B. F. Godfrey,

Boot & Shoe Sole.

No. 111,448. Patented Jan. 31. 1871.

Fig. 1.

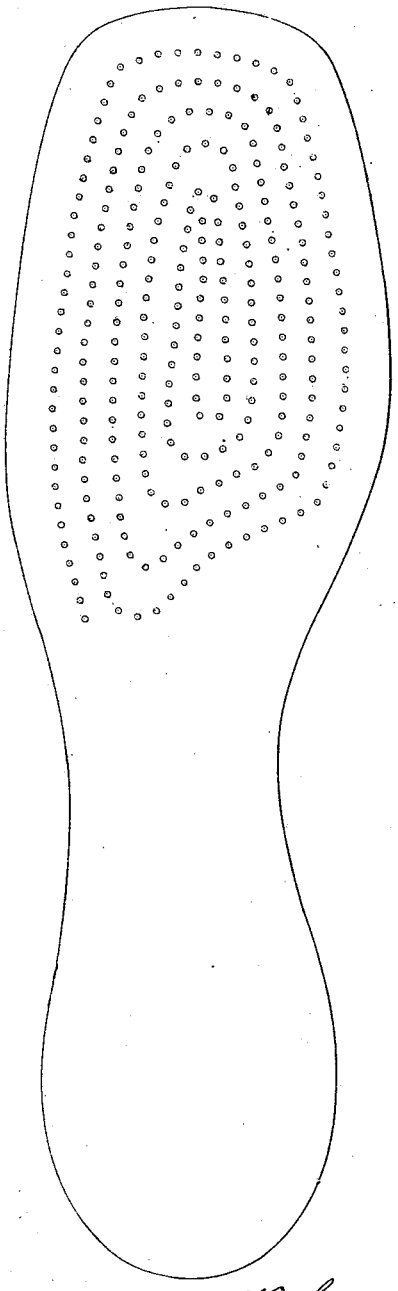

Fig. 2.

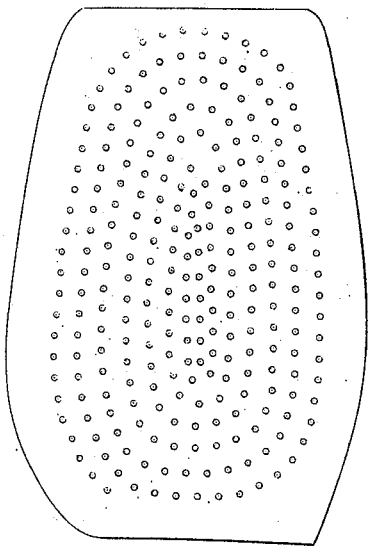

Fig. 4.

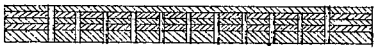

Fig. 3.

Witnesses { W. Crosby, L. W. Latimer.

United States Patent Office.

BENJAMIN D. GODFREY, OF MILFORD, ASSIGNOR TO WILLIAM CLAFLIN, TRUSTEE OF THE AMERICAN WIRE-QUILTED SOLE ASSOCIATION, OF BOSTON, MASSACHUSETTS.

Letters Patent No. 111,448, dated January 31, 1871.

IMPROVEMENT IN BOOT-AND-SHOE SOLES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, BENJAMIN D. GODFREY, of Milford, in the county of Worcester and State of Massachusetts, have invented an Improvement in the Manufacture of Boots and Shoes; and I do hereby declare that the following, taken in connection with the drawing which accompanies and forms part of this specification, is a description of my invention sufficient to enable those skilled in the art to practice it.

My invention may be stated as an improvement upon that patented under the number 64,587, dated May 7, 1867, to G. V. Sheffield and N. P. Coburn, said patented invention consisting in filling the wearing surface of leather with metallic pins of uniform diameter, cut off flush with said surface, and illustrated in its application to a tap-sole of solid leather for a boot or shoe.

My invention has for its object the utilization of splits and thin pieces of leather, such as are now often thrown away or burned, or are sold at a low price to be ground up to make a kind of pasteboard known as leather-board.

I utilize such waste, refuse, or inferior leather by making it into soles, either entire soles or tap-soles, to be applied upon outer soles of solid leather, thereby producing, at a greatly reduced cost, soles or taps which will wear equal to or perhaps better than solid leather soles.

In my invention I take several thin layers of leather, and, with or without uniting them by cement, I drive through them sections of wire, as explained in the said patent to Sheffield and Coburn, the leather being preferably first cut to the shape of the sole or of the tap which it is desired to produce.

These sections of wire are driven close together all over the surface of the sole or tap, where wear comes, leaving a margin about the edge sufficient to receive the fastenings by which the sole is secured to the upper and to the inner sole, or by which the tap-sole is secured to the main sole, said fastenings being nails, screws, pegs, or stitches, as may be desired.

My invention, then, may be said to consist in a sole or a tap-sole, as a new article of manufacture, when made up of several layers of thin leather, (generally splits, shavings, or other cheap thin leather,) when united and solidified in that portion known as the tread, and upon which the wear comes, by having driven into and through the layers, or all of them but the one which comes innermost, short sections of wire, said sections being located near each other, as seen in the drawing, and being cut off flush or smooth with the wearing surface.

An embodiment of my invention is illustrated in the drawing, in which—

Figure 1 is a plan of an entire outer sole; and

Figure 2 is a plan of a tap-sole.

Figure 3 is a cross-section taken through the entire sole, showing the sections of wire as driven entirely through all the layers; and

Figure 4 is a cross-section taken through the tap-sole, showing the sections of wire as driven through all the layers but the inner one, except the outer row of wires, which is driven through the inner layer to hold it to the rest of the sole before it is attached to a boot or shoe, and to harden or solidify the sole near its edge so that it will take a good finish.

When an entire sole is made up of layers of thin leather, as seen in fig. 1, there is no need of the wire sections in the shank-part of the sole, as that never wears, and the heel-part of the sole is covered by a raised heel. Therefore, to put the wire sections through any part of the sole except the tread would merely waste time and material. However, the whole of the sole, including shank and heel, may be filled with the wire sections like the tread, if desired.

I claim, as a new article of manufacture—

A sole or tap-sole, made of several layers of thin leather, united by short sections of fine wire driven closely together, substantially as shown and described.

BENJ. D. GODFREY.

Witnesses:

J. B. CROSBY,

L. H. LATIMER.