

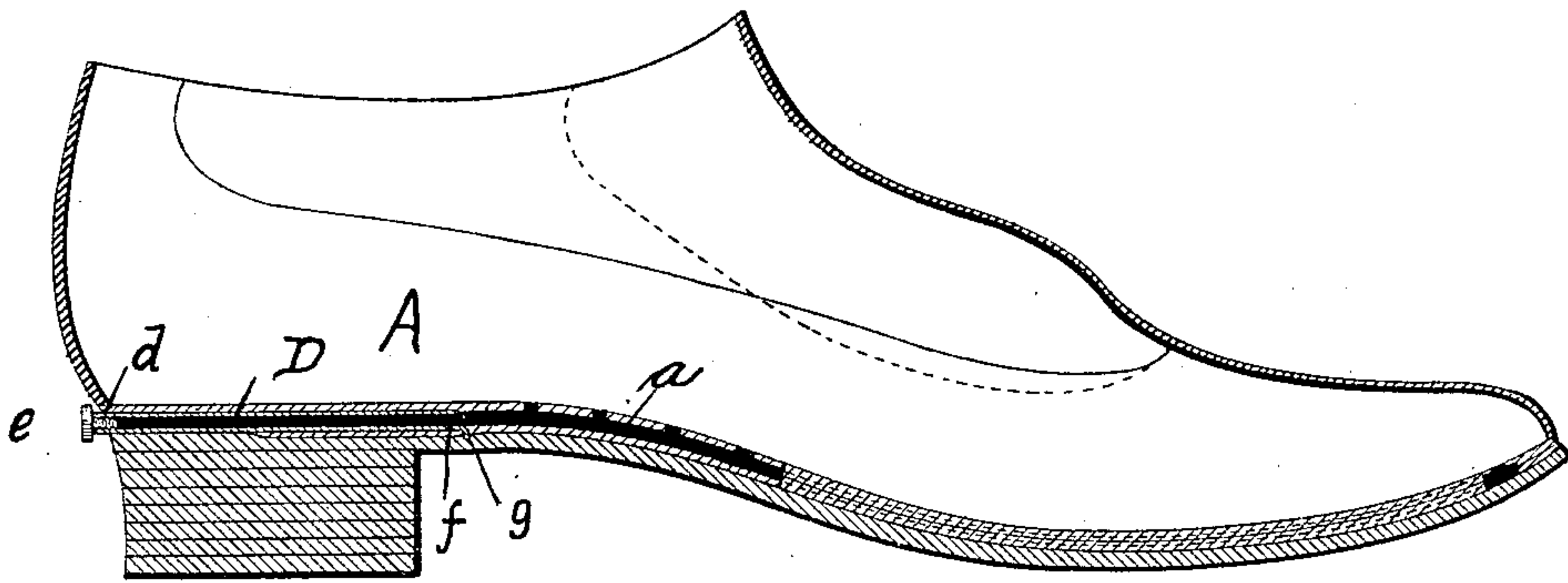
(No Model.)

A. JENSEN.
BOOT OR SHOE VENTILATOR.

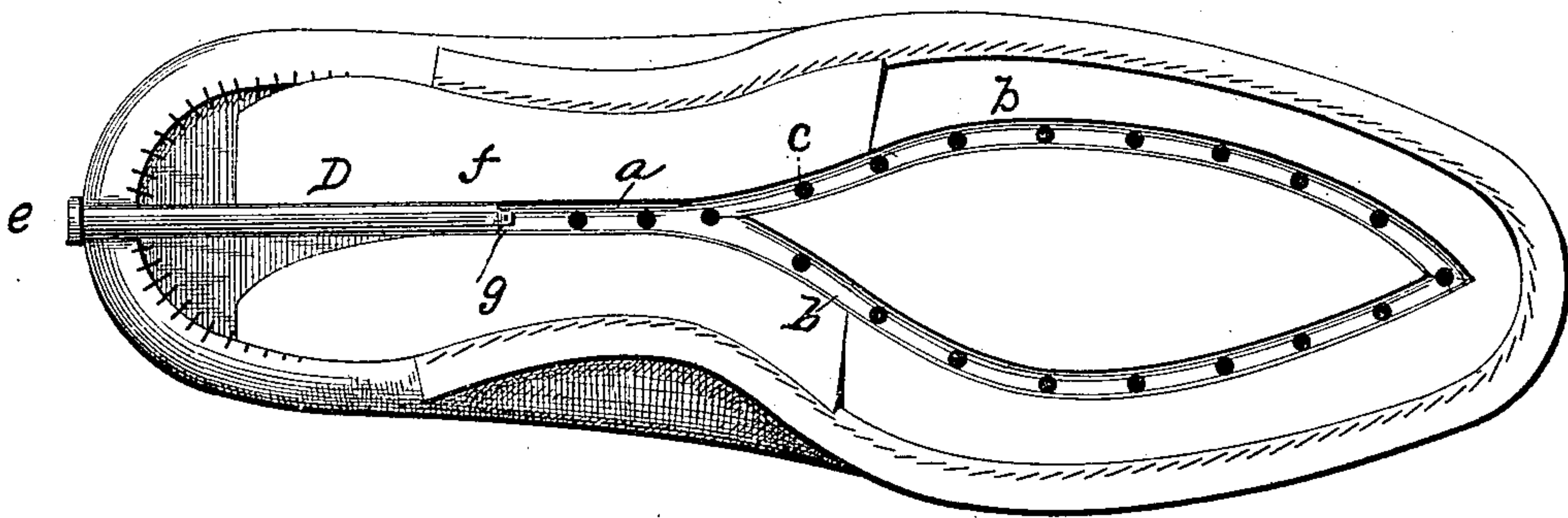
No. 379,579.

