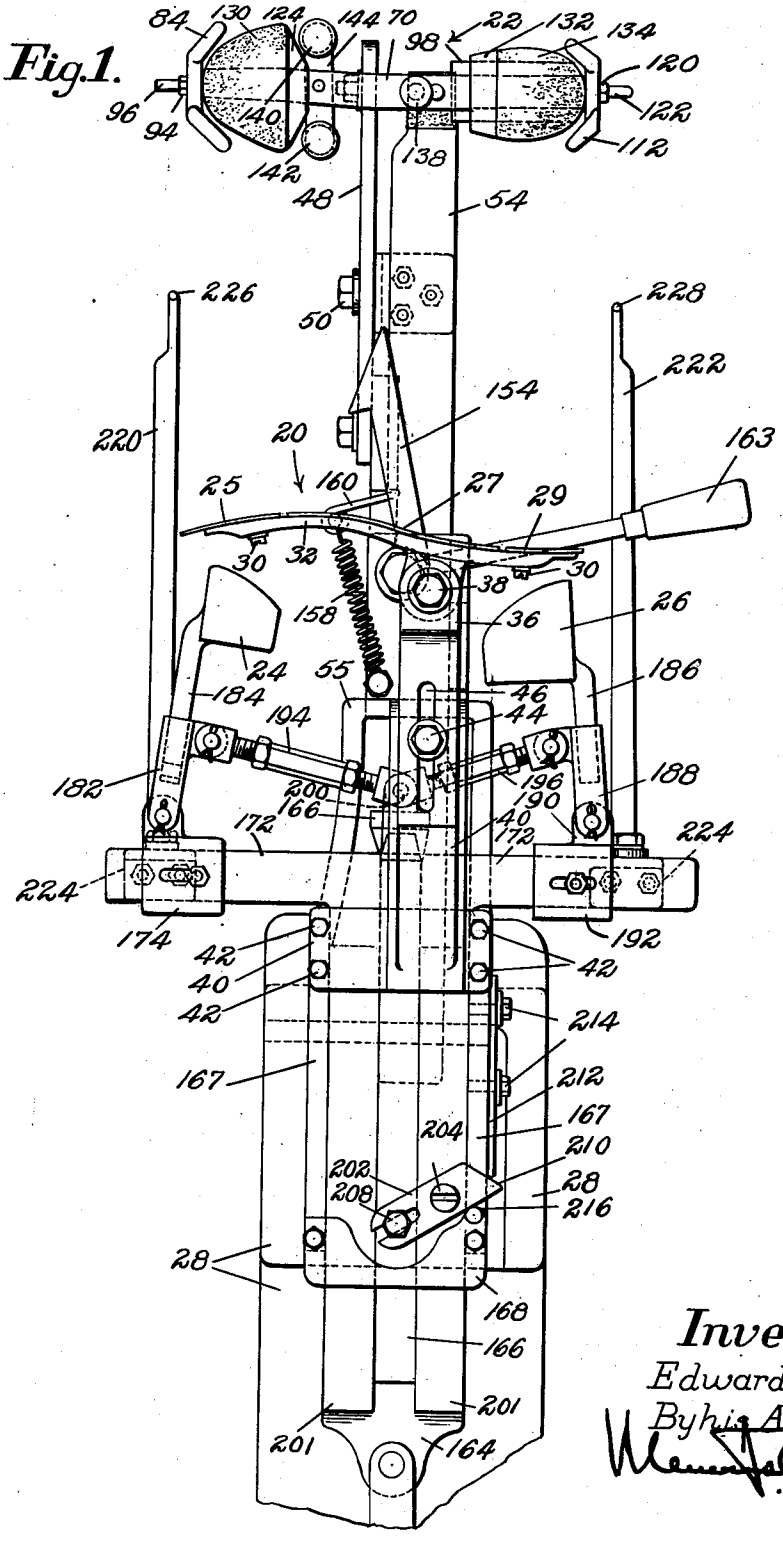
Sept. 2, 1952 E. QUINN 2,608,701

PLATFORM LAYING AND PLATFORM COVER TURNING MACHINE

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Fig. 1.



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PLATFORM LAYING AND PLATFORM COVER TURNING MACHINE

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Fig.2.

