

(No Model.)

A. F. SMITH.

PAD FOR SOLE LAYING MACHINES.

No. 388,377.

Patented Aug. 21, 1888.

Fig. 1.

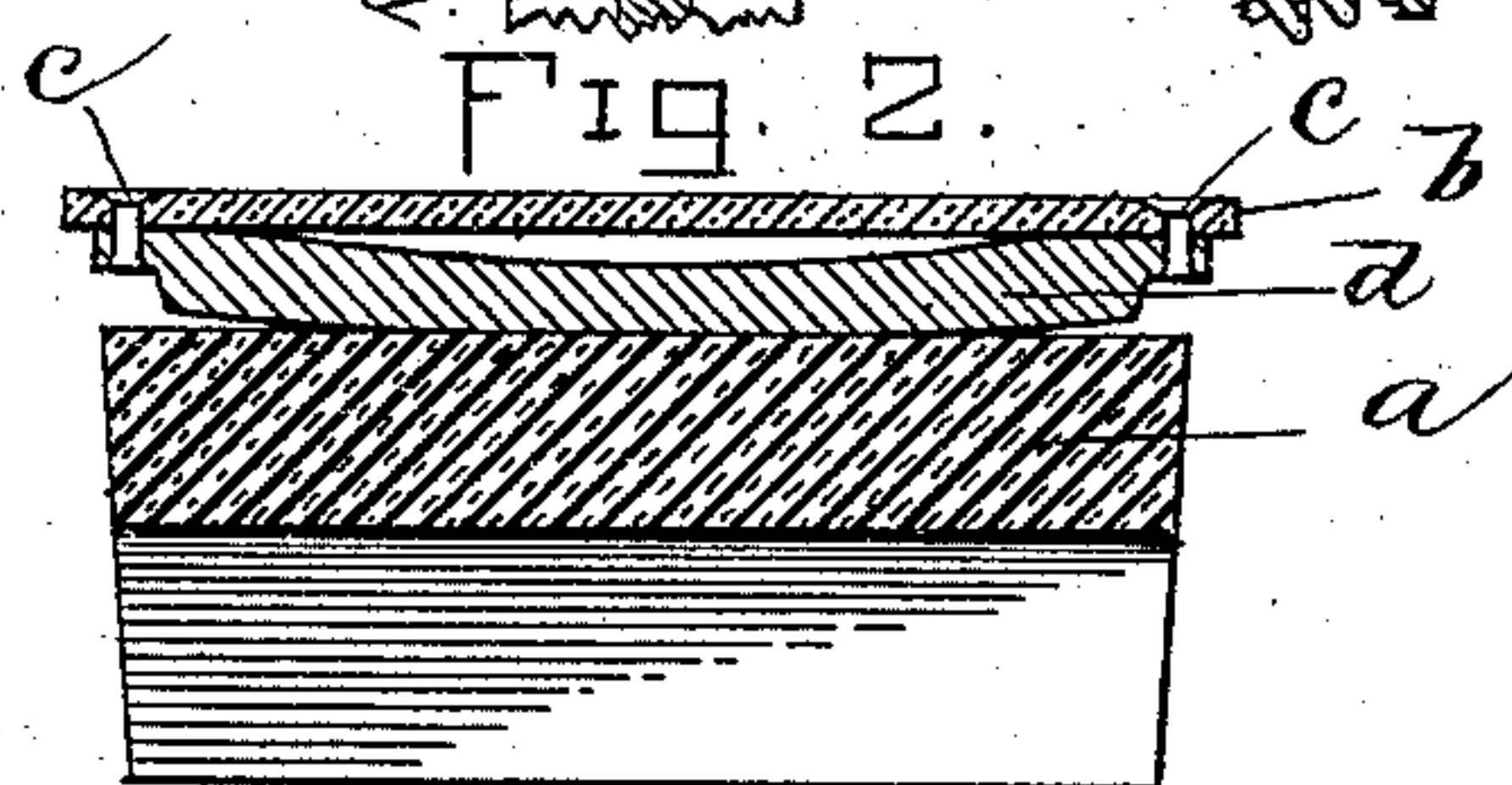
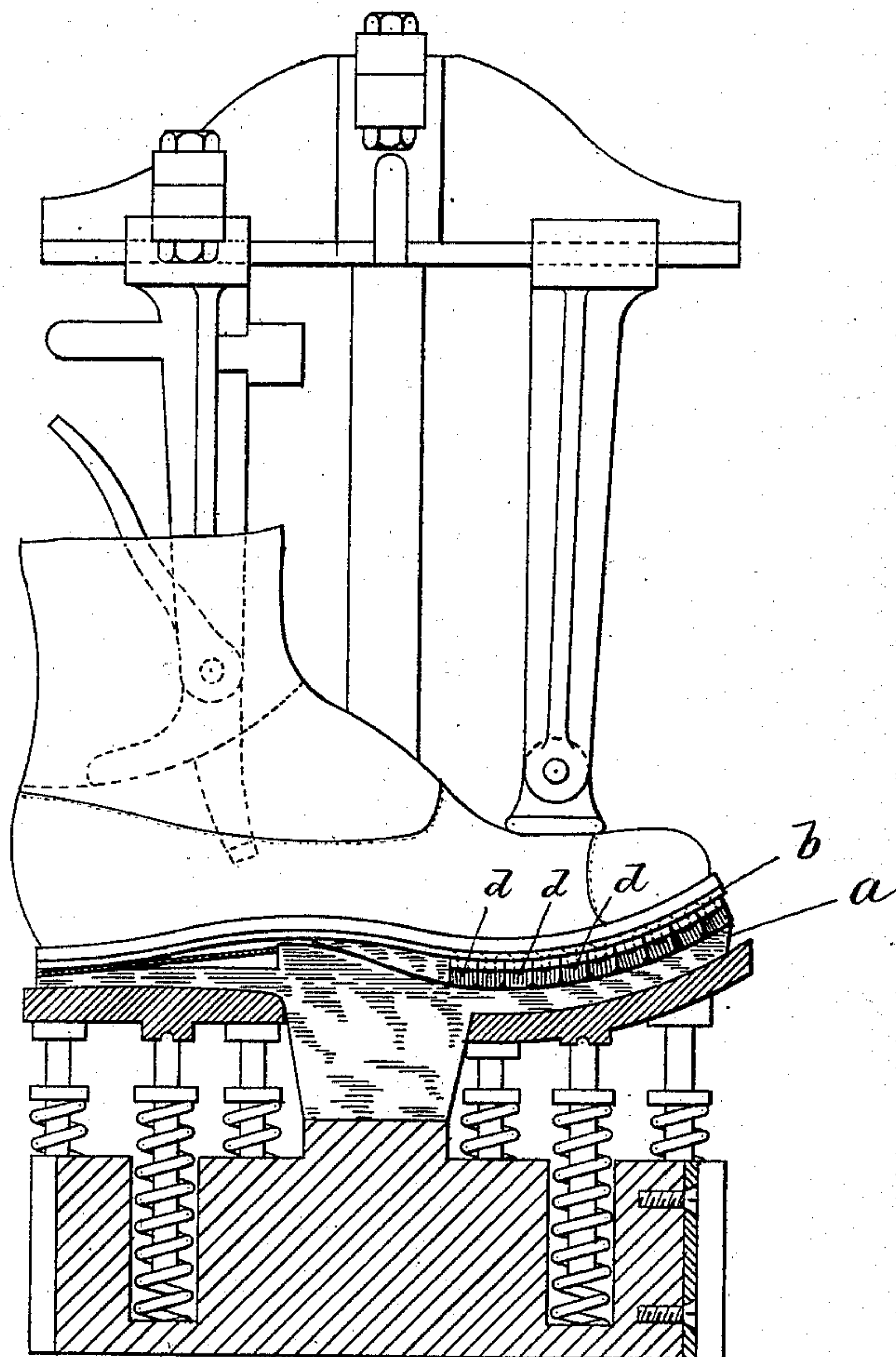
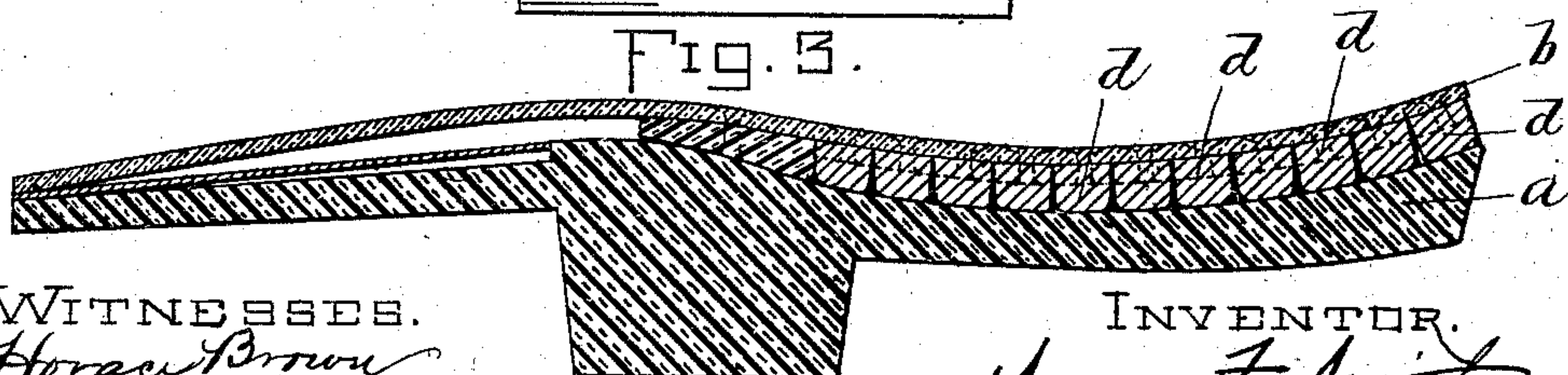


Fig. 3.



