

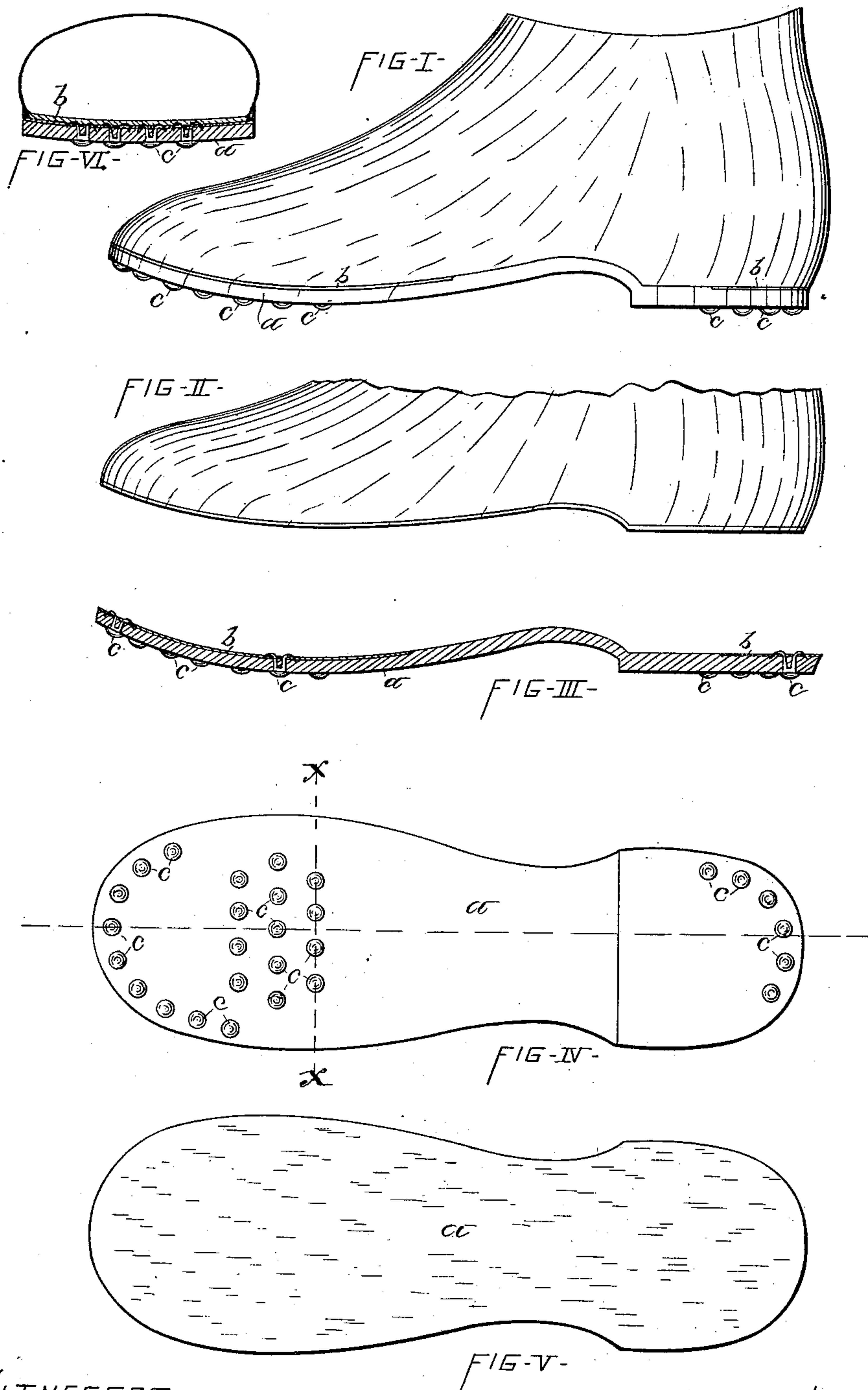
(No Model.)

J. L. THOMSON.

PROCESS OF APPLYING WEAR POINTS TO RUBBER BOOTS AND SHOES.

No. 335,323.

Patented Feb. 2, 1886.



WITNESSES

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UNITED STATES PATENT OFFICE.

JUDSON L. THOMSON, OF SYRACUSE, NEW YORK.

PROCESS OF APPLYING WEAR-POINTS TO RUBBER BOOTS AND SHOES.

SPECIFICATION forming part of Letters Patent No. 335,323, dated February 2, 1886.

