

No. 672,336.

Patented Apr. 16, 1901.

R. E. SNELL.
VENTILATED SHOE.

(Application filed July 7, 1900.)

(No Model.)

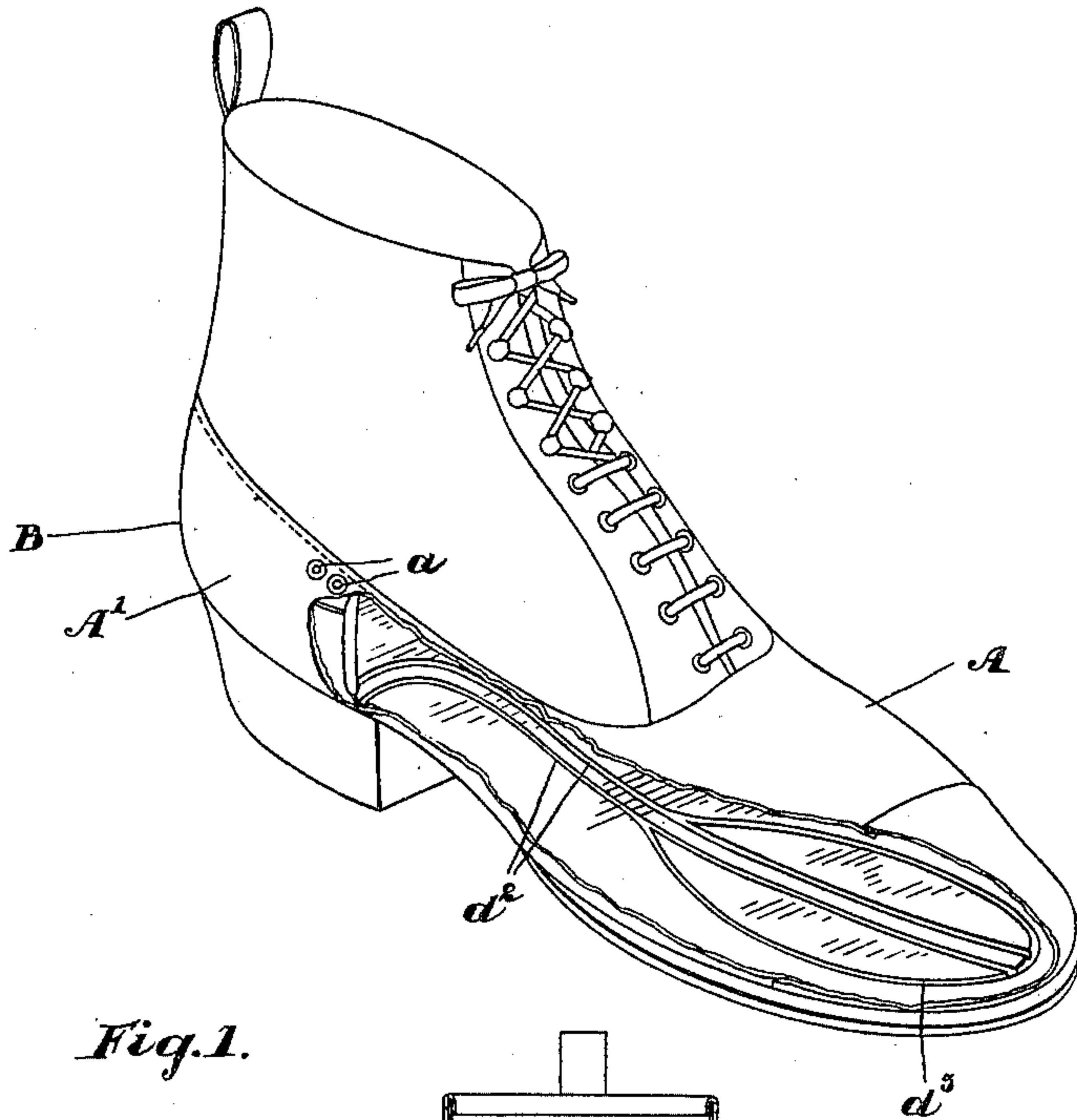


Fig. 1.

