Nov. 18, 1941. L. J. BAZZONI 2,262,789

MACHINE FOR OPERATING UPON SOLES OF SHOES

Filed July 18, 1940 5 Sheets-Sheet 1

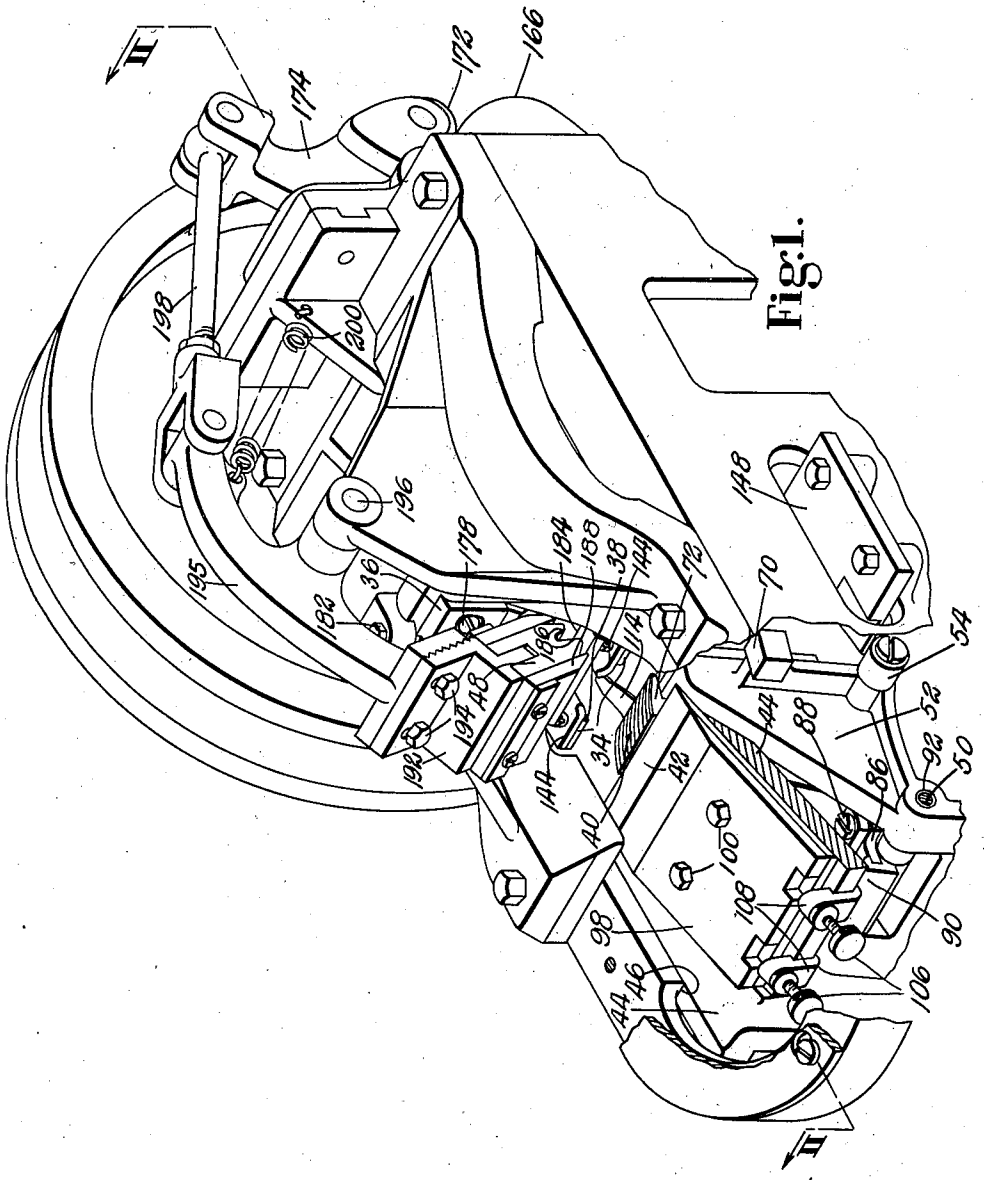


Fig.1.

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MACHINE FOR OPERATING UPON SOLES OF SHOES

