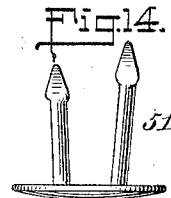
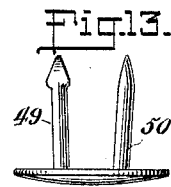
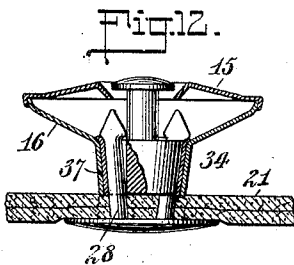
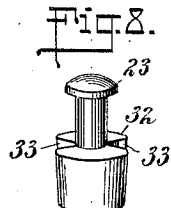
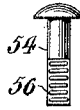
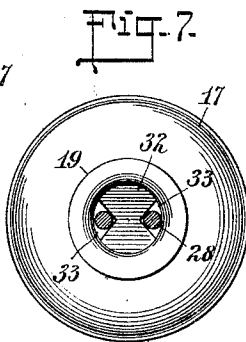
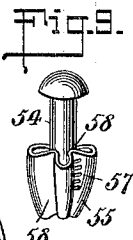
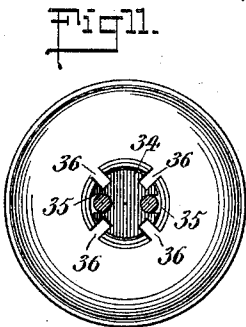
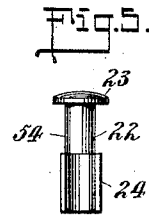
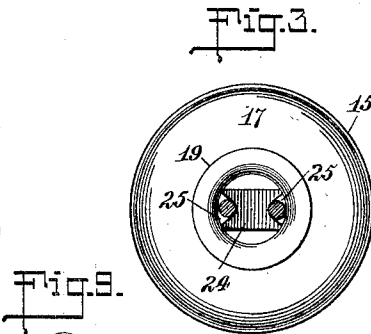
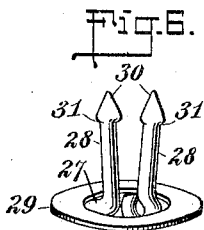
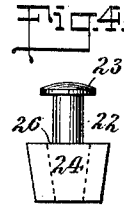
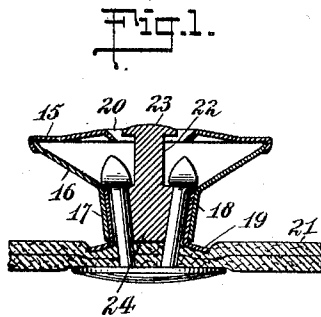
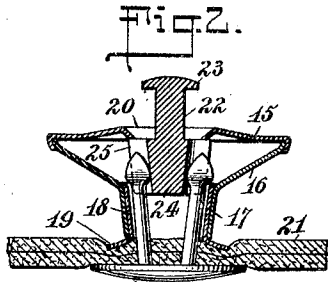


F. R. WHITE.
BUTTON.

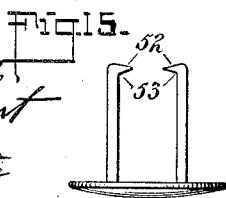
APPLICATION FILED SEPT. 28, 1912.

1,071,123.

Patented Aug. 26, 1913.



WITNESSES
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UNITED STATES PATENT OFFICE.

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BUTTON.

1,071,123.

Specification of Letters Patent.

Patented Aug. 26, 1913.

Application filed September 28, 1912. Serial No. 722,309.

To all whom it may concern:

Be it known that I, FRANKLIN R. WHITE, a citizen of the United States, and a resident of Watertown, in the county of Litchfield and State of Connecticut, have made and invented certain new and useful Improvements in Buttons, of which the following is a specification.

My invention relates to an improvement in buttons, and more particularly to that kind or class thereof known and generally referred to as "bachelor buttons", which are adapted to be secured or attached by hand to the garment, cloth or other material, by means of a metal fastener.

One of the objects of my invention is to provide a button of this character which may be easily and quickly attached to, or detached from the garment, cloth or other fabric.

