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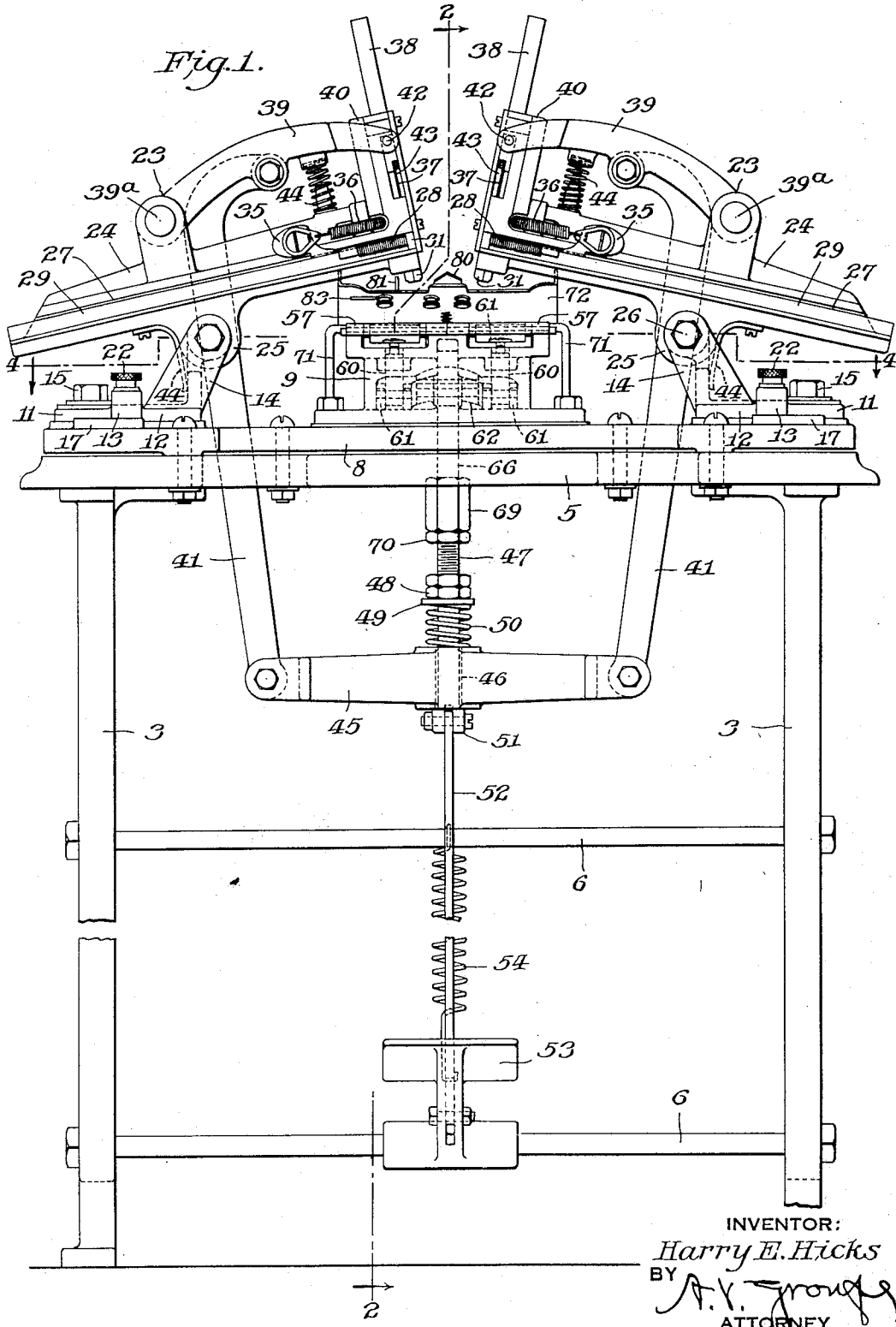
H. E. HICKS

1,938,386

STAPLING MACHINE

Filed Jan. 21, 1932

3 Sheets-Sheet 1



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Dec. 5, 1933.

