

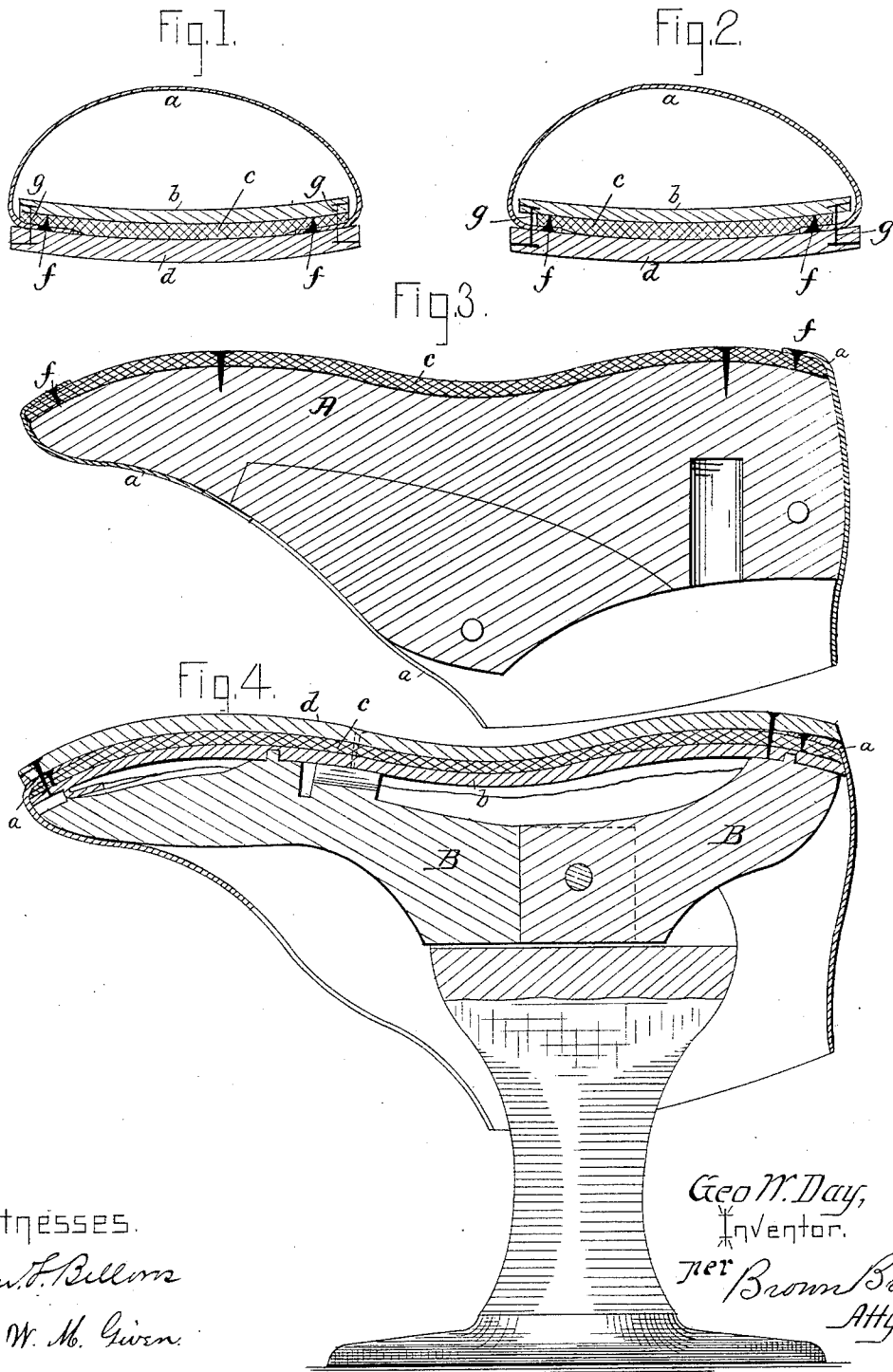
(No Model.)

G. W. DAY.

MANUFACTURE OF BOOTS OR SHOES.

No. 325,240.

Patented Sept. 1, 1885.



Witnesses.

Wm. F. Bellon

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UNITED STATES PATENT OFFICE.

GEORGE W. DAY, OF HAVERHILL, MASSACHUSETTS.

MANUFACTURE OF BOOTS OR SHOES.

