

(No Model.)

F. RICHARDSON.

RUBBER SHOE.

No. 250,974.

Patented Dec. 13, 1881.

Fig. 1.

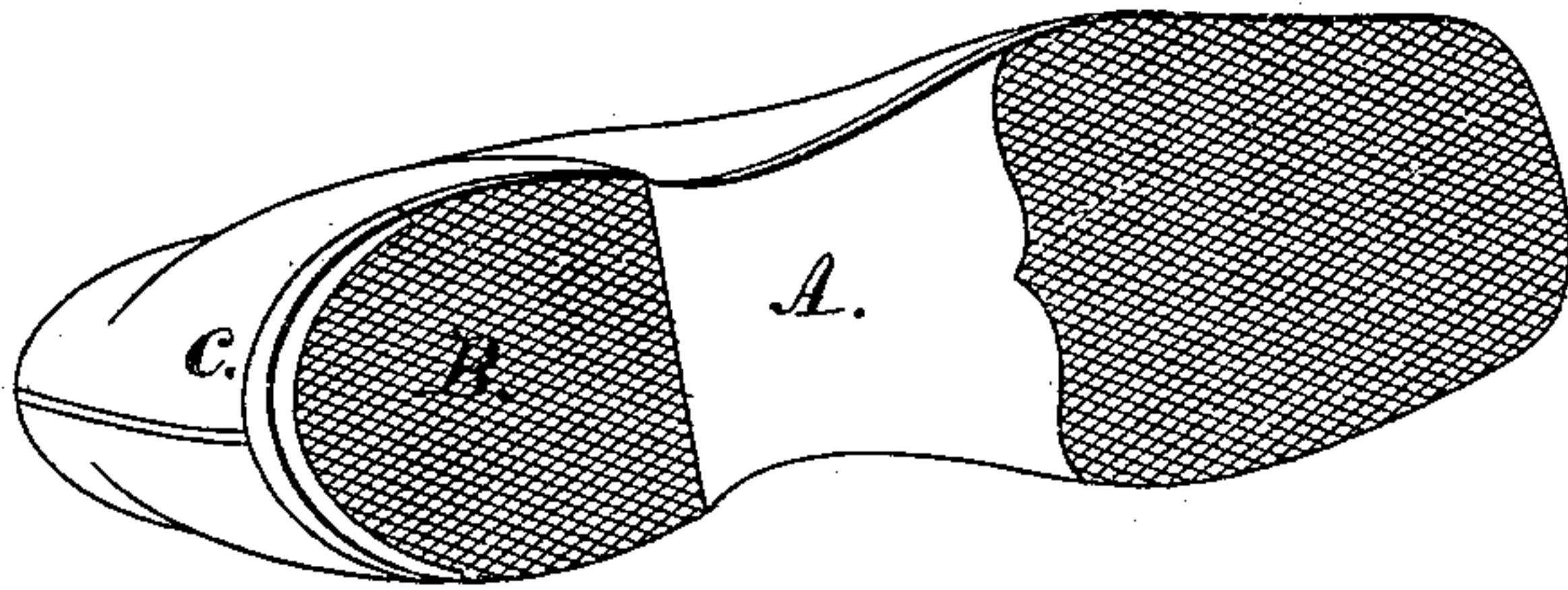


Fig. 2.

