Sept. 12, 1933. E. ISAKSSON ET AL 1,926,625

CREPE RUBBER BOOT

Filed Nov. 18, 1931

Fig. 1

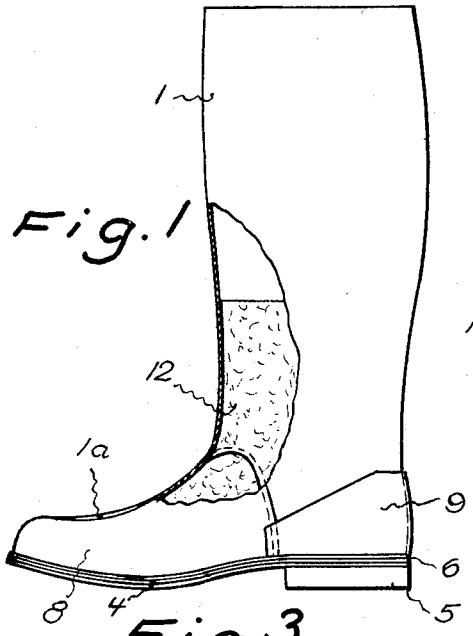


Fig. 2

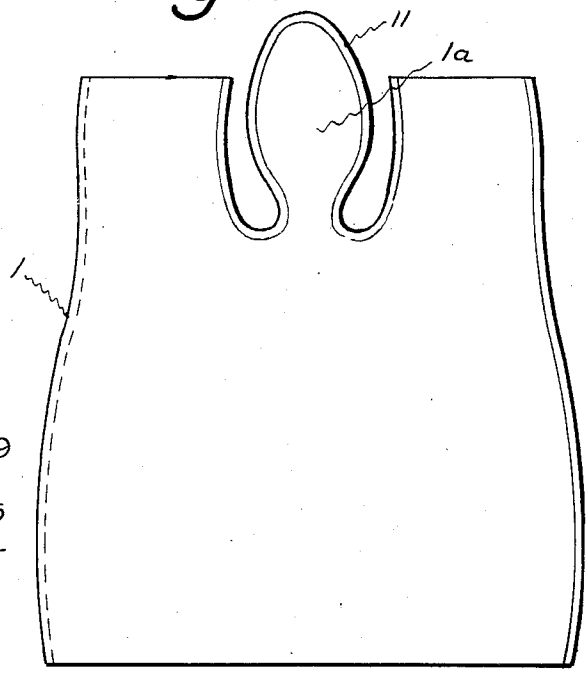


Fig. 3

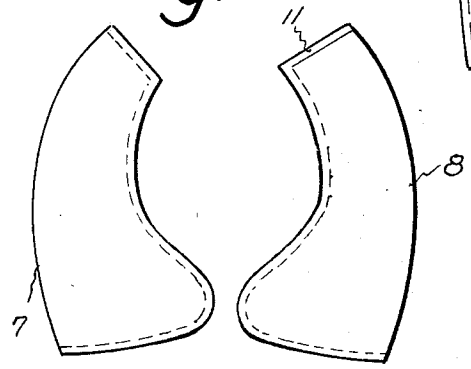


Fig. 4



Fig. 5

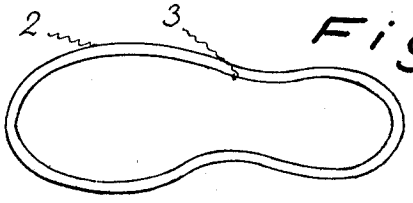
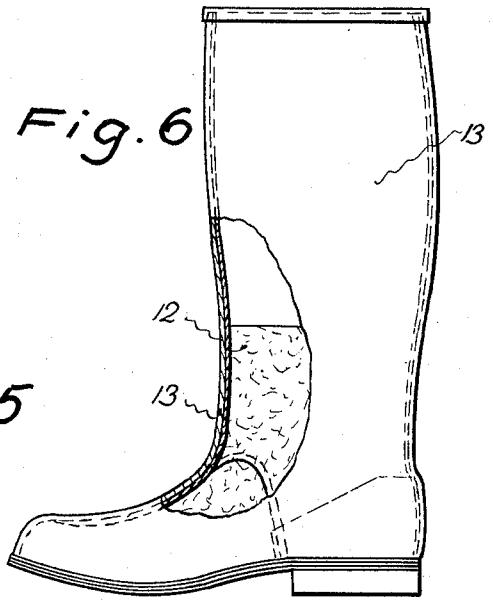


Fig. 6



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CREPE RUBBER BOOT

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Application November 18, 1931, Serial No. 575,924, and in Sweden November 21, 1930

1 Claim. (Cl. 36—4)

This invention relates to an improved rubber boot and has for its main object to provide a boot made entirely from crepe rubber, which is extremely strong and lasting, inexpensive to manufacture and perfectly water-proof and for these and other good reasons highly useful as a working-boot for labourers, workmen, huntsmen, woodmen, fishermen, military men etc.

