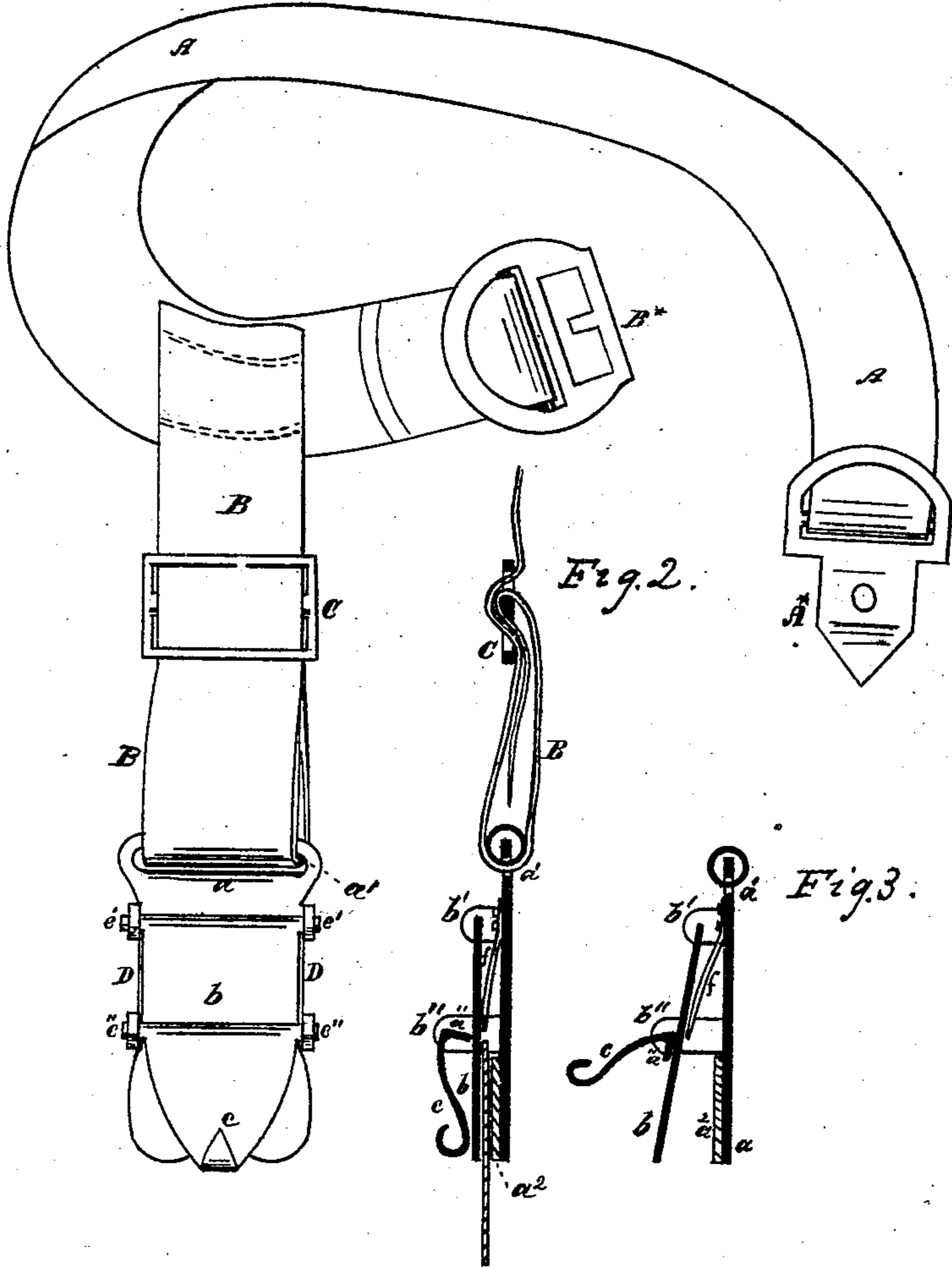


W. S. WARDWELL.
Garters.

No. 152,200.

Patented June 16, 1874.

Fig. 1.



Attest.
Chas. E. Quetel
A. J. Floor

William S. Wardwell
per
James Whitney
Atty

UNITED STATES PATENT OFFICE.

WILLIAM S. WARDWELL, OF NEW YORK, N. Y.

IMPROVEMENT IN GARTERS.

Specification forming part of Letters Patent No. 152,200, dated June 16, 1874; application filed September 9, 1873.