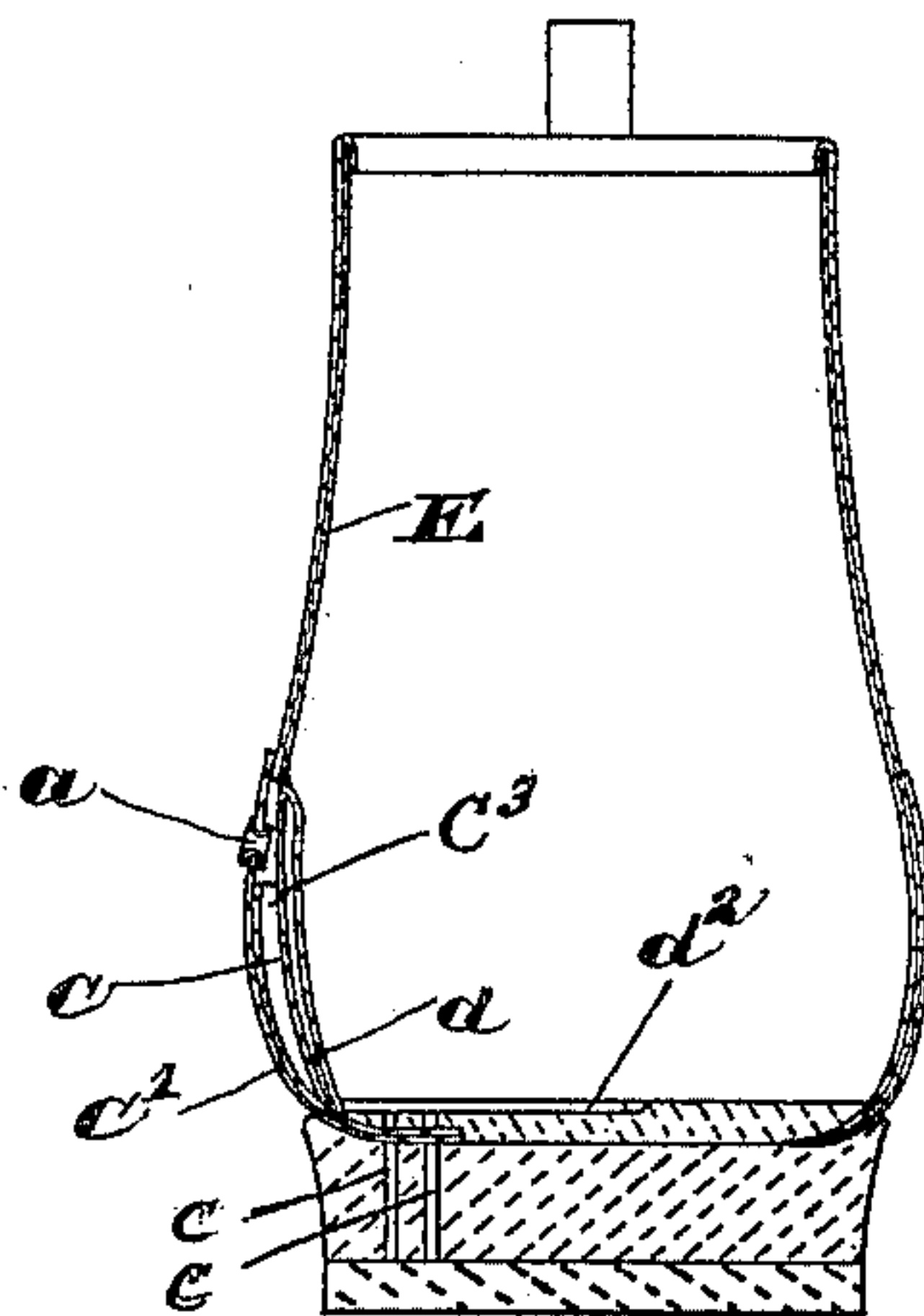


Fig. 2.

