(No Model.)

G. H. PERRINE.

BUTTON.

No. 485,848. Patented Nov. 8, 1892.

Fig. 1.

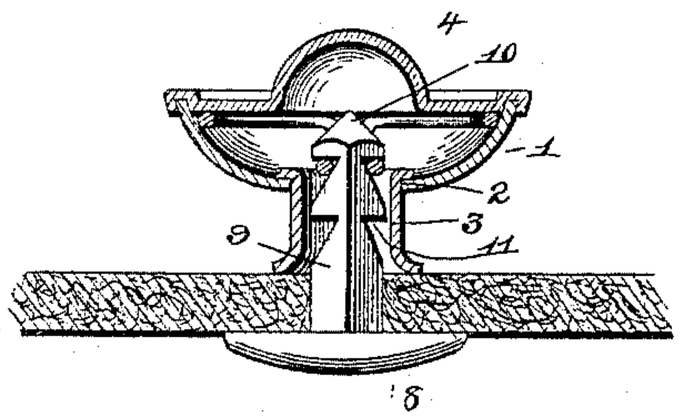


Fig. 2.

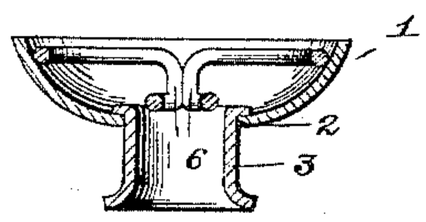


Fig. 3.

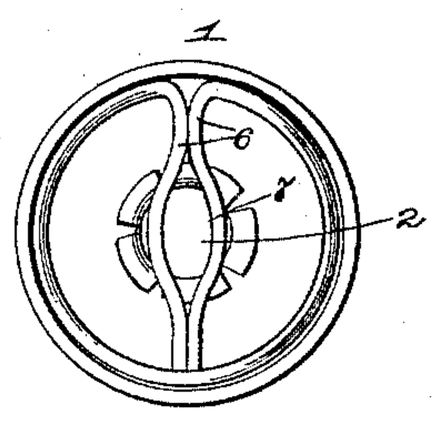


Fig. 4.

Fig. 6.

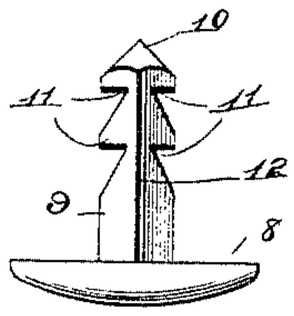
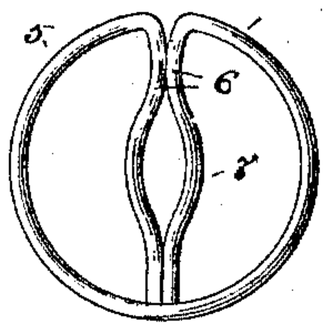
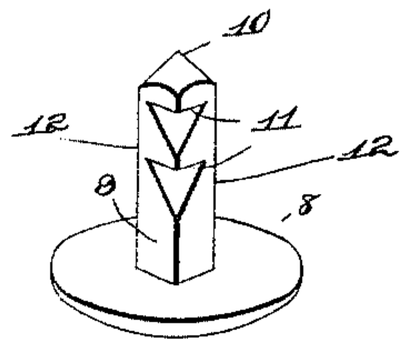


Fig. 5.





Witnesses:

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By his Attorneys,

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UNITED STATES PATENT OFFICE.

GEORGE H. PERRINE, OF WATERBURY, CONNECTICUT.

BUTTON.

SPECIFICATION forming part of Letters Patent No. 485,848, dated November 8, 1892.

Application filed November 25, 1891. Serial No. 413,098. (No model.)

To all whom it may concern:

Be it known that I, GEORGE H. PERRINE, a citizen of the United States, residing at Waterbury, in the county of New Haven and State of Connecticut, have invented a new and useful Bachelor's Button, of which the following is a specification.

This invention relates to improvements in buttons, and to that particular class thereof commonly termed "bachelors' buttons."

The objects of my invention are to provide a button having a convexed back, whereby it may be conveniently engaged with the buttonhole, and a spring-eye for engaging the stud, so constructed as to automatically maintain its position in the button shell or body.

Other objects and advantages of the invention will appear in the following description, and the novel features thereof will be particularly pointed out in the claim.

