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OVERSHOE AND PROCESS OF MANUFACTURING THE SAME

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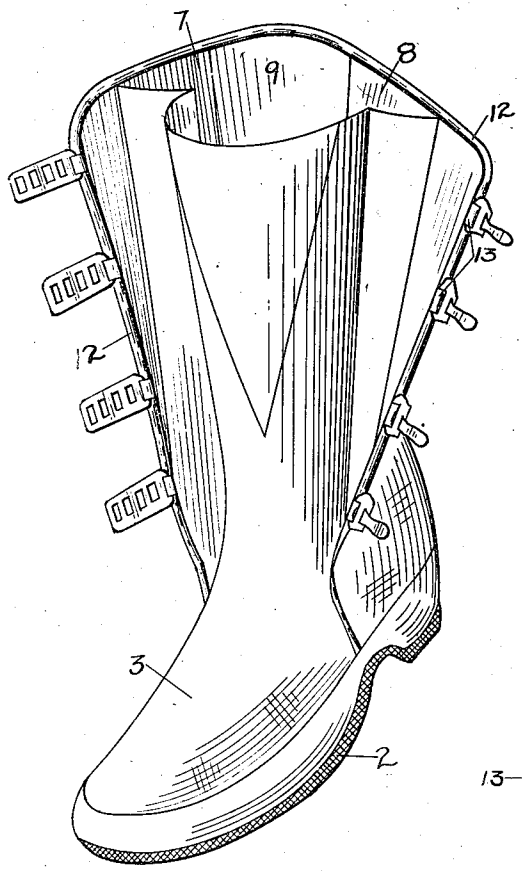

FIG. 1

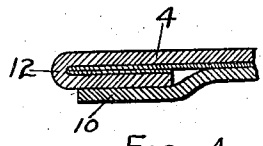

FIG. 4

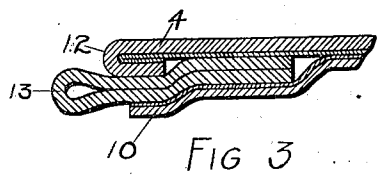

FIG 3

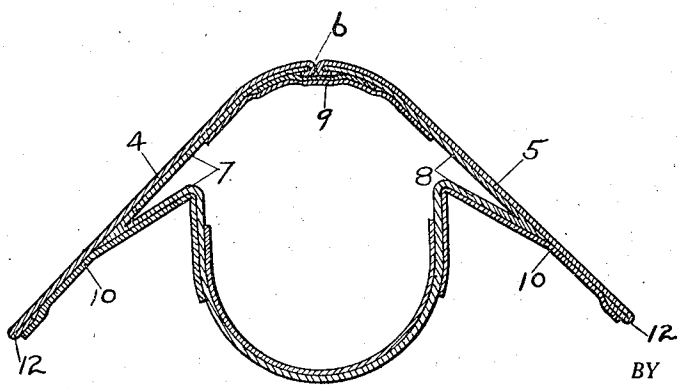

FIG. 2

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OVERSHOE AND PROCESS OF MANUFACTURING THE SAME.

Application filed June 3, 1926. Serial No. 113,490.

This invention relates to overshoes of the arctic type. Such overshoes include a rubber bottom and cloth top with fastenings, usually buckles for securing the opposite edges of the upper around the ankle of the wearer. The cloth upper usually includes an outer fabric and a lining united thereto by an intermediate coating of rubber, and the buckles are secured to straps which are anchored between the lining and the outer fabric, both ends of each strap being secured between these fabric pieces so that the straps form loops which project beyond the edge of the upper. Due to the presence of these loops, it has always been the practice to either leave the edges "raw" or unbound at the top and also at the front of the shoe, or else to bind the edge with a thread binding or overseaming.

When the edges were left "raw" or unbound there was a tendency of the fabric, especially if of the woven type, to fray, and when the edges were finished with a thread binding or overseaming, finished edge was produced at considerable expense and made an objectionable appearance.

The chief object of the present invention is to improve the construction of the overshoes of the type mentioned, with a view to effectually preventing the fraying of the exposed edges of the upper and providing an overshoe of improved appearance.

The invention also aims to devise a process of manufacturing overshoes which will attain the end just mentioned without adding materially to the expense of manufacturing the shoe.

The nature of the invention will be readily understood from the following description when read in connection with the accompanying drawings, and the novel features will be particularly pointed out in the appended claims.