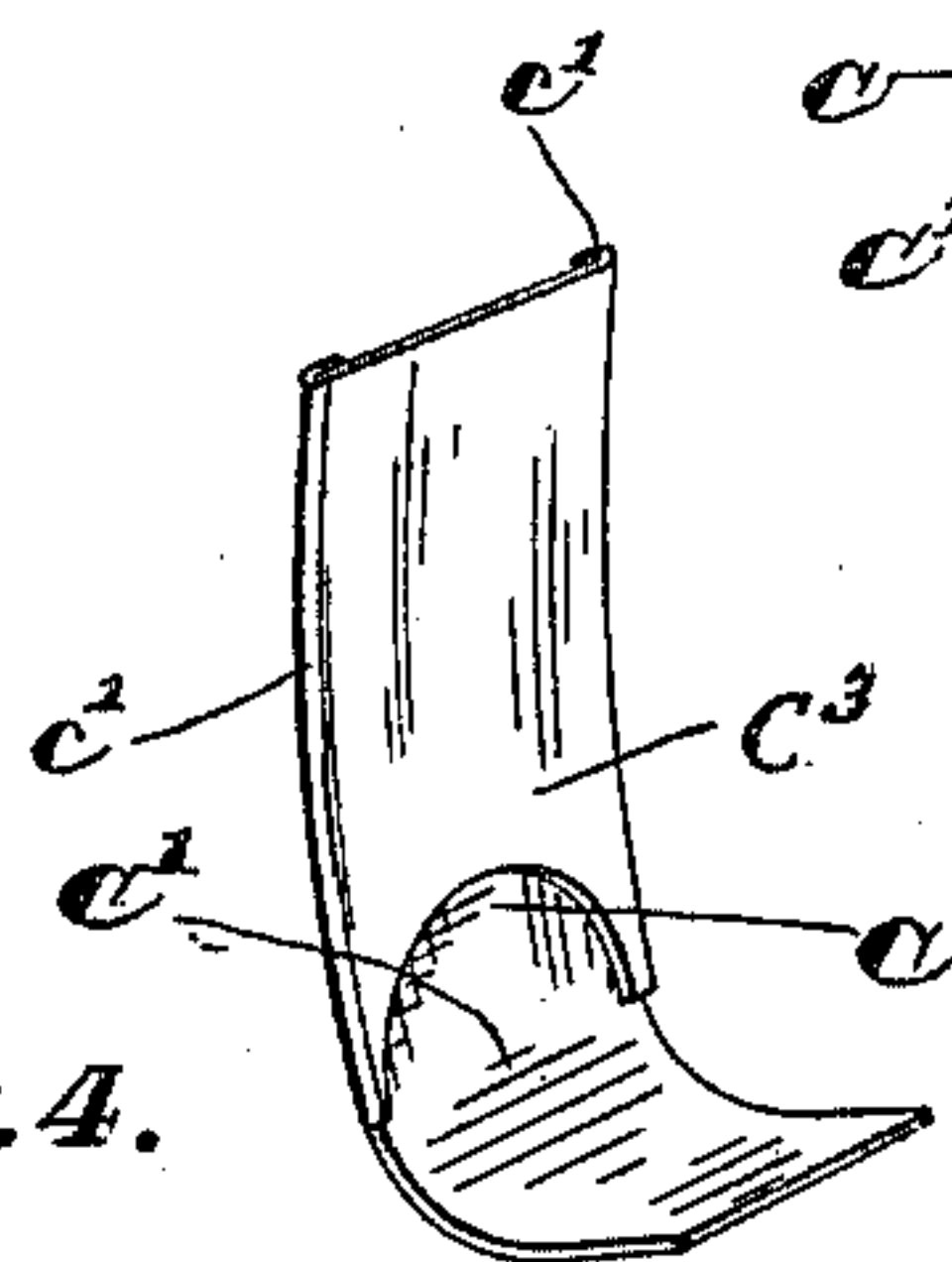


Fig. 4.