Filed July 18, 1940 5 Sheets-Sheet 2

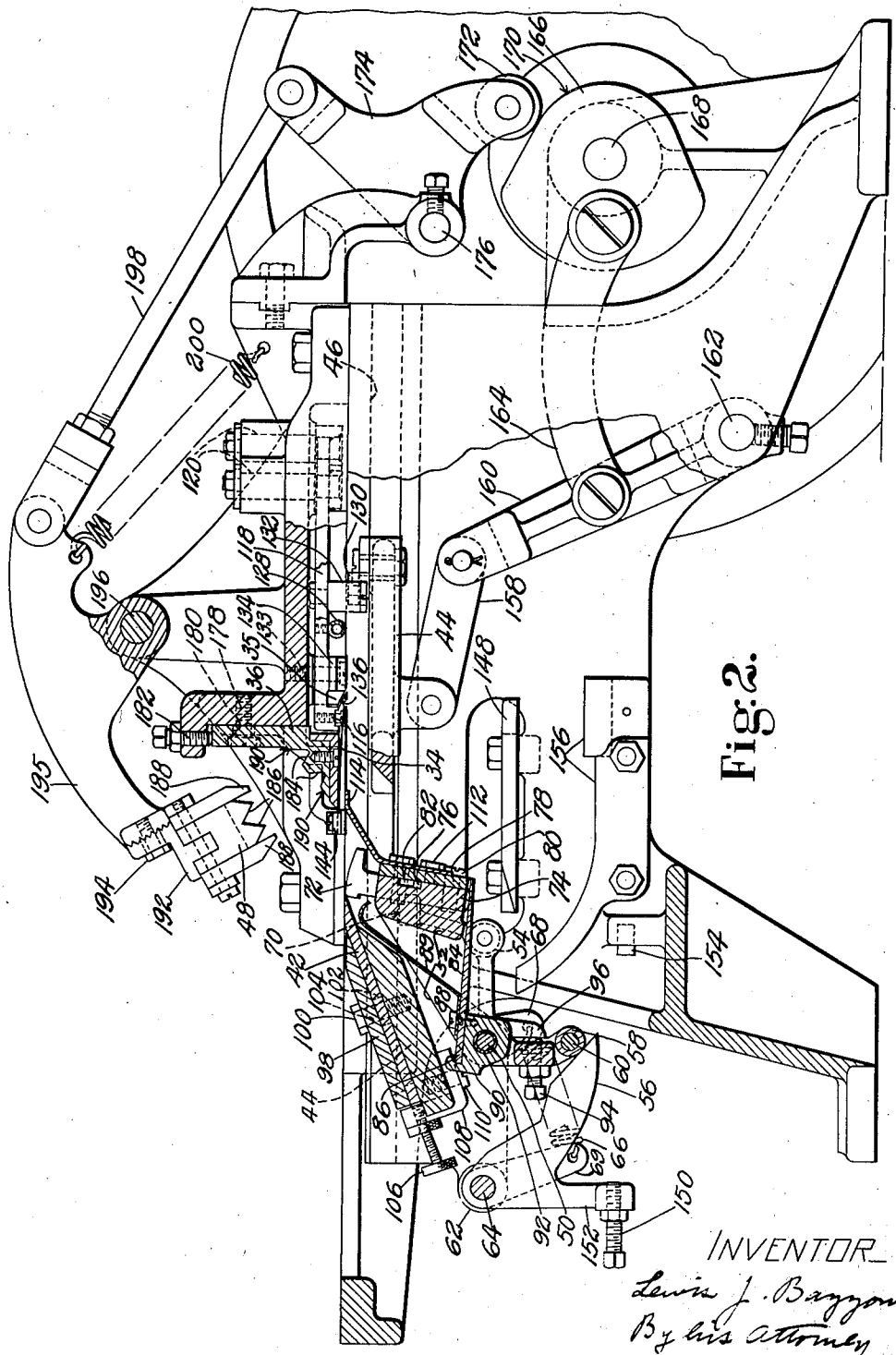


Fig. 2.

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MACHINE FOR OPERATING UPON SOLES OF SHOES

Filed July 18, 1940 5 Sheets-Sheet 3

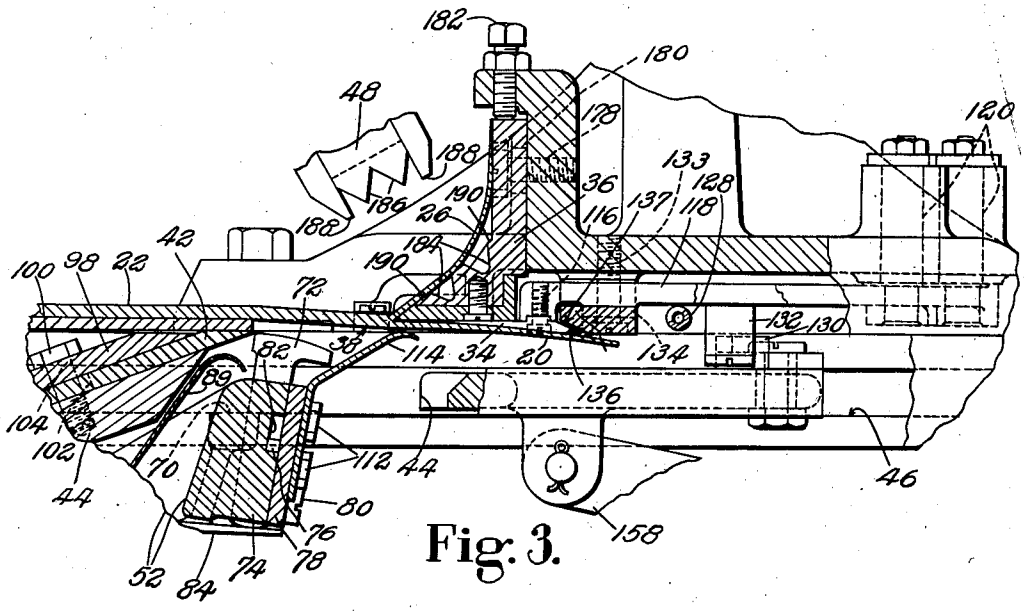


Fig. 3.

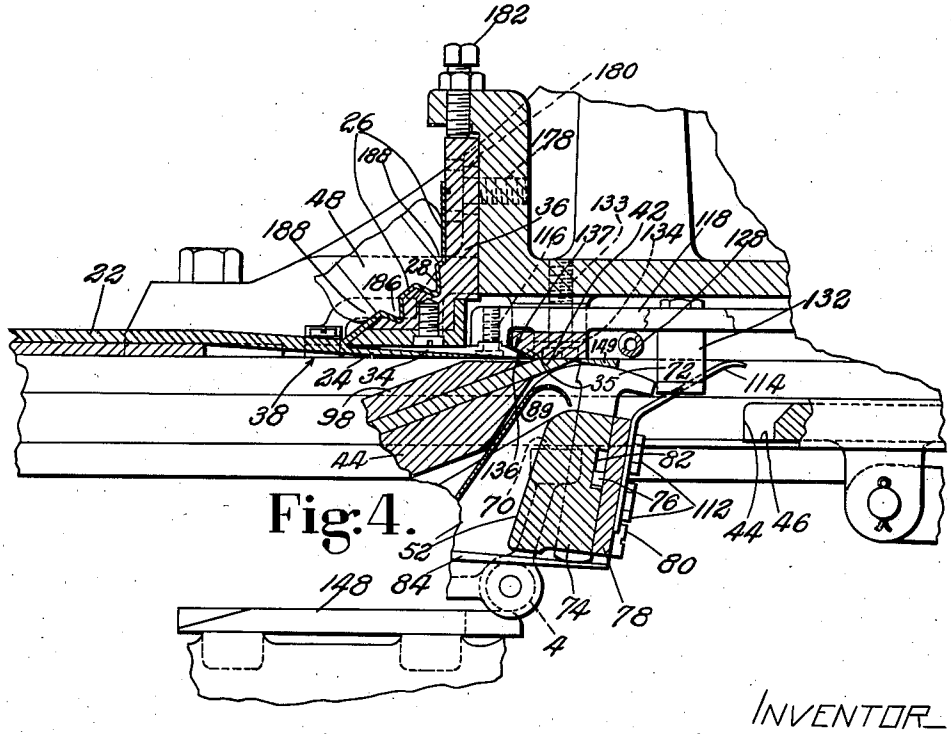


Fig. 4.