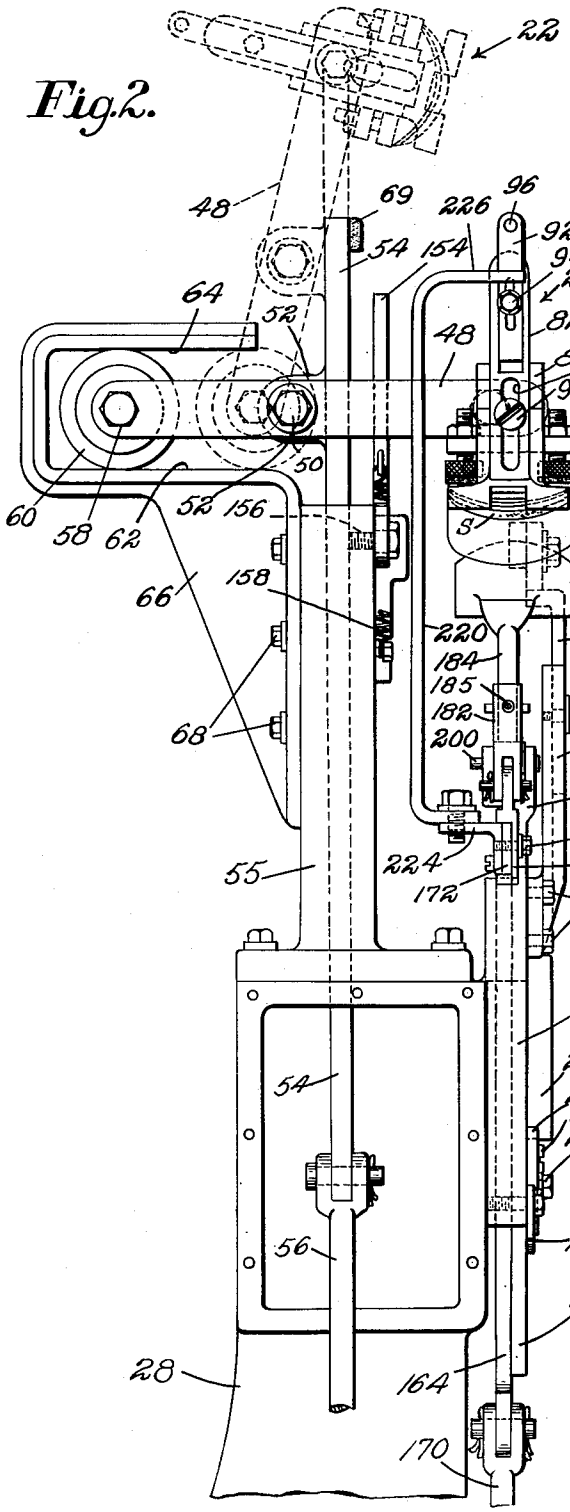
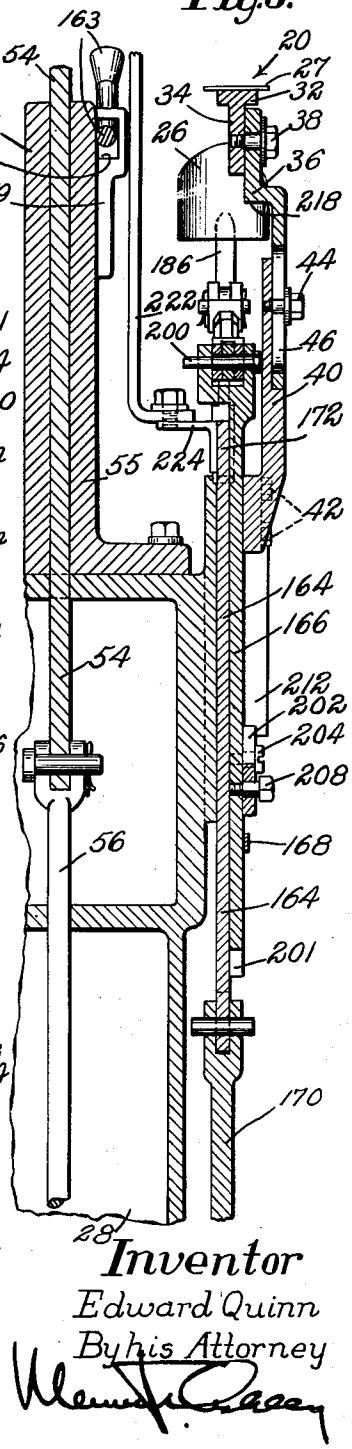


Fig.3.



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PLATFORM LAYING AND PLATFORM COVER TURNING MACHINE

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Fig. 5.

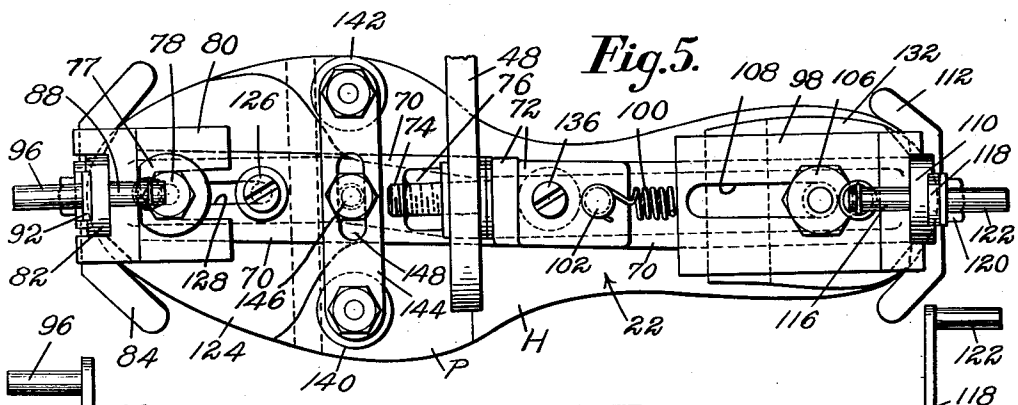
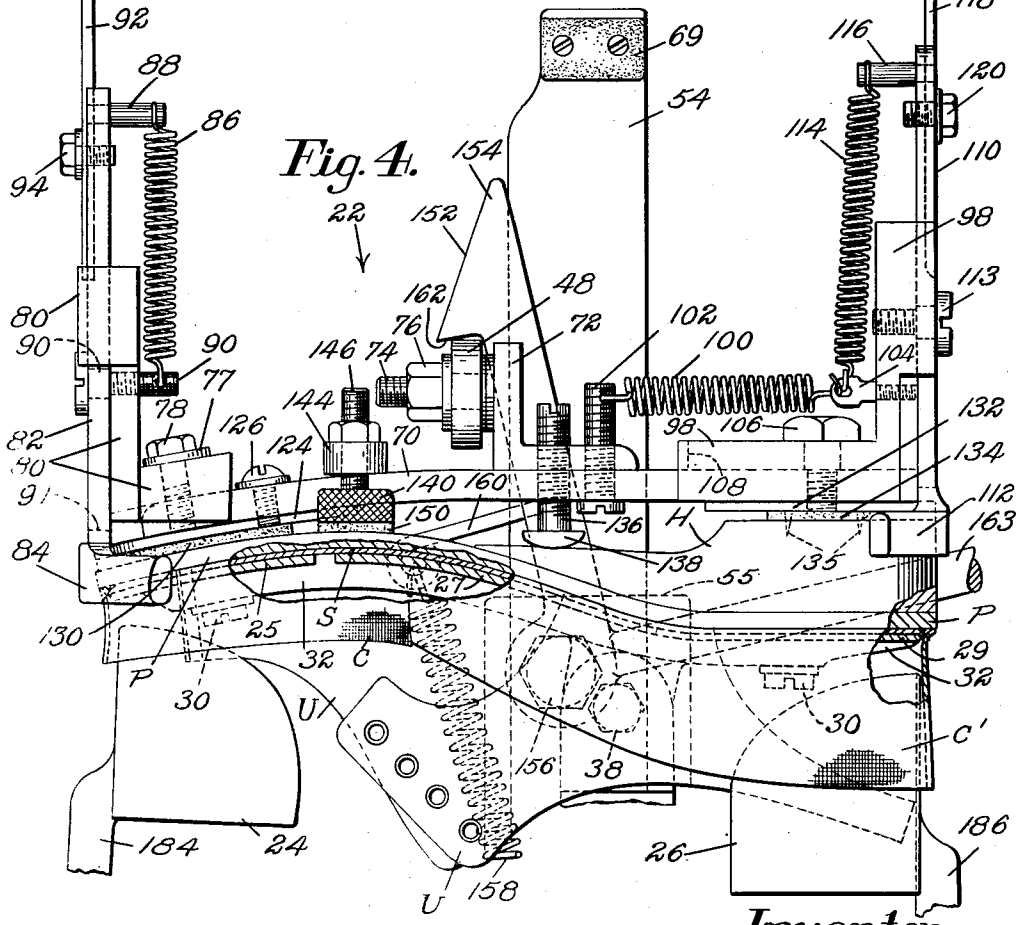


Fig. 4.



