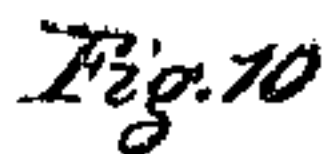
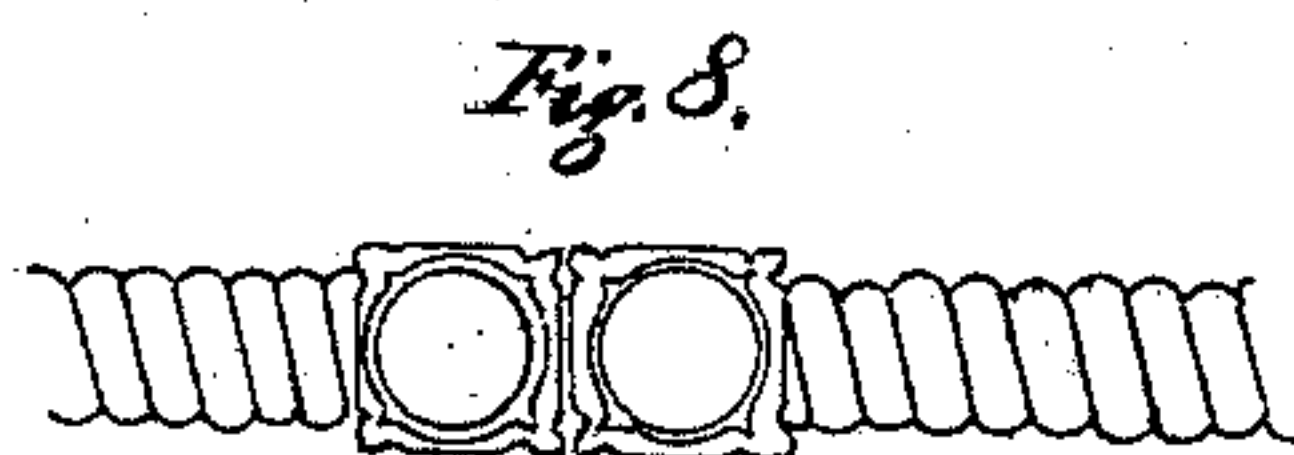
