

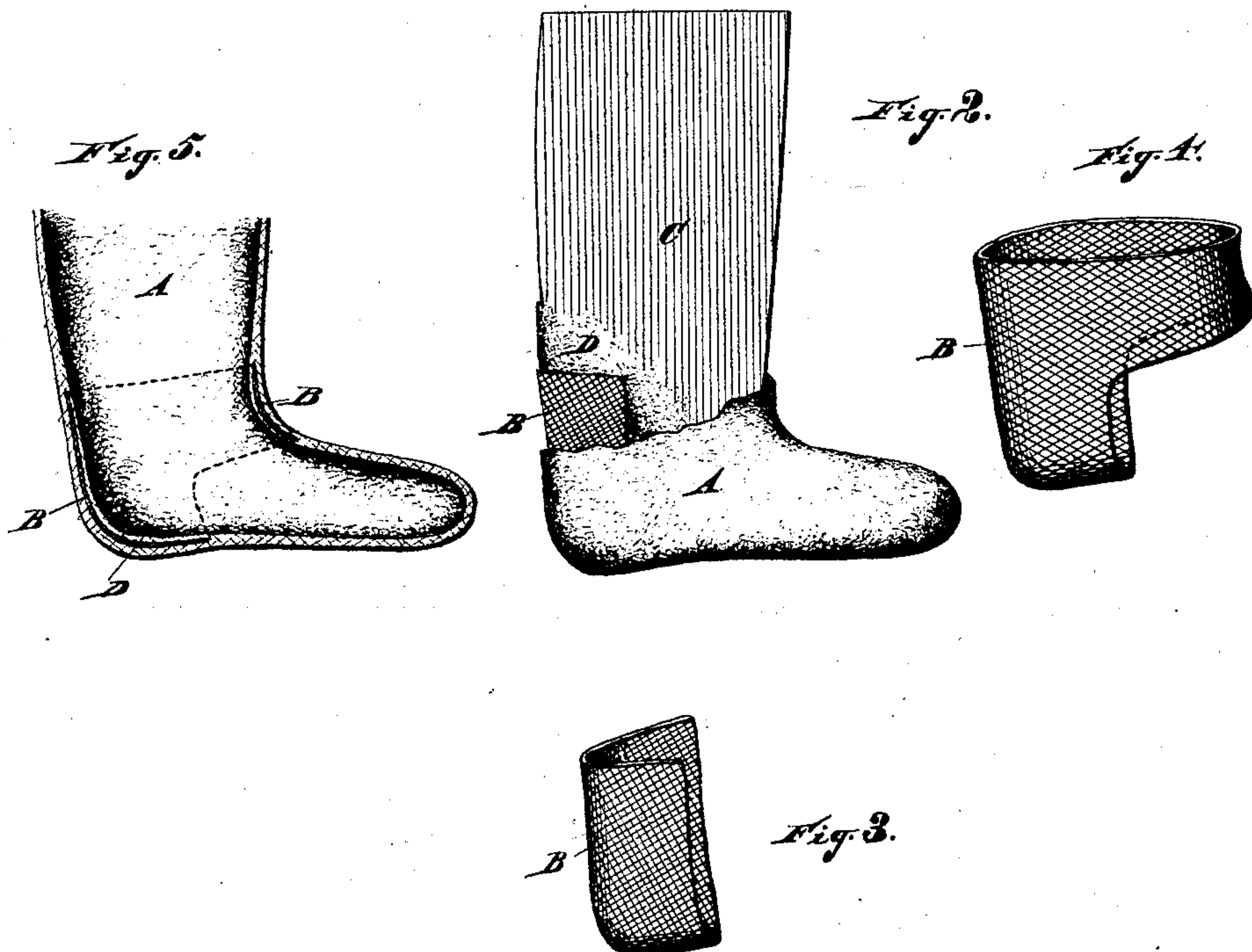
