine being shown broken away and in section.

Figure 2 is a horizontal, sectional view taken

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substantially on the line 2—2 of Figure 1, looking in the direction of the arrows, showing the bed plate and the slide plates for advancing the garment during the sewing of the label, the parts being shown in their initial position for starting the sewing of a label.

Figure 2A is a view similar to Figure 2, but showing the parts after the label has been sewed on one long side and on one short side.

Figure 3 is a horizontal sectional view taken on the line 3—3 of Figure 1, looking in the direction of the arrows, illustrating my novel label-holder.

Figure 4 is an enlarged, fragmentary, detail, vertical, sectional view taken on the line 4—4 of Figure 3, looking in the direction of the arrows.

Figure 5 is an enlarged, transverse, sectional view through the transverse slide plate of the garment-holder, taken on the line 5—5 of Figure 2, looking in the direction of the arrows.

Figure 6 is an enlarged, fragmentary, horizontal, sectional view taken on the line 6—6 of Figure 1, looking in the direction of the arrows, illustrating the means for automatically changing the throw of the drive cam for the work-holding slide plates.

Figure 7 is a fragmentary, detail, sectional view taken on the line 7—7 of Figure 6, looking in the direction of the arrows, illustrating the means for varying the throw of the cam for actuating the work-holding slide plates.

Figure 8 is a detail, sectional view taken at right angles to Figure 6 on the line 8—8 of Figure 7, looking in the direction of the arrows, showing the cam-actuating means.

Figure 9 is a fragmentary, plan view of a garment or a piece of goods, showing a label or patch sewed thereto on my improved sewing machine.

Referring to the drawings in detail, wherein similar reference characters designate corresponding parts throughout the several views, the letter S generally indicates a sewing machine, which can be of the general character shown and described in the patent to Allen et al. No. 1,319,450, issued October 21, 1919.

Hence, the machine comprises a frame including a bed plate 10 from which rises the hollow standard 11. The upper end of the hollow standard 11 has formed thereon the laterally extending tubular arm 12, which terminates in a hollow head 13.

As herein represented, the stitch-forming mechanism comprises an eye pointed needle 14 carried by the needle bar 15. The needle bar 15

is reciprocated through any suitable mechanism 16 from the main drive crankshaft 17. This crankshaft 17 is mounted in suitable bearings 18 and 19 in the lateral arm 12, and the shaft protrudes through the arm and is provided with loose and fast pulley wheels 20 and 21, and a belt 22 is adapted to be shifted from one pulley to the other. The belt 22 can be driven from any preferred drive mechanism. Formed on the crankshaft 17 is a crank 23, and this crank has connected therewith a pitman rod 24, which drives in any preferred way the shuttle-operating shaft 25 (see patent above mentioned).

Arranged on the bed plate 10 is a longitudinally extending slide plate 26 and a transversely extending slide plate 27. These plates 26 and 27 are arranged at right angles to one another, and the longitudinal slide plate 26 has its longitudinal edges beveled, as at 28, and mounted in suitable guide tracks 29 carried by the bed plate 10. This longitudinal slide plate 26 has also formed therein a longitudinally extending slot 30 for the needle 14, as will be later more fully described.

The transverse slide plate 27 has its longitudinal edges beveled, as at 31, and mounted in guide tracks 32 fastened on the longitudinal slide plate 26. Thus, the transverse slide plate 27 can move with the longitudinal slide plate 26, and also transversely of the longitudinal slide plate. This transverse slide plate 27 is provided with an enlarged opening 33, which corresponds to the configuration of the label or patch to be sewed, and this opening 33 can be of a size just slightly greater than the label. The needle bar 15 reciprocates constantly at one point, and the slide plates 26 and 27 form means for carrying the garment with the label in a rectangular path during the sewing operation. The means for operating the slide plates will be later described.

Naturally, the label and the garment must be securely held on the slide plates, and in order to hold the garment firmly in place at all times during the label sewing operation, I provide my novel clamp or garment holder 35.

