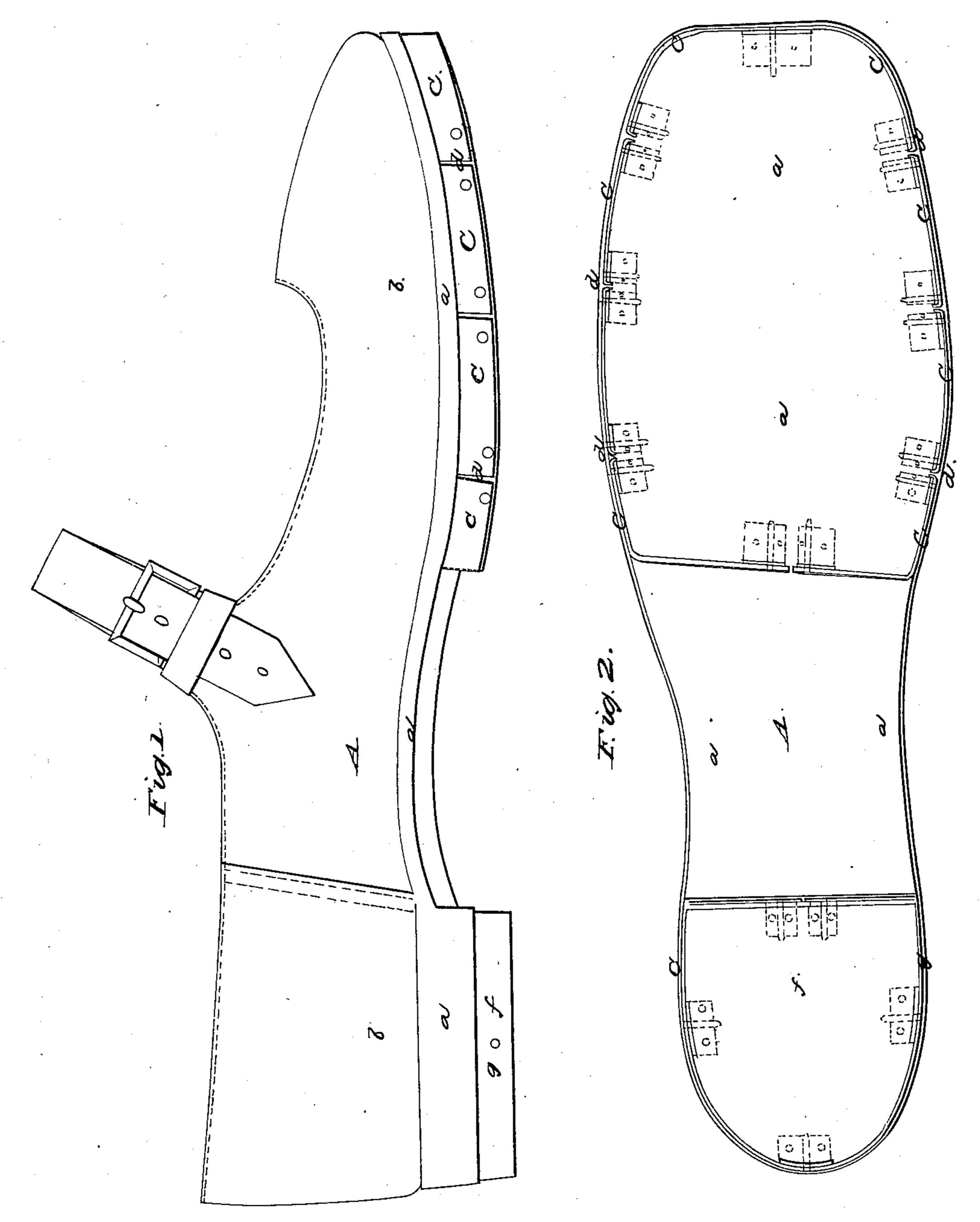
N. C. LEWIS, JR. BOOT OR SHOE.

