

W. H. SHURTLEFF.
Boot and Shoe.

No. 224,361.

Patented Feb. 10, 1880.

Fig. 1.

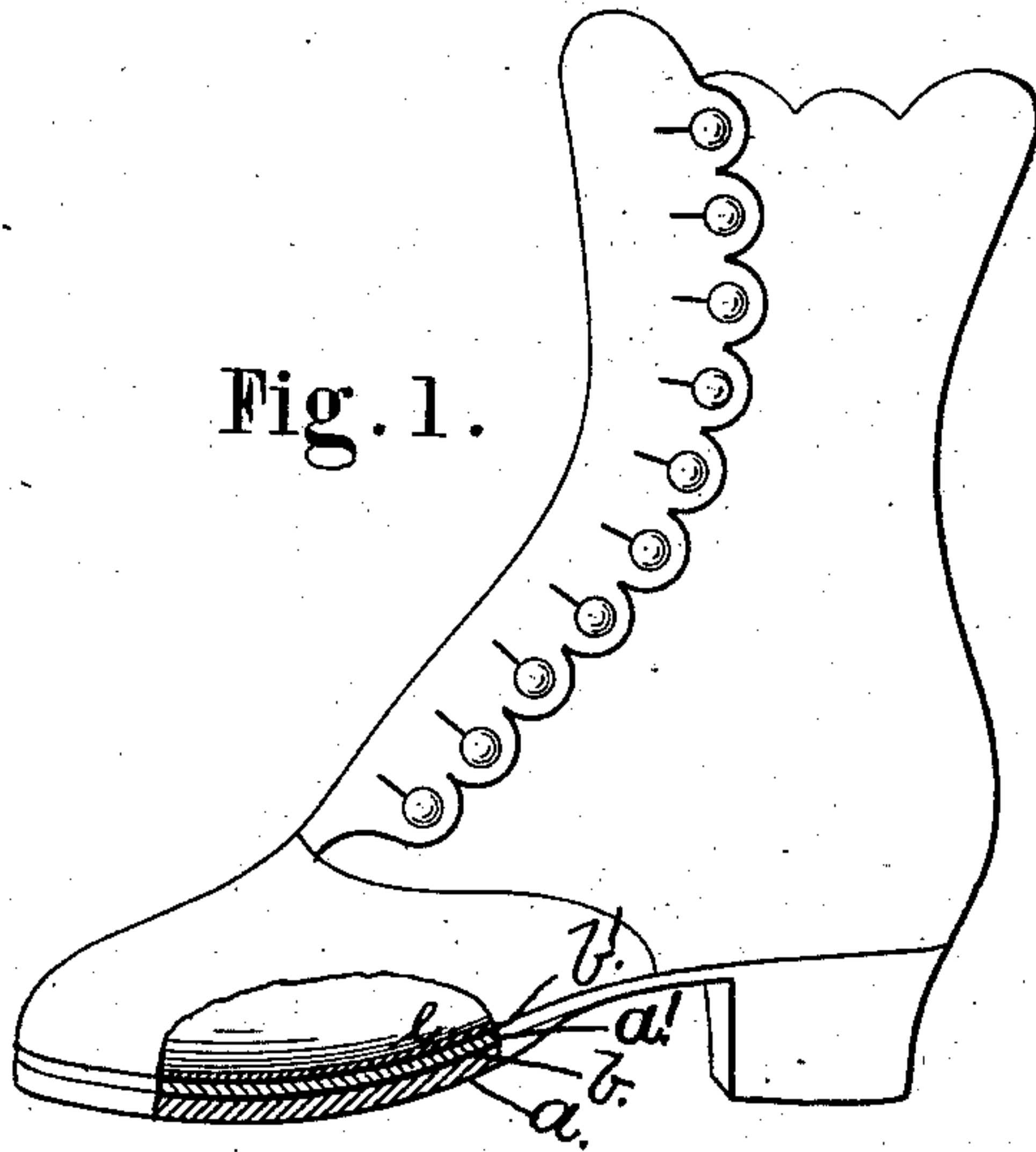
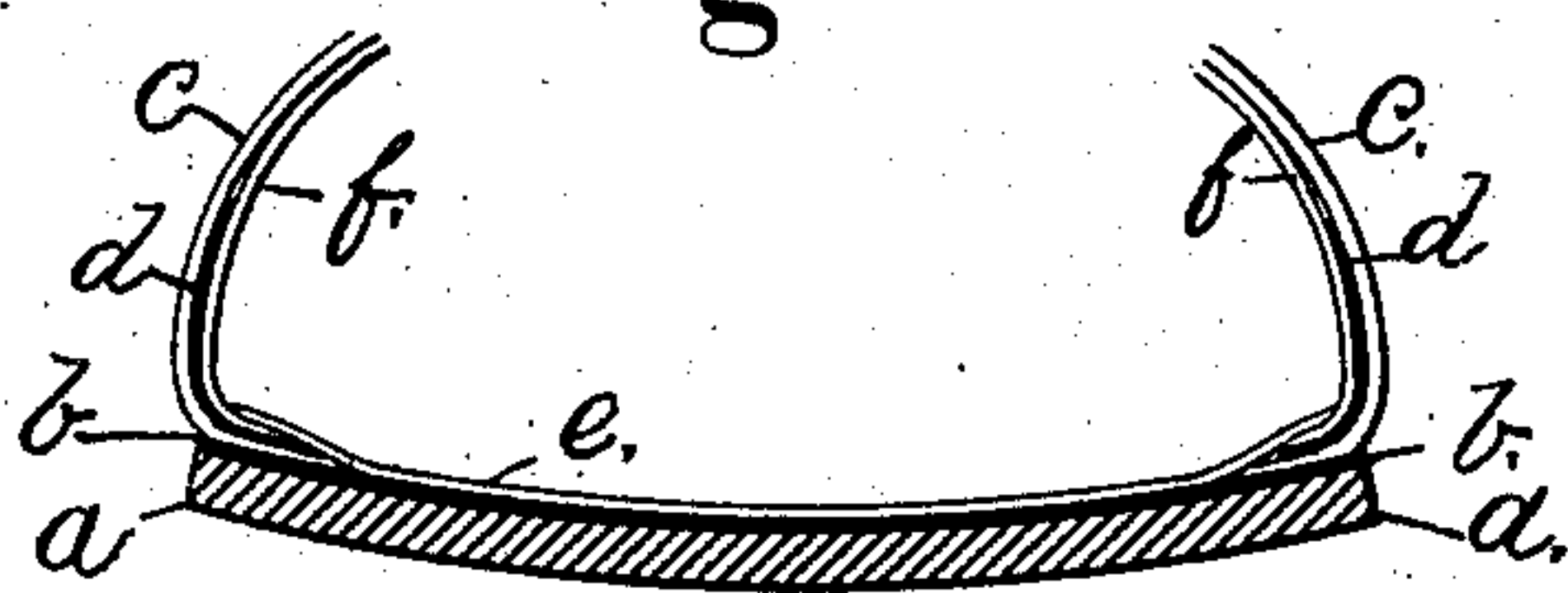