Another object of the invention is to provide a boot which is both water-proof and fire-proof and highly useful as a working-boot for workmen in iron-works, foundries and the like for protecting the foot and leg of the wearer against sprinkling molten metal, escaping steam etc.

Another object of the invention is to provide a relatively cheap, perfectly water-proof, strong and durable working-boot which is light and comfortable to the wearer and easy to pull on and off.

The invention consists in the improved crepe rubber boot and the modification thereof hereinafter described, reference being had to the accompanying drawing in which:—

Figure 1 is a side elevation partially in section, of the improved crepe rubber boot.

Figure 2 is a plan view of a piece of crepe rubber sheeting cut to form the leg and a central part of the foot portion of the boot.

Figures 3 and 4 are plan views of pieces of crepe rubber sheeting cut to form sides parts and a counter piece of the foot portion of the boot respectively.

Figure 5 is a plan view of the insole and the outer sole of the boot, which likewise are cut from a sheet of crepe rubber.

Fig. 6 is a side elevation, partially in section, of a modified construction of the improved working-boot, wherein the leg and foot portions of the boot are coated with a fire-proof asbestos fabric solutioned to the crepe rubber sheeting.

Like numerals refer to like parts throughout the several views of the drawing.

According to the invention the boot is made entirely of crepe rubber sheeting, the several parts, including the leg and foot portions as well as the soles and rand and heel pieces, being cut to the appropriate form from commercial sheets of crepe rubber, which may be of different thickness for the leg and foot portions on the one side and the sole and heel portions on the other side, if desired.

The leg portion 1 is cut from a commercial sheet of crepe rubber substantially to the form illustrated in Fig. 2, i. e. the leg portion proper is cut integral with a tongue 1^a adapted to form an upper or central part of the foot portion of the boot, the foot portion of the boot being completed by side parts 7 and 8 and an adjoining counter piece 9; the parts 7, 8 and 9 being also cut substantially to the forms illustrated in Figs. 3 and 4 from commercial crepe rubber sheeting.

The bottom of the boot comprises an insole 3, a welt or rand 6, an outer sole 2 and, if desired, any suitable number of further outer or wearing soles 4 as well as a heel 5, all of these parts also being cut from commercial crepe rubber sheeting.

The crepe rubber is unvulcanizable and no vulcanization is used in forming or attaching the several parts of the boot to each other; all of the said parts being assembled upon a last and attached to each other by means of an adhesive, preferably a solution prepared from waste crepe rubber dissolved in a suitable solvent such as benzole, or in any other well-known manner, for instance by frictionally heating the edges of the cut rubber sheetings so that they will stick together when pressed against each other. The meeting or adjoining edges of the several leg and foot portions are bevelled as at 11 and secured to each other in overlapping position.

If crepe rubber sheets cannot be obtained having sufficient width for allowing the leg portion 1 to be cut in one piece a gore or strip cut to an appropriate form can be let in at the back of the leg portion of the boot as will be understood.

The boot made from crepe rubber sheetings in thicknesses from say two to five millimetres in this way will be relatively cheap and entirely practical, strong, durable and comfortable to the wearer. Further it will be perfectly water-proof, and there will be no tendency for the joints to split or burst because all of the joints take such positions as not to be obstructive to the flexure of the relatively thick and stiff material, which flexure especially takes place at the transition between the front of the leg portion and the upper part of the foot portion of the boot when in use. Further through the manner in which the leg and foot portions are cut out the relatively thick and stiff material will follow the foot of the wearer without wrinkling or crumpling.

In order to make the boot easy to pull on and off the inside especially of the lower part of the leg portion may be coated with a mixture of a suitable adhesive solution such as latex and a talcous powder as at 12 (Fig. 1). Such a coating has been found to possess very good antifriction properties and at the same time to be very durable and not to come off on the dress of the wearer.

In the modification shown in Fig. 6 a crepe rubber boot constructed substantially in the same manner as that described with reference to Figs. 1 to 5 inclusively, is provided with an external coating 13 of a thin asbestos fabric solutioned to the crepe rubber sheeting. In this manner a boot is obtained which is fire-proof, heat-resistant and water-proof and is very useful as a working-boot for workmen in iron-works, foundries etc. The asbestos fabric extends over the entire outside of the leg and foot portions of the boot, and an asbestos sole may also be incorporated in the bottom of the boot, if desired.

What we claim and desire to secure by Letters Patent is:—

A boot comprising a leg portion provided at the lower end on the front side with a centrally arranged tongue forming the central portion of the vamp and with extensions on opposite sides of and spaced from the major rear portion of the said vamp tongue; side pieces for the upper shaped at their inner edges to correspond with the sides and front of the vamp tongue and at their outer edges to correspond with the contour of the front portion of the sole, and a counter piece united to the said extensions of the leg, the front portions of the said upper side members being united together, the inner edges of said upper side members being united to the said vamp tongue and the rear edges of said upper side members being united to the front portions of said extensions of the leg and also to the front end portions of the counter piece.

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