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MACHINE FOR OPERATING UPON SOLES OF SHOES

Filed July 18, 1940 5 Sheets-Sheet 4

Fig. 8.

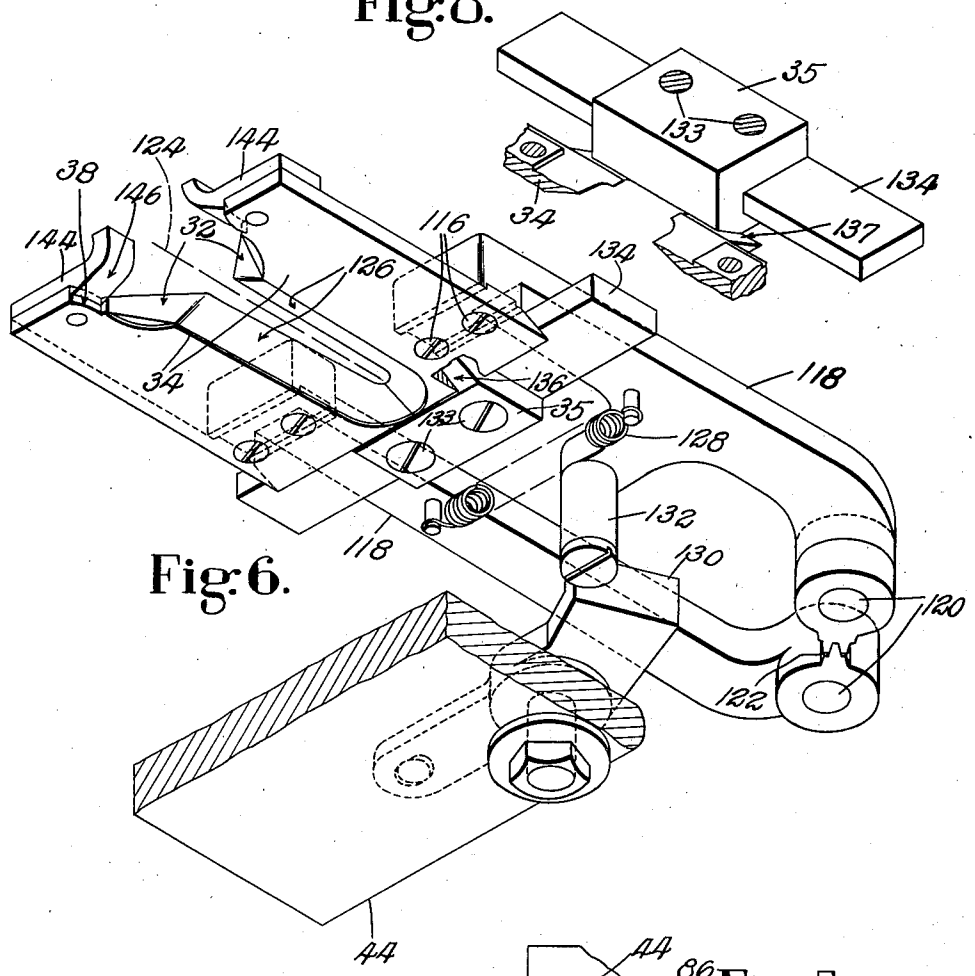


Fig. 6.

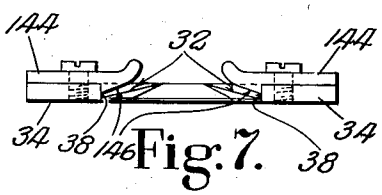


Fig. 7.

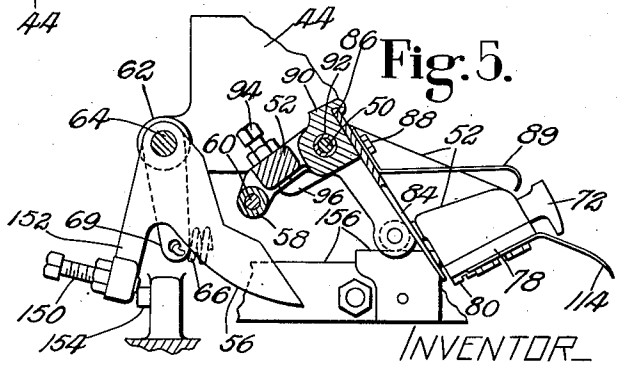


Fig. 5.