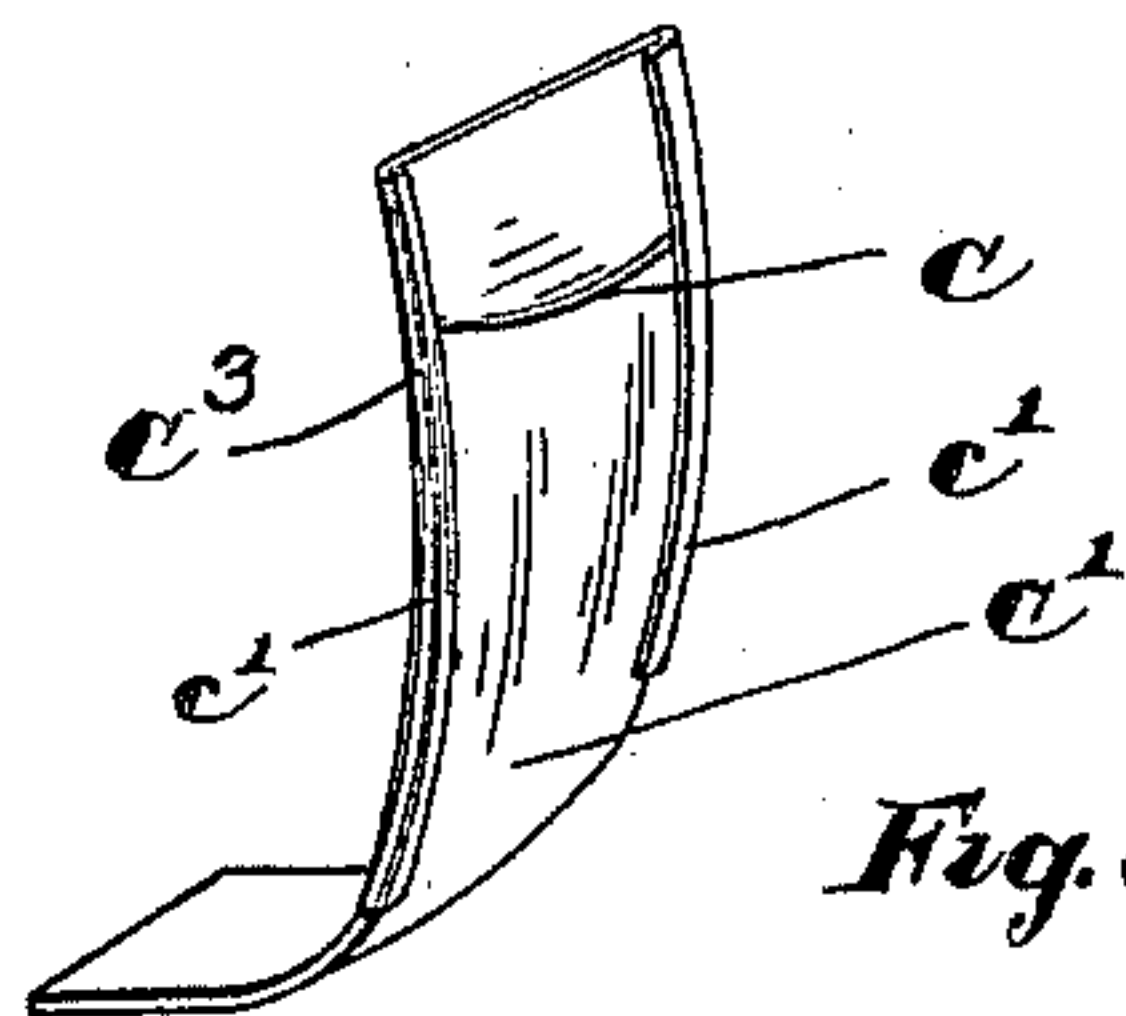


Fig. 5.

