

No. 607,978.

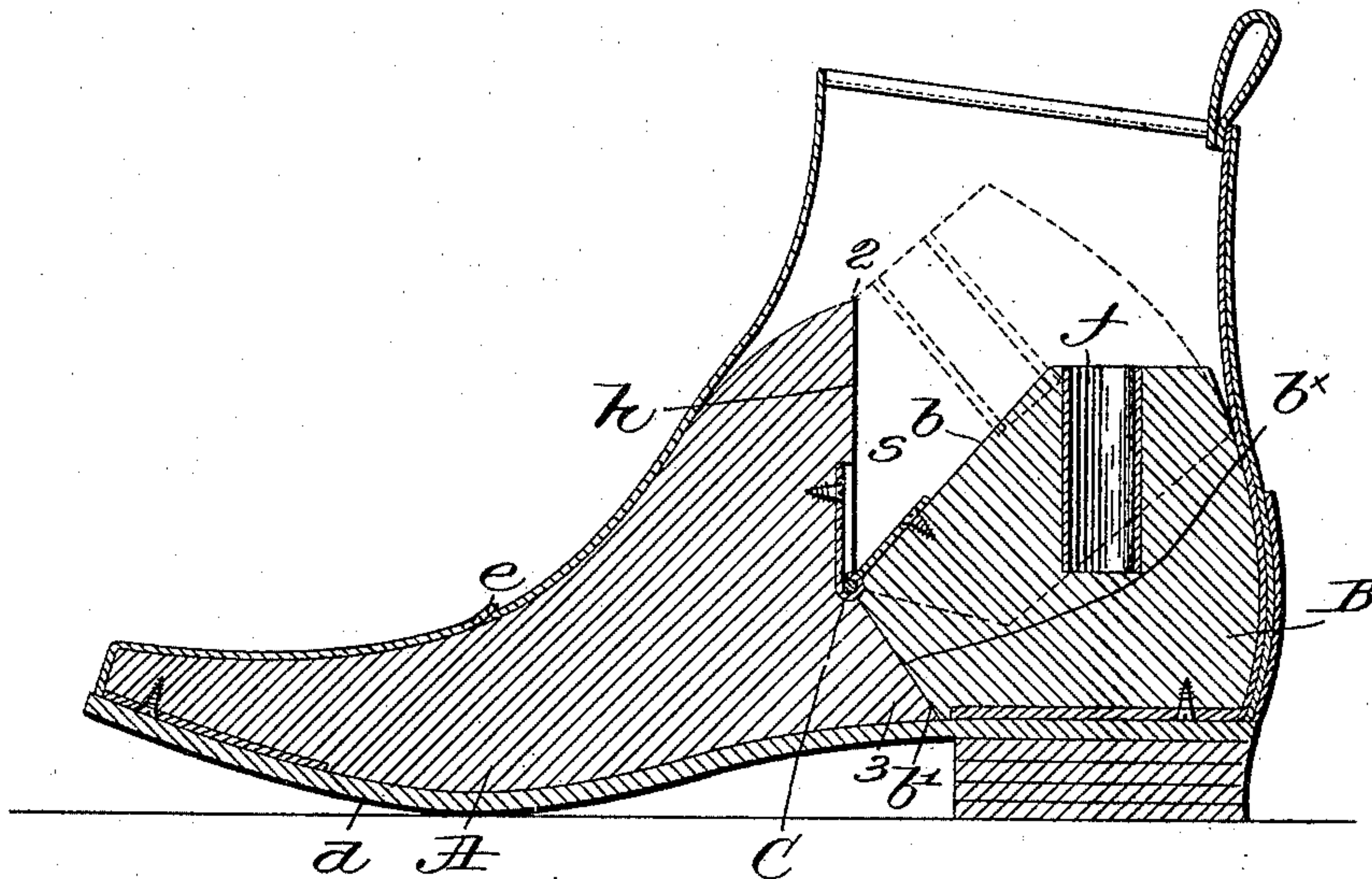
Patented July 26, 1898.

W. B. ARNOLD.

LAST.

(Application filed Dec. 31, 1897.)

(No Model.)



Witnesses:

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UNITED STATES PATENT OFFICE.

WILLIAM B. ARNOLD, OF ABINGTON, MASSACHUSETTS.

LAST.

SPECIFICATION forming part of Letters Patent No. 607,978, dated July 26, 1898.

Application filed December 31, 1897. Serial No. 664,798. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM B. ARNOLD, of North Abington, county of Plymouth, State of Massachusetts, have invented an Improvement in Lasts, of which the following description, in connection with the accompanying drawings, is a specification, like letters and figures on the drawing representing like parts.

This invention has for its object to provide an improved last.

