

(No Model.)

C. F. SPENCER.

ATTACHMENT FOR RUBBER SHOES.

No. 303,955.

Patented Aug. 19, 1884.

Fig. 1.

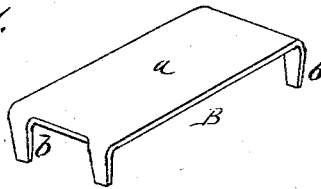


Fig. 2.

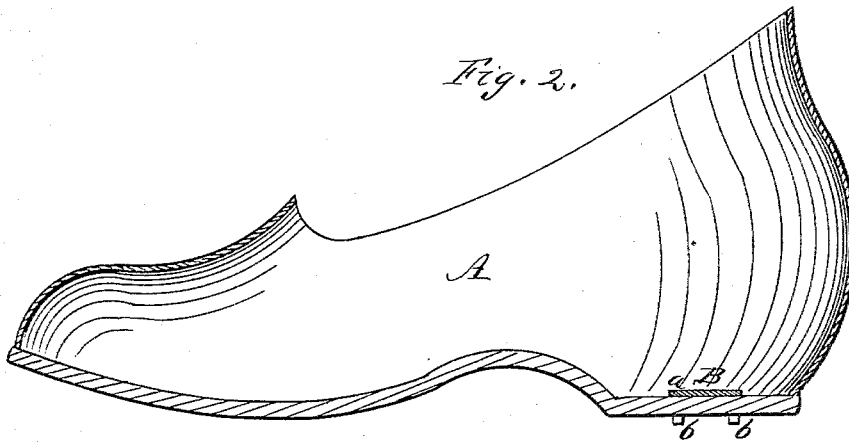
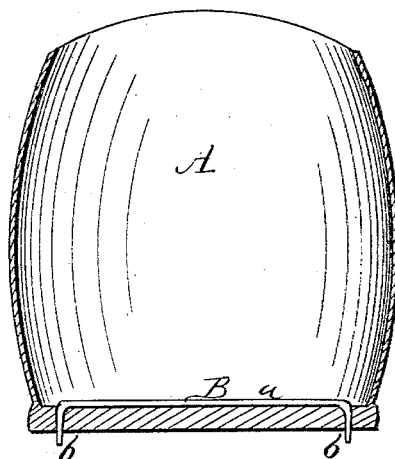


Fig. 3.



Attest.
Paris Clark
John H. Hopkins

Inventor.
Chas. F. Spencer

UNITED STATES PATENT OFFICE.

CHARLES F. SPENCER, OF ROCHESTER, NEW YORK, ASSIGNOR OF ONE-HALF
TO HOBART F. ATKINSON, OF SAME PLACE.

ATTACHMENT FOR RUBBER SHOES.

SPECIFICATION forming part of Letters Patent No. 303,955, dated August 19, 1884.

Application filed February 20, 1884. (No model.)

To all whom it may concern:

Be it known that I, CHARLES F. SPENCER, of the city of Rochester, county of Monroe, and State of New York, have invented a certain new and useful Improvement in Attachments for Rubber Shoes to Prevent Slipping; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of the device. Fig. 2 is a longitudinal vertical section of a rubber shoe with the device in place. Fig. 3 is a cross-section of the heel enlarged, also showing the device in place.

My improvement relates to attachments for rubber shoes to prevent slipping on ice, and is designed to be attached to the shoe in such a way that the pressure of the foot in walking will hold it down to place; also so that the device can be removed from place when necessity does not require its use.

To this end my invention consists in the combination, with a rubber shoe, of a flat plate or head having one or more projecting spurs, the spurs being passed through the sole of the heel and projecting on the under side, and the plate or head fitting flat on top of the sole, so as to be held down by the pressure above, as hereinafter more definitely described.

In the drawings, A shows a rubber shoe of ordinary form. B is the attachment applied to the heel thereof to prevent slipping. This attachment consists of a flat thin plate or head, *a*, and one or more spurs, *b*, made thin-edged or sharp-pointed. The plate may consist of a square or rectangular strip, as shown, or be round, square, or of any other desired form in outline; but it must be made so thin as to rest flat on the inner side of the sole of the heel, and not interfere with the foot in walking. It may also be made of any desired size, but such that sufficient surface is presented for the heel of the wearer to press thereon and hold it down. The spurs are of such length as to reach through the heel of the rubber and project a little below, so as to catch into the ice,

and they must also be made straight, or substantially so, so that they can be inserted and drawn out as necessity requires. The spurs may be made solid with the plate, as shown in the drawings, or they may be made separate and attached thereto.

In use the plate is attached to the heel by inserting the spurs through the bottom of the heel from the upper side, the plate resting flat on the inner side of the heel, and receiving the contact of the heel of the wearer. This constant pressure holds the plate down and causes the spurs to catch into and hold in the ice in walking. At the same time, when there is no danger of slipping, the plate can be removed by simply drawing the spurs out, and the slits of the rubber, where the spurs rested, will close tightly by the natural elasticity of the rubber, and effectually exclude water.

The great advantage of the device is its ready application and removal, and its ability to retain its place under the pressure of the foot of the operator. It avoids the use of creepers and separate outside attachments, such as have heretofore been used, and which are difficult to apply and keep in place. It makes a solid and permanent attachment to a rubber shoe by being embedded in the rubber, and renders practicable the fastening of spurs or points to the shoe, which cannot well be done on the outside, owing to the flexible and yielding qualities of rubber.

Having described my invention, I claim—

The combination, with a rubber boot or shoe, of an attachment consisting of a flat metal plate or head provided with depending spur or spurs, the plate or head resting on the inner surface of the heel or sole, and the spur or spurs projecting down through the heel or sole, the plate adapted to be removed, all substantially as set forth.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

CHAS. F. SPENCER.

Witnesses:

R. F. OSGOOD,
P. A. COSTICH.