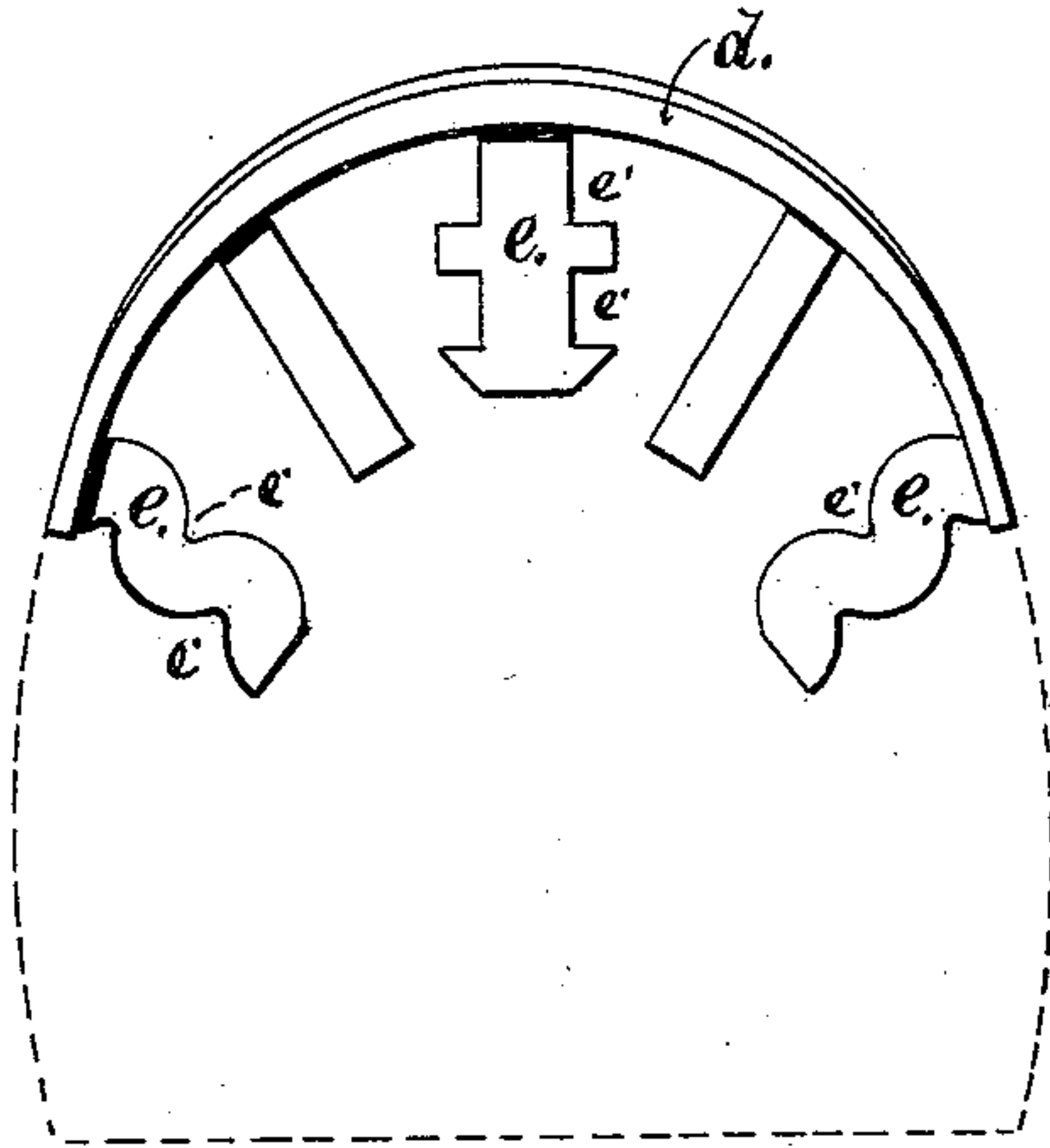


Fig. 3.

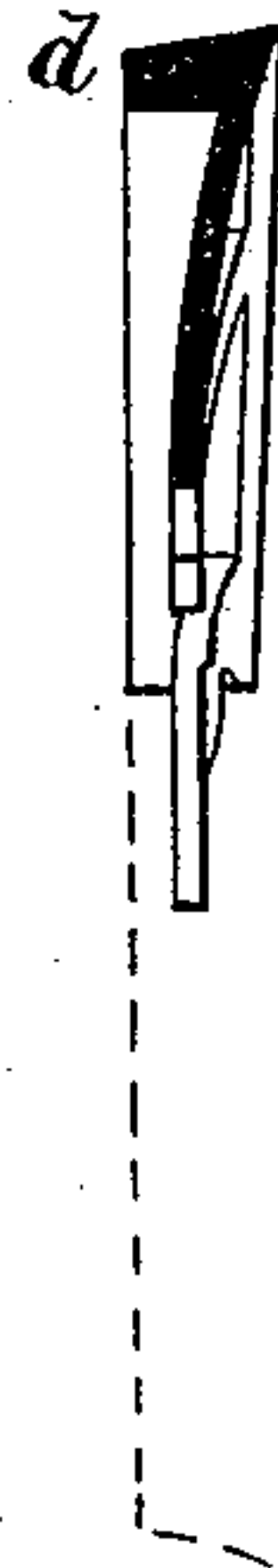
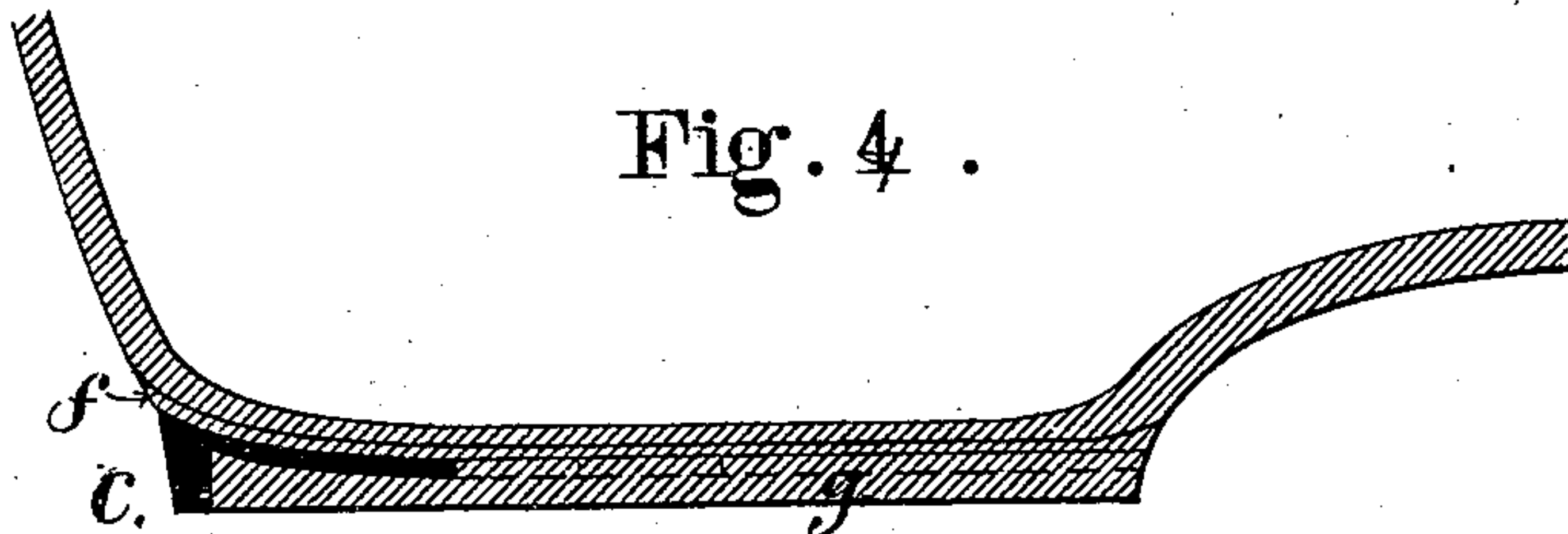


