J. H. VERMILYA.

Shoes.

No. 147,533. Patented Feb. 17, 1874.

Fig 1.

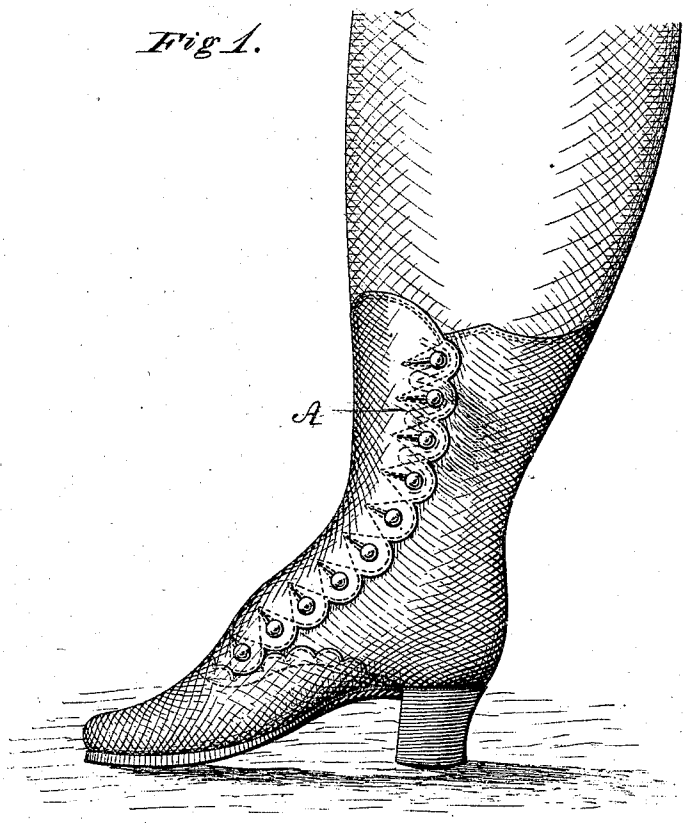


Fig 2.

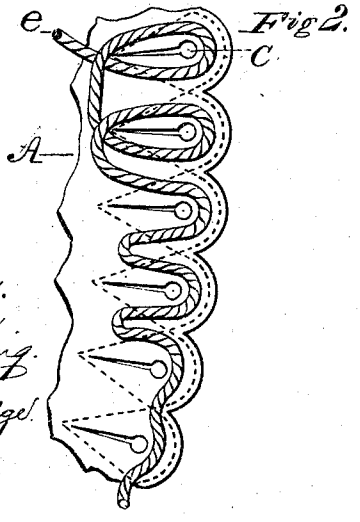
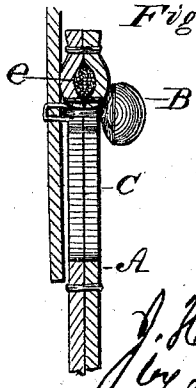


Fig 3.



Witnesses.

Harry King.

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UNITED STATES PATENT OFFICE.

JAMES H. VERMILYA, OF WASHINGTON, DISTRICT OF COLUMBIA.

IMPROVEMENT IN SHOES.

Specification forming part of Letters Patent No. **147,533**, dated February 17, 1874; application filed January 6, 1874.

To all whom it may concern:

Be it known that I, JAMES H. VERMILYA, of Washington, in the county of Washington and District of Columbia, have invented certain Improvements in Shoes, of which the following is a specification:

My invention relates to that class of shoes in which buttons are used, with button-holes for fastening; and the invention consists in inserting a cord between the outer layer of the shoe and the lining around or in front of the button-holes in such a manner as to strengthen them, as hereinafter more fully explained.

Figure 1 represents a shoe complete, with my improvement applied thereto. Fig. 2 represents the outer layer, with the lining detached, showing the manner of applying the cord; and Fig. 3 is a transverse section of the flap taken through one of the button-holes, showing the cord in front of the button.

It is now common to construct shoes for ladies' and children's wear, and especially gaiters, with buttons and button-holes, and in all first-class work it is necessary to work the button-holes by hand, as is usually done on cloth garments, which operation adds considerably to the cost of the shoe. Even when this is done the button-holes frequently tear out, especially when the material is light and thin; and to remedy this, it is common with some makers to lay a cord, or strands of silk or thread, along the edge of the button-hole and secure it by the stitches formed by hand in working the button-hole.

To obviate the necessity of working the button-holes, and at the same time greatly increase their strength, is the object of my invention; and to do this, I provide a strong cord, *e*, preferring for this purpose one composed of several strands of strong linen thread, properly waxed, such as is used by shoemakers in sewing the soles of boots or shoes; and after the button-holes are cut in the flap A, secure it by paste to the inner face of the outside layer, in such a manner that the cord *e* shall pass around or along in front of each of the button-holes *c*, as shown in Fig. 2. As represented in Fig. 2, the cord *e* may be arranged in various ways. It may be passed entirely around each button-hole successively, as shown in the upper part of said figure, or it may be arranged in a zigzag form between and in front of each hole, as shown at the central portion of said figure, or it may be arranged in a curved or in a straight line along in front of them, as shown in the lower portion of Fig. 2. A little paste rubbed upon the leather when the cord is applied will suffice to hold it in place, after which the lining is placed over it, when the flap is placed on a sewing-machine and the parts stitched together, the dotted lines, Figs. 1 and 2, indicating the rows of stitching. It will thus be seen that the cord *e* is firmly secured in place, the stitching passing through it more or less, according to the manner in which it is arranged, and that, when thus secured, it will pass directly in front of that part of the button-hole where the shank of the button rests, and where the wear and strain mainly come, as shown in Fig. 3, in which the cord is shown enlarged for the purpose of showing it more clearly. If preferred, the cord may be laid in a direct line along in front of the row of button-holes, in which case one or more rows of stitching might be run along in front of it, or on both sides of it, or through it, by which it would be held firmly in place and made to accomplish the desired result. By using a strong cord, such as described, it can be made so small that when the shoe is finished it will not be observed, though, by using a larger cord, it can be arranged so as to render the shoe more ornamental, and while the labor and expense of applying it are so slight as scarcely to be of account, it adds greatly to the strength and durability of the shoe, and at the same time considerably lessens the expense by obviating the necessity of working the botton-holes.

It is obvious that it is applicable to shoes made of cloth, as well as to those made of leather, and that it may be applied to any and all styles of shoes, gaiters, or boots in which button-holes are used.

I am aware that a cord or wire has been inserted as a stay along the front edge of the flap in front of the button-holes, and also that a braid has been sewed upon the under surface of the flap to strengthen the button-holes,

and I do not claim either of these as my invention; but,

Having thus described my invention, what I claim is—

1. A shoe, having its button-holes strengthened by the insertion of a cord, *e*, between the outer layer, and the linings passed around or between and in front of the button-holes, substantially as shown and described.

2. The cord *e* inserted between the lining and outer layer of the shoe and secured in place by stitching through or across the cord, substantially as set forth.

JAS. H. VERMILYA.

Witnesses:
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