

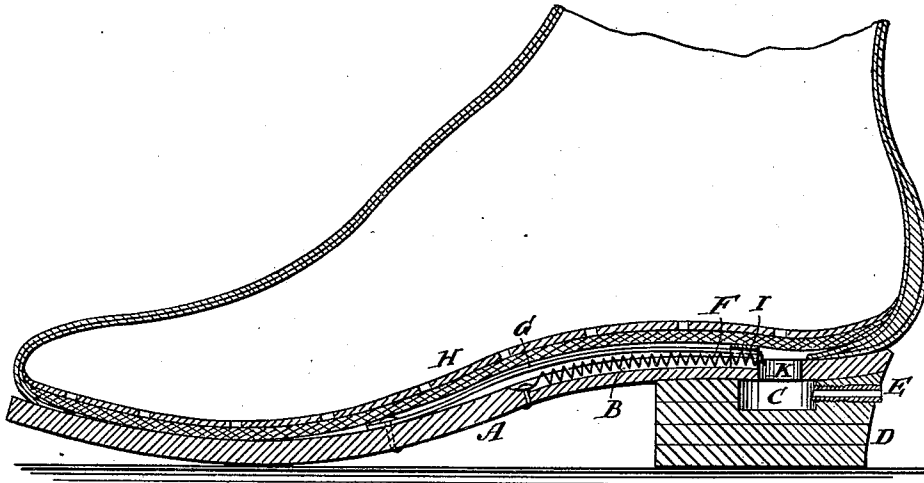
(No Model.)

**J. GREEN.**  
BOOT OR SHOE SOLE.

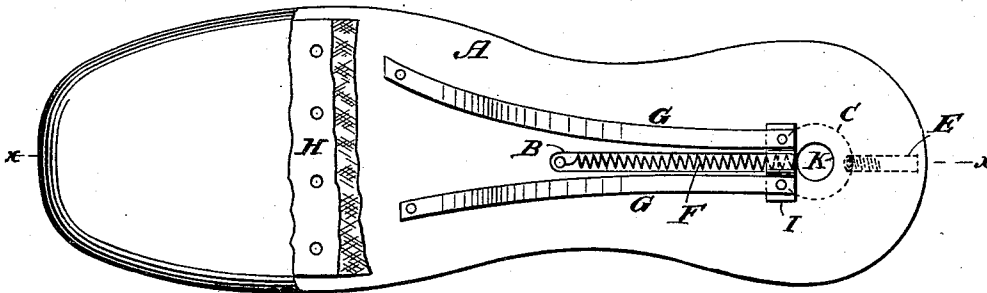
No. 470,046.

Patented Mar. 1, 1892.

*Fig. 1.*



*Fig. 2.*



WITNESSES:

*Edward Wolff.*  
*William Miller.*

INVENTOR:

*John Green.*

BY

*Van Santvoord & Hauff*  
his ATTORNEYS

# UNITED STATES PATENT OFFICE.

JOHN GREEN, OF NEW YORK, N. Y., ASSIGNOR TO THE DR. JAEGER'S SANITARY WOOLEN SYSTEM COMPANY, OF SAME PLACE.

## BOOT OR SHOE SOLE.

SPECIFICATION forming part of Letters Patent No. 470,046, dated March 1, 1892.

Application filed October 15, 1891. Serial No. 408,788. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN GREEN, a citizen of the United States, residing at New York, in the county and State of New York, have  
5 invented new and useful Improvements in Boots and Shoes, of which the following is a specification.

This invention relates to an improvement in boots and shoes; and the invention consists  
10 in the details of construction set forth in the following specification, and claimed, and illustrated in the annexed drawings, in which—

Figure 1 shows a side elevation of the shoe sectioned along *xx*, Fig. 2. Fig. 2 shows an  
15 inverted plan view of the shoe with parts broken away.

In the drawings, the letter A indicates the sole of the boot or shoe. This sole has an opening or channel B, which leads into the  
20 well C, formed in the heel D. From this well extends a tube E out to the open air. This tube is provided with a screw-thread, which is made to engage the leather of the heel to firmly retain the tube in position. The spiral  
25 wire F is made to terminate in the channel B and the two springs G are situated in the sole A, one spring each side of wire F. In walking the air is alternately pumped in and out through tube E and perforated insole H.  
30 The wire F serves to keep the channel B open. The springs G are provided with a bridge-

piece I, and the springs and bridge-piece prevent the wire F being flattened or crushed. The opening K, leading into air-well C, is of  
35 small diameter, as seen, so that the insole cannot be forced or pressed down into the air-well.

I do not claim anything covered by United States Patent No. 213,217, issued March 11, 1879.

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

1. The combination, with a sole having a channel on its inner side, a heel having an air-well therein which communicates with the  
45 channel and with the open air, and a pair of longitudinal springs, of a spiral wire located in the channel of the sole at a point below and between the two springs, substantially as and for the purpose described.

2. The combination, with a sole having a  
50 channel, of a heel having an air-well made to communicate with the channel and with the open air, a spiral wire located in the channel, and springs provided with a bridge-piece to  
55 protect the wire, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

JOHN GREEN.

Witnesses:

FRANK HUXTABLE,  
MILTON H. HOGEL.