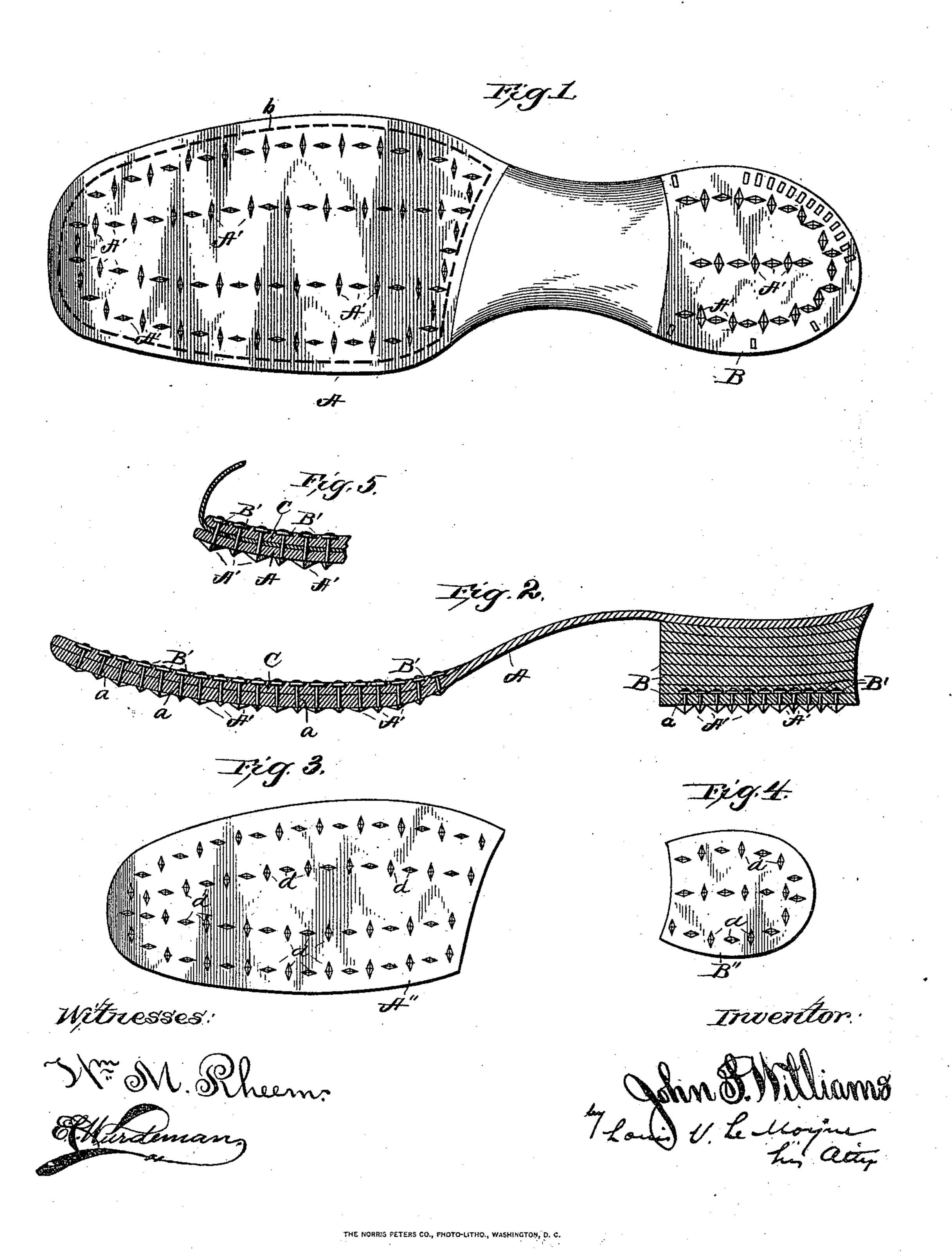
(No Model.)

## J. S. WILLIAMS. SOLE FOR BOOTS OR SHOES.

No. 441,730.

Patented Dec. 2, 1890.



## United States Patent Office.

JOHN S. WILLIAMS, OF CHICAGO, ILLINOIS.

## SOLE FOR BOOTS OR SHOES.

SPECIFICATION forming part of Letters Patent No. 441,730, dated December 2, 1890.

Application filed September 24, 1890. Serial No. 366,036. (No model.)

To all whom it may concern:

Be it known that I, John S. Williams, a citizen of the United States, residing at Chicago, Cook county, Illinois, have invented a new and useful Improvement in Shoes, of which the following is a specification.

My invention consists, broadly, of a shoe the sole and heel of which are shod with metal spurs to give them durability and to

10 prevent slipping.

Figure 1 is a plan view of the bottom of a shoe embodying my invention. Fig. 2 is a longitudinal section of Fig. 1. Fig. 3 is a detached view of a modified form of half-sole. Fig. 4 is a detached view of a modified form of heel. Fig. 5 is a modification in manner of attaching the sole and upper.

A represents the sole; B, the heel; C, the in-

side half-sole.

and washers B'. These rivets pass through the main sole A and the half-sole C, binding the two together. The washers B' are countersunk in the half-sole, making a smooth inner surface. The heads A' of the rivets project from the bottom of the sole A. The upper is attached to the sole in the usual way by means of pegs or stitches, as indicated by the dotted line b, or it may be run in between the soles and riveted in with them, as shown in the modification, Fig. 5. The heads A' of the rivets are made diamond-shaped and pointed and are longer on one diagonal than on the other. They are arranged in rows

upon the sole with their greatest width alter- 35 nately lengthwise and crosswise. The object of this arrangement is to increase their holding power upon the footing and prevent slipping in any direction.

The heel is shod in substantially the same 40 manner as the sole, the rivets being attached to one lift and this then nailed to the rest of

the heel in the usual way.

Figs. 3 and 4 show a detached half-sole A" and heel B", respectively, having rivet-heads 45 d of small size, suitable for ladies' shoes. These may be separately manufactured for use in repairing or to be attached to the ordinary shoe when a rough-shod shoe is desired.

I am aware of the patent to Vester, No. 50 36,385, September 2, 1862, and to Buck, No. 325,194, August 25, 1885, and make no claim to the invention therein disclosed.

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

The herein-described shoe, consisting of the combination, with the upper, of the sole A and the heel B, each provided with the metallic rivets a, with the sharp projecting heads A', of diamond shape, having one diagonal 60 greater than the other, and arranged in rows with their greatest diagonal alternately lengthwise and crosswise, all substantially as shown and described.

JOHN S. WILLIAMS.

Witnesses:

F. J. LE MOYNE, L. V. LE MOYNE.