

(No Model.)

W. M. SMITH.
PANTALOONS HOLDER.

No. 414,730.

Patented Nov. 12, 1889.

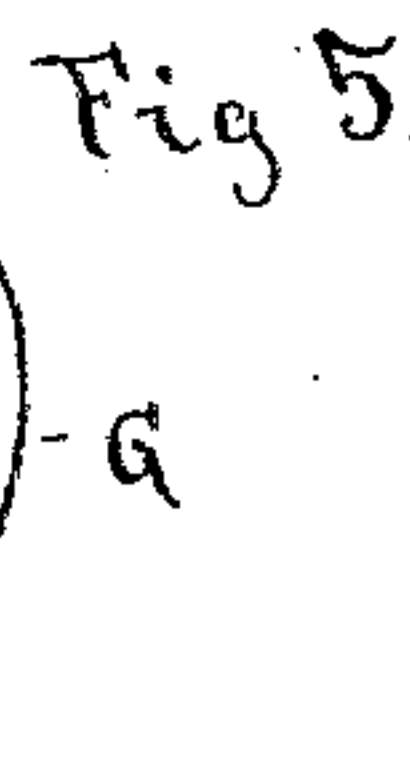
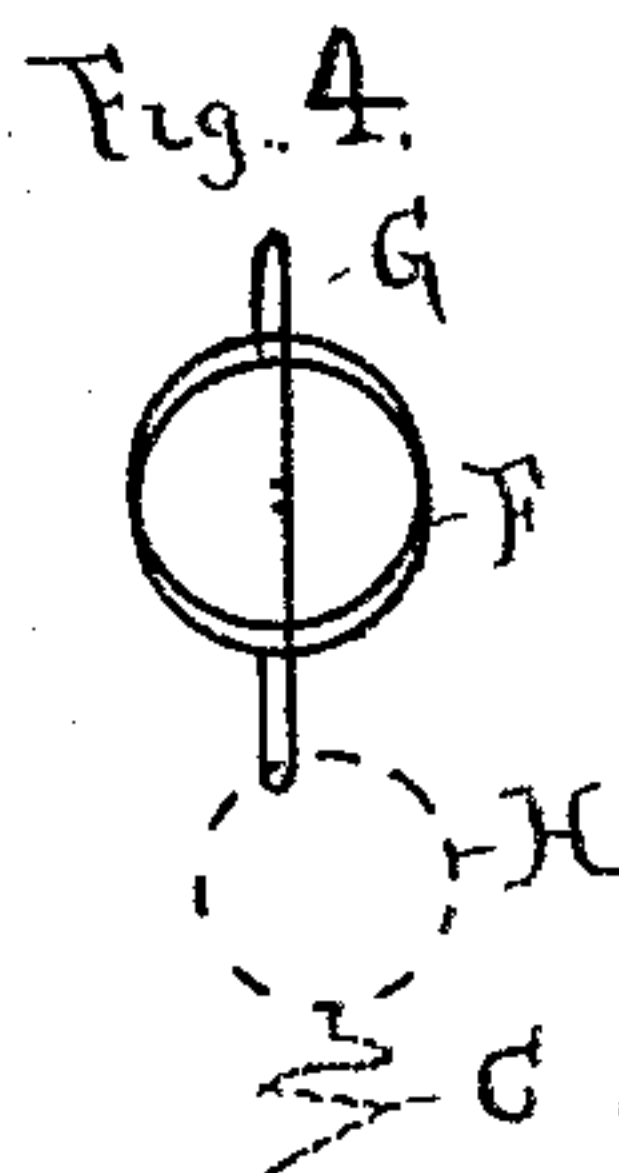
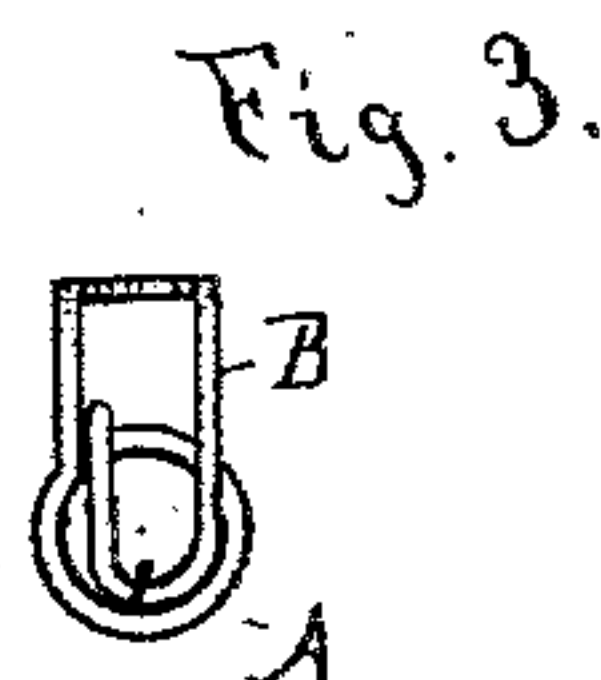