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Nov. 18, 1941. L. J. BAZZONI 2,262,789

MACHINE FOR OPERATING UPON SOLES OF SHOES

Filed July 18, 1940 5 Sheets-Sheet 5

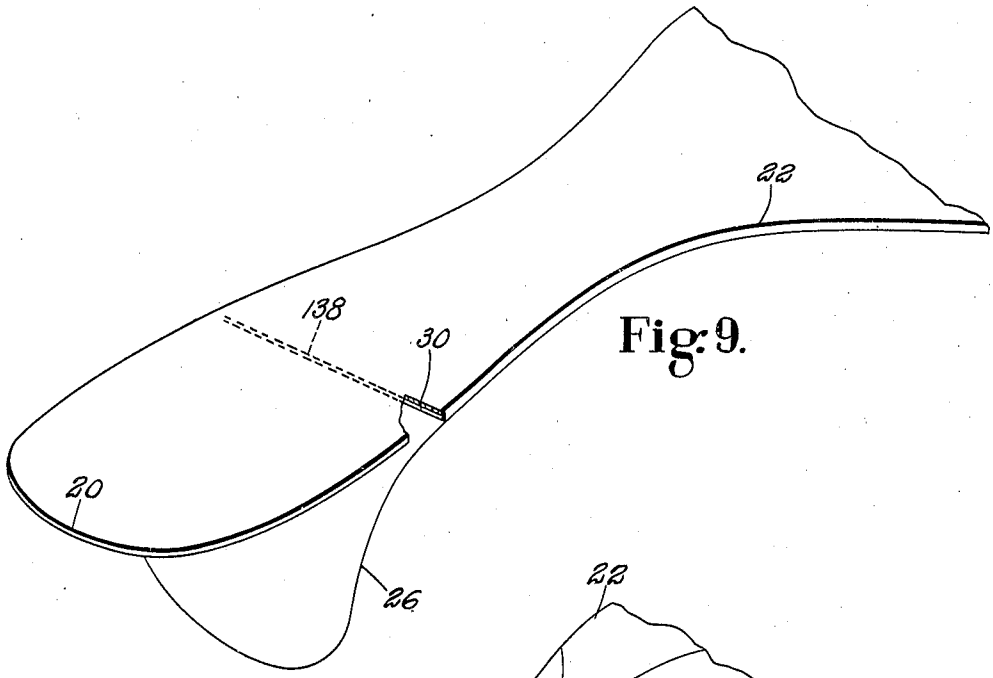


Fig: 9.

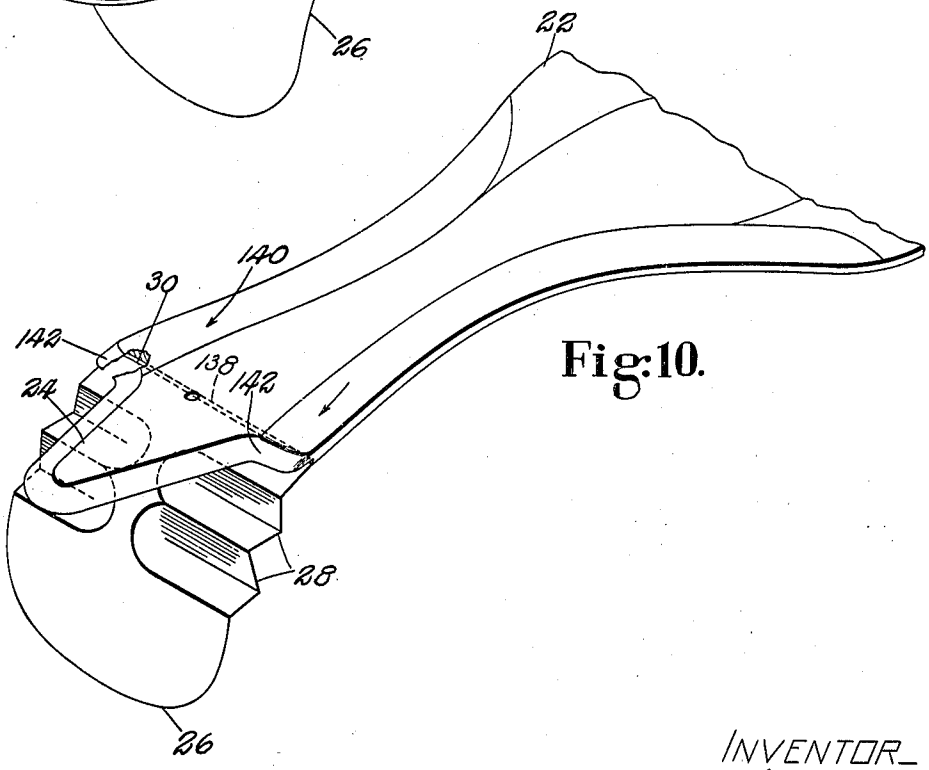


Fig: 10.

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Patented Nov. 18, 1941 2,262,789

UNITED STATES PATENT OFFICE

2,262,789

MACHINE FOR OPERATING UPON SOLES OF SHOES

Lewis J. Bazzoni, Swampscott, Mass., assignor to United Shoe Machinery Corporation, Borough of Flemington, N. J., a corporation of New Jersey

Application July 18, 1940, Serial No. 346,159

17 Claims. (Cl. 12—17)

This invention relates to machines for operating upon soles of shoes and is illustrated as embodied in a machine for simultaneously reducing the heel-seat portions of soles to form heel-seat tabs, and molding heel-breast covering flaps which have been split from said soles.

In United States Letters Pattent No. 2,125,328, granted August 2, 1938, on an application filed in my name, there is described a method of shoemaking which comprises splitting the heel end of an unattached sole to form a heel-breast covering flap and simultaneously therewith removing a layer of sole material to form a heel-breast receiving shoulder at the base of said flap, and thereafter reducing the heel-seat portion of the split sole to form a heel-seat tab preparatory to positioning the sole upon and attaching the same to the shoe. The sole may advantageously be split and the heelbreast receiving shoulder formed by the use of a machine disclosed in United States Letters Patent No. 2,173,822, granted September 26, 1939, on an application filed in my name.

It is desirable that the heel-seat tab of the finished shoe shall approximately fill the attaching face or cup of the Louis heel of said shoe, thereby serving as a solid base to which said heel may be attached. The tab, however, should terminate well within the rim of the attaching face of the heel and should not be so thick that it prevents said rim from being forced into snug engagement with the overlasted counter portion of the shoe during the heel attaching operation. It will be appreciated that since heels of shoes of a given style vary in size it is desirable that the size of the heel-seat tab be varied according to the size of the heel to be attached to the shoe.

It is an object of the present invention to provide a machine for quickly and effectively reducing the heel-seat portions of soles of shoes of different sizes to form heel-seat tabs varying in size in accordance with the size of the sole of the shoe and, accordingly, the size of the heel to be attached to the shoe.

