

(No Model.)

E. P. HADLEY & T. JOYCE.

Shank Support and Protector for Boots and Shoes.

No. 234,030.

Patented Nov. 2, 1880.

Fig. 1

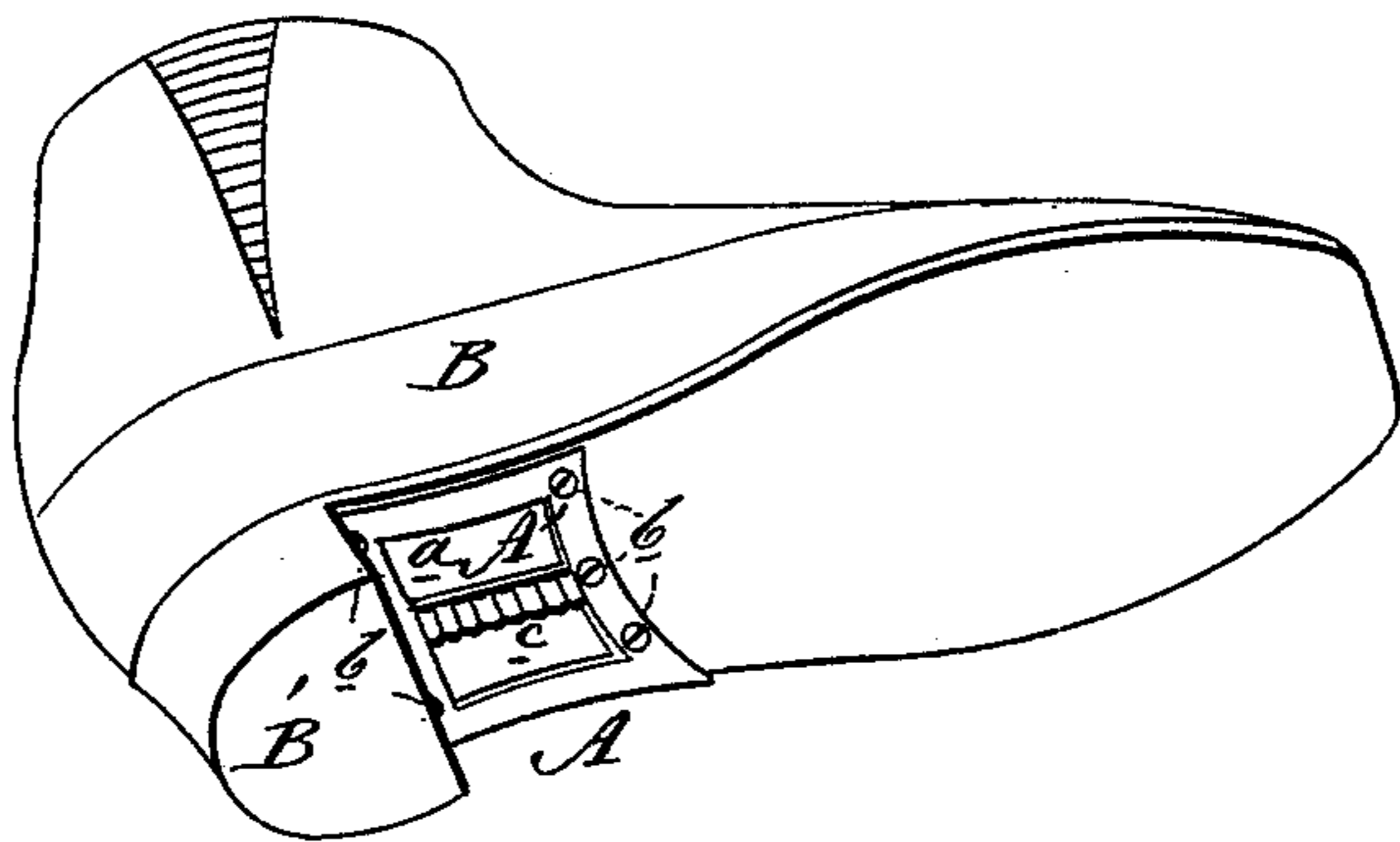


Fig. 2

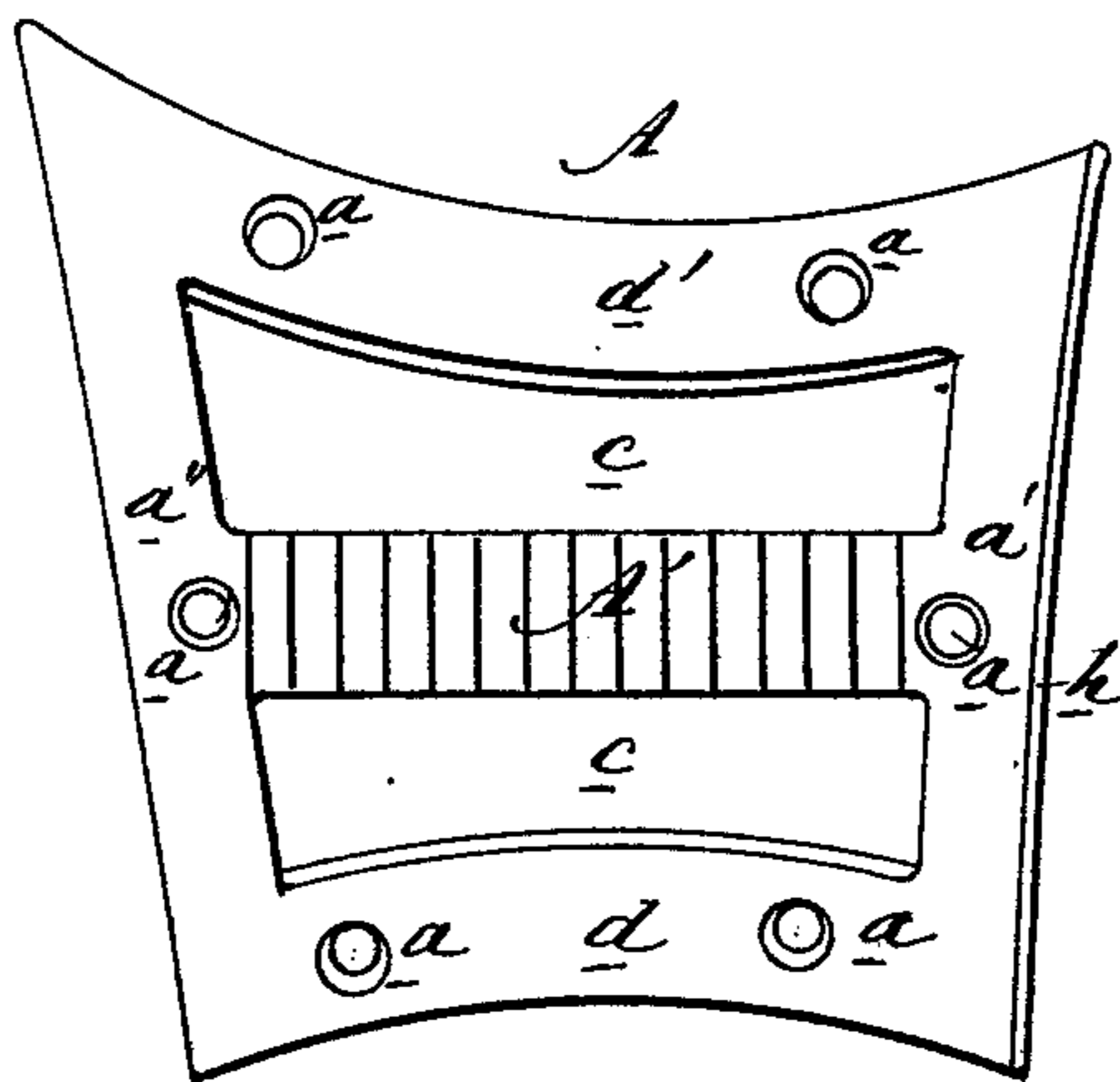
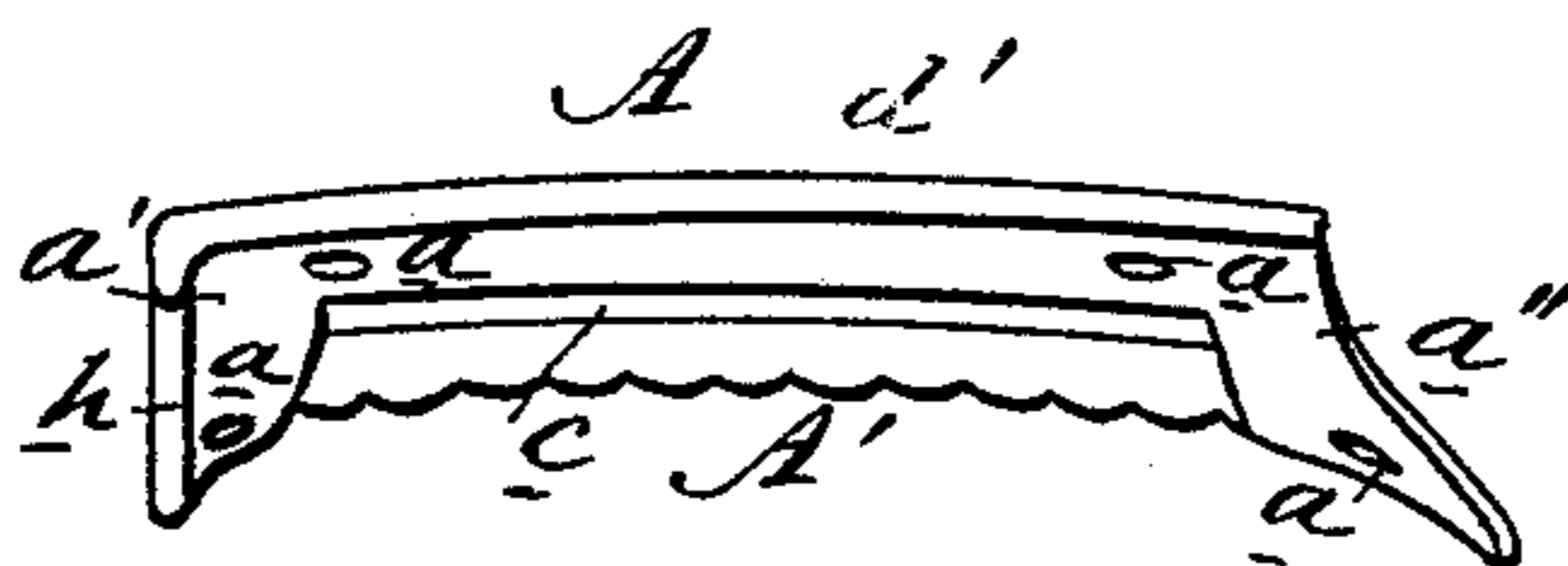


