

(No Model.)

J. S. MELLON.
GALVANIC SHOE.

No. 407,673.

Patented July 23, 1889.

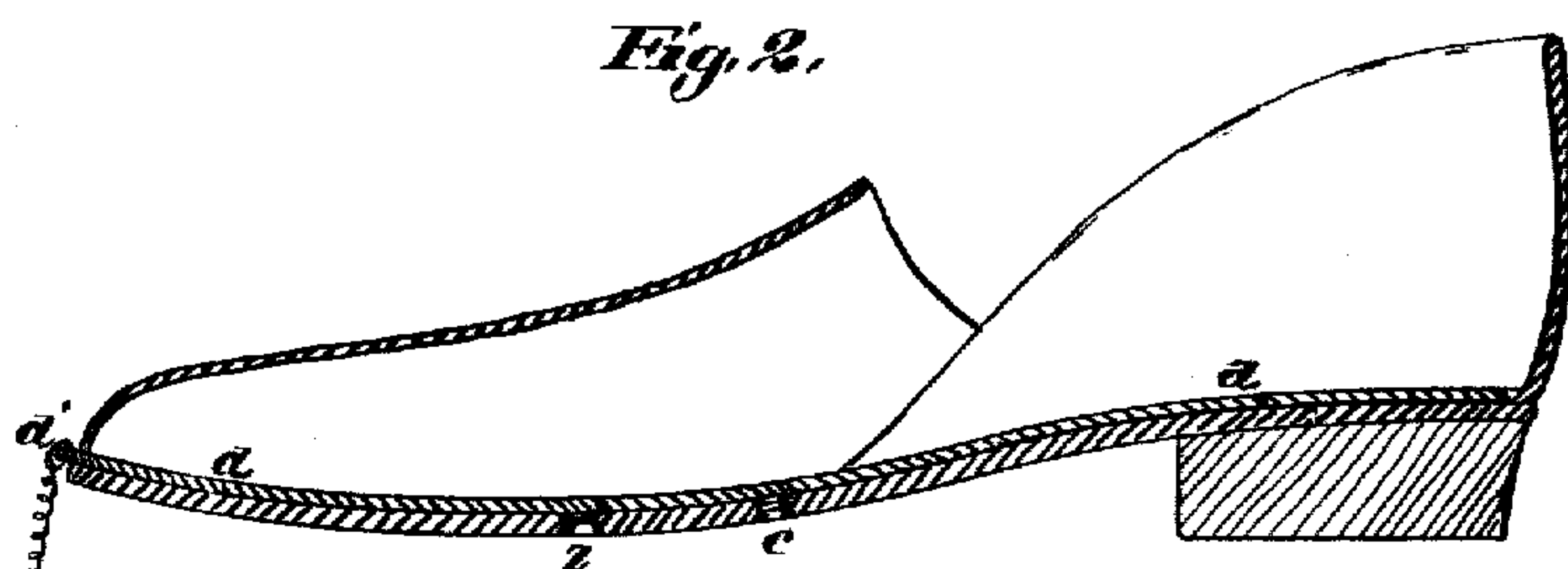
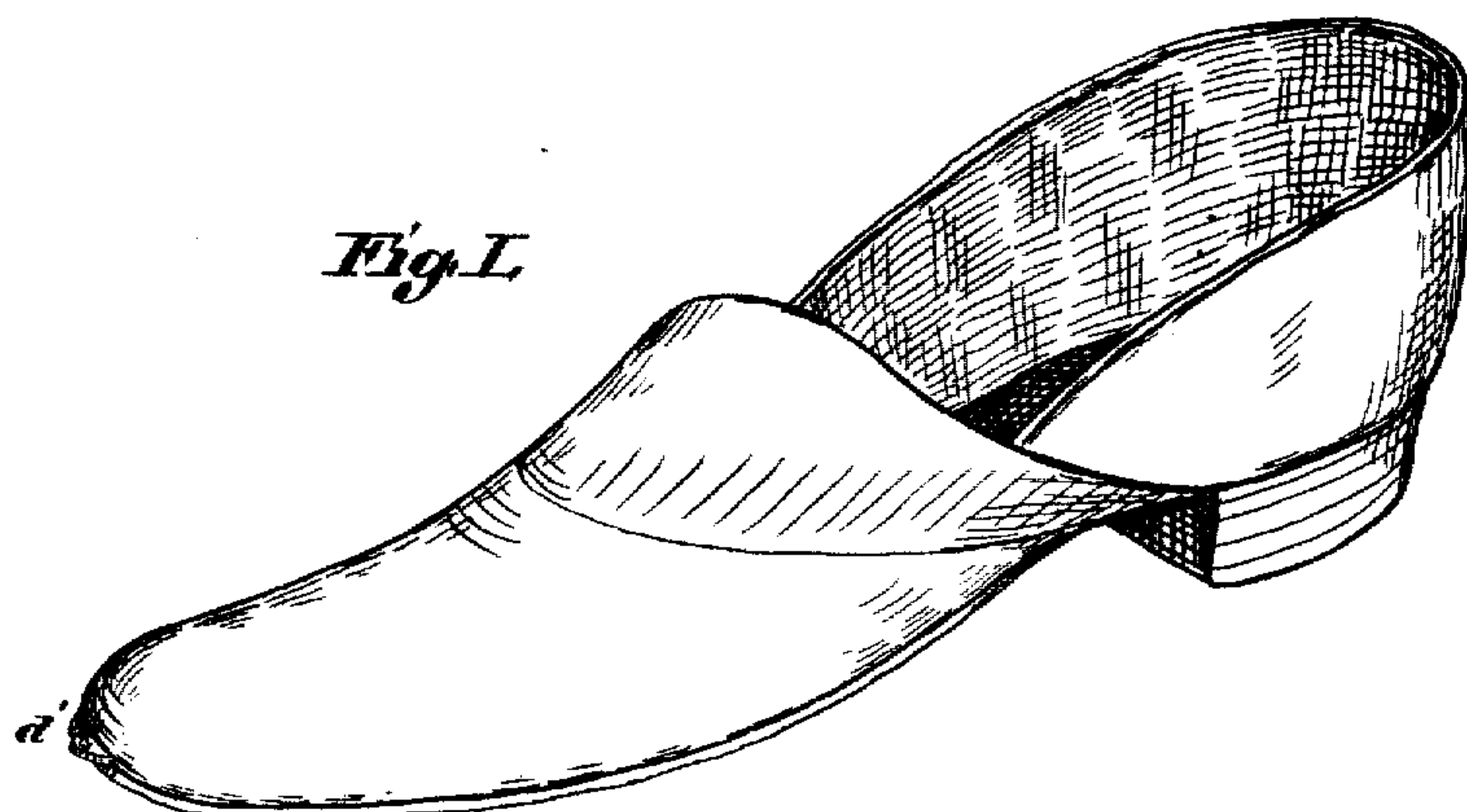


