

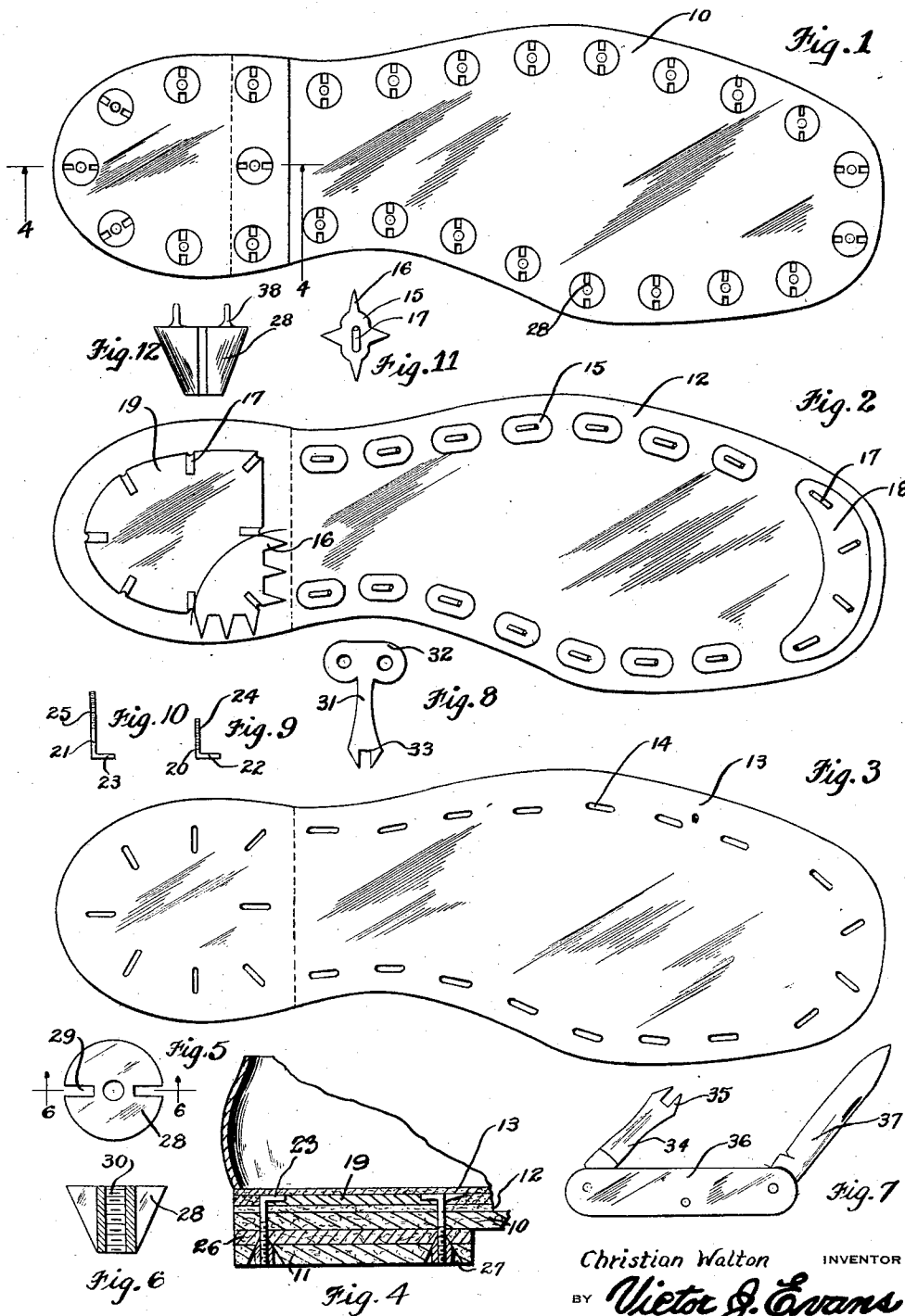
Dec. 23, 1930.

