Feb. 16, 1926. 1,573,299

H. BULLOCK

SHOE

Filed May 29, 1924

Fig. 1.

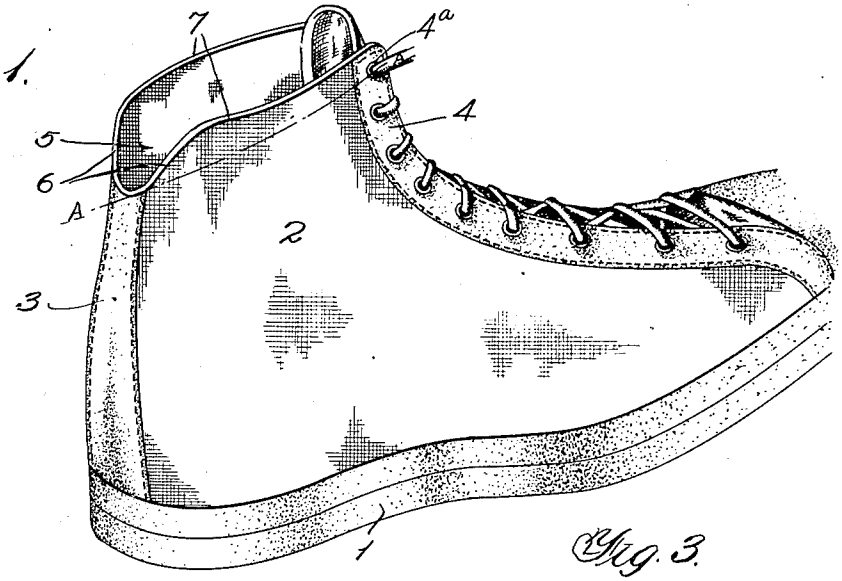


Fig. 2.

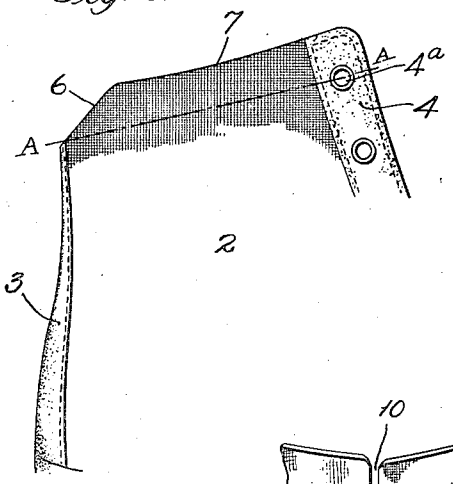


Fig. 3.

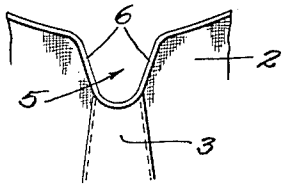


Fig. 4.

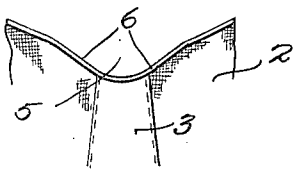


Fig. 5.

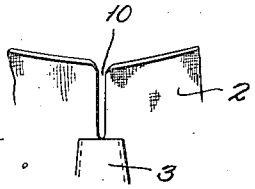
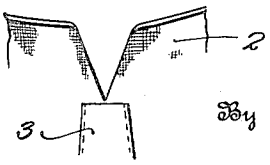


Fig. 6.



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UNITED STATES PATENT OFFICE.

HUGH BULLOCK, OF ANDOVER, MASSACHUSETTS, ASSIGNOR TO CONVERSE RUBBER SHOE CO., A CORPORATION OF MASSACHUSETTS.

SHOE.

Application filed May 29, 1924. Serial No. 716,822.

To all whom it may concern:

Be it known that I, HUGH BULLOCK, a citizen of the United States, residing at Andover, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Shoes, of which the following is a specification.

In certain types of shoes known generally as ankle height shoes, discomfort is often produced by the upper rear part of the shoe rubbing, chafing or cutting the Achilles tendon. This is particularly true with shoes subject to active use, such as in basket ball or tennis. In fact, basket ball players are sometimes kept out of the game by inflammation and swelling due to the upper edge of the shoe cutting into the skin and the Achilles tendon at a point where it is more or less exposed.

According to this invention, a shoe is provided which furnishes adequate and proper support for the ankle of the wearer which is very necessary particularly in athletic shoes, and at the same time obviates the inflammation, chafing, swelling and discomfort, due to the upper rear part of the shoe cutting into the leg of the wearer, near where the Achilles tendon is most exposed.