Application filed November 13, 1885. Serial No. 182,693. (No model.)

To all whom it may concern:

Be it known that I, JUDSON L. THOMSON, of Syracuse, in the county of Onondaga, in the State of New York, have invented new and useful Improvements in Processes of Applying Metallic Wearing-Points to the Bottoms of Rubber Boots and Shoes, of which the following is a full, clear, and exact description.

This invention relates to the application of rivets, nails, and other analogous metallic wearing points or plates to the soles and heels of rubber boots and shoes, for protecting the tread thereof, and thus rendering the same more durable.

This invention is specially designed to be employed in the usual method of applying the soles and heels to rubber boots and shoes by cutting or stamping said soles and heels out of sheets of unvulcanized rubber, then cementing said soles and heels onto the boot or shoe, and subsequently vulcanizing the same; and the invention consists in an improved process of applying rivets and other pronged wear-plates to rubber soles and heels as aforesaid.

To better enable others to avail themselves of my invention, I annex hereto a drawing showing the attachment of the wearing-points or rivets to the sole and heel of a rubber shoe in its various stages of construction.

Figure I is a side view of the shoe complete. Fig. II shows the same in its condition before the sole and heel proper is attached thereto. Fig. III is a longitudinal section of the sole and heel detached from the shoe. Fig. IV is an inverted plan view of said sole and heel. Fig. V is a plan view of the same as cut from the sheet of unvulcanized rubber; and Fig. VI is a transverse section on line *xx*, Fig. IV.

In practicing my invention I proceed as follows, to wit: I form the sole and heel in one piece of the form of a blank cut or stamped out of a sheet of unvulcanized rubber, as heretofore, and as represented in Fig. V of the drawings, then force the attaching-prongs of the rivets or other wear-plates through the unvulcanized rubber sole and heel from the under side thereof, and clinch said prongs on the upper side of the same. Then I cement said sole and heel combined onto the edges of

the upper and onto the usual inner cloth lining of the rubber boot or shoe, and subsequently vulcanize the same while on the last.

When it is desired to obtain a more secure hold for the clinches of the rivets *c* or wear-plates, I cement onto the upper surface of the unvulcanized sole and heel a lining, *b*, of canvas or leather, or other suitable material, through which lining the clinching-prongs are forced, and upon which they are clinched, as illustrated in Fig. III of the drawings, said lined side of the sole and heel being subsequently cemented to the usual inner cloth lining of the boot or shoe, as shown in Fig. I of the drawings, and the latter then vulcanized, as hereinbefore stated.

I am aware that prior to this invention pronged wear-plates have been secured to rubber soles and heels by casting the unvulcanized rubber around the attaching-prongs of the wear-plate placed in the mold in which the sole and heel are formed; but it will be observed that by such process the rubber is not compressed around the attaching-prongs of the rivet or wear-plate, but is left of a uniform density throughout, while by my process the rubber is compressed by the clinching of the attaching-prongs, and consequently the rubber is caused to hug more closely the said prongs.

Having described my invention, what I claim is—

1. The process of applying rivets and wear-plates to the soles and heels of rubber boots and shoes, consisting in cutting or stamping the sole and heel in one piece out of a sheet of unvulcanized rubber, then forcing the attaching-prongs of the rivets or wear-plates through said sole and heel from the under side thereof and clinching them on the upper side of the same, then cementing the combined sole and heel to the bottom edges of the upper and to the usual inner cloth lining of the rubber boot or shoe while on the last, and subsequently vulcanizing the same, substantially as set forth.

2. The process of applying rivets and wear-plates to the soles and heels of rubber boots and shoes, consisting in cutting or stamping the sole and heel in one piece out of a sheet of unvulcan-

ized rubber, then cementing onto the upper
side thereof a lining of canvas or other suit-
able material, then forcing the attaching-
prongs of the rivets or wear-plates through
5 the said sole and heel and through the lining
and clinching them upon the latter, then ce-
menting the lined side of the sole and heel to
the usual inner cloth lining of the boot or shoe,
and subsequently vulcanizing the latter, sub-
10 stantially as specified.

In testimony whereof I have hereunto signed
my name and affixed my seal, in the presence
of two attesting witnesses, at Syracuse, in the
county of Onondaga, in the State of New York,
this 10th day of November, 1885.

JUDSON L. THOMSON. [L. s.]

Witnesses:

FREDERICK H. GIBBS,
C. H. DUELL.