Jan. 10, 1950 T. B. CLARKE ET AL 2,493,859

HEEL-PRICKING MEANS

Original Filed Jan. 16, 1945 4 Sheets-Sheet 1

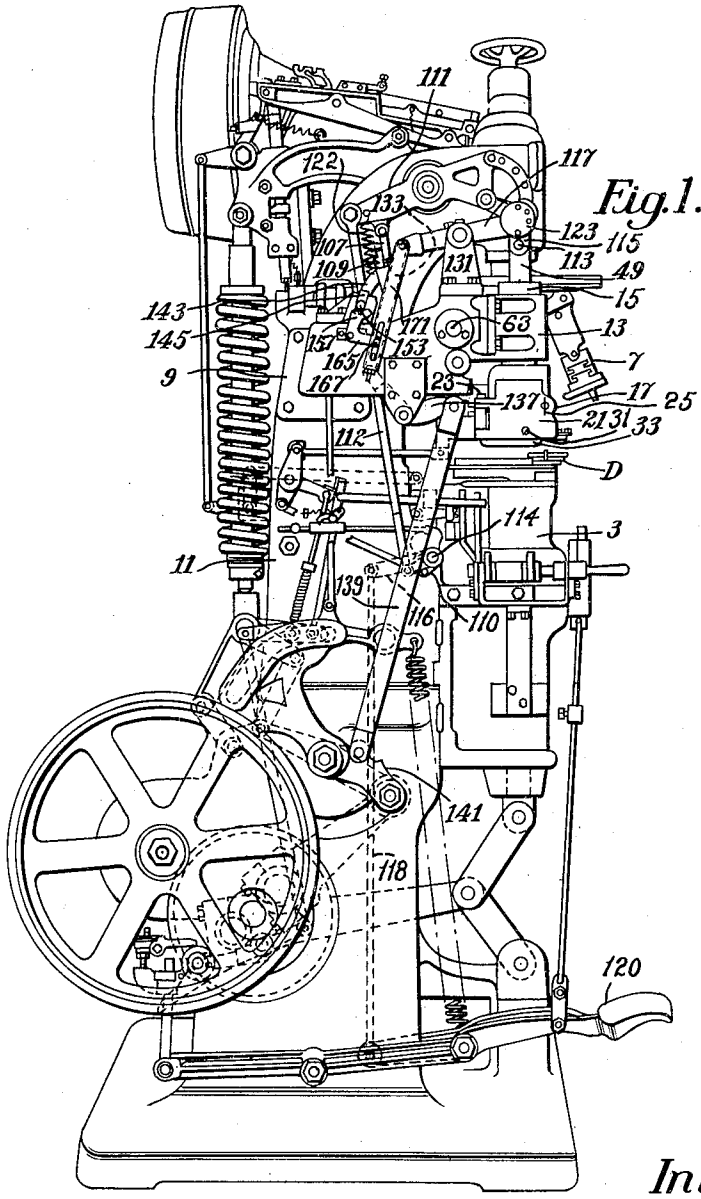


Fig. 1.

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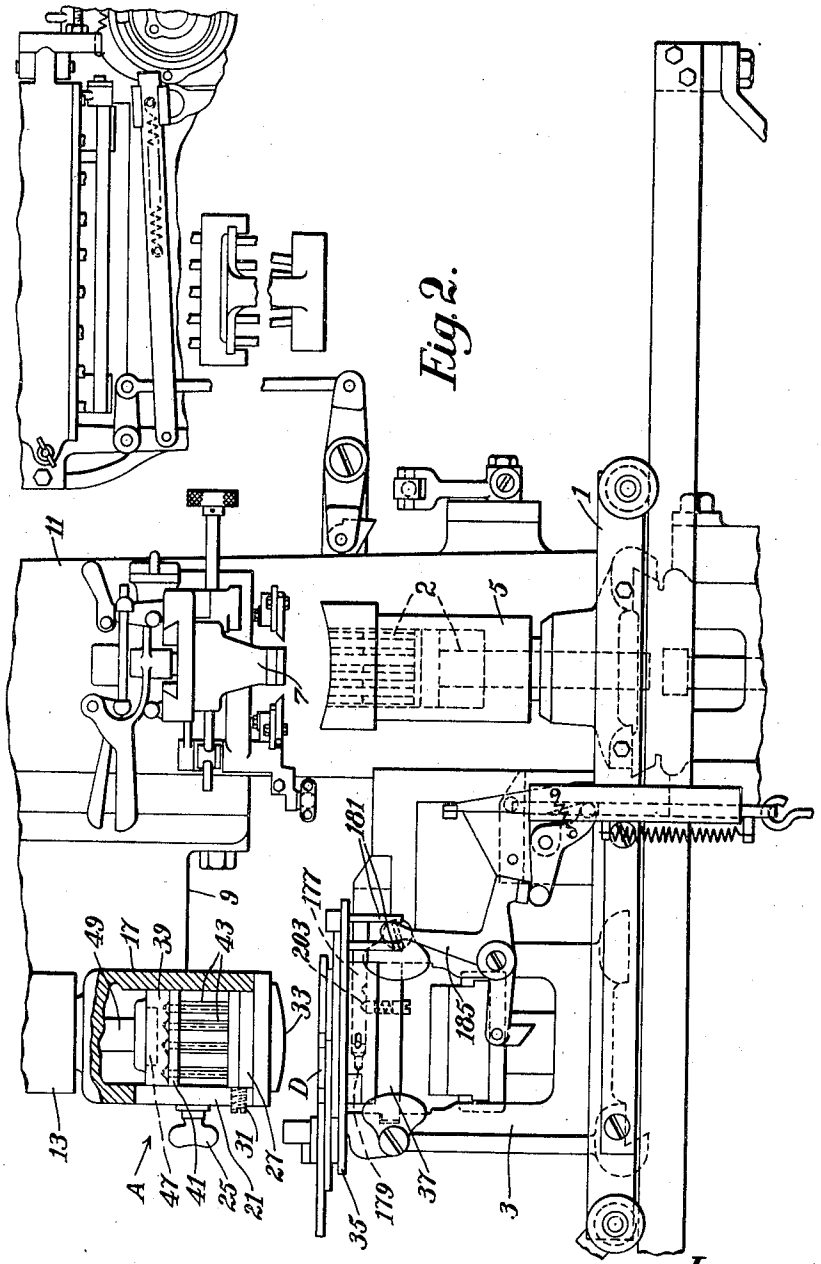


