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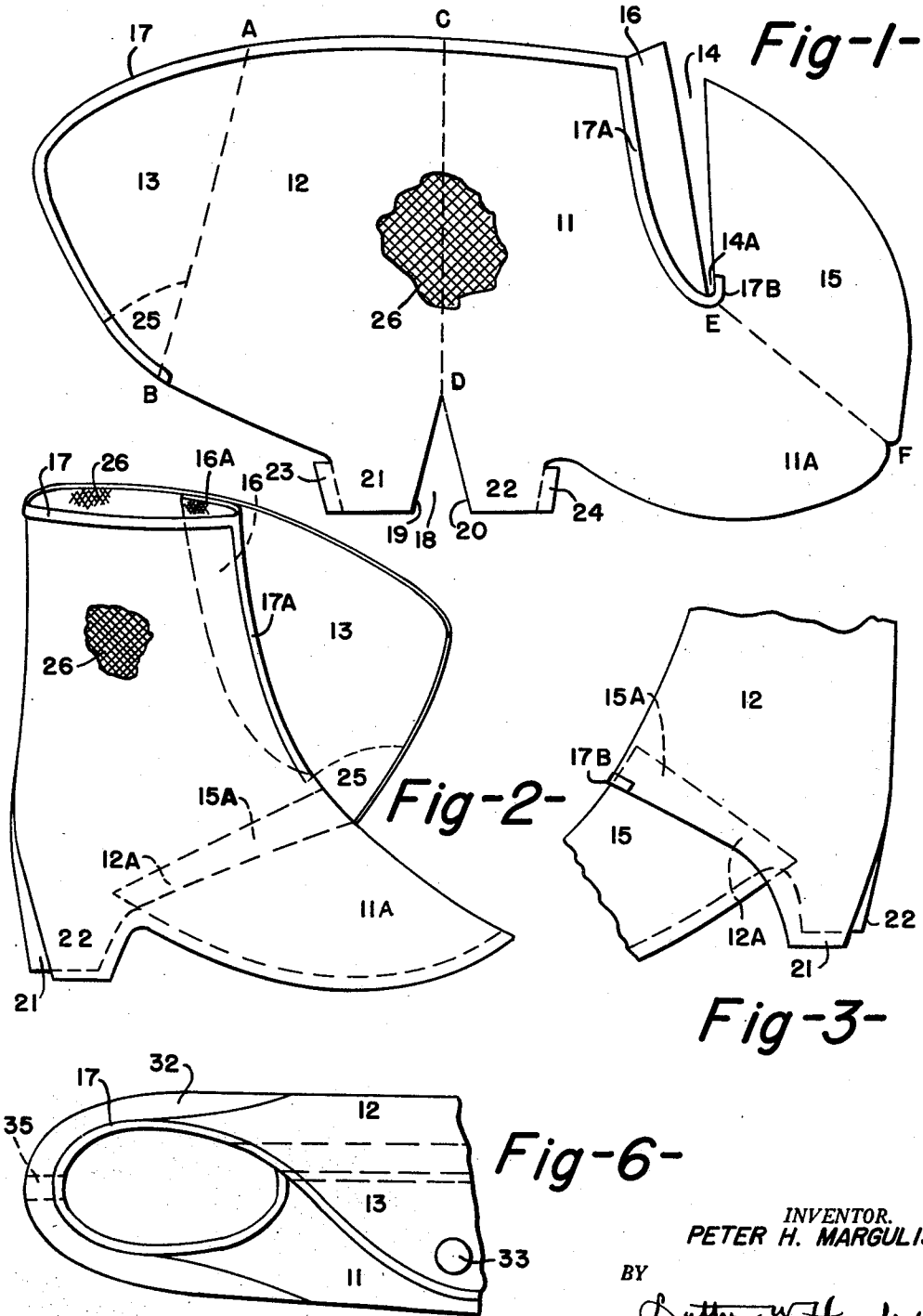
P. H. MARGULIS