With the above object in view and in accordance with a feature of the present invention there is provided a heel-seat fitting machine having a matrix comprising a plurality of parts, means associated with the matrix for positioning the heel-seat portion of a sole, means for measuring the sole widthwise and for effecting relative movement of said parts of the matrix to vary the effective width of said matrix in accordance with the measured width of the sole, a knife, a presser member for conforming the heel-seat portion of the sole to the matrix, and mechanism for effecting relative movement of the knife and the matrix to reduce the heel-seat portion of the sole, thereby forming on the sole a heel-seat tab.

In the illustrative machine the matrix is concave and comprises a pair of plates which are movable equal distances toward and away from each other for varying the effective width of the matrix in accordance with the width of the sole being operated upon. The sole is positioned lengthwise in the machine by moving the heel-breast receiving shoulder of the sole into engagement with front edges or faces of the plates of the matrix, the heel-seat portion of the sole underlying said matrix. A one-revolution clutch is then tripped with the result that the matrix plates are moved toward each other by a spring until abutments on the plates engage the opposite lateral edges respectively of the sole, and a slide which carries the above-mentioned presser member and the knife is moved rearwardly past the lower face of the matrix, the presser member which comprises a plurality of individual spring pressed fingers serving progressively to force the heel-seat portion of the sole against the matrix, and the knife which has a straight cutting edge and trails the presser member reducing the heel-seat portion of the sole to a shape determined by the matrix. With the above-described arrangement the effective width of the matrix and accordingly the width of the resultant tab formed by the machine varies in accordance with the width of the sole. At the end of the heel-seat reducing stroke the presser member is dropped away from the matrix to facilitate the removal of the U-shaped chip trimmed from the heel-seat portion of the sole.

In order to facilitate the subsequent application and permanent attachment of a flap split from the sole to the breast of a Louis heel attached to a shoe to which the sole is attached, the illustrative heel-seat fitting machine comprises means for supporting a flap split from the sole of the shoe, and means comprising a rigid mold and a conformable presser member constructed and arranged to form at the lateral margins of the base portions of the flap crimps extending widthwise of the flap.

By the use of the illustrative machine the heel-seat portions of soles can be quickly and effectively reduced to produce heel-seat tabs of different sizes in accordance with the widths of the soles, said tabs in the finished shoes serving

as suitable bases to which heels can be effectively attached. Moreover, the heel-breast covering flaps may be molded in the illustrative machine without substantially retarding the heel-seat fitting operation, with the result that said flaps are molded at practically no additional expense.

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 is a perspective view, partly broken away, of the illustrative machine;

Fig. 2 is a side elevation, partly in section, on line II—II of Fig. 1;

Figs. 3, 4 and 5 are enlarged sectional views on line II—II of Fig. 1 showing the relative positions of sole-engaging portions of the machine and a sole being operated upon in the machine during three progressive stages of the heel-seat reducing and flap-molding operation;

Figs. 6, 7 and 8 are detail views of a matrix of the machine; and

Figs. 9 and 10 are perspective views showing sole before and after being operated upon by the machine.

The illustrative machine is described with reference to reducing the heel-seat portion **20** (Figs. 3 and 9) of a sole **22** (Figs. 3, 4, 9 and 10) which has already been operated upon by the machine disclosed in said United States Letters Patent No. 2,173,822, to form a heel-seat tab **24** (Figs. 4 and 10), and also with reference to stretching the lateral margins of a flap **26** split from the sole, to form crimps **28** which extend widthwise of the flap and facilitate the application of the same to the breast of a Louis heel (not shown) of a shoe to which the sole is attached.

The sole **22**, as shown in Fig. 3, is presented to the machine flap uppermost and heel end first with its heel-breast receiving shoulder **30** (Figs. 9 and 10) in engagement with the front edges or shoulders **32** (Figs. 6 and 7) of right and left plates **34** (Figs. 3, 4, 6, 7 and 8) constituting, together with a block **35**, a matrix, the heel-seat portion **20** of the sole **22** underlying the matrix, and the flap **26** being turned up so as to overlie a molding block **36** of a flap-stretching or molding clamp. When a one-revolution clutch (not shown) is tripped, the plates **34** of the matrix are moved toward each other until their opposed faces or abutments **38** (Figs. 1, 6 and 7) engage the opposite lateral edge of the sole, and a presser member **40** (Fig. 1) and a knife **42** (Figs. 1, 2 and 3), which, as will appear later, are mounted upon a slide **44** movable along guideways **46**, travel along the bottom of the matrix and in co-operation with the same reduce the heel-seat portion **20** of the sole **22** to form the tab **24**, a conformable rubber pad **48** of the flap-stretching clamp forcing the flap **26** against the molding block **36** to form the crimps **28** in the flap.

Pivoted upon a fulcrum pin **50** (Figs. 1, 2 and 5) secured to the slide **44** is a carrier **52** having laterally projecting trunnions **54** (Figs. 1 and 2), said carrier, when the machine is idle, being held in its raised position shown in Figs. 1 and 2 by a lever **56** (Figs. 2 and 5) which engages a roller **58** mounted upon a pin **60** secured to the carrier. The lever **56** has a hub portion **62** fulcrumed upon a pivot pin **64** secured to the slide **44** and is normally urged in a counterclockwise direction, as viewed in Fig. 2, by a spring **66** the forward end of which is secured to the lower end of a depending lug **68** secured to the slide **44**, the rear end of the spring being secured to a depending arm **69** formed integral with the hub **62**.

