E. G. KILLERBRUE.

BOOT CLEANER.

APPLICATION FILED AUG. 5, 1907.

926,749.

Patented July 6, 1909.

2 SHEETS—SHEET 1.

Fig. 1.

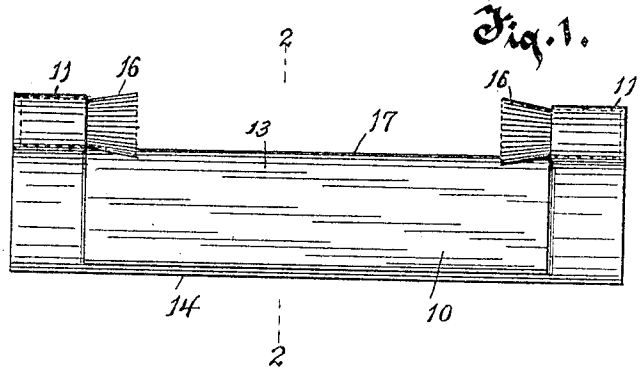


Fig. 2.

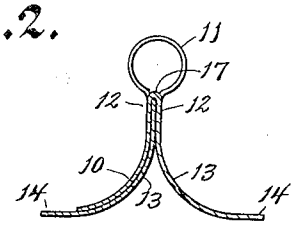


Fig. 3.

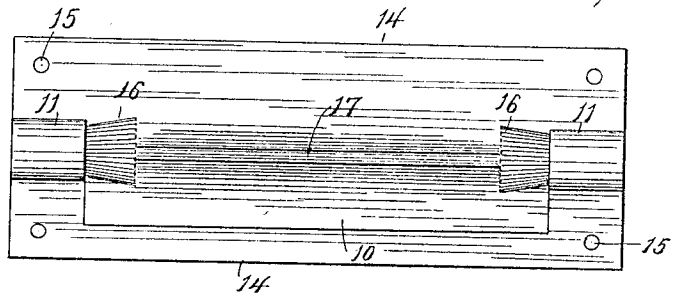
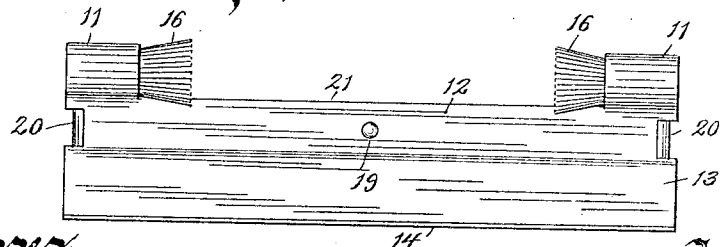


Fig. 2ª.



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2 SHEETS—SHEET 2.

Fig. 5.

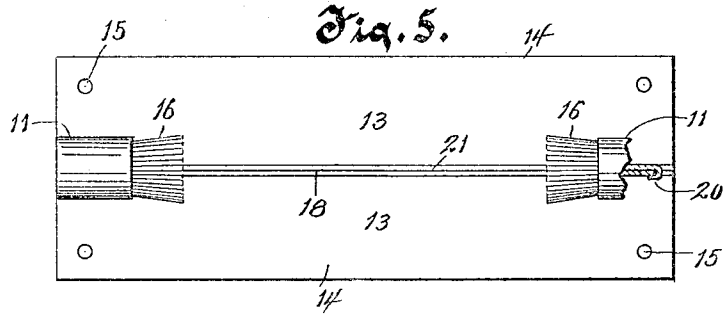


Fig. 6.

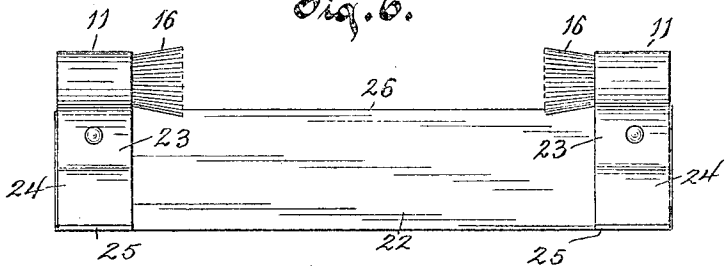
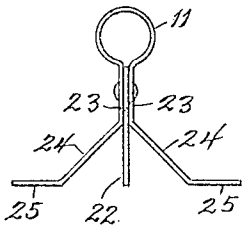


Fig. 7.



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UNITED STATES PATENT OFFICE.

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BOOT-CLEANER.

No. 926,749. Specification of Letters Patent. Patented July 6, 1909.

Application filed August 5, 1907. Serial No. 387,244.

To all whom it may concern:

Be it known that I, ENGSLEY GILES KILLERBRUE, residing in Kenosha, in the county of Kenosha and State of Wisconsin, have invented new and useful Improvements in Boot-Cleaners, of which the following is a description, reference being had to the accompanying drawings, which are a part of this specification.

My invention relates to improvements in boot cleaners, and more particularly to brushes employing devices for cleaning the soles and sides of boots and shoes.

The primary object of the invention is to provide a shoe cleaning device employing means for cleaning the bottom of the soles, and brushes for cleaning the sides of the sole.

With the above primary object, and other incidental objects, in view, the invention consists of the devices and parts, or their equivalents, as hereinafter set forth.

In the accompanying drawings, Figure 1 is a side elevation of one form of my device; Fig. 2 is a cross section on the line 2—2 of Fig. 1; Fig. 3 is a plan view of Fig. 1; Fig. 4 is a side elevation of a modified form of construction; Fig. 5 is a plan view of Fig. 4; Fig. 6 is a side elevation of another modified form of construction; Fig. 7 is an end view of Fig. 6.