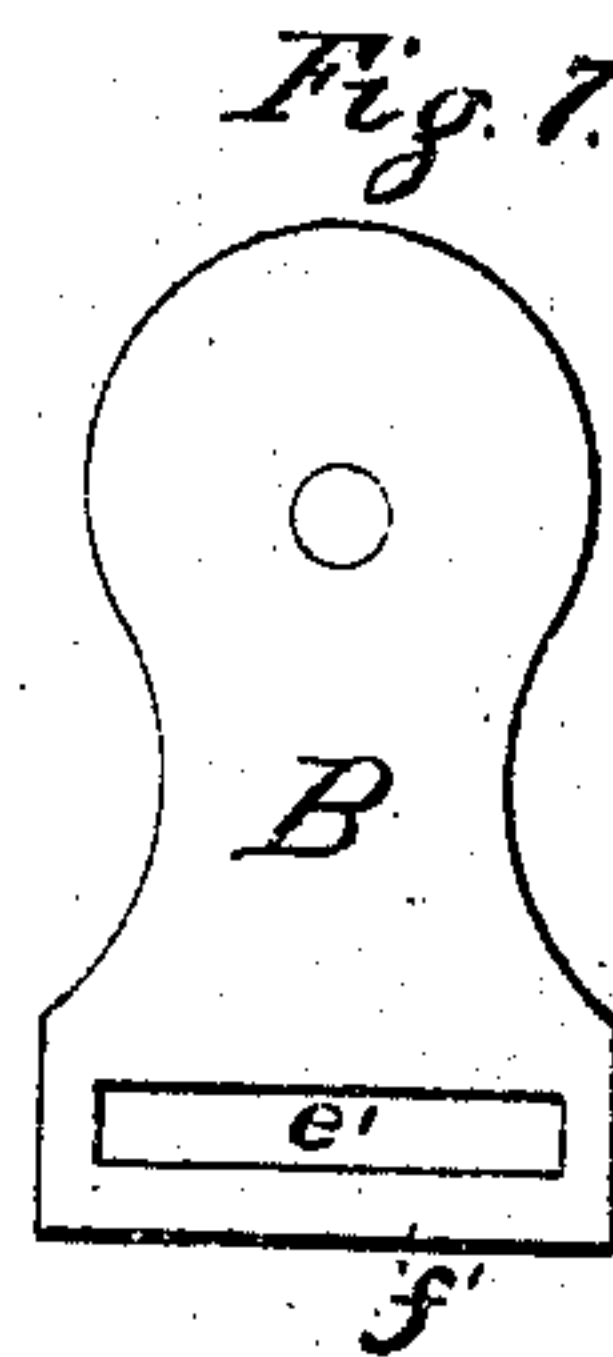