Fig. 3



WITNESSES:

C. Neveux
C. Sedgwick

INVENTOR:

E. P. Hadley
T. Joyce
BY *Mum Co*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

EDSON P. HADLEY, OF SHELBURNE FALLS, AND THOMAS JOYCE, OF
BUCKLAND; SAID JOYCE ASSIGNOR TO MANSON D. HAWES, OF
LEOMINSTER, MASSACHUSETTS.

SHANK SUPPORT AND PROTECTOR FOR BOOTS AND SHOES.

SPECIFICATION forming part of Letters Patent No. 234,030, dated November 2, 1880.

Application filed August 23, 1880. (No model.)

To all whom it may concern:

Be it known that we, EDSON P. HADLEY,
of Shelburne Falls, in the county of Franklin
and State of Massachusetts, and THOMAS
5 JOYCE, of Buckland, in said county, have in-
vented a new and useful and Improved Shank
Support and Protector for Boots and Shoes,
of which the following is a specification, refer-
ence being had to the accompanying drawings.

10 The object of this invention is to prevent the
boot or shoe from ripping at the shank, and
by protecting the shank to prevent it from
being cut or worn by shoveling, spading, or
any pedal labor, or from being burned when
15 the wearer rests his foot on the cope of the
grate or stove for warming; also, to prevent the
heel of the boot or shoe from being accident-
ally broken off, and to prevent a shovel or
spade from slipping on the boot or shoe in any
20 pedal labor.

