J. T. B. GILLENWATERS.

SHOE.

APPLICATION FILED DEC. 30, 1918.

1,328,665. Patented Jan. 20, 1920.

Fig. 1.

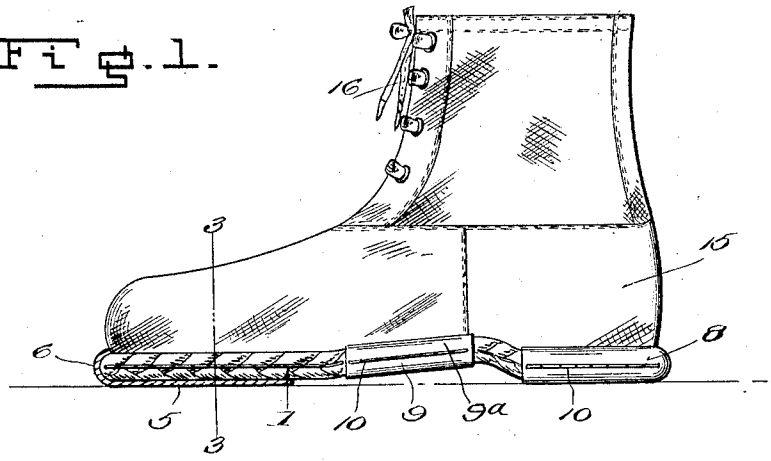


Fig. 2.

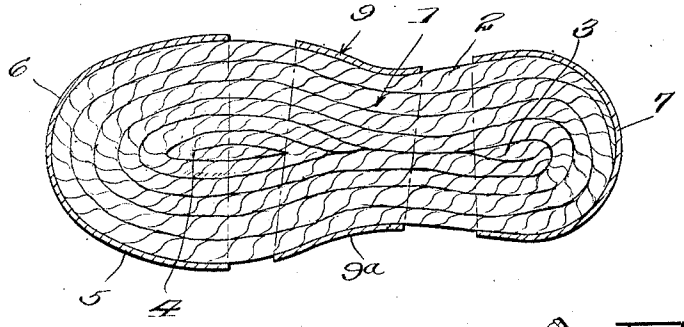


Fig. 4.

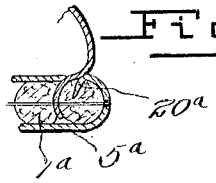
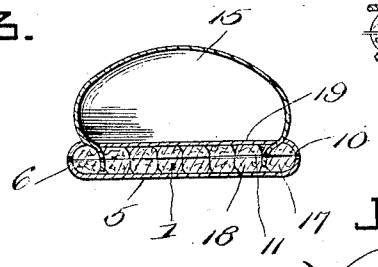


Fig. 3.



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SHOE.

1,328,665. Specification of Letters Patent. Patented Jan. 20, 1920.

Application filed December 30, 1918. Serial No. 268,878.

To all whom it may concern:

Be it known that I, JOSEPH T. B. GILLENWATERS, a citizen of the United States, and a resident of Cave City, in county of Barren, in the State of Kentucky, have invented certain new and useful Improvements in Shoes, of which the following is a specification.

This invention relates to shoes, and an object of the invention is to provide a shoe construction utilizing, for the major portion of the sole thereof material which is usually discarded as waste, for instance such as corn husks or shucks which are braided together to form a continuous strip, which strip is coiled into the proper shape to form the shoe sole and retained by transverse stitching and also by metal reinforcing plates, which engage the toe portion of the sole, the heel and across the instep portion of the sole to reinforce the sole and cause the same to maintain its proper shape during wear of the shoe.

A further object of this invention is to provide in a shoe structure, an upper which is preferably constructed of heavy fabric, and the lower edge of which upper is inserted between the outermost coil of the sole construction and the one next thereto, being attached to the sole by the transverse stitching which connects the various lengths of the coil of the sole structure.

Other objects of the invention will appear in the following detailed description, taken in connection with the accompanying drawing, forming a part of this specification, and in which drawing.

Figure 1 is a side elevation of the improved shoe having a portion of one of the sole reinforcing plates broken away.