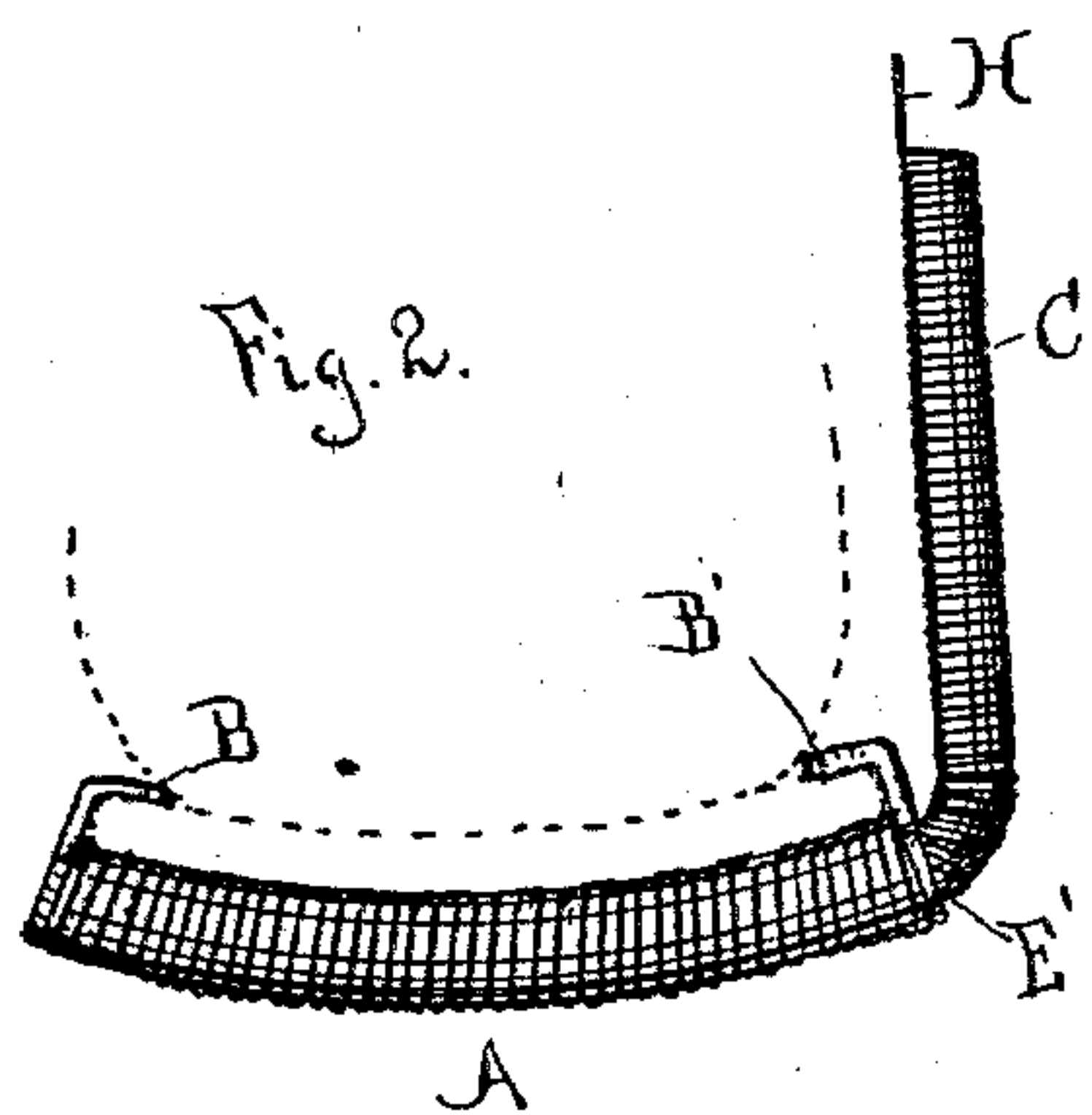
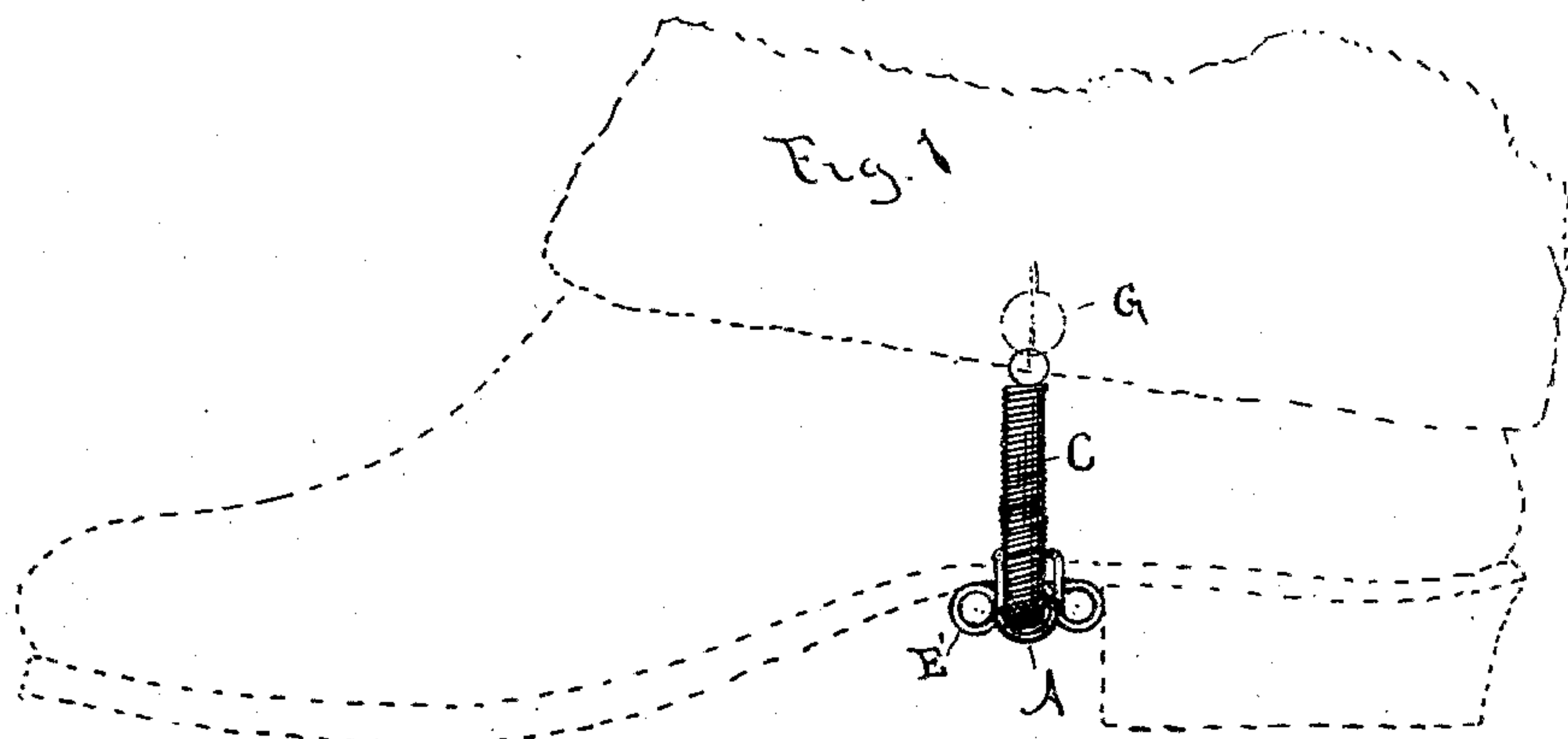
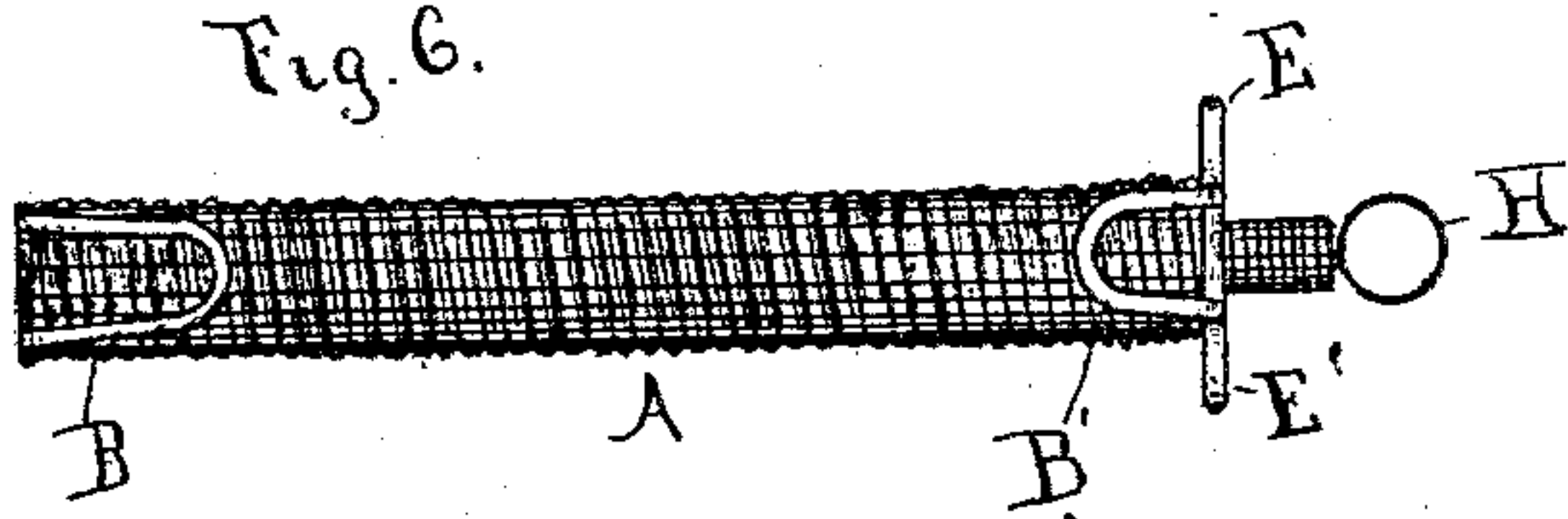


