

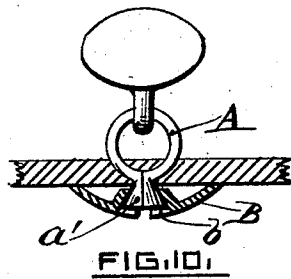
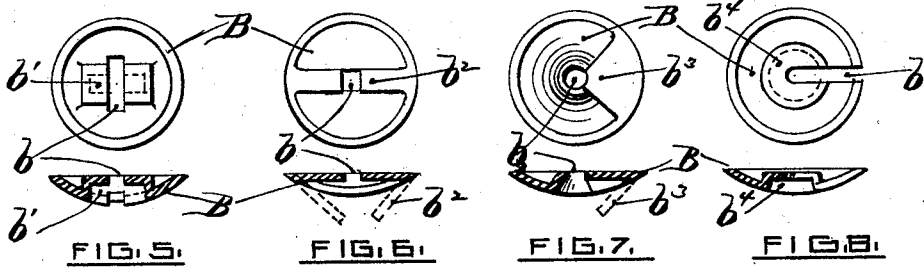
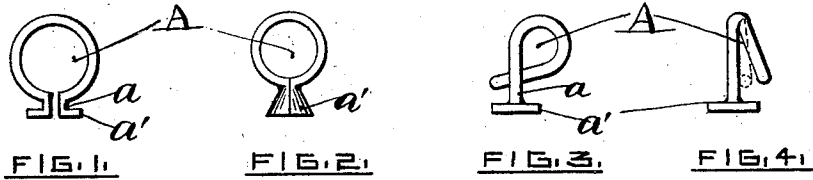
(No Model.)

F. A. SMITH, Jr.

BUTTON FASTENER.

No. 272,913.

Patented Feb. 27, 1883.



WITNESSES.

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UNITED STATES PATENT OFFICE.

FRANKLIN A. SMITH, JR., OF PROVIDENCE, RHODE ISLAND.

BUTTON-FASTENER.

SPECIFICATION forming part of Letters Patent No. 272,913, dated February 27, 1883.

Application filed November 27, 1882. (No model.)

To all whom it may concern:

Be it known that I, FRANKLIN A. SMITH, Jr., a citizen of the United States, residing at Providence, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Button-Fasteners; and I do 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, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

My invention relates to an improved device for attaching buttons to fabrics, and belongs to that class of fasteners which dispense with setting-instruments.

My invention consists practically of a loop or ring for the reception of the shank or eye of a button, said ring terminating on its under side in an enlarged projection, in combination with a spring locking concavo-convex disk or washer, the latter provided with a slot or aperture and indentations for receiving and retaining said loop or ring when applied to the fabric. The washer is placed underneath the fabric, with the ring projecting through and above the fabric.

In the accompanying drawings, made enlarged, Figures 1 and 2 represent the loop or spring-ring of my improved fastener, having an enlarged projection at its lower side, and constituting a part of my invention. Figs. 3 and 4 represent modifications of the loop. Fig. 5 represents a concavo-convex washer which can be used with the loop shown in Fig. 1. Figs. 6, 7, and 9 represent modified forms of a washer which can be used with my improved loop or ring. Fig. 8 represents my improved disk or concavo-convex spring-washer, having an indentation and slot therein, the latter extending from the periphery to the center thereof. Fig. 10 represents my improved button-fastener attached to the material or fabric, with button, &c., complete.

In the drawings, A represents the improved loop or ring, having a shank, *a a'*, formed thereon, and constituting a portion of my invention, while B represents a concavo-convex disk or washer, provided with a slot or aperture, *b*, and indentations *b' b'*, said indentations being formed from the outer or convex side of the washer B, and arranged to receive and retain the shank *a'* of the loop.

B, Fig. 5, represents a washer having a slot, *b*, therein, and having indentations *b'* at right angles to said slot, and is used preferably with the ring shown in Fig. 1.

B, Figs. 7 to 10, represents a washer for the reception of a ring, Fig. 2, having a conical shank, *a'*.

Figs. 3 and 4 represent a ring the shank of which, *a'*, is used in connection with a washer, B, preferably formed as shown in Fig. 8. Fig. 9 represents a washer formed of wire. The loops A can also be made of wire or cut from sheet metal.

In the operation of attaching buttons to fabrics with my improved fastener the button-eye is first sprung into the ring or loop A of the fastener. (See Fig. 1.) The shank of the latter is then pressed through a small hole in the fabric, after which the slot *b* of the washer B, Fig. 5, is passed over and above the projection *a'*. The washer is then partially turned or rotated, when the projections *a'* engage with the indentation or pocket *b'* of the washer, thereby securely holding the fastener in position both vertically and laterally.

I practically prefer the ring or loop shown in Fig. 2 and again represented in Fig. 10 complete, the washer therefor being substantially as shown in Fig. 8, the slot *b* extending from the circumference to the center thereof.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The button-fastener herein described, consisting of a spring loop or ring provided with an enlarged shank, said loop adapted to receive the eye of a button, in combination with a concavo-convex spring-washer provided with a slot and indentations, substantially as described.

2. In a button-fastener, the metallic spring washer or disk B, having a countersunk pocket or indentation at or near its center, a slot, *b*, extending from said indentation to the outer edge of said washer, substantially as shown and described.

In testimony whereof I have affixed my signature in presence of two witnesses.

FRANKLIN A. SMITH, JR.

Witnesses:

CHARLES HANNIGAN,
GEO. H. REMINGTON.