My clamp 35 includes a circular or like disc 36 having formed therein a central opening 37, which corresponds to the opening in the carrier slide plate 27, and the disc is adapted to fit down on top of the garment or fabric, so as to hold the fabric on the slide plate, and the disc 36 travels with the slide plate 27 the weight of the clamp 35 is utilized for holding the same down against a garment. The disc has formed therein an annular raceway 38 for receiving a bearing supported ring 39.

From the construction so far, it can be seen that the ring 39 is free to rotate in the disc, and friction between the ring and the disc will be reduced to a minimum. The free movable ring 39 can be held against accidental displacement from the disc by the use of a removable retaining ring 40. The retaining ring 40 is connected to the disc 36 and extends over the upper face of the movable ring 39, and the movable ring 39 can be rabbeted to receive the retaining ring 40. This movable ring 39 supports the inwardly directed bracket arm 41, and the inner end of the bracket arm is provided with a vertical bearing or guide sleeve 42 for the stem 43 of the presser foot 44, which constitutes the label-holder per se.

The presser foot 44 is of the same configuration as the label to be sewed, but is of a size slightly less than the label, whereby when the presser foot is in engagement with the label,

only the marginal portion of the label will be exposed for sewing. The weight of the stem 43 and the presser foot 44 will aid in connection with other mechanism to hold the same down on the label, so that the label will be held in place. If desired, however, the weight of the presser foot and stem can be used solely for engaging the label. The presser foot can be forcibly raised and lowered by means which will be later described.

The needle 14 lies directly in back of the bracket arm 41, and, consequently, during the advancing of the label and the garment by the slide plates 26 and 27, the needle guard sleeve 45 (which will be later described) merely pushes against the bracket arm, and the bracket arm is easily advanced in front of the needle, in view of the fact that its carrier ring 39 freely rotates in the disc 36. Consequently, it is never necessary to lift the presser foot out of engagement with the label until the label is completely sewed. The bracket arm 41 will hold the presser foot 44 centrally of the clamp 35.

In order to prevent injury to the needle during the reciprocation thereof and injury to the bracket arm 41, a tubular guard sleeve 45 is placed about the needle 14 and the needle bar 15, and the upper end of the tubular guard sleeve is fastened to the sewing machine head 13.

As my machine is particularly useful in sewing rectangular labels, the presser foot 44 in the present instance travels in a rectangular path, and in order to prevent turning of the presser foot during the travel of the goods-holder or disc 36 and the presser foot 44, the upper end of the stem 43 of the label-holder has rigidly secured thereto a guide plate 46, which is received in the master guide 47. This master guide 47 is also of a rectangular shape, and its inner edge is grooved to receive the guide plate 46. A bracket 48 is utilized for connecting the master guide 47 with the sewing machine slide bar 49. The sewing machine slide bar 49 can be raised and lowered manually in any preferred way, and this slide bar 49 can form a part of the sewing machine. Thus, it is merely necessary to raise the slide bar 49 when it is desired to move the presser foot 44 above the label, whereby to facilitate the placing of a label to be sewed on the garment or to permit the removal of the garment and a sewed label.

Obviously, the garment-holder or disc 36 also must be elevated during the placing of the garment or piece goods on and off the machine, and the disc 36 can be raised and lowered in different manners.

As shown, a laterally extending arm 50 is carried by the disc, and this arm is rockably mounted intermediate its ends on a loose pivot pin 51 carried by a bearing bracket 52, which can form a part of the sewing machine. The pivot pin 51 operates in a longitudinally extending slot 51' formed in the arm 50, and, consequently, the arm 50 can slide and turn as the clamp or garment holder 35 moves with the garment and the slide plates 26 and 27. If preferred, the bearing bracket 52 for the arm can be mounted directly on and carried by an extension of the slide plate 27. The free end of the arm 50 extends under a crankarm 53 formed on a rock shaft 54. The rock shaft can be manually actuated through the medium of a pedal (not shown). This rock shaft can also be employed for severing the thread above the shuttle after sewing the label. However, this forms no part of the present invention, and the same has not been illustrated. However,

upon operation of the rock shaft and downward movement of the crank 53, the forward end of the arm 50 will be raised, carrying the disc 36 therewith above the garment and label.