To all whom it may concern:

Be it known that I, WILLIAM S. WARDWELL, of the city, county, and State of New York, have invented certain Improvements in Stocking-Suspenders, of which the following is a specification:

This invention is designed to furnish a simple, cheap, and efficient buckling device for suspending stockings, in lieu of the ordinary garter, and for other analogous purposes. It consists in certain novel combinations of parts, whereby the desired result is effectually accomplished.

Figure 1 is a side view of a stocking-suspender made according to my invention. Fig. 2 is a longitudinal section of the buckle or clamp constituting a portion of the same, showing the parts in a closed position. Fig. 3 is a similar view of the said buckle or clamp, showing the parts in an open position.

A is a band of elastic webbing designed to be passed around the leg, either above or below the knee, but at some little space above the top of the stocking, and there held by a tongue, A*, and buckle B*, provided upon its ends to join or unite the same. Attached to this band A, at any desired point, is the pendent elastic strap B, made adjustable as to its available length, by having its lower portion looped in and through the clasp C, as more plainly represented in Fig. 2. D is a clamp comprising a flat plate, *a*, through a slot, *a*¹, in the upper part of which passes the looped lower part of the strap B, to attach the clamp to the said strap. The plate *a* is provided with two sets, *b'* *b''*, of lugs or ears, situate at right angles to its inner face, in such manner that the one set, *b'*, provides bearings for the pivots *e'* of a clamping-plate, *b*, while the other, *b''*, provides bearings for the pivots *e''* of a lever-plate, *c*, the inner edge *a''* of which is turned inward at an angle to its main length, as shown in Figs. 2 and 3, to exert a cam-like action upon the clamping-plate, as hereinafter fully set forth. The pivots *e''* of the lever-plate, and those *e'* of the clamping-plate, are in each formed by lateral extensions from the edges of the said parts of the metal of which the same are made. Attached, in any suitable manner, to the lower inner surface of the clamping-plate *a* is a thickness, *a*², of india-

rubber or equivalent elastic material. Fixed to the upper inner surface of said clamping-plate is a spring, *f*, which, pressing against the lever-plate *c*, tends to force the same outward to the open position shown in Fig. 3. The band A being placed upon the leg, as hereinbefore explained, the clamp D, open, as indicated in Fig. 3, is thrust downward, to bring the upper edge of the stocking between the plate *a* and the clamping-plate *b*, which done, the lever-plate is forced downward and inward, thereby causing the turned edge *a''* to act after the manner of a cam to force the clamping-plate toward the plate *a*, thereby to forcibly clamp or retain the hereinbefore-mentioned part of the stocking between the clamping-plate and the plate *a*, until designedly released by turning the lever-plate outward to the position shown in Fig. 3, and allowing the spring *f* to automatically throw the clamping-plate outward from the clamping-plate *a*.

It will be seen that the strap B, being pendent, elastic, and adjustable, enables the stocking to be held up without exerting undue strain either upon the stocking or upon the suspensory device itself, and without necessitating any injurious tightness upon the limb; also, that the layer of elastic material *a*², acting as a cushion, insures the griping action of the clamp, whether, within certain limits, the fabric of the stocking be of greater or less thickness, and without injury, in any event, to such fabric; also, that the spring *f*, by automatically opening the clamp when the lever-plate is turned outward or upward, materially facilitates the application of the device to the uses for which it is designed. The clamp may, on occasion, be applied to analogous suspensory devices—for example, to ordinary suspenders, so termed; and also, when desired, to elastic straps pendent from a band placed about the waist, and depending parallel with the limbs, for connection with the stockings by means of the clamps.

I do not in this application claim by itself the clamping device herein described, inasmuch as I propose to make the same the subject-matter of a separate and independent application; but

What I claim as my invention is—

1. The combination of the band A, arranged

to buckle around the leg immediately below the knee, and the elastic strap B, pendent from the band A, made adjustable, as described, and provided with a clamping device to grasp the stocking and hold up the same, substantially as and for the purpose herein set forth.

2. The combination, with the pendent strap B or its equivalent, of the plate *a*, clamping-plate, and lever-plate, the whole arranged for operation substantially as and for the purpose specified.

3. The combination, with the plate *a*, clamp-

ing-plate, and lever-plate, of the spring *f*, substantially as and for the purpose specified.

4. The arrangement of the elastic layer *a*¹ upon the lower inner surface of the plate *a*, and with reference to the clamping-plate operated by the lever-plate, substantially as and for the purpose specified.

WILLIAM S. WARDWELL.

Witnesses:

JAMES A. WHITNEY,
CHAS. E. QUETIL.

1.0 words.