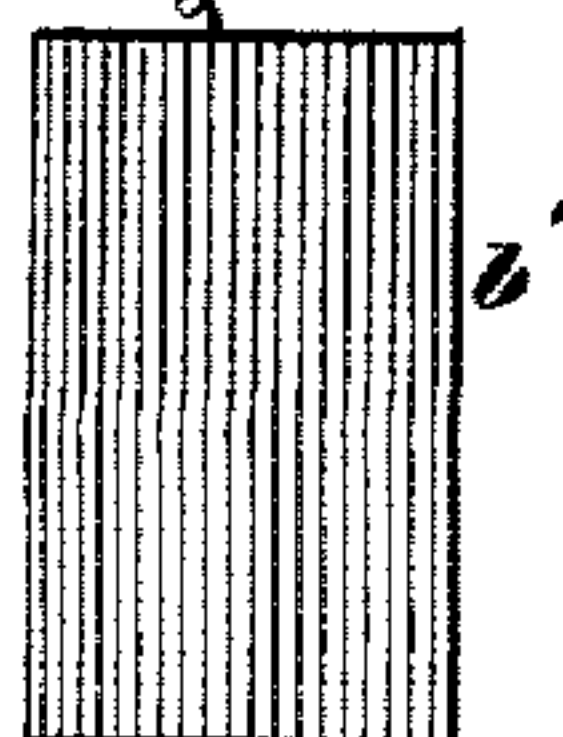
Fig. 3.



Fig. 4.



Attest:
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by H. M. Thompson
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UNITED STATES PATENT OFFICE.

JOHN S. MELLON, OF ST. LOUIS, MISSOURI, ASSIGNOR OF SIX-TENTHS TO
G. W. LEWIS, OF SAME PLACE.

GALVANIC SHOE.

SPECIFICATION forming part of Letters Patent No. 407,673, dated July 23, 1889.

Application filed April 1, 1889. Serial No. 305,597. (No model.)

