

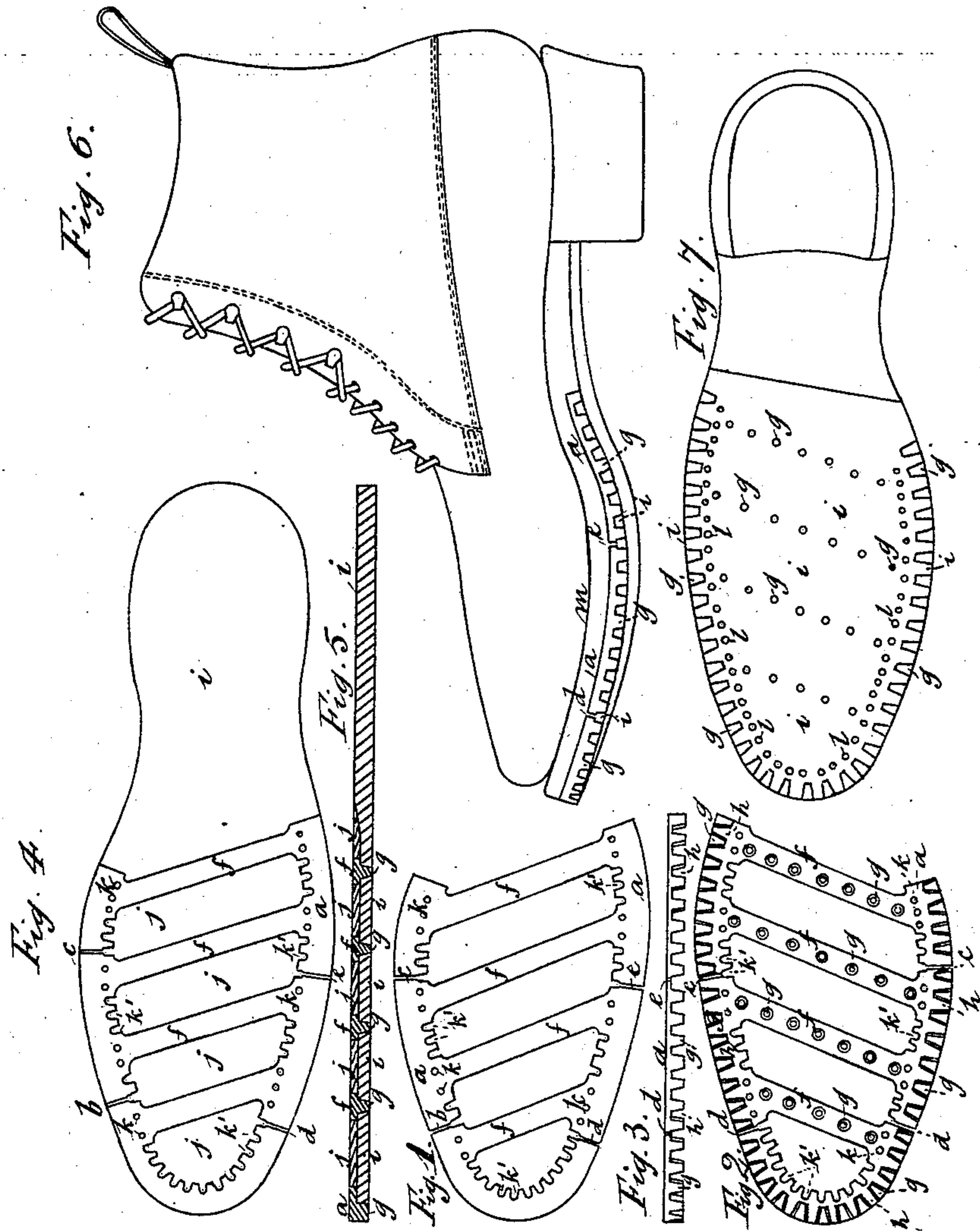
(No Model.)

J. BORRETT.

BOOT OR SHOE SOLE PROTECTING PLATE.

No. 299,455.

Patented May 27, 1884.



Witnesses

T. C. Bracht.  
W. C. Chappin

Inventor.

Joseph Borrett  
By John J. Halsted, for  
his Atty.



# UNITED STATES PATENT OFFICE.

JOSEPH BORRETT, OF LONDON, ENGLAND.

## BOOT OR SHOE SOLE PROTECTING PLATE.

SPECIFICATION forming part of Letters Patent No. 299,455, dated May 27, 1884.

Application filed November 17, 1883. (No model.) Patented in England April 30, 1883, No. 2,177; in Germany June 7, 1883, No. 25,820; in France June 8, 1883, No. 155,929; in Belgium November 8, 1883, No. 63,157; in Canada November 24, 1883, No. 18,169, and in Italy December 31, 1883, XVII, 16,123, XXXII, 163.