Witnesses

W. Arms

J. Blackmore

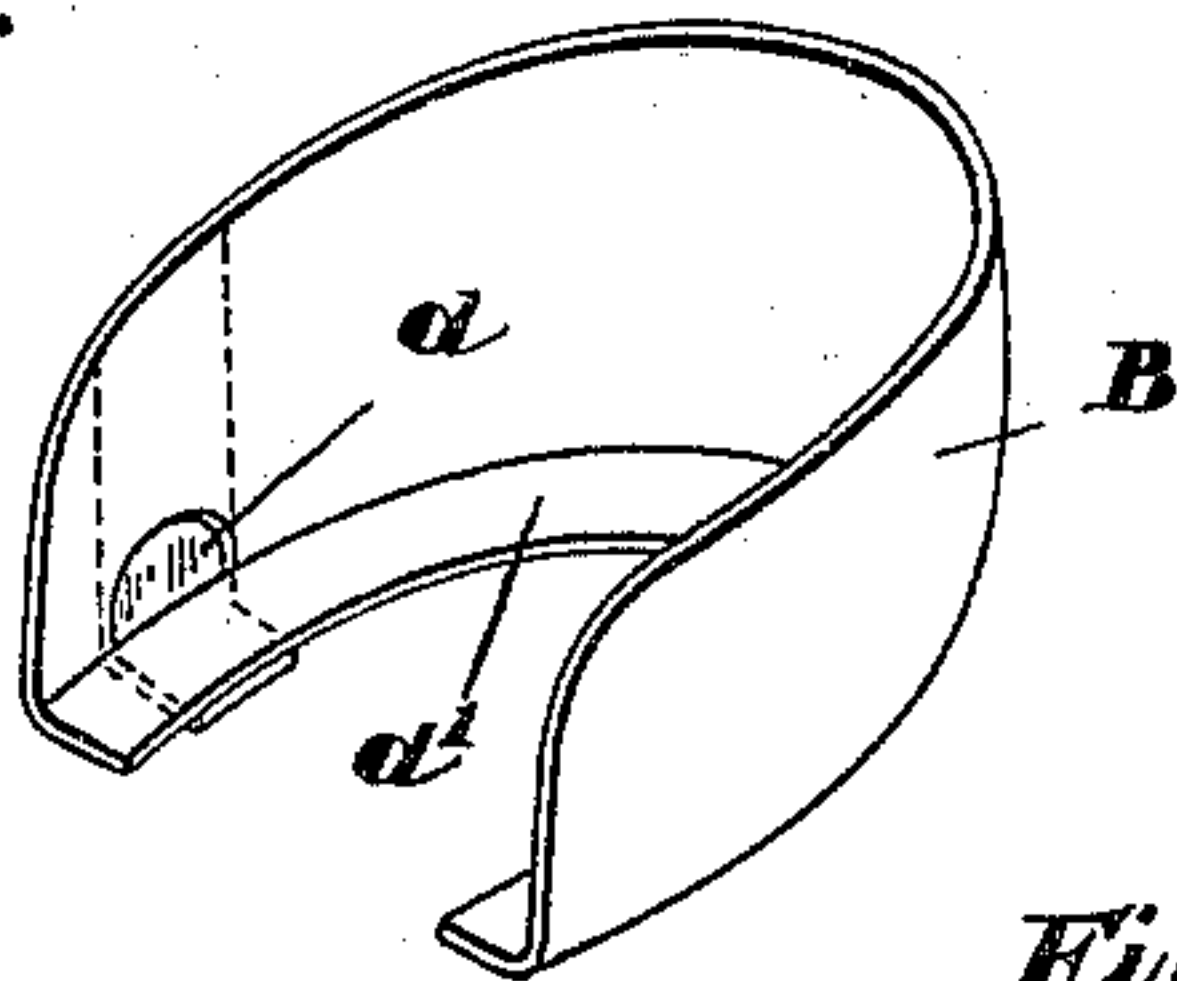


Fig. 3.

Inventor.

R. E. Snell
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UNITED STATES PATENT OFFICE.

ROBERT EDWARD SNELL, OF TORONTO, CANADA.

VENTILATED SHOE.

SPECIFICATION forming part of Letters Patent No. 672,336, dated April 16, 1901.

Application filed July 7, 1900. Serial No. 22,854. (No model.)

