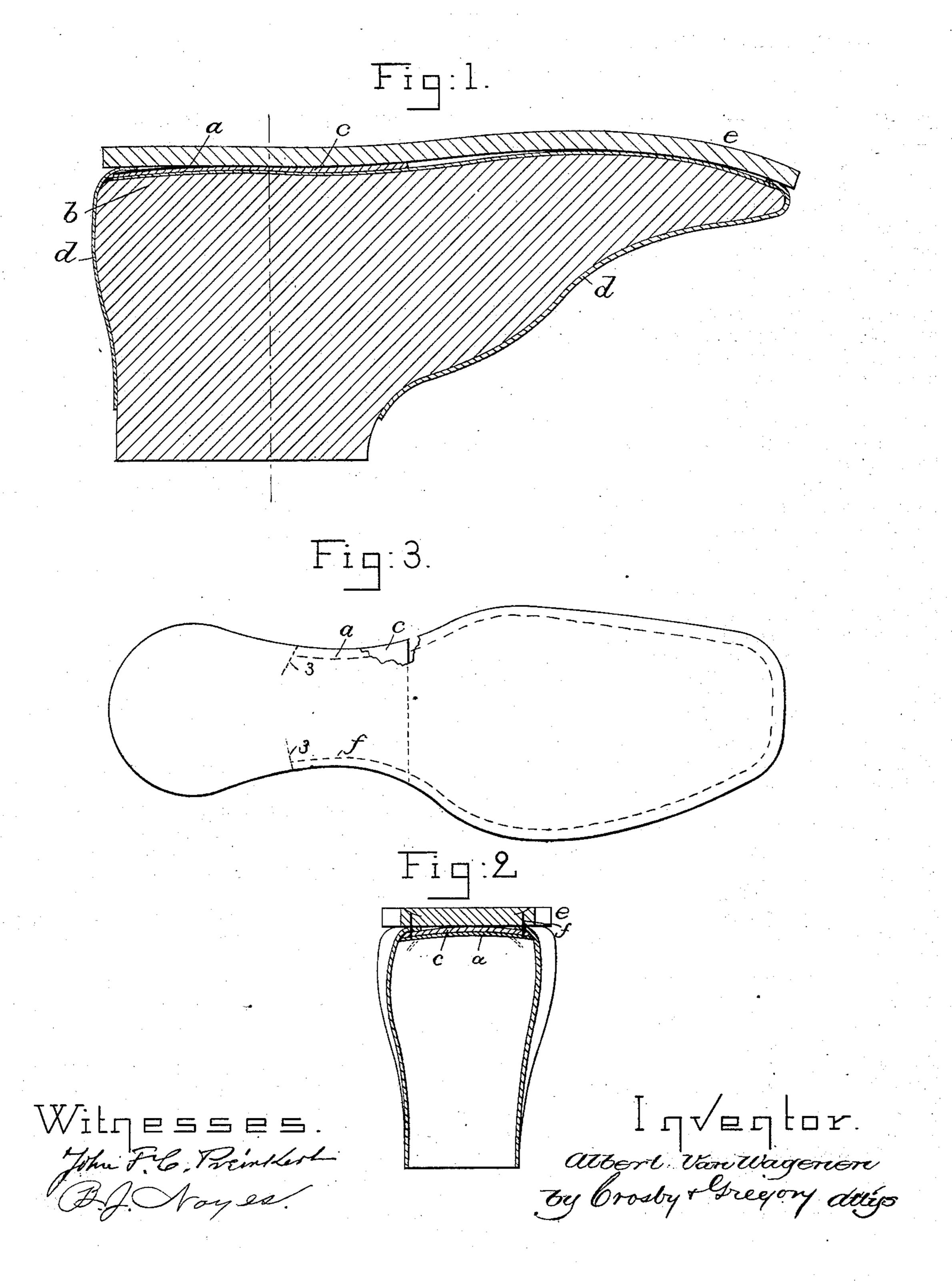
(No Model.)

A. VAN WAGENEN.

BOOT OR SHOE.

No. 317,477

Patented May 5, 1885.



United States Patent Office.

ALBERT VAN WAGENEN, OF BOSTON, MASSACHUSETTS.

BOOT OR SHOE.

SPECIFICATION forming part of Letters Patent No. 317,477, dated May 5, 1885.