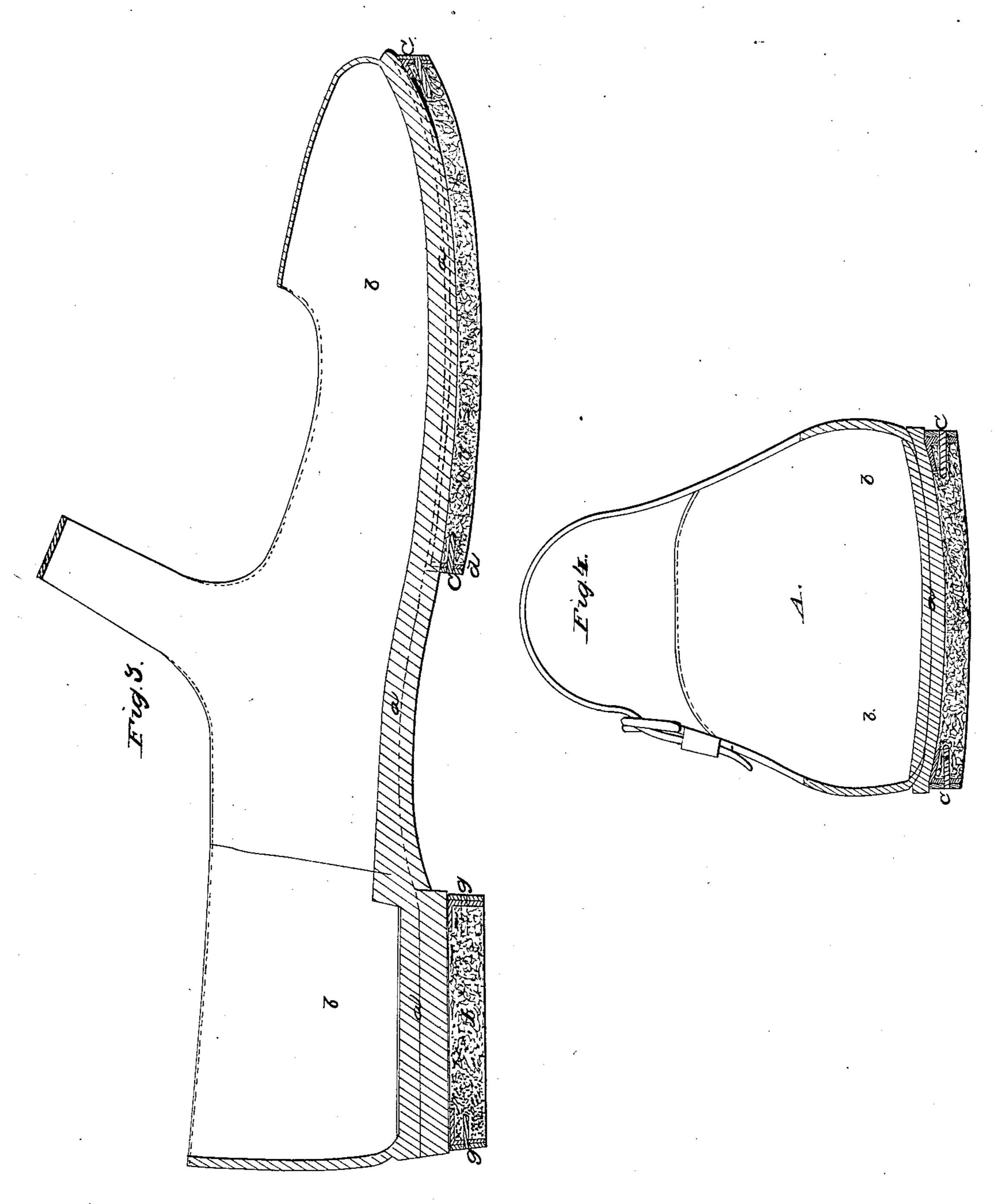
2 SHEETS—SHEET 1.



Inventor: Nation C. Lewsyn

N. C. LEWIS, Jr. BOOT OR SHOE.

2 SHEETS—SHEET 2.



Wittnesses R. H. Ludy A. Rettal

Inventor: Nathan C. Lewyp

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## UNITED STATES PATENT OFFICE.

