No. 873,722. PATENTED DEC. 17, 1907.

H. COHEN.

INNERSOLE.

APPLICATION FILED OCT. 12, 1906.

Fig. 1.

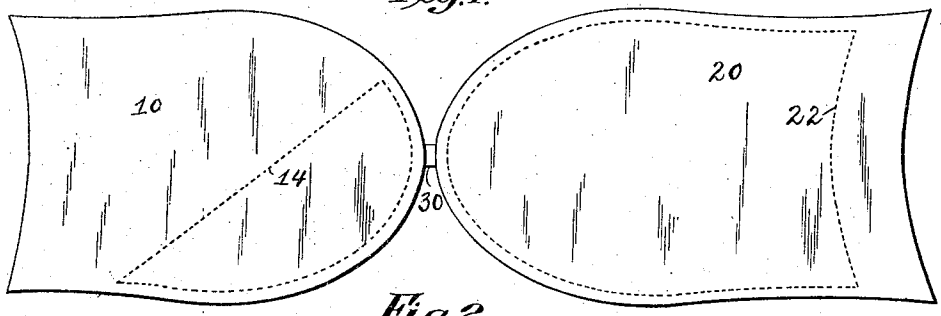


Fig. 2.

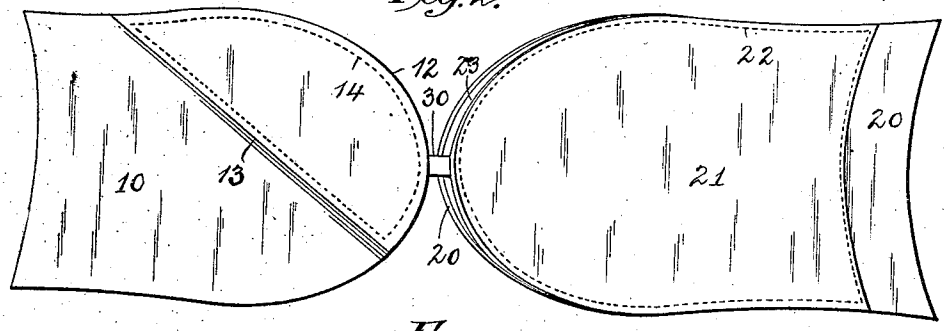


Fig. 3.

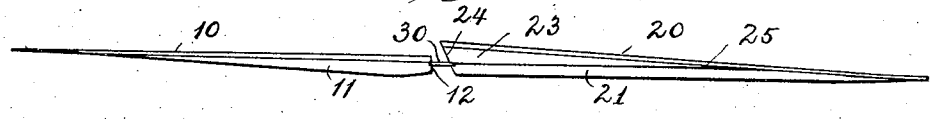


Fig. 4.

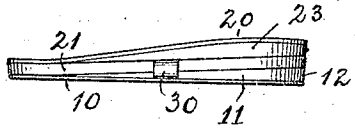


Fig. 5.

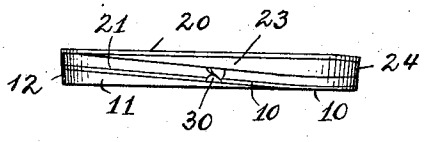
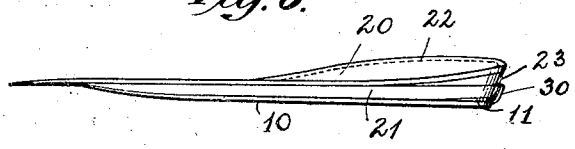


Fig. 6.



Attest:

Herman Meyer

Alan McDonnell

Hyman Cohen, Inventor:

by William R. Baird

his Atty.

NORRIS PETERS, INC., LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

HYMAN COHEN, OF NEW YORK, N. Y.

INNERSOLE.

No. 873,722. Specification of Letters Patent. Patented Dec. 17, 1907.

Application filed October 12, 1906. Serial No. 338,551.

