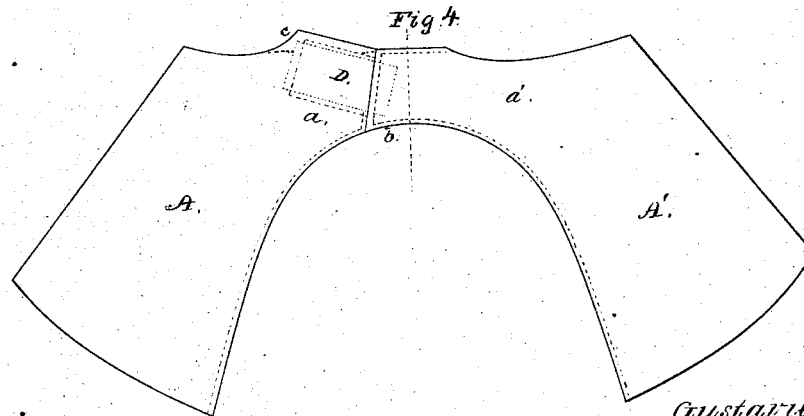
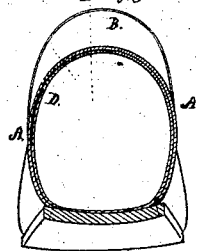
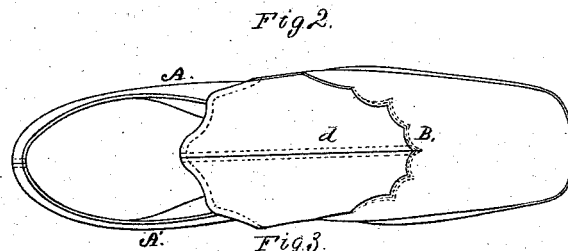
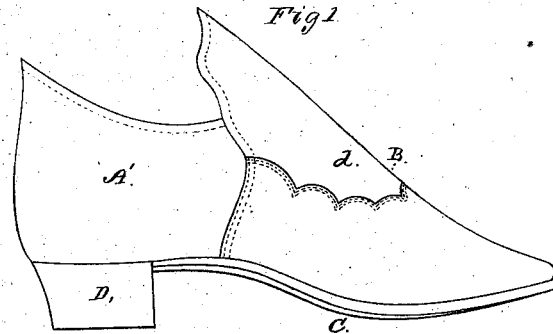


G. L. DAVIS.  
Shoes.

No. 161,103.

Patented March 23, 1875.



Witnesses  
Geo Gray  
J. G. Hale

Gustavus L. Davis  
by his attorney  
J. V. Hale

# UNITED STATES PATENT OFFICE.

GUSTAVUS L. DAVIS, OF HAVERHILL, MASSACHUSETTS.

## IMPROVEMENT IN SHOES.

Specification forming part of Letters Patent No. 161,103, dated March 23, 1875; application filed February 5, 1875.

*To all whom it may concern:*

Be it known that I, GUSTAVUS L. DAVIS, of Haverhill, in the county of Essex and State of Massachusetts, have invented certain new and useful Improvements in Shoes; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

In such drawing, Figure 1 is a side elevation, and Fig. 2 a top view, of a shoe constructed in accordance with my invention. Fig. 3 is a transverse vertical section taken through the elastic gore. Fig. 4 is a diagram of the quarters developed on a plane surface with the elastic gore inserted therein, the dotted lines showing the extension of the gore into the quarters.

My invention has reference to that class of shoes in which the fronts of the quarters extend under the vamp, and are connected by an elastic concealed gore; and my invention consists in the peculiar construction and formation of the quarters, as hereinafter described and claimed.

In the manufacture of shoes of this class, as ordinarily practiced, the lapels or instep portions of the quarters have been made of a uniform length, and connected by a wide band of elastic webbing extending across or over the crown of the instep. This is objectionable, as the elastic band impinging directly on the highest part of the instep (the point where greatest strain is exerted in walking) causes the quarters of the shoe, when worn, to chafe or abrade the foot of the wearer of the shoe.

The main object of my invention is to remedy this evil.

Another object of my invention is to enable the elastic gore to be so applied to the quarters as to conform to the curve of the instep, and have a firm connection at the ends of the gore, whereby the strain on the latter will be equally distributed, and the gore allowed to expand and contract without impinging against the foot.

In the drawings, A A' denote the quarters,

B the vamp, C the sole, and D the heel, of the shoe.

The quarters I form in two parts, which are connected at their rear portions, by a heel-seam or line of stitching, in the ordinary manner. The lapels or front portions *a a'* of the quarters I make of an unequal length, as shown in Figs. 3 and 4, the part *a'* having a prolonged portion, *b*, as shown by dotted lines in said Fig. 4, of a sufficient length to extend over and beyond the crown or arch of the instep, while the part *a* of the other quarter is made of a correspondingly-diminished length, so that their line of abuttal or intersection shall be on one side of the instep, whereby the abrading action of the parts is counteracted or materially diminished. The front of the quarter A' I also form with an extension, *c*, as shown in Fig. 4, the object of such extension being to enable the elastic gore D to be carried evenly over the instep, and be secured so as to cause the strain of the instep to be uniform upon all parts of the gore.

The gore D is connected to the quarter A at its extreme outer end, while the opposite end of the gore extends down between the lining and the quarter A', and is connected therewith or to its lining at a distance from the end of the quarter equal to the length of the gore, such construction, while connecting the quarters and allowing them to abut, permitting the full elasticity of the gore, without coming in contact with the surface of the foot.

The toe and side portions of the vamp I form of a single piece of leather, and connect them with an instep portion, *d*, which I prefer to make in two parts, curved at their line of intersection, and connected by a line of stitching, whereby I am enabled to give to such part the desired curvature to fit the arch of the instep; but, if desirable, such part may be made in a single piece and crimped. In either case such part is to be connected with the lower portion by one or more lines of stitching.

Having described my invention, what I claim is—

1. In a shoe having its quarters united by an elastic gore, and having a vamp applied externally thereto, the quarters A A', having

their lapels or front portions formed of unequal length, one of such lapels extending over and beyond the crown of the instep, while the lapel of its fellow quarter is of a correspondingly-decreased length, the same being as shown and described, and for the purpose set forth.

2. In a shoe having its quarters A A' united by elastic connection or gore, and having a vamp applied externally thereto, the part A formed with the extension *e*, as and for the purpose set forth.

3. In a shoe having its quarters united by

an elastic connection or gore, the vamp B, having its body or toe and side portions formed whole or of a single piece of leather, and its instep part *d* curved and united thereto, as and for the purpose set forth.

In testimony that I claim the foregoing as my own invention I affix my signature in presence of two witnesses.

GUSTAVUS L. DAVIS.

Witnesses:

F. P. HALE,

F. C. HALE.