Fig. 2 is a bottom plan of the sole structure showing the reinforcing metal plates in section.

Fig. 3 is a section on the line 3—3 of Fig. 1.

Fig. 4 is a fragmentary section of a modified form of the manner of connecting the metal reinforcing plates to the sole.

Referring more particularly to the drawings, 1 designates the sole of the shoe as an entirety, which sole is made of fibrous material such as corn husks, hemp or the like which is braided as shown in Fig. 1 of the drawings, in the ordinary plaited manner to form a continuous strip. The continuous strip 2 of braided or plaited material has one end bent inwardly upon itself as shown at 3 to provide the center of the heel portion of the sole. The strip is then coiled to form the proper shape of the shoe sole. The center of the toe portion of the sole is formed by an insert 4 of coiled fibrous material of the same type as that of the strip 2.

A metal reinforcing plate 5 extends across the under surface of the toe portion of the sole and it has its edges upturned as shown at 6 to engage the sides of the toe portion of the sole 1. A metal reinforcing plate 7 extends over the heel portion of the sole and it also has its edges upturned as shown at 8 to inclose the sides of the sole at the heel portion. An instep protecting and supporting plate 9 is provided which also has its edges 9^a upturned for engagement with the sides of the sole. The plates 5, 7 and 9 reinforce the coiled or braided sole 1 and form wear plates for the portions of the sole where the greatest wear upon the sole would occur. The plate 9 extends diagonally across the sole as shown in Fig. 2 of the drawings to conform to the angular relation of the ball of the wearer's foot.

The upturned edges 6, 8 and 9^a of the plates 5, 7 and 9 are provided with perforations 10 through which any suitable type of thread is passed. The threads 11 also pass transversely through the various lengths of the strip 1 and the insert strip 4, securely binding these lengths in proper engagement with each other and also attaching the plate to the sole structure.

The upper 15 of the shoe is preferably constructed of heavy fabric, or ducking, and it is open and laced upon the wearer's foot in the usual manner, by the ordinary type of laces 16. The lower edge of the upper 15 is positioned between the facing surfaces of the outermost length 17 of the continuous strip 2 and the inner length 18 which faces the outermost length 17, as clearly shown in Fig. 3 of the drawings. The lower edges of the upper are connected to the sole 1, by the thread 11 which connects the length of the fibrous strip of which the sole is made.

An inner sole 19 of any ordinary construction may be placed within the shoe body and against the inner upper surface of the sole 1 to protect the wearer's foot from engagement with the braided or plaited material of which the sole is made. In Fig. 4 of the drawings, a modified form of the shoe construction is shown. In this form, the metal reinforcing plate, corresponding

to the plates 5, 7 and 9 and indicated by the numeral 5^a have downwardly bent prongs 20^a formed upon their upper edges which prongs are embedded in the outermost length of the braided or plaited material of which the sole is formed. In all other respects, the modified form is identical with the preferred form heretofore described.

Having fully described the invention, what is claimed is:

1. In a shoe, the combination of a braided fabric strip coiled to form a shoe sole, an upper having its lower edge extending between the outermost coil of said sole and the coil next thereto, metal reinforcing plates provided with upturned perforated edges extending across portions of the outer surface of said sole, and stitching extending through said perforations transversely across said sole for connecting the upper, the coils of said sole and the metal reinforcing plate together.

2. In a shoe, the combination of a fabric strip coiled to form a shoe sole, an upper having its lower edge extending below the upper portion of the coils of the sole, metal reinforcing plates provided with upturned perforated edges extending across portions of the outer surface of said sole, and stitching extending through said perforations transversely across said sole for connecting the upper, the coils of said sole and the metal reinforcing plate together.

3. In a shoe, the combination of a fabric strip coiled to form a shoe sole, an upper having its upper edge extending between the coils of the sole, a metal reinforcing plate extending diagonally across said sole at the portion directly beneath the arch of the wearer's foot to maintain said sole in a foot fitting position, said plate provided with upturned perforated edges, and stitching extending through said perforations transversely across said sole for connecting the upper, the coils of said sole and the metal reinforcing plates together.

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