NATHAN C. LEWIS, JR., OF BOSTON, MASSACHUSETTS, ASSIGNOR TO HIMSELF AND EDWIN BRUCE, OF BOSTON, MASSACHUSETTS.

BOOT OR SHOE.

Specification of Letters Patent No. 29,344, dated July 24, 1860.

To all whom it may concern:

Be it known that I, Nathan C. Lewis, Jr., of Boston, in the county of Suffolk and State of Massachusetts, have invented an Improvement in Boots and Shoes; and I do hereby declare the same to be fully described and represented in the following specification and the accompanying drawings, of which—

Figure 1 is a side view; Fig. 2 a bottom or underside view; Fig. 3 a longitudinal section, and Fig. 4 a transverse section of an overshoe provided with my invention.

My invention consists in the arrangement 15 and application of a series of separate metallic guards with respect to the main sole of a shoe and to the edges of a gutta percha or caoutchouc outer sole applied to the main sole by screws or equivalent devices and ex-20 tend down about the edges of the rubber or outer sole, while such latter sole is held to the guards and main sole or the latter alone by cement. I am aware that metal guard tips or shields have been applied to the edges of 25 heels and soles of gutta percha, in which case they have been affixed by molding them into such heels and soles while the gutta percha was in a plastic state, the guards being formed on their inner faces with suit-30 able countersunk holes or projections into or around which the gutta percha would embed itself and thus operate to secure the guards to it. My invention relates more particularly to the application of a metallic guard 35 to a caoutchouc or gutta percha sole and the main or leather sole of a shoe to which such gutta percha or caoutchouc sole may be applied.

The principal advantage of my invention or improvement is that by the guards being fastened directly to the main sole, there is a greater security of such guards to the main sole and the other or gutta percha sole than when it is fastened to the edges of the outer sole alone.

In the drawings, A, denotes an overshoe of ordinary form of which, a, is the sole and, b, the upper or upper leather. To the sole and along under its edge, I apply a series of separate guards, C, C, C, constructed of metal with their flanches or edges d, d, d, to lap on and cover the edges of a sheet or outer sole of vulcanized caoutchouc or rub-

ber cemented to the sole. One of the guards I arrange at the toe of the sole and so that 55 its flanch shall encompass the toe part of the edge of the rubber sole, as shown in the drawings. Each guard is separate from that next to it and may be fastened to the leather or main sole of the shoe by screws or other 60 proper devices. By being separate from one another, the guards allow both the rubber and leather soles to bend while the shoe is being used, and as circumstances may require at such time. While they thus allow of the 65 proper flexibility of the soles, they also serve not only to protect the rubber sole at its edges from being torn away from the leather sole but in consequence of their lower edges being level or about so with the lower sur- 70 face of the rubber sole, they increase the foothold of the shoe on the ice or ground to great advantage. By means of the toe guard going around the metallic toe of the rubber sole and fastened to the leather sole, 75 the rubber sole at its toe is greatly protected by it, from the effects of "stubbing the toe" or blows tending to separate the rubber from the leather sole. The heel part of the sole may also have a sheet of rubber f, and a 80 metallic edge guard g, applied to it as shown in the drawings.

My invention is of great utility in preventing shoes from slipping on icy or wet streets, and also of protecting rubber soles 85 both from wear and injury when applied to shoes or boots.

I do not claim the application of a sheet of vulcanized rubber to the sole of a shoe or a boot; nor do I claim the arrangement of 90 a metallic toe guard around either the heel or the toe of the upper leather of a shoe or a boot; nor do I claim applying a metallic guard around and fastening it to the edge of a gutta percha sole uncombined with a main 95 leather sole, but

What I do claim is—

The arrangement and application of separate metallic guards with respect to the main leather outer sole of a shoe, and a 100 gutta percha or caoutchouc outer sole substantially in manner as described.

NATHAN C. LEWIS, JR.

Witnesses:

R. H. Eddy, F. P. Hale, Jr.