2,599,116

FOOTWEAR AND METHOD OF MAKING SAME

Filed Feb. 25, 1949

2 SHEETS—SHEET 1



INVENTOR.
PETER H. MARGULIS

BY

Arthur W. Hawley
ATTORNEY

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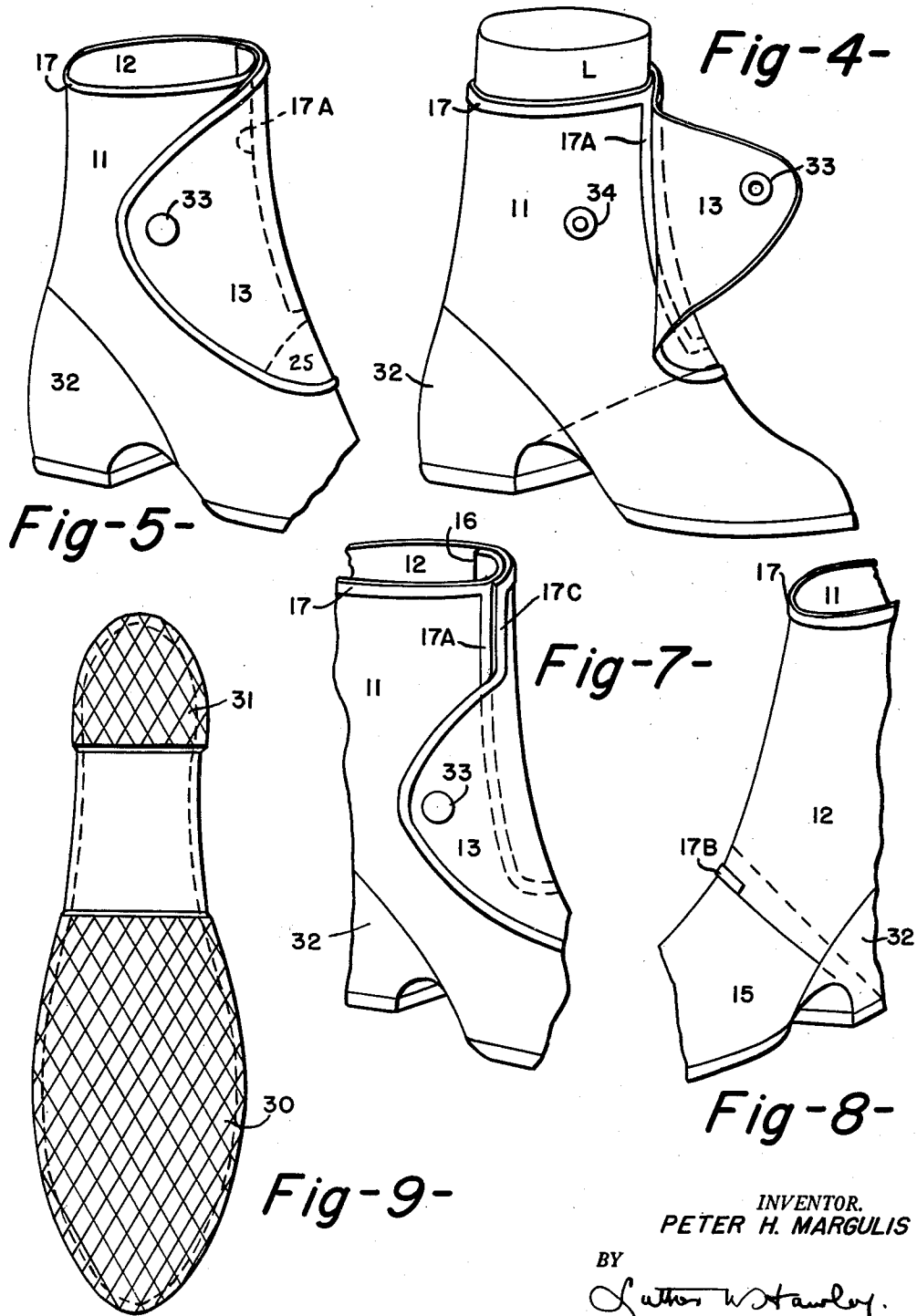
P. H. MARGULIS

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FOOTWEAR AND METHOD OF MAKING SAME

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2 SHEETS—SHEET 2



INVENTOR.
PETER H. MARGULIS

BY
Arthur W. Stanley
ATTORNEY

UNITED STATES PATENT OFFICE

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FOOTWEAR AND METHOD OF MAKING SAME

Peter H. Margulis, New York, N. Y.

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2 Claims. (Cl. 36—7.3)

1

This invention relates to snow or waterproof footwear and more particularly to footwear formed of rubber or rubberized material or material combining rubber and fabric.