When the clamp 25 is raised and the presser foot 44 is elevated, the garment can be quickly removed from the machine, and a new garment can be placed over the slide plates. As soon as the garment is in correct position, the clamp 35 is lowered onto the garment, and the label is placed within the opening 37 of the disc.

The slide bar 49 is now lowered, so that the presser foot 44 will engage the label. Only the margin of the label will be exposed, and the needle 14 travels in the space between the walls 33 of the slide plate 27 and the marginal edge of the presser foot 44, and, consequently, the periphery of the label will be sewed tight to the garment without wrinkling or puckering. As the bracket arm 41 moves in advance of the needle, the label is firmly held throughout one hundred per cent of the sewing. Due to the fact that the opening 33 in the slide plate 27 forms a pocket for receiving the presser foot, the garment, upon receiving the label, will be forced into the pocket, and, hence, firmly held.

In accordance with my invention, I provide an automatic means for regulating the movement of the slide plates which carry the label and the garment.

My automatic means includes the feed wheel 55, which is secured upon a shaft 56. This shaft 56 is rotatably mounted in suitable bearings carried by the bed plate 11 and the lateral hollow arm 12. The feed wheel 55 is rotated through the medium of a ratchet wheel 57. The ratchet wheel 57 is advanced in one direction in a step-by-step movement through the medium of a ratchet dog 58 carried in an arcuate path back and forth through the medium of a rock arm 59. This rock arm 59 is actuated by a pitman 60, and the pitman 60 is actuated from a rock shaft 61. The rock shaft 61 is, in turn, operated by a pitman 62. This pitman 62 is connected with a crank 63 on the rock shaft 61.

The mechanism for turning the feed wheel 55 from the ratchet wheel 57 and the mechanism for turning the ratchet wheel in one direction from the rock shaft 61 is shown and described in detail in the Allen et al. patent heretofore mentioned, and, hence, this mechanism is not shown or described in detail. The pitman rod 62 is provided with a strap 64, which extends about a cam 65 on the main operating shaft 17, and, in accordance with my invention, I provide means for varying the throw of the cam 65 at different times, so as to vary the sweep of the arm 59, whereby to control the movement of the ratchet wheel and, consequently, the distance of movement of the feed wheel 55.

The means for varying the throw of the cam 65 will now be described. The upper end of the shaft 56 has connected therewith a wheel 66, having a cam groove 67, which receives a roller stud 68. This roller stud 68 is carried by the outer end of one arm of a bell crank 69, and the bell crank is rockably mounted at its angle on a pivot pin 70 carried by a part of the hollow arm 12. The outer end of the other arm of the bell crank 69 has pivotally connected thereto, as at 71, a push rod 72 slidably mounted in a guideway 73. The push rod terminates in a yoke 74 carrying roller studs 75 for engaging a push collar 76. The push collar is mounted directly on the main shaft 17 and bears against a crosspin 77 slidably mounted in a diametrically extending slot 78 formed in the main shaft. The main shaft 17 at this point is formed hollow and slidably receives an operating bolt 79, which has its forward end beveled, as at 80, for actuating and operating against the smooth end of an adjustment screw 81 carried by the cam 65.

By referring to Figure 8, it can be seen that the bore of the cam 65 is formed relatively large, so that the cam can be shifted diametrically across the shaft 17 to vary the throw of the cam, and the cam carries a spring-pressed stud 82, which normally holds the cam in conjunction with the screw 81 and the bolt 79 tight on the shaft.

The crosspin 77 extends through the bolt 79 and is movable therewith, and the crosspin is normally held firm against the push collar 76 by means of an expansion coil spring 83 placed about the shaft 17 between the crosspin 77 and a wear disc 84, which, in turn, engages the cam 65 and the cam strap 64. The cam is carried by a cam wheel support 85, which is keyed to the main shaft 17 for rotation therewith, and the cam at one side is provided with an arm 86 connected by a pivot bolt 87 with its support 85. The opposite side of the cam carries a similar arm 88, provided with an arcuate slot 89 for receiving a guide pin 90 carried by the cam support 85. The throw of the cam 65 is at right angles to the guide stud 90, and, consequently, as the cam is moved outwardly, the arm 88 will ride on the pin 90.