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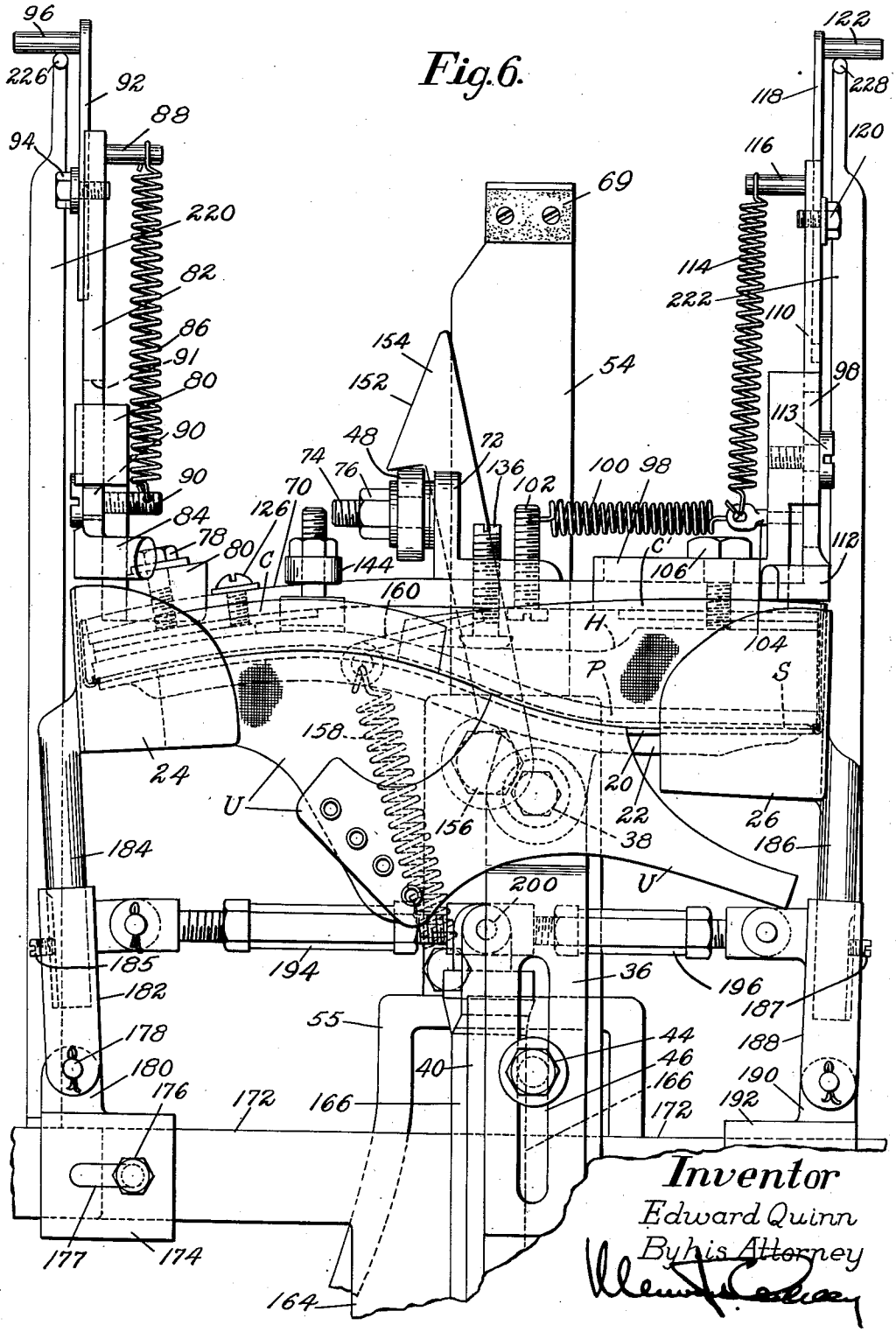
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PLATFORM LAYING AND PLATFORM COVER TURNING MACHINE

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Fig.6.



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PLATFORM LAYING AND PLATFORM COVER TURNING MACHINE

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Fig. 7.

