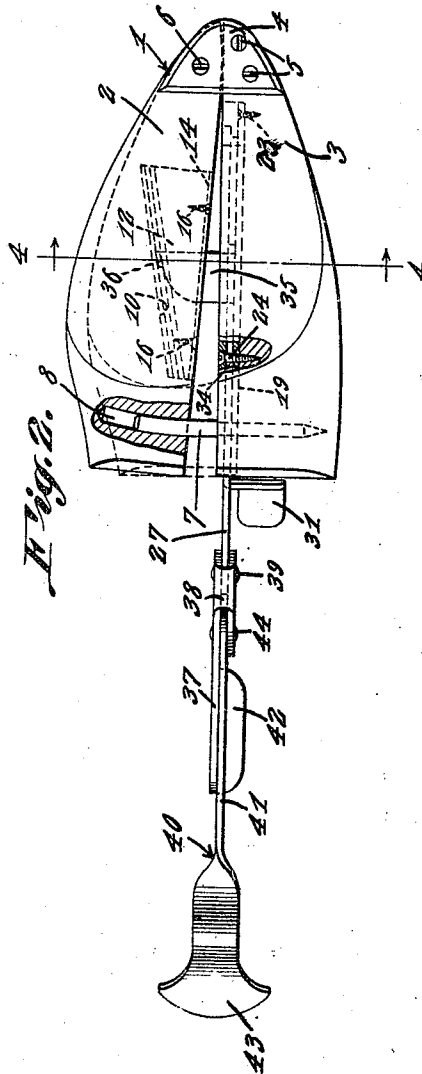
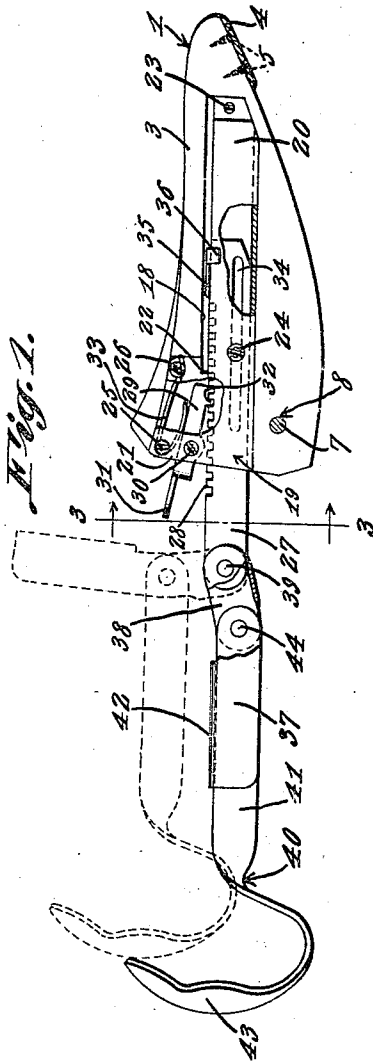


Feb. 6, 1923.

A. J. SHIMP.
SHOE FORM.
FILED JAN. 13, 1922.

1,444,010

2 SHEETS-SHEET 1



A. J. Shimp, Inventor

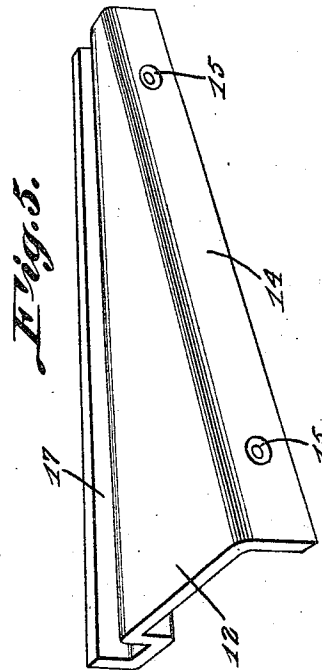
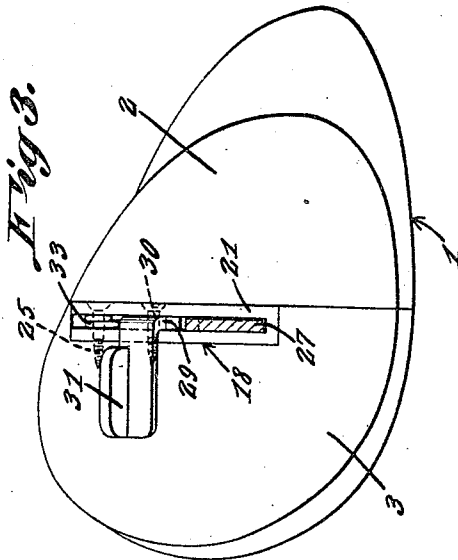
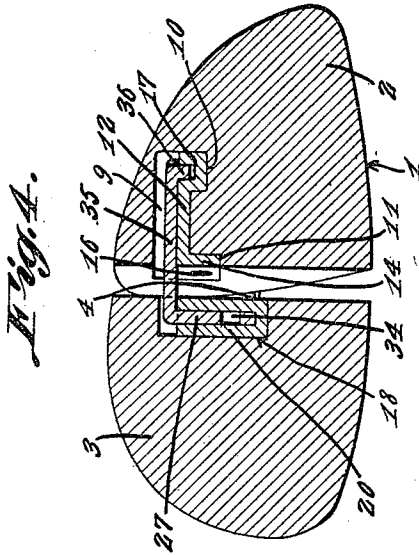
By *C. A. Sawley*
Attorney