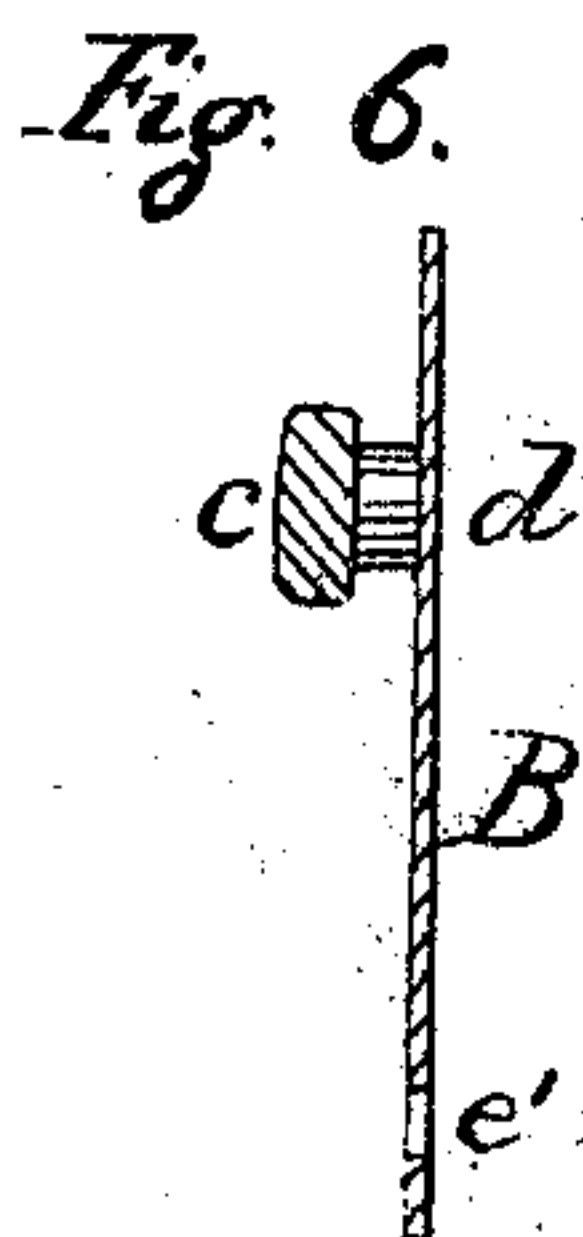
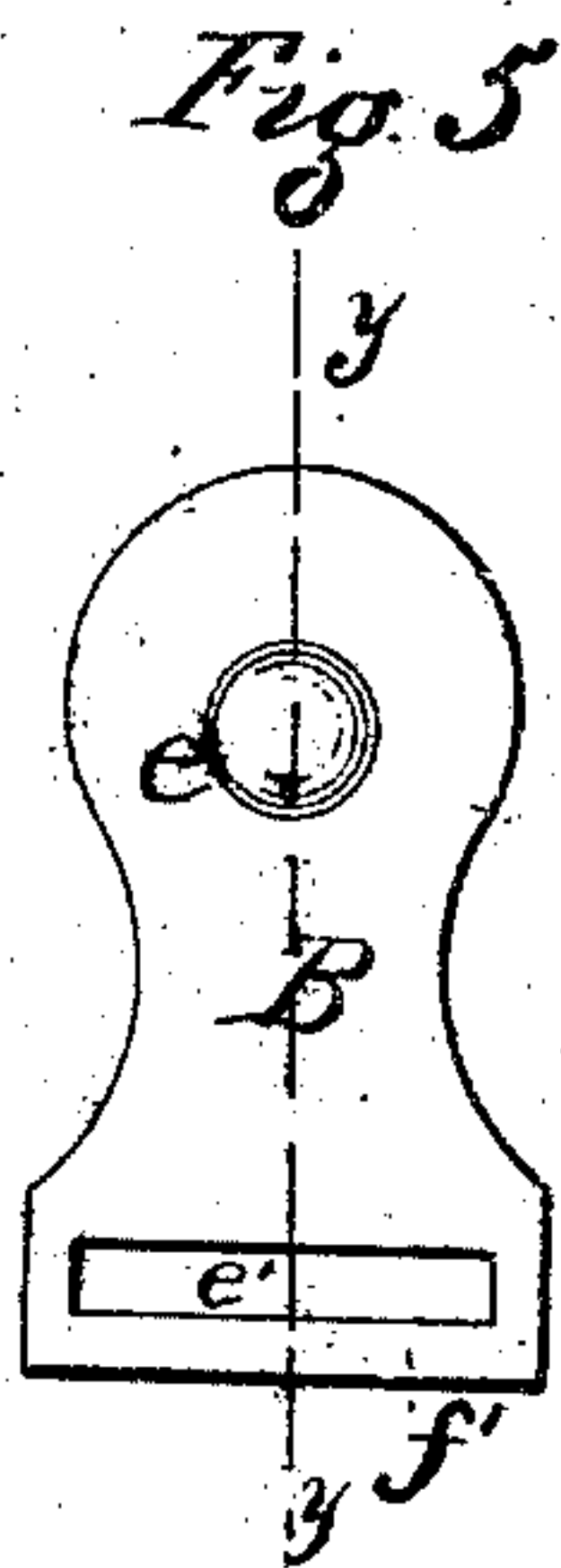
