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SHOE DRYING ATTACHMENT

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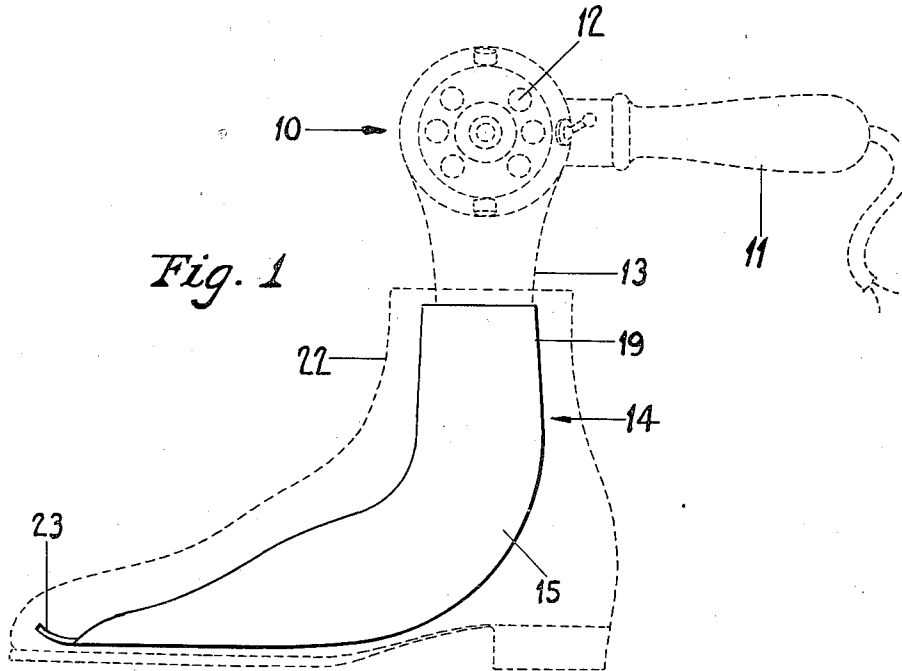


Fig. 1

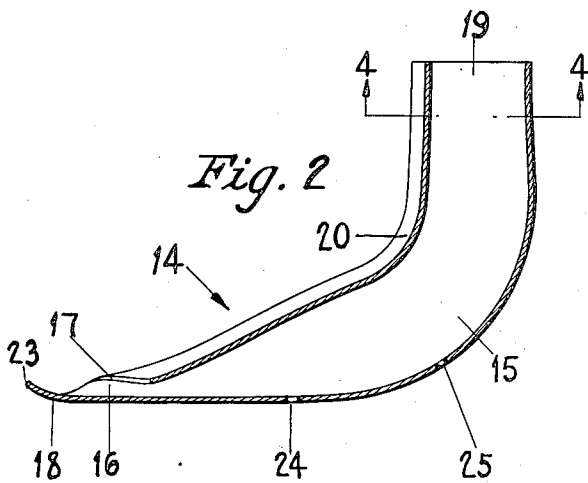


Fig. 2

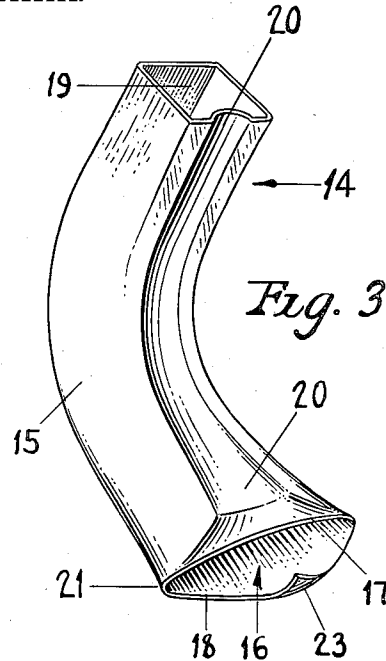


Fig. 3

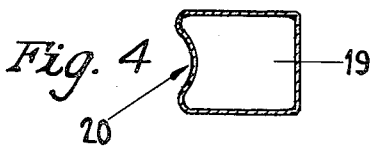


Fig. 4

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SHOE DRYING ATTACHMENT

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3 Claims. (Cl. 34-26)

This invention relates to a shoe drying attachment for electric hot air blowers.

An object of this invention is to provide means whereby heated air from an electric air blower and heater enters a tubular guide nozzle having a flared outlet which is designed to permit reversal in direction of air flow into the shoe and so that the air may freely leave the shoe while the drying operation is being performed.

Another object of this invention is to provide a nozzle having a flared and constricted or flattened outlet defined by upper and lower walls, the lower wall extending at an angle with the apex directed centrally outward, and the upper wall being curved all along its length into the tubular nozzle and forming a channel which permits outward flow of the hot air entering the shoe through said nozzle.

Another object of this invention is to provide a portable nozzle attachment of the character described which may be used for drying shoes while resting on a floor in normally upright position.

With the above and other objects in view, the invention will be hereinafter more particularly described in connection with the accompanying drawings and pointed out in the claims which form part of this specification.