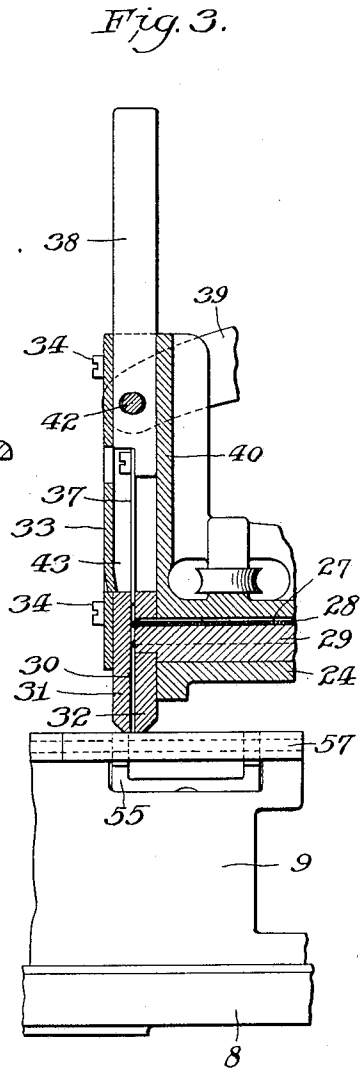
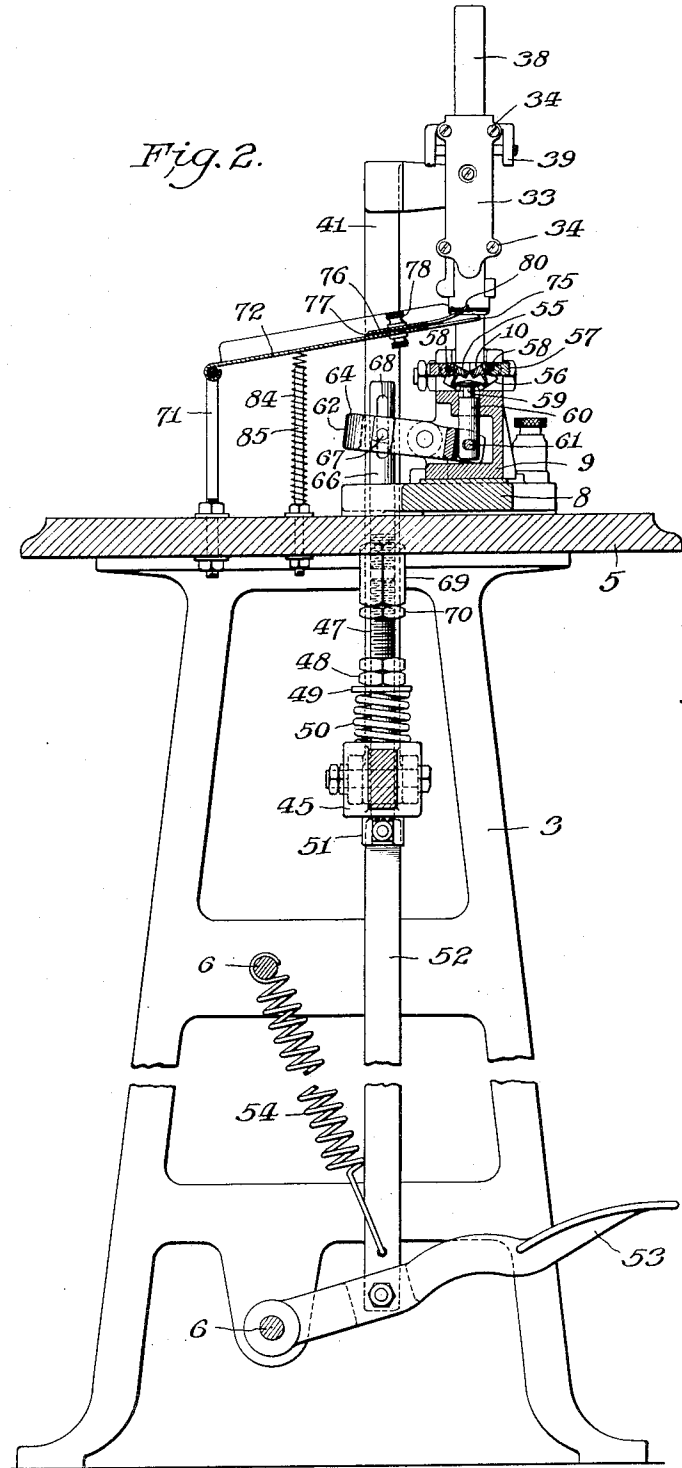
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STAPLING MACHINE

Filed Jan. 21, 1932

3 Sheets-Sheet 2



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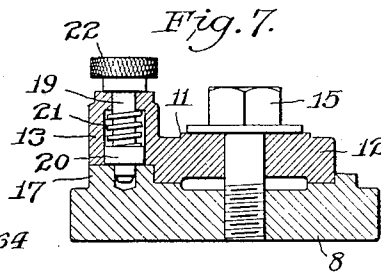
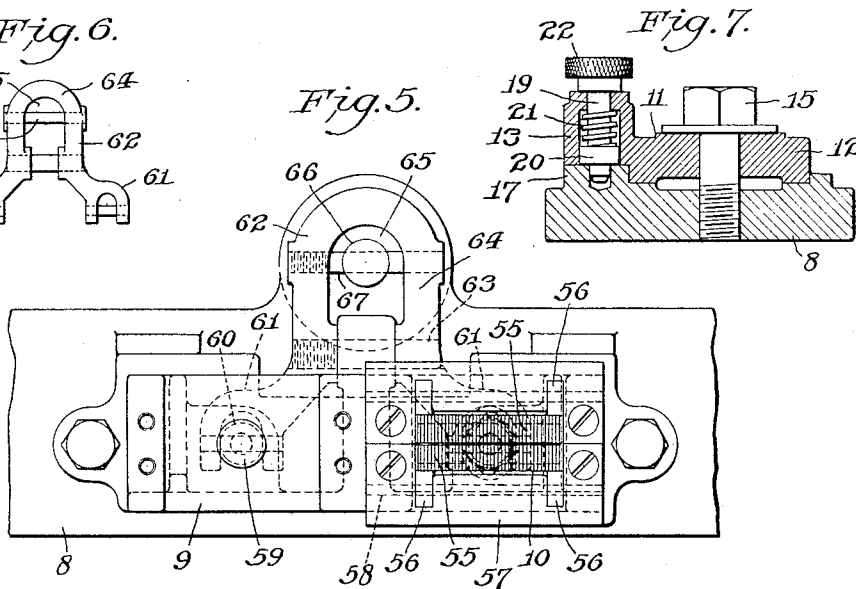
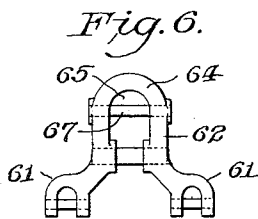
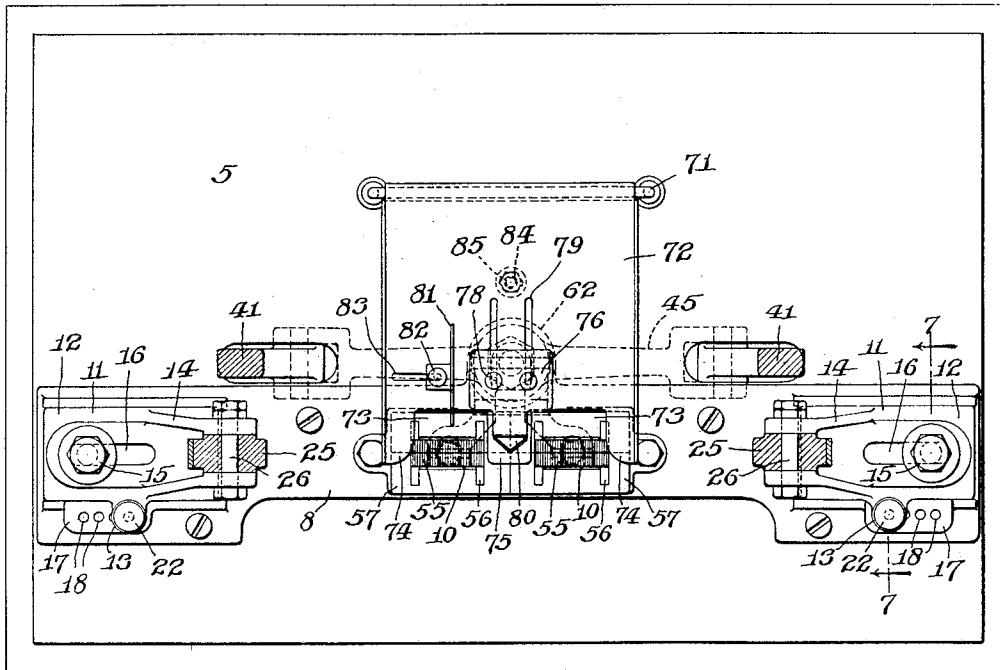
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STAPLING MACHINE