Another object is to provide a button in which the metal fastening device is positively locked or secured within the button when the latter is attached to the material, thereby preventing any accidental removal of the same.

With these and other objects in view, my invention consists in certain novel features of construction and combinations of parts, as will be hereinafter fully described and pointed out in the claims.

In the accompanying drawings, Figure 1 is a vertical sectional view of my improved button after having been attached to the material. Fig. 2 is a similar view showing the movable key in its raised position as it would be before the parts are locked in position, or after they have been unlocked to permit the button to be removed. Fig. 3 is a bottom plan view of the button as shown in Fig. 1, the prongs of the fastener being shown in section. Fig. 4 is a side elevation of the movable key. Fig. 5 is an end elevation of the same. Fig. 6 is a perspective view of the metallic fastener. Fig. 7 is a view similar to Fig. 3, showing a modified form of the movable key. Fig. 8 is a perspective view of the movable key shown in Fig. 7. Fig. 9 is a perspective view of still another modification of the movable key. Fig. 10 is a detached view in elevation of the shank of the key shown in Fig. 9. Figs. 11 and 12 are views similar to Figs. 3 and 1, showing another modification of my improved button. Figs. 13, 14 and 15 are

views in elevation of modified forms of the metal fastener.

Referring to the drawings, it will be seen that the body of the button consists of a top or face plate 15, to which is secured the lower or bottom plate 16, which preferably has the hub 17 formed integral therewith, although it will of course be understood that the hub may be made separate therefrom and secured thereto in any suitable manner if desired. Within the hub 17, a reinforcing member or ring 18 is secured in any suitable manner, and is preferably provided with an outwardly extending flange 19, adapted to bear against the material 21, to which the button is attached. The face plate 15 is provided with a suitable opening or aperture 20, through which passes the neck or shank 22 of the movable key, which is provided at its upper or outer end with a head 23, and at its lower or inner end with an enlargement or locking portion 24, which is preferably "keystone" shaped, as clearly shown in Figs. 4 and 5, the inclined end surfaces thereof being provided with suitable inclined grooves 25, adapted to receive the prongs of the fastener, as indicated in Fig. 2, the depth of said grooves being such that shoulders 26 are formed on the upper surface of the enlargement 24 on both sides of the neck or shank 22, as shown in Figs. 1 and 4. The enlargement or "keystone" shaped portion 24 is of such a size that when the key is in its innermost position, as shown in Fig. 1, it will fit snugly within the hub of the button, and the upper surface of said enlargement is so proportioned that, when the key is in its uppermost position, as shown in Fig. 2, it will contact with the inner surface of the face plate 15, thereby preventing the enlargement 24 from passing therethrough, and retaining the key within the button.

In Fig. 6, I have shown the metallic fastener as consisting of a piece of wire bent to form a head portion 27 and upwardly extending prongs 28, said head portion being attached or secured to a flanged cap 29, in the well known manner, although it will of course be understood that I do not wish to limit myself to the particular construction thus shown, as this feature forms no part of my invention. The prongs preferably diverge slightly, as shown in said figure, and their outer ends are pointed and

flattened or enlarged, as indicated at 30, whereby shoulders 31 are formed thereon for the purpose hereinafter described.

In applying the button, the prongs 28 of the fastener are forced through the cloth or other material and the button is placed over their projecting ends, the key being in its raised or outermost position, with the extreme ends of the prongs resting in the lower portions of the grooves 25, as clearly shown in Fig. 2. The button and fastener are pressed closely together to clamp the cloth firmly between them, and the key is then pressed inwardly, the prongs 28 spreading apart slightly to permit the locking portion 24 to pass between them, until it assumes its innermost position, as shown in Fig. 1, in which position the prongs 28 lie within the recesses 25 and the shoulders 31 formed at the ends of the prongs will overlie or engage the shoulders 26 formed on the upper surface of the locking portion 24, as clearly shown in said figure, thereby locking the parts securely together. Any strain imposed upon the button or fastener will simply tend to draw the key inward, due to the co-action between the shoulders 31 and 26, whereby the parts will be still more firmly locked in position.