To all whom it may concern:

Be it known that I, HYMAN COHEN, a subject of the Czar of Russia, and a citizen of the Russian Empire, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Innersoles, of which the following is a specification.

My invention relates to inner soles for boots and shoes and its novelty consists in the construction and adaptation of the parts as will be more fully hereinafter pointed out.

The purpose of the invention is to provide means for varying the thickness of the sole at its heel and making such variations, either uniform across the entire width of the sole, or greater at one side of the sole than the other.

In the drawings, Figure 1 is a top plan view of one of the two pieces of which the device is composed and a bottom plan view of the other piece when the two are joined together; Fig. 2 is a plan view of the same, each piece being turned over; Fig. 3 is a side elevation of the parts shown in Fig. 2; Fig. 4 is a rear elevation of the device when the wedges are arranged at the same side of the heel; Fig. 5 is a similar view when the wedges are arranged at the opposite sides of the heel, and Fig. 6 is a side view of the parts assembled as shown in Fig. 4.

In the drawings, 10 is the lower or positioning layer of the lower heel piece. It may be of cloth, leather, canvas, buckram or any other suitable material. Its function is to carry, support and locate a lower wedge 11 made of soft elastic material, such as soft rubber, and which wedge is preferably made in the form of a spherical or spheroidal segment with its wider edge 12 coincident with the outer edge of a part of the layer 10, and tapering down to a thin edge at 13. This wedge is secured to the layer 10 by any suitable means, for instance, the rows of stitching 14. The wider edge 12 is preferably beveled sloping toward the layer 10.

20 is the upper or positioning layer of the upper heel piece. It may be of cloth, leather, canvas, buckram, or other suitable material. It is preferably made of leather with a smooth upper surface, because it is the piece brought into contact with the foot of the wearer. Its function is to carry and support a cushioning layer 21 of felt or similar material secured by rows of stitches 22, or in any other suitable manner, and to carry and locate an upper wedge 23 made of soft elastic material such as soft rubber. The wedge 23 is preferably made in the form of a spherical or spheroidal segment. Its wider edge 24 is beveled and coincides in contour with the outer edge of the layer 20. It diminishes inwardly to a thin edge 25 and is secured by any suitable means between the layers 20 and 21.

The lower piece made of the layer 10 and wedge 11 and the upper piece made of the layers 20 and 21 and the wedge 22 are connected to each other by a short strip 30 of soft elastic material such as elastic webbing.

In using the device, if it is desired to increase the thickness of the sole at one side of the heel the parts are arranged as seen in rear elevation in Fig. 4 the upper and lower wedges being both on the same side of the shoe and underneath each other. If, however, it is desired merely to increase the thickness of the sole uniformly the parts are arranged as shown in Fig. 5. In Fig. 4 the connecting strip 30 forms a flat hinge. In Fig. 6 the strip 30 is twisted but forms a hinge which is not in contact with the foot of the wearer, the layers 20 and 21 being between the wearer and the hinge.

The lower heel piece is preferably made of less width than the upper heel piece, so that the entire device tapers downwardly and inwardly and the upper layer of the upper piece overlaps the layers beneath it so that their edges cannot come into contact with the foot of the wearer.

The device is very cheap to make and is convenient and efficient in use.

What I claim as new is:—

1. A device of the kind described, comprising two hingedly connected pieces one of which consists of a positioning layer, a protecting layer and a wedge and the other of a positioning layer and a wedge, said pieces adapted to be arranged to position the thicker portion of the wedge of one over either the thicker or thinner portion of the wedge of the other.

2. A device of the kind described, com-

prising one piece consisting of a positioning layer, a protecting layer and a wedge, and another piece consisting of a positioning layer and a wedge and united by a flexible hinge secured to both pieces at their rear.

3. A device of the kind described, comprising a plurality of superimposed pieces each of which is provided with a wedge and one of which is movable with relation to the other to cause the thicker part of the wedge of one to be positioned over either the thinner or thicker part of the wedge of the other.