C. WALTON

1,786,374

BOOT AND SHOE CONSTRUCTION

Filed Nov. 23, 1928



Christian Walton INVENTOR
BY Victor J. Evans ATTORNEY

UNITED STATES PATENT OFFICE

CHRISTIAN WALTON, OF CHICAGO, ILLINOIS

BOOT AND SHOE CONSTRUCTION

Application filed November 23, 1928. Serial No. 321,495.

This invention relates to certain novel improvements in boot and shoe constructions and has for its principal object the provision of an improved construction of this character which will be effective in use and economical in manufacture.

The salient object of my invention is to provide an improved means for attaching the sole and heel in position in boot and shoe constructions.

Another object of the invention, ancillary to the foregoing, is to provide a construction of the above named character which will be arranged such that the sole and heel may be expeditiously removed when so desired.

Other objects will appear hereinafter.

The invention consists in the novel combination and arrangement of parts to be hereinafter described and claimed.

The invention will be best understood by reference to the accompanying drawing, showing the preferred form of construction and in which:

Fig. 1 is a bottom plan view of a preferred form of construction for my device;

Fig. 2 is a view substantially similar to Fig. 1 of the top face of the intermediate sole;

Fig. 3 is a view substantially similar to Fig. 2 the intermediate sole having been removed;

Fig. 4 is a sectional view taken substantially on the line 4—4 on Fig. 1;

Fig. 5 is a plan view of a securing element employed in the device;

Fig. 6 is a sectional view taken substantially on the line 6—6 on Fig. 5;

Fig. 7 is an elevational view of one form of tool employed in assembling the device;

Fig. 8 is another form of tool that may be employed in assembling the device;

Fig. 9 is an elevational detail view depicting the securing element employed for securing the sole in position;

Fig. 10 is a view similar to Fig. 9 showing the securing element employed for securing the heel in position;

Fig. 11 is a detail view depicting an anchoring element employed in the device; and

Fig. 12 is an elevational detail view of a

modified form of construction for the device depicted best in Figs. 5 and 6.

In the accompanying drawing wherein I have illustrated the preferred form of construction for my device 10 indicates the outer sole of my improved construction and 11 indicates the outer ply of the heel construction and this sole and outer ply are preferably formed from a good grade of material as is well understood in the art, it being understood that my invention is adaptable for use in connection with any type of material; as for example, leather, rubber, or so-called composition material.

In the drawing 12 indicates the usual intermediate sole employed in boot and shoe construction and 13 indicates the usual insole. The foregoing portions are ordinary in shoe construction and the formation thereof and the materials from which they might best be made is well understood in the art.

In the insole 13 I provide adjacent the edges thereof in spaced apart relation a plurality of openings 14 which are preferably arranged in the disposition best depicted in Fig. 3 although it is to be understood that analogous arrangements might be made without departing from the purview of my invention. On the intermediate sole 12 I secure a plurality of so called anchoring elements 15 which, as clearly depicted in Fig. 11, have pointed projections 16 extending therefrom and when the device is assembled these projections 16 are preferably arranged at right angles to the main body of the members 15 and are inserted into the intermediate sole 12 on the side thereof intended to be directed toward the insole 13. At substantially the midpoint of the main body portion of the anchoring elements 15 is a dished out portion 17 and when the intermediate sole 12 is disposed in abutment with the insole 13 these dished out portions are intended to be disposed in the openings 14 it, therefore, being apparent that the members 15 are arranged on the intermediate sole 12 in the same spaced apart relation as exists between the openings 14 in the insole 13. At the toe portion of the shoe I provide a plate member 18 which is arranged so as to be of a config-

uration substantially similar to the configuration of said toe portion and the dished out portions 17 are formed in this plate member 18. The plate member 18 is held in position by projecting elements 16 which are also driven into the intermediate sole 12. At the heel portion of the shoe I provide a plate 19 in which the dished out portions 17 are provided and the projecting elements 16 are also provided on this plate 19 as clearly illustrated in Fig. 2. When the insole 13 and intermediate sole 12 are arranged such that the projections created by the dished out portions 17 are disposed in the openings 14 these two soles are stitched together in the manner well understood in the art.

