(No Model.)

E. L. SPRAGUE.

BOOT OR SHOE.

No. 259,231. Patented June 6, 1882.

Fig. 1.

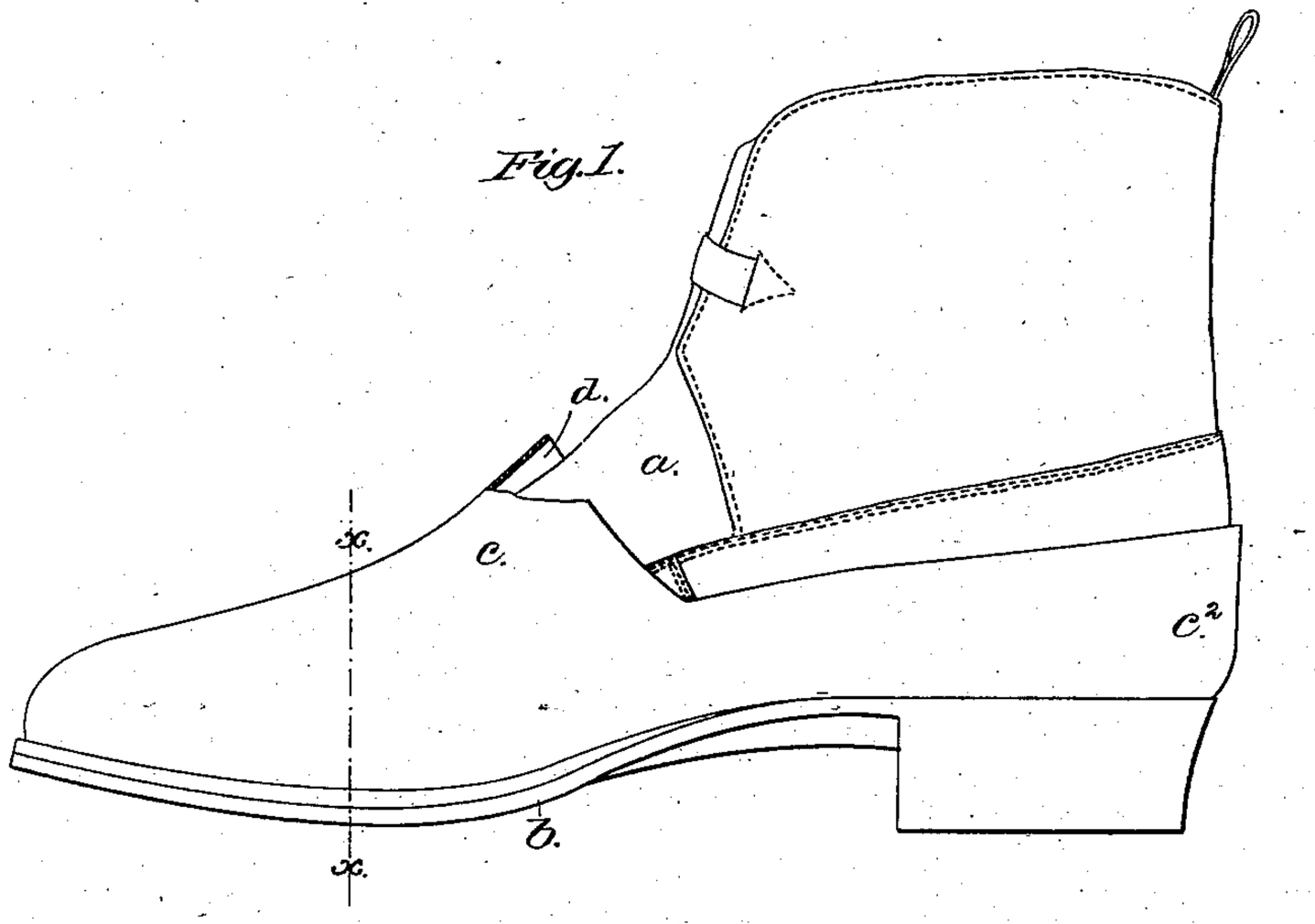


Fig. 2.

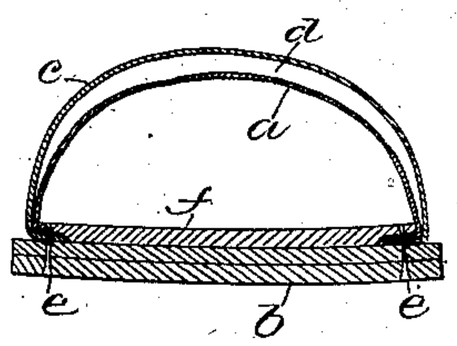
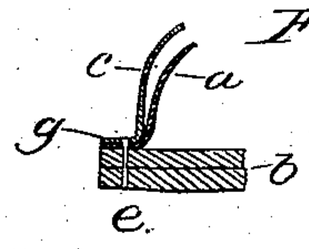


Fig. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

EDWIN L. SPRAGUE, OF BOSTON, MASSACHUSETTS.

