

*F. I. Palmer,  
Button.*

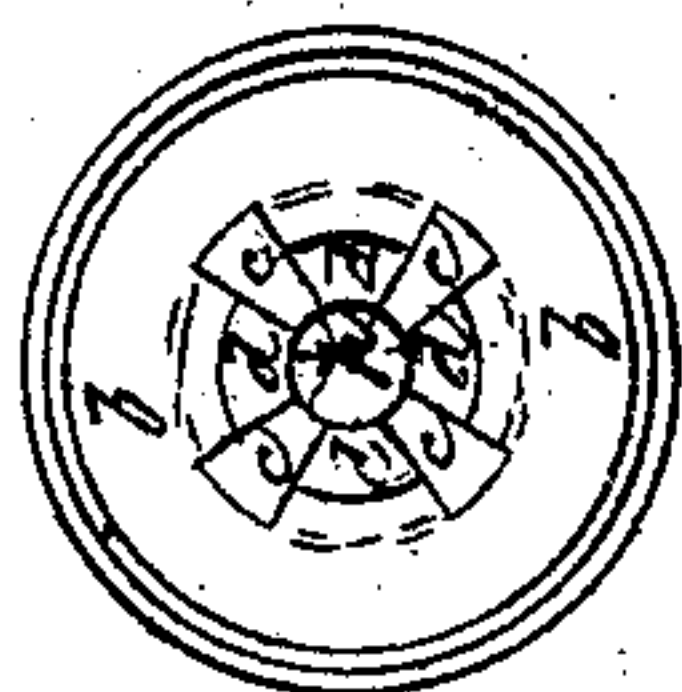
*No. 53,472.*

*Patented Mar. 27. 1866.*

*Fig. 4.*



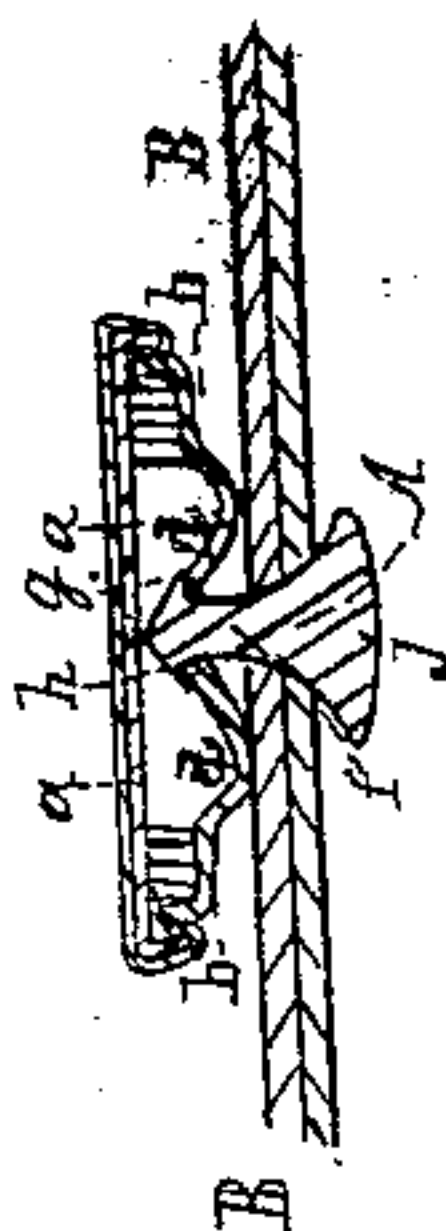
*Fig. 5.*



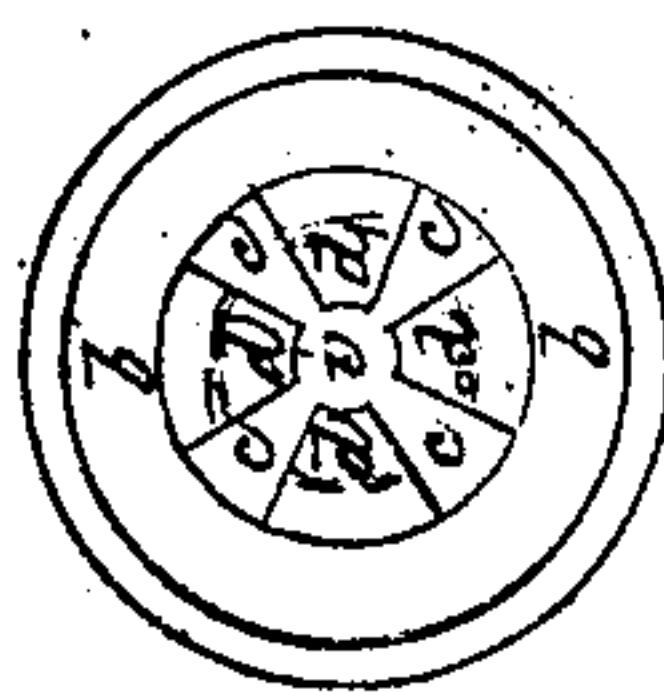
*Fig. 6.*



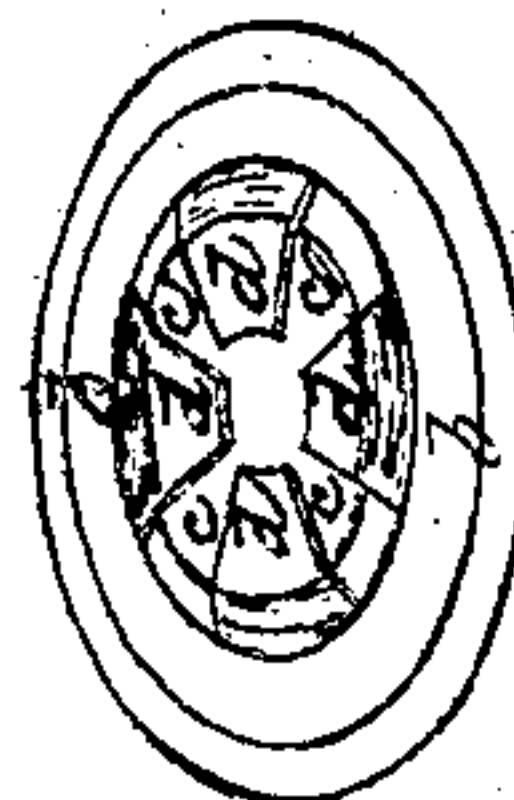
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



*Witnesses,  
Joseph Ingraham  
Israel Bush*

# UNITED STATES PATENT OFFICE.

FREDERIC INGERSOLL PALMER, OF SPRINGFIELD, MASSACHUSETTS.

## IMPROVEMENT IN FASTENINGS FOR GARMENTS.

Specification forming part of Letters Patent No. 53,472, dated March 27, 1866.

*To all whom it may concern:*

Be it known that I, FREDERIC INGERSOLL PALMER, of Springfield, in the county of Hampden and State of Massachusetts, have invented certain Improvements in Fastenings for Garments and other Articles, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a section through my improved button, showing the manner of attaching it to a garment. Fig. 2 is a plan of the back or collet of the button. Fig. 3 is a perspective view of the same. Fig. 4 is a view of the stud by which the button is attached to a garment. Fig. 5 is a plan of the inner side of the collet or back of the button with the stud in place. Fig. 6 represents a stud of a different construction, to allow of the button being detached, if desired.

My invention consists in forming and attaching buttons and ornaments to garments and other articles without sewing, riveting, or clinching, by which they may be securely attached in an expeditious manner. This I accomplish by forming the back or collet of a button or ornament in such a manner that a detached stud may be forced through an opening in the back or collet, which then springs over a shoulder or into notches on the end of the stud, and secures the button or ornament in place.

To enable others skilled in the art to understand and use my invention, I will proceed to describe the manner in which I have carried it out.

In the said drawings, *a* is the shell or front of a button to which is attached the back or collet *b*, in which are punched openings *c*, the portions between which are bent up, as seen in Figs. 1 and 3, forming springs *d*.

*A* is a stud of the form seen in Figs. 1 and 4, the shank *f* of which is turned down so as to leave a shoulder, *g*, from which it slopes to a point, *h*, which facilitates its entrance into the opening *i*, Fig. 2, between the springs *d*.

Any required number of springs may be cut in the collet or back of the button.

A hole being made in the article *B*, to which the button is to be attached by means of any