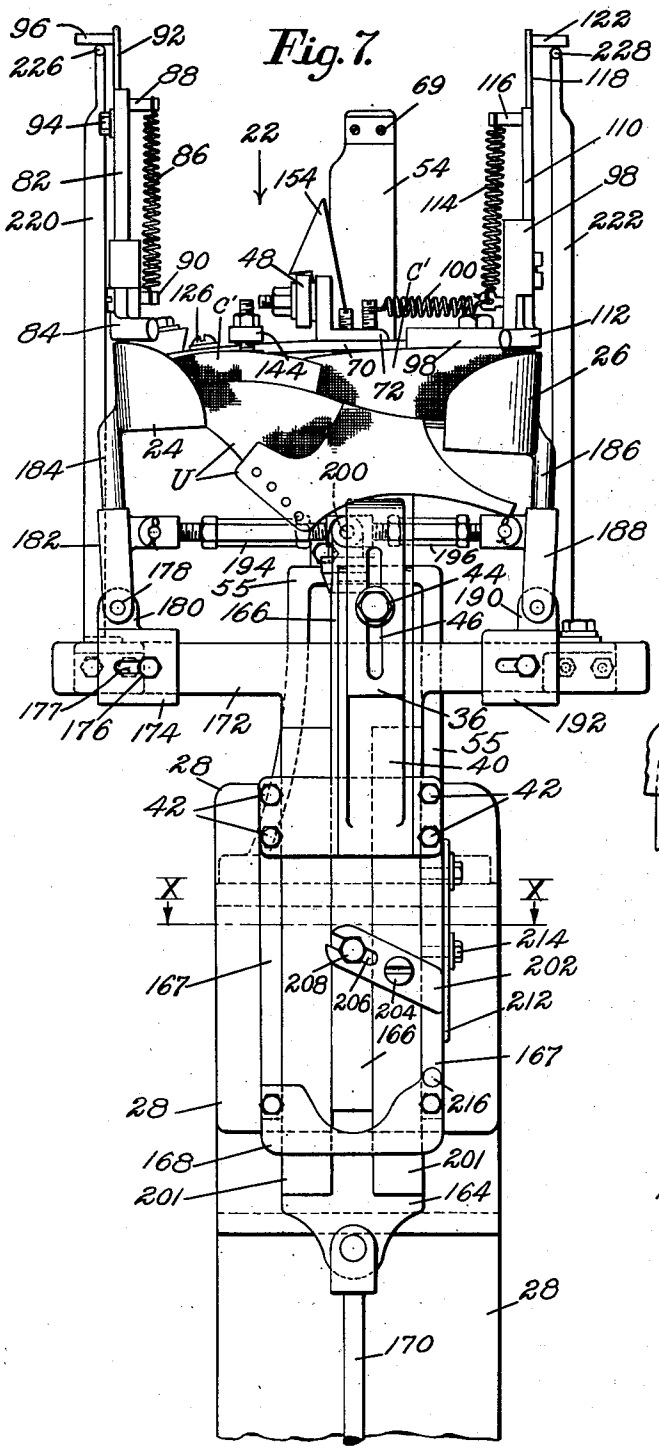


Fig. 8.

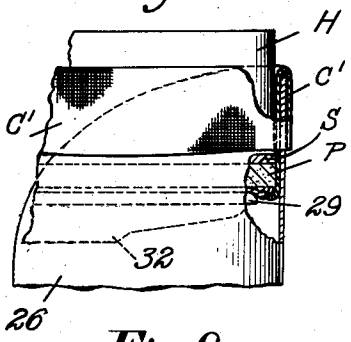


Fig. 9.

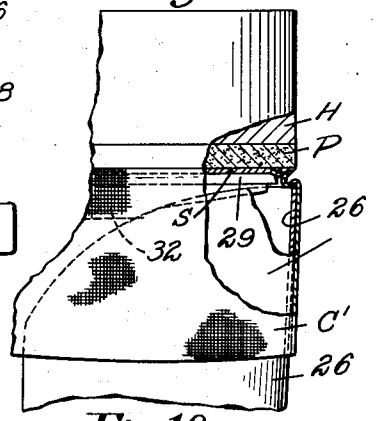
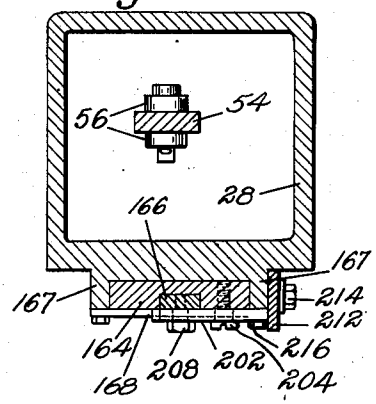


Fig. 10.



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UNITED STATES PATENT OFFICE

2,608,701

PLATFORM LAYING AND PLATFORM COVER TURNING MACHINE

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Application March 24, 1950, Serial No. 151,659

11 Claims. (Cl. 12—1)

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This invention relates to machines for use in the manufacture of shoes and it is herein disclosed as embodied in a machine for laying platform units upon the sock linings or insoles of platform shoes and also for turning the platform covers of the shoes. These operations are performed upon partially completed platform shoes consisting of sock linings, uppers, and platform covers united by stitching. Such shoes often have insoles in addition to or in place of sock linings, but the presence or absence of insoles is of no consequence in the operation of the machine and for convenience the term "sock lining" will be used to denote not only an actual sock lining but any of its equivalents.

It is an object of this invention to provide a simple machine for readily and conveniently performing the above-mentioned operations.

In accordance with a feature of the invention, the illustrated machine is provided with supports for a partially completed platform shoe and a platform unit and also with means for moving the platform unit support from a convenient loading position removed from the shoe to an operating position wherein precemented surfaces of the platform unit and the sock lining are pressed together to cause them to adhere. The platform unit support carries gages which hold the platform unit in register with the sock lining while the platform unit is being laid. In accordance with a further feature, the illustrated machine is provided with means for turning the platform cover while the shoe is held against the shoe support by the pressure of the platform unit support.

An advantage of the illustrated machine is that it does not require a preliminary lasting of the shoes upon which it operates. Another advantage is that it lays the platform unit and turns the platform cover in a single handling of the shoe.

These and other features of the invention will appear from the following detailed description of an illustrative embodiment of the invention, when considered in connection with the accompanying drawings, and will be pointed out in the appended claims.

In the drawings,

Fig. 1 is a front elevation of the upper portion of an illustrative machine embodying the invention;

Fig. 2 is a side elevation of the parts shown in Fig. 1;

Fig. 3 is a vertical sectional view of a portion of the mechanism shown in Figs. 1 and 2;

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Fig. 4 is an enlarged front elevation of the shoe-engaging members at the beginning of their operation upon a shoe;

Fig. 5 is a plan view of the platform support in operating position;

Fig. 6 is a front elevation of the shoe-engaging members at the completion of the operation;

Fig. 7 is a view similar to Fig. 1 showing the positions of the various parts at the completion of the operation;

Fig. 8 is an enlarged fragmentary view in elevation, showing one of the turning tools in operation upon a platform cover;

Fig. 9 is a view similar to Fig. 8 showing the tool at an earlier stage of the operation; and

Fig. 10 is a sectional view taken on the line X—X of Fig. 7.

The shoe-engaging instrumentalities of the illustrated machine consist of a shoe support **20** (Figs. 1 and 3), a platform unit support, indicated generally by the reference numeral **22** (Figs. 1 and 5), a toe turning horn **24**, and a heel turning horn **26**. The supporting structure of the machine consists of a frame **28** adapted to rest upon the floor.

