No. 895,539. PATENTED AUG. 11, 1908.

L. J. COURTEAU.

ARCH AND ANKLE SUPPORT.

APPLICATION FILED JAN. 2, 1907.

Fig. 1.

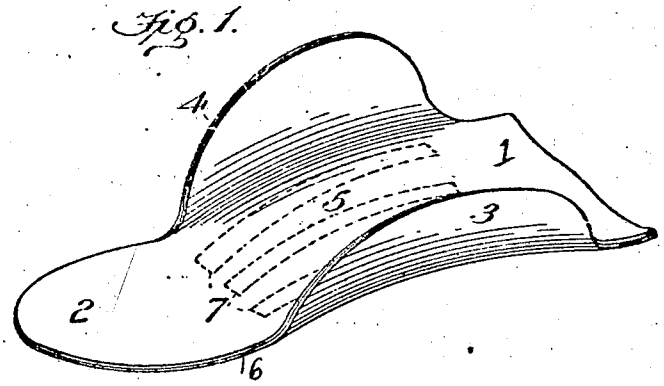


Fig. 2.

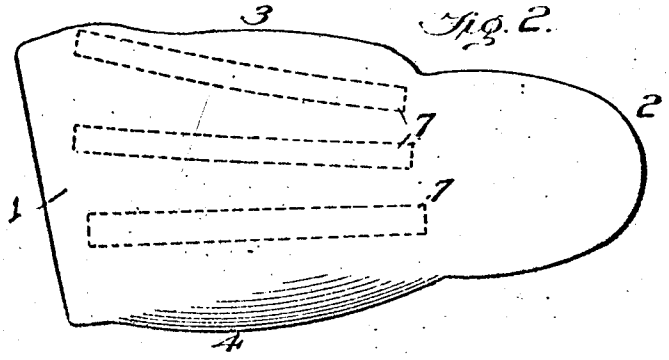


Fig. 4.

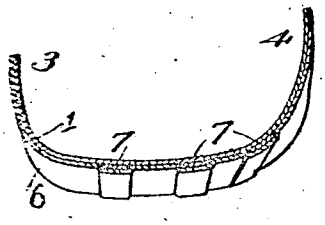


Fig. 3.

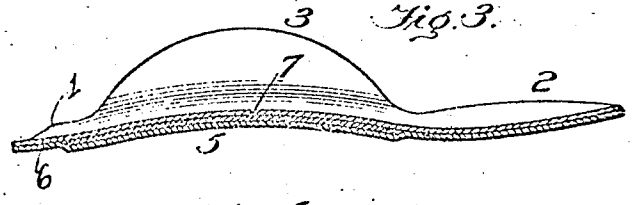


Fig. 5.

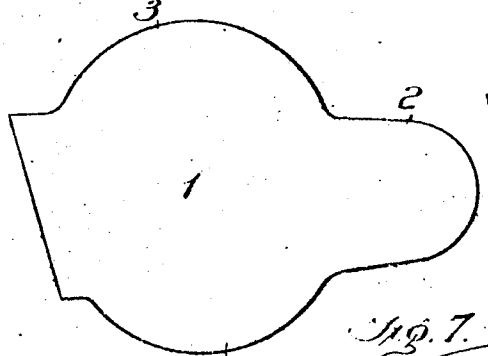


Fig. 6.

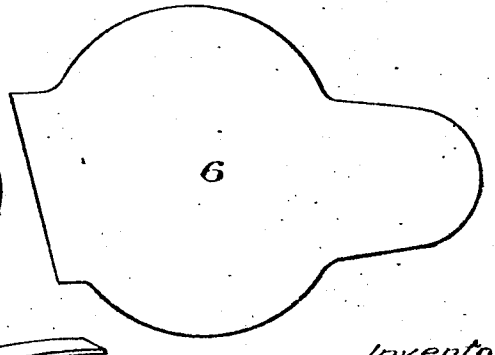
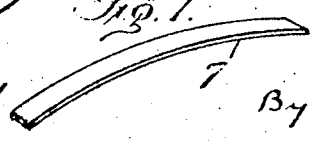


Fig. 7.



Witnesses
Edwin L. Bradford
G. M. Stucker

Inventor
Leopold J. Courteau
By Meyers, Cushman & Rea.
Attorneys

UNITED STATES PATENT OFFICE.

LEOPOLD J. COURTEAU, OF BROCKTON, MASSACHUSETTS.

ARCH AND ANKLE SUPPORT.

No. 895,539. Specification of Letters Patent. Patented Aug. 11, 1908.