Fig. 2.

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Fig. 3.

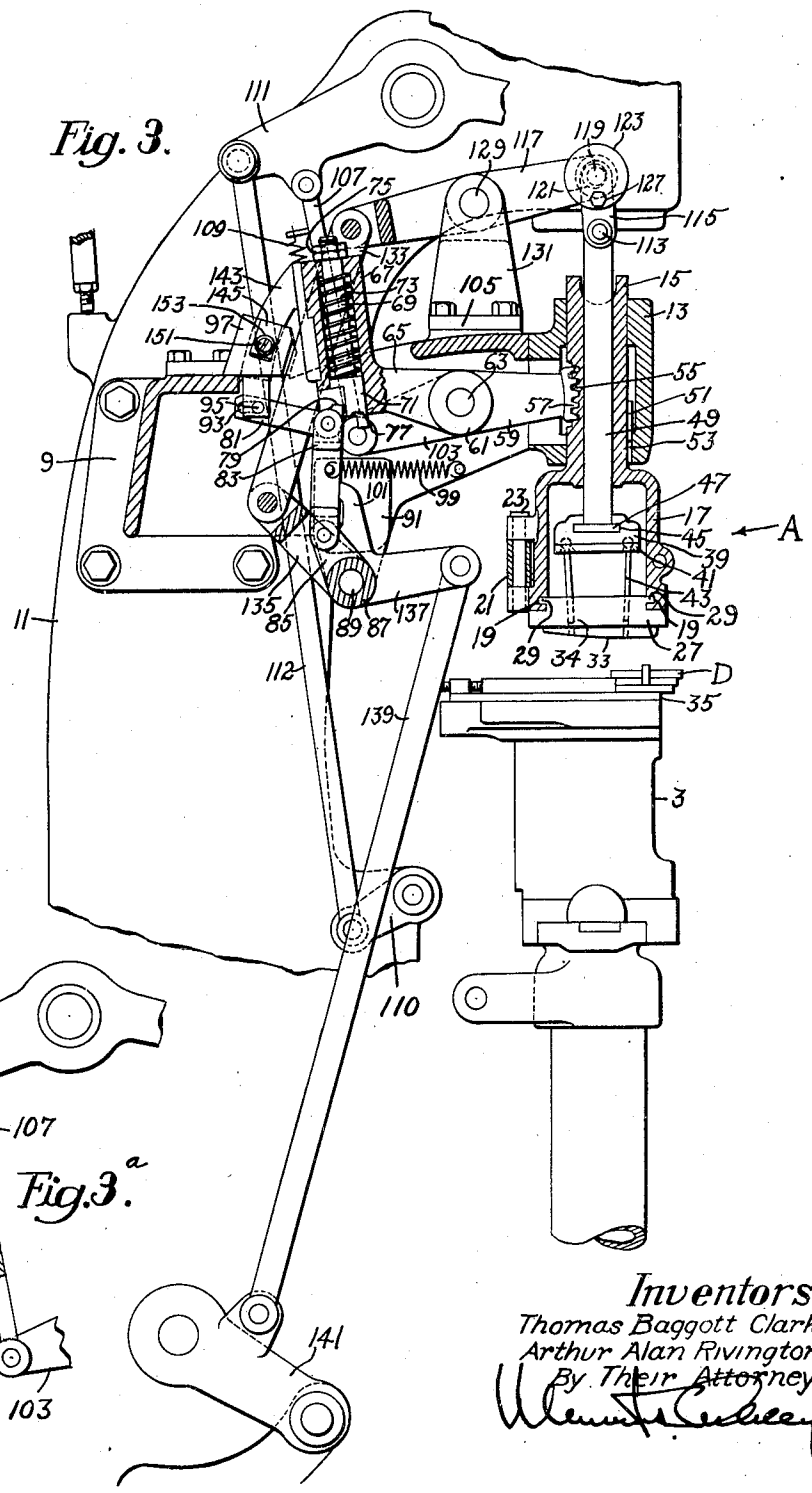


Fig. 3a.

