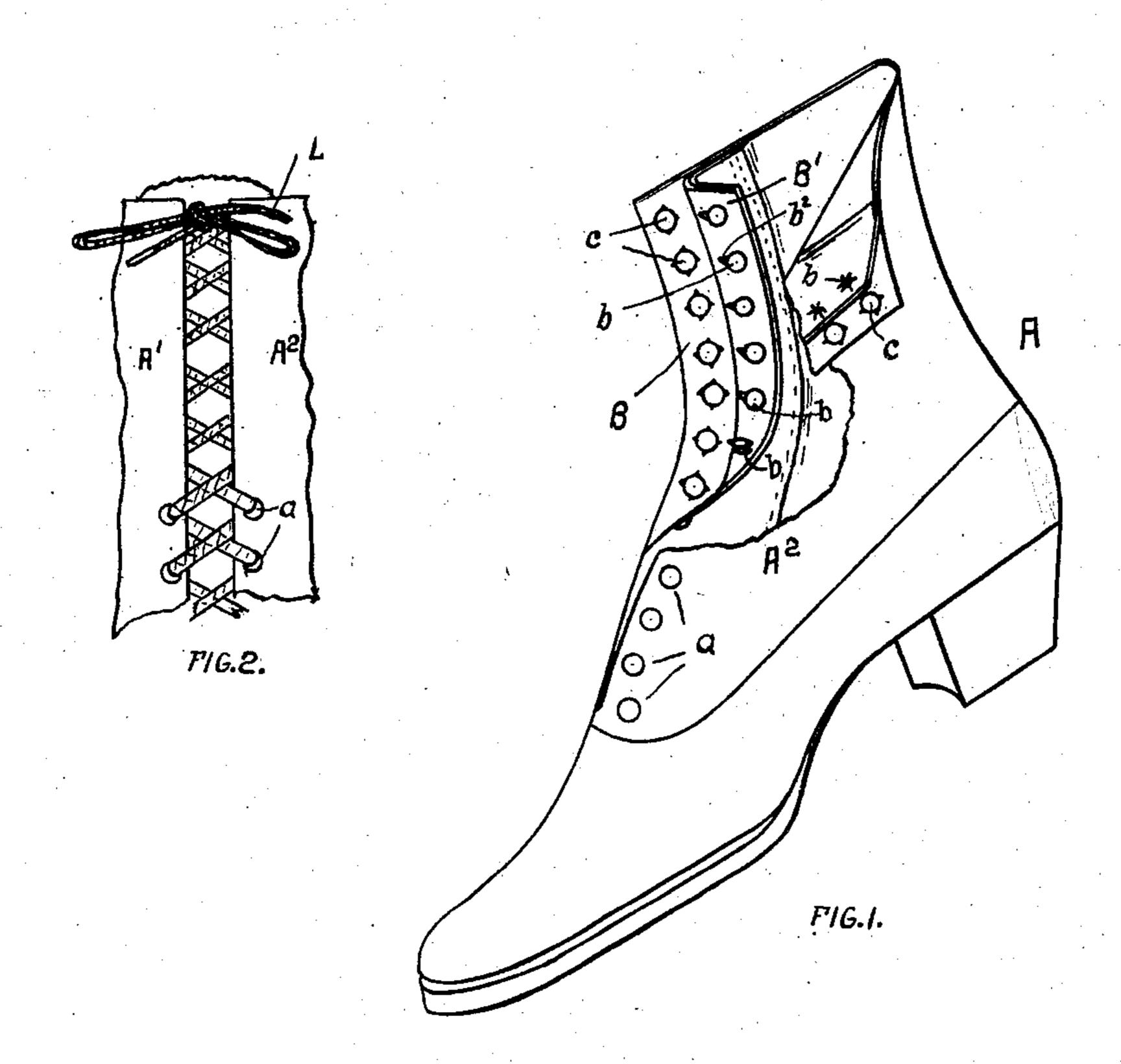
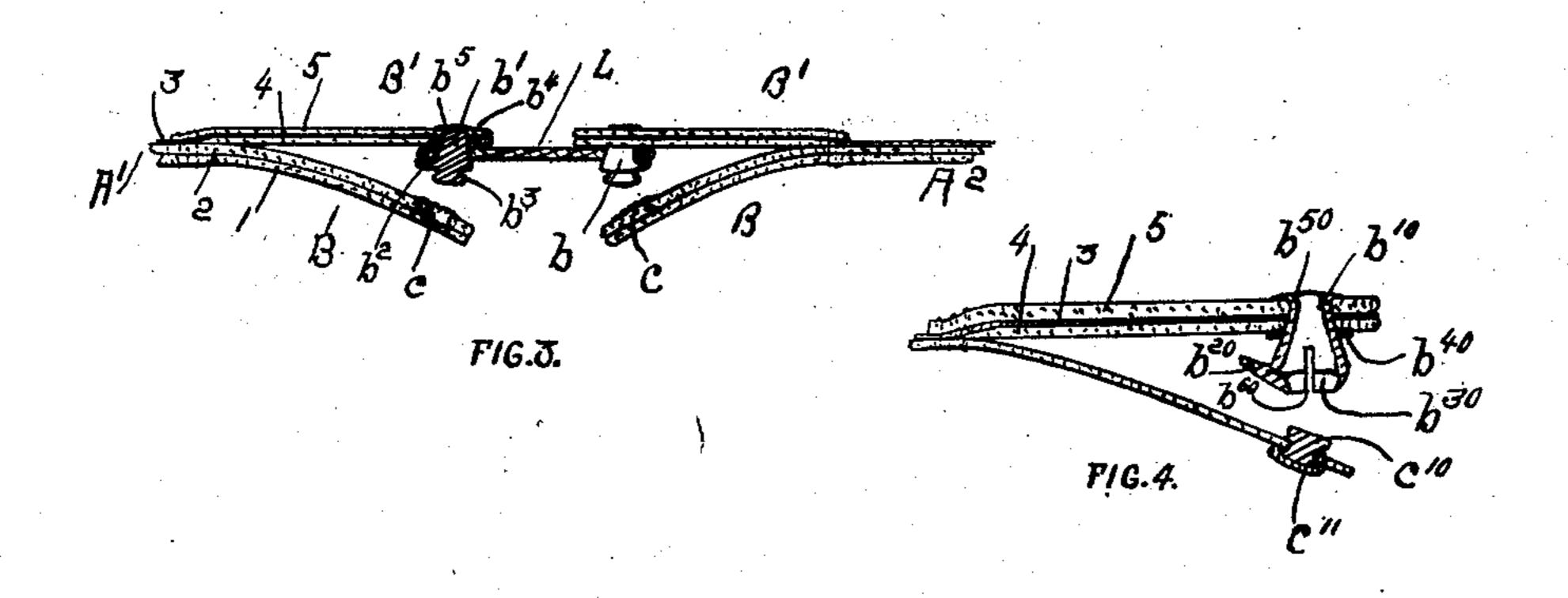
J. W. P. BUNNING. SHOE FASTENING.