To all whom it may concern:

Be it known that I, JOHN S. MELLON, a citizen of the United States, residing at the city of St. Louis, in the State of Missouri, have invented a new and useful Improvement in Shoes and other Foot Appliances, of which the following is a specification, reference being had to the accompanying drawings and claims.

My invention relates to health-sustaining appliances, in particular to appliances which are calculated to generate, induct, and educt electrical currents in connection with the human system, and to equalize such currents between it and the earth.

It consists in providing shoes and other foot appliances with metallic conductors and generators of electricity or galvanism and connecting the human system therethrough with the ground, so that the electrical condition existing between the body and the earth may be kept in harmony with each other.

The objects of my invention are to cure the afflicted and to improve the public health.

The accompanying drawings illustrate my mechanical devices for attaining these objects.

Figure 1 is a perspective view of an ordinary slipper-shoe. Fig. 2 is a longitudinal vertical section of the same. Fig. 3 is a detail section of a solid rivet. Fig. 4 is a detail section of a hollow rivet.

Similar letters refer to like parts throughout the several views.

Relative to the use of different kinds of metallic rivets, the scope of this invention is to provide both conductors and generators of the electric and galvanic forces in this device. Such constitute the bases of my invention. Therefore it is desirable to adapt the number of galvanic pairs in foot-wear to the individual's condition under treatment, which can be accomplished by increasing or diminishing the number of galvanic pairs in foot-wear by making them in this manner.

My mechanical device in one form consists of one or more metallic rivets inserted into holes made through the surface of a shoe-sole *c z*, as shown in Fig. 2. These may be of like or different kinds of metal, as one of zinc and another of copper, or otherwise. They may be solid rivets, as in Fig. 3, or hollow, as in

Fig. 4. Their ends inside of the shoe should be flattened to correspond with the inside surface of the shoe-sole, and their outer ends should be flattened and finished in a similar way. In addition to these rivets and combined with them I make use of one or more metallic plates *a a*, (shown in the same figure,) which are in the form of any ordinary "inner soles" for shoes. These are cut out of thin sheet metal and adapted to fit inside of any shoe removably, so they may be taken out or put in readily; or they may be securely fastened inside of the shoe. For these I prefer sheet copper or zinc, and these metals may be used conjointly. These metallic soles are placed inside of the shoe, their under surface in contact with the inner heads of the rivets, which extend through the shoe-sole. Thus, to the extent different kinds of metal are used in these soles and rivets, galvanic elements are formed in pairs, which are adapted to be excited electrically by the moisture of the sole of the foot acting against the inner metallic soles, and that coacting with the rivets, with which it is in contact in the shoe, while the outer ends of the rivets are in contact with the moist earth, or by standing upon a moistened surface arranged for that purpose. In addition to this, for invalid uses, where they are confined to beds or unable to be about on foot, I make use of this combined device by connecting the shoe-plate with the ground by a metallic conductor *b*, which may be copper wire, with or without the ground plant *b*, as shown in Fig. 2. In order to accomplish this, the ground-conductor *b* may be attached to the metallic sole *a* in any suitable way, or, as shown, by thrusting a point *a'* of the inner metallic sole through the leather of the shoe and connecting it to the ground by the conductor *b*, as shown. When used by bed-ridden or greatly-enfeebled persons, the ground conducting-wire *b* or *o* may be long enough to extend from wherever the individual is located out of a window or down through floors to the ground, in which the ground end should be buried sufficiently to be in moist earth. By this means any kind of slipper or foot-wear can be worn and used to accomplish the beneficial objects of this invention.

It is becoming more and more known that

electricity plays an important part in nature. The earth is the source of our physical system. Many diseases result from unnatural electrical conditions. By keeping these in
5 harmony with those of the earth we can live in health.

I am aware of numerous electrical devices for health-giving purposes. I therefore disclaim all others now known in the art, except
10 as herein described, and ask that Letters Patent be granted to me for my present invention and the following claims:

1. The combination consisting of the shoe,

the metallic inner sole, and the metallic rivets inserted through and in combination with the
shoe-sole, as and for the purposes mentioned. 15

2. The combination consisting of the shoe, the metallic inner sole, the metallic rivets inserted through and in combination with the shoe-sole, and the metallic ground-connection
20 a' , b , and b' , as stated herein.

JOHN S. MELLON.

Witnesses:

H. M. THOMPSON,

JENNIE E. MELLON.