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Fig. 6

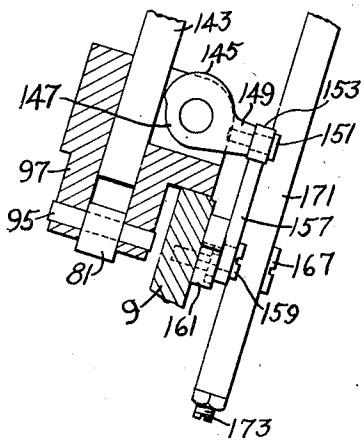


Fig. 5

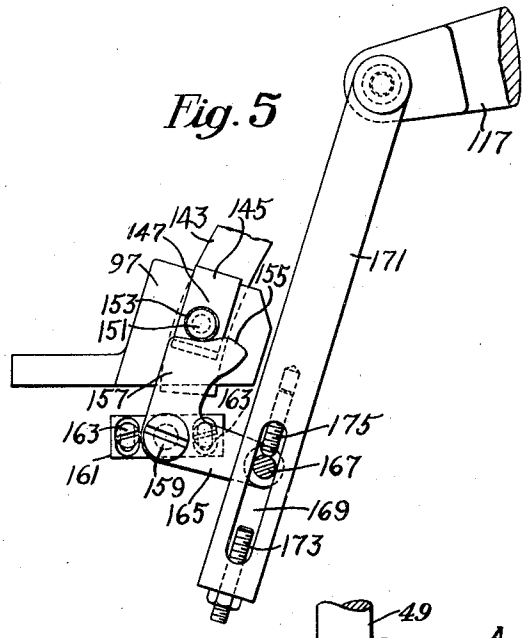


Fig. 4

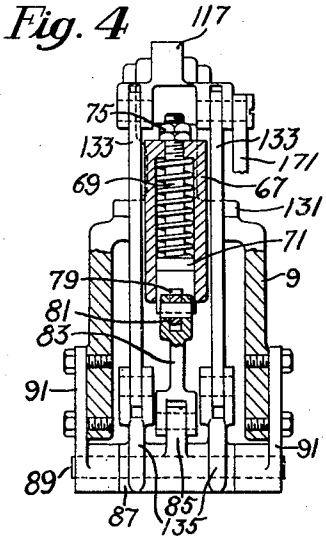


Fig. 9

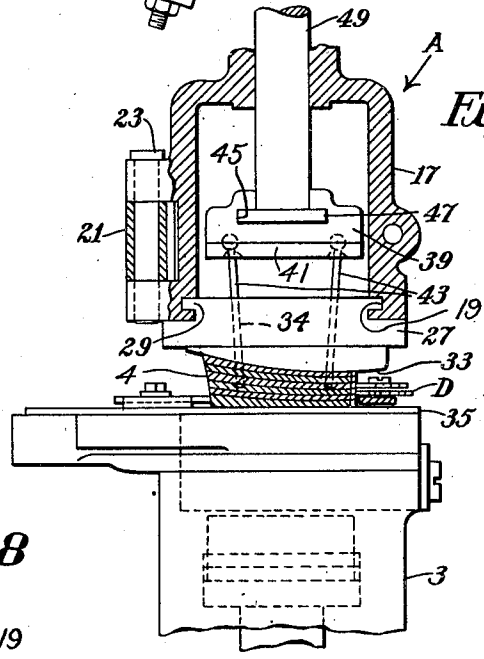


Fig. 7

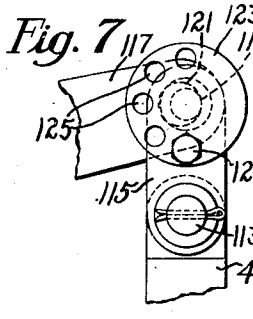
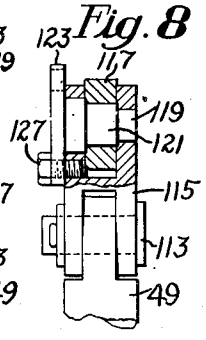


Fig. 8



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Patented Jan. 10, 1950 2,493,859

UNITED STATES PATENT OFFICE

2,493,859

HEEL-PRICKING MEANS

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Original application January 16, 1945, Serial No. 573,026. Divided and this application September 20, 1947, Serial No. 775,286. In Great Britain February 4, 1944

9 Claims. (Cl. 164—86.5)

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This invention relates to a pricking machine which is illustrated as forming part of a heel attaching machine such as disclosed in United States Letters Patent No. 2,480,905, granted September 6, 1949, on an application filed in our names, of which the present application is a division.

