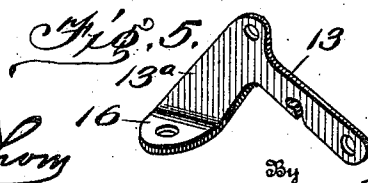
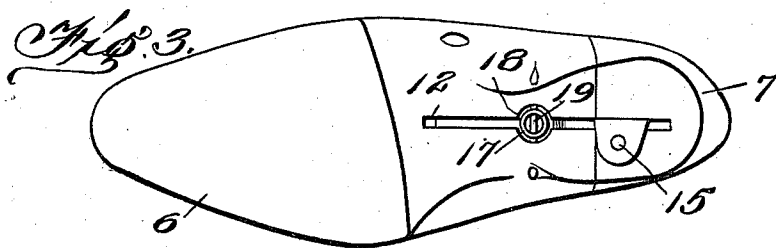
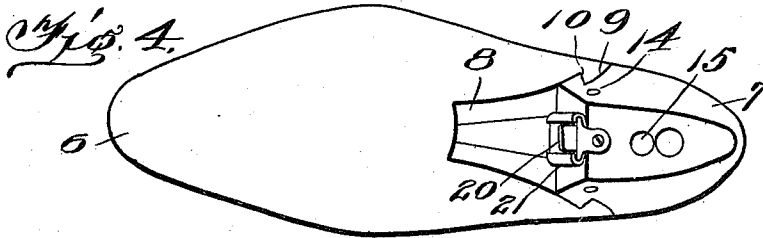
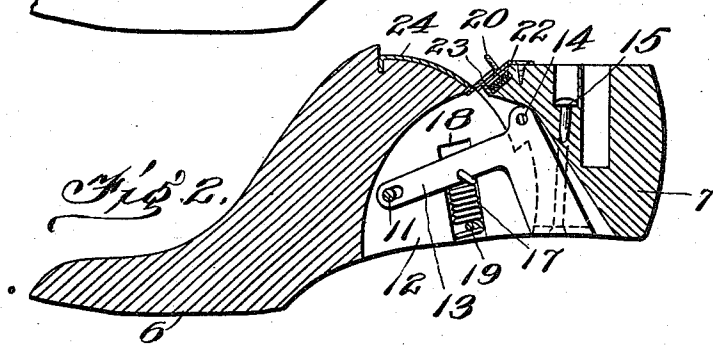
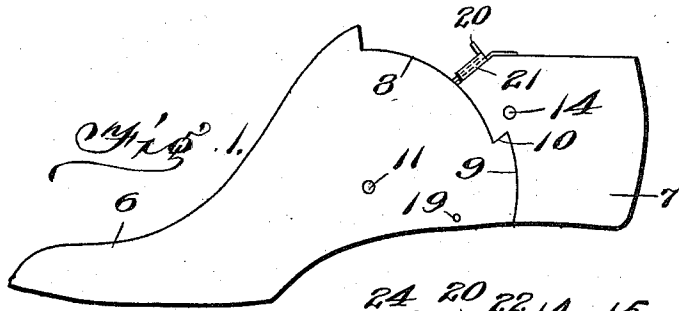


I. A. COOK.  
SHOE LAST.  
APPLICATION FILED MAY 22, 1909.

965,565.

Patented July 26, 1910.



Witnesses  
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# UNITED STATES PATENT OFFICE.

IRVING A. COOK, OF LANCASTER, OHIO.

SHOE-LAST.

965,565.

Specification of Letters Patent.

Patented July 26, 1910.

Application filed May 22, 1909. Serial No. 497,666.

*To all whom it may concern:*

Be it known that I, IRVING A. COOK, a citizen of the United States, residing at Lancaster, in the county of Fairfield and State of Ohio, have invented certain new and useful Improvements in Shoe-Lasts, of which the following is a specification.

This invention relates to shoe lasts, and particularly to lasts of that type having fore and heel sections which are connected together by a hinge or pivotal member to allow the heel section to swing upon the fore section so that the last may be easily inserted and removed from a boot or shoe to which it may be applied.

The object of the invention is to provide an improved last with respect to the means for connecting the sections in such manner that the front and heel sections will be in contact so that the strain will not come on the hinge, but will be transmitted directly from the toe to the heel.

