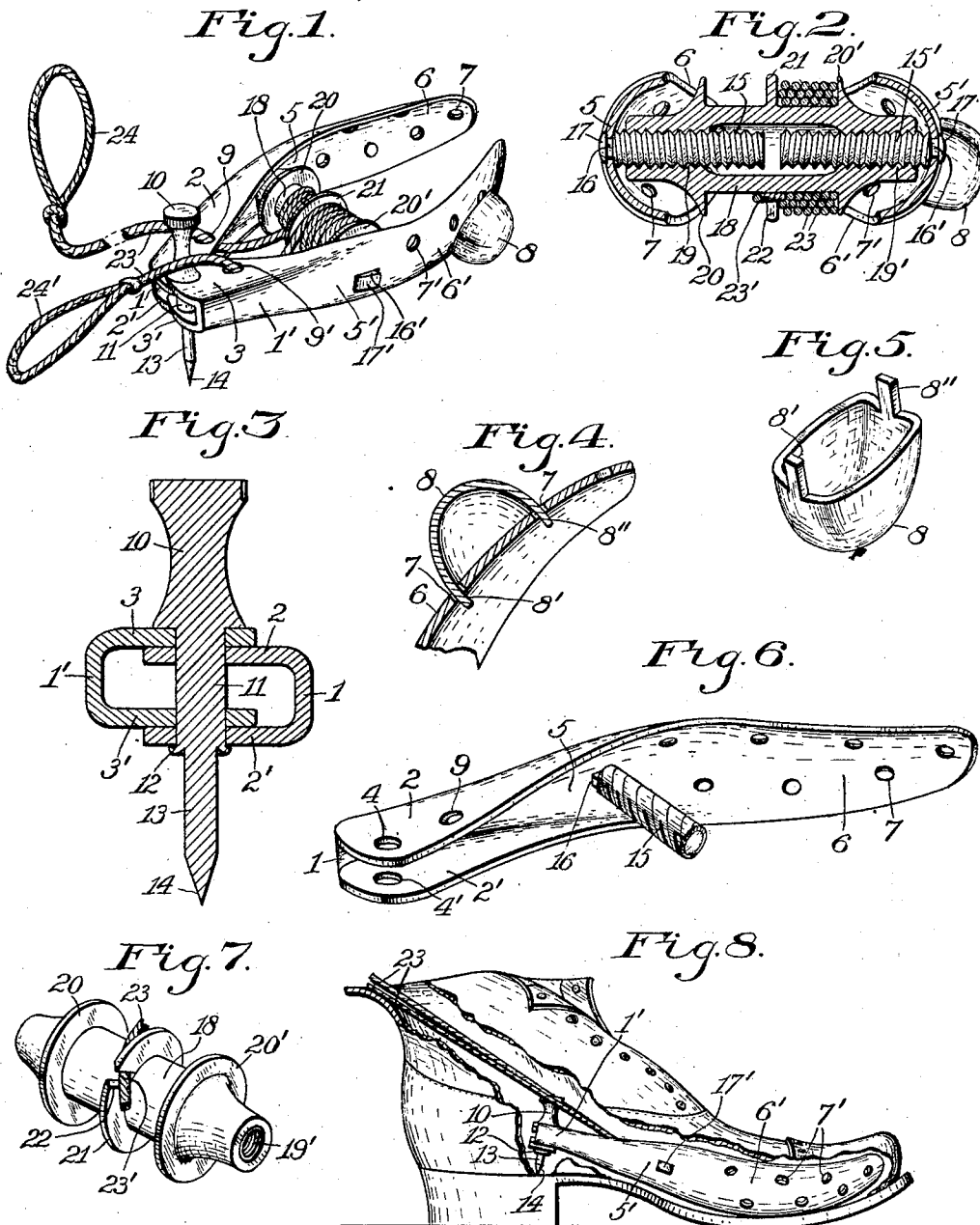


W. L. SMITH.
SHOE STRETCHER.
APPLICATION FILED MAY 13, 1911.

1,024,869.

Patented Apr. 30, 1912.



