No. 706,551. Patented Aug. 12, 1902.

W. GORDON & G. E. WARREN.

BOOT OR SHOE.

(Application filed Dec. 17, 1900.)

(No Model.)

Fig. 1.

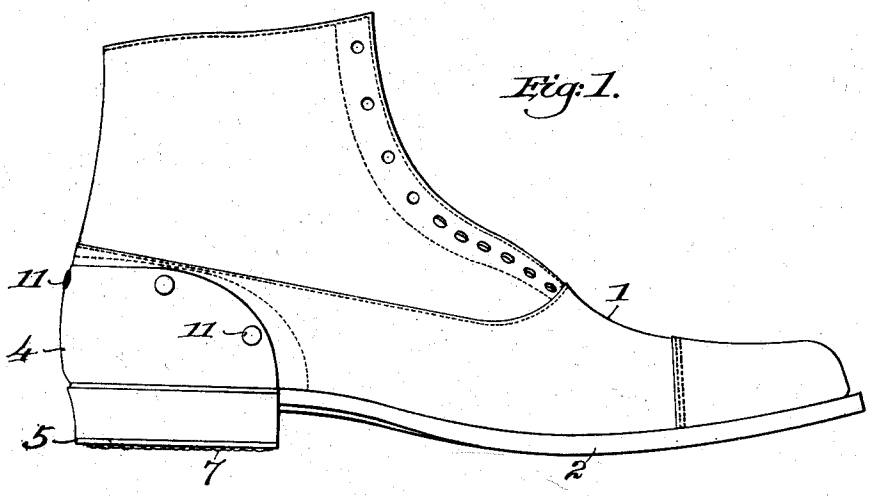


Fig. 2.

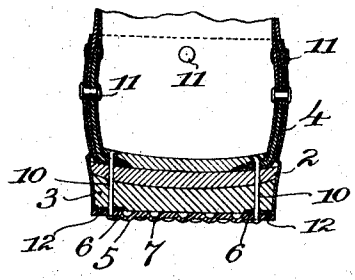


Fig. 3.

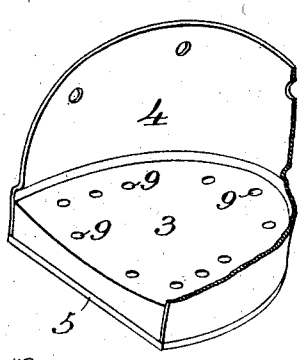
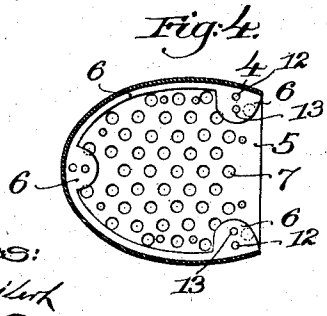


Fig. 4.



Witnesses:
John P. C. Steinbeck
Horace Van Everen

Inventors:
William Gordon and
George E. Warren
by their Attorney
Benjamin Phelps

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C

UNITED STATES PATENT OFFICE.

WILLIAM GORDON AND GEORGE E. WARREN, OF BOSTON, MASSACHUSETTS, ASSIGNORS TO METALLIC HEEL AND COUNTER COMPANY, OF KITTERY, MAINE, A CORPORATION OF MAINE.

BOOT OR SHOE.

SPECIFICATION forming part of Letters Patent No. 706,551, dated August 12, 1902.

Application filed December 17, 1900. Serial No. 40,151. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM GORDON and GEORGE E. WARREN, citizens of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Boots or Shoes; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The present invention relates to an improvement in boots and shoes.

The general object of the invention is to improve the construction of boots and shoes, and particularly that class of boots and shoes which is used by those engaged in outdoor employments and mining.

More specifically, the object of the present invention is to produce a strong, durable, and cheap substitute for the ordinary leather heel of a boot or shoe and at the same time strengthen and protect the counter portion of the boot or shoe.

With this object in view the present invention consists of a metal heel and counter-protector, a tread-plate, and a heel-block, the tread-plate and heel-block being provided with a series of registering holes, through which fastening devices may be driven into the sole of a shoe after the heel and counter-protector, tread-plate, and heel-block have been placed in proper position.

