No. 618,559. Patented Jan. 31, 1899.

G. W. CHASE.

SHOE.

(Application filed Mar. 18, 1898.)

(No Model.)

Fig. 1.

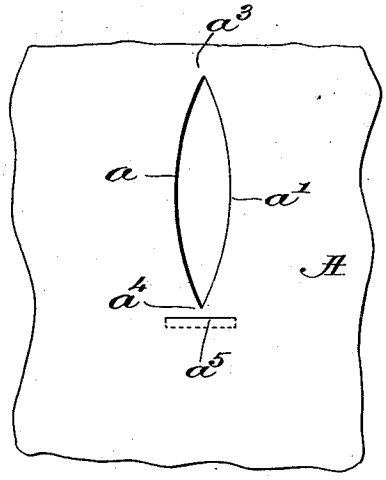


Fig. 2.

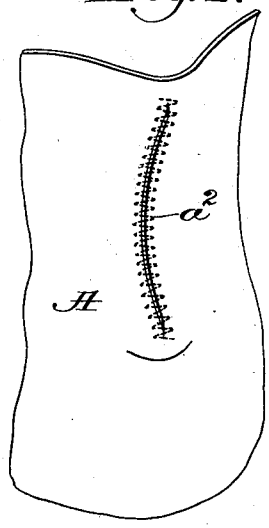


Fig. 3.

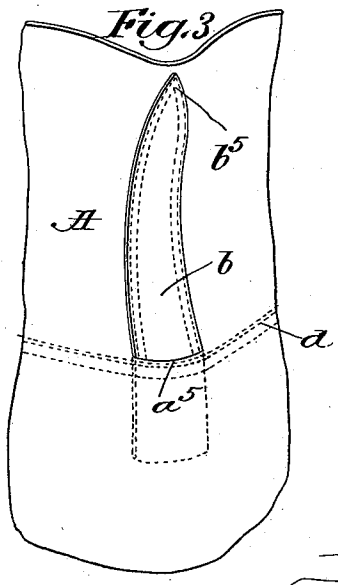


Fig. 4.

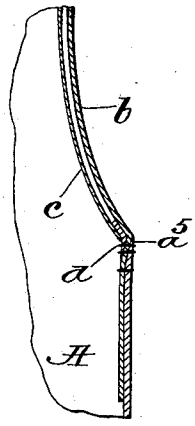


Fig. 5.

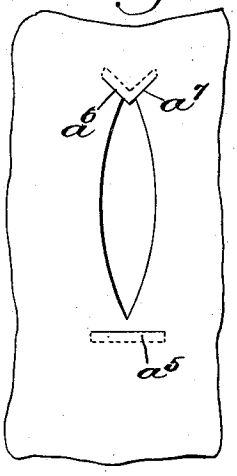


Fig. 6.

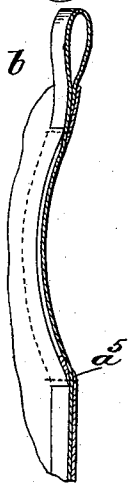
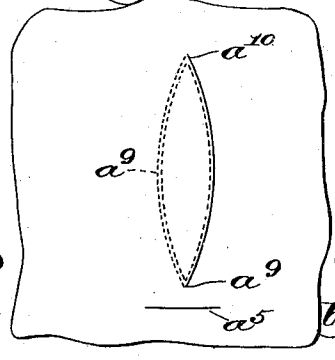


Fig. 7.



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UNITED STATES PATENT OFFICE.

GEORGE W. CHASE, OF NORTH ADAMS, MASSACHUSETTS.

SHOE.

SPECIFICATION forming part of Letters Patent No. 618,559, dated January 31, 1899.

Application filed March 18, 1898. Serial No. 674,294. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. CHASE, of North Adams, county of Berkshire, State of Massachusetts, have invented an Improvement in Shoes, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

My invention is an improvement in the formation of the back of a shoe, being particularly intended for shoes in which the vamp and top are cut as one piece of leather, although my invention is not restricted to this particular kind of shoe, but is applicable to various shoes.

