May 5, 1936. E. W. DUNBAR 2,039,476

SNAPLESS OVERSHOE

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Fig. 1

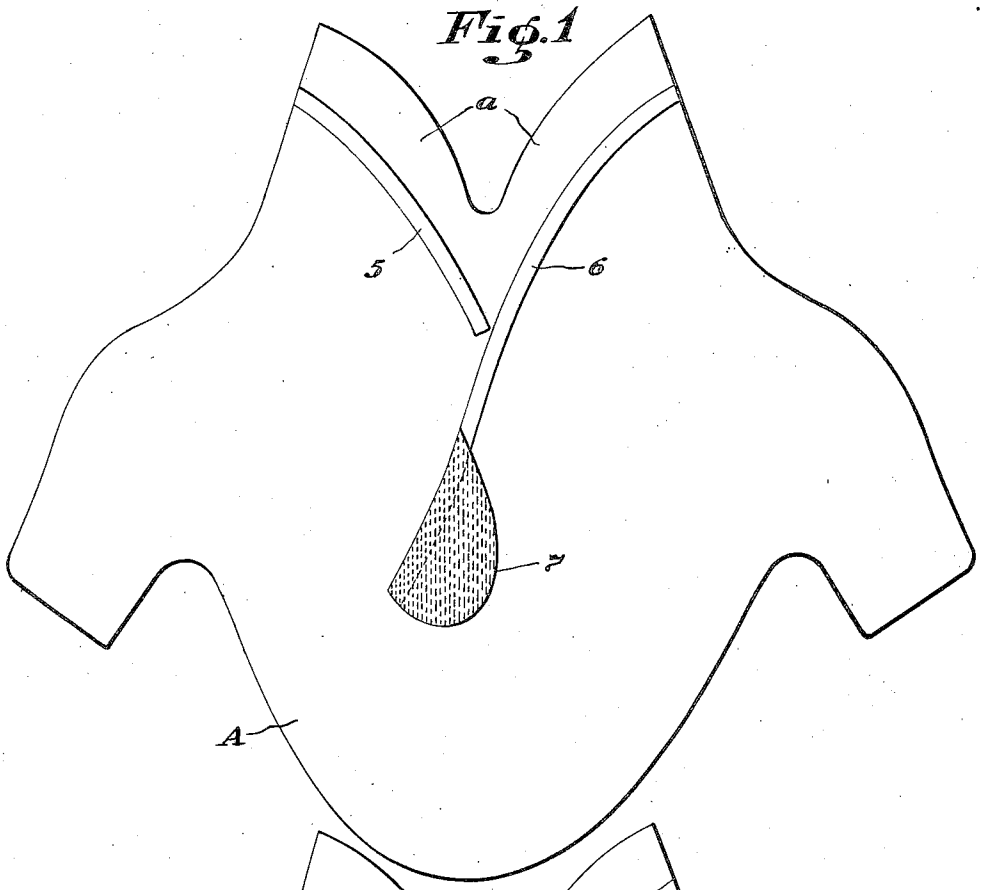
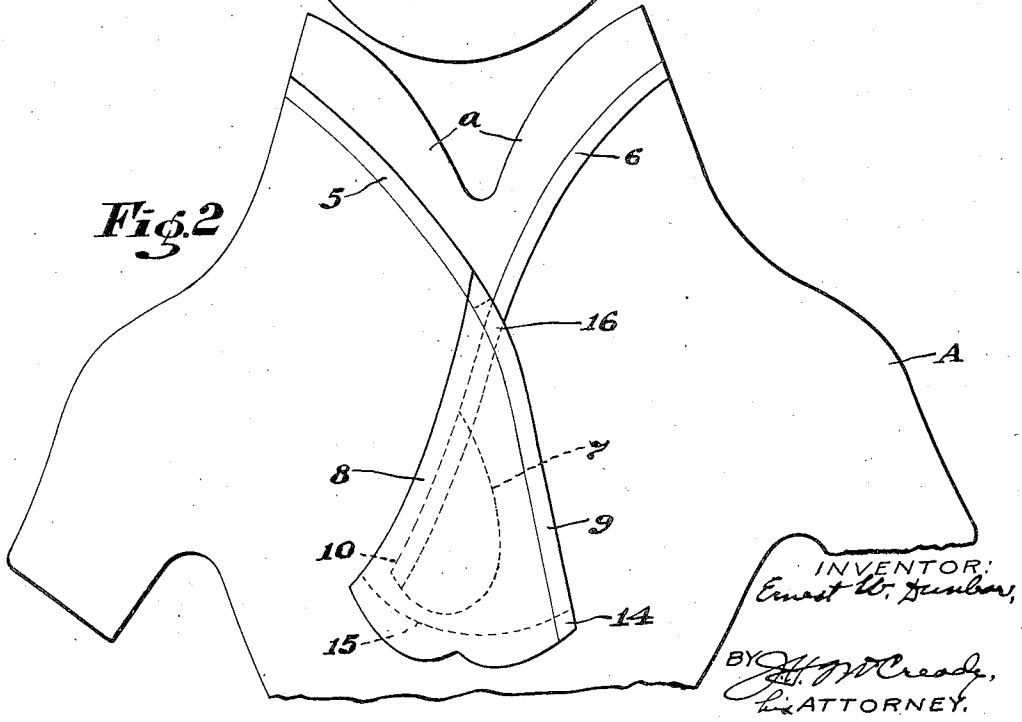


