

(No Model.)

J. W. WHITE.

ANTI SLIPPING SANDAL OR SHOE.

No. 287,748.

Patented Oct. 30, 1883.

Fig 1.

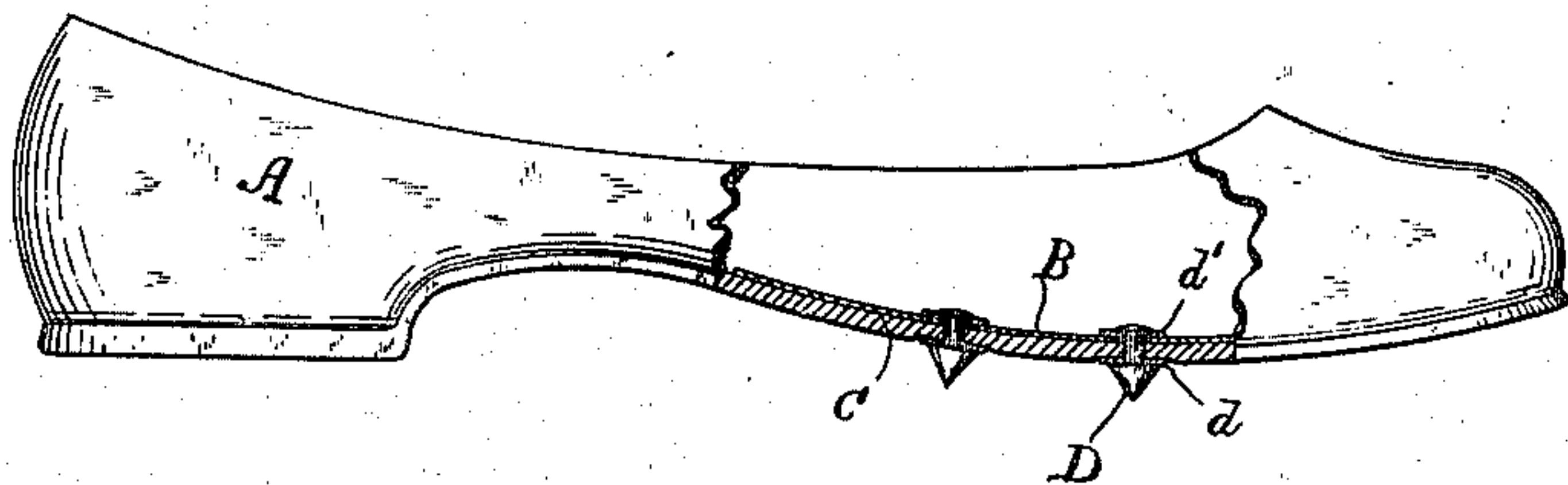
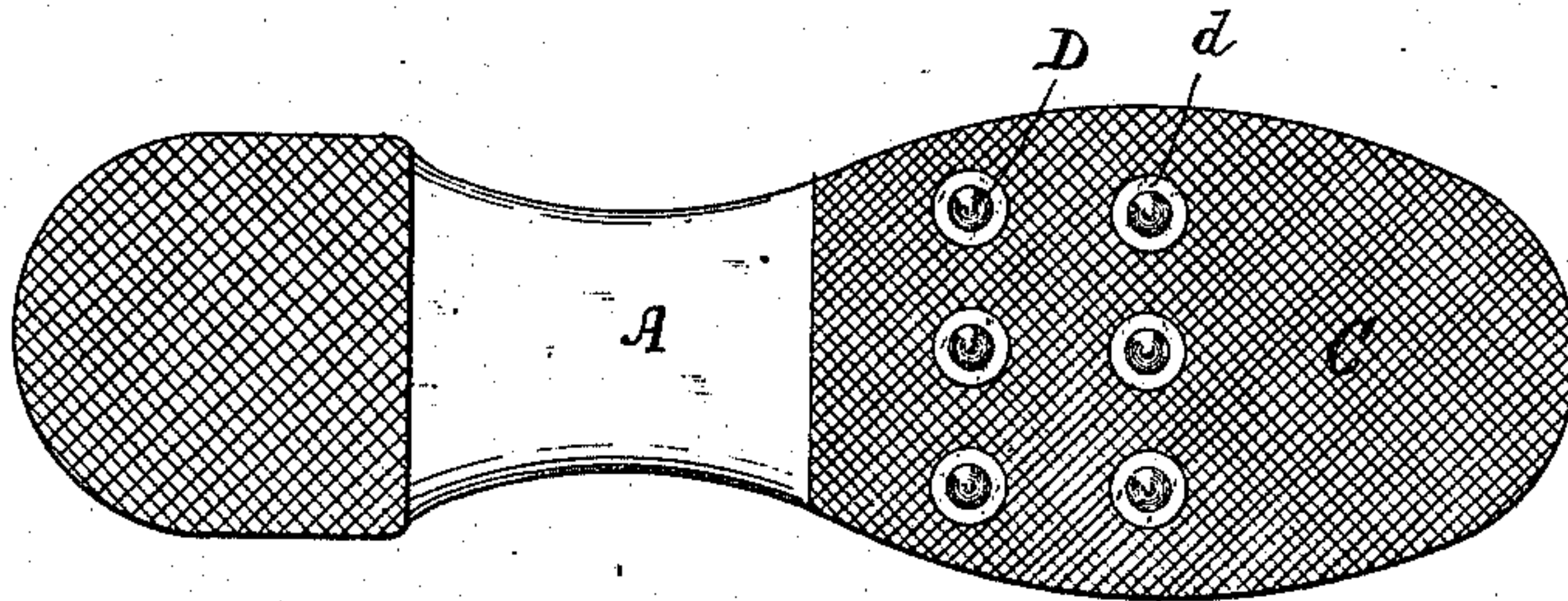


Fig 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

JAMES W. WHITE, OF PHILADELPHIA, PENNSYLVANIA.