Heretofore it has been the usual custom to form the back of a shoe by bringing together the edges of two separate pieces of leather properly cut to the right shape, and then these two edges are stitched together either with a welt between them, forming a heel-seam from the top edge to the bottom of the shoe, or a stay-piece of one kind or another is laid over the central back seam and is stitched to the upper at each side of said seam. Various places and lines of weakness are found to exist, however, in shoes constructed as above indicated, and, furthermore, such shoes are expensive and not easy to make and are difficult to repair. My present invention remedies all these defects, and presents, moreover, a shoe having a much more attractive and graceful back or ankle portion, being exceedingly neat, strong, durable, and inexpensive.

My invention comprises the features of construction hereinafter more particularly set forth, reference being had to the accompanying drawings, illustrative of preferred embodiments thereof, and will be more particularly defined in the appended claims, also forming a part of this specification.

In the drawings, Figure 1 is a plan view of a portion of a shoe upper or blank cut according to my invention. Fig. 2 is a perspective view thereof, showing the back portion above the counter as stitched in the process of manufacture. Fig. 3 is a perspective view of the back portion of a shoe completed according to my invention. Fig. 4 is a central vertical section thereof. Fig. 5 illustrates a modified form of the cut. Fig. 6 is a central vertical section of a construction like that shown in Fig. 5, provided with the backstay. Fig. 7 is a further modification.

The vamp or upper A may be of any usual or preferred pattern or variety, and inasmuch as my present invention relates wholly to the construction of the back of the shoe I have shown merely fragmentary portions of a vamp and top in order that my invention may be clearly understood without reference to the remaining details of construction of the shoe.

The upper A is provided with a central slit in the back, preferably in the form of two curved cuts $a\ a'$, meeting at their ends adjacent respectively to the top edge of the shoe and to the top of the counter, thereby leaving an intermediate gap or opening, so that when the edges $a\ a'$ are brought together and stitched, preferably as indicated at a^2, Fig. 2, the shoe will be given a graceful and convenient shape, as required for the ankle. Later on, in connection with Fig. 7, I have described another manner of making the vertical back seam; but it will be understood that I am not restricted to any single way of stitching and forming this back seam, provided only the parts are stitched or maintained in their proper shaping position. This cut leaves the leather whole or uncut at the top a^3 and at the bottom a^4, thereby effectually obviating all liability to rip at these places which might otherwise and does ordinarily exist.

Below the part a^4, adjacent the counter of the shoe, I make a short horizontal or transverse incision a^5, preferably cut slantingly or on a bevel, as indicated in Fig. 1 and shown more clearly in the cross-sectional views Figs. 4 and 6. A stay-piece b is passed through the opening at a^5, as shown in Fig. 4, depending inside the shoe at b' to constitute a filling-piece and give a smooth bearing-surface at b^2 for the heel to rest against. The stay-piece b is stitched to the upper by upwardly-extending rows of stitches b^3, one or more at either side of the back seam a^2, and by one or more transverse rows of stitches b^4. It will be apparent, viewing Fig. 4, that these latter rows of stitches not only secure the stay-piece in place, but also, by reason of the slanting or beveled cut in the slit a^5, secure both edges of the slit smoothly and neatly to

the stay-piece, avoiding any rough or abrupt edge such as would otherwise exist at this point.

The stay is stitched around its top, as indicated at b^5, or in another and very desirable form of my invention (shown in Figs. 5 and 6) the stay-piece is extended within the shoe at its upper end and bent around on itself to form a loop b^6, a short tongue a^6, formed by oblique and beveled cuts a^7, extending upwardly adjacent the edge portion of the top, being made to receive the stay, as will be evident viewing Figs. 5 and 6, so that when the stay is stitched to the top it is not only held firmly in loop form, but the stitches pass through the opposite beveled edges of the oblique cuts a^7 in the same manner as already described in connection with the cuts at a^5.

I have omitted herein to show by details the construction of the shoe, inasmuch as these will be of any usual or preferred variety. In Fig. 4 I have indicated a portion of lining c, which will preferably be stitched beneath the back seam at the same time that the seam is stitched, as indicated in Fig. 2. Also, I have indicated at d a usual false stitching employed in shoes made of one-piece top, and I have shown in Figs. 2 and 7 the slit a^5 as simply a straight incision and not beveled.

It will be understood that I am not limited to the precise shape or pattern of cuts which I have described, inasmuch as my invention is novel in many of its individual features. One variation is shown in Fig. 7, where the required shape is given to the back of the shoe simply by making a vertical incision and then lapping one edge, a^8, over the other edge, a^9, and then stitching the two in such overlapped position, after which the stay is secured in place in the same manner as is indicated in Figs. 3 and 4 or as in Fig. 6.