This invention has for its salient object to provide a simple, practical and economical method of making and constructing footwear of the character specified, such as boots, galoshes, arctics, or oxfords, that will be form fitting and attractive in appearance.

Another object of the invention is to provide footwear of the character specified so constructed as to use a minimum amount of material and to cut the time and labor required for its manufacture.

Another object of the invention is to provide footwear of the character specified having a wide entrance down to its throat and having a closing flap with a single fastener.

Another object of the invention is to provide footwear of the character specified that will be comfortable to the wearer, will fit snugly over insteps and ankles of varied measurements, and can be easily put on and taken off without ripping or tearing the footwear.

Further objects of the invention will appear from the following specification taken in connection with the drawings which form a part of this application, and in which:

Fig. 1 is a plan view of the blank used to make the article of footwear embodying the invention, this view showing the outer face of the blank;

Fig. 2 is an elevational view of the blank folded to the proper position for placing on the last, this view showing the right side of the folded blank;

Fig. 3 is a fragmentary elevational view showing the left side of the folded blank;

Fig. 4 is an elevational perspective view of the blank with its edges united and with the blank in position on the last and contoured thereto and sole and heel attached to the bottom of the inturred edges of the folded and contoured blank, the flap being shown open;

Fig. 5 is a view similar to Fig. 4 but showing the flap closed;

Fig. 6 is a top plan view of the footwear shown in Fig. 5, parts being broken away;

Fig. 7 is a perspective view, partly broken away, showing a slight modification of footwear embodying the invention, this view showing the right side of the article;

Fig. 8 is a perspective view, partly broken away, showing the left side of the boot shown in Fig. 7; and

Fig. 9 is a bottom plan view showing how the sole and heel are attached to the boot or overshoe in the usual manner.

The invention briefly described consists of a method of making an article of footwear, such as

2

a boot, arctic, etc. formed of elastic or rubber material, the article having the heel, vamp and quarter, including a closing flap, formed of a one-piece blank of raw rubber material, so designed and contoured that the back of the article will be seamless and the edges of the blank will be folded to meeting position and joined at the front over the instep and ankle. The article is molded or contoured around a last and the heel and sole are secured to the inturred bottom to complete the article of footwear and the article is vulcanized in the usual manner.

Further details of the invention will appear from the following description.

In the particular embodiment of the invention illustrated in the drawings, the blank shown in Fig. 1 is formed of raw or uncured rubber and is formed of one piece of material. This piece, for convenience in describing, may be considered as comprising a plurality of sections. The central portion comprises sections 11 and 12 which form the quarters and heel. The inner edge of quarter 12 is indicated by the dotted line C—D and the outer edge of the quarter 12 is indicated by the dotted line A—B.

Adjoining the quarter or section 12 at the outer edge thereof is an end section 13, triangular in outline, this section forming the closing flap of the boot or overshoe.

The blank has a downwardly extending elongated V-shaped opening or notch 14, the bottom of which forms the throat 14A of the boot, and beyond the lower right end of section 11 there extends a section 15 which forms, with the adjoining portion 11A of the section 11, the vamp of the boot. Section 15 is generally triangular in outline. A sealing flap 16, the purpose of which is hereinafter described, extends beyond the right upper outer edge of quarter or section 11 at the notch 14.

A reinforced bead, rib or band 17 is formed on or secured to the outer edge of section 13, upper edges of sections 12 and 11, and along the junction of flap 16 and section 11 at the bottom of the notch 14 at the throat 14A, as indicated by 17A, and the bead also extends around the lower end of the notch 14, as shown at 17B, for reasons hereinafter stated.

The sections 11 and 12 are divided at their lower ends by a V-shaped notch 18 forming edges 19 and 20 of heel sections 21 and 22. These sections have extensions or flaps 23 and 24 adapted to be turned inwardly upon the breast of the heel, as hereinafter explained.

Fold lines or markings on the blank are indicated at A—B, C—D and E—F.

The lower corner area 25 of the section 13 at its junction with section 12 at B functions as an elastic reinforcement when the closing flap 13 is

closed and said lower corner area 25 thereof secured to the section 11, 11A.

The entire inner surface of the blank for the overshoe, from edge to edge, may have a suitable lining, such as the fabric lining indicated at 26, which lining extends from the outer edge of the flap 13 to the outer edge of the flap 16 and of the vamp section 15. The portion of the lining 26 extending over the flap 16 is indicated on Fig. 2 at 16A.