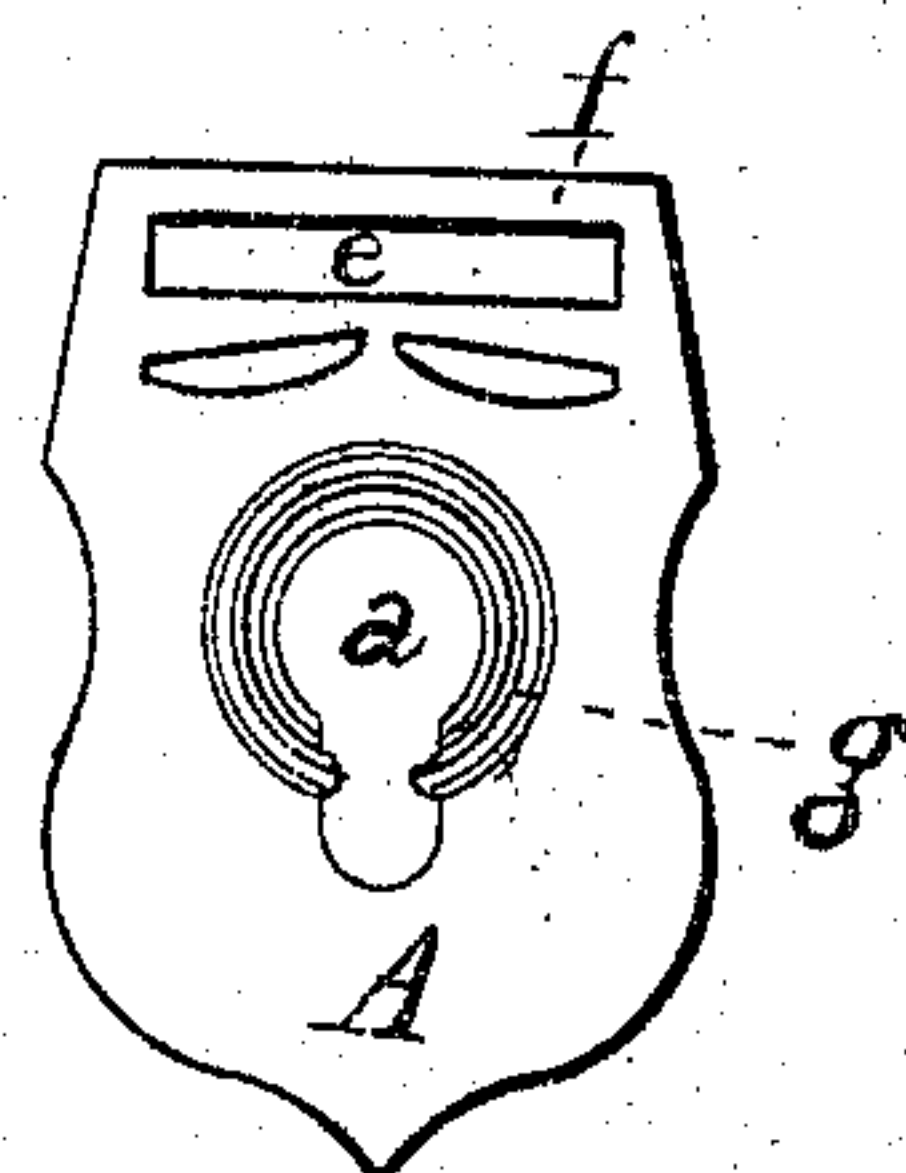