Fig. 2



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Fig. 3

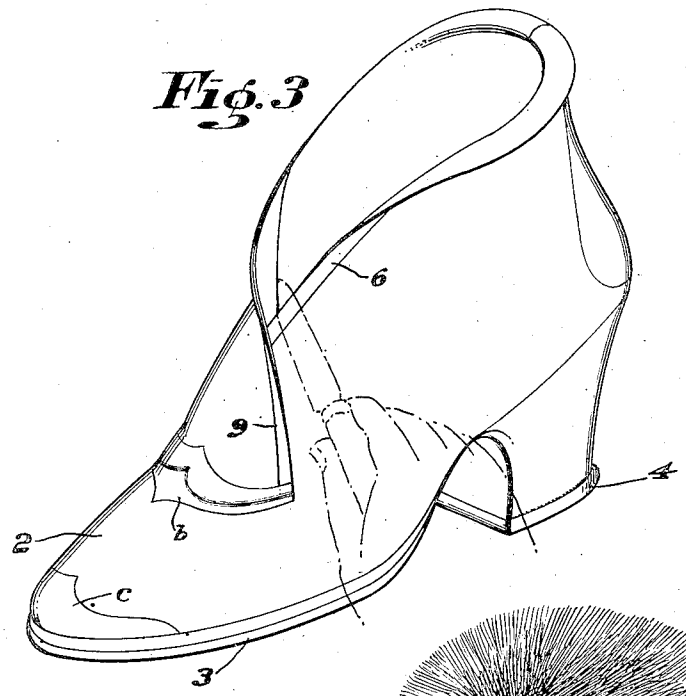
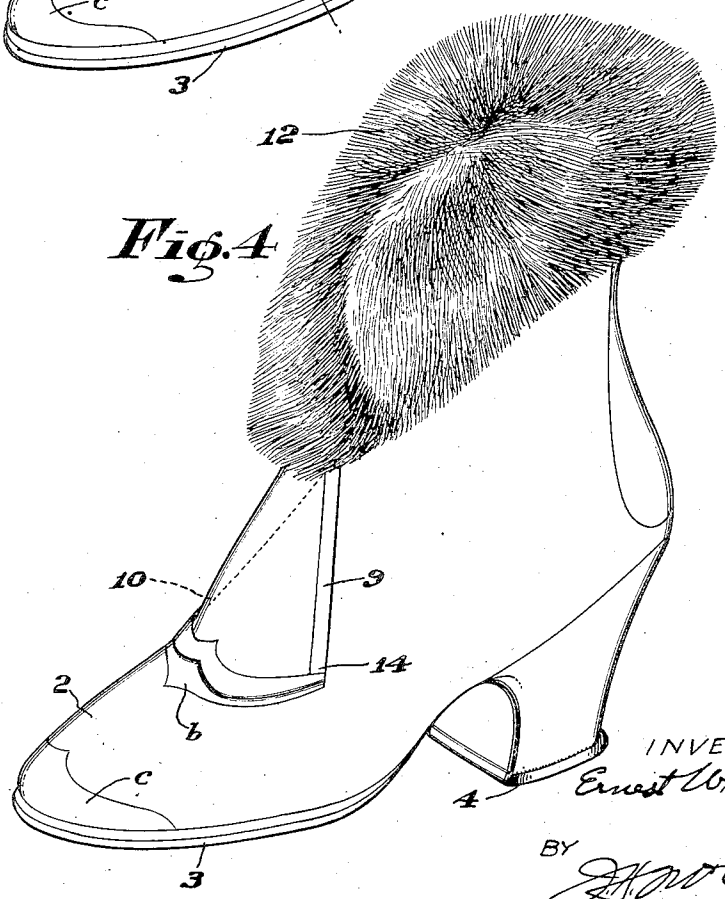