My improved last is of the divided or multi-part last type, comprising a fore part and a heel part united by a hinge, the last shown having particular cuts and construction embodying several features of invention set forth in my application, Serial No. 494,993, filed December 28, 1893, this application covering and being restricted to the feature of invention of my improved last, which resides in having the line of cut of such irregular shape as to leave a considerable portion of the shank of the last extending backwardly from the fore part toward the heel, said line of cut or division between the fore part and heel part of the last below the hinge thereof and between the hinge and the bottom of the last being carried in the rear of and beyond a line erected on and perpendicular to the adjacent portion of the bottom of the last and intersecting the axis of said hinge, so as to provide a portion of the fore part below the hinge extending beneath a portion of the heel part when the last is in upright position and overlapping and receiving support from a portion of said heel part when the last is in inverted position, as will be more particularly explained hereinafter, and I wish it understood that this application and the patent granted thereon are restricted to the aforesaid feature of invention, and that all other features of invention which are disclosed but not claimed herein are reserved in the aforesaid original application.

By providing a rearwardly-extending portion of the fore part, which overlies the heel part when the last is in inverted position, or bottom up, the hinge, when the last is subjected to pressure tending to break it down or break it apart, is relieved of stress tending to dislodge or break it in proportion to the support which its overlapping shank or portion of the fore part receives by and from the

heel part; also, when the last is top side up in a shoe and it is to be removed by turning the heel part relatively to the fore part no scraping movement on the inner sole is possible for the reason that as the heel part starts in its swinging movement about its hinge it is immediately lifted upwardly away from said rearwardly-extending shank portion, thereby avoiding any scraping or roughening of the said inner sole, as would ordinarily result from removal of hinge-lasts, wherein the heel part does not lift immediately at the commencement of the swinging movement.

The drawing shows my invention embodied in a last arranged in a shoe, the dotted lines showing the heel end of the last as elevated and the last thereby shortened preparatory to moving it toward the heel end of the shoe for removal.

Referring to the drawing, it will be observed that in the particular last shown the cut made in separating the fore part A from the heel part B starts at the crown of the last, as at 2, and extends downwardly to the hinge C, leaving a shoulder *h*, and that another cut is made at an angle to the first-mentioned cut, so as to leave a space *s* between the shoulder *h* and the opposite face *b* of the heel part, this space or gap being provided in order that the heel part B may be turned upwardly, as shown in dotted lines. The feature of invention, however, which it is my purpose to cover herein has to do with the direction of cut below the hinge C and the resulting relation of the parts formed thereby.

Below the hinge C the cut is carried rearwardly, as indicated at *b^x*, being carried toward the heel of the last and preferably beyond an imaginary line erected upon and perpendicular to the adjacent portion of the bottom of the last and intersecting the axis of the said hinge, thereby leaving a rearward projection or extension, (herein indicated at 3,) which includes most of the shank of the last. The heel part is thus provided with an inclined or beveled face *b^x*, resting on the rearwardly-extended shank projection 3 when the last is in its full-line position, bottom up, and it is clear that with the last in the said inverted position and subjected to pressure

tending to break it down or separate its parts the hinge is relieved by this feature of my invention of stress tending to dislodge or break it in proportion to the support which
5 the overlapping shank of the fore part receives from the heel part, as described.

The drawing also shows the sole of a shoe having an attached upper *e*, the last being positioned within the shoe and having a usual
10 spindle-hole *f* for lasting purposes.

To remove the last, the operator by the use of suitable appliances, as a hand-pin, turns the heel part B into its dotted position, with the face *b* resting against the shoulder
15 *h* of the fore part, thereby shortening the last to enable the latter to be more readily removed from the shoe, said heel part during such swinging movement being at once raised from the sole of the shoe without
20 sweeping back along and to chafe or roughen the sole, thereby avoiding injury which would otherwise result and which would be serious, particularly in a high-grade shoe.

This invention is not limited to any particular construction of hinge used for connecting the parts, as any usual hinge applied
25 in any desired manner may be used.

My invention is not necessarily restricted to the identical lines of cut or division shown

in the drawings, as the same may be varied 30 within the spirit and scope of my invention.

Having described my invention, what I claim, and desire to secure by Letters Patent, is—

A last comprising a fore part and a heel 35 part hinged together above the bottom of the last, to enable said parts to have a relative swinging movement for shortening the last, the line of division between the said parts below said hinge and between the latter and 40 the bottom of the last being carried in the rear of and beyond a line erected on and perpendicular to the adjacent portion of the bottom of the last and intersecting the axis of said hinge, whereby a portion of the fore 45 part below said hinge lies beneath a portion of the heel part when the last is in upright position and overlies and receives support from a portion of said heel part when the last is in inverted position, substantially as 50 described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM B. ARNOLD.

Witnesses:

GEO. H. MAXWELL,
GEO. W. GREGORY.