SPECIFICATION forming part of Letters Patent No. 325,240, dated September 1, 1885.

Application filed August 13, 1883. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. DAY, of Haverhill, in the county of Essex and State of Massachusetts, have invented certain new and useful Improvements in the Manufacture of Machine Sewed Boots and Shoes, of which the following is a full, clear, and exact description.

This invention relates to the manufacture of boots and shoes having soles made of three separate layers—to wit, an outer sole, a middle sole, and an inner sole—secured to the upper, preferably, by stitches passing either through the thicknesses of the several soles and of the upper or through the thicknesses of the inner sole and outersole only and of the upper.

The invention particularly relates to an improved method of manufacture therefor; and it consists in first lasting with tacks, cement, or other suitable means the upper and a middle sole in the usual manner of lasting, using a last of such a thickness or size from top to bottom as to secure, when the inner sole is afterward inserted, the desired size and shape to the upper, and in then removing said last and inserting the inner sole, attaching it and the outersole to the previously-secured upper and middle sole with tacks or pegs that may be easily removed as the boot or shoe is sewed to complete the attachment of the sole in three layers, as above stated, to the upper, all substantially as hereinafter described.

In the accompanying plate of drawings is illustrated a shoe of the class of boots and shoes to which this invention pertains, and a last and holder for use with boots or shoes having three soles and made in accordance with the method of this invention.

Figures 1 and 2 are similar cross-sections of the shoe at the ball portion and midway between the toe and shank of the sole. Fig. 1 shows the inner, outer, and middle soles and the upper as secured together by stitches passing through the several thicknesses, and Fig. 2 shows the inner and outer soles and upper as secured together by stitches passing through their several thicknesses and not through the middle sole. Fig. 3 is a longitudinal vertical section from toe to heel of the upper and the middle soles on the last for lasting them; and

Fig. 4 is a similar view to Fig. 3, but of the upper and the middle sole, after being lasted upon a last such as shown in Fig. 3, removed therefrom and the inner sole inserted, and then the whole with the outer sole placed upon a stand or holder for temporarily tacking or securing the inner and outer soles to the previously-secured middle sole and upper.

In the drawings, *a* represents the upper; *b*, the inner sole; *c*, the middle sole; *d*, the outer sole; *f*, the lasting-tacks lasting the middle sole and upper, and *g* the stitches securing, as shown in Fig. 1, the several soles and upper together by passing through their combined thickness, and securing, as shown in Fig. 2, the outer and inner soles and upper together by passing through their several thicknesses and not through the thickness of the middle sole.

A is a last to be used for lasting the middle sole, *c*, and upper *a*. The last A is of a thickness and size to give such a size and shape to the upper that after the middle sole and upper are lasted thereon and the inner sole inserted, and it with the outer sole first temporarily attached and afterward stitched, as ordinarily, the upper of the shoe will have the shape and size desired.

The lasting of the middle sole and upper when upon the last A is accomplished by first tacking the middle sole to the bottom of the last, and then, having drawn the upper over the last and over the outer face of the middle sole, securing the upper and middle sole together by tacks or cement, as in the ordinary manner of lasting an inner sole and upper. After lasting the upper and middle soles, as above described, the shoe is removed from the last A, and, the inner sole being first inserted, it is then, with the so-inserted inner sole, placed upon a stand or holder of suitable shape to receive and hold it, and, the outer sole being applied to the outer face of the middle sole, the outer and inner soles are then attached with tacks or pegs temporarily to the middle sole, and the several soles and upper, being removed from said stand, are then sewed or stitched in the usual manner and in and through their several thicknesses, as stated, completing the attachment of the soles in three layers to

the upper, the tacks securing the outer and inner soles, as stated, being removed after the sewing of the soles is finished.

Having thus described my invention, what I claim is—

An improved method of manufacturing boots and shoes having inner, middle, and outer soles, the same consisting in first lasting the middle sole and upper upon a last having an extra thickness on its bottom equal to the thickness of the inner sole to be afterward inserted, then removing the shoe from the last,

and temporarily securing the inner and outer soles to the so-last ed middle sole and upper, and permanently securing the whole together by stitches in the usual way, substantially as described, for the purpose specified. 15

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

GEORGE W. DAY.

Witnesses:

EDWIN W. BROWN,
WM. S. BELLOWS.