The wheel 66 having the cam groove 67 travels one revolution for each complete label sewing, and, hence, the groove 67 is divided into quarters representing each label side. When the long sides of the labels are reached, the roller stud 68 follows the indentation 67' of the cam slot, and, consequently, the bell crank 69 is rocked for forcing the push rod 72 away from the cam 65. This carries the push collar 76 away from the cam, due to the spring 83. Likewise, the bolt 79 will be carried away from the cam by the spring, and as the beveled face 80 of the bolt rides away from the screw 81, the cam is permitted to move inwardly toward the shaft, which decreases the throw thereof. A decrease in the throw of the cam 65 results in decreased travel of the pitman rod 62 and decreased movement of the arm 59, which actuates the ratchet wheel 57. Thus, the movement of the ratchet wheel on the long side of the label is materially decreased.

On the short side of the label, the roller stud 68 engages the high sides of the cam groove, and, consequently, the bell crank 69 will be rocked, forcing the push rod 72 toward the cam 65. Movement of the push collar 76 will push in on the bolt 79, and the inclined face 80 thereof engaging the screw 81 will move the cam outwardly from the shaft 17, increasing the throw thereof and the travel of the pitman rod 62. This will result in greater travel of the ratchet wheel 57, and, consequently, greater travel of the feed wheel 55 on the short sides of the label. With a decrease of travel of the cam 65 for the long sides of the label and an increase of travel of the cam 65 for the short sides of the label, a uniform speed travel is obtained for the label on the long and short sides thereof.

The means for operating the slide plates 26 and 27 for carrying the garment during the label-sewing operation embodies a cam groove 91 formed in the upper face of the feed wheel 55. This cam groove 91 is of a predetermined form, and riding in the groove 91 is a roller stud 92 carried by one arm of a bell crank 93, which is

rockably mounted at its angle on a pivot 94. This pivot 94 can be carried by the bed plate 11 of the machine. The other arm of the bell crank is of an arcuate shape and is provided with an arcuate groove for adjustably receiving the connecting pin 95 of an operating link 96. This operating link 96 carries a slide block 97 mounted in a slideway 98 in the rear end of the slide plate 26. By adjusting the position of the pin 95 in the groove of the arcuate arm of the bell crank 93, the movement of the slide plate 26 which carries the slide plate 27, can be governed to agree with the width of the label being sewn.

Also received in the cam groove 91 is a second roller stud 99 carried by a rock lever 100. This rock lever is mounted intermediate its ends on a pivot 101 carried by the bed plate 11, and the outer end of the rock lever 100 is slotted, as at 102, for receiving an operating pin 103. This pin is also slidably received in a slot 104 formed in a push rod 105. The push rod 105 is mounted in guides 106 on the bed plate 11, and the forward end of the push rod carries a roller stud 107 mounted in an inclined slot 108 formed in the outer end of the slide plate 27.

The cam groove or track 91 includes a concentric portion 109 arranged adjacent the hub of the feed wheel and a similar concentric portion 110 located adjacent the periphery of the feed wheel 55. These concentric portions 109 and 110 are arranged diametrically opposite one another and each takes up a space on the feed wheel equal to one-fourth revolution, and the ends of the concentric portions 109 and 110 are connected by inclined portions 111 and 112. If desired, an independent cam groove for each roller stud 92 and 93 can be formed in the feed wheel 55 in lieu of the single cam groove 91.

Considering that the machine is ready to sew a label and the garment and label have been correctly positioned on the machine, upon rotation of the main shaft 17, the needle bar 15 will be rapidly reciprocated, and the feed wheel 55 will be turned in a clockwise direction, as indicated by the arrow in Figure. 2. Hence, the roller stud 92 will ride in the concentric portion 110 of the cam groove, and the bell crank 93 will remain stationary.