The various features of the invention will be understood and appreciated from the following detailed description read in connection with the accompanying drawings in which

Fig. 1 shows in side elevation a combined heel pricking and heel attaching machine;

Fig. 2 is an enlarged front view, partly broken away, of operating parts of the machine shown in Fig. 1;

Fig. 3 is a left-hand side elevation, partly in section and partly broken away, showing the illustrated pricking machine;

Fig. 3*a* is a view showing in side elevation portions of treadle-operated mechanism for actuating a pricker head;

Fig. 4 is a rear view, partly in section, of portions of pressure-controlling mechanism illustrated in Fig. 3;

Fig. 5 is a left-hand side elevation of pricking mechanism locking means of the pricking machine;

Fig. 6 is a rear view, partly in section, of the mechanism illustrated in Fig. 5;

Fig. 7 is a left-hand side elevation of adjusting means for the pricking mechanism of the machine;

Fig. 8 is a front elevation, partly in section, of the mechanism illustrated in Fig. 7; and

Fig. 9 is an enlarged vertical section through the pricking mechanism at the completion of the pricking operation.

The combined heel-pricking and attaching machine illustrated in said Letters Patent No. 2,480,905 is in its general construction similar in many respects to machines described in Letters Patent of the United States No. 1,195,134, Gouldbourn, August 15, 1916, and No. 2,391,543, Carr et al., December 25, 1945. Double-pointed or headless nails (not shown) are delivered to a fastener-inserting mechanism 2 (Fig. 2) of the machine, the nails being so driven into the heel-seat portion of a shoe that they project therefrom, and a heel 4 (Fig. 9), operated upon by the present machine, thereafter being pressed on to the projecting portions of the nails to attach the heel to the shoe.

The pricking mechanism is arranged at the left-hand side of the combined machine disclosed

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in said Letters Patent 2,480,905. It is so positioned that when a frame 1, carrying a left-hand work-supporting mechanism 3 (Figs. 1, 2, 3 and 9) and a right-hand work-supporting mechanism 5, associated with the fastener-inserting mechanism 2, is moved to its left-hand position illustrated in Fig. 2, the heel 4 on the work-supporting mechanism 3 is beneath pricking tools, hereinafter described, of the pricking mechanism and the mechanism 5 is directly below a last-engaging or shoe-supporting abutment 7 (Figs. 1 and 2). The pricking machine comprises a main bracket 9 secured to a side of a machine-frame 11. A forward portion 13 of the bracket 9 has slidingly mounted in it a vertical sleeve-portion 15 (Figs. 1 and 3) extending upwardly from a hollow pricker-head 17. The pricker-head 17 is substantially rectangular, when viewed from above, and in the inner surfaces of its front and rear walls near the bottom thereof are formed rectangular grooves 19 (Figs. 3 and 9). The lower portion of the left-hand wall of the pricker-head 17 is formed by a door 21, hinged to the head by a vertical pivot 23 and held in closed position by a readily removable screw 25 (Figs. 1 and 2). An awl-guiding block or clamp 27 is supported in the lower end of the pricker-head 17. It has at the front and at the rear flanges 29 (Figs. 3 and 9) arranged to slide in the grooves 19 to be held therein by the right-hand wall of the pricker-head and an adjustable screw 31 forming part of the door. Below the flanges 29 the block 27 has outwardly extending portions which engage the lower face of the pricker-head. The lower face 33 (Figs. 1, 2, 3 and 9) of the block 27 is convex and is arranged to engage the upper concave attaching face of the heel 4 and to clamp the heel during the pricking operation. The block 27 has formed in it a plurality of awl-guiding holes or passages 34 (Figs. 3 and 9), which, if a man's shoe-heel is being operated upon, are usually vertical, but, if it is a woman's shoe-heel, usually slope downwardly and inwardly at a small angle to the vertical.

In the work-supporting mechanism 3 a pressing plate, on which a heel rests on its tread-face, is made in two parts. An upper part 35 (Figs. 2, 3 and 9), which supports the heel 4 and carries work-holding and -positioning devices D (Figs. 1, 2, 3 and 9), shown in detail in said Patent No. 2,391,543, is slidably mounted on a lower part 37 (Fig. 2), so that the upper part may be moved forward from beneath a pricker-head A (Figs. 2, 3 and 9) and held in this posi-

tion, while a heel is placed thereon in the devices D.

In the combined heel-pricking and heel-attaching machine disclosed in said Letters Patent No. 2,480,905, mechanism is provided for preventing the machine from being started under power unless the upper part 35 of the pressing plate of the supporting mechanism 3 is fully in operating position, and for preventing the part 35 from being pulled forward when the mechanism 3 is being moved to or from its right-hand position in which the pricked heel thereon is attached to a shoe. Such mechanism comprises a laterally extending horizontal locking rod 177 (Fig. 2), which is slidingly mounted in the part 37 of the pressing plate. The left-hand end of the rod 177 is arranged to enter a recess 179 in the part 37 in its rearward position to prevent said part from being moved forward. In the present pricking machine the rod 177, which has a pair of flanges 181, may, after removing a bell-crank arm 185, be moved by hand so as to enter the recess 179 in the part 35, said rod being held against displacement in its locking position, until manual withdrawal from the recess 179, by a spring-pressed plunger 203.

