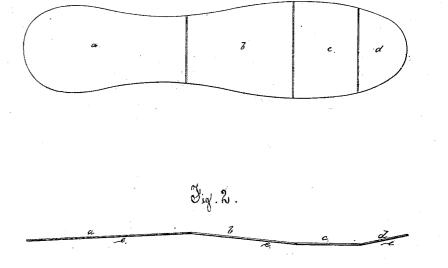


No. 30,317.



Witmesses,

Fig. 1.

Ching of New York Sapte 17 4 1860 Scheft Hill, muel

Char. H Ċ

UNITED STATES PATENT OFFICE.

JOSEPH HILL, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN GALVANIC PLATES FOR MEDICAL USE.

Specification forming part of Letters Patent No. 30,317, dated October 9, 1860.

To all whom it may concern:

Be it known that I, JOSEPH HILL, of Brooklyn, E. D., in the county of Kings and State of New York, have invented, made, and applied to use a certain new and useful Galvanic Plate for the Feet, which I term the "invigorating foot-battery;" and I do hereby declare that the following is a full, clear, and exact description of the nature of my said invention, reference being had to the annexed drawings, making part of this specification, wherein—

Figure 1 is a plan of my said galvanic plate, and Fig. 2 is an edge view of the same, the parts being lettered in a corresponding manner.

Galvanic plates, rings, chains, and a variety of devices have been applied to different parts of the body to promote the circulation of the blood and to act as remedial agents. My invention does not relate to these devices, broadly; neither do I lay claim to a metallic plate formed of two or more metals to be laid in the bottom of the boot or shoe, and under moisture from the foot produce a galvanic action, as this has before been tried; but I have found practically that the constant bending of the foot and plate in the act of walking quickly eracks said metallic plate in such a manner as to render it unsafe for the wearer or useless in its operation.

The nature of my said invention consists in constructing the metallic plate in several sections, hinged or attached to each other so that the same can give to the motion of the foot in walking and not become injured. In the drawings I have represented my invigorating foot-battery as composed of four sections, $a \ b \ c \ d$, of metal plate, and for this purpose I use copper coated with zinc; but any two metals that will produce the galvanic action under moisture from the foot may compose the plate out of which my sections are cut. The respective sections $a \ b \ c \ d$ are to be connected to each other by suitable hinges, so as to hold the sections in their relative position, but allow of motion as the foot bends in walking. For this purpose I make use of a piece of canvas or leather or equivalent material attached to the under sides of the sections, as shown at $e \ e$. By my invention the plate can assume the shape of the foot, and does not crack or break while in use.

I do not claim a metallic plate applied to the sole of the foot; neither do I pretend to claim the remedial effects produced by galvanic action, aiding the circulation of the blood; but

What I claim, and desire to secure by Letters Patent, is—

The galvanic foot plate or battery formed of the sections a b c d, hinged or jointed together in the manner and for the purposes specified.

In witness whereof I have hereunto set my signature this 17th day of September, 1860.

JOSEPH HILL.

Witnesses:

LEMUEL W. SERRELL, CHAS. H. SMITH.