To all whom it may concern:

Be it known that I, ROBERT EDWARD SNELL, of the city of Toronto, in the county of York, in the Province of Ontario, Canada, have invented certain new and useful Improvements in Ventilated Shoes, of which the following is a specification.

My invention relates to improvements in ventilated shoes; and the object of the invention is to devise an extremely simple, efficient, and practical means for ventilating a shoe which will not materially interfere with the ordinary construction, and therefore will not be an expensive addition to the cost of making the shoe; and it consists, essentially, of preferably two eyelet-holes formed in the counter portion and communicating with a channel formed to the inside of the counter portion, between the lining and the counter portion, and having an opening into the interior of the shoe at the bottom, such opening communicating with small channels made in the top of the insole and extending to the toe end of the shoe, the parts being constructed and arranged as hereinafter more particularly explained.

Figure 1 is a perspective view of a shoe with a portion broken away to exhibit the interior construction and arrangement of my ventilating device. Fig. 2 is a cross-section through the heel portion. Fig. 3 is a detail of the counter. Fig. 4 is a detail of the metal plate forming the channel looking from the inside. Fig. 5 is a similar view looking at the metal plates from the outside.

In the drawings like letters of reference indicate corresponding parts in each figure.

A is the vamp of the shoe, and A' the counter portion. To the inside of the counter portion I make a couple of eyelet-holes *a a*. To the front and to the outside of the counter B (shown in dotted lines in Fig. 1 and full lines in Fig. 3) I provide a channel C, formed of the metal plates C' and C³, the metal plate C' being bent in at the bottom on top of the heel under the insole D and nailed in position by nails *c c*, as indicated in Fig. 2. It will be noticed that the plate C' is slightly bulged at the upper portion, so as to form the channel, such plate being held bulged by the retaining-rims *c'* of the plate C³. I make an opening *d* in the counter, near the bottom

thereof, but above the inturn *d'* of the counter, and through this opening the air is designed to pass into the channels *d*², which are passed forwardly to the toe of the shoe in two central channels and two curved branch channels *d*³, connected together at the toe. I of course provide the usual lining E inside of the shoe.

The air is caused to pass into the shoe particularly in walking by the swing of the foot, it being well known that a rapid movement communicated to any hollow object causes an incurrent of air to pass into it if there are openings in the side, and this principle I have utilized in my means for ventilating shoes. A common example of this principle is a moving train in which the windows are open. By such a device the foot is particularly well ventilated during the action of walking, when the exercise of the foot is the greatest and the foot is most liable to be warm and overheated. When the foot is at rest, of course ventilation is also provided by means of the communication by the channels *d*² through the channels C and eyelet-holes *a* to the outer air.

I have made a thorough test of my invention and have cured several cases of perspiring feet by supplying them with my ventilated shoe, and I am therefore able to positively state that my simple means of ventilating the shoe herein described is very effectual. Not only is it effectual, but it does not interfere with the manufacture of the shoe, as a great many devices do which are designed to ventilate a shoe. The channels *d*², being very small in the insole, do not at all affect the foot, but form a very effectual means of conveying air underneath the foot. It will also be understood that the channels being cut out of the insole at the top are not liable at all to become choked, and even should any dirt get into them they can be readily cleaned out.

What I claim as my invention is—

1. In a ventilated shoe, in combination a counter having an opening therein, an inner sole having channels along the top of the same connecting with said opening in the counter, a quarter having eyelet-holes therein, a channel formed of metal plates, held between the quarter and counter connecting the

opening in said counter with said eyelet-holes, substantially as described.

2. In a ventilated shoe, the combination with the eyelet-holes leading to the inside of the counter portion and the channel located
5 inside of the counter portion and formed of the metal plates C' and C³, the plate C' having its lower end bent in at the bottom on top of the heel under the insole and secured
10 in position and the upper plate having the

side beads retaining the major portion of the plate C', said plate C³ having a recess in the lower portion and the insole, of the channels leading along the top of the insole from the channel formed between the metal plates, as 15 and for the purpose specified.

ROBERT EDWARD SNELL.

Witnesses:

B. BOYD,

H. L. TRIMBLE.