Reference will now be had to the drawing, wherein like numerals of reference designate corresponding parts throughout the several views, in which:

Figure 1 is a side elevation of the drying attachment in operative position in a shoe.

Figure 2 is a central longitudinal cross-sectional view of the attachment.

Figure 3 is a perspective view of the attachment.

Figure 4 is a cross-sectional view of the inlet portion of the attachment, the section being taken as on line 4-4 in Figure 2.

In the illustrated embodiment of the invention, the numeral 10 indicates an electric air-blower of the portable type, having a handle 11 by which it is gripped. The blower 10 comprises a motor and a fan which sucks air through an inlet 12 and discharges it into an outlet 13. The motor casing carries a resistance or heating element (not shown) as is well known in the art.

A shoe-drying attachment or nozzle 14 has been secured to the outlet 13, preferably in frictional engagement. The attachment or nozzle 14 has a curved tubular body 15 substantially in the form of a right-angle. As shown in Figure 3, the nozzle 14 has a flaring and constricted outlet

16 defined by an upper wall 17 and a lower wall 18 which are slightly spaced apart, the lower wall 18 being angularly directed and extending outwardly more than the upper wall, as shown in Figure 3. The nozzle has a tubular inlet 19, having a cross-section corresponding to the cross-section of the outlet 13 from the blower.

The upper wall 17 of the outlet 16 has a central concave portion 20 and this concavity extends all the way from the lower end 21 of the wall 17 up to the inlet 19 of the nozzle. This concave portion forms a channel which permits outward flow of air entering the shoe 22 through the nozzle 14.

The apex 23 of the angularly directed wall 18 has been curved upwardly to face the channel 20, so as to aid in reversing the direction of flow of the air from the downward direction inside the nozzle into an upward direction into the channel 20 outside the nozzle.

The cross-section of the inlet into the attachment may be varied to suit different cross-sections of outlets from existing air blowers, or the attachment may be made to form an integral part of an electric air blower.

The flared or outwardly widened and constricted outlet 17 serves the purpose of increasing the force with which the hot air from the electric air blower strikes the tip of the wet shoe and carries out the evaporated matter more rapidly.

The normal foot causes a minimum temperature of 90° F. in a shoe. When walking outdoors during cold weather, the air inside the shoe is excessively warm and as the cold air strikes the shoe from the outside the evaporation from the foot is liquefied, and the shoe becomes wet and causes bromidrosis. The bacteria responsible for this condition may survive in the damp shoe and cause further complications.

The tip of a shoe is the wettest portion. It is practically impossible to dry the tip of a wet shoe by mere exposure to the air in a room. It is necessary to cause a forced circulation of air into and out of the wet shoe in order to effectively and quickly dry the tip of a shoe. While it may be possible to dry the tip of a shoe by a forced circulation of cold air or by the production of a vacuum, I have found that the best effect is produced when the air is heated. It takes less than two minutes to dry a wet shoe when using the device herein disclosed.

The flared and constricted outlet of the attachment is also desirable for drying moist hair

on the head of a person because of the large area upon which the air may blow from the flared outlet. The flared outlet also eliminates a great deal of the excessive motions of the arm of the user usually made when using an electric air blower having the usual non-flared tubular outlet.

It is to be noted that I may provide a plurality of holes 24 and 25 in the bottom and rear of the shoe-shaped attachment so as to dry the sole and rear surfaces of the shoe simultaneously with the drying of the tip.

I claim as my invention:

1. A portable shoe drying attachment having a linear bottom substantially coextensive with the sole of a shoe and being designed for insertion into an upright shoe while supporting an air blower at its upper end, comprising a curved tubular body forming substantially a right angle, said body having a constricted outlet extending into the shoe to the tip and being defined by upper and lower walls, said walls being slightly spaced apart, the lower wall being angularly directed and extending outwardly more than the upper wall, the upper wall being curved all along its length into said tubular body and forming a channel permitting outward flow of air entering said shoe through said body.

2. A portable shoe drying attachment having a linear bottom substantially coextensive with the sole of a shoe and being designed for inser-

tion into an upright shoe while supporting an air blower at its upper end, comprising a curved tubular body, said body having a constricted outlet extending into the shoe to the tip and being defined by upper and lower walls, said walls being slightly spaced apart, the lower wall extending outwardly more than the upper wall, the upper wall being curved all along its length into said tubular body and forming a channel permitting outward flow of air entering said shoe through said body, the apex of said lower wall being upwardly curved and facing said channel, and said attachment having apertures in the bottom and rear surfaces thereof for drying the sole and the rear inner surfaces of the shoe.

3. A portable shoe drying attachment having a linear bottom substantially coextensive with the sole of a shoe and being designed for insertion into an upright shoe while supporting air circulating means at its upper end, comprising a curved tubular body forming substantially a right angle, said body having a constricted outlet extending into the shoe to the tip and being defined by upper and lower walls, said walls being slightly spaced apart, the lower wall being angularly directed and extending outwardly more than the upper wall, the upper wall being curved all along its length into said tubular body and forming a channel permitting outward flow of air entering said shoe through said body.

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