The shoe support **20** is a stationary member shaped to the general outline of a shoe bottom and curved heightwise from toe to heel in a manner similar to that of the average shoe. It comprises a toe end plate **25** (Figs. 1 and 4), a shank plate **27**, and a heel end plate **29**. The shank plate **27** is welded to a bar **32** which extends lengthwise along the median line of the support **20**. The toe end plate **25** and the heel end plate **29** are secured to the bar **32** by clamping screws **30** which are threaded into the respective plates and which extend through longitudinal slots in the bar to permit adjustment for different lengths of shoes. A lug **34** (Fig. 3), depending from the bar **32**, is clamped to a bracket **36** by a screw **38**. Angular adjustment of the shoe support **20** in a longitudinal heightwise plane is effected by loosening the screw **38**, tilting the shoe support about the screw to the desired position and then tightening the screw. The bracket **36** is slidable for heightwise adjustment in a guideway formed in a bracket **40** which is secured by screws **42** to the frame **28**, the bracket **36** being held in adjusted position by a clamping screw **44** threaded into the bracket **40** and extending through a vertical slot **46** in the bracket **36**.

The support **20**, just described, is adapted to support a partially completed platform shoe in inverted position. Such a shoe, as shown in Fig.

4, may consist of an upper U, a sock lining S (with or without an insole), a forepart platform cover C, and a heel end platform cover C'. The platform covers C and C' may, as shown herein, be separate members or they may be of one piece. The upper, the sock lining and the platform cover are all united by stitching. When the shoe is mounted upon the support 20, the platform covers C and C' have not yet been turned into their right-side-out position and they therefore extend down as shown in Fig. 4.

It is one of the functions of the illustrated machine to lay or adhesively apply a platform unit P (Fig. 5) upon the sock lining S. Such a platform unit may consist of a platform to which has been cemented a wedge heel H. In some types of shoe the platform and the heel H may be integral, and in other types the heel H may be omitted. Before the shoe is subjected to the operation of the illustrated machine, those portions of the sock lining and the platform unit which are to be adhesively united are precoated with a suitable cement.

The support 22 for the platform unit is movable from a loading position, shown in Fig. 1 and also in Fig. 2, to an operating position shown in solid lines in Figs. 2, 4, 5, 6 and 7. To provide for such movement, the platform unit support 22 is carried upon the forward end (as shown in Fig. 2) of a lever 48 which is fulcrumed upon a pin 50 threaded into a lug 52 extending from a slide 54. A suitable guideway formed in a bracket 55 extending up from the frame 28 guides the slide 54 for heightwise movement. The lower end of the slide 54 is pivotally connected to the upper end of a treadle rod 56 which is normally held up to a stopped position by a spring, the spring and the treadle which operates the rod 56 not being shown. Rotatably mounted upon a pin 58 secured in the rear end of the lever 48 is a roll 60 which is constrained against heightwise movement by a horizontal guideway consisting of a lower plate 62 and an upper plate 64 which are both integral with a bracket 66 secured by screws 68 to the bracket 55. When the treadle is up, the members just described will occupy their dotted line position as shown in Fig. 2 and when the treadle is depressed, they will move into their solid line position as shown in the same figure. A cushion 69 of leather on the upper end portion of the slide 54 serves as a stop for the platform unit support 22 in its up position.

The platform unit support 22 includes a longitudinal bar 70 (Figs. 4, 5 and 6) which is rigidly secured by an angle iron 72 to the lever 48. The angle iron 72 is brazed to the longitudinal bar 70 and is securely clamped to the lever 48 by a bolt 74, nut 76, and suitable washers. Secured by a washer 77 (Fig. 4) and a screw 78 threaded into the forward end of the bar 70 is a bracket 80 having depending guide flanges engaging the lateral edges of the bar 70 to guide the bracket 80 for adjusting movement along the bar. The bracket 80 has a slot through which the screw 78 extends to enable the bracket to be adjusted forward or back along the bar 70 and then clamped in its adjusted position by tightening the screw 78. Formed in a heightwise portion of the bracket 80 is a vertical guideway in which is guided for heightwise movement a slide 82 having a lower end portion 84 shaped to engage the toe end of the platform unit and thereby to serve as one of the end clamping members for the platform unit. A tension spring 86 secured at its upper end to a pin 88 extending from the slide 82 and anchored at its lower end to a screw 90 threaded into the bracket 80 yieldingly holds the clamping member 84 down in a stopped position wherein it can be engaged by the toe end of the platform unit. This stopped position is determined by the screw 90 (which is a shoulder screw) extending through a closed heightwise slot 91 (see also Fig. 2) in the slide 82. Formed in the upper portion of the slide 82 is a guideway wherein another slide 92 is guided for heightwise adjustment and in which it can be secured in any desired position of heightwise adjustment by a screw 94 threaded into the slide 82 and extending through a heightwise slot formed in the slide 92. Extending horizontally from the upper portion of the slide 92 is an abutment pin 96, the purpose of which will later be explained.

On the heel end portion of the bar 70 is a bracket 98 (Figs. 4 and 5) slidable along the bar and having depending guide flanges which engage the lateral edges of the bar. This bracket 98 is yieldingly urged toeward by a tension spring 100 secured at its forward end to a post 102 upstanding from the bar 70 and at its heelward end to a post 104 secured in the bracket 98. A shoulder screw 106 threaded into a presser 132 (to be described later) and extending through a slot 108 in the bracket 98 serves as a stop to limit the toeward movement of the bracket 98 under the influence of the spring 100. Slidably mounted for heightwise movement in a guideway formed in an upstanding portion of the bracket 98 is a slide 110 upon the lower end portion of which is formed a member 112 for engaging the heel end of the platform unit. This member 112 under the influence of the spring 100 presses toewardly against the heel end of the platform unit and thus holds the platform unit yieldingly clamped against the toe clamping member 84. A shoulder screw 113 threaded into the bracket 98 and extending through a closed slot in the slide 110 serves to stop the downward movement of the slide. The slide 110 is yieldingly urged down toward its stopped position by a tension spring 114, the upper end of which is secured to a pin 116 extending from the slide 110 and the lower end of which is secured to the post 104. Slidably guided for heightwise movement on the upper portion of the slide 110 is another slide 118 which can be adjustably secured in any desired heightwise position by a screw 120 threaded into the slide 110 and extending through a heightwise slot in the slide 118. An abutment pin 122 extends horizontally from the upper portion of the slide 118, the purpose of which will later be explained.

