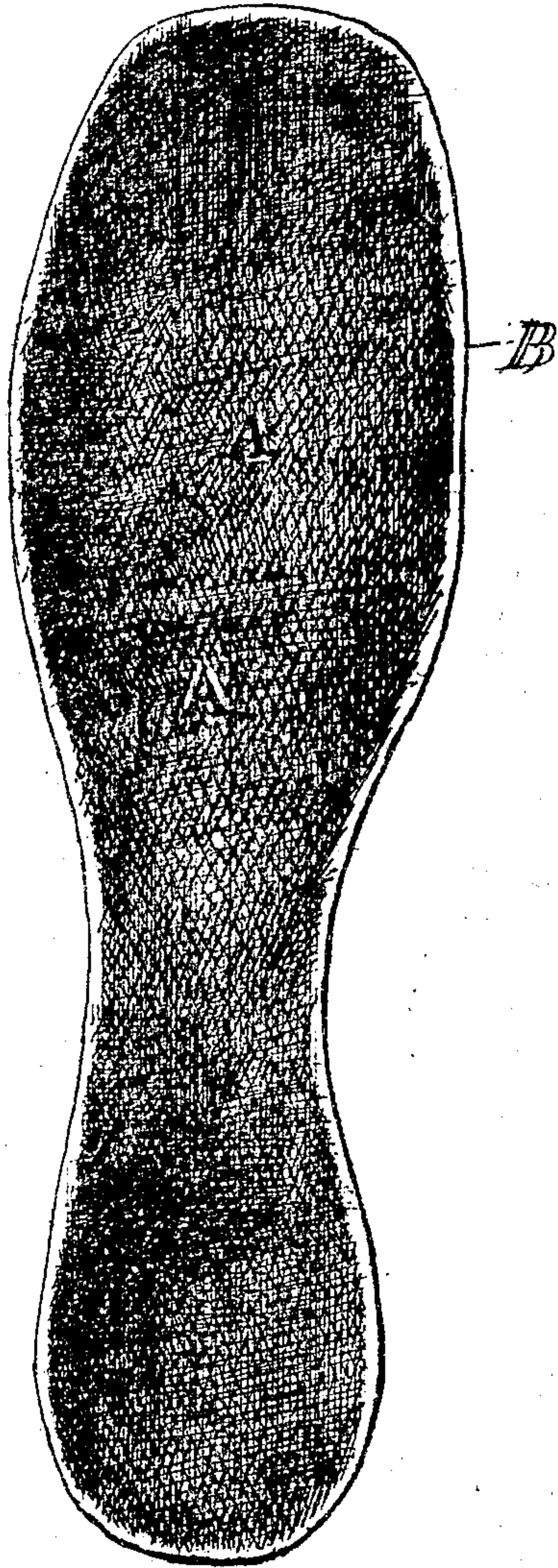


[13.]

Joseph Lutenchlager.
Improved Inner Sole.

No. 118,733.

Patented Sep. 5. 1871.



Witnesses.

Warren H. Smith
B. W. Williams

J. Lutenchlager Inventor

by Henry C. Williams
Att'y.

UNITED STATES PATENT OFFICE.

JOSEPH LUTTENCHLAGER, OF NEW YORK, N. Y.

IMPROVEMENT IN INNER SOLES FOR BOOTS AND SHOES.

Specification forming part of Letters Patent No. 118,733, dated September 5, 1871.

To all whom it may concern:

Be it known that I, JOSEPH LUTTENCHLAGER, of New York, in the county of New York and State of New York, have invented a new and useful Improvement in Inner Soles for Boots, Shoes, &c., of which the following, when taken in connection with the accompanying drawing, is a full and exact specification.

My invention consists in the application to an inner sole for boots, shoes, &c., of a layer of hair, attached as below described, for the purpose of retaining warmth for the feet.

The accompanying drawing represents an inner sole embodying my invention.

A is the sole. B is the horse-hair or other hair, fastened to the sole A by means of thread or cement.

The hair B, being a non-conductor of heat, keeps the feet very warm and dry.

The sole A may be made of felt, cloth, leather, paper, cork, or any other suitable material.

I am aware that, in Letters Patent numbered 87,942, the inventors claim a horse-hair sole, stiffened by a strip of metal, &c. I do not claim anything covered by that invention, as my sole is composed of a common inner sole with the addition of horse-hair.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

The arrangement of the hair B and sole A, as and for the purposes hereinbefore set forth.

JOSEPH LUTTENCHLAGER.

Witnesses:

S. I. LYMAN,

E. E. SHELTON.