Figs. 2 and 3 show the blank folded on the line C—D. When the blank has been so folded, the flap 16 is folded inwardly and secured by cementing its outer surface to the inner surface of the section 12 adjoining the closing flap 13.

The section 15 is folded on line E—F and the upper outer edge portion 15A of section 15 is cemented beneath the lower edge portion 12A of section 12. The section 15 and the lower end or vamp portion 11A of section 11 form the vamp of the boot or overshoe.

The folded blank, with the edges joined as above described, is then dropped over a last L (see Fig. 4) and is contoured thereto. The heel flaps 23 and 24 are inturned upon the breast of the heel of the article and cemented in the usual manner to form the heel or, if desired, the flaps may be dispensed with and the outer edges of the heels can be butt joined in the usual manner and the bottom edges inturned and cemented upon the insole. The other heel edges 19 and 20 are also cemented or joined.

After the sole and heel have been cemented to the inturned bottom edges of the upper sections, the article shown in Figs. 2-5 is inverted, thus leaving the closure flap 13 above the anchored area 25 hanging parallel to the upper 11. The article is so brought to the vulcanizer in accordance with the well known procedure, thus preventing the lining of the flap 13 from being vulcanized to the upper 11.

The bottom edges are then inturned and cemented to the sole 30 and heel 31, as shown in Fig. 9, and the counter is reinforced as shown at 32.

The boot or overshoe is then vulcanized in the usual manner and thereafter the flap 16 is severed along the outer edge of bead portion 17A, that is, at the junction of the flap 16 and section 11, thus releasing one upper from the other.

The invention and the use of a one-piece blank to form an elastic boot or article of footwear is not limited to low boots, as oxfords, or to high boots. The elimination of unnecessary seams, joints, and reinforcements, provides uniform, uninterrupted stretch, enabling the boot to fit snugly and comfortably around the ankle and over the instep. A high boot is shown in Fig. 7. In this construction the sections 11 and 12 are extended upwardly beyond the upper end of the flap 13 to form cuffs, the two edges of the cuffs being reinforced, as at 17A and 17C.

The boot is closed by a single flap and fastener, such as the snap fastener 33, 34 and the shape of the closure provides for a snug fit around the leg. Moreover, the low positioned throat 14A at the bottom of notch 14 and the wide opening throat facilitates putting on and taking off the boot and prevents tearing or ripping by the heel of the wearer's shoe. Tearing at the base of the throat is also prevented by the reinforcing beading which extends around the base of the notch and throat and by the reinforced area 25.

The back of the boot may be reinforced, if desired, by a strip 35, as shown in Fig. 6.

Although certain specific embodiments of the invention have been particularly shown and described it will be understood that the invention is capable of modification and that changes in the construction and in the arrangement of the various cooperating parts may be made without departing from the spirit or scope of the invention, as expressed in the following claims.

What I claim is:

1. An article of footwear of the overshoe type having unitary quarters, a vamp, a substantially triangular instep closure flap and heel-inclosing portions extending downwardly from the lower edges of the quarters, the closure flap being connected to one of the quarters with the apex thereof being substantially midway the upper and lower edges of said quarter and extending from said quarter to approximately midway of the other quarter, a reinforcing strip secured throughout its area to the inner face of the first named quarter at the front vertical margin thereof with the front edge of the reinforcing strip positioned to mate with the downwardly extending edge of said other quarter when in closed position on the foot, one side of the vamp being integral with said other quarter and the other side of the vamp being connected integrally to and extending beyond the first named vamp portion, and said other quarter having an upwardly extending edge separated from the first named quarter by an elongated, downwardly extending notch forming the throat of the completed product, said extending vamp portion being folded over and secured to the lower edge of the first named quarter, the lower portion of said closure flap extending over and being secured to the outer surface of the vamp portion below said notch.

2. The method of forming an article of footwear which comprises providing a blank having connected quarters, a closure flap at the outer edge of one quarter and a sealing flap at the outer edge of the other quarter, folding the quarters forwardly and cementing the sealing flap to the inner face of the outer margin of said first named quarter inwardly of the junction of the closure flap with said quarter, placing the secured quarters upon a last, molding and contouring the article to the last including inturning the lower edge of the article, securing a sole to the inturned edges of the article, and severing the sealing flap from the quarter to which it was initially secured.

PETER H. MARGULIS.

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