June 30, 1925. 1,544,087

J. A. DUFAULT

BUTTON FASTENER

Filed March 20, 1925

Fig. 1.

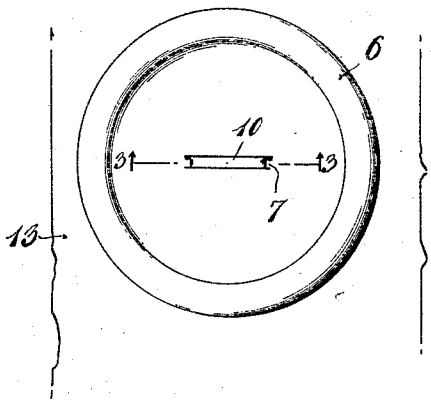


Fig. 2.

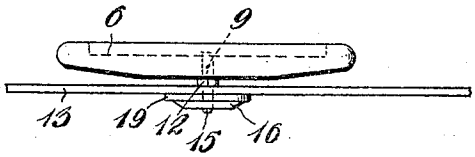


Fig. 3.

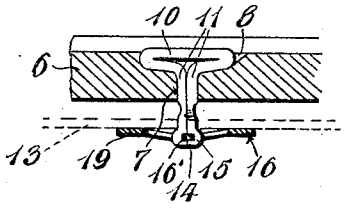


Fig. 4.

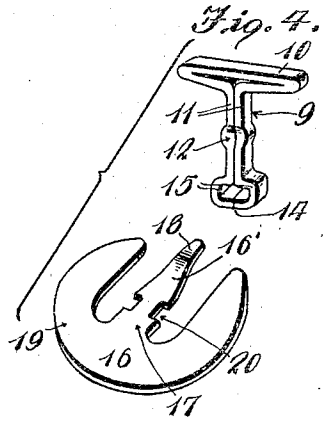


Fig. 5.

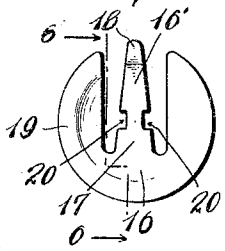
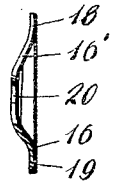


Fig. 6.



Inventor

John A. Dufault

Patented June 30, 1925. 1,544,087

UNITED STATES PATENT OFFICE.

JOHN A. DUFAULT, OF CLEVELAND, OHIO.

BUTTON FASTENER.

Application filed March 20, 1925. Serial No. 16,977.

To all whom it may concern:

Be it known that JOHN A. DUFAULT, citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, has invented certain new and useful Improvements in Button Fasteners, of which the following is a specification.

This invention is an improved button fastener having for an object the provision of means permitting rapid and reliable semi-permanent attachment of practically any type of button to an article of clothing or the like.

Another object is to construct a button fastener from sheet metal and employ a minimum number of parts whereby to decrease the expense and labor incident to manufacture as well as facilitate application for use.

A further object is to provide a button fastener which may be manipulated to permit detachment of a button, but will normally so function as to positively fasten a button in place.

It is likewise an object to provide a simply constructed yet highly efficient fastener which will absolutely eliminate the necessity of thread for attaching a button to an article of clothing or the like.

Other objects will be in part obvious and in part pointed out hereinafter.

In order that the invention and its mode of functioning may be clearly understood by others skilled in the art to which it pertains, I have in the accompanying drawings and following detail description based thereon, set out the preferred embodiment thereof.

In these drawings—

Figure 1, is a plan view;

Figure 2, is an edge elevation;

Figure 3, is an enlarged section on 3—3 of Fig. 1;

Figure 4, is a detail perspective view of the fastener;

Figure 5, is a detail plan view of the fastener plate; and

Figure 6, is a sectional view taken on the line 6—6 of Figure 5.

It is well known that buttons of value are often lost through the mere breaking of a thread whereas a metal fastener of suitable construction would prevent such loss, as well as facilitate attachment in the first instance.

With the above thought in mind I have provided broadly a metal shank attachable to a button and having spring jaws to engage a spreader member carried by a plate arrangeable on the inner face of an article of clothing or the like, or on the opposite side from that on which the button is arranged.

Preferably, the button 6, which in this instance is shown as of bone or shell construction, is provided with a central aperture 7 whose outer end opens into an elongated channel or way 8 whose function will be pointed out. A shank is provided with a head snugly fitted in the channel 8 so as to prevent relative turning.

In the formation of the shank 9, I take a piece of spring steel and fold its ends inwardly to form an elongated head 10 which is receivable in the way 8. The peculiar shaping is clearly shown in Figure 4. The arm portions 11 are brought together and extend through the aperture 7 whereat they are slightly enlarged to form stop shoulders 12 whose function is to space the button from the cloth 13. After extending the arms 11 a sufficient distance to pass through a piece of cloth, the metal is bent outwardly, downwardly and inwardly causing the ends 14 to abut one another and form hook-like jaws 15. Between these jaws 15, a space is created for reasons hereinafter apparent.

A supporter or base plate 16 is formed from light sheet steel and while shown in disk formation, obviously may be of any preferred configuration. The plate is substantially E-shaped, the central locking finger being in the form of a tapered spreader 16 decreasing in width toward its outer end whereby it may enter the space between the jaws 15 to spread them. The inner end portion 17 of the spreader is offset out of the plane of the remainder of the plate to facilitate attachment to the shank 9, while its outer end portion 18 is in the plane with the main plate whereby to provide a maximum bearing surface. It is noted the entire peripheral portion 19 of the plate bears upon the cloth to which the button is fastened. A pair of opposed notches or recesses 20 is formed at the offset portion of the spreader to receive the hook-shaped jaws 15 as illustrated.

In applying this device, the shank 9 is passed through a fabric and the spreader

is moved between the jaws 15 thereby separating them slightly. This movement is continued until the shank carried jaws snap into the recesses or notches, 20. At this point attachment is complete. It is clear that accidental separation of a button from an article of clothing, with this fastener employed, is not at all probable, though if removal is desired, the jaws may be spaced apart through using a sharp instrument. The plate can then be removed.

Obviously certain changes in minor details of construction may be resorted to and such of these changes as may fall within the scope of the appended claims I consider within the spirit of my invention.

I claim:—

1. A button fastener comprising, a shank, yieldable expansible gripping jaws carried at one end of the shank, a base plate, and means on the plate releasably engageable between the jaws.

2. A button fastener comprising, a shank, yieldable gripping jaws carried by the shank, a base plate, a tapered finger integral with said plate, said finger having opposed notches for releasable snap engagement with the jaws.

3. A button fastener comprising a shank, yieldable gripping jaws integral with the shank, a base plate and a locking finger integral with the plate and having opposed notches near one end, said finger being tapered to expand the jaws for snap engagement in the notches.

4. A button fastener comprising, a shank, expansible hook-like jaws on the shank, a base plate, and a notched tapered finger on the plate releasably engageable with the jaws.

5. A button fastener comprising, a shank, expansible hook-like jaws on the shank, a substantially E-shaped base plate and a central tapered notched finger on the plate for releasable engagement with jaws, said finger having its notched portion offset from the plane of the remainder of the plate.

6. A button fastener comprising, a shank expansible hook-like jaws on the shank, a base plate having an offset central portion, a tapered finger extending from the offset portion and having its outer end in a plane with the remainder of the plate and said finger having opposed notches to releasably receive said jaws.

In testimony whereof I affix my signature.

JOHN A. DUFAULT.