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2 SHEETS-SHEET 2



A. J. Skimp, Inventor

By C. Hawley

Attorney

UNITED STATES PATENT OFFICE.

ARCHIE J. SHIMP, OF ROCKFORD, ILLINOIS.

SHOE FORM.

Application filed January 13, 1922. Serial No. 528,892.

To all whom it may concern:

Be it known that I, ARCHIE J. SHIMP, a citizen of the United States, residing at Rockford, in the county of Winnebago and State of Illinois, have invented a new and useful Shoe Form, of which the following is a specification.

It is the object of this invention to provide novel means for producing relative movement between the constituent sections of the toe piece of a shoe form, to secure a fitting of the toe piece in a shoe, and to provide novel means for producing relative movement between the toe piece and the thrust member, to the end that the toe piece may be advanced into the toe of a shoe.

It is within the province of the disclosure to improve generally and to enhance the utility of devices of that type to which the invention appertains.

With the above and other objects in view, which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that within the scope of what is claimed, changes in the precise embodiment of the invention shown can be made without departing from the spirit of the invention.

In the accompanying drawings:—

Figure 1 shows in longitudinal section, a device constructed in accordance with the invention, parts being broken away, most elements appearing in elevation; Figure 2 is a bottom plan; Figure 3 is an end elevation of the toe piece, the view being a section on the line 3—3 of Figure 1; Figure 4 is a section on the line 4—4 of Figure 2; Figure 5 is a perspective view showing the plate which is mounted in one of the toe sections.

In carrying out the invention, there is provided a toe piece denoted generally by the numeral 1 and comprising sections 2 and 3 which are pivotally connected at their forward ends. The pivotal connection between the sections 2 and 3 may be effected by a plate 4, secured rigidly at 5 to the section 3, and attached pivotally at 6 to the section

2, as indicated in Figure 2. An arcuate guide pin 7 is mounted in the section 3 and is received in an arcuate bore 8 formed in the section 2, the function of the guide pin being to hold the toe sections 2 and 3 for pivotal movement toward and away from each other in what may be termed a horizontal direction, without permitting relative vertical movement between the toe sections.

A recess 9 is fashioned in the inner surface of the section 2 and includes an internal extension 10 and external extension 11. A plate 12, of approximately triangular form is provided, the plate being located in the recess 9 of the section 2 and including a flange 14 having openings 15. The flange 14 is received in the external recess 11, the openings 15 being adapted to receive securing elements 16 which, engaging the section 2, hold the plate 12 in place thereon. The plate 12 is provided with a trough-shaped guide 17 received in the internal extension 10 of the recess 9.

A superficial recess 18 is formed in the inner surface of the toe section 3 and receives a U-shaped guide, denoted generally by the numeral 19, it being observed, as indicated in dotted line in Figure 2 that the guide 17 of the plate 12 is disposed at an acute angle to the guide 19, the guide 19 being disposed approximately parallel to the inner surface of the section 3, whereas the guide 17 is disposed at an acute angle to the inner surface of the section 2. The guide 19 comprises a body 21 and a reduced arm 20, there being a notch 22 in the inner edge of the body 21 of the guide. The forward end of the arm 20 of the guide 19 is attached to the toe section 3 by a securing element 23, the arm being attached, likewise, to the section 3, by a securing element 24, other securing elements 25, 26 and 30 connecting the body 21 of the guide to the member 3.