The presser member **40** (Fig. 1) comprises a plurality of presser fingers **72**, having convex upper ends, and shank portions which fit between spacer flanges **74** of the carrier **52** and are held in the carrier by a key or stop **76** and by a front plate **78** secured by screws **80** to the carrier. Each of the presser fingers **72** has an elongated keyway **82** and is constantly forced upward by a leaf spring **84** of a presser plate **86** (Figs. 1, 2 and 5) which is secured by screws **88** to a sleeve **90** secured to a hollow tubing **92** mounted upon the fulcrum pin **50** of the slide **44**. In order to force the leaf springs **84** with considerable pressure against the presser fingers **72**, respectively, there is provided a screw **94** which is threaded into the carrier **52** and has its rear end in engagement with a depending arm **96** formed integral with the sleeve **90**. Upward movement of the presser fingers **72** under the action of the leaf springs **84** is limited by the engagement of the bottoms of the keyways **82**, respectively, with the key or stop **76**. With the above arrangement, it will be clear that the upward pressure exerted by the leaf springs **84** against the presser fingers **72** may be varied by adjusting the screw **94** in the carrier **52**. Secured by the screws **88** to the presser plate **86** is a cover piece **89** which, as will appear later, prevents chips removed from the heel-seat portion of the sole from falling into a pocket formed at the upper side of the carrier **52** and, accordingly, assists in ejecting said chips from the machine.

The knife **42** is secured in its operative position to the slide **44** by a clamp plate **98** forced against the knife by screws **100** (Figs. 1, 2 and 3) which are threaded into the slide and pass through slots **102**, **104** (Figs. 2 and 3) in the knife **42** and the plate **98**, respectively. In order to facilitate the positioning of the knife **42** in the machine after sharpening, there are provided thrust screws **106** (Figs. 1 and 2) threaded into angular lugs **108** secured to the slide by screws **110** (Fig. 2). Secured to the carrier **52** by screws **112** is a flexible support **114** for retaining the heel-seat portion of the sole in close proximity to the matrix, thereby facilitating the presentation of the work to the machine.

The plates **34** of the matrix are secured by screws **116** to arms **118** which are mounted upon fulcrum pins **120** (Figs. 2, 3 and 6), respectively, carried by the machine frame, and are geared together at **122** (Fig. 6), the arrangement being such that the plates will always be located at practically equal distances from a central plane of reference **124**. Each of the plates **34** has at its under side a beveled face **126**, best shown in Fig. 6, the contour of the outer edges of the beveled faces when the plates are in their operative positions corresponding approximately to the contour of the heel-seat tab **24** to be formed upon the sole. It will be appreciated that plates **34** having differently shaped beveled faces **126** may be interchangeably secured to the arms **118** in accordance with the desired shape of the heel seat tab. The arms **118** are constantly urged toward each other by a spring **128**. When the machine is idle, the slide **44** being in its forward position the matrix plates **34** are held in their open position by a cam **130** which is secured to the slide **44** and is shaped and arranged to engage, during retractive movement of the slide, a roll **132** pivoted to one of the arms **118**, thereby causing the matrix plates **34** to move apart to their open positions, shown in Fig. 8.

In order effectively to support the plates 34 against displacement during the tab-forming operation, and to insure against the formation of an open gap between rear portions of the faces 126 of the plates, through which gap the rear end of the heel-seat portion 20 of the sole 22 otherwise might be forced during the trimming operation, there is provided the thrust block 35 which is secured by screws 133 to a support 134 secured to the main frame. The beveled face 136 (Figs. 3, 4 and 6) of the block 35 is constantly engaged by faces 137 of the matrix plates 34, the arrangement being such that the face 136 is approximately continuous with the faces 126 of the plates 34 and serves as the rear end of the matrix when said plates are spaced from each other.

In order slightly to depress the opposite lateral margins of the sole 22 immediately ahead of its heel-breast line 138 (Figs. 9 and 10) so that the shank reducing bevels 140 (Fig. 10) shall merge attractively with the forward beveled margins 142 of the heel-seat tab 24, there is provided a pair of lugs 144 (Figs. 1, 6 and 7) which override the sole and have upwardly and inwardly inclined sole engaging faces 146, respectively.

After the sole 22 has been positioned, as illustrated in Fig. 3, with its heel-breast receiving shoulder 30 in engagement with the front edges 32 of the plate, the clutch (not shown) is tripped causing the slide 44 to move rearwardly and the cam 130 to be moved out of engagement with the cam roll 132, thereby permitting the matrix plates 34 to close in on the sole until opposed abutments 38 of the plates 34 engage the opposite lateral edges of the sole. With such an arrangement it will be clear that the width of the matrix and, accordingly, the width of the resultant heel-seat tab is varied in accordance with the width of the sole.

It is desirable that the heel-seat portion 20 of the sole shall be effectively conformed to the matrix during the tab-forming operation and, accordingly, there are provided, at opposite sides of the machine, cams 148 (Figs. 1, 2 and 4) shaped and arranged to be engaged by the trunnions 54 of the carrier 52 during the rearward movement of the slide 44, the arrangement being such that the presser fingers 72 during the rearward or operating stroke of the slide 44 force the sole with considerable pressure against the matrix.

In order to dispose of the U-shaped chip 149 (Fig. 4) trimmed from the heel-seat portion 20 of the sole 22, the presser member 40 is permitted to drop away from the knife, to the position illustrated in Fig. 5, as it arrives at the end of its operating stroke and is swung back to its raised position, shown in Fig. 2 during its retractive movement with the slide. In order to effect the above-mentioned movement of the presser member 40, the cams 148 are of suitable length to insure that when the heel-seat portion of the sole has been trimmed, the trunnions 54 will run off said cams, a screw 150 (Figs. 2 and 5) adjustably secured to a depending lug 152 formed integral with the lever 56 just prior to this time engaging a stop 154 to prevent the lever 56 from following up the roll 58 of the carrier 52. Downward pivotal movement of the carrier 52 with reference to the slide 44 is limited by the engagement of one of the trunnions 54 with a cam 156 which is so shaped that the carrier during its retractive movement is swung in a counterclockwise direction, as viewed in Figs. 2 and 5, the carrier at the end of its retractive stroke being raised away from the cam 156 to its starting position, shown in Fig. 2, by the spring pressed lever 56.