The form of construction illustrated in Figs. 1, 2 and 3 is made from a single sheet of metal through which, before said metal is bent into shape, a U-shaped cut longitudinally thereof is made, leaving a rectangular lip 10. The lip so formed is bent outwardly, and the solid metal beyond the ends of the cut, by means of a die, or other suitable means, are pressed outwardly in substantially half circular formations. These half circular projections are next brought together to form upper circular tubes 11, 11. The metal is also brought together along the line of juncture of the lip 10 with the main body of the metal blank, so that said line of juncture will register with the longitudinal line of the cut. The two sides of the metal are also pressed downwardly adjacent to each other, as indicated by the numerals 12, 12, and then curved outwardly, or spread apart, as indicated by the numerals 13, 13, being finally bent into terminal horizontal portions forming supporting feet 14, 14 adapted to be secured to the floor, or other convenient support, by any desirable means, as by bolts passed through bolt openings 15 in said feet and entering the floor. The lip 10 which at this stage of the formation of the device projects outwardly is now bent down adjacent to and in conformity with one of the sides of the cleaner, and thereby not only serves to reinforce the device, but also acts as a spring tongue pressing against one of the sides 12, and serving to retain said side in close engagement with the opposite side 12, thereby dispensing entirely with the necessity of employing rivets for holding the said two sides together. The circular tubes 11 form sockets for the shanks of brushes 16, 16, the bristles of said brushes projecting inwardly toward each other. The edge from which the lip extends, and which when the device is completely shaped to form, extends from one brush socket 11 to the other, forms a doubled and reinforced scraping edge 17 for the sole of the shoe, and is thereby rendered capable of withstanding the maximum amount of wear.

In the use of the device, a person places the sole of the shoe on the edge 17, and by drawing the foot back and forth over this edge, mud and dirt are readily taken off the sole of the shoe, and at the same time the side brushes 16 clean the sides of the sole of the shoe. If the shoe is narrower than the space between the brushes 16, the foot can, of course, be moved laterally in one direction into engagement with one of said brushes, and then laterally in the opposite direction into engagement with the other of said brushes.

Referring to the modified device illustrated in Figs. 4 and 5, this device is also made from a single sheet of metal, the blank, before being formed into shape, having a rectangular piece cut out of it centrally, as indicated by the numeral 18. This differs from the Figs. 1 to 3 form of construction in that in said latter form, and as previously explained, only a U-shaped cut is made so as to leave a projecting lip 10 which is bent down against the outside of one of the sides of the device. In the Figs. 4 and 5 form of construction, however, a rectangular cut is made so that a rectangular piece is cut entirely out of the blank, webs being left between the ends of the cut and the end edges of the blank. These webs by means of a die, or other suitable means, are formed into half circular portions, and are then bent around

to form the complete circular upper tubes 11, 11, which constitute sockets for the shanks of the side brushes 16, 16. The blank is also folded longitudinally on a plane of the vertical center of the socket, and the metal from the bend is continued downwardly in the straight portions 12, 12, and then formed with the outwardly curved or spread apart portions 13, 13, finally terminating in the horizontal feet portions 14, 14, as in the other form of construction, said feet portions provided with bolt openings 15. A rivet 19 may be employed for holding the two straight portions 12, 12 firmly together. These straight portions, however, may be still more firmly locked together by the provision of inturned end flanges, which are formed by cutting in the end edges of the metal, and bending the lips or flanges 20, 20 so formed inwardly against the main body of the metal. It will be seen that the scraping portion 21 of this form of construction consists of a double thickness, or two edges of the metal, as shown most clearly in Fig. 5, whereas in the previously described form of construction, the scraping edge is formed by a fold of the metal.

Figs. 6 and 7 illustrate another form of construction, wherein is employed a straight flat piece of metal 22, and two end straps which latter are bent centrally to form sockets 11, 11, for the reception of the shanks of the end brushes 16, 16, and are also bent to form two straight parallel portions 23, 23 which straddle the ends of the plate and are secured thereto by means of rivets, the said straps being further bent or spread outwardly as indicated by the numerals 24, 24, and finally terminate in the horizontal feet extensions 25. The scraping edge 26 of this form, it will be apparent, differs from the scraping edges of the previously described forms, consisting as it does of merely a single edge.

What I claim as my invention is:

1. A boot and shoe cleaning means having an upper straight longitudinal edge constituting a scraping edge for the sole of a shoe, and brush holding means at opposite ends of said edge and on a plane above said edge, and said boot and shoe cleaning means also having opposite sides extending downwardly from the scraping edge and adjacent to each other, said sides at a desired distance downwardly being spread apart in opposite directions, and brushes carried by the brush holding means, the bristles thereof pointing inwardly, and said brushes adapted for cleaning the sides of the sole of the shoe.

2. A boot cleaner, comprising a blank of sheet metal, the opposite ends of the blank at medial portions being bent upwardly and curved to form brush-holding sockets, and a portion of the metal of the blank between the upwardly bent portions being bent over the adjacent portion to form a scraping edge.

3. A boot cleaner, comprising a blank of sheet metal creased and overlapped medially to form a scraping edge and having opposite end portions extending above the overlapped portion and curved to form brush-holding sockets, the lower longitudinal edges of the blank being spread apart to form a support, and inwardly extending brushes carried by said sockets.

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

ENGSLEY GILES KILLERBRUE.

Witnesses:
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J. M. PULL.