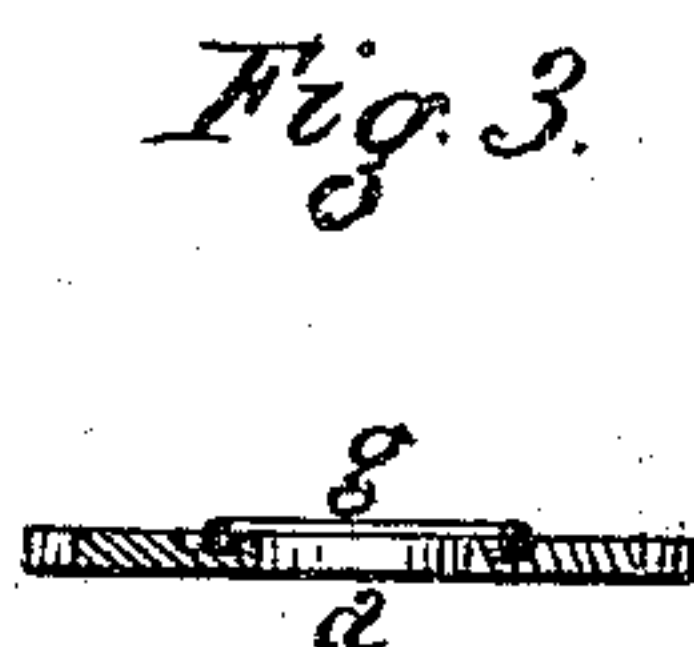
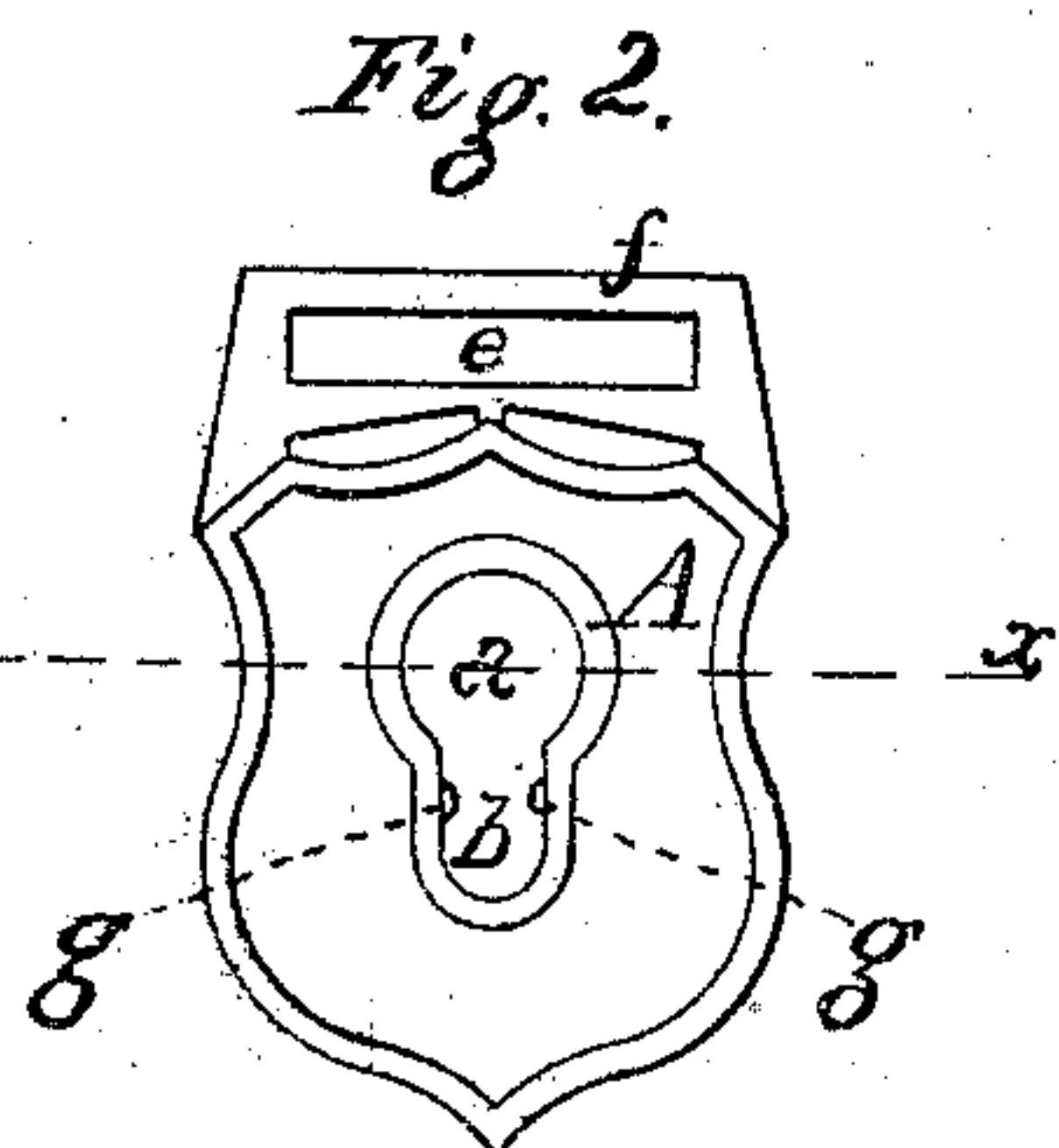