Application filed March 2, 1885. (No model.)

To all whom it may concern:

Be it known that I, ALBERT VAN WAGEN-EN, of Boston, county of Suffolk, State of Massachusetts, have invented an Improvement in 5 Boots and Shoes, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the

drawings representing like parts.

This invention has for its object to increase ro the flexibility of the soles of boots and shoes as made on the McKay and other similar machines. In the class of shoe made on the machines referred to, and known as machinesewed shoes, the inner sole is laid upon the 15 last, the upper is drawn over the inner sole, and the outer sole is then applied, and the outer sole, upper, and inner sole are penetrated by the needle, and the thread is drawn through them to form stitches. To render this class of 20 shoe flexible, it has been proposed to cut away the edge of the inner sole for a greater or less distance about the sides of the fore part, so as to enable the needle in its work to pass by the edge of, and not enter, the inner sole along the 25 sides of the fore part or ball of the sole. In my experiments to provide for yet greater flexibility of the sole, and at the same time cheapen the cost of the boot or shoe. I have found that the stiff leather or leather-board inner sole need 30 be extended only from the heel to the front of the shank, and that only a textile or thin soft lining-sole need be extended to the toe of the boot or shoe.

Figure 1, in section, represents a last with an 35 upper, an outer sole, and a shortened inner sole, and lining-sole embodying my invention. Fig. 2 is a section of Fig. 1 in the dotted line x x, the last being omitted, and Fig. 3 is a top side view of my combined inner and lining sole

40 detached.

In the manufacture of a boot or shoe in accordance with my invention the lining-sole a, preferably of textile material, is laid upon the bottom of the last b, and upon the lining-45 sole is laid the shortened inner sole, c, the leather-board or other substitute for leather,) being extended from the heel of the shoe to the front of the shank, as shown in the drawings. 50 The edges of the upper d will next be drawn over upon the inner sole and the lining-sole, and will be temporarily secured, and the outer-

sole, e, will then be applied, the latter being channeled in any usual way for the reception of the stitches f, to be made by any suitable 55 or usual sole-sewing machine. It is desirable to make the shank of a boot or shoe quite stiff, and the fore part, under the ball of the foot, quite flexible. The point where the strain is the greatest is in and near the shank.

In accordance with my invention, the stiff or substantial shortened inner sole extends throughout that part of the boot or shoe where the greatest stiffness and strength are needed. The stitches f pass through the upper, outer 65 sole, and shortened inner sole, and also through the lining-sole, as shown in Fig. 3, but from the toe to the front end of the shortened inner sole the stitches run through only the liningsole, upper, and outer sole. The duty of the 70 lining-sole is to cover the inner side of the outer sole and the edges of the upper and hold the stitches.

To conceal the stitches or fastenings fat the heel portion of the sole, the lining-sole a may be 75 slit in the dotted line 3, and be turned back, as designated by dotted lines in Fig. 2, while the stitches f are being made and the heel-attaching nails are being driven, and thereafter turned down, and pasted or cemented in place 80 to cover the said stitches. The upper d may be of any usual shape, cut, or material.

The fastenings herein described are stitches, but, instead, I might use a metal fastening, which may be clinched; but I prefer stitches. 85

Fig. 3 shows the lining-sole pasted down over, and to conceal, the stitches or fastenings about the heel of the shortened inner sole.

I claim—

1. As an improved article of manufacture, 90 a boot or shoe composed of an upper, a shortened inner sole, an outer sole, and a lining-sole, the shortened inner sole terminating at the forward part of the shank, the said parts being united by stitches or fastenings, substantially 95 as described.

2. In a boot or shoe having a shortened latter preferably of leather, (but it may be of | inner sole in which the fastenings for uniting outer sole and upper at the heel and for fastening the heel itself pass only through the 100 shortened inner sole, the soft or textile liningsole, the latter being slit at its edge, as shown and described, whereby a portion of the said lining-sole near its outer edge may be turned

back while uniting the outer sole upon the inner sole at the heel-seat and attaching the heel, after which the soft inner sole may be again returned, covering the stitches or fastenings, and leaving the lining-sole free from fastenings at that part, substantially as described.

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

ALBERT VAN WAGENEN.

Witnesses:

G. W. GREGORY, W. H. SIGSTON.