APPLICATION FILED FEB. 16, 1903.

MO MODEL.





Witnesses.
Mary a Normany
Elizabeth Hendunuch

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United States Patent Office.

JOHN W. P. BUNNING, OF BOSTON, MASSACHUSETTS.

SHOE-FASTENING.

SPECIFICATION forming part of Letters Patent No. 746,280, dated December 8, 1903.

Application filed February 16, 1903. Serial No. 143,508. (No model.)

To all whom it may concern:

Be it known that I, John W. P. Bunning, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Shoe-Fastenings; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The present invention relates to boots and shoes, and more particularly to that type in which lacings are employed to secure the boot or shoe about the foot and ankle of the wearer.

In shoes adapted for men's wear it is usual to provide the lower part of the shoe-upper with a series of eyelets through which the lacing is threaded, while the remainder of the upper is provided with hooks of some kind 20 about which the lacings may be passed in a convenient and expeditious manner, avoiding the delay incident to threading the laces through the eyelets and enabling the wearer to remove the shoe without removing the lac-25 ings from the eyelets. This form of shoe is not adapted for women's wear, for the reason that the drapery composing the skirts and other garments catch in the hooks, rendering walking difficult and injuring or even de-35 stroying the garments. Moreover, even in the case of men's shoes bare hooks are objectionable, since they catch in the bottoms of trousers.

