

(No Model.)

J. D. THOMAS.

RUBBER BOOT.

No. 382,498.

Patented May 8, 1888.

Fig. 1.

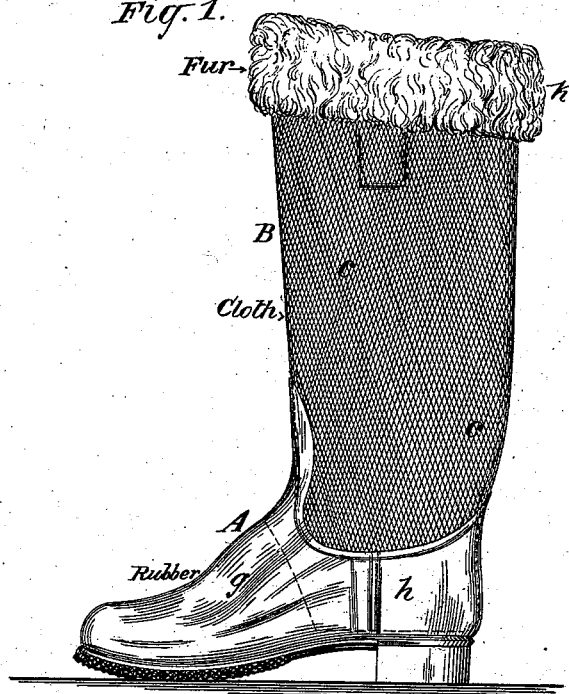


Fig. 2.

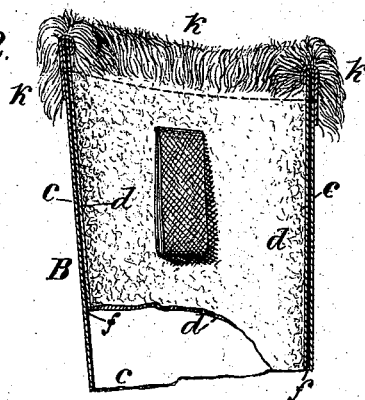
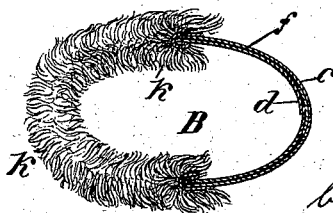


Fig. 3.



WITNESSES.

John Becker.
Geo. E. Gavin.

INVENTOR.

Joseph D. Thomas
by Chas. M. Higgins
Attorney.

UNITED STATES PATENT OFFICE.

JOSEPH D. THOMAS, OF SOUTH FRAMINGHAM, MASSACHUSETTS.

RUBBER BOOT.

SPECIFICATION forming part of Letters Patent No. 382,498, dated May 8, 1888.

Application filed December 1, 1887. Serial No. 256,484. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH D. THOMAS, of South Framingham, Middlesex county, Massachusetts, have invented certain new and useful
5 Improvements in Rubber Boots, of which the following is a specification.

My invention aims to furnish rubber boots which shall have a more agreeable and dressy appearance, combined with greater lightness
10 and other useful qualities, and which shall better protect the legs of the wearer from cold and prevent splashing in of snow or wet at the open top of the boot-leg, and yet allow free ventilation of the boot. According to my im-
15 provements, however, I make the leg of the boot with an interior cloth or fleece lining, as usual, while the exterior of the leg consists of a layer of some dressy cloth or textile fabric cemented to the inner layer and joined tightly
20 at the base with the rubber layers of the vamp or foot portion, and around the top of this cloth leg is affixed an edging of fur, which projects both outwardly and inwardly, and thereby closes the top of the boot around the wearer's
25 leg and better protects the same. By these means I form a rubber boot which has several important advantages over the old construction, as hereinafter fully set forth.

In the drawings annexed, Figure 1 gives an
30 elevation of my improved rubber boot; and Fig. 2 is a fragmentary vertical section of the leg, in which my improvement chiefly lies. Fig. 3 is a partial cross-section of the leg.

In the drawings, A indicates the foot por-
35 tion, and B the leg portion, of the boot, which in shape or form are presumed to be of the ordinary design.

The foot portion A is made of rubber and cloth layers, in the usual manner, which is
40 well known and needs no description here, as it forms no part of my invention. The exterior layer, *g h*, of the foot is of course all rubber, and it extends over or upon the leg part just below and around the ankles, as usual,
45 rising higher in front and back than at the sides, as seen in Fig. 1.

