(No Model.)

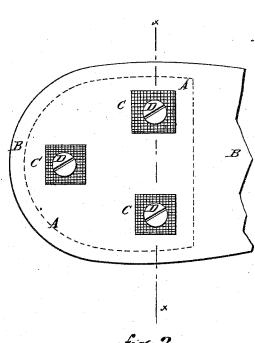
## A. V. B. CARLISLE.

METHOD OF SECURING HEELS TO RUBBER BOOTS.

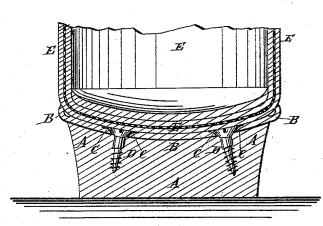
No. 301,670.

Patented July 8, 1884.

fig:1.



Sig: 2.



WITHNESSES .

C. Dedgwick

INVENTOR:

a. V. B. Carlisle,

BY Munn 4

ATTORNEYS.

## UNITED STATES PATENT OFFICE.

ALFRED V. B. CARLISLE, OF NEW BRUNSWICK, NEW JERSEY, ASSIGNOR TO THE NEW BRUNSWICK RUBBER COMPANY, OF SAME PLACE.

## METHOD OF SECURING HEELS TO RUBBER BOOTS.

SPECIFICATION forming part of Letters Patent No. 301,670, dated July 8, 1884.

Application filed April 25, 1884. (No model.)

To all whom it may concern:

Be it known that I, Alfred V. B. Carlisle, of New Brunswick, in the county of Middlesex and State of New Jersey, have invented a new and useful Improvement in Applying Heels to Rubber Boots, of which the following is a full, clear, and exact description.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 is a plan view of the heel part of the outsole of a rubber boot to which my improvement has been applied. Fig. 2 is a sectional elevation of the same, taken through the line x x, Fig. 1.

The object of this invention is to prevent the heels of rubber boots from coming off.

The invention consists in applying the heel to the outsole, inserting screws through the outsole into the heel, and then applying the outsole and heel to the body of the boot, whereby the said screws will be wholly embedded in the rubber, as will be hereinafter fully deceived.

A represents the heel of a rubber boot, which is made and connected to the outsole B in the usual manner.

To the inner side of the heel part of the outsole B are cemented three or more small pieces of stout canvas, C, which are coated upon both sides with rubber. The pieces of canvas C are placed about half an inch from the edge of the heel A, and in the places where the 35 screws D are to be placed. Holes are punched through the pieces of canvas C and the outsole B and into the heel A, and into these holes are inserted the points of the screws, which are forced into place by means of a 40 hand-brace or screw-driver. The outsole is then cemented to the body of the boot E, and the whole is vulcanized or cured in the ordinary manner, connecting the rubber firmly with the screws. The screws Dare preferably short 45 and stout, with a broad flat head and a very coarse thread. With this construction the screws D are wholly embedded in the rubber, so that it will be impossible for water to find its way into the boot along the sides of the 50 said screws.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The method of securing heels to rubber boots, substantially as herein shown and described, 55 which consists in applying the heel to the outsole, inserting screwsthrough the outsole into the heel, and then connecting the outsole and heel to the body of the boot and vulcanizing the same, whereby the said screws will be 60 wholly embedded in rubber, as set forth.

ALFRED V. B. CARLISLE.

Witnesses:

W. Q. B. SPADER, SCHUYLER B. WARK,