ANTI-SLIPPING SANDAL OR SHOE.

SPECIFICATION forming part of Letters Patent No. 287,748, dated October 30, 1883.

Application filed February 2, 1883. (No model.)

To all whom it may concern:

Be it known that I, JAMES W. WHITE, of the city and county of Philadelphia, in the State of Pennsylvania, have invented certain
5 new and useful Improvements in Anti-Slipping Sandals or Shoes, of which the following is a specification.

Anti-slipping shoes have been made with points projecting from the sole or heel thereof, the points being either permanently fixed to the shoe or removable therefrom at pleasure. One of the common forms is to have the projecting points, spurs, or catches attached to or formed with a removable plate held to the
15 sole or heel of the shoe by clamps or straps. Sandals or overshoes have also been made with a double sole of leather having an intermediate plate secured therein, with points or spurs projecting from the outer side of the plate through the lower thickness of the leather sole. All the anti-slipping arrangements or ice-creepers, so far as I am aware, have some objectionable feature, either by reason of the difficulty of securing the spurs or points to
25 the sole or heel, or by reason of the liability of the same to become detached while in use, causing either inconvenience or loss. Some plans are objectionable on account of expense, while others, though comparatively economical, are less efficient for the purposes for which they are designed.

The object of my present invention is to provide an improved sandal or shoe, which can be rendered anti-slipping by the attachment thereto of projecting spurs or points in a ready and economical manner, the anti-slipping spurs or points being capable either of attachment to the sandals or shoes at the time of manufacture or of being readily applied
40 thereto at a future time, as may be desired.

The subject-matter claimed is first fully described, and then particularly pointed out at the close of the specification.

In the accompanying drawings, Figure 1 is
45 a longitudinal section through my improved sandal or shoe, and Fig. 2 a bottom plan view thereof.

My improvements are preferably applied to rubber shoes or sandals which the owner wears
50 when he is walking upon wet or slippery places,

and removes when he enters places having covered or carpeted floors.

An ordinary rubber sandal, A, is shown in the drawings, having water-tight sides and sole, as usual. Fitting the inside of the sandal, 55 forward of the hollow part of the foot, is a thin metal plate, B, preferably corresponding in shape to the interior of the sole C. This plate has one hole or a series of holes formed therein for the reception of the inner ends or shanks 60 of tapered or cone-headed rivets D. I preferably employ a double series of these rivets, as clearly shown in Fig. 2, the shanks of which are passed through the sole of the sandal from the outside, and through the holes in the metal 65 plate upon the inner side of the sole. Interposed between the annular shoulder formed at the junction of the reduced shank with the tapered or pointed head of the rivet and the sole I preferably interpose a thin metal washer, 70 *d*, a little larger in diameter than the cone-head of the rivet, for said head to bear upon, while upon the inner end of the shank of the rivet I also preferably employ a corresponding washer, *d'*, and then rivet the inner or shank 75 end down upon said last-mentioned washer, so as to securely fasten the rivet in place.

It will thus be seen that the sandal or shoe is provided with firm fixed cone points or spurs upon the bottom or wearing surface, whereby 80 slipping of the wearer upon ice and snow is effectually prevented. In addition, the metal plate affords stiffness and firmness to the shoe, and the shoe or sandal may be easily secured upon the foot by placing the toe of the foot into 85 it and driving it home by a thrust of the foot against the floor, the spurs or projections locking the outer shoe or sandal, while the movement due to the thrust of the foot drives the foot readily into the sandal, thus permitting of 90 its being readily secured to the foot without necessarily using the hands to pull the sandal on.

I have described the preferred form of construction; but it will be obvious that, instead of riveting the inner ends of the shanks of 95 the cone-rivets down upon the stiffening-plate B, screw-nuts may be screwed upon threads formed upon the rivet-shanks, so as to render each rivet separately detachable, whereby, after long use, should any one or more of the rivets 100

have their points or spurs worn, so as to be unavailable as an anti-slipping medium, ready renewals of the spurs or projections may be accomplished.

5 It will also be obvious that instead of having separate screw-nuts for the shanks of the rivets, the holes in the plate A, into which the rivets are inserted, may be screw-threaded, and that the rivets or spurs may be screwed therein.
10 Again, it is not absolutely necessary to interpose between the head of the rivet or spur and the bottom of the sole a separate washer, while it will also be understood that the equivalent of such interposed separate washer would
15 be a thin metal plate on the bottom of the sole, through which all or some of the rivets might be made to pass.

It will be readily perceived that my improved method of attaching spurs or projections to
20 shoes or sandals may be employed either at the factory where the shoes are made or subsequently.

Before stating what I claim, it may be well to say that I do not broadly claim a shoe or

sandal having projecting spurs extending 25 through the outside of a sole. That, as before indicated, is old, and not my invention.

What I claim herein is—

1. The combination, with a shoe, of a shouldered spur projecting from the shoe-bottom, 30 and a fastening for said spur at the inner side of the shoe, substantially as described.

2. In a shoe, the combination of a shouldered spur projecting from the shoe-bottom, a washer interposed between the shoulder 35 of said spur and the outer side of said shoe-bottom, and a plate at the inner side of the shoe, through which the shank of the spur projects, and to which it is fastened by riveting or in other equivalent ways, substantially as 40 described.

In testimony whereof I have hereunto subscribed my name this 1st day of February, A. D. 1883.

JAMES W. WHITE.

Witnesses:

FRANK L. HISE,
W. R. POTTER.