

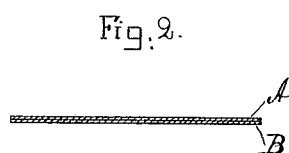
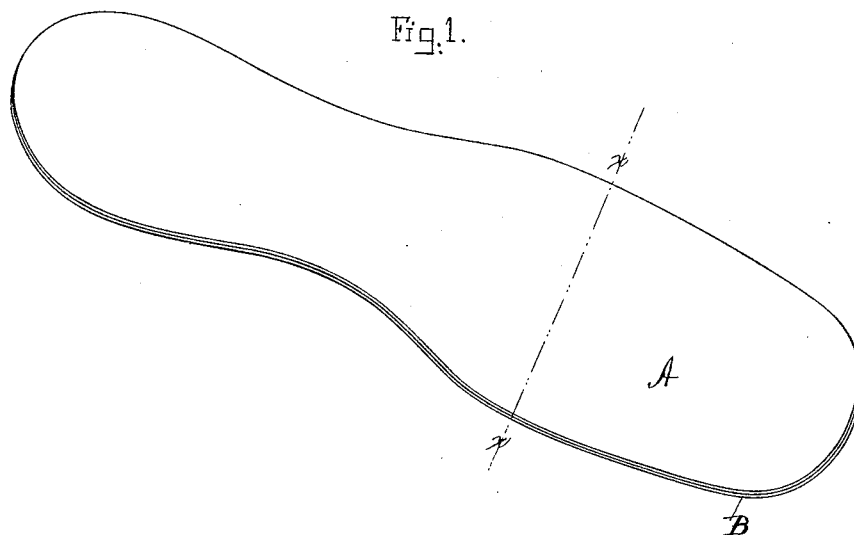
(No Model.)

C. W. KING.

INSOLE.

No. 346,553.

Patented Aug. 3, 1886.



Witnesses

Robert Wallace,
M. A. Thompson.

Inventor

Charles W. King,
by M. A. Wallace
his atty.

UNITED STATES PATENT OFFICE.

CHARLES W. KING, OF RUTHERFORD, NEW JERSEY, ASSIGNOR TO EDWARD
F. BRADFORD, TRUSTEE, OF CINCINNATI, OHIO.

INSOLE.

SPECIFICATION forming part of Letters Patent No. 346,553, dated August 3, 1886.

Application filed November 7, 1885. Serial No. 182,090. (No model.)

To all whom it may concern:

Be it known that I, CHARLES W. KING, of Rutherford, county of Bergen, State of New Jersey, have invented a new and useful Improvement in Inner Soles for Boots and Shoes, of which the following is a full, clear, concise, and exact description, reference being had to the drawings, in which—

Figure 1 is a perspective view of my improved sole; and Fig. 2 is a section on line *xx*, Fig. 1.

The object of my invention is the production of an inner sole, which, when introduced into the shoe, will have sufficient substance to admit of the upper being firmly secured to it, and which, after the shoe has been worn for a time, will become light and flexible throughout the central portions; and it consists of a sole constructed of two or more layers, as hereinafter set forth.

The upper layer is preferably of a good quality of leather, and to one side of this layer I secure, by cement or otherwise, a layer, B, which consists of a material composed chiefly of paper-stock and tar, which is known as "sheathing-felt," and is used largely as a sheathing paper or felt under the metallic sheathing of the hulls of vessels. It is not desirable or necessary to secure the layer of sheathing-felt to the leather very firmly, but only so that the two layers may be handled as one piece until they are secured in the shoe. By the use of this peculiar material for the layer B, which forms the lower or inside layer when the sole is in the shoe, I find that a sole is produced which retains substantially its normal thickness around the edges, where it is stitched or fastened; but which, after slight wear, becomes much thinner and more flexible throughout the central portions, due to

the shrinkage and crumbling away of the layer B throughout these central portions of the sole when dry, and subjected to the pressure and slight friction resulting from the wear of the shoe and the movement of the inner sole relatively to the outer sole and the other parts. When by this action the layer B has practically disappeared, the leather layer A is left, forming a light, flexible, and strong inner sole.

The handling of the shoe in the process of manufacture after the inner sole has been secured to the upper has the effect of breaking up the felt layer B, so that it offers but little resistance to the flexibility of the sole, and the wear of the shoe to a slight extent is sufficient to complete the breaking up of this layer B in such a manner as to cause any resistance which it might present to the flexibility of the shoe to practically disappear. Continued wear of the shoe completes the disintegration of the layer B until the layer of leather alone is left in the central portion of the shoe.

I am aware that soles constructed of two or more layers, one or both of which were of leather, leather-board, leather scraps, cloth, and the like, are old and well known, and I do not claim the same.

What I claim is—

An inner sole for boots or shoes, having an upper layer of leather and an under or intermediate layer of sheathing-paper which is composed chiefly of paper-stock and tar, substantially as and for the purpose specified.

CHARLES W. KING.

Witnesses:

WM. A. MACLEOD,
ROBERT WALLACE.