In the drawings, Figure 1 is a perspective
view of the device in place on a boot. Fig. 2
is a plan of the outer face of the same. Fig.
3 is a side elevation of the same.

25 Similar letters of reference indicate corre-
sponding parts.

A represents the shank protector and sup-
port, consisting of a curved plate irregularly
shaped to conform with the shank of the shoe
30 B, and provided with screw-holes *a* along its
sides and ends, through which are introduced
the nails or screws *b* that secure it to the said
shoe B, and provided, also, with a corrugated
bar, *A'*, crossing the central opening, *c*, from
35 the rear bar, *a'*, to the front bar, *a''*, for the
purpose of strengthening the said device and
for a protection against slipping. On the edge
of the bar *a'* is a downward-projecting flange,
h, that engages closely in the angle formed by
40 the shank and heel of the shoe B, and thereby
strengthens and protects said heel B' against
blows from the front.

The side bars, *d d'*, of the protector A have
curved outlines to conform with the outlines
45 of the shank of the boot or shoe, the side bar,
d', having a longer curve than the bar *d*, and
being designed to fit along the inner curve of
the said boot or shoe shank.

The invention consists in the application of

a plate of metal or other rigid material to the 50
arch of the sole of a boot or shoe which comes
under the instep of the wearer, which plate
bears upon the sole with a surface or bearing
wide enough to support the leather of the sole
and prevent it from twisting or bending, and 55
provided with a central corrugated bar.

The sole is further prevented from twisting
and the sole and heel kept level in wear by
the cutting away of the tap-sole and the fit-
ting of one side of the plate to it, while the 60
other opposite side of the plate bears against
the heel. This plate may be of any shape, the
material above it being fitted in or cut away
to fit it; but the advantage of the curved form
shown fitting the exterior curves of the sole is 65
that it may be made or cast in that shape with-
out extra cost, and will then fit without change
of sole. This plate is affixed to the exterior
surface of the sole, because it can be made
suitable therefor and affixed to boots and 70
shoes after they are made, also because it pro-
tects the sole, enables the addition of corruga-
tions for the purpose described, and furnishes
a rigid basis through which screws or nails to
be headed or clinched may pass and fasten the 75
sole and upper firmly together and to the plate
by passing through them.

The plate may be cut away, as shown at *c*,
to save metal and secure lightness, making it
a frame, the bars *d d'* being sufficient for 80
strength, and, being on the outer edges of the
sole, afford a broad base to prevent torsion of
the sole. Obviously the function of the de-
vice to protect and sustain the sole and keep
it level in wearing would be accomplished 85
without these openings and with a simple
plate. So the bar *A'* may be omitted and the
corrugations be put on the side bars, *d d'*.

The essential part of the corrugations are
the faces presented to the shovel or spade in 90
use from the rear end of the boot or shoe to
prevent backward slip. Being forward the
heel, they stop the shovel on a more natural
place on the shoe or boot to have the foot ex-
ert its full force. One face would be sufficient, 95
though the taking hold of the shovel by the
boot or shoe is made surer and quicker by
many. A flange, *h*, is fitted to the heel to pro-

tect it. It may be extended to the face or wearing-surface of the heel to prevent it from wearing down or to carry a projection to prevent slipping on ice.

5 The twisting of the boot or shoe shank rips the side seams, draws the shank-pegs, breaks down the counter, and causes the heel to run over. This twisting is prevented by the support and protector A. By preserving the curve
10 of a boot-shank it maintains the level of sole and heel, so that the boot will wear out evenly, never running over heel or counter.

These supports and protectors are preferably made of malleable iron, and can be bent
15 to fit any boot or shoe snugly, and may be

firmly fastened by screws, screw-head or clinch nails, or any other suitable material that will fasten the upper to the shank, so that the boot or shoe is water-tight at that part.

What we claim as our invention, and for 20 which we pray Letters Patent, is—

The curved plate A, having holes *a*, bars *a''* *d d'*, rear bar, *a'*, with flange *h*, the opening *c*, and the corrugated bars A', stretching across the opening *c*, as and for the purpose specified. 25

EDSON P. HADLEY.

THOMAS JOYCE.

Witnesses:

C. H. KNOWLTON,

A. FARNSWORTH.