Of the accompanying drawings,

Figure 1 is a perspective view of an overshoe embodying the invention in the form at present preferred;

Figure 2 is a cross sectional view through the top of the overshoe just below the upper edge thereof;

Figure 3 is a cross sectional view on a large scale through one of the buckle supporting straps and the parts of the upper immediately associated therewith; and

Figure 4 is a cross sectional view through the edge binding of the upper.

Referring to the drawings, the shoe shown comprises a rubber bottom 2 and a cloth top 3. In the shoe shown the top or upper includes two side pieces 4 and 5, (Figure 2), which are united at the back of the shoe seam 6. It should be understood, however, that this invention also applies to a shoe with a one piece upper, in which case there is no seam at the back. The parts forming the outer fabric of the upper are secured to inner lining pieces 7, 8 and 9 by means of an intermediate coating of rubber. The side pieces 4 and 5 are also adhesively united to a fabric piece 10 which forms part of the shoe. A portion of the member 10 is also secured to the lining pieces 7 and 8. The construction so far described is that of the ordinary type of overshoe.

According to the present process the front and top edges of the side pieces 4 and 5 are folded as is shown in Figure 3. The folding is done after the side pieces have been cut out and before they are secured to the lining. The fold is approximately one-eighth inch in width and can be performed either by hand or by one of several suitable folding machines known commercially. It is then preferable to apply a coating of rubber cement to that portion of the edge which is folded over, and later when lining pieces 7, 8 and 9 are secured to the side pieces, the gum coating on the side pieces readily adheres to the cement on the folded portion of parts 4 and 5 and a firm union is thereby secured. Fastener supporting loops 13, 13 are anchored between the lining and outer fabric of the upper in the customary way. The invention is not limited necessarily to apply a coat of cement to the folded portion of the edges, and although we prefer to bring the lining pieces even with the folded edge, it is possible to eliminate the application of the coat of cement and only bring the lining pieces up to, but not over, the folded portion of the outside edges. We also prefer to treat the top edge of the gore which is the V-shaped piece 12 in Figure 1, in a similar fashion by folding the edge and cementing, as described.

The remaining manufacturing operations may be carried out in any suitable manner. After assembling the various parts of the

upper, the remainder of the parts of the shoe are assembled in proper relationship to each other on a last and the shoe is vulcanized.

The completed shoe is shown in Figure 1 and it will be observed that it presents a much neater appearance than shoes made either with a "raw" or unbound edge or shoes in which the edges are finished by a thread bind or overseaming. The exposed edges of the parts 4 and 5 of the upper and also the top edge of the gore are effectually prevented from fraying by this method of folding the edge and makes a much neater and more finished appearance than can be produced otherwise. A stronger edge is obtained thereby allowing the elimination, in some cases, of certain inside stays or reinforcements which are usually used in the top construction to prevent tearing of the fabric at the edge and so forth. A more durable top is obtained as the double thickness of the top material is more resistant to wear than the unbound edge or the thread bound edge. Also as the folding and cementing operations are very readily performed either by machine or hand, the present process involves practically no increase in cost over the ordinary method of leaving the edges unbound and is more economical than the method of thread binding or overseaming.

Modifications of the invention may be resorted to without departing from the spirit thereof or the scope of the appended claims.

What is claimed is:

1. An overshoe of the arctic type comprising a rubber bottom and a rubberized cloth upper, said upper including outer and inner plies of fabric adhesively secured together, fastening means secured between said plies at one of the front edges of said upper to facilitate the fastening of the shoe about the ankle of the wearer, the edges of the outside plies being folded over and the inner plies being adhesively secured at the edges to the outer plies.

2. An overshoe of the arctic type comprising a rubber bottom and a rubberized cloth upper, said upper including outer and inner plies of fabric adhesively secured together, fastening means secured between said plies at one of the front edges of said upper to facilitate the fastening of the shoe about the ankle of the wearer, the edges of the outside plies being folded over and adhesively secured.

3. That improvement in the process of manufacturing arctic overshoes, which consists in cutting the parts of the upper out of suitable rubberized fabric, folding over the edges of the quarters and gore, cementing the portion of the edges folded over, and securing rubberized fabric pieces to the inner surfaces of said quarters with the edges of said inner pieces located adjacent the edge of the quarters, and then completing the manufacture of said overshoe in any suitable manner.

4. That improvement in the process of manufacturing arctic overshoes, which consists in cutting the parts of the upper out of suitable rubberized fabric, folding over the edges of the quarters and gore, and securing rubberized fabric pieces to the inner surfaces of said quarters with the edges of said inner pieces located adjacent the edge of the quarters, and then completing the manufacture of the said overshoe in any suitable manner.

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