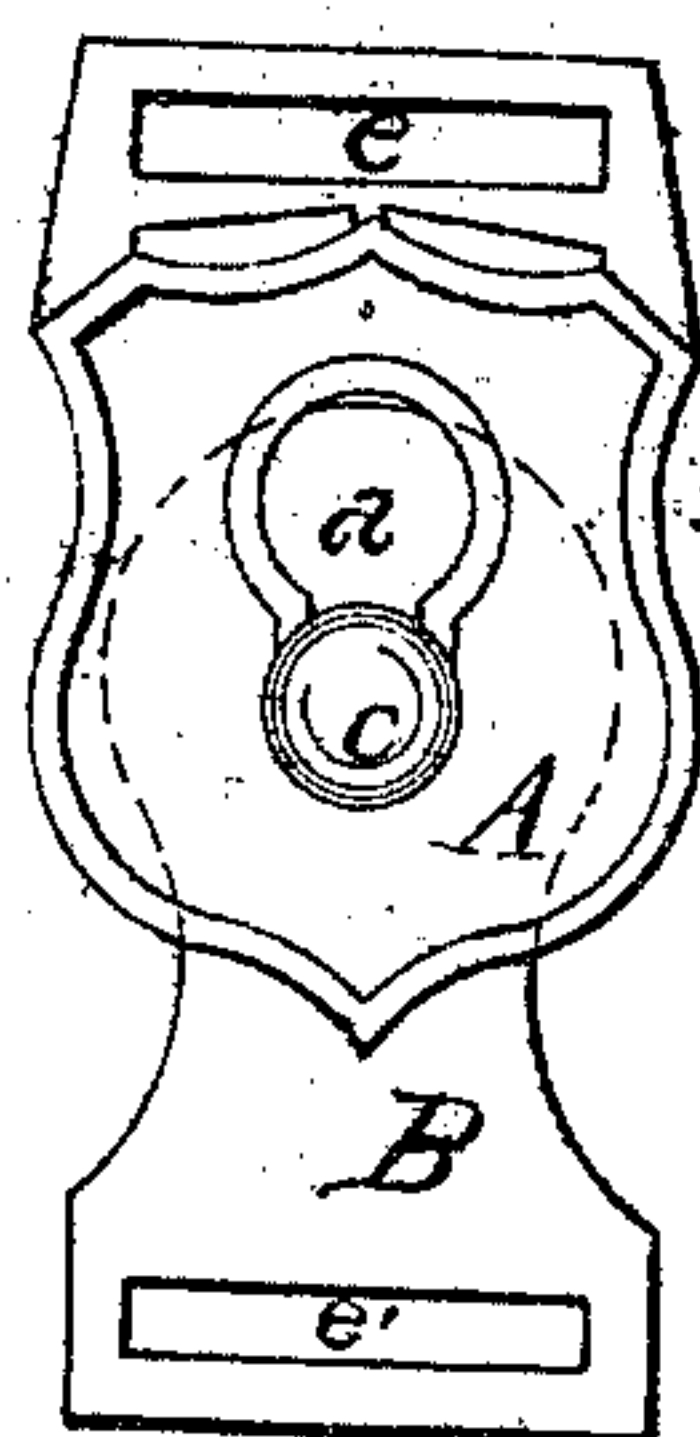


