Oct. 10, 1933. C. H. BROWN ET AL 1,930,304

SHOE LAST

Filed Jan. 6, 1930

Fig. 1.

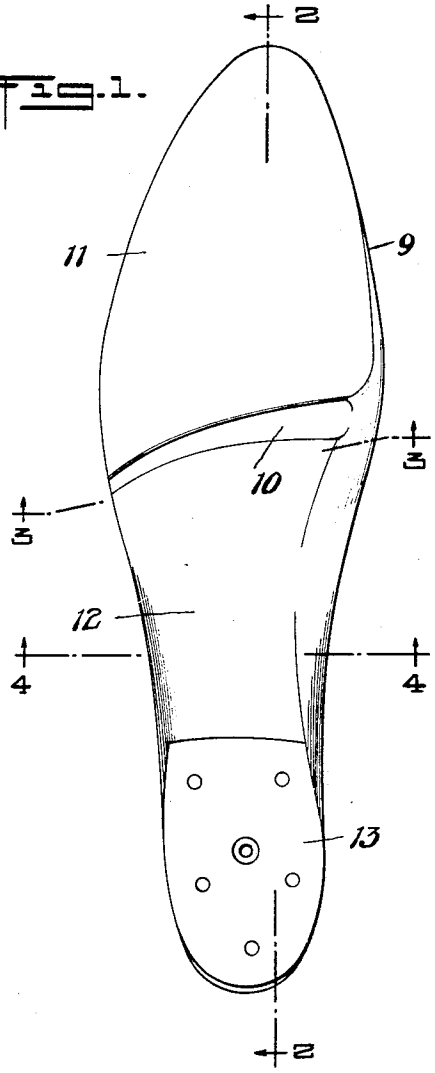


Fig. 2.

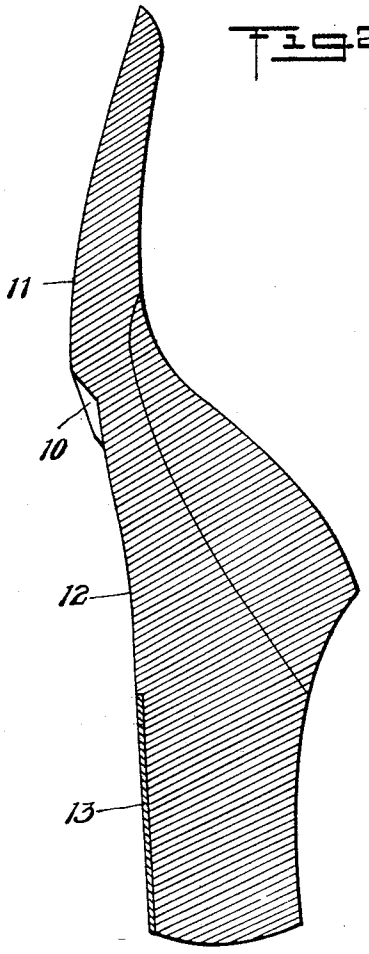


Fig. 3.

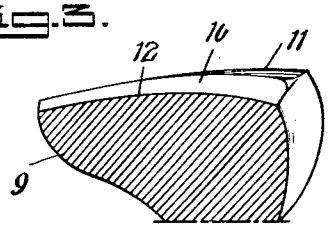
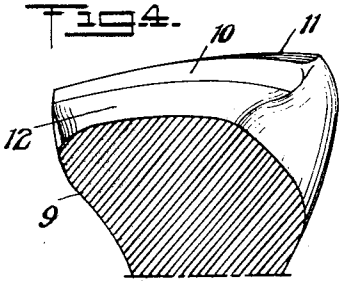


Fig. 4.



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SHOE LAST

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2 Claims. (Cl. 12—133)

Among the principal objects which the present invention has in view are: To conform the inner surface of a shoe to the structural peculiarities of the human foot; to form a support for the tarsus region of the human foot and accommodate the bone structure of the foot to distribute the weight pressures thereon; and to accomplish the above stated objects by so shaping the last on which the shoe is built that, the structure will accomplish the objects mentioned.

Figure 1 is a bottom view of a last constructed and arranged in accordance with the present invention;

Figure 2 is a sectional view thereof, the section being taken as on line 2—2 of Figure 1;

Figure 3 is a sectional view, the section being taken as on line 3—3 of Figure 2;

Figure 4 is a sectional view, the section being taken as on line 4—4 of Figure 1.

Description

Heretofore, devices have been employed for supporting the metatarsal arch of the human foot. Generally, these devices have provided, in one form or another, a pad or mound rising above the general surface of the insole of the shoe for the purpose of filling in the space, or area, behind the tarsal joints, of the human foot, the object being to produce, when in service, an upward pressure on the muscular structure to offset the lateral compression of shoes generally exerted by preventing the natural spread of these joints when in action and when bearing the direct weight of the person. It has proved that the upward pressure on these muscles has given pain and other discomfort. It is to avoid this, that we have provided the shoe last 9 with a lowered shank portion and an inclined section 10 extending between the sole portion 11 and the shank portion 12 as seen in Figure 2 of the drawing:

The section 10 is preferably forwardly bowed as seen best in Figure 1 of the drawing and progressively deepens from the outer edge of the last to the inner edge thereof in correspondence with the shape of the shank portion at the inner side of the shoe or foot. The terminals of the section so formed correspond in location to the joint of the large toe and the joint of the small toe. The curve of the section 10 carries forward slightly into the space filled with the muscular structure above referred to, but it is not sufficiently advanced to enter decidedly into the region occupied by the said muscular structure to cause any discomfort.

When a shoe last thus constructed is employed, the insole is either moulded or pressed into the section 10. When the shank iron is then laid over the shank portion 12 and heel portion 13, it will be found that the forward edge thereof enters the region indicated as the section 10.

Later, when the wearing sole and the filler have been secured on the shoe, it will be found that the interior of the shoe is provided with a transverse ridge corresponding with the shape and direction of the section 10.

When a shoe thus formed is placed on the foot, it will be found that the metatarsal structure overhangs the ridge formed primarily by reason of the section 10 and raised shank portion 12, and thereby relieves the same from the pressure, pain, and inconvenience above referred to. It will also be found that the weight of the person is more evenly distributed in the shoe, the shank portion taking its share of the load.

We claim:

1. A shoe last embodying a ball portion, heel portion and a shank portion intermediate and connecting said ball and heel portions, said shank portion at the forward end being connected with said ball portion by an inclined section, said inclined section being shaped to provide an increased disparity in surface between said ball portion and said shank portion, said inclined section being bowed forwardly toward the toe of said last.

2. A shoe last embodying a ball portion, heel portion and shank portion intermediate and connecting said ball and heel portions, said shank portion at the forward end being connected with said ball portion by an inclined section, said inclined section being cut away at the inner side of the last for molding the sole, and parts connected therewith, upward at the inner side of said last, said inclined section being bowed forwardly under the metatarsal region of the foot.

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