However, the roller stud 99 will travel in the inclined portion 111 of the cam groove, which will force the roller stud outwardly toward the periphery of the feed wheel, and the rock lever 100 will turn on its pivot 101, moving the push rod 105 to the left (see Figure 2). The roller stud 107 traveling in the inclined groove 108 will move the slide plate 27 inwardly, carrying the garment, the label, and the clamp 35 as a unit past the needle on the long side of the label, and by the time the roller stud 107 travels the distance of the slot 108, the slide plate 27 will have moved a sufficient distance to complete the sewing of the label on the long side, and the guard sleeve 45 for the needle bar will have pushed the bracket arm 41 of the label-holder in front of the needle. Thus, by the time the roller stud 99 travels in the inclined portion 111 of the cam groove 91, the sewing of one long side of the label will be completed, as stated, and the roller 99 will then travel in the concentric portion 110 of the cam groove, and no further movement will be imparted to the push rod 105 at this time. During this operation of the sewing on the long side of the label, the roller stud 68 of the drive will be riding in the depressed portion 67' of the groove 67 of the cam 66, and, thus, the drive eccentric 65 is in toward its shaft 17.

Immediately after this movement, the roller stud 92 will ride in the inclined portion 112 of the cam groove 91, and the roller stud will be moved toward the center of the feed wheel, which will swing the arcuate arm of the bell crank 93 outwardly, and the slide plate 26 will be fed inwardly, moving both the slide plates 26 and 27 longitudinally of the bed plate 11, which will permit the needle to sew one short side of the label, and when the short side of the label is sewed, the pivot pin 103 will lie at the outer end of the slot 104 of the push rod 105, as the push rod will be carried with the slide plates 26 and 27 toward the front end of the machine. This position is clearly shown in Figure 2A. During the sewing of the short side of the label, the roller stud 68 will be riding in one outer part of the groove 67 of the cam 66, and the drive eccentric 65 will be forced outwardly of its shaft 17.

Upon the next quarter revolution of the feed wheel 55, the roller stud 92 will ride in the inner concentric portion 109 of the cam groove, and, hence, the slide plate 26 will remain stationary. However, the roller pin 99 will ride in the inclined portion 112 of the cam groove and will be brought toward the center of the feed wheel, which will move the outer end of the rock lever 100 to the right, and bring back the push rod 105 to its initial starting position. The roller stud 107, operating in the inclined groove 108, will move the slide plate 27 outwardly, bringing the label and fabric transversely of the bed plate, and permit the completion of the sewing of the label on its other long side.

Upon the next and final quarter revolution, the roller stud 99 will ride in the inner concentric portion 109 of the cam groove, and, hence, the rock arm 110 will remain stationary. The roller stud 92 will be moving at this time in the inclined portion 111 of the cam groove, and, consequently, the stud will be forced toward the periphery of the feed wheel. This will swing the arcuate arm of the bell crank 93 toward the shaft 56, which will pull the slide plate 27 inwardly, carrying the slide plate 27 and the garment and label and label-holder therewith, which will permit the sewing of the last short side of the label. This completes the sewing of the label and one cycle of the operation of the feed wheel, and the parts will again be disposed as shown in Figure 2.

At this time, the rock shaft 54 can be operated by the crank 53, so as to swing up on the outer end of the arm 50 and raise the clamp 35 above the work. Likewise, the slide bar 49 on the machine head can be raised to elevate the presser foot, and the garment with the completed label thereon can be removed. It is to be understood that upon the operation of the rock shaft 54 for lifting the clamp 35, the cutter (not shown) for the thread will also be actuated.

With my novel apparatus, the label is held tight down on the work during the complete sewing thereof on all four sides, and the machine is so arranged that the stitches on the short sides of the label will be substantially equal in length to the stitches on the long side of the label.

Changes in details may be made without departing from the spirit or the scope of my invention, but what I claim as new is:

1. In a machine for sewing labels on garments and the like, a reciprocating needle for sewing the label to the garment, a presser foot for holding the label on the garment during the entire

sewing operation, a bracket arm for the presser foot movable in advance of the needle, whereby the presser foot will stay in contact with the label during the entire sewing operation, means for raising the presser foot above the label and garment after the completion of the sewing operation, and means for preventing turning movement of the presser foot on the label during the traveling of the bracket arm in advance of the needle.

