(No Model.)

C. J. BAILEY.
RUBBER.

No. 458,212.

Patented Aug. 25, 1891.

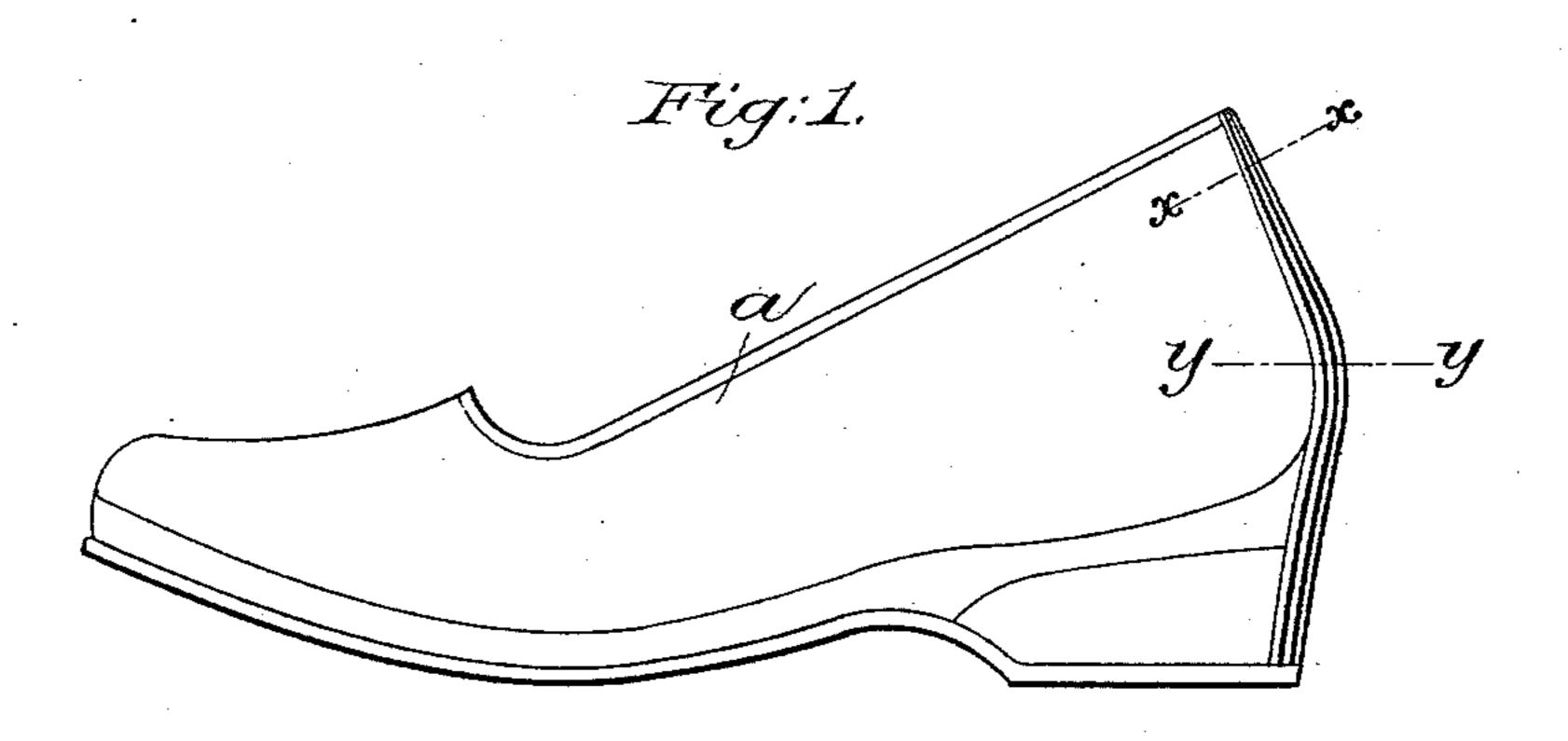
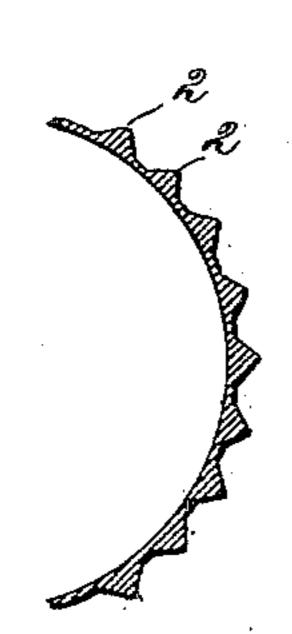