Fig. 4.



WITNESSES:

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INVENTOR:

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by *Joseph A. Miller* atty

# UNITED STATES PATENT OFFICE.

FREDERICK RICHARDSON, OF PROVIDENCE, RHODE ISLAND, ASSIGNOR TO  
THE REVERSIBLE HEEL COMPANY, OF SAME PLACE.

## RUBBER SHOE.

SPECIFICATION forming part of Letters Patent No. 250,974, dated December 13, 1881.

Application filed May 9, 1881. (No model.)

*To all whom it may concern:*

Be it known that I, FREDERICK RICHARDSON, of the city and county of Providence, and State of Rhode Island, have invented a new and  
5 useful Improvement in Rubber Shoes; and I hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification.

10 This invention has reference to an improvement in rubber shoes, particularly applicable to rubber overshoes.

The invention consists in the peculiar construction and arrangement, in connection with  
15 the shoe-heel, of a metal guard by which the rear portion of the heel is protected, as will be more fully set forth hereinafter.

Figure 1 is a perspective view of a rubber shoe, showing the metal heel-guard secured to  
20 the rear portion of the heel. Fig. 2 is a view of the metal heel-guard provided with a number of arms, constructed to form dovetail and interlocking devices to secure the guard to the shoe. Fig. 3 is a sectional view of the same.  
25 Fig. 4 is a sectional view of the heel portion of a rubber overshoe, showing the manner of securing the heel-guard.

In the drawings, A is the rubber shoe, B the heel of the same, and C the metal guard. This  
30 guard consists of the rim *d*, thickest at the rear of the heel and diminishing in thickness toward each side, and extending to the tread or face of the heel, so as to form a wearing-surface. Connected with the rim *d*, and extending

inward toward the center of the heel, are the 35 arms *e e*, having in their edges indentations *e'*, into which the rubber will interlock and prevent said arms from being withdrawn.

When the rubber shoe is constructed and the uppers are cemented to the inner sole I 40 place a thin sheet of rubber, *f*, over the joint, and on this I place the heel-guard C. I now cut out a sheet of rubber to fit the heel and enter between the arms *e e*, projecting into the indentations thereof, and over the whole ce- 45 ment the outer sheet, *g*, forming the surface of the heel. When the shoe so formed is now subjected to the process of vulcanization all the parts will form one whole homogeneous mass, and the heel-guard will be firmly held in 50 its place and will be able to resist all the strains and shocks exerted on the same in wearing the shoe, as the arms *e e*, independent of their adhesion, will, by their configuration and direction, be firmly interlocked with the rubber of 55 the heel.

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

The metal heel-guard for rubber shoes, consisting of the rim *d*, provided with the arms *e*, 60 extending inwardly, said arms having the indentations *e'* in their edges, substantially as and for the purpose set forth.

FREDERICK RICHARDSON.

Witnesses:

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