The leg B, I make of an external layer, *c*, of some dressy cloth or other textile fabric, preferably cashmerette, botany cloth, diagonal, or,
50 in some cases, a fine quality of felt cloth. The interior of the leg, as seen in Figs. 2 and 3,

consists, as usual, of a layer, *d*, of some warm and soft-faced cloth—such as fleece, canton-flannel, or felt—and the two layers are cement-
ed together on their meeting faces, as will be
55 understood from Figs. 2 and 3. I generally prefer to spread a thin film of rubber, preferably vulcanizable, on the inner face of the external cloth layer, *c*, and a similar film on the
60 outer face of the inner layer, *d*, which thus unite firmly when the two layers are put together and form a thin impervious layer of rubber between the two cloth layers, as indicated at *f* in Figs. 2 and 3. If desired, the
65 rubber film may be spread on the face of one layer only, but it is best to spread it on the meeting faces of both layers, as described. The two layers of the leg are lapped and joined at the back of the leg, as indicated in Fig. 3, and in the usual well-known manner, which
70 therefore needs no description. The lining or inner fleece layer, *d*, extends not only all down the leg, but also inside the foot, and is lasted over the edge of the insole in the well-known way, which it is not thought necessary
75 to illustrate. The outer cloth layer, *c*, however, extends down a little way under the edge of the outer rubber layer of the foot or vamp, as indicated by dotted lines in Fig. 1. This
80 outer cloth layer will preferably never extend farther under the vamp *g* in front than to the swell of the instep, and it may extend down on the quarters and heel *h* as far as the edge
85 of the sole, as indicated by the dotted lines; but in some cases it may extend down farther and be lasted over the edge of the insole, if desired.

The outer rubber layers of the foot or vamp are of course cemented firmly on the cloth, and when the boot is vulcanized all the layers
90 are firmly united and bound together.

In some cases the outer cloth layer, *c*, may make a butt-joint with the edge of the rubber
foot-layers *g h*; but the underlapping joint
95 shown is preferred. Now, around the top of this double-layered cloth leg is secured a binding or edging of fur, *k*, which is so put on and stitched, as seen in Figs. 1, 2, and 3, as to not
100 only protrude or overhang on the exterior, but also protrude or overhang on the interior, and partly close up the tube or entrance of the leg, as fully shown in Figs. 2 and 3.

First it will be noted that the improved boot has a continuous tubular leg made of an inner and an outer layer of cloth joined by a thin intervening layer of rubber. It will be also seen that the external layer of cloth renders the appearance of the boot much more dressy and agreeable to the eye and more pleasant to the touch than is the case with the ordinary rubber leg, and thus forms a much more salable article. Furthermore, the striking together of the legs in walking is attended with much less friction than is the case with the rubber legs, in which the adhesion or friction is much greater than is the case with cloth, and is often accompanied by an unpleasant cringing sound, which becomes completely softened or muffled with the cloth legs.

Another great advantage of the cloth-legged boot is that it is much more pleasant to wear and "draws" much less than the boots with the rubber legs, and gives out little or none of the rubber odor.

It will be seen that in my improved boot the looseness or opening at the top is closed up by the inwardly-projecting rim of fur, *k*, which embraces the leg all around the top of the boot in the manner of a gland or valve, thus not

only better protecting the leg from the cold, but effectually preventing the splashing in of snow or wet, which is an important consideration for ladies' and children's wear, for which the boot is specially adapted. At the same time the fur guard described will permit the free ventilation of the boot through the interstices of the fur, and will also admit the free insertion or removal of the leg as readily as is the case in the common boot. Besides these advantages, the fur greatly improves the appearance of the boot exteriorly. Any soft fibrous substance like fur can, of course, be substituted for the fur guard *k*.

What I claim is—

As an improved article of manufacture, a rubber boot having a rubber foot part, a leg formed of the inner and outer cloth layers, *cd*, and intervening rubber layer, *f*, and a fur guard, *k*, secured to the cloth layers at the top edge of the boot and overlapping said edge and extending upon both the inside and outside thereof, substantially as described.

JOSEPH D. THOMAS.

Witnesses:

JNO. E. GAVIN,
CHAS. M. HIGGINS.