Enclosed within the pricker-head 17 is an awl-carrying block 39 (Figs. 2, 3 and 9) having secured to its lower face a plate 41 having a number of holes through each of which passes an awl 43, comprising a relatively thin rod having a head on its upper end. The heads of the awls are received in recesses in the block 39 and are supported by the plate 41, the holes in which are large enough to allow the awls to have some slight lateral swinging movement. The block 39 and the plate 41 constitute a carrier to which the awls are coupled as above described. The block 39 has formed in its upper portion a guideway 45 (Figs. 3 and 9) extending laterally of the machine, and which is arranged to receive a head 47 on the lower end of a vertical awl-spindle or connection 49 guided in the sleeve 15 of the pricker-head. When the door 21 on the pricker-head 17 is opened, the guide-block 27, carrying block 39 and awls 43, then in their operating position in the head, may be removed bodily as a unit by merely sliding them from said head and from the head 47 on the spindle 49. They may then be replaced by a guide-block, carrying block and awls corresponding to a different pricking design. The screw 31, which may be described as constituting part of the door 21, retains the awl-guiding block 27, the carrier 39, 41 and the awls 43 in their operative positions when the door has been shut and locked.

The sleeve-portion 15 of the pricker-head has a key 51 (Fig. 3), arranged to slide in a keyway 53 in the portion 13 of the main bracket 19 to prevent the pricker-head from rotating. At the rear of the sleeve-portion are rack-teeth 55 engaged by a gear-segment 57 on the forward end of an arm 59 of a pricker-head-lever 61. The arm 59 is secured on a horizontal spindle 63 (Figs. 1 and 3) extending laterally of the machine and rotatably mounted in the main bracket 9.

The lever 61 has a rearwardly extending arm 65 on which is an upwardly extending boss 67 (Figs. 3 and 4). Slidably mounted in a bore in the boss 67 and extending lengthwise thereof is a pricker-head-actuating rod 69. The rod has a head or latch 71 at its lower end and a reduced portion extending upwardly from the head through the boss. The bore in the boss has one portion in which the head 71 is movable and a reduced upper portion in which the rod is movable, there being a compression-spring 73 in the bore surrounding the rod. This spring engages the latch 71 and a shoulder formed by the reduced portion of the bore and urges the rod 69 downwardly. The rod 69 above the boss is threaded and has on it a nut and a locknut 75 which limit its downward movement. The lower end of the latch 71 has a shoulder 77 (Fig. 3) which is arranged to be engaged by a projection 79 (Figs. 3 and 4) on the forward end-portion of a rearwardly extending link 81 (Figs. 3, 4 and 6), pivoted to the upper end of a pricker-head-actuating toggle-link 83. The projection 79 is movable in response to movement of the upper end of the link 83 and may be considered as part of such link. The lower end portion of the toggle-link 83 is pivotally connected to a toggle-arm 85 of a power-operated pricker-head-actuating lever or member 87. The lever 87 has a hub, from which the arm 85 extends upwardly, it turning about a horizontal spindle 89 extending laterally of the machine and secured in brackets 91 fixed to the bracket 9 of the pricker mechanism. The arm 85 of the lever 87 and the link 83 form a toggle, which when straightened, as hereinafter described, causes, through the rod 69, spring 73, pricker-head-lever 61 and gearing 57, 55, the awl-block 27 to be pressed against a heel on the plate 35 of the work-supporting mechanism 3.

The rear portion of the link 81 has a substantially horizontal slot 93 (Fig. 3), through which passes a horizontal pin 95 (Figs. 3 and 6), secured in a bracket 97 (Figs. 3, 5 and 6) on the bracket 9 to support and guide the rear end of the link. The toggle-link 83 has connected to it one end of a tension-spring 99 (Fig. 3), the other end of which is secured to the bracket 9 and is arranged to pull the upper end of the toggle-link and link 81 forward to position the projection 79 on the latter link beneath the shoulder 77 on the latch 71 of the pricker-head-actuating rod 69. The pricker-head-actuating lever 87 has another arm or extension 101 (Fig. 3) in front of the toggle arm 85. This is arranged to engage the front of the toggle-link 83 near the lower end thereof, and, as the toggle is broken, to move the upper end of the toggle-link 83 and the link 81 rearwardly to shift the projection 79 from beneath the shoulder 77 on the latch 71 of the pricker-head-actuating rod.