Patented Mar. 20, 1888.

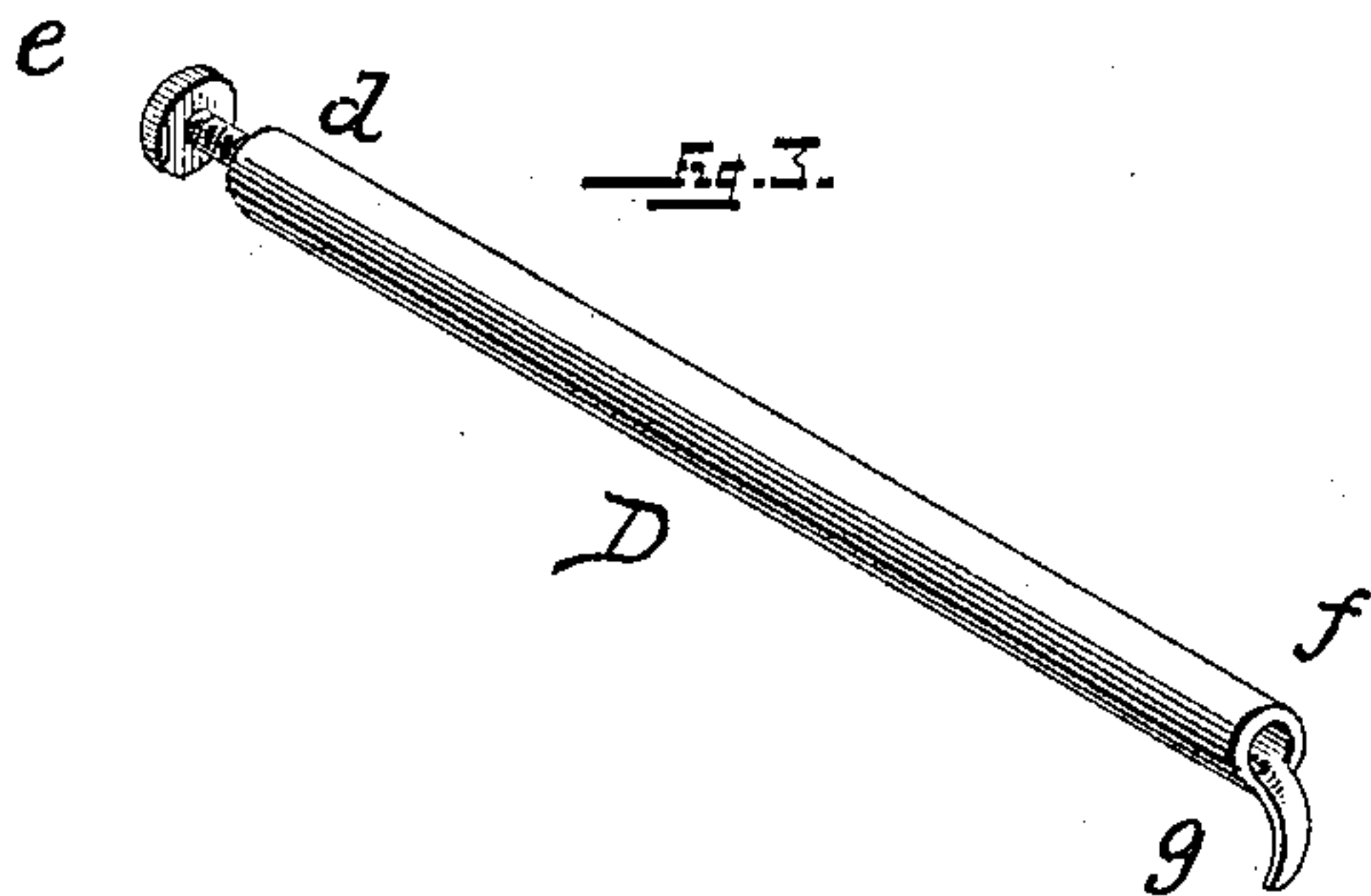
—Fig. 1.