Referring to the drawings, Figure 1 is a radial section of a button constructed in accordance with my invention, the same being exaggerated and in position upon an article of apparal. Fig. 2 is a similar view, the parts being separated. Fig. 3 is a detail in plan of the button-back, the spring-fastener being in position. Fig. 4 is a detail in plan of the spring-fastener. Fig. 5 is a detail in perspective of the fastening-stud. Fig. 6 is a side elevation of the stud.

Like numerals of reference indicate like parts in all the figures of the drawings.

The back 1 of the button is stamped from sheet metal and is concaved upon its upper face, while its under side is convexed and is provided at its center with an opening 2. In the opening 2 is fitted an annular hub 3, the lower end of which is slightly flared, as shown, while the upper end is upset within the button over the edge of the opening 2. The surrounding edge of the back 1 is embraced by the front or face plate 4, the edge of which is crimped in position around the exterior of the back. By forming the back convexed I provide a button in which a short shank may be employed, and I also better adapt the button for engaging with the buttonhole.

In constructing the spring-fastener, which is seated in the back 1, a blank of wire of suitable length and gage is employed. This blank has its opposite halves or terminals curved in semicircular form, as indicated at 5, and meet at a point diametrically opposite their starting-point, from which meeting point they are downwardly curved and diametrically disposed to the said starting-point, forming two spring-bars 6, which at their centers are outwardly bent or offset in opposite directions, forming a spring-eye 7. The two semicircular halves of the spring-eye complete a circle which exactly agrees with the internal diameter of the opening in the back-plate, and the curved parts force the circular portion 5 snugly up into the angle between the back and face plates. Hence any rattle or movement of the spring within the button is avoided, and, furthermore, the spring-eye 7 mentioned is always maintained directly in alignment with the hub of the button.

The stud for fastening the button to the garment comprises a base 8, from the center of which rises a solid rigid post 9, square in cross-section and so proportioned with relation to the spring eye or loop 7 that the distance between its corners and the bent terminals forming the loop is greater, whereby when introduced into the loop and turned so that its angles or corners are against the terminals a loop is spread and will permit of a removal or separation of the button from the post. In order to facilitate the introduction of the button over the post, the upper end of the latter is pointed, as indicated at 10. At diametrically-opposite sides the stud or post is provided with a series of notches 11, the inclined walls of which are flat. Such location of the notches in this formation of stud will leave intermediate plain longitudinal edges or corners 12, for a purpose hereinafter described.

In applying the button the fastener is first introduced or forced through the material from the inside and the hub of the button when in position forced over the end of the stud or post until a pair of the diametrically-opposite notches are engaged by the opposite sides of the spring-eye 7, the terminals 6 of the spring-fastener yielding or spreading for the admission of the stud or post. Such engagement with the notches is announced by a click or snap quite audible to the operator. The angular transverse shape or form of the stud or post and the perfectly-plain notches

will prevent any rotation of the button upon the stud under ordinary circumstances, such as the button will receive in ordinary use, so that, as will be obvious, a very secure fastening is provided. If, however, it should be desired at any time to remove the button for the purpose of resetting the same at some different point, or otherwise, the button is simply given a quarter-turn, so that the spring-terminals of the catch are forced or spread from their position of engagement and brought opposite the plain corners of the stud or post, which are a greater distance apart than the sides of the spring loop or eyes 7, which will permit of a withdrawal of the button from off the post or stud, the terminals readily riding thereover. It will thus be seen that though the fastener is secure the button may be separated from it without any breakage of the parts or impairment of the button for subsequent resetting.

It will be seen that the resiliency of the fastener lies in its terminals 6 and that the sides 5 do not spread in order to receive the stud, and hence as a result of this feature the fastener itself may be manufactured so as to fit snugly in the concaved back of the button and is maintained directly in alignment with the opening in the back and against any rattle or play. By the simple formation of the fastener I also avoid the necessity of constructing the same with many bends or angles, all of which tend to increase the cost of a button as a whole, and thus while I simplify and cheapen the cost of the article I also render it detachable and silent when worn.

Having described my invention, what I claim is—

The herein-described button, consisting of the front and convexed back plates, the latter having an opening at its center, the hollow stud located in the opening, the spring-catch having the curved base 5, fitting in the angle formed by the back-plate and face-plate of the button, the terminals of said catch being downwardly curved to conform with the interior of the back-plate and extending transversely across the same, whereby the fastener becomes sprung or snugly wedged between the back and front plates, said terminals being provided opposite the opening in the back-plate with offsets 7, and the fastening-stud, rectangular in cross-section and having diametrically-opposite notches in its angles for engaging with the spring-offsets, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

GEORGE H. PERRINE.

Witnesses:
B. I. RUSSELL,
WM. H. LOWE.