The pricker-head 17 is first moved down by treadle-operated means to cause the awl-guiding block 27 to engage the heel 4 on the work-support 3. This means comprises a rearwardly extending arm 103 fast on the spindle 63 to which the pricker-head-lever 61 is secured. The end of the arm 103 (Fig. 3) has pivotally connected to it a two-part link, comprising a lower portion 105 (Figs. 3 and 3a) and an upper portion 107 (Figs. 1, 3 and 3a) slidingly mounted in the lower portion and connected by a tension-spring 109. The upper end of the portion 107 is pivotally connected to a lever 111, by which the shoe-supporting abutment 7 of the heel-attaching machine is depressed, as described in said Patent No. 2,391,543. The rear end of the lever 111 is coupled by a rod 112 to the end of an arm 110 (Fig. 1) secured upon a shaft 114 mounted in bearings of the frame. To the shaft 114 is also secured a longer arm 116 operatively connected by a rod 118 to a treadle 120. Depression of the treadle 120 causes clockwise movement of the lever 111, as viewed in Fig. 1, against the action of a spring 122, the upper

end of which is attached to the lever and the lower end of which is attached to the machine frame. When the treadle 120 is depressed, the pricker-head 17 is moved downwardly through the abutment-lever 111, the link 105, 107 and the arm 103, until the awl-guiding block 27 engages the heel 4 on the work-supporting mechanism 3. During this movement of the arm 103 and accordingly the lever 61, the boss 67 and the pricker-head-actuating rod 69 are moved upwardly, and this upward movement causes the shoulder 77 on the head 71 on the rod to lie at a higher level than the projection 79 on the link 81, so that the projection may be moved beneath the shoulder in readiness to cause, as hereinbefore described, the awl-guiding block 27 to be pressed against the heel by power-operated means. The upper end of the awl-spindle 49 is pivotally connected by a pin 113 (Figs. 1, 3, 7 and 8) to a link 115 pivoted to the forward end of an awl-actuating lever connection or arm 117. The pivotal connection between the lever 117 and link 115 comprises a stud 119 (Figs. 3, 7 and 8) rotatably mounted in the link 115 and having an eccentric portion 121 mounted in the lever 117. The stud 119 has a relatively large disc-like head 123, having around it a plurality of holes 125 through any one of which a screw 127 may be passed and threaded into the link 115. By removing the screw 127 and rotating the stud 119 the height of the spindle 49 and accordingly the awls may be adjusted relatively to the lever 117, and since this lever has a definite amount of movement during operation of the machine, the depth of the holes in the heel is correspondingly varied.

The lever 117 is pivoted about midway on a horizontal stud 129 carried by a bracket 131 secured to the main bracket 9. The rear end of the lever 117 has two arms each of which is pivotally connected to the upper end portion of a toggle-link 133 (Figs. 1, 3 and 4) of an awl-actuating toggle-lever. The lower end portion of each toggle-link 133 is pivotally connected to the upper end of an arm 135 extending from the hub of the pricker-head-actuating lever 87. The lever 87 has an arm 137 to which is pivotally connected the upper end of a rod 139, the lower end of which is pivoted to an arm 141 movable under the power of the machine when clamping pressure is applied to the work, as described in the Gouldbourn Patent No. 1,195,134 and the Carr et al. Patent No. 2,391,543. When, therefore, the machine is being operated by power, the toggle, comprising the links 133 and arms 135, is straightened, to cause the awls 43 to prick the heel, after the guide-block 27 has been pressed firmly against the heel, as later described.

As the downward movement of the awls 43 to prick the heel 4 is nearly completed, the pricker-head 17, after it has been pressed by the power-operated mechanism against the heel, is locked against upward movement. The lock remains operative until the awls 43 have been withdrawn from the heel 4, to prevent the heel from being lifted from the work-support 3 as the awls are moving upwardly after their pricking action. The mechanism for locking the pricker-head 17 comprises an arm 143 (Figs. 1, 3, 5 and 6) projecting downwardly from the boss 67 at the rear of the pricker-head-lever 61. Arranged to engage the left-hand side face of the arm 143, viewing the machine from the front, is an eccentric face 145 on a locking lever 147 (Figs. 5 and 6) pivoted on

the bracket 97. The lever 147 has an arm 149 extending toward the left and the eccentric face 145 is so arranged that upward movement of this arm 149 causes the eccentric face to wedge against the arm 143. The opposite face of the arm 143 bears against the bracket 97 and the engagement of the eccentric face prevents downward movement of the arm and therefore upward movement of the pricker-head 17. The arm 149 of the locking lever 147 has extending from it a stud 151 (Figs. 3, 5 and 6) on which is mounted a roll 153 (Figs. 1, 3, 5 and 6). The roll 153 is engaged by a cam-face 155 (Fig. 5) on a cam-lever 157 pivoted on a stud 159 (Figs. 5 and 6) secured in a plate 161 fixed to the bracket 9 by screws 163. These screws pass through slots in the plate, so it and the cam-lever 157 may be adjusted upwardly or downwardly. The cam-lever 157 has an arm 165 in which is secured a stud 167 (Figs. 1, 5 and 6) passing through a slot 169 (Fig. 5) in the lower portion of a lock-actuating link 171. The upper end of the link 171 is pivoted to the rear end of the pricker-actuating lever 117. The slot 169 has extending into it two screws 173 and 175, so arranged that just before the awls complete their pricking movement the screw 173 at the lower end of the slot engages the stud 167 in the lever 157 and causes the lock to become effective. When the awls 43 have been withdrawn from the heel 4, the screw 175 in the upper end of the slot engages the stud 167 and operates the locking lever to release the lock. The screws 173, 175 may be adjusted to vary the time of applying and releasing the lock.

