(No Model.)

E. PRINGLE.

GLOVE FASTENING.

No. 380,694. Patented Apr. 10, 1888.

Fig. 1.

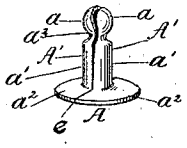


Fig. 2.

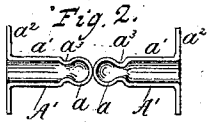


Fig. 3.

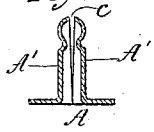


Fig. 4.

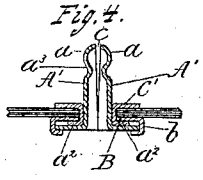


Fig. 5.

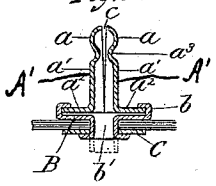


Fig. 6.

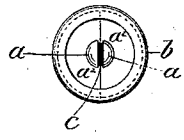


Fig. 7.

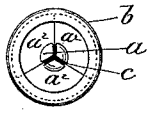


Fig 8

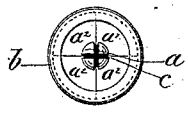
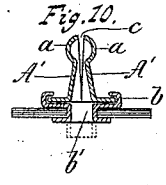


Fig. 9.



Fig. 10.



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UNITED STATES PATENT OFFICE.

EUGENE PRINGLE, OF GLOVERSVILLE, NEW YORK.

GLOVE-FASTENING.

SPECIFICATION forming part of Letters Patent No. 380,694, dated April 10, 1888.

Application filed April 17, 1886. Serial No. 199,261. (No model.)

To all whom it may concern:

Be it known that I, EUGENE PRINGLE, a citizen of the United States, residing at Gloversville, in the county of Fulton and State of New York, have invented certain new and useful Improvements in Spring-Studs for Buttons, of which the following is a specification.

My invention relates to spring-studs for buttons in which the stud is composed of duplicate sections, which include in each a head portion, stem portion, and a base portion, all made in continuity from a single piece, and a base holding and binding piece, by means of which the several duplicated sections will be securely held together, and provided with means for ready attachment to the fabric or leather of the article the stud is to be used with.

The objects of my invention are to provide in a spring-stud for buttons a series of two or more elastic stem and head sections, made in continuity with base portions, and duplicates of each other, which will be securely held in operative position under all circumstances, without liability of derangement, and also to provide means by which this spring-stud will be readily secured to the leather or fabric of articles—such as gloves, boots, &c.—to which this stud is adapted for use. I attain these objects by the means illustrated in the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a perspective view of the sections of the stud assembled before being secured together. Fig. 2 are views of two sections which compose the stud proper. Fig. 3 is a sectional view of the stud proper. Fig. 4 is a sectional view of the stud proper with its sections secured together and attached to a piece of leather or fabric. Fig. 5 is a sectional view of the stud completed and provided with my preferred means of securing it to the fabric. Fig. 6 is a plan view of my improved stud composed of two sections. Fig. 7 is a plan view of a stud composed of three sections. Fig. 8 is a plan view of a stud composed of four sections. Fig. 9 is a sectional view of a stud having a modified form of stem with binding-piece omitted, and Fig. 10 is a sectional view of the same with the sections secured together and attached to the fabric by another modified form of attachment.

The same letters of reference refer to like parts or elements throughout the several views.

In the drawings, A represents my improved spring-stud, which is composed of two or more sections, A′ A′, as may be preferred. These sections are preferably made a duplicate of the other in form and size and relative proportions of parts, and are preferably made with a shell form in its stem and head portions. Each of these sections is made from a single piece of metal, so as to include the head portion *a*, stem portion *a′*, and horizontal base portion, a^2, all in continuity, as shown. In each of said sections there is provided below the holding head portion *a* a reduced portion or neck, a^3, for engagement with any suitable catching device (not shown) this stud is used with. When these sections A′, (two or more,) composing the stud proper, are arranged together in the order shown in Figs. 6, 7, and 8, with the edge or edges *e* of each of the base portions a^2 adjoining the edge or edges of the neighboring base portion, as shown in said figure, they are secured in position from shifting in relation to each other, with the head and stem portions in the same relative vertical lines and with the base portions on the same plane.