WITNESSES:

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SHOE-STRETCHER.

1.024,869.

Specification of Letters Patent.

Patented Apr. 30, 1911

Application filed May 13, 1911. Serial No. 627,009.

To all whom it may concern:

Be it known that I, WILLIAM L. SMITH, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented a new and useful Shoe-Stretcher, of which the following is a specification, reference being had to the accompanying drawings and to the letters and figures of reference marked thereon.

This invention relates to an appliance which is adapted to be used in stores where shoes or similar foot-wear may be had, for stretching shoes or similar articles so as to be comfortable to the wearer in case the shoe or the like does not exactly fit the foot, the invention having reference more particularly to a shoe stretcher that is adapted to be used by individuals who may desire to stretch their own shoes at their pleasure.

The object of the invention is to provide a relatively simple and inexpensive shoe stretcher that will be adapted to be operated by any one, however inexperienced, and be convenient, durable and economical in use.

With the above mentioned and minor objects in view the invention comprises an appliance adapted to be inserted into a shoe or the like and be held by one hand and operated by the other hand of the user, for stretching the forward portion of a shoe or the like; and the invention consists further in the novel parts and combinations and arrangements of parts, as hereinafter particularly described and claimed.

Referring to the drawings, Figure 1 is a perspective view of the improved shoe stretcher as preferably constructed; Fig. 2, a transverse sectional view thereof through the expanding apparatus; Fig. 3, a transverse sectional view through the pivotal or hinging connections of the two main members of the appliance; Fig. 4, a fragmentary sectional view of the parts of the appliance in detail; Fig. 5, an inverted perspective view of one of the adjustable parts of the appliance; Fig. 6, a perspective view of one of the main members; Fig. 7, a perspective view of the winding or expanding spool which operatively connects the main members together for moving them relatively each to the other; and Fig. 8, a side view of a shoe partially broken away and show-

ing the shoe stretcher in operative position therein.

Similar reference characters in the different figures of the drawings indicate like parts or features of construction herein referred to and described.

A practical embodiment of the invention comprises two counterpart main members adapted to fit against the inner side of a shoe upper portion, the members having hinging portions at one end thereof and preferably are composed of sheet metal bent to required contours, so as to be relatively light in weight and strong. The hinging portions comprise opposing backs 1 and 1', two flanges 2 and 2' extending parallel one with the other from the back 1, and two flanges 3 and 3' extending parallel one with the other from the back 1'. The flanges have pivot holes 4 and 4' therein respectively to receive a pivot or hinge pin. The hinging portions constitute shanks for main portions 5 and 5' of the members which extend from the backs 1 and 1' and the flanges thereon and are substantially concavo-convex in cross-section, there being end portions 6 and 6' that are approximately spoon shaped extending from the main or body portions 5 and 5', the end portions being adapted to directly accomplish the stretching operation and are provided with series of apertures 7 and 7' respectively for holding a rounded boss 8 provided with projections 8' and 8'' adapted to be inserted in any two adjacent apertures, for retaining the boss in position temporarily while the appliance is being inserted in the shoe. The boss may be shifted to either one of the end portions 6 or 6' as occasion may require for stretching a particular portion of the shoe upper. The end portions are preferably made substantially spoon shaped so as to be strong and yet not be heavy. The flanges 2 and 3 have oblique angle guide ways 9 and 9' therein respectively. The flanges of the two members are placed together and a suitable handle 10 which is provided is seated upon the uppermost one of the flanges and has a pivot or hinge pin 11 thereon extending through the flanges, the end of the pivot being upset to form a flange 12 against the undermost one of the flanges of the two members whereby to secure the members to-

gether hingedly. The pivot has a spike 13 projecting from its end and it has a sharp point 14 adapted to be pressed into the sole of a shoe for holding the appliance in the desired position.