Fig. 6.



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UNITED STATES PATENT OFFICE.

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PANTALOONS-HOLDER.

SPECIFICATION forming part of Letters Patent No. 414,730, dated November 12, 1889.

Application filed July 30, 1888. Serial No. 281,414. (No model.)

To all whom it may concern:

Be it known that I, WENDELL M. SMITH, a citizen of the United States, residing at Rochester, in the county of Monroe, in the State of New York, have invented certain Improvements in Pantaloons-Holders for Bicyclists, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to an improved pantaloons-holder for bicyclists, or device by which the rider's pantaloons are held down and prevented from flapping or being caught in or soiled by the wheel or other portions of the machine.

My invention is represented in the accompanying drawings, in which—

Figure 1 is a side elevation of my improved pantaloons-holder, represented as in use and as seen from the inside of the foot. Fig. 2 represents the same detached, the manner of its attachment to the sole being indicated by the dotted lines. Fig. 3 represents the outer end of my improved pantaloons-holder. Figs. 4 and 5 are respectively side and edge views of my improved screw-hook by which the elastic cord or spring is attached to the pantaloons. Fig. 6 represents my improved pantaloons-holder detached, as seen from above.

My improved pantaloons-holder consists, essentially, of a flexible hollow spring-holder A, which is provided with clips or catches B B', engaging over the edges of the sole below the instep, and of an elastic cord or coiled spring C, attached to the interior of the spring-holder at one end and detachably connected to the bottom of the pantaloons at the other.

The construction and operation of the invention will be readily understood from an examination of the accompanying drawings.

The spring-holder A is secured to the sole D, Fig. 2, of the boot or shoe underneath the instep, and preferably as near the heel as possible, by means of the clips B B', the inwardly-projecting lips of which engage with the upper side of the sole above its edges in the channel between the sole and the upper. The flexibility of the spring-holder permits the clips to be engaged with the edges of the sole, and it is thus held in place.

The device may be worn continuously, the

elastic cord or spring C being concealed within the spring-holder; or it may be readily detached from the sole at any time when such removal is desired. The elastic cord or spring C is of such length that when detached from the pantaloons it contracts and becomes entirely concealed within the spring-holder, the position of which under the hollow of the foot and close to the heel being such that it is out of sight, and yet not likely to be injured by coming in contact with the ground in walking.

As shown in the drawings, the spring-holder is preferably made of a spiral coil of spring-wire, the ends of the wire being bent upward and inward, so as to form the clips, and an additional turn being given to the wire at the outer end, around which the end of the spiral spring C is bent (see Fig. 3) so as to secure it to the spring-holder. Any other suitable manner of constructing the spring-holder may, however, be adopted, and the spring C may be attached thereto in any other preferred manner.

At its inner end the spring-holder may be provided with lugs or projections E, formed in this case by circular turns of wire, to facilitate the attachment or removal of the spring-holder.