In addition to the clamping members 84 and 112 which yieldingly support the platform unit, the illustrated platform unit support 22 is also provided with several members engageable with the bottom of the platform unit to press the platform unit down on the sock lining. One of these presser members consists of a plate 124 (Figs. 4 and 5) clamped upon the forward end portion of the bar 70 by a screw 126 extending through a slot 128 formed on the bar 70 to allow for lengthwise adjustment. The operating face of the presser 124 is preferably lined with a sheet of felt 130 or like cushioning material. A similar presser 132 is secured upon the heel end portion of the bar 70 with provision for forward and rearward adjustment and it is similarly provided with a cushion 134. The screw 106 has, just below its

head, an enlarged shank which fits loosely in the slot 108; and below the enlarged shank it has a reduced threaded portion. The shoulder at the junction of the enlarged shank and the reduced threaded portion bears down upon the upper surface of the bar 70, and the reduced threaded portion extends loosely through a short slot (not shown) which is formed in the bar 70 to allow for said forward and rearward adjustment of the presser 132. The lower end portion of the screw 106 is threaded into the presser 132 so that tightening of the screw will clamp the presser against the bar 70. The presser 132 is provided with sticker points 135 to prevent slipping of the work. Another presser 136 consists of a screw threaded heightwise through both the bar 70 and the angle iron 72. The lower end of the screw 136 carries a rounded head 138 adapted to bear against the forward portion or shank area of the heel H. The support 22 is provided with two additional pressers 140 and 142 which consist of inverted screws threaded up into the end portions of a bar 144 which extends transversely of the platform unit and across the bar 70 and is clamped to the bar 70 by a screw 146 threaded into the bar 70 and extending through a slot 148 formed in the bar 144 to allow for transverse adjustment. The heads of the screws 140 and 142 are provided with cushioning material 150. It is evident that when the platform unit support 22 is pressed down, its pressure will be transmitted to the bottom of the platform unit over five well distributed areas.

As the platform unit support 22 is brought down by pressure on the treadle from its loading position to its operating position, the lever 48 will engage a cam surface 152 (Fig. 4) formed on a latch 154 which is pivotally mounted upon a pin 156 secured on the bracket 55. A tension spring 158 having its lower end anchored to the bracket 55 and its upper end secured to a rod 160 extending from the latch 154 yieldingly holds the latch in a limiting position determined by a stop 159 (Fig. 3) having a slot 161 through which extends a disengaging handle 163 (Fig. 1) secured to the latch. As the lever 48 descends, it engages the cam surface 152, causing the latch 154 to yield and permit the lever to continue descending until the platform P presses against the sock lining S, whereupon a notch 162 formed in the latch 154 engages the lever 48 to hold the lever down in its operating position.

The platform cover turning horns 24 and 26 are carried by operating mechanism comprising a primary slide 164 (Figs. 1, 2, 3, 7 and 10) and a secondary slide 166. The slide 164 is guided for heightwise movement in a guideway formed by guide flanges 167 on the frame 28. A portion of the bracket 40 bridges this guideway and serves to retain the slide 164 within it. Also bridging the guideway is a plate 168 which cooperates with the bracket 40 in retaining the slide. The lower end of the slide 164 is pivotally connected to the upper end of a treadle rod 170 which is normally held down to a stopped position by a spring. This spring and a treadle which is connected to the lower end of the rod 170 are not shown. Depression of the treadle raises the slide 164 to operate the horns 24 and 26.

To provide for mounting the horns upon it, the slide 164 has an integral cross bar 172 (Figs. 1, 6 and 7) extending lengthwise of the shoe, the slide and cross bar together being in the form of the letter T. Slidably mounted for adjustment along the cross bar 172 is a bracket 174 which can be secured to the bar 172 in any desired position of adjustment by a clamping screw 176 threaded into the bar and extending through a slot 177 in the bracket. Pivotally mounted upon a pin 178 in a lug 180 extending up from the bracket 174 is a socket 182 in which is mounted for heightwise and rotary adjustment a shank 184 which depends from the toe turning horn 24. The shank 184 can be clamped in adjusted position in the socket 182 by a suitable set screw 185 (Fig. 6). The heel turning horn 26 has a similar depending shank 186 which can be secured by a set screw 187 in any desired position of heightwise and rotary adjustment in a socket 188 which is pivotally mounted upon a lug 190 extending up from a bracket 192 which can be secured in any desired position of adjustment along the bar 172. The above-mentioned provision for heightwise adjustment of the horns 24 and 26 enables the horns to be so adjusted as to cause their engagement with the toe and heel ends of the work to take place simultaneously; or, if desired, they can be so adjusted as to cause the engagement of either horn to take place before the engagement of the other. The provision for rotary adjustment enables the horns to be turned to the most advantageous angles for operation upon any particular type of shoe, this adjustment being particularly important for the toe turning horn 24 because of the considerable variation in the shape of the toe end in shoes of different types. Adjustment of the turning horns along the bar 172 enables the horns to be positioned in accordance with the various lengths of shoes.

