

No. 880,725.

PATENTED MAR. 3, 1908.

A. EFFENBERGER.  
BUTTON.

APPLICATION FILED MAY 27, 1907.

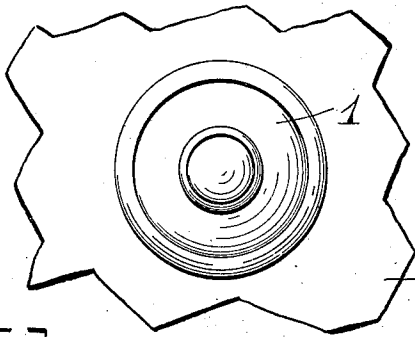


Fig. 1

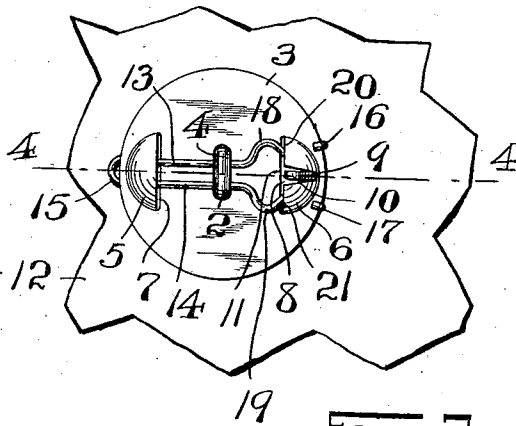


Fig. 2

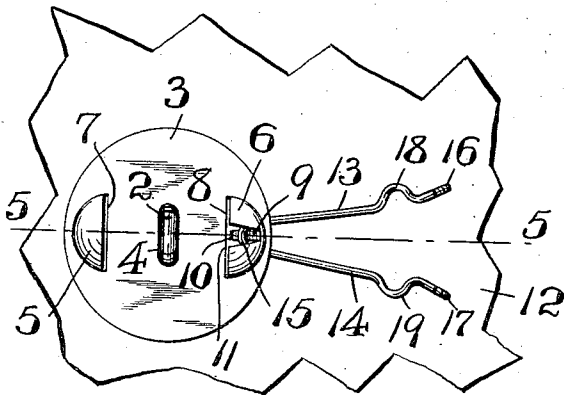


Fig. 3

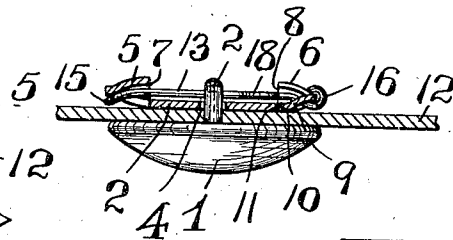
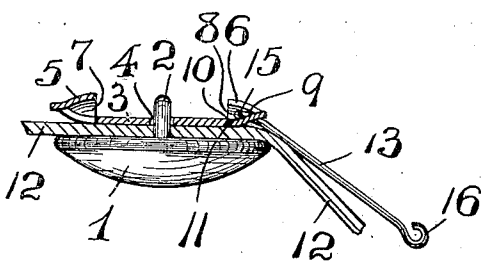


Fig. 4



WITNESSES: Fig. 5

*F. H. W. Fraentzel.*  
*Anna H. Peter.*

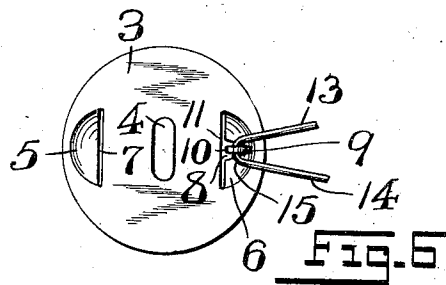


Fig. 6

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# UNITED STATES PATENT OFFICE.

ALEXANDER EFFENBERGER, OF ORANGE, NEW JERSEY.

## BUTTON.

No. 880,725.

Specification of Letters Patent.

Patented March 3, 1908.

Application filed May 27, 1907. Serial No. 375,878.

*To all whom it may concern:*

Be it known that I, ALEXANDER EFFENBERGER, a citizen of the United States, residing at Orange, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Buttons; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to characters of reference marked thereon, which form a part of this specification.

This invention has reference, generally, to improvements in that class of buttons known in the art as military or bachelor buttons; and, the invention relates, more particularly, to a novel construction of button and means for detachably securing the same in its fixed position upon the face of a piece of fabric or other article of wear, without the usual sewing.

