(No Model.)

P. WELANDER.

VENTILATOR FOR BOOTS OR SHOES.

No. 418,966. Patented Jan. 7, 1890.

Fig 1

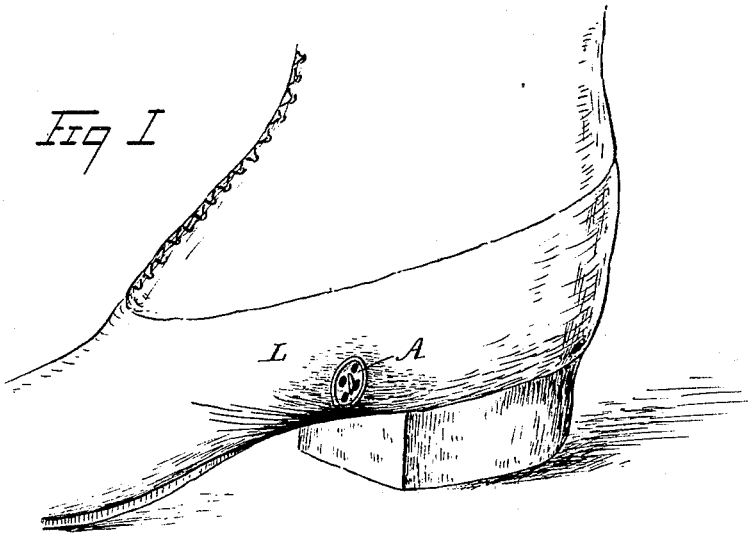


Fig 2

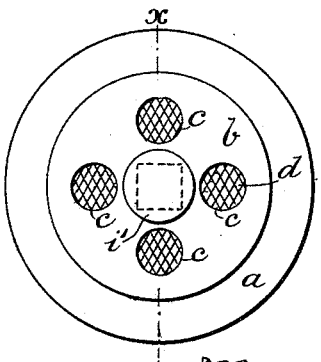


Fig 3

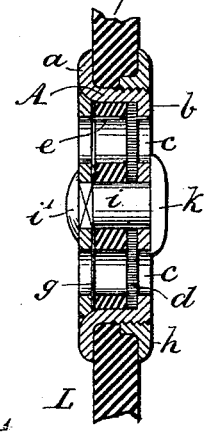


Fig 4

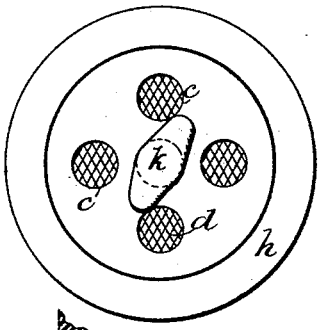


Fig 5

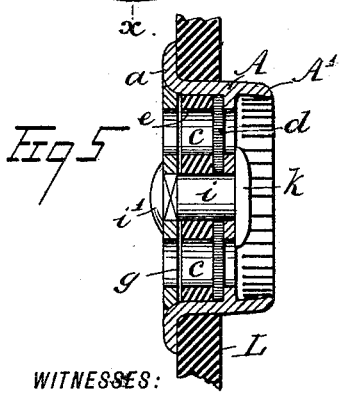
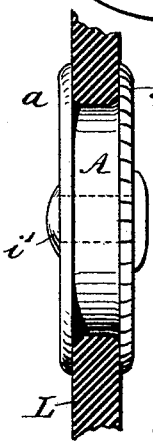


Fig 6



WITNESSES:

H. Walker

C. Sedgwick

INVENTOR

P. Welander

BY Munn & Co

ATTORNEY.

UNITED STATES PATENT OFFICE.

PETER WELANDER, OF SAN FRANCISCO, CALIFORNIA, ASSIGNOR OF ONE-HALF TO MARTIN A. BROWN, OF SAME PLACE.

VENTILATOR FOR BOOTS OR SHOES.

SPECIFICATION forming part of Letters Patent No. 418,966, dated January 7, 1890.

Application filed July 26, 1889. Serial No. 318,784. (No model.)

To all whom it may concern:

Be it known that I, PETER WELANDER, of San Francisco, in the county of San Francisco and State of California, have invented a new and useful Ventilator for Boots or Shoes, of which the following is a full, clear, and exact description.

My invention relates to an improvement in ventilators for boots or shoes, the object of which is to provide a simple and convenient device whereby the thorough ventilation of the interior of a shoe or boot while in use may be effected.

A further object is to provide a ventilator for boots or shoes which may be readily secured in place at any desired point and which is adapted to be set in an open or in a closed position.