The slide 44 is operatively connected by a link 158 (Fig. 2) to a lever 160 mounted upon a fulcrum pin 162 secured to the machine frame. A link 164 operatively connects the lever 162 and a cam 166 which is keyed to a drive shaft 168 and has a face 170 which is engaged by a cam roll 172 carried by a rocker arm 174 fulcrumed upon a pin 176 secured to the machine frame.

The flap-molding block 36 is adjustably secured to the machine frame by screws 178 which pass through elongated recesses 180 of the block and are threaded into the machine frame. To facilitate the positioning of the molding block 36 and the retaining of the same in position, there is provided a thrust screw 182 which is threaded into the machine frame. The molding block 36 has a pair of laterally extending grooves 184 of V-shaped cross section arranged to co-operate with V-shaped projections 186 of the conformable pad 48 to form the crimps 28 in the heel-breast covering flap 26. It will be noted that the conformable pad 48 comprises projections 188 for clamping the flap against the flat faces 190 (Fig. 2) of the molding block 36, the arrangement being such that the base portion of the flap is securely clamped between the projections 188 of the pad and the faces 190 of the molding block 36 before the base portion of the flap is stretched by the co-operative action of the associated grooves 184 of the block and the V-shaped projections 186 of the pad 48.

The pad 48 is bolted to a bracket 192 secured by screws 194 to the forward end of a lever 195 which is pivoted upon a fulcrum pin 196 secured to the main frame and is operatively connected to the rocker arm 174 by a link 198. The cam roll 172 is constantly forced against the face 170 of the cam 166 by a spring 200 the forward and rear ends of which are secured to the lever 195 and to the machine frame, respectively.

When the sole has been positioned in the machine as above described, the one-revolution clutch (not shown) is tripped, causing the knife 42 and the presser member 40 to co-operate with the matrix in reducing the heel-seat portion 20 of the sole 22 to form the heel-seat tab 24, and causing the conformable pad 48 to force the flap against the molding block 36 to form the crimps 28 in the flap. The sole is removed from the machine while the operative parts of the same are returning to their idle positions, shown in Fig. 3, the machine then coming to rest.

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

1. A heel-seat fitting machine having, in combination, a matrix comprising a plurality of parts, means associated with the matrix for positioning the heel-seat portion of a sole, means for measuring the sole widthwise and for effecting relative movement of said parts of the matrix to vary the effective width of said matrix in accordance with the measured width of the sole, a knife, a presser member for conforming the heel-seat portion of the sole to the matrix, and mechanism for effecting relative movement of the knife and the matrix to reduce the heel-seat portion of the sole thereby forming a heel-seat tab thereon.

2. A heel-seat fitting machine having, in combination, a matrix comprising a plurality of parts, means associated with the matrix for positioning the heel end of a sole, means for meas-

uring the sole widthwise and for effecting relative movement of said parts of the matrix to vary the size of the matrix in accordance with the measured width of the sole, a knife, and mechanism for effecting relative movement of the knife and the matrix to form a heel-seat tab upon the sole.

3. A heel-seat fitting machine having, in combination, a matrix comprising a pair of parts movable toward and away from each other, means associated with said parts for centralizing a sole, measuring the sole widthwise, and varying the effective width of the matrix in accordance with the measured width of the sole, a pressed member, a knife, and means for effecting relative movement of the presser member and the knife on the one hand and the matrix on the other hand to cause said presser member to force the heel-seat portion of the sole against the matrix and to cause the knife to reduce the heel-seat portion of the sole.

4. A heel-seat fitting machine having, in combination, a matrix comprising parts constructed and arranged to be moved toward and away from each other, each of said parts having a shoulder constructed and arranged to be engaged by a heel-breast receiving shoulder of a sole, each of said parts also having an abutment constructed and arranged to engage a lateral edge of the sole, movable means for reducing the heel-seat portion of the sole, and mechanism movable in response to movement of said means for forcing the abutments of the respective parts against opposite lateral edges of the sole to centralize the sole and to vary the effective shape of the matrix preparatory to reducing the sole.

5. A heel-seat fitting machine having, in combination, a matrix comprising a pair of plates, means for positioning the heel-seat portion of a sole with relation to the matrix, a presser member, a knife, means for effecting relative movement of the presser member and the knife on the one hand and the matrix on the other hand to form a heel-seat tab on the sole, and means responsive to said relative movement for effecting relative movement of the right and left plates of the matrix prior to the tab forming operation in order to vary the width of said matrix in accordance with the width of the sole being operated upon.

6. A heel-seat fitting machine having, in combination, a matrix comprising right and left plates geared together for equal movement in opposite directions to vary the effective shape of the matrix, a spring for normally urging the right and left plates toward each other, said plates comprising abutments constructed and arranged to be engaged by the opposite lateral edges of the sole to limit movement of the plates of the matrix toward each other, a presser member, a knife, means for moving said presser member and the knife in one direction past the matrix to form a heel-seat tab on the sole, and means responsive to the retractive movement of the presser member and the knife for moving the right and left plates of the matrix away from each other against the action of said spring.

7. A heel-seat fitting machine having, in combination, a matrix comprising right and left plates pivotally mounted for equal movement in opposite directions to vary the shape of the matrix, a spring for normally urging the right and left plates toward each other, said plates comprising abutments constructed and arranged to be engaged by the opposite lateral edges of the sole to limit movement of the plates of the matrix toward each other, a pressed member, a knife, means for moving the presser member and the knife in one direction past the matrix to form a heel-seat tab on the sole, and means responsive to movement of the presser member and the knife in said one direction for permitting the spring to swing the matrix plates toward each other until said abutments engage the opposite lateral edges of the sole, said last-named means also being responsive to retractive movement of the presser member and the knife to swing the matrix plates away from each other against the action of the spring.