BOOT OR SHOE.

SPECIFICATION forming part of Letters Patent No. 259,231, dated June 6, 1882.

Application filed January 14, 1882. (No model.)

To all whom it may concern:

Be it known that I, EDWIN L. SPRAGUE, of Boston, county of Suffolk, and State of Massachusetts, have invented an Improvement in Boots and Shoes, of which the following description, in connection with the accompanying drawings, is a specification.

This invention has for its object the production of a boot or shoe more especially adapted for the use of workmen in furnaces and foundries, miners, and others, where a stiff, strong boot or shoe is desired, and wherein the leather of the upper which fits the foot shall be guarded or shielded with metal.

My invention consists in a metallic or other stiff casing, such as hereinafter described, adapted to cover and protect a part of or the whole of the upper, leaving an open space between the casing and upper for the upper to move or bend with or to fit the foot without at the same time bending the casing or causing it to press the upper and prevent the latter from conforming itself to the foot.

Figure 1 represents in side elevation a sufficient portion of a shoe to illustrate one embodiment of my invention; Fig. 2, a cross-section thereof, and Fig. 3 a modification.

The upper portion, *a*, of the shoe is composed of leather. The outer sole, *b*, and inner sole, *f*, may be of any usual material and shape, as may be the fastenings *e*, which unite them together, the latter being herein shown as tacks. Outside the upper of this shoe I have placed a metal casing, *c*, the edges of which are flanged or turned to lie parallel with the sole *b*, so as to be united to it by the fastenings *e*. The metal shield, which covers nearly all the upper, is larger than the upper, so as to leave a space, *d*, between the shield and upper to prevent such contact of the stiff metal with the leather of the upper next the foot as would injure the foot.

In Fig. 2 I have shown the edges of the metal shield turned in between the inner and outer soles with the usual upper, where all are secured by the fastenings *e*; but, if desired, the said edges may be turned outward, as at *g*, Fig. 3. In practice this metal shield will be formed by drawing it into shape between suitable dies, after which the edges will be bent in the desired direction, as when bending other sheet-metal articles. The metal casing will preferably be extended about the quarter of the shoe or boot, as in Fig. 1.

In foundries and workshops where metal is worked, molten and hot iron frequently falls upon the shoe or boot, and if of leather the upper is spoiled, and frequently the foot is injured; but with such a boot or shoe incased in metal, as herein shown, such difficulties are effectually avoided. This casing on boots or shoes worn by miners protects the upper from mar, and makes the boot or shoe much more durable.

I am aware that the toes of boots and shoes have been provided with metal tips to prevent the toe of the upper from being worn through; but such shoe-tips fit the upper closely and cover only a small part of the toe, whereas in this my invention the metal casing is extended up and back over the ball of the foot, and preferably up over the instep, the metal shield being, however, larger than the upper to leave a space, *d*.

The metal c^2 covering the quarter may extend higher up than in Fig. 1, if desired.

As so far described I have referred to the outer casing as composed only of metal; but it will be obvious that any other practically rigid and stiff material—such as stiff leather-board—if applied over the regular upper of the boot or shoe, as described of the casing *c*, will protect the principal part of or all of the upper or the front and quarter.

When the protecting-casing, composed of a material more rigid and serviceable than the material of the vamp or front of the shoe, is shaped to fit the shoe, as in Fig. 3, the casing, if injured, or if desired, may be removed, and another one applied by attaching it to the sole; or, if desired, the casing may be otherwise applied to the shoe and retained in position thereon.

My improved casing, adapted to be secured to a shoe, may be made separately and be applied by users of the shoes.

I do not claim a foxing or cover applied to a boot or shoe and fitted closely to the vamp thereof, as I am aware that a foxing of that class is not new; but I am not aware that a rigid cover has ever been applied to protect the upper in such manner as to leave a free open space between the upper and cover, so that the upper may adapt itself to the foot without altering the shape of the cover, or causing it to press injuriously or uncomfortably on the upper or foot.

I claim—

As an improved article of manufacture, the herein-described stiff or rigid casing, adapted to be placed over the upper to protect a part or the whole of the upper, and leave an open space between the casing and upper, substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

EDWIN L. SPRAGUE.

Witnesses:
G. W. GREGORY,
B. J. NOYES.