Should it become necessary to remove the button for any reason, the button and fastener are pressed together, thereby forcing the prongs 28 slightly farther within the button, and the key is then raised or drawn outwardly by grasping the head 23 thereof with the fingers and pulling thereon, or by inserting a knife or other suitable article beneath said head and prying upwardly, the prongs springing apart sufficiently to permit the locking portion 24 to pass between them into its outermost position shown in Fig. 2, after which the button and fastener can be easily separated by simply pulling them apart.

In Figs. 7 and 8, I have shown a modified form of the movable key, in which the locking portion 32 has the shape or form of a frustum of a cone, and is provided with suitable inclined grooves 33. In other respects the button and fastener are the same as shown and described above.

In Figs. 9 and 10, I have shown still another modification of the movable key, comprising two parts, the shank 54 and the locking portion 55. The lower part of the shank is preferably provided with notches, corrugations or grooves 56, as shown in Fig. 10, and the locking portion 55, which consists preferably of a piece of thin or sheet metal formed as shown in Fig. 9, having a central opening adapted to receive the lower portion of the shank 54, and oppositely disposed inclined grooves 58 adapted to receive the prongs of the fastener, is secured to the shank by inserting the lower part of the

latter within the central opening formed in the locking portion 55 and pressing or pinching the opposite sides thereof against the shank, whereby the metal will be forced into engagement with the notches or grooves 56, as indicated at 57, thereby retaining the locking portion firmly in position upon the shank. The key is positioned within the button in the manner indicated in Figs. 1 and 2.

In Figs. 11 and 12, I have shown another modification of my device in which the locking portion 34 of the movable key is cylindrical and provided with suitable inclined grooves 35, the key being otherwise substantially the same as the keys shown in Figs. 4, 5 and 8. Instead of providing the reinforcing ring 37 with an outwardly extending flange at its lower edge, as shown in Figs. 1 and 2, I provide a number of inwardly turned or bent lugs or lips 36, upon which the key is adapted to rest when in its innermost position, and which will prevent the key from passing or falling out through the hub of the button when it is detached from the material. It will of course be understood that these lugs or lips could be formed on the lower edge of the hub of the button, if so desired, without departing from the spirit of my invention, and that they may be of any desired shape or size.

In Fig. 13, a fastener is shown similar to the one shown in Fig. 6, but having only one of the prongs 49, provided with a flattened or enlarged end portion, the other prong 50 being simply pointed, as shown.

In Fig. 14, I have shown a fastener in which one prong 51 is slightly longer than the other, in order that if there is any slight difference in the depth or thickness of the locking portions of the keys, one or the other of the prongs will be sure to engage therewith to lock the fastener in position.

In Fig. 15 I have shown still another modification of the fastener, the prongs being provided at their ends with inwardly extending portions 52, whereby shoulders 53 are formed, said portions 52 being formed by bending the extreme ends of the prongs inward or in any other suitable manner.

What I claim is:—

1. A button of the character described, consisting of a body and a hub, and an apertured top plate, a movable key contained within and vertically movable in said hub and provided with grooves extending from the lower to the upper side thereof, and having a headed shank extending through the aperture in said top plate, in combination with fastener having prongs adapted to fit within and extend through said grooves and provided with enlarged ends for engaging the upper side of said key whereby the fastener is locked in position, substantially as described.

2. A button of the character described,
consisting of a body comprising a bottom
plate, a hub, and an apertured top plate se-
cured thereto, and a movable key comprising
5 a keystone shaped locking portion, located
within said hub and having shoulders, and
grooves in its inclined surfaces, and a
headed shank extending through said aper-
ture, in combination with a fastener having
10 prongs adapted to lie within said grooves,
said prongs being provided with enlarged

ends for engaging said shoulders whereby
the fastener is locked in position, substan-
tially as described.

Signed at Waterbury, in the county of 15
New Haven and State of Connecticut, this
24th day of September A. D. 1912.

FRANKLIN R. WHITE.

Witnesses:

ROLAND H. CAMP,
KATHARINE A. RUBEN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."