Fig. 4



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UNITED STATES PATENT OFFICE

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SNAPLESS OVERSHOE

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Application October 1, 1935, Serial No. 43,015

3 Claims. (Cl. 36—7.3)

This invention relates to overshoes. It aims to devise an article of this type of such a construction that it will be held securely on the foot without requiring fasteners, while still being easily put on or taken off. It is also an object of the invention to produce a shoe of this type in which an upper trimmed with fur or other bulky material will be held snugly around the wearer's ankle notwithstanding the absence of fasteners.

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.

In the drawings,

Figure 1 is a plan view of a one-piece vamp and quarter blank which preferably is used in the manufacture of the shoe;

Fig. 2 is a similar view, with parts broken away, showing the blank at a later stage in the process of manufacture;

Fig. 3 is a perspective view of the shoe after vulcanization, but before the trimming has been applied; and

Fig. 4 is a perspective view of the completed shoe.

Referring first to Figs. 3 and 4, the shoe there shown comprises an upper **2** which preferably is made of some waterproof material, such for example as a composite fabric consisting of an outer ply of rubber combined with a suitable lining fabric, or inner and outer fabric plies combined with an intermediate waterproof ply. In the particular construction illustrated in the drawings the upper material is of the former type. The shoe also includes a rubber sole **3** and the rubber heel **4**, all the parts being vulcanized together.

While the shoe may be made in any suitable or convenient manner, the method at present preferred consists in making the vamp and quarters in a single piece. A vamp and quarter blank for such a shoe is shown at A, Fig. 1, this blank being cut out of a suitable fabric with the aid of cutting dies or patterns. As above stated the outer ply preferably consists of rubber, which at this point in the process of manufacture is uncured. The next step in the process consists in applying reinforcing strips **5** and **6**, Figs. 1 and 2, to the blank along lines such that they will reinforce the free edges of the upper in the completed shoe. The location of these reinforcing strips may be determined with the aid of certain patterns or guides. Preferably, also, a reinforcing piece **7** of fabric, of approximately the shape shown in Fig. 1, is applied to the central portion of the blank, with its left-hand edge flush with the corresponding edge of the lower part of the strip **6**. This fabric should be of a stretchable or elastic nature, such as stockinette, the wales or ribs of the fabric running vertically. It may be secured to the blank by rubber cement and it serves both to reinforce this part of the upper and also to facilitate the sliding of the flap over it in the finished shoe. Next, a flap **8** of rubber lined with stockinette, or some other fabric adapted to stretch laterally, is secured to the central portion of the blank in the relationship to the other parts illustrated in Fig. 2. This flap has a reinforcing strip **9** along its right-hand edge which is adapted to overlap and form a continuation of the strip **5**.

In making the overshoe the rearward edges of the blank A are overlapped one upon the other and cemented together to close the upper, after which the upper and insole are assembled upon a last, the lasting operation is performed, the usual foxings, heel stays and other finishing and ornamental pieces, such as the parts *b* and *c*, Figs. 3 and 4, and which form parts of the design of the individual shoe, are applied and the shoe and heel are put on. All of these operations are like those common to the manufacture of rubber footwear of this type. The shoe then is vulcanized. After vulcanization, the shoe is removed from the last, and either before or after such removal, as desired, the workman trims away the surplus upper margins *a*. He is guided in performing this trimming operation by the reinforcing strips **5** and **6**, the rear ends of which have been united during the operation of closing the upper. He cuts to the upper edges of these strips and continues this operation downwardly along the upper edge of strip **6**, under the flap **8**, as shown in Fig. 3, cutting almost or quite to the point **10**, Fig. 2. Later the fur or other trimming **12**, Fig. 4, is stitched to the free margin of the upper.