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3 Sheets-Sheet 3

Fig. 4.



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UNITED STATES PATENT OFFICE

1,938,386

STAPLING MACHINE

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Application January 21, 1932. Serial No. 587,938

19 Claims. (Cl. 1—3)

This invention relates to improvements in stapling machines and an object thereof is to provide a novel, simple and efficient construction and organization of mechanism whereby two suitably spaced staples may be set in the work or parts to be fastened together thereby at a simple operation, the improved machine being particularly adapted for use in fastening tickets or tags to articles of wearing apparel and other articles of merchandise.

Another object of the invention is to provide the staple setting instrumentalities of the improved machine with means whereby the parts thereof may be adjusted to and retained in various relative positions to increase or decrease the distance between the places where the two staples are set in the work.

A further object is to provide an elongated staple clinching anvil in combination with staple guiding and driving devices which may be adjusted to and retained in various positions with relation to the anvil to cooperate therewith in such positions to set staples in the work.

Another object is to provide a novel yieldable means for receiving and supporting tickets or tags or other articles in spaced relation to the staple clinching anvil and between it and the staple driver so that the things to which such tickets or tags are to be fastened may be placed between the same and the anvil and in position to receive the staples.

The invention resides in the elements and the combinations of them hereinafter described and claimed.

In the accompanying drawings, illustrating the invention,

Figure 1 is a front view of a stapling machine embodying my invention.

Figure 2 is a vertical section of the machine on line 2—2 of Fig. 1.

Figure 3 is a longitudinal vertical section of the end portion of one of the staple carrying and guiding members in which the staple driver is located, showing a part of the bed plate and a part of the anvil bracket thereon beneath the member in the lowered position.

Figure 4 is a horizontal section of the machine, on line 4—4 of Fig. 1.

Figure 5 is a top view of the central portion of the bed plate showing the anvil carrying bracket thereon, the lever for operating the anvil clinchers and one of the anvils and its supporting plates at one side of the bracket, the other anvil and its supporting plates being removed from the other side of the bracket.

Figure 6 is a top view of the lever for operating the anvil clinchers and the fulcrum and pivot pins therein.

Figure 7 is a sectional detail through one of the brackets for supporting one of the staple carrying and guiding members, on line 7—7 of Fig. 4.

Referring to the drawings, the frame of the machine comprises end members 3 having leg portions adapted to rest upon the floor, a table 5 resting upon and suitably secured to the end members 3, tie rods 6 connecting the end members 3 and a long bed plate 8 resting upon and secured to the table 5. The parts of the frame may be formed of any suitable material. As herein illustrated, the end members 3 and bed plates 8 are formed of cast iron, and the table 5 is formed of wood.

Secured upon the central portion of the bed plate 8 is a bracket 9 provided with two elongated, staple clinching anvils 10, 10 which are arranged in longitudinal alinement on the respective sides of the center of the machine in somewhat spaced relationship, as shown in the drawings.

Supported upon the respective end portions of the bed plate 8 are two brackets 11, 11 which are adapted to be adjusted toward and from each other and toward and from the staple clinching anvils 10, 10 on a line parallel to the longitudinal lines of the anvils.

These brackets 11, 11 and their associated parts are alike, excepting that they are made right and left, and, therefore, a description of one will suffice for both, as follows:

The bracket 11 comprises a base portion 12 provided with a laterally extending lug 13 and upwardly and inwardly projecting side arms 14. The base portion 12 is slidably fitted between two parallel ribs which project upwardly from the bed plate 8 and serve to hold the bracket in alinement with the anvils 10, 10 and to guide it when it is adjusted toward and from the same. The bracket 11 is adapted to be secured in its several positions of adjustment by a screw 15 which extends through a longitudinal slot 16 in the base portion 12 and is screwed into the bed plate 8. The screw 15 is provided with a suitable head and a washer beneath the head to engage the top of base portion 12 of the bracket to secure the same to the bed plate when the screw 15 is tightened.