2. A machine for sewing labels on garments and the like comprising, a reciprocating needle for sewing the label to the garment, a presser foot movable on and off the label, means for advancing the garment, label, and presser foot past the needle on all four sides of the label, a bracket arm for the presser foot movable in advance of the needle, whereby the presser foot can engage the label during the entire sewing operation of the label, and a master guide carried by the machine for holding the presser foot against turning movement during the traveling of the bracket arm and the label.

3. A machine for sewing labels on garments and the like comprising, a reciprocating needle, means for advancing the garment and label past the needle on all four sides of the label, a clamp engaging the garment and holding the garment on the garment-advancing means, a movable ring on said clamp, a bracket arm secured to the ring and movable therewith and extending toward the central portion of the clamp, and a presser foot slidably carried by the bracket arm for engaging the label for holding the label on the garment, the bracket arm being movable in advance of the needle, whereby the presser foot can be held in engagement with the label during the complete sewing thereof.

4. A machine for sewing labels on garments and the like comprising, a reciprocating needle, a bar for reciprocating the needle, a guard sleeve partially surrounding the needle bar and needle, work-receiving means on the machine disposed below the needle for advancing the work past the needle on all four sides of the label, a clamp engaging the work for holding the work on said work-advancing means, a movable ring rotatably mounted on the clamp, a bracket arm secured to the ring and movable therewith extending toward the central portion of the clamp, a label presser foot slidably carried by the bracket arm for holding a label on the work, said presser foot being movable independently of the clamp above the work and label to permit the placing of a label on the work under the foot, and said bracket arm being disposed in front of the guard sleeve, whereby during the advancing of the work past the needle the guard sleeve will push the bracket arm in advance of said needle.

5. A machine for sewing labels on garments and the like comprising, a reciprocating needle, a bar for reciprocating the needle, a guard sleeve partially surrounding the needle bar and needle, work-receiving means on the machine disposed below the needle for advancing the work past the needle on all four sides of the label, a clamp engaging the work for holding the work on said work-advancing means, a movable ring rotatably mounted on the clamp, a bracket arm secured to the ring and movable therewith extending toward the central portion of the clamp, a label presser foot slidably carried by the bracket arm for holding a label on the work, said presser foot being movable independently of the clamp above the work and label to permit the placing of a label on the work under the foot, and said bracket arm being disposed in front of the guard sleeve, whereby during the advancing of the work past the needle the guard sleeve will push the bracket arm in advance of said needle, and a master guide for holding the presser foot against turning movement during travel of the bracket arm.

6. A machine for sewing labels on garments and the like comprising, a reciprocating needle, a bar for reciprocating the needle, a guard sleeve partially surrounding the needle bar and needle, work-receiving means on the machine disposed below the needle for advancing the work past the needle on all four sides of the label, a clamp engaging the work for holding the work on said work-advancing means, a movable ring rotatably mounted on the clamp, a bracket arm secured to the ring and movable therewith extending toward the central portion of the clamp, a label presser foot slidably carried by the bracket arm for holding a label on the work, said presser foot being movable independently of the clamp above the work and label to permit the placing of a label on the work under the foot, and said bracket arm being disposed in front of the guard sleeve, whereby during the advancing of the work past the needle the guard sleeve will maintain the bracket arm in advance of said needle, a master guide for holding the presser foot against turning movement during the travel of the bracket arm, and means for raising and lowering the master guide and presser foot.

7. A machine for sewing labels on work comprising, a bed, a head arranged above said bed, a reciprocating needle bar carried by the head, a needle in said bar, work-receiving means on the bed for advancing the work with a label thereon past the needle on all four sides of the label, a clamp engaging the work for holding said work against the work-advancing means, a freely rotatable ring on the clamp, a bracket arm secured to the ring and extending toward the axis of said ring, a holder for the label including a stem slidably mounted in the inner end of the bracket arm and a presser foot, said bracket arm being movable in advance of the needle, whereby the presser foot will engage the label during the complete sewing operation, a guide plate on the upper end of the stem, a manually actuated slide bar on the head, and a master guide movable with the slide bar receiving the guide plate for preventing turning movement of the presser foot during the traveling of the bracket arm.

