No. 666,005. Patented Jan. 15, 1901.

T. W. FERGUSON.

BUTTON.

(Application filed July 30, 1900.)

(No Model.)

Fig. 1.

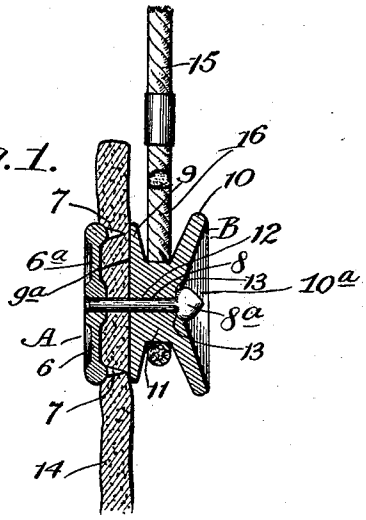


Fig. 2.

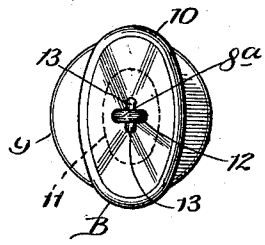


Fig. 3.

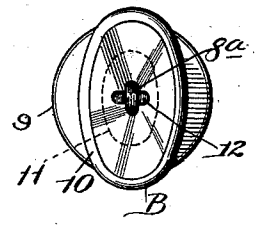
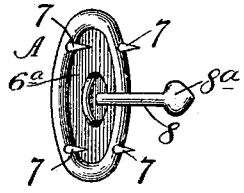


Fig. 4.



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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

THOMPSON W. FERGUSON, OF NEW YORK, N. Y.

BUTTON.

SPECIFICATION forming part of Letters Patent No. 666,005, dated January 15, 1901.

Application filed July 30, 1900. Serial No. 25,218. (No model.)

To all whom it may concern:

Be it known that I, THOMPSON W. FERGUSON, a subject of the Queen of Great Britain, residing at New York, in the county and State of New York, have invented certain new and useful Improvements in Buttons, of which the following is a specification.

This invention relates to buttons; and it has for its object to provide a simple and improved button capable of ready and convenient attachment and detachment without sewing and which will when in operative position have a positive and firm hold upon the fabric to which it is secured.

The invention consists in the novel construction and arrangement of parts hereinafter specified.

In the drawings which form part of this specification, Figure 1 is a transverse sectional view of a button constructed according to my invention, showing the same in operative position. Fig. 2 is a front view of the button in detached and partly-assembled position. Fig. 3 is a front view of the button in detached and fully-assembled position. Fig. 4 is a perspective view of the button-back.

Like reference characters denote corresponding parts in the several views.

Referring to the drawings, A designates the button-back, and B the button-front, which parts A and B constitute the two relatively separable members of my improved button.

The member A consists, preferably, of a metallic plate 6, having a spring quality, from one face of which project a plurality of pointed prongs 7, arranged adjacent the periphery thereof, and a locking-tongue 8, arranged centrally thereof and provided, preferably, with a spear-head 8^a, the function of which will be hereinafter fully set forth. The plate 6 is formed with an area of decreased thickness, as at 6^a, whereby the edge portion carrying the prongs 7 and the central portion carrying the locking-tongue 8 have a relative spring movement, as will be clearly understood. In manufacture the member A minus the locking-tongue 8 may be struck up from a single blank, and the locking-tongue may be riveted or soldered in place.

The member B or button-front comprises two flange or rim portions 9 and 10, respectively, the front one of which, 10, is preferably oval in pheripheral contour. These rim portions are connected centrally by a hub or shank 11, also of oval form, whereby an oval groove or annular recess is formed between the flanges and surrounding the hub or shank 11. The member B is provided with a transverse bore 12, which passes axially through the hub or shank 11 and is elongated transversely, as shown, so that it is adapted to permit the passage of the corresponding flat spear-head 8^a. The bore 12 is provided in the outer face of the flange 10 with side recesses 13.

In assembling the members A and B the spear-shaped head 8^a of the locking-tongue 8 is initially passed through the bore 12, which is accurately formed to receive the same, and the member B is then axially turned with relation to the tongue 8 until the spear-head 8^a is seated in the recesses 13, when detachment of the members A and B is prevented.

In securing the button to a piece of fabric (shown at 14) or to a garment the prongs 7 of the member A are forced thereinto at one side thereof, being formed, preferably, of such length as to be entirely received and confined by the fabric, the locking-tongue 8 being forced through and caused to project a predetermined distance beyond the fabric. The member B is then impaled upon the locking-tongue and pressed firmly against the fabric until the head 8 projects forwardly thereof, when the member B is rotated upon the locking-tongue until the head 8^a rides into the recesses 13. If the length of the locking-tongue be duly proportioned to the thickness of the fabric 14, a certain pressure of the member B will be required to seat the head 8^a in the recesses 13, and as soon as this pressure is relaxed the spring quality of the metal plate 6, due to its annular portion 6^a of decreased thickness, will cause a firm retention of the head 8^a in the recesses 13, thus preventing relative movement and accidental detachment of the members A and B.

The inner face 9^a of the flange portion 9 of the member B is preferably smooth and plane to secure an even bearing upon the fabric, whereas the outer face 10^a of the flange portion 10 is concave, whereby the head 8^a is prevented from projection beyond the periphery thereof and is effectively protected against

inadvertent engagement with other parts of wearing-apparel.

The oval recess or groove between the flange portions 9 and 10 of the member B preferably tapers inwardly, and it is designed to conveniently conform to and receive the end portion 15 of a suspender, which is usually of oval contour with an oval buttonhole 16. The button member B is thus particularly adapted for engagement with the ordinary suspender end or tab, fitting the same snugly and tending in its connection therewith under stress to assist in the prevention of relative movement of the members A and B.

I do not desire to be understood as limiting myself to the specific details of construction and arrangement as herein described and indicated, as it is manifest that variations and modifications may be made in the features of construction and arrangement and in the adaptation of the button to various conditions of use without departing from the spirit and scope of my invention and improvements. I therefore reserve the right to all such variation and modification as properly fall within the scope of my invention and the terms of the following claim.

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

A button, comprising two separable members, one of which consists of a spring-plate having a central area of decreased thickness, a locking-tongue carried centrally of the spring-plate, and prongs carried at the periphery of the spring-plate and adapted for engagement with a supporting fabric, and the other of which members is formed to receive said locking-tongue, substantially as and for the purpose set forth.

In testimony whereof I have signed my name in the presence of the subscribing witnesses.

THOMPSON W. FERGUSON.

Witnesses:
J. R. LITTELL,
M. C. MATTES.