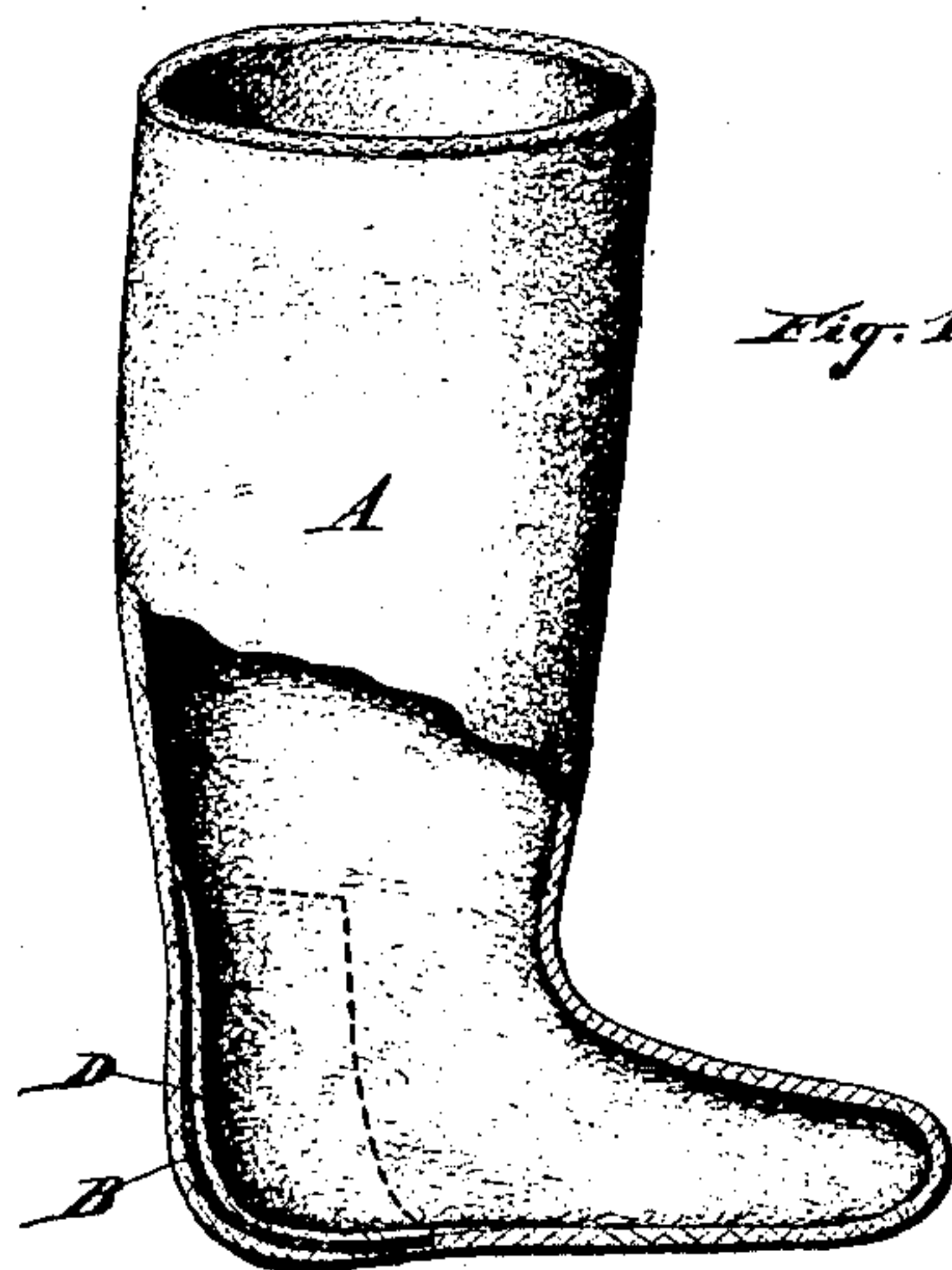
(No Model.)