In some hinged lasts now in use a large part of the wood is cut away leaving all the strain on the hinge and the catch which locks the parts together. Inasmuch as the strain is considerable the catch and hinge soon wear, causing the last to buckle and open at the bottom and throwing the last out of alinement.

In the last forming the subject of the present application very little of the wood is cut away and there is no strain whatever on the hinge or link, which serves merely to keep the two parts of the last from separating. The two parts or sections are in contact so that it has the strength of a single block last and combines the good qualities of the block and hinged last and eliminates the weak points of both.

The invention is illustrated in the accompanying drawings in which—

Figure 1 is a side view of the last; Fig. 2 is a longitudinal section; Fig. 3 is a bottom plan view; Fig. 4 is a top view; Fig. 5 is a perspective view of the hinge piece or link, detached.

Referring specifically to the drawings, the front or toe section of the last is indicated at 6 and the heel section at 7. These sections meet or match on segmental lines, the meeting ends of the sections being cut to form upper and lower segmental faces 8 and 9 connected by an undercut shoulder at 10. These segmental faces are cut on the pivot 11 as a center, the radius of the face 9 being

somewhat greater than that of the face 8, so as to form the shoulder 10 referred to which, as stated, is undercut so that the sections are hooked or engaged together when the last is in use.

The rear end of the fore part of the last is slotted as at 12, and the sections are connected together by means of a hinge member or tongue 13 which is pivotally connected to the front section by the cross pin 11. The rear part 13<sup>a</sup> of the hinge member fits in a slot in the heel section formed to receive it, and is fastened to the sections by means of a pin 14 at the top and by a vertical pin 15 which engages at the bottom with an angular lip or flange 16 formed at the lower end of the rear part 13<sup>a</sup> of the hinge member, said offset part fitting in a recess in the bottom of the heel so as to be flush with the bottom surface of the last. A coil spring 17 is set in a recess 18 near the rear end of the toe section and is connected in tension between the tongue 13 and a pin 19, and it tends to hold the last in straight or normal position, the shoulder at 10 acting as a stop when the spring brings the parts to alinement. In order to lock the last in such normal position the heel section is provided with a spring catch 20 which slides in a keeper plate 21 fastened to the top of the heel section adjacent the segmental face thereof, and this catch is advanced by a spring 22 which bears against a depending tongue 23 on the catch. The front end of the catch is adapted to engage behind or under the end of a plate 24 which is set in flush with the face 8 at the top thereof, said plate acting to prevent wear on the wooden part of the last as the parts are adjusted.

To "break" the last, the catch 20 is pulled back and released, and the heel portion may then be swung up, the segmental faces at 8 and 9 of the toe section sliding in contact with the corresponding opposite faces of the heel section and remaining in such contact in all positions. When released, the spring 17 will return the sections to normal position, and in such position the segmental faces will be in contact with each other and the strain on the last will thereby be transmitted directly between the section, the hinge member and catch being practically free from the pressure. The construction is such that the latch 20 may be omitted, being necessary only where the strain is very great and the work very heavy. An

advantage of the last is that when it is broken to remove the shoe there is no gap at the bottom of the last, and consequently no place for tacks and the like to gather. 5 Some hinged lasts have the defect that a space is formed when the last is opened, in which space tacks may collect or be caught and when the last is closed either throws the last out of line or cuts the last into the 10 wood. In my last this is impossible as the two parts fit closely together and as the heel comes back in place it scrapes off any tacks or dirt which may have gathered against the face of the joint. It will be noticed that 15 the hole in the end of the tongue 13, through which the pin 11 passes, is somewhat enlarged or elongated, allowing sufficient play for easy movement of the heel section, but 20 10 brings the segmental faces closely together when the last is straightened.

I claim:

A last comprising fore and heel sections having vertical slots, the front section also having a recess extending from the slot 25 therein through the bottom of the last, a hinge member located in said slots, said hinge member comprising a forwardly projecting tongue pivoted at its front end to the fore section and a rear offset part 13<sup>a</sup> 30 rigidly fixed in the slot in the heel section, the said sections having contacting segmental faces with a shoulder forming a stop, and a spring located in said recess and connected to the tongue to the rear of its pivot. 35

In testimony whereof, I affix my signature in presence of two witnesses.

IRVING A. COOK.

Witnesses:

RUSSELL A. WALKEY,  
WAYNE SPYBEY.