The invention has for its principal object to provide a button and novel button-fastener of the character hereinafter more fully set forth, which although it permits of the separation of the back-plate or shell from the eye of the button is not in itself detachable from said back-plate or shell, so that the button-fastener which is usually made from spring-metal, while being manipulated for the separation of the back-plate or shell from the eye or loop of the button, will not spring from between the thumb and fingers of the operator when clumsily manipulated, and when brought into its detached relation with the button proper will not become separated from the back-plate, so that the fastener can not be lost and is at all times ready for use.

Other objects of this invention not at this time more especially enumerated will be clearly understood from the following detailed description of the invention.

The invention consists, primarily, in the novel button and button-fastener hereinafter set forth; and, furthermore, this invention consists in the various arrangements and combinations of devices and parts, as well as in the details of the construction of the same, all of which will be hereinafter more fully described and then finally embodied in the clauses of the claims which are appended to and which form an essential part of this specification.

The invention is clearly illustrated in the accompanying drawings, in which:—Figure 1 is a front or face view, and Fig. 2 a rear view of a button and button-fastener made according to the principles of this invention, said Fig. 2 showing the fastener in its locked or holding engagement with the back-plate and the eye or loop of the button. Fig. 3 is a view similar to that represented in Fig. 2, but illustrating the spring-fastener in its separated relation from the eye or loop of the button. Fig. 4 is a transverse section of the button, said section being taken on line 4—4 in Fig. 2; and Fig. 5 is a similar section, taken on line 5—5 in said Fig. 3. Fig. 6 is a rear face view of the back-plate or shell of the button, with a portion of the spring-fastener shown inseparably connected with said back-plate or shell.

Similar characters of reference are employed in all of the above described views, to indicate corresponding parts.

Referring now to the said drawings, the reference-character 1 indicates any suitably shaped button-head, and 2 is the usual eye or loop which projects from the back of the button. The button-head shown in the accompanying drawings, is of the form and construction known in the trade as a military button; but it will be evident, that my novel form of button-fastener to be presently described may be used with any other suitably formed and shaped button-head which is provided with a rearwardly extending loop or eye.

The button-fastener consists essentially of a suitably formed plate or shell 3, usually made from sheet-metal and preferably in the form of a circular disk, said plate or shell having a centrally disposed and elongated slot or opening 4, through which the eye or loop of the button-head can be inserted. The said plate or disk 3, as will be seen from the several figures of the drawings, is made with a pair of outwardly or rearwardly projecting portions 5 and 6, which are suitably forced out of the metal, so as to provide openings or receiving portions 7 and 8, and the rearwardly projecting elements 5 and 6, which are diametrically opposed to each other, substantially in the manner illustrated, forming suitable retaining elements or members substantially as and for the purposes to be presently described. The said outwardly or rearwardly projecting portion or element 6 is also provided with a down-

wardly extending retaining lug or tongue, as 9, which is bent substantially in the manner illustrated in Figs. 2 to 6 inclusive, and extends directly into the opening or receiving  
5 portion 8, with its free end 10 terminating directly at or near the edge-portion 11 of the back-plate, disk or shell 3.

When the eye or loop of the button-head has been forced through the fabric 12, or  
10 other suitable body, and has been inserted through the elongated hole or opening 4 in said plate 3, a holding or retaining pin or device comprising a pair of spring-arms, which normally tend to spread in opposite outward  
15 directions, is passed beneath the lug or tongue 9, which it forces upwardly, so as to arrange the said lug or tongue between said spring-arms, the latter then being passed through the receiving portion 6, the eye or  
20 loop 2, and through the other receiving portion 7, substantially as shown in Figs. 2 and 4 of the drawings. The said arms by means of their spring-like action are brought into frictional holding engagement with the parts  
25 of the plate or shell 3 and the eye of the button-head, the said plate or shell and the button-head thereby being positively secured in their operatively connected relation upon the opposite faces of the fabric, against  
30 any accidental separation, or from becoming loose and lost; but, the pin or holding device upon manipulation, permitting the back-plate or shell 3 to be separated from the eye or loop 2, for the removal of the button-head  
35 from the fabric. One form of such holding pin or retaining device consists, essentially, of a pair of diverging spring-arms or members 13 and 14, which are connected by means of a curved or looped end-member 15.  
40 At their opposite ends, the said spring-arms or members are respectively provided with suitable finger-pieces, substantially in the form of doubled-over or loop-shaped end-members 16 and 17. Outwardly bent or  
45 curved portions or elements 18 and 19 are also provided for the purposes to be presently described.

