J. HASKINS.

Rubber-Shoe.

No. 211,629. Patented Jan. 28, 1879.

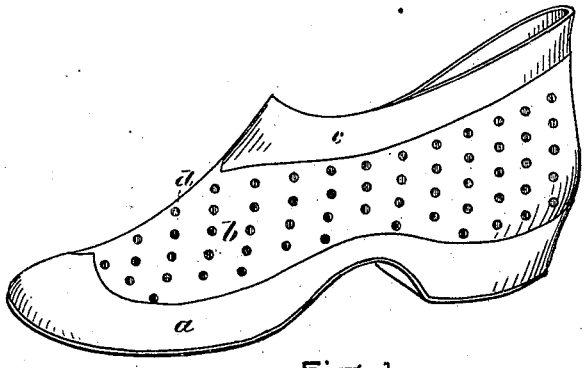

Fig. 1.

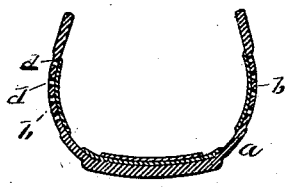

Fig. 2.

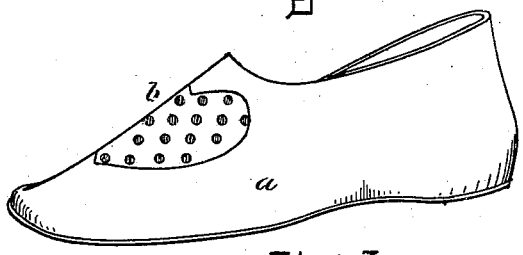

Fig. 3.

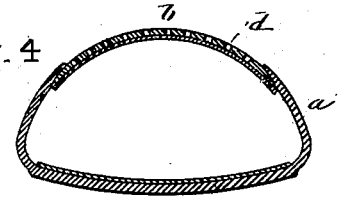

Fig. 4

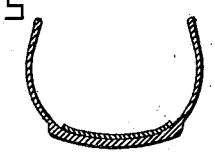

Fig. 5

WITNESSES

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JOHN HASKINS, OF SOUTH FRAMINGHAM, MASSACHUSETTS.

IMPROVEMENT IN RUBBER SHOES.

Specification forming part of Letters Patent No. **211,629**, dated January 28, 1879; application filed September 20, 1878.

To all whom it may concern:

Be it known that I, JOHN HASKINS, of South Framingham, in the county of Middlesex, in the Commonwealth of Massachusetts, have invented an Improvement in Rubber Shoes, of which the following is a specification:

This invention has for its object the following-described rubber shoe made of gossamer or very thin rubber, and having a perforated portion between the upper band and the lower part of the upper, as will hereinafter be more fully explained.

Heretofore rubber shoes have been made generally of inferior rubber-stock vulcanized in suitable molds upon a fibrous backing, and unprovided with perforations. These shoes generally are quite heavy, and have no means by which ventilation can be effected and the temperature of the foot kept uniform, while at the same time the foot shall be protected from moisture and dampness.

In the drawings, Figure 1 is a perspective of a rubber shoe employing my invention. Fig. 2 is a cross-section thereof. Fig. 3 is a perspective of a rubber shoe with a modification of my improvement. Figs. 4 and 5 are sectional views, illustrating the construction.

The shoe is formed with the unperforated portion *a*, which is carried up sufficiently far to give the sides suitable strength, and the perforated portion *b*, which preferably is provided with a fibrous backing, and with the elastic upper band, *c*, which is preferably somewhat thicker and firmer than that portion of the upper which is perforated.

The perforated portion may not form a zone entirely around the shoe between the portions *a* and *c*, as shown in Fig. 1, but may be inserted in any portion of the upper where it is desirable to secure ventilation, care being had that the perforations do not extend to the upper edge of the shoe, but that that part be bordered with an unperforated portion.

The unperforated portion of the shoe below the band *c* may be provided with a lining or not, as desired; and Fig. 3 illustrates a shoe unprovided with any lining except as a backing to the perforated portion, and is made of almost pure rubber, very thin, and elastic. Such a shoe is very light.

It will be observed that the perforations *d* are so small that water will not readily penetrate through them, and also that the perforated portion is backed by fibrous lining, which assists in preventing the water from penetrating to the interior of the shoe, while at the same time the perforations are amply large to supply sufficient ventilation to the shoe.

It will also be seen that the perforated portion should not extend to the sole or to the upper edge of the shoe, as the rubber is somewhat weakened by the perforations, and would be more liable to give way if the shoe were so constructed.

When perforated gossamer is used, or when the shoe is constructed from an entire strip of rubber previously perforated, an unperforated band or re-enforce may be formed, similar in shape to the portion *a*, (shown in Fig. 1 as a foxing,) and the upper edge may be provided with an unperforated re-enforcing-strip, like the portion *c* in Fig. 1.

When the shoe is made of very thin rubber it is desirable that the upper portion or band shall be unlined and elastic, in order that the same may give or stretch when the shoe is put on, and may snugly fit the shoe of the wearer, and it is necessary that shoes made of light rubber should have this continuous elastic band or portion; and it is also desirable in constructing the shoe that the opening surrounded by the band be made smaller than is customary in the ordinary lined rubber shoe of the market, in order that when the shoe is put on the said upper band shall stretch, be under some tension, and tightly hug the shoe.

The ordinary shoe of the market, though flexible, has a very little, if any, elasticity around its top.

The advantages of this invention consist in the thorough ventilation effected, and in the lightness of the article.

Having thus fully described my invention,

I claim and desire to secure by Letters Patent of the United States—

1. As an improved article of manufacture, an india-rubber or gossamer shoe provided with the perforated portion *b*, either with or without a suitable lining inserted between the unperforated upper band, *c*, and the unperforated portion *a*, substantially as and for the purposes described.

2. As an improved article of manufacture, a shoe made of india-rubber having a perforated intermediate portion, and provided with the continuous elastic upper band or portion, *c*, substantially as set forth.

JOHN HASKINS.

Witnesses:
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