Swinging movement of the horns 24 and 26 toward and from each other is effected by a toggle mechanism (Fig. 1) comprising a toggle link 194 pivotally connected to the socket 182 and a toggle link 196 pivotally connected to the socket 188. These toggle links, which are of the turnbuckle type to permit adjustment of their effective lengths, are also pivotally connected to each other and to the upper end of the secondary slide 166 by means of a toggle pin 200. The secondary slide 166 is guided for heightwise movement in a guideway formed by integral guide flanges 201 on the primary slide 164. Its movement is derived from the slide 164 and is transmitted by a lever 202 which is fulcrumed upon a pin 204 secured in the slide 164. One end of the lever 202 has formed in it a slot 206 (Fig. 7) which embraces a pin 208 extending from the secondary slide 166. The other end of the lever 202 is inclined to the axis of the lever and it has formed upon it a finished surface 210 (Fig. 1) which makes an acute angle with the lower edge of the lever and which engages a finished surface on a cam plate 212 secured rigidly by screws 214 to the frame 28. Between the lower end of the plate 212 and an abutment 216 which extends out from the face of the bridge plate 68 is a space into which the acute-angled corner of the lever 202 between the lower edge face and the finished surface 210 can extend, assuming that the primary slide 164 occupies its lowermost position as shown in Fig. 1 with the lever 202 in the position shown in the figure. Upon depression of the treadle, the primary slide 164 will rise and the inclined finished end 210 of the lever 202 will fulcrum about the lower end of the cam plate 212 until the entire surface of the end 210 is flat against the cam plate and in sliding engagement therewith. The lever 202, in swinging around the lower end of the cam

plate 212, will cause the secondary slide 166 to move up faster than the primary slide 164. The toggle pin 200 will thus be moved up faster than the cross bar 172 and will cause the toggle links 194 and 196 to straighten and move the turning horns 24 and 26 further apart. It may be noted that the horns 24 and 26, as shown in Fig. 1, are close enough to each other to enter within the unturned platform covers C and C' as the horns begin to rise, and that as the horns continue rising, they also separate to enable them to clear the seam at the toe and heel ends of the shoe. The upward movement of the secondary slide 166 relative to the primary slide 164 will cease as soon as the finished surface 210 comes flat against the cam plate 212, whereupon the secondary slide will rise in unison with the primary slide until the various parts reach the positions shown in Fig. 7. The upward movement of the slides will be stopped by the engagement of the upper end of the secondary slide 166 with an offset 218 (Fig. 3) formed on the bracket 36. Upon release of the treadle, the primary slide 164 and also the secondary slide 166 will descend; and the lower edge of the lever 202 will engage the abutment 216 to return the secondary slide to its initial position.

It is often desirable to move the clamps 84 and 112 up out of the way as the horns 24 and 26 rise to turn the platform cover. This is accomplished by a pair of lift rods 220 and 222 which are secured in upstanding position to angle irons 224 (Figs. 1, 2 and 3) mounted on the opposite end portions of the cross bar 172. The lift rod 220 has an upper end portion 226 which is bent horizontal and at right angles to the pin 96 so as to engage the pin 96 as the cross bar 172 rises. The lift rod 222 has a similar horizontal end portion 228 for engagement with the pin 122. It is evident that as the horns 24 and 26 rise, the lift rods 220 and 222 will also rise and move the slides 82 and 110 up to bring the clamps 84 and 112 to out-of-the-way positions. The timing of the engagment of the lift rod 220 with the pin 96 is determined by the adjustment of the slide 92 up and down on the slide 82, and the timing of the engagement of the lift rod 222 with the pin 122 is similarly determined by the adjustment of the slide 118 on the slide 110 (Fig. 7).

It is sometimes desirable, in the turning of platform covers of more or less stiff material, to maintain tension in the covers as they turn over the edges of the horns 24 and 26. Such tension can be maintained by proper heightwise adjustment of the slides 92 and 118 referred to in the preceding paragraph. Sufficient upward adjustment of these slides renders the lift rods 220 and 222 completely inoperative and enables the clamps 84 and 112, under the influence of their respective springs, to press the platform covers C and C' against the edges of their respective turning horns 24 and 26, thereby imposing a frictional drag upon the platform covers while they are being turned. Less upward adjustment renders the lift rods partially inoperative, enabling the clamps 84 and 112 to tension the platform covers at the beginning of the turning operation and to release them at any given stage of the operation, depending on the adjustment.

In operating the machine the operator, after first making the proper adjustments, inserts the platform unit P in the platform unit support 22 and he then mounts the shoe on the shoe support 20, drawing down manually the platform covers C and C' to center the shoe properly on its support. He then depresses the treadle connected to the rod 56 and thereby brings the platform unit support 22 from loading position into operating position wherein it is automatically latched by the latch 154. The platform unit, gaged by the clamps 84 and 112, is thus laid in register upon the sock lining S of the shoe on the shoe support 20. Sufficient pressure, determined by the heightwise adjustment of the shoe support 20, is developed by the presser members 124, 132, 136, 140 and 142 against the platform unit P to establish a firm bond between the precemented adjoining surfaces of the platform unit and the sock lining.

While the shoe is thus held down by the platform unit support 22, the operator depresses the treadle connected to the rod 170 and thereby causes the rod to raise the slide 164 and the horns 24 and 26. The horns have already been adjusted (by a suitable positioning of the brackets 174 and 192 along the cross bar 172) to enter the unturned platform covers C and C' at the respective ends of the shoe. As they continue to rise the horns 24 and 26 are moved further apart by the toggle links 194 and 196 to enable the horns to clear the seams by which the platform covers are stitched to the sock lining and the upper. The platform covers are thus turned over the edges of the horns, with or without tension according to the adjustment of the slides 92 and 118 as has already been explained. The turning of the platform covers is finished before the upward movement of the slides is stopped by the offset 218 and the operator thereupon releases the treadle connected to the rod 170, permitting the slides to descend to their initial positions. He then grasps the handle 163 and releases the latch 154, permitting the platform unit support 22 to rise to its initial position and release the shoe. The operation is now complete and the shoe, with its platform covers C and C' turned and its platform unit P laid upon and cemented to the sock lining S, can be removed from the support 20.

The machine, as shown and described herein, is adapted to operate upon platform units to which the heels have already been attached. It is sometimes desirable, however, to apply the platform, alone and without an attached heel, to the sock lining and then, after the platform covers have been turned, to apply the heel to the platform. All that is necessary to convert the illustrated machine to such use is to substitute for the platform unit support 22 a similar member having a suitable heightwise curvature from toe to heel to accomplish the desired purpose.

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

1. In a machine for use in the manufacture of shoes, a support for a partially completed platform shoe having an upper, a sock lining, and an unturned platform cover united by stitching, a clamp for supporting a platform unit, operating means for moving said clamp with a platform unit therein from a convenient loading position removed from the shoe to an operating position wherein precemented surfaces of the platform unit and the sock lining are pressed together to cause them to adhere, and means for turning the platform cover while the shoe is held against the shoe support by the pressure of the operating means.