Application filed January 2, 1907. Serial No. 350,369.

To all whom it may concern:

Be it known that I, LEOPOLD J. COURTEAU, a citizen of the United States, residing at Brockton, in the county of Plymouth and State of Massachusetts, have invented new and useful Improvements in Arch and Ankle Supports, of which the following is a specification.

My invention relates to an improved arch and instep support designed for giving effectual and at the same time comfortable support to these parts of the foot, a consideration greatly desired in the case of many persons who are afflicted with weak insteps and arches.

It is the purpose of the invention also to provide such an efficient and comfortable support which may be separate and distinct from, and readily insertible and removable from, the boot or shoe, so that these devices may be manufactured and sold economically.

To the ends stated the invention consists in an arch and instep support constructed as hereinafter set forth and claimed, reference being made to the accompanying drawing illustrating the article.

That which is regarded as new will be set forth in the clauses of the claim appended to the description.

In the accompanying drawings illustrating my invention—Figure 1 is a perspective view thereof; Fig. 2 a bottom plan view; Fig. 3 a longitudinal central section; Fig. 4 a transverse section; Fig. 5 a plan view of the blank of the body of the article; Fig. 6 a similar view of the blank of the reinforce; and Fig. 7 a perspective view of one of the yielding elements embodied in the structure.

In the said drawing the reference numeral 1 designates the body portion of the support which, as shown, may be conveniently constructed or shaped up from the blank illustrated in Fig. 5, having an extension 2 which constitutes a heel seat, and side wings 3, 4 of appropriate shape to be bent up in the form illustrated in Fig. 1, to conform to the shape of the inner and outer instep of the foot and accurately fit thereagainst and afford support thereto. The blank, as shown, may be and preferably does terminate a slight distance in advance of the forward extremities of said wings; that is to say, just slightly beneath the ball of the foot. Intermediate the front edge of the article and the heel seat 2 thereof the blank is arched longitudinally, as at 5 in Fig. 1, the desired degree to fit against and afford support for the arch of the foot. The body portion of the article may be constructed of leather or of suitably stout and preferably shellacked fabric, or other suitable material. Since the arched instep support comprises a number of spring strips 7 arranged in parallel relation, it may be seen that each strip will have independent movement, thus providing for any uneven treading of the wearer.

For the purpose of imparting increased strength and the desired rigidity to the structure as an entirety, and also for the purpose of incorporating in the structure a yielding element having for its office to yield slightly under the pressure of the arch in walking and yet adequately support it and prevent it from breaking down and to maintain normally the arched shape of the support so that it will always be in easy comfortable contact with the arch of the foot, a reinforce blank 6, conforming in size and shape to the body blank 1, is provided. This blank may be of any suitable material such as leather, stout fabric, or other suitable material, and is fitted, as shown in Fig. 1, beneath the body blank and is secured thereto by cement or other suitable adhesive. Interposed between the assembled body blank and reinforce blank is the yielding element referred to and which is shown as consisting of a plurality of arched springs 7, one of which is illustrated in perspective in Fig. 7 of the drawing and this yielding element is, when the parts are assembled as described, and secured together, securely incorporated into the structure at the arched portion without the use of rivets or other devices the use of which would be uncomfortable to the wearer, and be the cause of irritation and annoyance. This solid incorporation of the yielding element in the structure, furthermore, such element being in positive engagement throughout the length of the arch with the arched portion of the body blank, affords support throughout the extent of the arch.

For the requisite stiffness when the body and reinforce blanks are of comparatively thin material, it is preferable that the reinforce blank be of fabric and provided with a sufficient coating of shellac to afford rigidity to the completed shaped article illustrated in Fig. 1, and a requisite stiffness thereto.

The improved arch and instep support of my invention is simple of manufacture and economical. It may be made in standard

sizes to accord with the size and shape of standard shoes, or may be specially made to compensate for the infirmity of any given patient. The articles may be slipped into a pair of shoes with facility and when the user places the shoes upon his feet his heel will rest upon the heel seat portion of the article and thus prevent it from slipping or disarrangement within the shoe.

Having thus fully described my invention, what I claim as new and desire to secure by Letters Patent, is:

An arch and instep support adapted to be inserted in a boot or shoe, comprising an arched body portion having lateral wings and a heel seat, a reinforce portion conforming to the body portion and secured thereto, and a yielding element consisting of a plurality of independent arched springs interposed and spaced between and incorporated into the article by said body and reinforce portions at the arched portion of the article, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

LEOPOLD J. COURTEAU.

Witnesses:
GEO. A. GOSS,
E. O. LYSETH.