In the accompanying drawings, illustrating the preferred form of our invention, Figure 1 is a side elevation of a shoe provided with our improvement. Fig. 2 is a transverse cross-section of the heel. Fig. 3 is a perspective view of the heel and counter-protector with the heel-block in position therein, and Fig. 4 is a plan view of the heel and counter-protector and tread-plate.

In the drawings, 1 designates the shoe-upper provided with the usual sole 2. The heel of the shoe consists of a heel-block 3, a heel and counter-protector 4, and a tread-plate 5. The heel and counter-protector is made of thin elastic metal, preferably thin sheet-steel, shaped to embrace and support the counter elastically, being thus capable of yielding to the pressure of the foot or accidental blows without suffering permanent distortion. The heel and counter-protector 4 is provided on its lower edge with an inwardly-turned flange 6, to which the tread-plate 5 is preferably secured by means of rivets 12 or other fastening devices. The tread-plate is made of relatively thick metal, being also preferably made of sheet-steel, so as to be capable of resisting wear and at the same time securely holding the heel-block 3 on the shoe by the means hereinafter described. The tread-plate may cover the whole or a part of the tread-surface of the heel as desired, and it may be provided with projections 7 to roughen the surface of the tread-plate and afford a surer footing. The heel-block may be made of any suitable material; but we prefer to make it of wood, as the same is cheap and durable and easily worked and brought to the desired shape. It is concaved on its upper side to receive the heel part of the sole 2, and it is provided with a series of holes 9 to receive the fastening devices by means of which it is secured to the heel part of the sole of the shoe. The tread-plate 5 is provided with a series of holes exactly corresponding in position with the holes in the heel-block, so that the nails 10 or other fastening devices may be driven through said holes in both the block and the tread-plate and penetrate the heel part of the sole and be clenched on the inside of the shoe. We prefer also to provide the flange 6 with a series of holes corresponding to some or all of the holes in the tread-plate and heel-block, so that the fastening devices 10, which secure the tread-plate and heel-block to the sole, may also serve as means for holding the heel and counter-protector to the shoe. To the above end the flange 6 is shown widened at the rear and at both sides near the front of the heel, and the widened parts of the flange are provided with the holes 13, which register with three of the holes in the heel-block and tread-plate. It is to be noted that the rivets 12 may be dispensed with in some forms of our invention, as the fastening devices 10 may be exclusively relied upon for

the purpose of securing the tread-plate, heel and counter-protector, and heel-block to the sole of the shoe; but we prefer to use the rivets 12, as they constitute an additional means of uniting the parts firmly together.

We prefer to secure the upper edge of the heel and counter-protecter to the shoe by means of rivets 11, as shown, for the purpose of more securely binding the heel to the shoe; but it will be seen that our invention in its broader aspect does not necessarily require this additional fastening means for fastening the heel and counter-protector to the counter.

It is to be noted that our invention is capable of being used with any form of shoe and either in connection with old or new shoes. Thus if the heel of a shoe becomes worn it is possible to pull off the old heel and to secure to it the heel and counter-protector, the tread-plate, and heel-block shown herein by simply driving nails through the tread-plate and heel-block and clenching them on the inside of the shoe.

In utilizing our invention in the repair of old shoes or in the manufacture of new shoes any of the usual heel-nailing machines may be employed to drive the fastening devices through the holes in the tread-plate and heel-block into the sole of the shoe. This feature we consider of value, as thereby the parts can be applied to a shoe as readily as the ordinary leather heels are applied.

By the use of our invention the shoe and heel are rigidly and securely attached together by means of the fastening devices which pass up through the tread-plate of the heel, the heel-block, and the sole of the shoe, thus making a strong and durable shoe which will endure much wear and rough use.

Having thus described our invention, we claim as new and desire to secure by Letters Patent of the United States—

An article of manufacture consisting of a metallic heel and counter-protector, a tread-plate and a heel-block, said tread-plate and heel-block being provided with a series of registering-holes through which fastening devices may be driven into the sole of a boot or shoe after the heel and counter-protector, tread-plate and heel-block are in position thereon, substantially as described.

In testimony whereof we affix our signatures in presence of two witnesses.

WILLIAM GORDON.
GEORGE E. WARREN.

Witnesses:
HORACE VAN EVEREN,
ALFRED H. HILDRETH.