2. In a machine for use in the manufacture of shoes, a support shaped to fit within an inverted

partially completed platform shoe having an upper, a sock lining, and an unturned platform cover united by stitching, said support being adapted to engage the sock lining and thereby to support the shoe, a yieldable clamping means engageable with the periphery of a platform unit to support the platform unit, a carrier for the clamping means movable from a convenient loading position above the shoe to an operating position wherein adjoining precemented surfaces of the platform unit and the sock lining are in contact, operating means for so moving the carrier and for pressing the platform unit down against the sock lining to cause the precemented surfaces to adhere, means for turning the platform cover while the shoe is held down on its support by the operating means, and means operated by the turning means for moving the yieldable clamping means out of the way.

3. In a machine for use in the manufacture of shoes, a support for a partially completed platform shoe having an upper, a sock lining, and an inturned platform cover united by stitching, means for supporting a platform unit in gaged relation to said support while out of contact with the sock lining to insure subsequent registry of the platform unit with the sock lining, means for applying pressure between the platform unit and the sock lining while the platform unit is thus gaged to cause precemented surfaces of the platform and the sock lining to adhere, and means for turning the platform cover while the shoe is held on its support by the pressure applying means.

4. In a machine for use in the manufacture of shoes, a support for a partially completed platform shoe having an upper, a sock lining, and an inturned platform cover united by stitching, treadle-operated mechanism for pressing a precemented platform against the precemented sock lining, a latch engageable with the treadle-operated mechanism to maintain the pressure of the platform against the sock lining to cause adhesion, and means for turning the platform cover while the shoe is held on its support by the latched pressing mechanism.

5. In a machine for use in the manufacture of shoes, a support for an inverted partially completed platform shoe having an upper and a sock lining united by stitching, a support for a platform unit, a lever upon one end of which the platform unit support is rigidly secured, a slide upon which the lever is fulcrumed at a locality between the ends of the lever, a guideway in which the slide is movable heightwise, a pin in the opposite end of the lever about which the lever can swing heightwise, a horizontal guide means for constraining the pin against heightwise movement while allowing it to move horizontally as the slide is moved heightwise, and a treadle connection for moving the slide heightwise to move the platform unit support between a loading position above the shoe support and an operating position wherein the platform unit is laid upon the sock lining.

6. In a machine for use in the manufacture of shoes, a support for a partially completed platform shoe having an upper and a sock lining united by stitching, a support for a platform unit, said platform unit support comprising clamps engageable with the periphery of the platform unit to hold the platform unit in gaged relation to the supported shoe and comprising also a plurality of abutments independently adjustable heightwise of the platform unit to apply pressure against a face of the platform unit, and means for causing relative movement of said supports to bring the platform unit and the sock lining together with their adjoining precemented faces pressed against each other to cause them to adhere.

7. In a machine for use in the manufacture of shoes, a support for a partially completed platform shoe having an upper and a sock lining united by stitching, a support for a platform unit, said platform unit support comprising a pair of clamps engageable with the toe and heel ends of a platform unit, spring means for urging one of said clamps toward the other to hold the platform unit yieldingly, and a plurality of abutments independently adjustable heightwise of the platform unit to apply pressure against a face of the platform unit, and treadle operated means for moving the platform unit support to lay the platform unit upon the sock lining and to press the platform unit thereagainst to cause the adjoining precemented faces of the platform unit and the sock lining to adhere.

8. In a machine for use in the manufacture of shoes, a support for a partially completed platform shoe having an upper, a sock lining, and a platform cover united by stitching, a pair of clamps engageable with the toe and heel ends of a platform unit to support the platform unit in register with the sock lining, a pair of guides in which said clamps are respectively movable heightwise of the shoe to permit them to be moved from clamping position to a position wherein they will not interfere with subsequent operations upon the platform cover, a support on which the guides are mounted one of the guides being thus mounted for movement toward and from the other, a spring acting upon said movable guide to cause the clamp guided heightwise thereby to be urged longitudinally of the shoe toward the other clamp and thus to cause the clamps to hold the platform unit yieldingly between them, means for pressing the clamped platform unit against the sock lining to cause precemented surfaces on the platform unit and the sock lining to adhere, and positive means operable after the platform unit has been pressed against the sock lining for moving the clamps heightwise of the shoe to said noninterfering position.

9. In a machine for use in the manufacture of shoes, a support for a partially completed platform shoe having a sock lining and an unturned platform cover secured to the margin thereof, a pair of turning horns engageable within the unturned platform cover at opposite ends of the shoe, a common support upon which the horns are pivotally mounted for movement toward and from each other lengthwise of the shoe, means for moving the common support and thereby the horns heightwise to cause the horns to turn the platform cover at both ends of the shoe, and a common means for moving the horns lengthwise of the shoe to increase the distance between them as they move heightwise after their initial engagement with the platform cover to enable them to clear the seam by which the platform cover is stitched to the sock lining.

10. In a machine for use in the manufacture of shoes, a support for a partially completed platform shoe having a sock lining and an unturned platform cover secured to the margin thereof, said support extending within the shoe substantially from one end of the shoe to the other, a pair of turning horns engageable within the un-

turned platform cover at opposite ends of the shoe, a slide on which the horns are mounted for movement relative to the slide in a direction toward and from each other lengthwise of the shoe, a guideway in which the slide is movable heightwise of the shoe to cause the horns to turn the platform cover at both ends of the shoe, means for moving the slide in said guideway, and means for moving the horns to increase the distance between them after their initial engagement with the platform cover to enable the horns to clear the seam by which the platform cover is stitched to the sock lining.

11. In a machine for use in the manufacture of shoes, a support for a partially completed platform shoe having a sock lining and an unturned platform cover secured to the margin thereof, said support extending within the shoe substantially from one end to the other thereof, a pair of turning horns engageable within the unturned platform cover at opposite ends of the shoe, a slide on which the horns are pivotally mounted for swinging movement toward and from each other in a direction lengthwise of the shoe, a toggle connecting the horns to control the distance between them, a guideway in which the slide is movable heightwise of the shoe to cause the horns to turn the platform cover at both ends of the shoe, means for moving the slide in its guideway, and means operated by the slide and acting upon the toggle for moving the horns to increase the distance between them after their initial engagement with the platform cover to enable the horns to clear the seam by which the platform cover is stitched to the sock lining.

EDWARD QUINN.

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