It will be evident from an inspection of Figs. 2, 3 and 4 that after the shoe has been completed, the free margin of the upper extends from the lower end of the cut above described, or, in other words, from a point close to the point **10**, Fig. 2, upwardly along the strip **6**, entirely around the upper edge of the shoe, and thence downwardly along the reinforcing strip **9** to the point **14** at which the lower end of the latter strip is anchored to the upper. It should also be noted that the entire area of the flap **8** is free from the part of the upper which it overlies except that portion between its lower edge and the dotted line **15**, Figs. 2 and 3, the lower margin of the flap be-

ing vulcanized securely to the outer ply of the upper. As clearly shown in the drawings, the points 10 and 14 are located at the opposite sides of the shoe at approximately the junction of the instep portion of the shoe with the toe portion thereof, one of these points being located at one side of the vamp portion of the upper at approximately the height of the toe portion of the shoe and above the ball region of the sole, while the other is positioned at the other side of the shoe at a point approximately opposite the first point. Due to this arrangement it will be observed that when the foot is pushed into the shoe, the pressure of the instep portion of the foot, and the ordinary shoe covering it, against the area of the overshoe immediately under the flap 8 will exert a tensioning action on the entire free edge of the upper. This results in drawing the margins 5 and 6 toward each other and tightening the entire free edge of the top of the shoe around the ankle of the wearer. Thus the top is made to hug the ankle without the use of fastenings, and this is assured even with a somewhat bulky top such as that produced when the fur trimming is used. At the same time this construction of the upper and the inherent elasticity of the upper material makes it an easy matter to slip the shoe on to the foot or to take it off. In addition, the symmetrical location of the flap with reference to the longitudinal median plane of the shoe, together with the tapered form of the flap, contribute to the production of the results just described.

In stitching the strip of fur trimming 12 to the upper, it is usual to start the stitching operation at one end of the strip at a point on the part 6 just above the region 16, where the free edges of the upper cross each other. The opposite end of the fur strip preferably is run down somewhat below this crossing point.

The invention thus provides an overshoe of the ankle type in which the top of the shoe is made to hug the wearer's ankle snugly notwithstanding the absence of fastening devices.

While I have herein shown and described a typical embodiment of my invention, it will be understood that the invention may be embodied in other forms without departing from the spirit or scope thereof.

Having thus described my invention, what I desire to claim as new is:

1. An overshoe comprising a sole and an upper secured thereto, said upper being adapted to encircle the wearer's ankle and having a free edge beginning at a point at one side of the vamp portion located approximately at the height of the toe portion of the shoe and above the ball region of the sole and extending upwardly and around the rear portion of the upper, thence forwardly and downwardly, crossing itself adjacent to the upper part of the instep and terminating at the other side of the shoe at a point approximately opposite the said point of beginning.

2. An overshoe comprising a sole and an upper secured thereto, said upper being adapted to encircle the wearer's ankle and having a free edge beginning at a point at one side of the vamp portion located approximately at the height of the toe portion of the shoe and above the ball region of the sole and extending upwardly and around the rear portion of the upper, thence forwardly and downwardly, crossing itself adjacent to the upper part of the instep and terminating at the other side of the shoe at a point approximately opposite the said point of beginning, thus providing a flap overlying the instep region, and a lining material secured to the upper and interposed between the inner surface of said flap and the upper material which the flap overlaps.

3. An overshoe comprising a sole and an upper secured thereto, said upper being adapted to encircle the wearer's ankle and having a free edge beginning at a point at one side of the vamp portion located approximately at the height of the toe portion of the shoe and above the ball region of the sole and extending upwardly and around the rear portion of the upper, thence forwardly and downwardly, crossing itself adjacent to the upper part of the instep and terminating at the other side of the shoe at a point approximately opposite the said point of beginning, thus providing a flap overlying the instep region, said flap being of triangular form and being located substantially symmetrically with reference to the longitudinal median plane of the shoe.

ERNEST W. DUNBAR.