

No. 616,470.

Patented Dec. 27, 1898.

J. E. KENNEDY.
RUBBER SOLED LEATHER SHOE.

(Application filed Nov. 5, 1896.)

(No Model.)

FIG. 1.

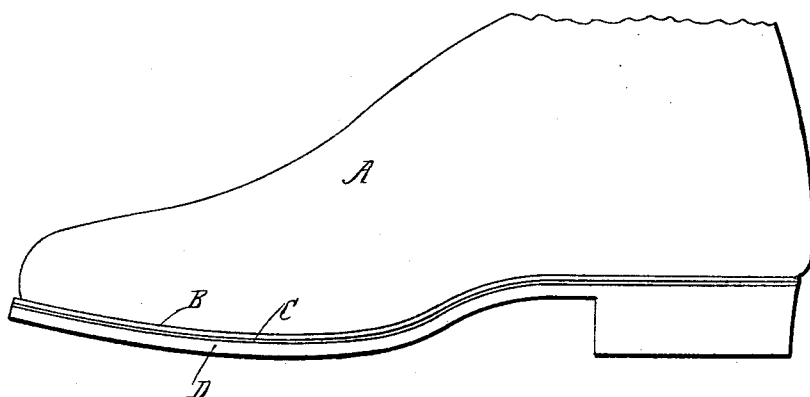
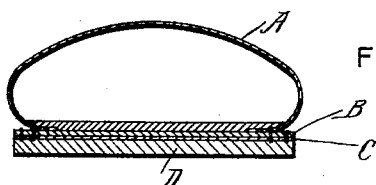


FIG. 2.



Witnesses
A. Page
I. Ruel

John Ernest KENNEDY, Inventor

By Attorney *J. A. Marion*

UNITED STATES PATENT OFFICE.

JOHN ERNEST KENNEDY, OF MONTREAL, CANADA.

RUBBER-SOLED LEATHER SHOE.

SPECIFICATION forming part of Letters Patent No. 616,470, dated December 27, 1898.

Application filed November 5, 1896. Serial No. 611,114. (No model.)

To all whom it may concern:

Be it known that I, JOHN ERNEST KENNEDY, a citizen of the Dominion of Canada, residing at Montreal, in the Province of Quebec, Canada, have invented certain new and useful Improvements in Rubber-Soled Leather Shoes; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to shoe-soles; and it consists in the novel construction and combination of the parts hereinafter fully described and claimed.

In the drawings, Figure 1 is a portion of a shoe provided with a sole constructed according to this invention. Fig. 2 is a cross-section through the sole.

In the manufacture of rubber-soled shoes it has heretofore been the general practice to first vulcanize the rubber sole to a middle sole formed of rubber-impregnated cloth and afterward sew or nail the rubber sole and its cloth to the upper. This is disadvantageous by reason of the fact that the sole is not waterproof and also the fact that any break of thread will cause the sole to become loose and of no use, or when the sole becomes worn through the shoe becomes worthless, as no new sole can be affixed. Another manner of securing the sole is that disclosed in the English patent granted to T. G. Douglass, No. 7,631 of 1886, in which the sole is secured to the shoe by means of cement and vulcanization, the process consisting, essentially, in applying cement to both sides of the intumed edges of the upper, the insole being secured to the upper by means of the cement. A filling is then secured to the under side of the insole, the filling making the lower surface practically level, the edges of the filling and the under surface of the intumed edges being connected by a bending strip of rubber-impregnated cloth. To this is secured the rubber outsole by vulcanization. This process depends entirely on the use of cement, and for this reason is only suitable for cheap shoes, such as tennis-shoes, the fact that it is impossible to cement rubber to leather making it useless in the manufacture of a higher grade of shoes. Another disadvan-

tage in this process lies in the fact that when the shoe becomes worn the shoe is worthless, even if the cement were aided by supplemental fastening devices, such as sewing, pegging, or nailing, there being no provision for the adding of a new sole. To obviate these disadvantages, together with many others not named, I have provided the following-described construction:

A designates the upper of the shoe, which is made in any approved manner and is provided with the usual insole. Secured to the upper by suitable means—such as stitching, pegging, or nailing—is a layer B, formed of leather, which extends outward beyond the edge of the upper a suitable distance. The sole or layer B is not a filling, but a distinct sole, the use of which will hereinafter appear.

C designates a middle sole formed of textile material impregnated with rubber on one or both sides, as desired. The middle sole is secured to the sole or layer B by suitable means—such as sewing, pegging, or nailing—and is of the same size and shape as the sole B. The middle sole may also be secured to the upper by means of nails, pegs, or sewing; but this fastening is necessarily independent of the fastening of the sole or layer B to the upper.

After the shoe has been prepared as above indicated the outer sole and heel D are vulcanized to the under surface of the middle sole C, being held in position without the aid of stitches, pegs, or rivets, there being no openings formed in the outer sole or heel. By this construction it will be apparent that the rubber outsole cannot be loosened until the fastening between the middle sole C and layer B is broken, and as this fastening is not exposed until the sole becomes worn through it is obvious that the sole D will become useless only after it is entirely worn off the shoe. When this occurs, the shoe can be resoled with rubber, if desired, by replacing the middle sole C with a new sole and revulcanizing, or the middle sole C may be entirely removed and the shoe used as an ordinary shoe, the layer or sole B forming the new outer sole, or an ordinary sole can be placed on the layer B. As the fastening between the upper and layer B is independent of the fastening be-

tween the layer B and the middle sole C, it will be obvious that even were the latter fastening broken and become loose the shoe would still be in condition for use.

5 Inasmuch as the rubber-soled shoe is intended to be used more particularly for walking over snow and ice it will be apparent that, if desired, the rubber sole and heel D can be removed by breaking the fastening between
10 the middle sole C and layer B, leaving the shoe suitable for use as an ordinary shoe.

As shown in Fig. 2 of the drawings, the layer B, middle sole C, and outer sole D are of the same shape and size, and no protecting-strip for the edges of the plate B and middle sole C is used.

What I claim is—

A shoe comprising an upper; a layer or

sole secured to said upper and entirely covering the under side of said upper; fastening 20 means for securing said layer or sole to said upper; a rubber-impregnated middle sole secured to the under face of said layer or sole; fastening means for connecting said layer or sole and said middle sole, said fastening means 25 being independent of the layer-securing means; and a rubber outer sole secured to said middle sole by vulcanization, substantially as described.

In testimony whereof I affix my signature 30 in presence of two witnesses.

JOHN ERNEST KENNEDY.

Witnesses:

J. A. MARION,

I. RUEL.