8. A heel-seat fitting machine having, in combination, a matrix comprising a pair of plates, said plates having front edges constructed and arranged to be engaged by a heel-breast receiving shoulder formed upon a sole, said plates also having abutments constructed and arranged to engage the opposite lateral edges respectively of the sole, means for moving the plates toward each other until their abutments engage the opposite lateral edges of the sole thereby varying the effective width of the matrix in accordance with the width of the sole, and mechanism comprising a knife constructed and arranged to co-operate with said matrix in forming upon the the heel end of the sole a heel-seat tab.

9. A heel-seat fitting machine having, in combination, a matrix comprising a pair of plates, means associated with said plates for positioning the heel-seat portion of a sole lengthwise with relation to the matrix, said plates having abutments constructed and arranged to be moved into engagement with the lateral edges respectively of the sole, means for moving the plates with yielding pressure toward each other until the abutments engage the opposite lateral edges of the sole thereby varying the effective width of the matrix in accordance with the width of the sole, and means comprising a knife constructed and arranged to co-operate with the matrix in reducing the heel-seat portion of the sole to form a heel-seat tab.

10. A heel-seat fitting machine having, in combination, a matrix comprising a pair of plates, means associated with the plates for positioning the heel-seat portion of a sole lengthwise with relation to the matrix, said plates having abutments constructed and arranged to engage the opposite lateral edges respectively of the sole, resilient means for constantly urging the plates toward each other, mechanism comprising a knife constructed and arranged to co-operate with the matrix in reducing the heel-seat portion of the sole to form a heel-seat tab, mechanism for moving said first-named mechanism past the matrix to form the heel-seat tab, and means responsive to movement of said first-named mechanism for causing the plates to be moved apart against the action of said resilient means after the heel-seat tab has been formed upon the sole, said last-named means being constructed and arranged to permit the abutments of said plates to be moved into engagement with the opposite lateral edges of the sole under the action of said resilient means preparatory to forming the heel-seat tab.

11. A heel-seat fitting machine having, in combination, a matrix, a slide, a knife fixed to the slide, a presser member carried by the slide, means for moving the slide in one direction to cause the presser member and the matrix to co-operate

in progressively conforming the heel-seat portion of a sole to a predetermined shape and to cause the knife to trim the conformed heel-seat portion of the sole to form a heel-seat tab, and means for causing the presser member to move upon the slide to an inoperative position away from the matrix after the heel-seat portion of the sole has been trimmed and to remain in said inoperative position during a portion of the retractive movement of the slide.

12. A heel-seat fitting machine having, in combination, a concave matrix, means for positioning the heel-seat portion of a sole beneath the matrix, a presser member, a knife, means for moving the presser member and the knife in one direction to cause the same in co-operation with said matrix to reduce the heel-seat portion of the sole, means for causing the presser member to drop to an inoperative position away from the matrix after the heel-seat portion of the sole has been reduced and during a portion at least of its retractive movement, and means for moving the presser member to its raised operative position preparatory to reducing another sole.

13. A heel-seat fitting machine having, in combination, a matrix, means for positioning the heel-seat portion of a sole with relation to the matrix, a knife, a presser member arranged in advance of the knife, means for moving the presser member and the knife past the matrix thereby forcing the heel-seat portion of the sole against the matrix and reducing said heel-seat portion to a shape determined by the matrix, and means for moving the presser member to an inoperative position away from the matrix during a portion of the retractive movement of said member to insure that the material trimmed from the sole shall be removed from the machine.

14. A heel-seat fitting machine having, in combination, a matrix, means for positioning the heel-seat portion of a sole with relation to the matrix, a slide, a carrier pivoted to the slide, a knife secured to the slide and having a cutting edge, a presser member mounted upon the carrier and arranged in advance of the cutting edge of the knife, said presser member comprising a plurality of fingers, a stop, resilient means for forcing the fingers of said presser member into predetermined positions determined by said stop, means for moving the slide in one direction to cause the presser member to force the heel-seat portion of the sole progressively against the matrix and to cause the knife to reduce the heel-seat portion of the sole, means for causing the carrier to swing to an inoperative position upon the slide after the heel-seat portion of the sole has been reduced and during a portion of the retractive movement of the slide, and means for moving the carrier to its operative position upon the slide during the retractive movement of said slide.

15. A machine for operating upon soles of shoes having, in combination, means for positioning a sole the heel-end portion of which has been split to form a heel-breast flap, means for supporting said flap, means comprising a rigid mold and a conformable presser member constructed and arranged to form at the lateral margins of the base portion of said flap crimps extending laterally of the flap, and means for reducing the heel-seat portion of the sole.

16. A heel-seat fitting machine having, in combination, a matrix, a presser member comprising a plurality of spring pressed fingers, a knife, means for effecting relative movement of the presser member and the knife on the one hand and the matrix on the other hand to form a tab at the heel-seat portion of a sole having a heel-breast flap, and mechanism operated in timed relation with said means for forming at the lateral base margins of the flap crimps extending widthwise of said flap.

17. A heel-seat fitting machine having, in combination, a matrix comprising plates each having a face, means associated with the matrix for positioning the heel-seat portion of a sole with relation to said matrix, means for relatively moving the plates into different operative positions to vary the effective width of the matrix, said matrix comprising a thrust block constructed and arranged to be engaged by said plates and having a face which is approximately continuous with and bridges a gap formed between said faces of the plates when said plates are spaced from each other, a presser member for forcing the heel-seat portion of the sole against said faces of the plate and the block to conform said heel-seat portion to the matrix, a knife, and means for effecting relative movement of the matrix and the knife to reduce the heel-seat portion of said conformed sole.

LEWIS J. BAZZONI.

CERTIFICATE OF CORRECTION.

Patent 2,262,789 November 18, 1941.

LEWIS J. BAZZONI.

It is hereby certified that error appears in the printed specification of the above numbered patent requiring correction as follows: Page 2, first column, line 23, after "showing" insert --the--; page 4, first column, line 15, claim 3, and second column, line 3, claim 7, for "pressed" read - -presser--; second column, line 30, claim 8, strike out "the" first occurrence; and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 27th day of January, A. D. 1942.

Henry Van Arsdale,
Acting Commissioner of Patents.

(Seal)