The lug 13 of the bracket 11 extends outwardly over a raised portion 17 of the bed plate 8. This raised portion 17 is provided with a series of

spaced holes or depressions 18 which extends parallel to the line of adjustment of the bracket, and the lug 13 carries a vertically movable pin 19 which is adapted to enter any one of the holes 5 18 and thus establish the bracket in a fixed position of adjustment governed by the relation to the center of the machine or bed plate 8 of the particular hole which receives the pin 19. The pin 19 is fitted to slide in any opening in the lug 13 and it is provided with a collar 20 on the lower portion thereof. A spring 21 encircles the pin 19 between the collar 20 and a shoulder formed in the lug 13 and acts to move the pin 19 downwardly and into a hole 18 with which it is in registry. The upper end of the pin 19 is provided with a suitable head 22 by means of which the pin 19 may be raised by hand from within one of the holes 18 when it is desired to change the position of adjustment of the bracket 11.

It will now be understood that the two brackets 11 may be secured in different positions of adjustment toward and from each other and toward and from the anvils 10, 10.

Each bracket 11 is provided with a staple carrying and driving device 23. The two devices 23 are alike, excepting that they are made right and left, and, therefore, a description of one will answer for both, as follows:

A staple carrying and guiding member 24 is provided, having a downwardly projecting lug 25 which extends between and is pivoted to the arms 14 of the bracket 11 by means of a pin or bolt 26. One side of the member 24 is grooved and forms a magazine 27 for a row of staples 28. The row of staples 28 is adapted to slide on a guiding rib or bar 29 which extends longitudinally in the magazine 27 and is secured at its bottom to the member 24. The staples 28 are guided by the bar 29 to be moved forwardly thereon and into a staple guiding channel 30, Fig. 3, which extends up and down transversely to the bar 29 and which is formed by the forward end wall of the bar and by two blocks 31 and 32 which are suitably secured within an opening in the member 24 back of a front plate 33 which is secured to the member 24 by means of screws 34.

The lower end portions of the blocks 31 and 32 extend downwardly from the body of the member 24 and they are adapted to be brought substantially into vertical alinement with the staple clinching anvil 10 beneath the same when the inner portion of the member 24 is lowered or moved downwardly on its pivot 26.

The row of staples 28 is fed forwardly on the guiding bar 29 and into contact with the front wall of the channel 30 by a suitable follower 35 which embraces and is slidably fitted to the bar 29 and which is urged toward the channel 30 by a spring 36 which is connected thereto and to the member 24 in the usual manner. The space between the block 31 and the adjacent end of the bar 29 is equal to or slightly in excess of the thickness of one staple.

A staple driving plate 37 is fitted to slide in the channel 30 toward and from the anvil 10 beneath the same. The upper end portion of the staple driver 37 is secured to the lower end portion of a bar 38 which is fitted to slide within an upwardly extending limb 39 on the inner end portion of the member 24.

During the staple setting operations hereinafter described, the bar 38 is moved down and up to reciprocate the staple driver 37 within the channel 30, and, at each downward stroke of the driver, the lower end thereof engages the

foremost staple of the row 28 thereof which rests in contact with the block 31 and drives the staple downwardly through the channel 30.

The bar 38 is pivotally connected to the inner end of a lever 39 which is fulcrumed, at 39a, on the member 24 and which is pivotally connected to the upper end of an operating bar 41 which extends downwardly from the lever 39 and through a suitable opening in the table 5. The forward end of the lever 39 is bifurcated and embraces the limb 40 of the member 24 and it is pivotally connected to the bar 38 by a pin 42 which extends through a slot or opening in the bar and through vertical slots or openings 43 in the side of the limb 39.

The lever 39 is raised relatively to the member 24 to raise the bar 38 and staple driver 37 by a spring 44 which is interposed between the top of the member 24 and the bottom of the lever 39 and which is retained in place by a post which projects upwardly from the member 24 and which is encircled by the lower portion of the spring. The upper end portion of the spring 44 rests in a cavity formed in a projection on the lever 39.

It will now be understood that the lever 39 may be depressed relatively to the member 24 against the action of the spring 44 to actuate the staple driver 37, and that, normally, the spring 44 holds the pivot pin 42 in contact with the upper end walls of the slots 43, so that the lever 39 and member 24 may be lowered and raised as a unit by lowering, and raising the operating bar 41.

When the lever 39 and member 24 are raised to the position shown in Fig. 1, further upward movement thereof is prevented by the engagement of an arm 44, fixed to the member 24, with a part of the bracket 11.

The operating bars 41 of the two staple carrying and driving devices 23 have their lower ends pivoted to the respective ends of a centrally-arranged, horizontally extending bar 45, and the bars 41 constitute links which connect the bar 45 and the levers 39 of the two staple carrying and driving devices.

The central portion of the bar 45 has a hole 46 extending therethrough, and extending vertically through the hole 46 is a rod 47 which is threaded and provided with a nut 48 located above the bar. Encircling the rod 47 between the top of the bar 45 and the bottom of a washer 49 beneath the nut 48 is a spring 50 which holds a head 51 on the lower end of the rod 47 in contact with the bottom of the bar 45, and against the action of which the rod 17 may be moved downwardly through the hole 46. The head 51 is pivoted to the upper end of a bar 52 whose lower end is pivoted to a pedal 53 which is fulcrumed on one of the tie rods 6 of the machine frame, as shown in Figs. 1 and 2.