*To all whom it may concern:*

Be it known that I, JOSEPH BORRETT, a subject of the Queen of Great Britain, residing at London, England, have invented new and useful Improvements in Boot and Shoe Sole Protecting Plates, (for which I have obtained patents in Great Britain, No. 2,177, bearing date April 30, 1883, and in France, No. 155,929, dated June 8, 1883,) of which the following is a specification.

My improvements in boot and shoe sole protecting plates consist in providing a metal frame of the contour of the sole of the boot or shoe, and having projections, preferably at regular intervals, on its outer edge or under side, with spaces left between the projections to receive a piece of leather or other material of the shape of the sole, the said piece being fixed into the metal frame hereinbefore described by means of pressure, and the combined sole-plate thus produced is afterward secured, by nails, rivets, screws, or other fastenings, to the insole or upper of the boot or shoe; and in order to prevent the frame from being too rigid or firm, I cut or sever the frame in places, or reduce it so as to make it thin at given parts, in order that the sole may be capable of bending, to follow the motion of the foot of the wearer. Where protecting-plates are required for parts of the soles of ordinary boots and shoes already made, or otherwise, I construct the plates of different shapes and sizes, but upon the same principle as that above described for the complete sole-plates. These protectors are constructed of various shapes to suit various parts of the sole, and are fixed by nailing or otherwise where protection is required.

In order to enable my invention to be fully understood, I will proceed to describe the same by reference to the accompanying drawings, in which—

Figures 1 and 2 are plans of the upper and under sides, respectively, of a frame of metal for use in the production of a sole-protecting plate according to my invention. Fig. 3 is a side elevation of the same. Fig. 4 is a plan of upper side, and Fig. 5 a section showing

the said frame to which the leather or the like layer has been applied to constitute a sole-protecting plate for attachment to the upper of a boot or shoe. Fig. 6 is an elevation of a boot with one of the protecting-plates fixed thereto, and Fig. 7 is a plan of the under side of the sole of the same.

Similar letters in all the figures represent similar parts.

*a* is the hereinbefore-described metal frame of the contour of the sole. The said frame is cut or severed at *b*, *c*, *d*, and *e*, and is formed with connecting cross-bars *f*. It will be obvious that the number of the cuts and of the cross-bars may be varied.

*g g* are the projections on the outer edge or under side of the frame *a*, and also on the cross-bars *f*.

*h* are the spaces between the projections *g g*. The layer, *i*, of leather or other like material is cut to the shape of the frame *a* and of the sole, and pieces are cut at the edges corresponding with the projections *g g*, and the said layer is fixed into the metal frame *a* by means of pressure which may be exerted by a powerful press. Fig. 4 is a plan, and Fig. 5 a longitudinal section, of the combined sole-protecting plate, it being shown as having pieces, *j j*, of cork or other suitable water-proof material applied for filling up the space or spaces between the inner sole or welt and the upper surface of the leather or the like in the frame *a*. When thus put together, the outer surface of the leather and the metal of the projections *g* are flush at the under part; or the metal may project slightly, if desired.

*k k k'* are holes and slots, respectively, in the frame *a*, for receiving rivets or screws *l l*, to secure the combined sole-plate to the insole or upper *m*, as shown in Fig. 7.

Instead of the frame *a* being cut or severed, as at *b*, *c*, *d*, and *e*, as hereinbefore described, I sometimes reduce the frame sufficiently thin at these parts to prevent the frame from being too rigid or firm, and to allow a natural bend in the sole; but I prefer to cut or sever the frame for effecting this object.

It will be evident that the same method of



construction may be employed for various parts of the sole, instead of for a whole sole.

Having thus described the nature of the said invention and the manner of performing the same, I wish it to be understood that what I consider to be novel and original, and therefore claim, is—

1. The improved boot or shoe sole protector for protecting all or a part or parts of a sole, consisting of a metal frame having connecting cross-bars, and all in one piece, but cut through or reduced to a flexible thinness at suitable places, and having projecting pins, into the spaces between which a layer of leather or the like is forced by pressure, substantially as shown and described.

2. A sole-protecting plate having the cuts or reduced portions on the same, as set forth, the cross-bars, and the projections, the layer of leather forced into the spaces between the pins, and the spaces between the under sole or welt and the upper surface of the plate being filled in with cork or other suitable water-

proof material, all substantially as and for the purposes shown and described.

3. A metallic boot or shoe sole plate having the reduced portions or cuts, the cross-bars, and the projections on both, as shown and described, and also having at the inner edge of the frame holes suitable for stitching or pegging the plate to the boot or shoe.

4. A boot or shoe having an outer sole composed of a metal frame made with cuts or reduced portions, as set forth, and with the projections on such frame and cross-bars, and with the spaces between such projections filled in with leather or the like, and with the spaces above such outer sole and between the cross-bars filled in with cork or water-proof material, such sole being stitched or nailed to the upper or shoe, all as set forth.

JOSEPH BORRETT.

Witnesses:

G. F. REDFERN,  
B. BRADY.