The main members are provided with two axial screw threaded rods 15 and 15' respectively, one being right-hand and the other left-hand pitch, the rods having necks 16 and 16' inserted in suitable apertures in the main portions 5 and 5' respectively, and heads 17 and 17' on the necks to secure them in place, the necks however being slightly loose in the main members. A spool 18 is provided in opposite end portions thereof with oppositely pitched screw threads 19 and 19' receiving the screws or rods, the end portions of the spool having flanges 20 and 20' thereon, the middle portion of the spool having a guide collar 21 thereon in which is an opening or notch 22 through which the middle portion 23' of a cord 23 extends so that the cord may be wound on either end portion of the spool. The cord extends through the guide ways 9 and 9' and has loops 24 and 24' constituting hand-holds on opposite ends thereof.

It should be understood that obvious changes may be made in the details of construction, it being clear that the main members may be operated and controlled by the use of one screw connected to one of the members with the spool engaging the screw and rotatably connected with the other one of the main members.

In practical use one end of the cord is drawn out so as to rotate the spool in the proper direction to bring the free end portions of the main members sufficiently close together to permit the appliance to be inserted into the shoe to be treated. The appliance is placed upon the sole of the shoe in the desired position and the operator with one hand takes hold of the handle 10 and presses the point 14 of the spike into the sole and then pulls on the opposite end of the cord to expand or force the free end portions of the appliance apart so as to stretch the shoe. The operation having been performed the other end of the cord is again drawn out so as to collapse and release the implement from the shoe, after which it may be readily withdrawn therefrom.

Having thus described the invention what is claimed as new, is—

1. A shoe stretcher including two counterpart members hingedly connected together at one end thereof, an expanding-spool operatively connected with the two members, and a cord connected with the expanding-spool.

2. A shoe stretcher including two counterpart members comprising each a shank and an approximately spoon-shaped main portion, a pivot-pin connecting the shanks of

the two members together and having a handle on one end and a spike on the opposite end thereof, and an expanding-spool arranged between and operatively connected with the two members.

3. A shoe stretcher including two counterpart members hingedly connected together at one end thereof, the opposite end portions of the members being approximately spoon-shaped and having each a plurality of apertures therein, a boss having projections thereon removably inserted in two of the apertures, an expanding-spool arranged between and operatively connected with the two members, and a cord connected with the expanding-spool.

4. A shoe stretcher including two counterpart members hingedly connected together at one end thereof and having each a guideway therein, an expanding-spool operatively connected with the two members, and a cord connected to the expanding-spool and extending movably through the guideways.

5. A shoe stretcher including two counterpart members hingedly connected together and provided each with an axial rod, one of the rods being screw-threaded, and an expanding-spool rotative on the rods between the members, the expanding-spool having screw-threads therein engaging the screw-threads on the rod.

6. A shoe stretcher including two counterpart members hingedly connected together at one end thereof, two screws connected to the two members respectively, one screw being right-handed and the other left-handed pitch, a winding-spool having right-hand and left-hand pitch screw-threads therein engaging the two screws respectively, and a cord connected to the spool.

7. A shoe stretcher including two counterpart members having each a guideway therein and provided with a screw, a pivot-pin connecting the two members together and provided with a projecting spike on the end thereof, a spool having screw-threads therein connected with the screws, and a cord connected with the spool and extending through the guideways.

8. A shoe stretcher comprising two counterpart members having each a plurality of pairs of apertures therein, a pivot connecting the two members together and having a handle on one end and a sharp spike on the opposite end thereof, a boss having projections thereon removably inserted in a pair of the apertures, two oppositely pitched screws connected to the two members respectively, a spool rotatable on the screws and having oppositely pitched screw-threads therein engaging the two screws respectively, and a cord wound about the spool and connected thereto.

9. A shoe stretcher comprising two coun-

terpart members having each a guideway therein, a pivot connecting the two members together and having a sharp spike on one end thereof, two oppositely pitched
5 screws connected to the two members respectively, a spool rotatable on the screws and having oppositely pitched screw-threads therein engaging the two screws respectively, the spool having a guide collar there-
10 on in which is an opening, and a cord

wound about the spool and extending through the opening in the collar and also through the guideways, the cord having two hand-holes on opposite ends thereof.

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

WILLIAM L. SMITH.

Witnesses:

E. T. SILVIUS,

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