The pricking machine operates in the following manner. When the heel-pricking and heel-attaching machine comes to its stopped position after having caused the pricked heel to be attached to a shoe (not shown), the work-supporting mechanism 3 will be in its right-hand position beneath the shoe-supporting abutment 7, to which it was previously moved with a pricked heel, now attached to the shoe as described in said Letters Patent No. 2,480,905. Unjacking the heeled shoe, the operator moves the carrier-frame 1 to shift the mechanism 3 to its left-hand position, beneath the awls 43, the pricker-head 17 and awls being raised. Although the work-supporting mechanism is described as being shiftable it will be appreciated that so far as the pricking machine per se is concerned the work-supporting mechanism may be fixed.

The operator in placing an unpricked heel 4 to be operated upon in the machine draws forward the upper part 35 of the pressing plate of the mechanism 3 and places on it said heel, tread-face down, in the work-holding and positioning devices D. He then moves the part 35 of the pressing plate rearwardly to carry the heel beneath the pricker-head 17 and locks the part 35 upon the part 37 of the work support by inserting the locking rod 177 (Fig. 2) in the recess 179 of the part 35 as above described. When, thereafter, the operator depresses the treadle 120 of the machine, the pricker-head 17 is moved down by its connection to the abutment-lever 111, as already described, to cause the awl-guiding block 27 to engage the upper face of the heel and to force the heel against the upper part 35 of the pressing plate. Movement of the arm 103 and accordingly movement of the pricker-head-lever 61 resulting from the above movement causes the boss 67 on the rear of the lever to be raised, so that the shoulder 77 on the head or

latch 71 of the rod 69 in the boss is at a higher level than the projection 79 on the link 81 at the rear of the rod. When the machine is operated by power, after the treadle 120 has been further depressed to start the machine, the pricker-head-actuating lever 87 is turned clockwise by its connection to the arm 141. The arm or extension 101 of the lever 87 is moved away from the toggle-link 83 and allows the tension-spring 99 to carry the toggle-link and the link 81 forward to position the projection 79 on the link beneath the shoulder 77. As the pricker-head-actuating lever 87 continues its clockwise movement, the pricker-head-actuating toggle-lever 83, 85 and awl-actuating toggle-lever 133, 135 are straightened. The arrangement is such that the pricker-head-actuating lever causes the awl-guiding block 27 in the pricker-head to be pressed firmly against the heel just before its pricking by the awls 43 commences. As the awl-actuating toggle-lever is approaching its straightened condition, the pricker-head-actuating toggle-lever 83, 85 passes slightly beyond this point. The awls 43, as they are moved from their fully raised position, travel a slightly greater distance before they engage the heel than they do when they are actually pricking the heel, and the pricker-head-actuating toggle-lever is so arranged that pressure is applied by the pricker-head to the heel before the awls enter the heel. The full pressure of the pricker-head 17 is effective before the awls 43 complete their pricking movement. At this time, and while the pricker-head 17 is being fully pressed against the heel, the locking eccentric 145 prevents upward movement of the pricker-head and heel while the awls are rising. The lock remains effective until the awls have been withdrawn from the heel and the awl-actuating toggle-lever 133, 135 is nearing its fully broken condition. As the lever 133, 135 is being broken the pricker-head-actuating toggle-lever 83, 85 is also being broken, and before the lock is released the projection 79 on the link 81 is moved rearwardly from beneath the shoulder 77, so that the pricker-head may return to its raised position when the treadle 120 of the machine is released by the operator. As the pricker-head is raised, the boss 67 and rod 69 are lowered, and the shoulder 77 returns to a position lower than the projection 79. If the machine should be operated without the pricker-head 17 being first moved downward, as is possible by tripping the clutch of the machine by means other than the usual treadle, which first causes this movement, the projection 79 will move idly up and down behind the rod 69 without causing movement of the pricker-head. The awls will be moved down in the pricker-head, then in its raised position, but the arrangement is such that their points will not be moved out of the block 27 and therefore cannot cause injury to the operator.

Having described our invention, what we claim as new and desire to secure by Letters Patent of the United States is:

1. In a pricking machine, resilient means, a pair of members which are constructed and arranged to be engaged by the attaching and tread faces respectively of a built-up heel having a plurality of lifts, and which are mounted for relative yielding movement against the action of said resilient means to compress said heel heightwise, awls, means for effecting relative movement in opposite directions generally heightwise of the heel between said awls on the one hand and said members and the compressed heel on the other hand to cause the heel to be pricked, and means for positively locking said members against relative movement while the awls and heels are in engagement to insure that the lifts of the heels shall not be separated during the pricking operation.