sharp-pointed instrument, the point *h* of the shank *f* of the stud *A* is forced through, or in some cases, if preferred, the point *h* of the shank may be forced through the material without first making a hole. The button is then placed with the opening *i* on the point *h* of the stud and pressure applied so as to force the springs *d* over the shoulder *g*, the springs closing down around the shank, as seen in Fig. 1, holding the button firmly to the garment, the large head *j* of the stud preventing it from being pulled through the cloth or other material.

It will be seen that the form of the springs *d* is such (being bent near the center) that any strain brought onto the button will tend to draw the springs tightly together under the shoulder *g*, and thus hold the parts more firmly in place, and that when the button is once secured to the cloth or other material it cannot be detached if turned or bent over in any direction.

When it is desired to make the button removable, instead of forming a shoulder on the full circumference of the stud, as above described, the shank may be made plain, as seen in Fig. 6, with notches *k*, into which the springs in the collet or back will enter when the stud is forced into place, the number of notches corresponding to the number of springs in the collet; and when so constructed, by turning the button on the shank, so as to bring the full portion of the shank opposite to the openings between the springs, the bottom can be instantly removed, the springs being in correspondence with the plane surface of the shank of the stud. In other words, though the springs and the part they act upon are the same, their continuity is interrupted so as to admit of the release of the attachment.

I have thus far described my invention as applied to buttons and the method of attaching them to cloth and other materials; but other ornaments may be attached in a similar manner to various articles or things by using a stud of the proper length and snapping the ornaments to which the springs are attached onto the stud—for instance, plate trimmings and other ornaments for harnesses, and my invention may also be applied to jewelry of various kinds.

A plain stamped button made in one piece



without a collet may be struck up so as to form springs and openings similar to those in the collet of the above-described button.

It is contemplated within the scope of this invention to connect two buttons or other objects together to form links or bonds of union, by simply duplicating the means of attachment herein shown.

Without intending to limit myself to the construction of buttons or any other subject or class of subjects, but intending to apply

my invention to the attachment of ornaments to wearing-apparel, harness, and to everything for which it is applicable, I claim—

The attachment or fastening composed of the springs and the pin or stud, substantially as herein shown and described.

FREDERIC INGERSOLL PALMER.

Witnesses:

W. H. ALLIS,  
J. R. BURNETT.