4. A device of the kind described, comprising a plurality of superimposed pieces each provided with a wedge and a flexible hinge connecting said pieces with each other and adapted to permit the pieces to be relatively adjustable to place the thicker part of the wedge of one over either the thicker or thinner part of the wedge of the other.

5. A device of the kind described comprising a plurality of superimposed pieces each of which is provided with a wedge which is thinned both laterally and longitudinally, one of said pieces being reversible to position the thicker part of its wedge over either the thicker or thinner part of the wedge of the other.

6. A device of the kind described comprising a plurality of superimposed pieces each of which is provided with a wedge which is thinned both laterally and longitudinally, and means connecting said pieces with each other, said connecting means adapted to permit one of the pieces to be reversed, to permit the thicker part of the wedge of one to be positioned over either the thicker or thinner part of the wedge of the other.

7. A device of the kind described comprising a plurality of superimposed pieces each of which is provided with a wedge which is thinned both laterally and longitudinally, and a flexible hinge connecting said pieces with each other and adapted to be twisted between the same.

8. A device of the kind described, comprising an upper positioning layer and a wedge secured to the lower surface thereof, the thicker edge of the wedge coinciding in outline with the contour of the positioning layer and sloping downwardly and inwardly therefrom in combination with a lower positioning layer and a wedge secured to the upper surface thereof, the thicker edge of this wedge coinciding in outline with the contour of the lower positioning layer and sloping upwardly and outwardly therefrom, the upper positioning layer and its wedge being hinged to the lower positioning layer and its wedge with a rear flexible strip.

9. A device of the kind described comprising a plurality of pieces each having a positioning layer provided with a wedge, said pieces being relatively movable to position the thicker part of the wedge of one over either the thinner or thicker part of the wedge of the other, each of said wedges having its thicker edge coinciding in outline with the contour of its positioning layer and sloping laterally and longitudinally therefrom, and a protecting layer between the positioning layers, secured to one of the positioning layers and arranged over the outer surface of the wedge therein.

10. A device of the kind described comprising a plurality of pieces each having a positioning layer provided with a wedge, said pieces being relatively movable to position the thicker part of the wedge of one over either the thinner or thicker part of the wedge of the other, each of the said wedges having its thicker edge coinciding in outline with the contour of its positioning layer and sloping laterally and longitudinally therefrom, a protecting layer between the positioning layers, secured to one of the positioning layers and arranged over the outer surface of the wedge therein, and a flexible means connecting said pieces with each other and adapted to permit said relative adjustment thereof.

11. A device of the kind described, comprising an upper positioning layer and a wedge secured to the lower surface thereof, the thicker edge of the wedge coinciding in outline with the contour of the positioning layer and sloping downwardly and inwardly therefrom in combination with a lower positioning layer and a wedge secured to the upper surface thereof, the thicker edge of this wedge coinciding in outline with the contour of the lower positioning layer and sloping upwardly and outwardly therefrom, the upper positioning layer and its wedge being hinged to the lower positioning layer and its wedge with a rear flexible strip, and a protecting layer intermediate the wedges and secured to one of the positioning layers.

12. A device of the kind described comprising two positioning layers each provided with a segment-shaped wedge the inner edge of which extends diagonally of the layer to which it is applied and the outer edge of which coincides in outline with the edge of said layer, each of said layers thinned toward said inner edge, and means connecting the layers with each other and adapted to permit the same to be relatively adjusted to position the thicker part of the wedge of one over either the thinner or thicker part of the wedge of the other.

13. A device of the kind described comprising two positioning layers each provided with a segment shaped wedge the inner edge

of which extends diagonally of the layer to which it is applied and the outer edge of which coincides in outline with the edge of said layer, each of said layers thinned toward said inner edge, and a twistable connection between the rear ends of said layers, whereby the same may be relatively adjusted to position the thicker part of the wedge of one over either the thinner or thicker part of the wedge of the other.

In testimony whereof I affix my signature in presence of two witnesses.

HYMAN COHEN.

Witnesses:
HERMAN MEYER,
ALAN MCDONNELL.