

F. W. KREMER.

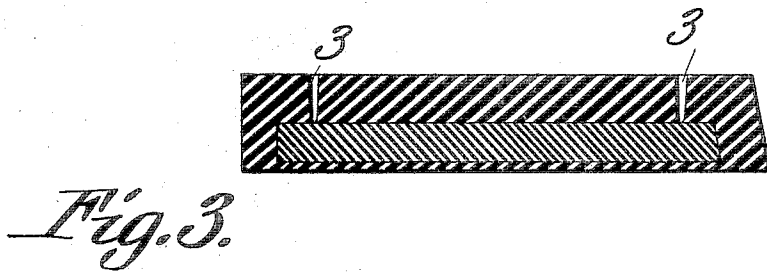
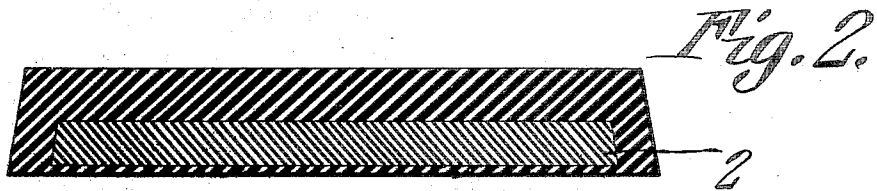
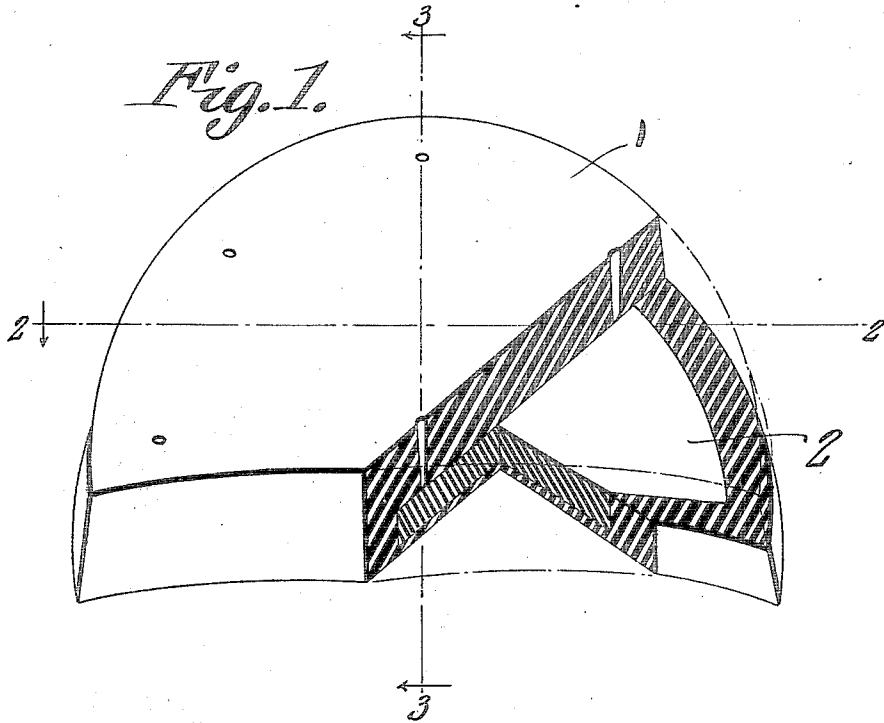
RUBBER HEEL.

APPLICATION FILED JAN. 25, 1910.

1,044,540.

Patented Nov. 19, 1912.

2 SHEETS—SHEET 1.



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RUBBER HEEL.

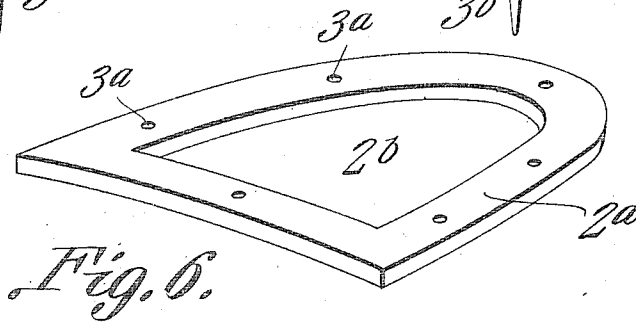
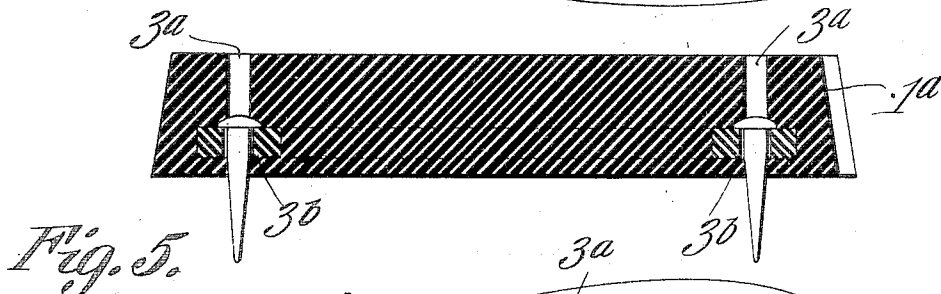
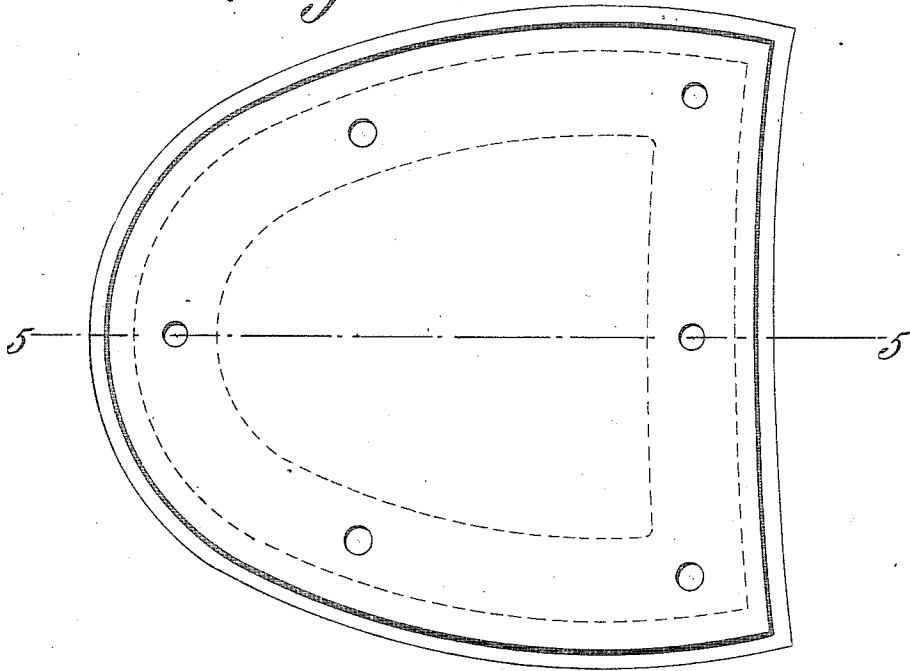
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2 SHEETS-SHEET 2.