8. A machine for sewing labels on work comprising, a bed, a head arranged above said bed, a reciprocating needle bar carried by the head, a needle in said bar, work-receiving means on the bed for advancing the work with a label thereon past the needle on all four sides of the label, a clamp engaging the work for holding said work against the work-advancing means, a freely rotatable ring on the clamp, a bracket arm secured to the ring and extending toward the axis of said ring, a holder for the label including a stem slidably mounted in the inner end of the bracket arm and a presser foot, said bracket arm being movable in advance of the needle, whereby the presser foot will engage the label during the complete sewing operation, a guide plate on the upper end of the stem, a manually actuated slide bar on the head, and a master guide movable with the slide bar receiving the guide plate for preventing turning movement of the presser foot during the traveling of the bracket arm, said master guide in-

cluding an open frame having an inner marginal groove, and said guide plate being received in said groove.

9. A machine for sewing rectangular labels on work comprising, a main drive shaft, a needle reciprocated from said main drive shaft, a bed plate below said needle and main shaft, work-advancing means upon said bed for carrying the work and the rectangular label past the needle on all four sides of the label, including a slide plate mounted longitudinally of the bed plate, and a slide plate carried by the first slide plate and movable transversely of the bed plate and said first-mentioned slide plate, a countershaft, a feed wheel on said countershaft, means for independently operating the slide plates at different stepped intervals from the feed wheel, means for operating the feed wheel from the main shaft, including an eccentric on said shaft, and means for automatically varying the throw of the eccentric according to the position of the feed wheel.

10. A machine for sewing stitches of substantially equal length on all four sides of a rectangular-shaped label comprising, a bed plate, a main shaft above the bed plate, a reciprocating needle, means for actuating the needle from the main shaft, means for driving the main shaft, means for holding a rectangular label on the work, means for advancing the work and label past the needle on all four sides of the label, including a slide plate movable longitudinally of the bed plate, a second slide plate carried by the first slide plate movable transversely of the bed plate and said first slide plate, said second slide plate having an opening of a greater size than the label for receiving the work and the label, and means for operating the slide plates at a uniform rate of speed for the short and long sides of the label, including a feed wheel having a cam groove, operating members for actuating the slide plates independently from the feed wheel including stud rollers disposed in the cam groove, means for advancing the feed wheel in one direction from the main drive shaft including an eccentric on said main drive shaft, and means for automatically varying the throw of the eccentric from the center of the main drive shaft according to the position of the feed wheel.

11. A machine for sewing stitches of substantially equal length on all four sides of a rectangular-shaped label comprising, a bed plate, a main shaft above the bed plate, a reciprocating needle, means for actuating the needle from the main shaft, means for driving the main shaft, means for holding a rectangular label on the work, means for advancing the work

and label past the needle on all four sides of the label, including a slide plate movable longitudinally of the bed plate, a second slide plate carried by the first slide plate movable transversely of the bed plate and said first slide plate, said second slide plate having an opening of a greater size than the label for receiving the work and the label, and means for advancing the first slide plate at an equal speed with the second slide plate, including a feed wheel having a cam groove, operating members for actuating the slide plates independently from the feed wheel including stud rollers disposed in the cam groove, means for advancing the feed wheel in one direction from the main drive shaft including an eccentric on said main drive shaft, and means for automatically varying the throw of the eccentric from the center of the main drive shaft according to the position of the feed wheel, said means including a timing disc rotatable with the feed wheel having throws at its quarters, a push yoke actuated from the timing wheel, a bolt slidably mounted in the shaft actuated by the push yoke, said bolt having an inclined beveled face, and a threaded pin on the eccentric engaging said inclined face of the bolt.

12. In a machine for sewing labels on work, a bed plate, a reciprocating needle above the bed plate, work-advancing means on the bed plate for moving the work past the needle on all four sides of the label, including a longitudinally movable slide plate, a second slide plate movable transversely of the bed plate and first slide plate and carried by said first slide plate, a single feed wheel, means for turning the feed wheel in one direction, said feed wheel having a cam groove therein, a crank having a stud roller fitted in the cam groove and operatively connected to the first slide plate, and a second crank operatively connected to the second slide plate and having a stud roller fitted in the same cam groove, said cam groove having concentric non-operating crank portions and oppositely inclined, operating crank portions.

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