WITNESSES.

Horace Brown.
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UNITED STATES PATENT OFFICE

AARON F. SMITH, OF LYNN, MASSACHUSETTS, ASSIGNOR TO THE BOOT AND SHOE SOLE LAYING COMPANY, OF PORTLAND, MAINE.

PAD FOR SOLE-LAYING MACHINES.

SPECIFICATION forming part of Letters Patent No. 388,377, dated August 21, 1888.

Application filed December 24, 1887. Serial No. 253,900. (No model.)

To all whom it may concern:

Be it known that I, AARON F. SMITH, of Lynn, in the county of Essex and State of Massachusetts, have invented certain new and useful Improvements in Pads for Sole-Laying Machines, of which the following is a specification.

This invention has for its object to provide an improved sole-pressing pad for use in boot or shoe sole laying machines for pressing a cement-coated outer sole against the bottom of a lasted boot or shoe upper.

In sole-laying machines the lasted upper is held by a suitable jack and the cement-coated outer sole is pressed by a flexible pad against the edges of the upper, which are turned inwardly on the bottom of the last. Usually the pressing-surface of said pad is of such a nature that it will conform to all the irregularities of the bottom of the lasted upper, so that when no filling is placed on the bottom of the inner sole to make a surface flush with the inwardly-turned edges of the upper the outer sole will be pressed by the pad closely against the inner sole, and will therefore have a central depression, showing the outline of the edge of the upper, the appearance of the bottom of the outer sole being thus marred and its smoothness detracted from.

To overcome this objection is the object of my invention, which consists in a pad-covering of flexible material formed to be interposed between the pad and the outer sole, and provided with transverse rigid ribs, which, while not interfering with the longitudinal flexibility of the pressing-surface, make it rigid crosswise, so that it cannot sink the central part of the outer sole into the space surrounded by the inwardly-turned edges of the upper, as I will now proceed to describe.

Of the accompanying drawings, forming a part of this specification, Figure 1 represents a side elevation of a sole-pressing pad provided with my improvements and showing the jack and the pad-supporting devices. Fig. 2 represents a transverse section of the pad with my improvement. Fig. 3 represents a longitudinal section of the same.

The same letters of reference indicate the same parts in all the figures.

In the drawings, *a* represents a sole-press-

ing pad of yielding rubber adapted to conform to the shape of the bottom of a last and to press an outer sole closely thereagainst, and supported by suitable devices forming a part of an organized sole-laying machine.

In Fig. 1 I have shown pad-supporting devices and a last-supporting jack such as are shown in various patents belonging to the Boot and Shoe Sole Laying Company; but as such devices form no part of my present invention a description thereof is not necessary.

In carrying out my invention I provide as the pressing-surface of said pad a sheet, *b*, of sole-leather or other suitable flexible material, formed to cover the fore-part-pressing portion of the sole. To the edges of the under side of said sheet I connect by rivets *c c*, or any other suitable means, a series of metal ribs, *d d*, extending crosswise of the sheet, and each entirely independent of the others, so that while said ribs stiffen the sheet *b*, so that it cannot conform crosswise of the last to depressions on the bottom of the lasted upper, it is still free to bend lengthwise and conform to the longitudinal curvature of the bottom of the last.

I prefer to make the upper surfaces of the ribs *d d* concave, as shown in Fig. 2, said concave surfaces forming supports for the sheet *b* when pressure is applied to the pad, and holding the sheet in form to impart the desired convexity to the bottom of the outer sole.

It will be seen that by this improvement I avoid the use of a filling between the inner and outer soles, and also prevent the adhesion of the central part of the outer sole to the inner sole, so that the boot or shoe is made more flexible than it would be if it had a filling, or if the central part of the outer sole were cemented to the inner sole.

I claim—

1. In a sole-laying machine, a flexible sheet, as *b*, formed to constitute a sole-pressing surface, and provided with a series of transverse metal ribs attached to the sheet independently of each other and extending across the sheet, whereby the sheet is stiffened crosswise, but left free to bend lengthwise, as set forth.

2. In a sole-laying machine, the combination, with the yielding sole-pressing pad *a*, of

the flexible sheet *b*, having the transverse independently-attached metal ribs extending across it, as set forth.

3. The flexible sheet *b*, provided with the 5 independently-attached metal ribs *d*, having concave inner surfaces, as set forth.

In testimony whereof I have signed my name

to this specification, in the presence of two subscribing witnesses, this 20th day of December, A. D. 1887.

AARON F. SMITH:

Witnesses:

C. F. BROWN,

A. D. HARRISON.