A shoe made in accordance with this invention, has an upper or quarter for furnishing adequate and firm support for the ankle, the important point being that the upper rear edge of the shoe upper or quarter is provided with a cut-out portion or notch, which is located with respect to the Achilles tendon at a point where that tendon is more or less exposed.

The cut-out portion or notch may be of any desired width, depth or shape, the preferred form, however, being illustrated in the accompanying drawings.

The line of pull from the upper eyelet at the front of the shoe is diagonally upward from the bottom of the notch, which lessens the tendency of the back of the shoe to cut into the tendon, due to the fact that such pull is not perpendicular to the tendon, and also due to the fact that such bias pull is at an angle to the threads of the cloth of the upper, so that the cloth gives and stretches and so absorbs the force that otherwise would tend to cause a cutting and chafing of the tendon.

In the drawings,

Fig. 1 is a perspective view, illustrating the invention as embodied in a shoe commonly used for basket ball, tennis or other athletic use;

Fig. 2 is a side view of the shoe;

Fig. 3 is a rear view showing the cut-out portion as worn when the shoe is level with the ground;

Fig. 4 is a view showing the spreading of the sides of the cut-out portion when the heel is raised.

Figs. 5 and 6 are views showing other shapes for the cut-out portion.

Referring now to the drawings, the shoe comprises the sole 1, quarter or upper 2, back-stay 3 and eyelet stay 4; at the front of the quarter or upper.

At the upper rear portion of the quarter 2 is a cut-out portion 5, the depth and shape of which may be varied as desired, but, which in the preferred form, is substantially U-shaped.

In the preferred form, the sides 6 defining the cut-out portion 5 are disposed at an angle to the back-stay 3 and at an angle to the upper horizontal edge of the quarter.

The warp and woof threads of the quarter are usually vertical and horizontal. The upper eyelet 4^a is preferably slightly above the level of the top of the back stay 3 so that there is an upward or bias pull imposed substantially along the line A—A, Figs. 1 and 2. This bias pull, from the fact that it is not directly perpendicular to the Achilles tendon, lessens the tendency of the back of the shoes to cut into the tendon. Furthermore, this bias pull is diagonal with respect to the warp and woof threads of the quarter, and so there is a stretching action of the cloth due to such diagonal pull; that is to say, when there is a strain along the line A—A, the cloth gives and stretches and so takes up the strain that otherwise would act to cut into the Achilles tendon.

Referring now to Figs. 3 and 4, it will be seen that the upper edge of the back-say terminates substantially at the lower edge of the cut-out portion 5. When in use, with the shoe level on the ground, the edges of the cut-out portion are substantially as shown in Fig. 3. When the wearer lifts his heel from the ground, and the back of the shoe would tend to cut into the Achilles tendon, the edges 6 spread as shown in Fig. 4, and so prevent chafing, cutting and soreness due to friction at this point.

The invention is particularly applicable to that type of athletic shoe having a rubber sole and a canvas quarter, where the top of the quarter is a little above the ankle bone. The Achilles tendon is probably most exposed at about the level of the angle bone and the cut-out portion is substantially at this level, although the level of the cut-out may be varied.

It should, however, be distinctly understood that the invention is not limited to athletic shoes, but is applicable to any other forms of shoes for general wear and that the width, depth and proportions of the cut-out portion may be varied as desired.

The invention may also be applied to low shoes commonly known as oxfords, as well as to ankle-height shoes.

For example, in Fig. 5, the cut-out portion 10 is practically a narrow slot. In Fig. 6, the cut-out portion is substantially V-shaped.

While I have illustrated my invention in some detail, it should be understood that it may be carried out in other ways as expressed in the following claims.

I claim as my invention:—

1. An ankle height athletic shoe, having lacing means at the front thereof, and provided at its top, rear part with a substantially U-shaped notch, the edges of which extend partly around the Achilles tendon of the wearer, whereby the pull from the lacing means is distributed and chafing of the tendon prevented.

2. An angle height shoe, provided at its top rear part with a cut-out portion forming a notch, the edges of which extend partly around the Achilles tendon of the wearer, and having the usual lacing eyelets at the front, the upper eyelet being above the level of the bottom of the cut-out portion, whereby a bias pull is imposed across the upper part of the shoe.

3. An ankle height shoe having a quarter of woven material, the top, rear part of the quarter having a cut-out portion forming a notch, the edges of which extend partly around the Achilles tendon of the wearer, the quarter being provided with eyelets at the front, the upper eyelet being above the level of the bottom of the cut-out portion, whereby a bias pull is imposed along the upper part of the quarter.

In testimony whereof I affix my signature.

HUGH BULLOCK.