A spring 54 has its lower end connected to the bar 52 and its upper end connected to the tie rod 6 and serves to hold the parts influenced thereby in the elevated position shown in Figs. 1 and 2 with the head 51 on the bottom of the rod 47 bearing against the bottom of the bar 45, the pins 42 bearing against the upper ends of the slots or openings 43, and the arms 44 bearing against the brackets 11 and limiting the upward movement of all the parts raised by the spring 54.

The staple clinching anvils 10, 10 each comprise two parallel clinchers or bars 55 arranged in close relationship and having upwardly and outwardly diverging upper surfaces provided with 150

transversely extending grooves for guiding and directing the prongs of the staples when they are driven against the anvil. The end portions of these anvil bars 55 are provided with outwardly extending flanges or ears 56, and the bracket 9 is provided with plates 57 secured thereon and having openings therein into which the ears 56 extend. The plates 57 are provided with parallel rods or pins 58 which extend through the same and through the flanges or ears 56 and pivotally connect the anvil bars 55 to the bracket 9 in a manner to permit the bars 55 to be raised on their pivots to effect the completion of the clinching of the staple legs.

The clinchers or bars 55 of each anvil 10 rest normally upon a surface of the bracket 9 beneath them and they are shaped in cross section to embrace a head 59 on the upper end of a pin 60 which is fitted to slide vertically in a part of the bracket 9. The lower end portions of the pins 60 of the two anvils 10, 10 are pivotally connected to the forwardly extending side arms 61 of a lever 62 which is fulcrumed, at 63, on the bracket 9 and which is provided with an arm 64 extending rearwardly from its fulcrum 63. This arm 64 has a vertical opening 65 extending therethrough, and extending through the opening 65 is the upper end portion of a rod 66 which is connected to the arm 64 by a pin or screw 67 which extends through the side portions of the lever arm 64 and through a vertically-extending slot 68 formed in the rod 66.

The rod 66 extends above the rod 47 in alignment therewith and it is connected thereto by means of a turnbuckle 69, so that the rod 66 forms, in effect, a continuation of the rod 47. The adjacent end portions of the rods 47 and 66 are oppositely threaded and screwed into the turnbuckle 69, so that it may be turned to raise or lower the rod 66 with relation to the rod 47 for a purpose hereinafter explained. A suitable lock nut 70 is provided upon the rod 47 to be tightened against the turnbuckle 69 to lock it in positions of adjustment.

The forwardly extending side arms 61 of the lever 62 rest normally upon the base portion of the bracket 9 and the anvil clinchers or bars 55 rest normally upon the upper portion of the bracket 9, as shown in Fig. 2, and, when the rod 66 is moved downwardly, the upper end of its slot 68 engages the pin 67 and operates the lever 64 to raise the pins 60 and thereby raise the clinchers or bars 55 of the anvils on their pivot rods 58 for effecting the clinching of the staple legs, as will be hereinafter described.

The purpose of making the two anvils 10, 10 elongated and providing the upper surfaces of their clinchers 55 with parallel, transverse grooves, extending throughout the length thereof, is to enable them to cooperate with the two staple carrying and driving devices 23, 23 to effect the clinching of the staple prongs in the different positions of adjustment of the devices. In all the positions of adjustment of the devices 23, 23, from or toward the center of the machine, some parts of the anvil clinchers 55 are in the proper positions beneath the staple guiding channels 30 and drivers 37 of the two devices 23, 23 to receive the staple legs and guide them and direct them inwardly or toward each other during the staple setting operations.

The operation of the staple setting mechanism is as follows:

The work to be stapled is placed upon the anvils 10, 10 between them and the blocks 31, 31

of the staple carrying and driving devices 23, 23. The pedal 53 is then depressed, thereby drawing the bar 52 and rods 47 and 66 downwardly against the action of the spring 54. During the initial downward movement of the bar 52, the spring 50 holds the horizontal bar 45 against the head 51 on the rod 47, causing the bar 45 to move downwardly with the bar 52 and causing the links 41 to move the levers 39 and members 24 of the staple carrying and driving devices 23 downwardly, as a unit on their pivots 26 until the blocks 31 thereof engage the work upon the anvils 10, and the work stops the further downward movement thereof. After the engagement of the blocks 31 with the work upon the anvils 10 stops the downward movement of the members 24 the continued downward movement of the bar 52 causes the bar 45 and links 41 to move the levers 39 downwardly relatively to the members 23 and thereby move the staple drivers 37 thereof downwardly within their channels 30 to drive the staples therein downwardly therethrough and against the inclined upper surfaces of the clinchers 55 of the anvils, until the further downward movement of the staple drivers is stopped by the engagement of the crowns of the staples with the work upon the anvils, thereby stopping further downward movement of the levers 39, links 41 and horizontal bar 45. The transverse grooves in the upper inclined surfaces of the clinchers 55 of the anvils guide and direct the legs of the staples inwardly and toward each other as they are forced against the anvils by the drivers. During the operation of the staple setting mechanism thus far described, the bars 45 and 52 and rods 47 and 66 were moved downwardly as a unit and the lever 62 for operating the clinchers of the anvils was unaffected thereby, owing to the lost motion provided by the pin-and-slot connection between the rod 66 and lever 62. At or about the time that the downward movement of the staple drivers 37 of the devices 23, 23 was arrested by the engagement of the crowns of the staples driven thereby, with the work upon the anvils, the upper end of the slot 68 in the rod 66 had reached the pin 67 of the lever 62. Therefore, during the continued downward movement of the bar 52 and rods 47 and 66 against the yielding action of the springs 50 and 54, the upper end of the slot 68 engages the pins 67 and operates the lever 62 to raise the pins 60 and thereby raise the anvil clinchers 55 on their pivots 58 to force the staple legs thereon up against the bottom of the work upon the anvils 10 to complete the setting and clinching of the staples.