S. G. ALEXANDER.

FELT BOOT.

No. 336,542.

Patented Feb. 23, 1886.



WITNESSES

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# UNITED STATES PATENT OFFICE.

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MERINO SHOE COMPANY, OF KENNEBUNK, MAINE.

## FELT BOOT.

SPECIFICATION forming part of Letters Patent No. 336,542, dated February 23, 1886.

Application filed January 27, 1885. Serial No. 154,122. (No model.)

*To all whom it may concern:*

Be it known that I, SAMUEL G. ALEXANDER, of Detroit, county of Wayne, State of Michigan, have invented a new and useful Improvement in Felt Boots; and I declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form a part of this specification.

My invention consists of the combinations of devices and appliances hereinafter specified, and more particularly pointed out in the claims.

In the drawings, Figure 1 is a view of a felt boot, partly in section and partly in elevation, illustrating my invention. Fig. 2 illustrates the process of making the boot with my improved feature incorporated. Fig. 3 is a separate view of a knit or woolen fabric, such as is shown incorporated with the boot in Figs. 1 and 2; Fig. 4, an enlarged fabric embracing the instep; Fig. 5, a boot embracing the fabric at the heel and instep.

My invention consists, essentially, in combining with a felt boot a knit or woven fabric (preferably of wool) with the heel portion of the boot, or with any other particular part of the boot—as, for instance, the toe or the instep—the same serving to greatly re-enforce and strengthen the boot at the point or points where it is liable to excessive wear.

Heretofore in the manufacture of felt boots it has been customary to make them entirely of felt, either with or without the heel or other wearing parts being re-enforced by extra thicknesses of the felt; or where the knit or woven fabric has been combined with the felt this fabric has been in the form of a complete wool stocking. This last process, however, of incorporating the complete stocking entailed a considerable expense beyond what is essential for the wearing-parts, and more particularly the heel and adjacent parts are the only portions which derive any particular advantage by the incorporation of the woven or knit fabric.

In carrying out my invention, A is the felt body of the boot. B represents a knit or woven fabric, preferably of wool. This fabric

is incorporated with the felt boot in the manner I will now proceed to describe, and for the purposes of this description the said fabric will be presumed to be a knit or woven wool fabric. I first put upon the form C one or more thicknesses of wool or wool-bat, or felt and hardened wool-bat, as shown at D. I put the fabric B over the form upon the felt or bat D and fit it up snugly. I then proceed in the usual manner to lay the bats over the form and fabric according to the usual processes for making felt boots. The subsequent operation of felting incorporates the wool-bat or felt D and the fabric B with the other material. A constitutes the usual body of the boot, so that the whole will form an integral mass, as shown in Fig. 1, with the fabric embedded within the body of felt. This fabric being of wool, will readily full in unison with the other material of which the boot is composed. The result is an article which is very materially strengthened and stiffened at the heel, and is capable of greater wear without breaking along this section.

It is of course apparent that while the heel is the only portion which usually needs strengthening, and consequently the only portion illustrated, yet the same fabric might, if desired, be incorporated at the toe or at the instep, or beneath the ball of the foot, or in any particular part which is subject to unusual wear.

The fabric B is preferably woven or knit quite loosely, so as to leave a very open mesh to facilitate the incorporation of the wool-bats in felting. This is not absolutely essential, however. So, also, where a very loosely woven or knit fabric is employed, it might be composed of cotton or other similar material, inasmuch as a loose fabric of that character would, to a limited extent, be capable of reduction with the woolen bats in the process of fulling.

I would also have it understood that while in the drawings the fabric B is shown as incorporated between two surfaces of felt, it may be with equal facility incorporated with the felt and itself form the interior surface of the boot; or it may be incorporated with the felt and itself form the exterior surface of the boot at the heel. This would be accomplished in the first instance by putting the fabric di-



rectly contiguous to the form, instead of first interposing a layer of wool-bat, and in the second place it would be accomplished by putting the fabric upon the exterior surface of the felt, the whole being subsequently incorporated by the usual process of felting and fulling. I prefer, however, to make the same as shown in the drawings.

This invention is shown as connected with a felt boot; but I would have it understood that by the term "boot" I comprehend shoes, stockings, or slippers, the invention pertaining, as a matter of course, to all alike.

This fabric may, as shown in Fig. 4, be made so as to embrace, also, the instep, and I have employed it in this manner.

The resulting boot possesses greatly-increased strength and wearing capacity, by reason of the fabric when constructed in this manner.

What I claim is—

1. A felt boot provided at its heel or other wearing-points with a section or sections of knitted or woven fabric incorporated integrally with the body of the felt, substantially as described. 25

2. A felt boot provided at its heel or other wearing-points with a section or sections of knitted or woven fabric incorporated integrally with the felt between its inner and outer surfaces, substantially as described. 30

3. A felt boot having a section of fabric felted and fulled with the boot in the region of the heel and instep, substantially as described. 35

In testimony whereof I sign this specification in the presence of two witnesses.

SAMUEL G. ALEXANDER.

Witnesses:

JNO. D. NORTON,  
C. E. WALDO.