F. E. Drake.

Spring Clasp.

No. 43,152.

Patented Jun-14-1864



Witnesses.

J. Snowden
F. Schmidt.

Inventor.

F. E. Drake
by his Atty
Baldwin & Son

UNITED STATES PATENT OFFICE.

FRANCIS E. DRAKE, OF CHICOPEE, MASSACHUSETTS, ASSIGNOR TO HIMSELF AND GEORGE ARMS, OF SAME PLACE.

SPRING CLASP OR BUTTON.

Specification forming part of Letters Patent No. 43,152, dated June 14, 1864.

To all whom it may concern:

Be it known that I, FRANCIS E. DRAKE, of Chicopee, in the county of Hampden and State of Massachusetts, have invented a new and useful Spring Clasp or Button for Sword-Belts, Braces, Jewelry, &c.; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a front view of my clasp united; Fig. 2, a front view of the plate carrying the eyelet and slot and the spring to secure and hold the button in place. Fig. 3 is a sectional view of the same at the line *xx* of Fig. 2. Fig. 4 is a back view of the same, showing the spring in place. Fig. 5 is a front view of the plate carrying the button. Fig. 6 is a section of the same at the line *yy* of Fig. 5. Fig. 7 is a back view of the same. Fig. 8 is a front view of my improvement as applied to a bracelet or jeweler's clasp. Fig. 9 is a back view of the plate carrying the eyelet-slot and spring. Fig. 10 is a side view of the same. Fig. 11 is a back view of the plate carrying the button, and Fig. 12 is a side view of the same.

It is the object of my invention to provide a secure clasp or button fastening, susceptible of a vibratory motion or of being made rigid, that can be united or separated with ease and when united will not open from use; and to this end my invention consists in a clasp made of two plates of metal, one of which carries a stud terminating in a button and the other an eyelet to receive the button, a slot to receive the shank of the stud, and a spring to retain the shank within the slot, and these so united as to permit the shank of the stud to vibrate within the slot where it rests, or both plates to be rigidly united together, while in either form the clasp can be separated with ease, but will not be liable to come apart from or while in use.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

From sheet metal of suitable strength cut a blank, A, in any ornamental shape desired. From the center, or near it, punch a hole, *a*, and

a slot, *b*, to receive the button *c* and the shank *d*, which is fastened securely in or near the center of the other leaf or half, B, of the clasp, also cut from the sheet metal. The upper and lower edges of the leaves A and B of the clasp must be punched with suitable openings, *e* and *e'*, so as to leave a bar or bars, *f* and *f'*, by which to attach the leaves of the clasp to the articles they are to be used with, or it is obvious that rings, rivets, or solder may be used for such attachments.

Around the central opening, *a*, in the plate A, and on the inner or under surface of the plate, from one side of the slot *b* to the other, a continuous depression or countersink is made near to the edge of the opening and wide and deep enough to receive a wire spring, *g*, and retain it even with or below the surface of the plate. The spring *g* is fastened at its center by a screw-rivet or solder in the groove in the plate, while its ends project over or beyond the edges of the slot and form a stop to retain the shank or stud *d* when resting in the slot *b*, as shown in the drawings.

Now, when the button *c* of the plate or leaf B is passed through the central opening, *a*, in the plate or leaf A, the stud or shank *d* will be easily slipped past and between the ends of the spring *g* into the slot *b*, where it will be retained by the button *c* and the projecting ends of the spring. It is obvious that to remove the shank to separate the leaves of the clasp it will be necessary to use just force sufficient to draw the shank from between the ends of the spring when the button will come opposite to and can be withdrawn easily through the central opening. It is also obvious that if the shank *d* be made round and fit loosely in the slot *b* the leaves will have a vibratory motion, and can be adapted to various uses requiring such a yielding motion in the clasp, or it will be equally manifest that by making the shaft *d* square and to fit neatly in the slot *b* the leaves will have no vibration, but be rigid and better adapted to other uses.

When it is desired to use my clasp in fine jewelry, it is obvious that the leaves 9 and 11 may be soldered to the ends of the chain, bracelet, or locket to which they may be attached, while the slot 10 and stud or button 12 are secured in the under plate of the clasp,

and such fastenings can be made either flexible or rigid by the means already described or by inserting the stud into its slot at the side of the clasp 9, and letting the two inner edges of the leaves meet with a close joint. These edges will brace the clasp rigidly, as shown in Fig. 8, and prevent it from vibrating, while by curving the inner edges of the leaves the clasp will be flexible.

My invention is obviously of a wide and beneficial application to wearing-apparel and to many other uses, and is capable of being advantageously substituted for many known

fastenings and of a great variety of ornamentation.

What I claim as my invention, and desire to secure by Letters Patent, is—

A clasp or button fastening constructed, arranged, and operating substantially in the manner described.

In testimony whereof I have hereunto subscribed my name.

FRANCIS E. DRAKE.

Witnesses:

K. HENDALL,

S. F. STEBBINS.