In the construction as shown in Fig. 7 the vertical incision is preferably made on a bevel the same as the incisions a^5 and a^7, the purpose of this bevel cut and its main advantage residing in the fact that by thus having the edges beveled they overlap each other more efficiently at the ends, as is evident viewing Fig. 7 at the point a^{10}. In further explanation of this last feature I will state that certain constructions have been heretofore devised in which simple incisions in the leather have been made in order to produce a given shape by overlapping the edges of the incision to the desired extent and stitching them down, and these constructions have invariably been exceedingly objectionable at the ends of the incisions for the reason that the stitches at the extreme end could not catch and hold both of the edges, because they could not be made to overlap at the said extreme end, but invariably left a more or less definite aperture liable subsequently to work open and cause the adjacent stitches to tear out and work loose. However, by cutting on a bevel, as I have done, the edges at their extreme ends overlap, and thus when the stitches are properly taken, as is indicated in Fig. 4, these two edges are stitched together with absolute certainty, making a smooth, tight, and strong seam. I regard this feature of my invention as of considerable importance and consider it a valuable improvement from a practical standpoint over the former constructions, whether employed in connection with the other improvements herein set forth or not. Also, the stay can be used either inside or outside.

The general construction embodying my present invention produces an exceedingly efficient back for a shoe. The appearance of the shoe is neat and smooth, the latter feature affording also material structural advantages, inasmuch as there is no edge or corner to catch and occasion ripping or tearing of the parts. By my construction there is no point where ripping is liable to start. For instance, the stitches at the upper edge are not liable to rip for the reason that the edge of the upper is integral or whole at a^3. Likewise the back seam a^2 cannot rip open for the reason that it is not only protected by the stay b, but it is strenghened by the whole parts a^3 a^4 and by the transverse stitches at a^5. Also, the edges of the latter are not liable to be scuffed open because of their formation and their being stitched to the stay-piece, said stay-piece also constituting at its inner end a neat smooth filling-piece for heel.

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

1. A shoe having its back formed with a vertical back seam terminating in whole parts at each end of the back seam, a transverse slit below said vertical seam adjacent the counter of the shoe, and a stay-piece extending through said transverse slit and over said vertical seam, said stay-piece being stitched at said transverse slit and on either side of the vertical seam, substantially as described.

2. A shoe having its back formed with a vertical back seam terminating in whole parts at each end of the back seam, a transverse slit below said vertical seam adjacent the counter of the shoe, said slit being cut obliquely downward toward the inside of the shoe, and the stay-piece extending through said transverse slit and over said vertical seam, substantially as described.

3. A shoe having its back formed with a vertical back seam terminating in whole parts at each end of the back seam, a transverse slit adjacent the upper end of said vertical seam, a lower transverse slit, and a stay-piece extending through said lower transverse slit and extending upwardly over said vertical seam, and inwardly through said upper transverse slit, said stay-piece being stitched to the upper at said transverse slits and along each side of said vertical back seam, substantially as described.

4. A shoe having its back formed with a ver-

tical back seam terminating in whole parts at each end of the back seam, a transverse slit below said vertical seam adjacent the counter of the shoe, a transverse slit adjacent the upper end of said vertical seam, and a stay-piece extending through said lower transverse slit and extending upwardly over said vertical seam and inwardly through said upper transverse slit, said stay-piece being bent over on itself in a loop adjacent the top edge of the back and being stitched to the upper at said transverse slits and along each side of said vertical back seam, substantially as described.

5. In a shoe, a back stay having its end inserted through an opening or slit in the shoe-top, said opening being cut obliquely to the material, thereby forming overlapping edges, and said stay and opposite edges being stitched through and through, substantially as described.

6. In a shoe, a back seam for giving shape to the ankle portion of the shoe, said seam being formed by a slit cut at its ends obliquely through the material, producing at said ends oppositely-beveled overlapping edges, and said beveled overlapping edges at said ends being stitched together by stitches passing through and through the two beveled edges, the material being stitched between said end stitches in suitable manner to hold the parts in their proper relative position for maintaining the required shape, substantially as described.

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

GEO. W. CHASE.

Witnesses:
JOHN COUPER EDWARDS,
AUGUSTA E. DEAN.