With these objects in view my invention consists in the construction of parts and in the combination of these parts, as will be hereinafter set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of a portion of a shoe, showing the improved ventilator in position thereon. Fig. 2 represents an enlarged rear face view of the preferred form of ventilator. Fig. 3 is an enlarged view in transverse section of the shoe or boot ventilator, taken on the line x x, Fig. 2. Fig. 4 is a front face view of the device. Fig. 5 is a side view in section of a modified form of the ventilator-shell and attached parts, and Fig. 6 is a side view of the modified ventilator-shell in position with its securing-edge turned over upon the shoe material.

A represents a short tubular shell of sheet metal, having a flange a turned over outwardly upon one end. The opposite end of the shell is closed by an integral plate b, as shown in Fig. 3, said plate being perforated at spaced intervals for the purpose of ventilation. Any suitable number of orifices c may be made in the end plate b. Four are shown in the drawings, which are an equal distance from the center and apart from each other. The center of the end plate is also perforated, for a purpose which will be explained.

Within the shell A there is located a screen d, made of wire cloth, and upon this screen a circular piece or disk of leather e is imposed, said leather disk being perforated to register its holes with those made in the end plate b. A circular cap-plate g is provided, which corresponds in its diameter to that of the shell A, which cap-plate is placed upon the leather disk e. The cap-plate is perforated, as shown, a number of holes being made therein, which are intended to correspond with the similar sized orifices formed in the disk e and end plate b, before mentioned, and a central squared hole is also made in it.

A fine screw-thread is produced upon the outer surface of the shell A, near the end plate, and upon the threaded portion of the shell an annular flange h is screwed, it being internally threaded to permit such an engagement.

The several parts of the device, as described, being assembled in the manner specified, they are held together by the insertion through the central orifices of a rivet i, that is squared at the end which is inserted through the cap-plate g, and its projecting terminal being riveted upon the cap-plate at i', thus secures all the parts together. Upon the opposite end of the rivet i a thumb-piece k is formed, by which the cap-plate g may be rotated along with the rivet.

In Figs. 5 and 6 a somewhat differently-constructed shell is shown, and, as will be seen, the cylindrical body of the same is extended beyond the end plate b, thus providing a short tubular end A′, the wall of which is slitted at spaced intervals.

The remaining portions of the device are constructed similarly to those previously described, and are held in place by the rivet i and thumb-piece k.

The ventilator may be inserted in the shoe or boot upper at any preferred place. As shown, it is affixed at one side of the quarter at a point just above the arch of the sole.

When the device in its preferred form is to be attached to a shoe or boot, the flange h is removed from the shell A, and the latter is

inserted through an orifice of proper dimension made for it in the upper-leather L at any preferred point. The hole in the upper-leather should neatly fit the body of the shell A, and the length of said shell should be proportioned to the thickness of the upper-leather, so that when the annular flange *h* is screwed in place upon the shell, tightly clamping the upper-leather between it and the integral flange *a*, there will be no projection of the end of the shell beyond the outer surface of the flange *h*, and a neat appearance consequently afforded.

It is evident that the insertion of the ventilator-shell A should be from the inside surface of the upper-leather outwardly, so as to locate the thumb-piece of the rivet *i* upon the outside of the boot or shoe.

The shell shown in Figs. 5 and 6 of the drawings is secured in place on a shoe or boot upper by first inserting it through a close-fitting orifice, and then bending outwardly upon the exterior surface of the upper-leather the slitted wall of the projecting tubular end A′, which, when firmly seated, will retain the ventilator in place. It is practical to dispense with the slitting of the tubular end A′, and by means of a simple machine, similar to an eyelet-setting tool, this end may be turned over outwardly upon the upper-leather, and so secure the device in place thereon.

In use the ventilator may be left open to afford ingress for air to the interior of the boot or shoe, and thus cool the feet of the wearer. The screens which are inserted within the shells of the device admit air and prevent sand, small stones, or other objectionable matter from entering the ventilator-holes.

In wet weather the cap-plates are revolved sufficiently to cover the air-inlet holes, and thus seal them to exclude water, as the obvious use of the ventilator is to afford ventilation in hot dry weather, when the feet are liable to be blistered from their hot exhalations and sweating induced thereby.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. In a ventilator for boots or shoes, the combination, with a cylindrical shell having an integral annular flange and a perforated end plate, of a screen, a leather disk, and a cap-plate, all perforated to align with the apertures in the end plate, a rivet having a thumb-piece, on which rivet the cap-plate may be rotated, and a ring threaded on said shell opposite its flange, substantially as set forth.

2. A ventilator for boots or shoes, consisting of a cylindrical shell exteriorly screw-threaded at its outer end, fixed and movable apertured disks within said shell, a threaded ring screwed upon the outer end of said shell, and a rivet passed through said disks, having a thumb-piece on its outer end, substantially as shown and described.

PETER WELANDER.

Witnesses:
D. E. BESECKER,
LEE D. CRAIG.