The object of the present invention is to provide means whereby lacing-hooks may be used along the upper part of the shoe without the use of objectionable projections.

A further object of the present invention is to provide a fastener to be used in connection with a lacing or other detachable element, said fastener constituting also one member of a protecting and concealing device.

Further objects will appear in connection with the following description of my improvement.

To the above ends the present invention consists in devices and combinations of devices to be hereinafter described, and particuto larly pointed out in the claims.

The present invention is illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view showing a laced shoe provided with my improved fastening means. Fig. 2 is a fragmentary view 55 showing the front of a shoe-upper, the lacings being in position and the parts interlocked. Fig. 3 is an enlarged view showing in transverse cross-section one manner in which the fastener and auxiliary flap may be arranged 60 with relation to the parts now employed in the construction of the tops of shoes. Fig. 4 is a sectional view showing a fragment of a shoe-upper and a modified form of fastener and auxiliary flap.

Similar reference characters will be used to denote and indicate like parts throughout the specification and drawings.

A designates a laced shoe of any ordinary form, having an opening in the front thereof 70 extending from the top of the shoe down through the upper, and A' and A² are the meeting flaps of the shoe-upper. Eyelets a are provided for a portion of the length of the opening, and these eyelets may be of any 75 preferred or desired construction and may be arranged in any suitable manner. Above the instep I employ instead of the eyelets my improved fastening device. If desired, eyelets may be dispensed with, my fastening device 80 extending clear down.

In carrying out my invention it is desired to retain all the advantages which obtain in the use of the old form of hooks, obviating, however, the objections previously noted. 85

The present invention consists, therefore, in the employment of fastening-hooks, together with means for covering or concealing said hooks in such a manner that it shall be impossible for any piece of wearing-apparel 90 to become entangled therein.

In the preferred form of my invention the front pieces A' and A² of the shoe-upper are accordingly made double, each front piece consisting of two flaps B and B'. B is the 95 outer flap and has for its outermost surface preferably the leather of the shoe-upper. B' is the inner flap and may consist of one or more pieces of leather or other material securely fastened to the shoe-upper and have noo ing its outer edges coextensive with the corresponding edges of the shoe-upper.

It is on the flaps B' that modified forms b of the ordinary lacing-hooks are arranged.

After the lacing has been threaded through the eyelets a it is caught over or about the

hooks b in the usual manner.

The flaps B are provided with members c, 5 which are adapted to engage and interlock with the hooks b, the operation being as follows: The lacing having been passed through the eyelets a and about the hooks b has its ends secured in any desired manner, the illusso tration showing them tied together. The flaps B are then pressed inward, whereby the members b and c are caused to snap into engagement and lock the two flaps B and B' together, uniting them in this manner, so as to 15 present the appearace of a single flap only.

In Figs. 3 and 4 I have illustrated several ways in which the complementary flaps may be constructed and also several modified

forms of fastening-hooks.

20 In Fig. 3 the flaps B and B' are shown as being composed of five parts, the flap B comprising the upper-leather 1 and a piece of finishing-leather 2, and the flap B' consisting of two pieces of leather or other material 4 and 5, 25 having between them the shoe-lining 3. The elements 2, 4, and 5 may be narrow strips of leather or other material an inch or so in width and fastened securely along the edges of the opening in the shoe-upper. Although 30 the elements 2, 4, and 5 are shown as being narrow strips, it is of course understood that the dimensions may be varied in any manner which may be deemed desirable, as the specific manner of forming the flaps depends 35 largely on the character of the shoe to which my improvements are applied.

The fastener b (illustrated in Fig. 3) consists of a body portion b', a hook or projection b^2 , and a head b^3 . The body portion b'40 may be in the shape of a frustum of a cone, having mounted thereon a washer b^4 , which is of such a diameter as to leave sufficient space between it and the hook b^2 for the passage of the shoe-lacing when the washer has 45 been slid along the body of the fastener as

far as it will go. The fastener may be riveted to the flap B', pressing the material of the flap tightly between the washer and riv-

eted portion b^5 .