B is the holding and binding piece, made with a form corresponding with that of the assembled base portions a^2, and provided with an annular flange, *b*. This holding and binding piece receives the several base portions *a* of sections A′, and has its annular flange clinched down on the marginal edges of said base portions, as shown in Figs. 4, 5, and 10. In Fig. 4 this holding-piece B is applied to the assembled base portions a^2 a^2 from their upper side, with flange portion *b* clinched on the lower side of the marginal edges of the same. In Figs. 5 and 10 this piece is shown to be applied to the lower side of said base portions, with its flange *b* clinched on the opposite side marginal edge.

For convenient and ready attachment of this stud to the leather or fabric, I make with the holding and binding piece B clinching-tube *b′*. (Shown by full and dotted lines in Figs. 5 and 10.) This clinching-tube is made to project from the central portion of piece B in direction opposite from the projection of annular clinching-flange *b* and downwardly, as shown.

This clinching-tube can be clinched directly down on the fabric, or on a washer, C, interposed between the fabric and the clinching-tube when the latter is turned, as shown in Fig. 5. In Fig. 4 this stud is shown to be secured to the leather or fabric by means of eyelet C′, which forms no part of this invention.

The slit or slits *c* between the head and stem portions of sections A′ A′ are preferably made to taper gradually from the upper end of the head of the stud toward the base portions, as shown. The advantageous result had from this form of slit is that the stem portions of the sections are made relatively more stiff than when the slits are made with one width throughout, as heretofore in spring-studs; yet it is evident that such old form of slit may be made between the head and stem portions of the sections of the stud, and that with such uniform width of slit or slits in the stud the stem and head portions will be comparatively more stiff than in the old forms of construction, because of the secure holding and binding of the base portions of the stud in the same plane and without liability of shifting or moving in any direction.

By means of these above-described improvements I am enabled to produce spring-studs with but few parts, and with but little manipulation and at little expense, and with means for rapid and convenient attachment to leather or fabric.

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

1. A spring-stud having outwardly-turned sectional base portions, and in combination with the same the binding-piece B, clinched or turned to hold the sections of the said base portions on the same plane, substantially as and for the purposes set forth.

2. In a slitted spring-stud, the combination, with duplicate sections A′ A′, two or more thereof, having each a head portion, a stem portion, and a horizontal base portion, made from a single piece, of the base holding and binding piece B, arranged on one side of the joined base portions of the sections of the stud, and secured therewith to hold them on the same plane and securely together, substantially as and for the purposes set forth.

3. In a slitted spring-stud, the gradually-tapering slit (or slits) *c*, extended downwardly between the upper portions of the head of the stud and from the same to the joined base portions of the sections of the stud, with said joined portions held by binding-piece B, arranged on one side of said joined base portions and secured therewith, substantially as and for the purposes set forth.

4. A slitted spring-stud provided with longitudinal slit or slits *c* between the oppositely-located and neighboring head sections and stem sections, and having below the head sections the reduced portions or necks a^3 a^3, the stem portions of the sections A′ being secured from shifting in relation to each other by binding and holding piece B, secured to the base portions, which are made continuous with the respective stem portions, substantially as and for the purposes set forth.

5. The combination, with a stud having its holding-stem in connection with its horizontal base, of the base-holding piece B, made integral with the downwardly-projected central clinching-tube, *b*′, and having its marginal edge *b* turned on the upper surface of said base and the lower end of the clinching-tube turned tightly against the lower side of the fabric, or on a washer against the fabric, substantially as and for the purposes set forth.

EUGENE PRINGLE.

Witnesses:
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