After the staples from the two devices 23, 23 have been applied to the work upon the anvils, as just described, the foot pressure upon the pedal 53 is removed, the springs 44, 50 and 54 return the parts operatively connected thereto to the normal position, shown in Figs. 1 and 2, the lever arms 61, pins 60 and anvil clinchers 55 drop by gravity to the normal position shown in Fig. 2, and the springs 36 operate the followers 35 to advance the rows of staples 28 of the devices 23, 23 to move the foremost staple of each row into its staple guiding channel 30 beneath its driver 37, the work is removed from the anvils 10 and the parts of the mechanism are left in the normal position for a succeeding staple applying or setting operation.

When it is desired to vary the distance between the two staples set in the work by the staple setting mechanism, the set screws 15 are loosened, the gage pins 19 are raised from the holes 18 in 150

the bed plate 8 and the brackets 11 supporting the staple carrying and driving devices 23, are adjusted with relation to each other to adjust the devices 23 to bring their staple guiding blocks 31 into the desired relationship over the anvils 10 to space the staples the desired distance apart within the limits allowed by the lengths of the anvils 10 and the adjustments of the brackets 11. After the brackets 11 have been adjusted, as above described, the screws 15 are tightened to secure them in position.

The two series of holes 18, 18 in the bed plate 8 and the cooperating spring pressed pins 19 of the brackets 11 afford a convenient means for accurately gaging and setting the brackets and their devices 23 in certain predetermined fixed positions of adjustment when the set screws 15 are loosened.

When the adjustment of the brackets 11 and the devices 23 supported thereby is sufficient to disturb the proper timing of the operation of the staple clinchers 55 of the anvils 10 with relation to the operation of the staple carrying members 24 and their staple drivers 37, the same may be properly timed by loosening the set nut 70 and operating the turnbuckle 69 to raise or lower the rod 66 with relation to the rod 47 to bring the upper end of the slot 68 nearer to or farther from the pin 67, as the case may be, for the proper correction of the timing, and thereafter tightening the set nut 70 against the turnbuckle.

While the staple setting mechanism hereinbefore described may be employed for any useful purpose, it is, as previously stated, particularly adapted for use in fastening tickets or tags to wearing apparel and other articles of merchandise, and, when it is used for this purpose, I provide it with a suitable device for receiving and holding the tags or tickets in proper relation to the staple setting instrumentalities to cause the staples to be driven through the tickets or tags at the desired places for the attachment thereof to the articles of merchandise, and I shall now describe this device.

Secured to the table 5 rearwardly of the anvil carrying bracket 9 is a bracket 71 providing a horizontal rod on which the rearward end of a plate 72 is pivoted. The plate 72 extends forwardly from the bracket 71 and its free forward end portion is located over the anvil carrying bracket 9 and provided with lateral cut-out portions forming openings 73 over the anvil clinchers 55 and leaving tag or ticket supporting portions 74 outwardly of the openings 73 and a similar portion 75 between the openings 73.

Above the plate 72 is a centrally arranged plate 76 which is separated from the plate 72 a distance equal to or slightly in excess of the tags or tickets to be received between them by an interposed plate 77. The plates 76 and 77 are adapted to be adjusted forwardly and rearwardly as a unit on the plate 72 and to be held in positions of adjustment thereon by clamp screws 78 which extend through the plates 76 and 77 and through forwardly and rearwardly extending parallel slots 79 in the plate 72. The plate 76 is provided with a centrally-arranged, upwardly-flared finger 80 which projects over the central tag or ticket supporting portion 75 of the plate 72 to permit tags or tickets easily to be inserted between the finger 80 and plate 72. The forward edge portion of the interposed plate 77 forms a stop against which the tags or tickets are placed in the proper position above the anvil clinchers

55 when the tags or tickets are placed between the plate 72 and finger 80.

The pivoted plate 72 is provided with a stop bracket 81 laterally of the plate 76 and finger 80 and against which one end of the tags or tickets are placed to properly position them longitudinally with respect to the anvils 10. This stop bracket 81 is adapted to be adjusted toward and from the plate 76 to serve as a stop or positioner for tags or tickets of different lengths, and it is adapted to be secured in place upon the plate 72 by a clamp screw 82 which extends through a part of the bracket 81 and a slot 83 in the plate 72, extending parallel to the elongated anvils 10.

The plate 72 is yieldingly supported with its forward portion spaced above the anvils 10 by a spring 84 which encircles a post 85 beneath the plate 72 and bears against the bottom of the same.

It will now be understood that a tag or ticket may easily be placed upon the free forward portion of the plate 72 between it and the finger 80 with the rearward edge of the tag or ticket stopped against the plate 77 and one end edge thereof stopped against the bracket 81, and that, when it is thus placed, its respective end portions will be beneath the staple guiding blocks 31 of the two devices 23 and over the openings 73 in the plate 72 and over and spaced above the anvils 10; that the article to which the tag or ticket is to be attached may easily be placed upon the anvils 10 beneath the plate 72 and the tag or ticket thereon; that thereafter the pedal 53 may be depressed to operate the staple setting mechanism, as hereinbefore described; that during the operation of the staple setting mechanism, the staple guiding blocks 31 will engage the tag or ticket upon the plate 72 and depress the plate against the action of the spring 84 until the tag or ticket contacts with the article placed upon the anvils 10, and, thereafter, the two staples delivered by the devices 23, 23 will be driven through the tag or ticket and through the openings 73 in the plate 72 and through the article upon the anvils 10 and clinched beneath the same to secure the respective end portions of the tag or ticket to the article.