The flap B is provided with an eyelet, which constitutes the member adapted to engage the head b^3 in order to lock the two flaps together. As shown, this eyelet is contained within the inner strip of material 2, which is 55 made of sufficient thickness to allow secure connection to be made between the eyelet and the fastening-hook. This construction provides a perfectly plain external surface from the instep upward.

The largest diameter of the head b^3 is made slightly greater than the smallest diameter of the eyelet c, so that upon the application of a slight pressure the two complementary parts will snap together and will be held in such po-

65 sition until a pull is applied.

While I have shown shoulders on the head

myself to this construction, since any form of fastener now in use may be applied. Also the necessary resiliency in the parts of 70 the fasteners may be provided for by any of the well-known methods.

In Fig. 4 I have shown another modification, in which the flap B consists of a single piece of material—namely, that of the shoe-upper— 75 while the flap B' is made in the same manner

as that shown in Fig. 3.

The hook member of the fastening consists of the body portion b^{10} , the hook b^{20} , which may be inclined, as shown, a socket b^{30} , and 80 the washer b^{40} , the fastener being secured in place by passing the body portion thereof through the material of the flap and riveting it, as at b^{50} , pressing the material of the flap firmly against the washer b^{40} . A slit b^{60} may 85 be cut through the socket and into the body portion to provide for a greater resiliency.

The complementary member of the fastening device is provided in this case with a shouldered head or ball instead of the eyelet 90 shown in Fig. 3 and is secured to the flap B in any suitable manner, the head engaging

the socket b^{30} of the hook member.

By using the arrangement shown in Fig. 3 the top portions of the shoe-upper flaps are 95 left entirely plain, as shown in Fig. 2. In Fig. 4, however, I have shown the element c^{10} provided with an ornamental button or other design c^{11} , which is arranged on the exterior of the flap and which may also serve 100 to hold this element of the fastening device in position.

It will now be seen that the present invention provides a cheap and efficient means for employing the ordinary form of lacing-hook, 105 but in such a manner that there remains no objectionable projection above the surface of

the united parts.

The strain is all borne by the lacing and the hook member, so that it is unnecessary 110 to provide a very strong, and therefore a very expensive, arrangement for holding the flap B in place to cover the hooks.

While I have described and illustrated my invention in connection with laced shoes, yet 115 I do not wish to be understood as limiting myself in the application thereof to boots and shoes only, since it may well be employed in connection with gloves or, in fact, in connection with the fastening together of any two 120 meeting edges where it is desired to form a detachable connection which may be rapidly manipulated and in which it is necessary that there should be no objectionable protuberances or projections.

Having described my invention, I claim as new and desire to protect by Letters Patent

of the United States—

1. A fastener comprising hooks, a lacing to engage said hooks, and a detachable cov- 130 ering for the hooks, whereby a smooth surface is obtained, substantially as described.

2. A fastener member comprising a body 3 and within the eyelet c, yet I do not limit I portion, means for securing it in position, a

125

hook, and means for engaging a complementary member, substantially as described.

3. A fastener having in combination, a member comprising a body portion, means 5 for securing it in place and a hook, and a second member for covering said first member, said members being provided with means for securing them detachably together, substantially as described.

4. Means for fastening together the meeting edges of two parts, which consists in forming two flaps at each of such edges, hook members for receiving a lacing on one set of flaps, locking elements on said hooks and

15 complementary elements on the second set of

flaps for detachably locking said hook members and flaps together, substantially as described.

5. A shoe, having in combination, an upper, the opposing edges of which are provided 20 with two flaps, hooks on the inner set of flaps for receiving a lacing and means for detachably locking the outer flaps to the inner flaps, substantially as described.

In testimony whereof I affix my signature 25

in presence of two witnesses.

J. W. P. BUNNING.

Witnesses:

WM. F. FREUDENREICH, MARY A. KENNEY.