Fig. 4.



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UNITED STATES PATENT OFFICE.

FRANKLIN WILLIAM KREMER, OF CARLSTADT, NEW JERSEY.

RUBBER HEEL.

1,044,540.

Specification of Letters Patent.

Patented Nov. 19, 1912.

Application filed January 25, 1910. Serial No. 539,990.

To all whom it may concern:

Be it known that I, FRANKLIN W. KREMER, a citizen of the United States, residing at Carlstadt, in the county of Bergen and State of New Jersey, have invented new and useful Rubber Heels, of which the following is a specification.

This invention relates to rubber heels.

In devices of this kind as usually constructed, a metal washer or the like is embedded within the body of the heel. It is found in practice however that this washer frequently cuts through the rubber covering and destroys the use of the rubber heel.

One of the objects of the present invention is to provide a form of rubber heel in which the metallic washer is dispensed with, without sacrificing the durability of the article.

Further objects of the invention are generally to improve and simplify the construction of rubber heels as well as to decrease the expense attending their manufacture and to render them more durable in use.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiments of invention herein disclosed can be made within the scope of the following claim without departing from the spirit of the invention or sacrificing any of its advantages.

In the accompanying drawings forming part of this specification, Figure 1 is a perspective view partly in irregular section of a heel constructed in accordance with the present invention. Fig. 2 is a transverse vertical section on the line 2—2 of Fig. 1. Fig. 3 is a vertical longitudinal section on the line 3—3 of Fig. 1. Fig. 4 is a plan view of a modified construction. Fig. 5 is a section of the line 5—5 of Fig. 4. Fig. 6 is a perspective view of the modified form of insert.

Like reference numerals indicate corresponding parts in the different figures of the drawings.

The heel of the present invention consists of a resilient rubber body portion with a hard rubber insert or core completely em-

bedded therein, the insert being nearer to the upper sides of the heel than to the lower sides thereof, said heel being likewise provided with nail holes which preferably extend through the outer or thicker portion of the resilient rubber body and terminate at the outer edge of the hard rubber insert.

Referring to the drawings, the reference numeral 1 indicates the body portion of the heel, said body portion being preferably formed of resilient rubber and having completely embedded therein an insert or reinforcement 2 which is formed preferably of hard rubber.

As shown particularly in Fig. 2 the coating of resilient rubber is very much thicker on the outside of the insert 2 than on the inside thereof. The nail holes 3 by which the heel is secured to the shoe extend through the thick outer portion of the resilient rubber body 1 and terminate at the outer edge of the insert 2.

It is to be understood that the hard rubber insert 2 is to be semi-flexible so as not to interfere with the action of the heel or present such unyielding resistance as would cause it to wear through in the same manner as a metallic washer. Moreover the resilient rubber portion and the hard rubber insert are vulcanized so as to form in effect a solid rubber heel.

It is found in practice that the heel of the present invention is strong, simple, durable and inexpensive in construction as well as thoroughly efficient and practical in use.

The modified construction of heel shown in Figs. 4, 5 and 6 is practically the same as that shown in the other figures of the drawing, the principal difference being that the central portion of the insert 2^a is cut away, as indicated at 2^b so as to allow the resilient rubber to flow through and thus form a solid cushion of resilient rubber for the heel proper. Moreover, in this case, the heel as a whole is rendered more homogeneous. The insert in either form of the invention may be made not only of hard rubber, but also of any suitable fiber or other composition having the necessary strength. In the modified construction the nail holes 3^b extend through the insert as well as the body portion of the heel. This may be the case in the other form of heel if desired.

What is claimed as new is:—

A heel comprising a nail-holding insert of hard rubber and a soft rubber body in which the insert is completely inclosed, the
5 insert and the body being vulcanized together, to prevent relative movement between the insert and the body.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

FRANKLIN WILLIAM KREMER.

Witnesses:

JOSEPH A. MILLER,
FRANK WORSNOPP.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."