Prior to the time the insole and intermediate sole have been secured in position on the upper and prior to the time they are secured together I arrange the fastening elements 20 and 21 in position. The fastening elements 20 are arranged such that the head portions 22 thereof are disposed in the dished out portions 17 on the anchoring elements 15 and the plate 18 and such that the head portions 23 on the anchoring elements 21 are disposed in the dished out portions 17 in the plate 19 and the shank portions 24 and 25 of the elements 20 and 21 are extended through openings in the intermediate sole 12 and through openings in the outer sole 10 and the outer ply 11, it being understood that the shank portions 25 also extend through the intermediate plies 26 in the heel construction.

In the outer sole 10 and the outer ply 11 in alignment with the openings through which the shank portions 24 and 25 extend I provide conical openings such as those indicated at 27 in Fig. 4 it being apparent that the wider portion of these conical openings is outwardly disposed. Securing elements such as 28 are provided which have conical peripheries. Oppositely disposed slots 29 are formed in the securing elements 28 and axially arranged tapped openings 30 are also provided in these elements. The outer ends of the shank portions 24 and 25 are threaded and these threaded portions are disposed in the conical recesses 27. Therefore, the securing elements 28 are arranged such that the threaded end portions of the shank portions may be extended into the openings 30 in these elements. In order to facilitate the positioning of the securing elements 28 I provide a tool such as 31 (Fig. 8) which includes a handle portion 32 and a bifurcated end portion 33. The bifurcated end portion is arranged such that the prongs thereof will be disposed in the slots 29 and, therefore, the securing elements 28 may be expeditiously screwed into position so as to securely fasten the outer sole 10 and the outer ply 11 in position. In Fig. 7 I depict a modified form of construction for the tool and herein I show a

tool 34 having a bifurcated end portion 35 substantially similar to the bifurcated end portion 33 and this tool 34 is mounted in the body portion 36 of a so called pocket-knife construction which includes a blade 37. It is apparent that the sole 10 and the outer ply 11 may be expeditiously removed and replaced by merely unscrewing the securing elements 28 through the use of a tool such as that described.

In Fig. 12 I have depicted a modified form of construction for the securing elements which will be particularly adaptable for use on so called sport shoes and in this instance I have provided on the outer surface of the securing elements 28 projecting portions or cleats 38.

It is to be understood that while I have described one arrangement for the anchoring elements 24 and 25 and the securing elements 28 it is to be understood that these parts might be interconnected in different manners without departing from the purview of my invention.

While I have illustrated and described the preferred form of construction for carrying my invention into effect, this is capable of variation and modification, without departing from the spirit of the invention. I, therefore, do not wish to be limited to the precise details of construction set forth, but desire to avail myself of such variations and modifications as come within the scope of the appended claims.

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

1. In a boot and shoe construction, an insole, an intermediate sole, anchoring elements on said intermediate sole, an outer sole having recesses therein, means for interconnecting said soles comprising fastening elements including head portions mounted in the anchoring elements on said intermediate sole, and securing elements disposed in the recesses in said outer sole and connected to said fastening elements.

2. In a boot and shoe construction, an insole provided with openings, an intermediate sole, anchoring elements on said intermediate sole having dished out portions therein projecting into the openings in the insole, an outer sole having recesses therein, means for interconnecting said soles comprising fastening elements including shank portions and head portions whereby said head portions may be disposed in said dished out portions and said shank portions may be extended into said recesses in said outer sole, and anchoring elements mounted in said recesses in said outer sole and engaging said fastening elements.

3. In a boot and shoe construction, an insole provided with openings, an intermediate sole, anchoring elements having dished

out portions therein projecting into the openings in the insole and means for attaching said anchoring elements to said intermediate sole, an outer sole having substantially conical openings therein with the wider portions thereof outwardly disposed, means for interconnecting said soles including fastening elements comprising shank portions and head portions extended substantially at right angles to said shank portions, said shank portions having the outer ends thereof threaded, said head portions being disposed in said dished out portions and said shank portions being extended so as to dispose the threaded end portions thereof in said recesses in said outer sole, and substantially conical anchoring elements having screw threaded openings therein whereby said substantially conical anchoring elements may be disposed in said substantially conical openings in said sole with the screw threads on said anchoring elements in engagement with the screw threads on said shank portions.

In testimony whereof I affix my signature.

CHRISTIAN WALTON.