

J. H. JASPER.
CALKED SOLE.

APPLICATION FILED FEB. 12, 1917.

1,246,929.

Patented Nov. 20, 1917.

Fig. 1.

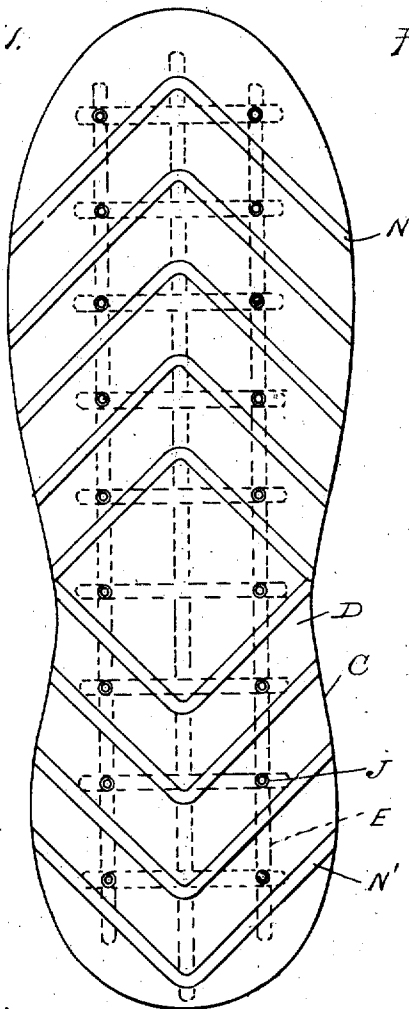


Fig. 2.

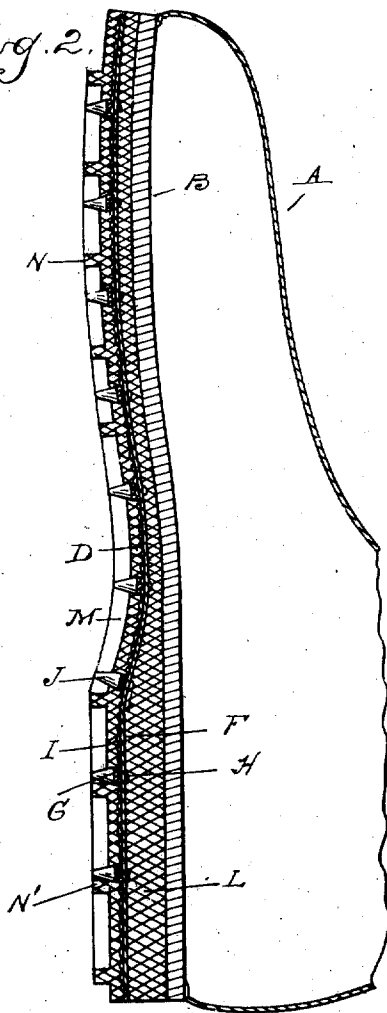
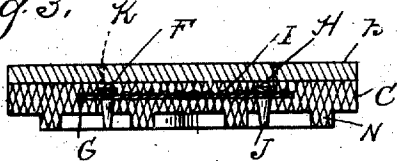


Fig. 3.



Inventor
Joseph H. Jasper

By Whittmore, Albert Whittmore

Attorneys

UNITED STATES PATENT OFFICE.

JOSEPH H. JASPER, OF DETROIT, MICHIGAN.

CALKED SOLE.

1,246,929.

Specification of Letters Patent.

Patented Nov. 20, 1917.

Application filed February 12, 1917. Serial No. 148,136.

To all whom it may concern:

Be it known that I, JOSEPH H. JASPER, a citizen of the United States of America, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Calked Soles, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to calked soles for shoes or the like and refers more particularly to a dual purposed steel calked rubber top sole for all-around lumbermen's use.

15 Among the objects of the invention are to provide a construction which can be used for resoling worn-out footwear and more particularly for attaching to the soles of boots, moccasins or lumbermen's cruising shoes;
20 to provide a construction in which the steel calks are combined with rubber corrugations or projections which will prevent slipping in either direction; to provide a construction in which the calks will not be rendered inoperative by being frozen up with
25 snow and ice and thus rendered slippery; to provide a construction in which the steel reinforcement not only makes the sole stiffer but provides a certain degree of resiliency so
30 as to make the soles easier to walk on; to provide a construction in which the calks are mounted at the junctions of the framework which is vulcanized into the rubber so that the calks will have a certain give and
35 will not injure the feet as where steel calks are mounted directly upon the leather soles; and in general to provide a new and improved sole of the character above referred to which can be applied either when the sole
40 is manufactured or as a replacement or attachment to shoes, moccasins or other footwear.

The invention also resides in such features of construction and arrangements and combinations of parts as will more fully hereinafter appear.

In the drawings:

Figure 1 is a bottom plan view of a calked sole embodying my invention;

50 Fig. 2 is a longitudinal section showing the sole attached to a moccasin;

Fig. 3 is a cross section taken at right angles to Fig. 2.

Describing in detail the construction
55 shown in the drawings, A designates the

shoe or moccasin having the sole B to which is secured the calked sole C embodying my invention. In detail the calked sole comprises a rubber body portion D into which is vulcanized a steel frame E formed of longitudinal bars F and transverse bars G riveted together at H. In order to more completely secure the steel frame in the rubber I preferably employ a wire screen I connected to the framework as shown in Fig. 3. 60

At the junction of the steel bars G and F the steel calks J are mounted and preferably secured to the framework by the rivets, screws or other securing members employed for fastening the framework together. Thus
65 when the steel framework is vulcanized into the rubber body portion D the calks are secured in place. This construction has a further advantage, in that the calks are held in relation to the rubber by the entire framework, thus giving a wide bearing surface and preventing the tearing out of the calks which would happen if they were individually vulcanized into the rubber. 70

The bars F are preferably also provided
75 with apertures K through which the calked sole C can be nailed or sewed to the sole B of the moccasin or other footwear to which it is attached. If the sole is attached to the moccasin or other member not provided with
80 a raised heel, the rubber of the calked sole is thickened at one end to provide a raised heel L, as shown in Fig. 2, in which case the framework is offset at M to take care of the offset in the heel portion. 85

In addition to the calks the lower or wearing surface of the calked sole has a plurality of ribs or rubber corrugations N which extend diagonally and meet at the center to form a square. Those ribs N' which are at
90 the heel portion extend diagonally in the opposite direction from those of the front part of the shoe, thus preventing the slipping of the shoe in either direction. From Figs. 2 and 3 it will be noticed that the calks J
95 project beyond the lower surface of the sole C a distance substantially equal to the depth of the ribs N and N'. This arrangement will prevent the calks from being frozen up with snow or ice and will give the lumbermen or other wearers of the shoe a safe
100 footing irrespective of the weather or whether he is walking on ice, frozen slippery timber or other slippery surfaces. Various changes in the details of construction, how- 110

ever, can be made within the scope of my invention.

What I claim as my invention is:

5 A calked sole for shoes or the like, comprising a resilient body portion, a metal framework vulcanized therein, calks carried by said framework and projecting be-

yond the plane of the main body portion, and ribs formed on the lower surface of the body portion, said calks projecting beyond 10 the lower surface of the body portion a distance substantially equal to the depth of the ribs.

JOSEPH H. JASPER.