Fig. 2.



WITNESSES:

Geo. M. Church
H. E. Webster

INVENTOR:

W. H. Shurtleff

UNITED STATES PATENT OFFICE.

WILLIAM H. SHURTLEFF, OF PROVIDENCE, R. I., ASSIGNOR OF ONE-HALF
OF HIS RIGHT TO HENRY A. CHURCH, OF SAME PLACE.

BOOT AND SHOE.

SPECIFICATION forming part of Letters Patent No. 224,361, dated February 10, 1880.

Application filed June 12, 1879.

To all whom it may concern:

Be it known that I, WILLIAM H. SHURTLEFF, of the city and county of Providence, and State of Rhode Island, have invented a new and useful Improvement in Boots and 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.

This invention has reference to improvements in the construction of boots and shoes; and it consists in placing between the upper-leather and the lining, particularly near the junction of the same with the sole, a thin sheet of lead, tin, or other similar metal, as will be more fully set forth hereinafter.

Figure 1 is a perspective view of a boot, part of which is shown as cut away so as to show more clearly the metal plates inserted. Fig. 2 is a cross-section, showing a boot or shoe sole and the sheet metal inserted between the insole and sole proper, and also between the upper-leather and the lining at the intersection, with the sole extending upward more or less, as may be desired.

In the drawings, *a* is the sole proper. *b* is a sheet of lead, tin, or other suitable flexible metal, preferably such as can be readily sewed through, so as to unite the same with the sole and with the upper-leather. *c* is the upper-leather; *d*, a strip of any desired width, of a soft metal, preferably lead or tin, placed between the upper-leather and the lining *f* near the joint formed with the sole, as shown.

In Fig. 1 a double-sole shoe is shown. *a* is the sole proper; *b*, a sheet of soft flexible

metal; *a'*, the lighter sole secured to the upper; *b'*, another sheet of soft metal, and *e* the insole.

Many attempts have been made to construct boots and shoes so that they shall be impervious to moisture without fully reaching the desired result.

To prevent moisture penetrating the uppers and soles, I place a thin sheet of lead or similar metal between the upper and lining, from the sole upward any desired distance, and also place a thin sheet of lead or similar material between any two pieces forming the sole. These pieces of sheet metal may be secured in any desired manner, and operate to produce a perfectly water-tight joint, and thus prevent the entrance of water or dampness to the inner portion of the boot or shoe.

In rubber boots or shoes such soft metal sheets may be secured between the lining and upper, and also between the parts of the sole, as above described, and this may be done before vulcanizing, as heat will not injure the metal.

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

In a boot or shoe, the combination, with the upper-leather, of a strip or sheet of lead, tin, or other similar metal extending from the sole upward, substantially as and for the purpose set forth.

WM. H. SHURTLEFF.

Witnesses:

GEO. M. CHURCH,
H. E. WEBSTER.