As already indicated, the spring C may consist of an elastic cord or of a coil of fine spring-wire. Its upper end may be attached to the pantaloons in any suitable manner; but I prefer to employ the spring-hook represented in Figs. 4 and 5. This consists of a spiral coil of spring-wire F, having the inner end of the same sharpened to a point, so that it may be easily and readily fastened to the pantaloons, preferably on the inside, by screwing it into the cloth and having the outer end bent into the form of a hook G, which engages with a loop H on the end of the spiral spring C. The coiled portion of this screw-hook should, preferably, consist of about two and one-fourth turns of the spring-wire, and the coils should lie close together, so that when screwed into the cloth the separation of the coils by the thickness of the cloth will hold the hook more firmly in position. The hook may be shaped variously, but preferably as shown in the drawings, at G. The lower part of the hook

should be so bent as to extend below the coiled portion, so that when the spring C is attached the tension of the latter will tend to hold the hook in its proper position and prevent its becoming accidentally unscrewed and detached. The upper part of the hook should be so bent as to return upon itself on the inside, so as to form another and secondary hook, as shown in the drawings. This peculiar shape is intended to prevent the eye or loop H on the end of the spring C from becoming accidentally detached from said hook G, but permits such eye to be easily unhooked when desired by carrying it inside of the point of such secondary hook. The middle portion of the hook G should be bent outward in a prominent curve, as shown in the drawings, so as to afford a sure and easy grip for the thumb and finger when screwing the hook into the pantaloons. The screw-hook may be left on the pantaloons, its position on the interior surface of the cloth hiding it from view, and the spring C detached from the hook G when the apparatus is not in use, its freedom from any sharp projecting points or angles preventing its catching.

It is obvious that the clips B B' or the lugs E may be attached to the spring-holder in various different ways other than that shown herein. It is also obvious that any suitable means may be employed for attaching the upper end of the extensible connection to the pantaloons, the connection being provided with a ring or loop H, which is made larger than the connection itself, so as to prevent the end from being drawn into the spring-holder, as indicated in Fig. 4.

The manner of using my improved pantaloons-holder will have been already understood from the preceding description. A pair of the clipped spring-holders being applied to the bicyclist's shoes, as indicated in the accompanying drawings, the connections C are attached to the pantaloons by means of the screw-hooks F or other suitable devices. The pantaloons are held down and prevented from flapping against or becoming caught in or soiled by the wheel or other portions of the bicycle by my invention, which is cheap, durable, and, being placed on the inside, is not visible to the ordinary observer, and even when the spring C remains attached to the pantaloons permits a perfectly-free and natural movement of the pantaloons in walking.

I hereby disclaim, broadly, a pantaloons-holder consisting of a clamp which is adapted to clamp the under side of a boot or shoe, a band extending therefrom, and a clamp which detachably engages the pantaloons, said clamp

consisting of two hooks adapted to engage the opposite sides of the sole and connected by a spring, as the same is not my invention; but

I claim—

1. The combination, with the spring-holder A, provided with clips B B', of the elastic or extensible connection C and the screw-hook F, substantially as described.

2. The combination, with a clamp adapted to clamp the under side of the sole of the shoe, consisting of two hooks arranged to engage the opposite sides of the sole and connected by a spring, and the elastic connection and means for detachably connecting the same to the pantaloons, substantially as and for the purpose specified.

3. In a pantaloons-holder, the combination, with a tubular casing having the clamping-hooks arranged to engage the opposite sides of the sole of a boot or shoe, of a band and a clasp thereon adapted to detachably engage the pantaloons, said band being secured to and operating within the casing, whereby it will be protected, substantially as described.

4. In a pantaloons-holder, the combination, with a tubular casing having the clamping-hooks arranged to engage the opposite sides of the sole of a boot or shoe, of an elastic band and a clasp thereon adapted to detachably engage the pantaloons, said band being secured to and operating within the casing, whereby it will be protected, substantially as described.

5. In a pantaloons-holder, the combination, with a clamp consisting of a spiral spring having at its ends hooks adapted to grasp the opposite sides of the sole of a boot or shoe, of a band and a clasp thereon adapted to detachably engage the pantaloons, said band being secured to and operating within the spiral spring, substantially as described.

6. In a pantaloons-holder, the combination, with a clamp constructed of a single piece of spring-wire formed into a spiral with the hooks B B' at the ends thereof, of a band connected to the clamp and extending through the spiral and a clamp on the free end of said band, substantially as described.

7. In a pantaloons-holder, the combination, with a clamp constructed of a single piece of spring-wire formed into a spiral having the hooks B B' and lugs E' formed thereon, of a band connected to the clamp and extending through the spiral and means for the attachment of the pantaloons, substantially as described.

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