2. In a pricking machine, a fixed support for a built-up lift heel, a clamp, means which comprises a resilient member and is constructed and arranged to move said clamp towards said support with yielding pressure to compress said heel heightwise, awls, means for moving said awls heightwise of the heel to prick said heel, and mechanism for positively locking the clamp against movement heightwise of the heel during the pricking of the heel to insure that the awls shall not cause separation of the lifts of the heel as they move in said heel.

3. In a pricking machine, a support constructed and arranged to be engaged by the tread end of a built-up lift heel, a clamp, a member positively connected for movement with the clamp, means comprising a spring for operating said member to cause said clamp to be forced with yielding pressure against the attaching face of the heel to compress said heel heightwise, awls, mechanism for moving said awls heightwise of the heel to prick the attaching face of said heel, and a lock which is actuated in response to movement of said mechanism and is constructed and arranged positively to hold said heel compressed heightwise as the awls move in said heel thereby insuring against the lifts of the heels being separated during the heel pricking operation.

4. In a pricking machine, a support for a heel, a clamp, manually operated means comprising a lever for forcing the clamp yieldingly against a heel upon the support to apply preliminary pressure to said heel, awls, mechanism comprising a lever for operating the awls, a power operated member, and means operative in response to movement of said member for yieldingly actuating said clamp operating lever to apply secondary clamping pressure to the heel and for positively operating the awl operating lever to move the awls into and out of the heel, a lock for securing the clamp against movement during the withdrawal of the awls from the heel, and means for varying the period during which the lock is effective.

5. In a pricking machine, a support for a heel, a pricker-head comprising a guide block having passages, means for moving the pricker-head to force said guide block against an attaching face of the heel mounted upon the support, a carrier movable in the pricker-head, awls which are coupled to the carrier and extend into the passages of the guide black, a spindle for moving the carrier in the pricker-head to drive the awls into the attaching face of the heel forced against said support by the guide block, power operated connections for actuating said spindle, means for varying the operating position of said spindle with relation to said connections in order to vary the positions of the awls in the passages of the guide block and accordingly the depth of penetration of the awls into the heel, said block being slidable to and from an operative position in the pricker-head and said carrier being removably mounted upon the spindle, said pricker-head having a door which is constructed and arranged to be moved to an open position to permit the block and the carrier together with awls to be removed as a unit from or to be placed in operative positions in the pricker-head and

the spindle respectively, and means for locking the door, said door in its locked position being constructed and arranged to retain the block, the carrier and the awls in their operative positions.

6. In a pricking machine, a support for a heel, movable means for clamping a heel against the support, movable means for pricking the clamped heel, levers for operating the clamping means and the pricking means respectively, a power-operated actuating member, a link which forms a toggle with said member and operatively connects positively said actuating member to the pricking means operating lever, a link forming a toggle with said member, and mechanism which is actuated by the last-named link and is constructed and arranged to communicate movement of said link yieldingly to the clamping means operating lever.

7. In a pricking machine, a support for a heel, movable means for clamping a heel against the support, movable means for pricking the clamped heel, levers for operating the clamping means and the pricking means respectively, a power-operated actuating member, a link which forms a toggle with said member and operatively connects positively said actuating member to the pricking means operating lever, a link forming a toggle with said actuating member, mechanism which is actuated by the last-named link and is constructed and arranged to communicate movement of the said link yieldingly to the clamping means operating lever, manually operated means for actuating the clamping means operating lever to apply preliminary pressure to the heel, and a latch which forms part of said mechanism and is movable in response to said manually operated means to an active position in which it is engaged by said last-named toggle link to cause the heel-clamping means to be opeated in response to movement of said power-operated actuating member.

8. In a pricking machine, a support for a heel, movable means for clamping a heel upon the support, movable means for pricking the clamped heel, levers for operating the clamping means and the pricking means respectively, a power-operated actuating member, a link joining the actuating member to the pricking lever, a latch slidingly mounted upon the clamping means operating lever, a spring which is interposed between said latch and the lever and through which movement of the latch is imparted to the clamping means operating lever, and a link pivoted to the actuating lever and movable into driving engagement with said latch.

9. In a pricking machine, a support for a heel, means for clamping a heel upon the support, means for pricking the clamped heel, a lever for moving the heel-clamping means, a connection for moving the heel-pricking means, manually operated yieldable mechanism for moving said lever to cause said heel-clamping means to apply preliminary pressure to the heel, a power-operated-actuating member, an arm joining the actuating member to the pricking means operating connection, a latch slidingly mounted upon the heel clamping means operating lever, a spring interposed between the latch and the lever, a link pivoted to the actuating member and movable into and out of operative engagement with the latch, resilient means for constantly urging the link toward the latch, and an actuating lever extension for moving the link against the action of said resilient means, said latch being moved, upon the application of preliminary pressure to the heel, into a position in which the resilient means moves the link into operating engagement with the latch, subsequent operation of the power-operated-actuating member causing through the latch the application of yieldable clamping pressure against the heel and, through the arm, the connection and the heel pricking means, the pricking of the clamped heel.

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