When the foot pressure upon the pedal 53 is removed therefrom, the article with the tag or ticket attached thereto may be removed in a forward direction from the anvils 10 and plate 72, either during the time that the parts of the staple setting mechanism are resuming their normal position, or after they have resumed the same. After each depression of the plate 72 and the removal therefrom of the tag or ticket and the article to which it is attached, the spring 84 automatically elevates the plate 72 to the normal position shown in Figs. 1 and 2, for a succeeding tag or ticket attaching operation.

I claim as my invention:

1. In a staple setting machine, the combination of a supporting frame, two brackets adjustably mounted on the frame to be movable toward and from each other, means for securing the brackets to the frame in different positions of adjustment, a staple carrying and guiding member pivotally mounted on each bracket, a staple driver movable in each member, two staple clinching anvils, said members and said drivers being movable toward and from said anvils to cooperate therewith to set staples, a movable operating part common to said members and said drivers, and means operated by said part for actuating said members and said drivers.

2. In a staple setting machine, the combination

of a supporting frame, two brackets adjustably mounted on the frame to be movable toward and from each other, means for securing the brackets to the frame in different positions of adjustment, a staple carrying and guiding member pivotally mounted on each bracket, a staple driver movable in each member, two staple clinching anvils supported by said frame beneath said members, said members and said drivers being movable toward and from said anvils, said anvils being elongated and constructed to cooperate with said members and said drivers to set staples in different positions of adjustment of said brackets, a movable operating part common to said members and said drivers, and means operated by said part for actuating said members and said drivers.

3. In a staple setting machine, the combination of a supporting frame, two brackets adjustably mounted on the frame to be movable toward and from each other, means for securing the brackets to the frame in different positions of adjustment, a staple carrying and guiding member pivotally mounted on each bracket, a staple driver movable in each member, two staple clinching anvils arranged beneath said members and said drivers and each comprising a pair of pivotally mounted clinchers movable toward and from the driver above the same, said members and said drivers being movable toward and from said anvils to cooperate therewith to set staples, a movable operating part common to said members and said drivers and said anvils, and means operated by said part for actuating said members and said drivers and said clinchers.

4. In a staple setting machine, the combination of a supporting frame, two brackets adjustably mounted on the frame to be movable toward and from each other, means for securing the brackets to the frame in different positions of adjustment, a staple carrying and guiding member pivotally mounted on each bracket, a staple driver movable in each member, two staple clinching anvils supported by said frame beneath said members and said drivers and each comprising a pair of pivotally mounted clinchers movable toward and from the driver above the same, said members and said drivers being movable toward and from said anvils to cooperate therewith to set staples, a movable operating part common to said members and said drivers and said anvils, and means operated by said part for actuating said members and said drivers and said clinchers.

5. In a staple setting machine, the combination of a supporting frame, two brackets adjustably mounted on the frame to be movable toward and from each other, means for securing the brackets to the frame in different positions of adjustment, a staple carrying and guiding member carried by each bracket, a staple driver movable in each member, two staple clinching anvils supported by said frame beneath said members, said members and said drivers being movable toward and from said anvils, said anvils being elongated and provided with parallel grooves for receiving and guiding staple legs and said anvils being constructed to cooperate with said members and said drivers to set staples in different positions of adjustment of said brackets, a movable operating part common to said members and said drivers, and means operated by said part for actuating said members and said drivers.

6. In a staple setting machine, the combination of a supporting frame, two brackets adjustably mounted on the frame to be movable toward and from each other, means for securing the

brackets to the frame in different positions of adjustment, a staple carrying and guiding member carried by each bracket, a staple driver movable in each member, two staple clinching anvils supported by said frame beneath said members and said drivers and each comprising a pair of pivotally mounted clinchers movable toward and from the driver above the same, said members and said drivers being movable toward and from said anvils, said anvils being elongated and provided with parallel grooves for receiving and guiding staple legs and said anvils being constructed to cooperate with said members and said drivers to set staples in different positions of adjustment of said brackets, a movable operating part common to said members and said drivers and said anvils, and means operated by said part for actuating said members and said drivers and said clinchers.

7. In a staple setting machine, the combination of a supporting frame, an elongated staple clinching anvil mounted on the frame and having longitudinally-extending, parallel clinchers constructed to clinch staples in different positions longitudinally thereon, a bracket adjustable on the frame in a direction longitudinally of the anvil and on a line parallel therewith, means for securing the bracket to the frame in different positions of adjustment, a staple carrying and guiding member carried by the bracket and movable thereon toward and from the anvil, a staple driver movable in the member, said member and said driver being movable toward and from the anvil to cooperate therewith to set staples in any one of a plurality of positions longitudinally of the anvil, and means for operating said member and said driver.

8. In a staple setting machine, the combination of a supporting frame, an elongated staple clinching anvil mounted on the frame and having longitudinally-extending, parallel clinchers constructed to clinch staples in different positions longitudinally thereon, said clinchers having transversely-extending, parallel grooves for receiving and directing staple prongs, a bracket adjustable on the frame in a direction longitudinally of the anvil and on a line parallel therewith, means for securing the bracket to the frame in different positions of adjustment, a staple carrying and guiding member carried by the bracket and movable thereon toward and from the anvil, a staple driver movable in the member, said member and said driver being movable toward and from the anvil to cooperate therewith to set staples in any one of a plurality of positions longitudinally of the anvil, and means for operating said member and said driver.

9. In a staple setting machine, the combination of a supporting frame, a staple carrying and guiding member movably mounted on the frame, a staple driver movable in the member, a staple clinching anvil mounted on the frame beneath the member and the driver and having pivotally mounted staple clinchers, a vertically movable operating element, means operated by the initial downward movement of said element to move said member toward said anvil and thereafter to move the staple driver downwardly in said member, and a lever operatively connected to the staple clinchers and having a pin-and-slot connection with said element to be operated thereby during its continued downward movement to raise said clinchers.