A locking bar or slide 27 is mounted for reciprocation in the guide 19 and is provided on its upper edge with a rack 28, the locking bar having an elongated slot 34, whereby the locking bar is mounted slidably on the securing element 24. A latch 29 ex-

tends within the body 21 of the guide 19 and is mounted intermediate its ends to swing on the pivot element 30, the latch being provided on its inner end with a head 32 adapted to cooperate with the rack 28 and being supplied at its outer end with a lateral finger piece 31 disposed behind the toe section 3. A U-shaped spring 33 is located within the body 21 of the guide 19, one arm of the spring being engaged about the securing elements 25 and 26, the other arm of the spring bearing against the inner end of the latch 29, to maintain the head 32 of the latch engaged releasably with the rack 28 of the locking bar 27. The locking bar or slide 27 has a lateral arm 35, extended into the recess 9 of the toe section 2 and mounted to slide on the plate 12, the arm having a depending finger 36 received slidably in the guide 17 on the plate 12.

The numeral 37 designates a lever having a double-walled end 38 wherein the rear end of the locking bar 27 is received, a fulcrum member 39 connecting the end 38 of the lever with the locking bar. The numeral 40 designates, generally, a heel piece or thrust member, including a shank 41 and provided with a heel piece 43. The heel piece 43 is shown as hook-shaped but this element may be constructed as desired. The forward end of the shank 41 of the member 40 is received in the double-walled end 38 of the lever 37 and is connected thereto by a pivot element 44. The wing 42 of the lever 37 overhangs the upper edge of the shank 41 of the thrust member 40.

The device may be used in various ways, depending upon the taste of the user. Preferably, the toe 1 is inserted into the article of foot wear, the latch 29 being disengaged from the slide 27, so that the slide can be advanced. When the slide is advanced, a lateral separation of the sections 2 and 3 of the toe piece 1, on the pivot element 6, will be brought about, because the finger 36 on the arm 35 of the slide is received in the guide 17, the slide proper being received in the guide member 19, the guide elements 17 and 19 being disposed at an acute angle to each other, as hereinbefore explained. When the toe sections 2 and 3 have been swung apart to the desired extent, the latch 29 may be engaged with the rack 28 of the slide 27. The heel piece 43 is brought into engagement with the heel portion of the upper of the shoe and the lever 37 is swung downwardly until the wing 42 rests on the upper edge of the shank 41 of the thrust member 40, as shown in Figure 1, whereupon the shoe or other article of foot wear will be expanded, and the device forming the subject matter of this invention will be held securely therein. When the lever 37 is swung downwardly at its free end until the wing 42 engages the upper edge of the shank

41 of the thrust member 40, the pivotal connection 44 between the lever and the shank of the thrust member is so positioned that the lever cannot swing upwardly and effect a release of the device accidentally, from the shoe.

What is claimed is:—

1. In a device of the class described, a toe piece comprising relatively movable sections, a guide on one section diverging from its inner edge toward its toe, a straight guide on the other section arranged longitudinally thereof, a slide mounted to reciprocate in said guides, means for reciprocating said slide, and means to lock the slide in adjusted position.

2. In a device of the class described, a toe piece comprising relatively movable sections; relatively inclined guides on the sections; a slide mounted for reciprocation in one guide and provided with means for engaging the other guide; a latch mounted movably on one section and cooperating with the slide to hold the slide in adjusted positions; a thrust member; and means connecting the thrust member with the slide for securing relative longitudinal movement therebetween.

3. In a device of the class described, a toe piece comprising relatively movable sections; relatively inclined guides on the sections; a slide co-operating with the guides to secure an expansion of the sections; means for holding the slide in adjusted positions; a thrust member; and a lever forming an operative connection between the slide and the thrust member.

4. In a device of the class described, a toe piece comprising relatively movable sections, relatively inclined guides on the sections diverging toward the toe thereof, a slide mounted to reciprocate in said guides, a thrust member including a shank pivotally connected with said slide, a lever fulcrumed on the slide and pivotally connected with the shank to lock said shank in operative position.

5. In a device of the class described, a toe piece comprising relatively movable sections, relatively inclined guides on said sections diverging toward the toe, a slide mounted to reciprocate in said guides, and provided on one edge with a plurality of longitudinally spaced teeth, a latch pivoted on one of said sections and having a head to engage said teeth to lock the slide in adjusted position, and means for yieldably holding said latch engaged with the slide.

6. In a device of the class described, a toe piece comprising laterally movable sections, one of said sections having a longitudinally extending guide adjacent its inner edge, the other section having a guide extending toward the toe and diverging, a slide having downturned arms engaging the

guides of said sections, means for reciprocating said slide to move said sections toward and away from each other, releasable means for locking said slide in adjusted
5 position and pivoted thrust means for actuating said slide.

In testimony that I claim the foregoing as

my own, I have hereto affixed my signature in the presence of two witnesses.

ARCHIE J. SHIMP.

Witnesses:

DAVID DEMADDEN,
LORETTA LADEN.