—Fig. 2.



—Fig. 3.



Witnesses:
W. H. Mortimer.
William C. Cox.

Inventor :
Andrew Jensen.
by Dunsmuir, Curtiss,
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UNITED STATES PATENT OFFICE.

ANDREW JENSEN, OF ST. PAUL, MINNESOTA.

BOOT OR SHOE VENTILATOR.

SPECIFICATION forming part of Letters Patent No. 379,579, dated March 20, 1888.

Application filed January 17, 1888. Serial No. 261,072. (No model.)

To all whom it may concern:

Be it known that I, ANDREW JENSEN, a citizen of the United States of America, residing at St. Paul, in the county of Ramsey and State of Minnesota, have invented certain new and useful Improvements in Boot or Shoe Ventilators; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention has reference to ventilators for boots or shoes; and it consists in the improved construction, hereinafter described and set forth, whereby the arrangement of such class of devices is simplified and their general efficiency increased.

In the accompanying drawings, forming part of this specification, Figure 1 is a longitudinal sectional view of a shoe having my improvements. Fig. 2 is an inverted plan view of a shoe having my improvements applied thereto, the outer sole being removed to more clearly show the arrangement of parts. Fig. 3 is a detailed view.

By reference to Fig. 2 it will be noted that the rear portion of the inner sole, A, is longitudinally grooved or channeled to form a duct, *a*, which branches into two ducts, *b b*, which extend around the larger portion of the sole and intersect at the toe portion thereof, as seen in Fig. 2. A series of perforations, *c*, are made in the inner sole, A, along the path of the ducts *a b* in said sole, and form communications between the interior of the shoe and the said ducts.

The outer sole, B, is grooved or channeled on its inner face, corresponding with the grooves in the adjacent face of the inner sole, so that said inner and outer soles conjointly form closed ducts.

D designates a metallic tube which is located in the duct *a*, so that one end of said tube will extend flush with the rear face of the heel portion of the shoe. This end of the tube referred to I have designated *d*, and is internally threaded to engage and receive the threaded body of a cap-screw, *e*. The other end, *f*, of said tube is provided with an integral lip, *g*, which is curved down, as shown, and is embedded in the outer sole, so as to

retain the tube in position and prevent any accidental movement thereof. An article provided with my improvement will at all times properly ventilate the foot and secure comfort to the wearer. When the cap-screw is removed from the outer end of the tube, air will pass through the same and be led along the ducts *a b*, and thence through the perforations in said ducts to the interior of the shoe, so as to cool and ventilate the foot. In wet or cold weather, when ventilation is undesirable, the tube may be effectually closed by the cap-screw. It will be noted that the tube *d* forms a simple and rigid mouth-piece for the ducts, and is so arranged and located that it can sustain no injury from either wear or dirt.

I claim—

1. The combination, in a ventilator for boots or shoes, of a sole having a single duct or passage and two branches formed therein, and a metallic tube located at the heel portion of the shoe and forming a communication between said ducts and the atmosphere, substantially as set forth.

2. The combination, with the sole of a boot or shoe having ducts or passages formed therein and communicating with the interior of the same, of the metallic tube located in the heel, its front end leading into said ducts or passages between the sole, and its outer portion communicating with the atmosphere, and a device for closing said tube, substantially as set forth.

3. The combination, in a ventilator for boots or shoes, of a duct or passage formed in the sole and communicating with the interior thereof, and a metallic tube located at the heel portion, as described, and having a lip to engage the sole, substantially as set forth.

4. As an improved article of manufacture, the herein-described tube for boot or shoe ventilators, having a removable cap at one end and lip at the other, substantially as set forth.

In testimony whereof I have hereunto signed my name in the presence of two subscribing witnesses.

ANDREW JENSEN.

Witnesses:

CHARLES KITTELSON,
ALBERT SCHEFFER.