Fig:R.

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Fig:3.



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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

## United States Patent Office.

CHARLES J. BAILEY, OF NEWTON, MASSACHUSETTS.

## RUBBER.

SPECIFICATION forming part of Letters Patent No. 458,212, dated August 25, 1891.

Application filed March 10, 1891. Serial No. 384,434. (No model.)

To all whom it may concern:

Be it known that I, Charles J. Bailey, of Newton, county of Middlesex, State of Massachusetts, have invented an Improvement in Rubbers or Overshoes, of which the following description, in connection with the accompanying drawings, is a specification, like letters and figures on the drawings representing like parts.

parts. Rubbers, overshoes, rubber boots, and the like as now commonly made and worn in wet weather present at such times smooth wet surfaces at the heel ends, and the lower edges of the clothing rubbing over said smooth wet 15 surfaces and adhering or clinging thereto by suction or otherwise will become badly soiled and will in turn soil the shoes. In my attempts to obviate this result I have provided the heel ends of the rubbers, overshoes, and 20 the like with a series of vertical ribs, by which when the clothing is brought into contact therewith a series of air-passages will be provided, which I have found prevents the clothing from adhering or clinging to said wet sur-25 faces; and my invention therefore consists in a rubber shoe or overshoe having at its heel end a series of vertical ribs, as will be hereinafter described.

Figure 1 shows in side elevation a rubber shoe provided on its heel end with vertical ribs in accordance with this invention; Fig. 2, a cross-section of the heel portion, taken on the dotted line xx; and Fig. 3, a cross-section of the heel portion, taken on the dotted line  $35 \ y \ y$ .

a represents a molded rubber shoe of any well-known or usual construction. On the exterior of its heel end a series of ribs 2 2 are arranged vertically, being either molded in the rubber or attached thereto at any time in

40 the rubber or attached thereto at any time in the process of manufacture. As the heel end

of the rubber widens, the ribs 2 2 are located farther apart, as represented in Figs. 2 and 3. The ribs by thus converging at the top tend also to draw the upper edge of the rub- 45 ber snugly about the foot, thereby preventing it from slipping off; but I do not desire to limit my invention to any particular distance apart which said ribs will be located. These ribs stiffen the heel end of the rubber and 50 prevent the same from breaking at the junction of the heel proper and the heel end of the rubber. As the clothing comes in contact with the ribs 22, air-spaces are presented which break the suction and prevent the said 55 clothing from adhering or clinging to and rubbing over the wet surface of the rubber, as is now common. This result is due to the small surface area with which the clothing comes in contact.

I claim—

1. As an improved article of manufacture, a rubber shoe or overshoe having a series of vertical ribs on its exterior at the rear part of the heel end of the shoe, substantially as 65 and for the purpose set forth.

2. As an improved article of manufacture, a rubber shoe or overshoe having a series of converging vertical ribs on its exterior at the rear part of the heel end of the shoe, said ribs 70 converging to the top and thereby keeping the upper edge of the shoe snugly about the foot, substantially as and for the purpose set forth.

In testimony whereof I have signed my 75 name to this specification in the presence of two subscribing witnesses.

CHARLES J. BAILEY.

Witnesses:

BERNICE J. NOYES, EDWARD F. ALLEN.