10. In a staple setting machine, the combination of a supporting frame, two staple carrying

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and guiding members movably mounted on the frame, staple drivers movable in said members, staple clinching anvils mounted on the frame beneath the members and drivers and having pivotally mounted staple clinchers, a horizontally extending bar, a vertically movable operating element, yieldable means connecting said element and the central portion of the bar, means connected to the respective end portions of the bar for operating the respective staple carrying and guiding members and the staple drivers thereon during the initial downward movement of said element, and means operated by said element during the continued downward movement thereof to raise said staple clinchers.

11. In a staple setting machine, the combination of a supporting frame, two staple carrying and guiding members movably mounted on the frame, staple drivers movable in said members, staple clinching anvils mounted on the frame beneath the members and drivers and having pivotally mounted staple clinchers, a horizontally extending bar, a vertically movable operating element, yieldable means connecting said element and the central portions of the bar, means connected to the respective end portions of the bar for operating the respective staple carrying and guiding members and the staple drivers thereon during the initial downward movement of said element, and a lever operatively connected to the staple clinchers and being operated by said element during the continued downward movement thereof to raise said clinchers.

12. In a staple setting machine, the combination of a supporting frame, two staple carrying and guiding members movably mounted on the frame, staple drivers movable in said members, staple clinching anvils mounted on the frame beneath the members and drivers and having pivotally mounted staple clinchers, a horizontally extending bar, a vertically movable operating element, yieldable means connecting said element and the central portion of the bar, means connected to the respective end portions of the bar for operating the respective staple carrying and guiding members and the staple drivers thereon during the initial downward movement of said element, and a lever operatively connected to the staple clinchers and having a pin-and-slot connection with said element to be operated thereby during its continued downward movement to raise said clinchers.

13. In a staple setting machine, the combination of a supporting frame, two staple carrying and guiding members movably mounted on the frame, staple drivers movable in said members, staple clinching anvils mounted on the frame beneath the members and drivers and having pivotally mounted staple clinchers, a horizontally extending bar having a vertical opening in the central portion thereof, a vertically movable operating element extending through said opening and having an abutment part above the same, a spring interposed between the abutment part and the bar to form a yieldable connection between the bar and said element, means connected to the respective end portions of the bar for operating the respective staple carrying and guiding members and the staple drivers thereon during the initial downward movement of said element, and means operated by said element during the continued downward movement thereof to raise said staple clinchers.

14. In a staple setting machine, the combination of a supporting frame, a staple carrying and

guiding member movably mounted on the frame, a staple driver movable in the member, a staple clinching anvil below the member and the staple driver therein, means operable to lower the member and the driver to drive a staple through work between them and the anvil, and a resiliently-supported, depressible receiving device adjacent to the anvil for supporting a part to be stapled extending therefrom and into the space between the anvil and the said member above the same.

15. In a staple setting machine, the combination of a supporting frame, a staple carrying and guiding member movably mounted on the frame, a staple driver movable in the member, a staple clinching anvil below the member and the staple driver therein, means operable to lower the member and the driver to drive a staple through work between them and the anvil, a bracket on said frame, a receiving device pivoted to the bracket, and yieldable means supporting said receiver in a normal position, said receiver being adapted to receive and support a part to be stapled extending therefrom and into the space between the anvil and the said member above the same.

16. In a staple setting machine, the combination of a supporting frame, two staple clinching anvils mounted thereon and having elongated, longitudinally alined, staple clinching parts constructed to clinch transversely extending staples in different positions longitudinally thereon, two brackets adjustable toward and from each other on the frame in directions longitudinally of the anvils and on lines parallel therewith, means for securing the brackets to the frame in different positions of adjustment, staple carrying and guiding members movably carried by said brackets above said anvils, respectively, staple drivers movable in said members, a movable operating part common to said members and said drivers, and means operated by said part for actuating said members and said drivers.

17. In a staple setting machine, the combination of a supporting frame, two elongated, longitudinally alined, staple clinching anvils mounted thereon and having pivotally mounted staple clinchers constructed to clinch staples in different positions longitudinally thereon, two brackets adjustable toward and from each other on the frame in directions longitudinally of the anvils and on lines parallel therewith, means for securing the brackets to the frame in different positions of adjustment, staple carrying and guiding members movably carried by said brackets above said anvils, respectively, staple drivers movable in said members, a movable operating part common to said members and said drivers and said clinchers, and means operated by said part for actuating said members and said drivers and said clinchers.

18. In a staple setting machine, the combination of a supporting frame, two staple clinching anvils mounted thereon and having elongated, longitudinally alined, staple clinching parts constructed to clinch transversely extending staples in different positions longitudinally thereon and having transversely-extending parallel grooves for receiving and directing staple prongs, two brackets adjustable toward and from each other on the frame in directions longitudinally of the anvils and on lines parallel therewith, means for securing the brackets to the frame in different positions of adjustment, staple carrying and guiding members movably carried by said brackets above said anvils, respectively, staple drivers movable in said members, a movable operating

part common to said members and said drivers, and means operated by said part for actuating said members and said drivers.

staple drivers movable in said members, an operating lever common to said clinchers and operatively connected thereto, a movable operating part common to said members and said drivers and said lever, and means operated by said part for actuating said members and said drivers and said lever.

19. In a staple setting machine, the combination of a supporting frame, two laterally adjacent staple clinching anvils having pivotally mounted staple clinchers, movable staple carrying and guiding members above said anvils, respectively,

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