From an inspection of Figs. 3, 5 and 6 of the drawings, it will be seen, that the retaining  
50 lug or tongue 9 acts as a stop against the withdrawal and complete separation of the holding pin or device from the back-plate, disk or shell 3, because of the fact, that when the pin is brought into the position shown in  
55 said figures, the curved or looped end-member 15 will ride upon said tongue or lug, and thus cannot be separated and lost from said plate or shell. In bringing the holding pin or retaining device into its operative holding  
60 relation with the inserted eye or loop 2 and the portions or members 5 and 6 of the plate or shell 3, the finger-pieces 16 and 17 are pressed toward each other, thereby bringing the two spring-arms or members 13 and 14  
65 parallel to each other, so as to be readily in-

serted through the loop or eye 2, with the connected end-portions of said arms arranged and held in the receiving portion 7, directly beneath the portion 5, as will be  
70 clearly evident. Upon the removal of the pressure from the finger-pieces, the outwardly bent or curved portions 18 and 19 are brought into holding or retaining engagement with the edge-portions 20 and 21 of the  
75 portion or element 6, whereby the pin is positively locked against accidental displacement, and thus at the same time securing the button-head in its operative position upon the face of the material or fabric  
80 against all danger of being pulled off and lost. It will thus be seen from the foregoing description of my present invention, that I have devised a device for military or bachelor buttons which is operative for securing  
85 the button-head and the back-plate upon the opposite face of the fabric, and in which these parts are readily separable, but the holding pin or retaining device being inseparable from the back-plate or shell, so that it can not be lost or misplaced.  
90

I claim:

1. A button and button-fastener comprising, in combination with a button-head and its loop, a perforated plate into and through  
95 which said loop is inserted, and a retaining or holding pin movably but inseparably connected with said plate, said pin consisting of a pair of spring-arms adapted to be brought in holding engagement with said loop, substantially as and for the purposes set forth.  
100

2. A button and button-fastener comprising, in combination with a button-head and its loop; a perforated plate into and through  
105 which said loop is inserted, a retaining lug or tongue on said plate, and a retaining or holding pin slidably connected with said plate, said pin consisting of a pair of spring-arms adapted to be brought in holding engagement with said loop, and a connecting element between said spring-arms adapted to be  
110 brought in engagement with said retaining lug or tongue, so as to be inseparable from said plate, substantially as and for the purposes set forth.

3. A button and button-fastener comprising, in combination with a button-head and its loop, a perforated plate into and through  
115 which said loop is inserted, said plate having a pair of outwardly extending members forming pin-receiving portions, and a retaining or holding pin, said pin consisting of a pair of spring-arms movably arranged in said  
120 receiving portions adapted to be brought in holding engagement with said members and the loop of the button-head, and said pin being inseparably connected with one of said outwardly extending members, substantially  
125 as and for the purposes set forth.

4. A button and button-fastener comprising, in combination with a button-head and  
130

its loop, a perforated plate into and through which said loop is inserted, said plate being provided with a pair of outwardly extending members forming pin-receiving portions, a  
 5 retaining lug or tongue projecting from one of said outwardly extending members into the receiving portion therebeneath, and a retaining or holding pin movably arranged in said receiving portions, said pin being in-  
 10 separably connected with said retaining lug or tongue, substantially as and for the purposes set forth.

5. A button and button-fastener comprising, in combination with a button-head and  
 15 its loop, a perforated plate into and through which said loop is inserted, said plate being provided with a pair of outwardly extending members forming pin-receiving portions, a retaining lug or tongue projecting from one  
 20 of said outwardly extending members into the receiving portion therebeneath, and a retaining or holding pin, said pin consisting of a pair of spring-arms movably arranged in said receiving portions adapted to be brought in  
 25 holding engagement with said outwardly extending members and the loop of the button head, and a connecting element between said spring-arms adapted to be brought in engagement with said retaining lug or tongue,  
 30 so as to be inseparable from said plate, substantially as and for the purposes set forth.

6. A button and button-fastener comprising, in combination with a button-head and  
 its loop, a perforated plate into and through  
 35 which said loop is inserted, said plate being provided with a pair of outwardly extending members forming pin-receiving portions, a retaining lug or tongue projecting from one of said outwardly extending members into  
 40 the receiving portion therebeneath, and a re-

taining or holding pin, said pin consisting of a pair of spring-arms movably arranged in said receiving portions, said spring-arms being provided with oppositely extending  
 45 curved elements in engagement with one of said members, and a connecting element between said spring-arms adapted to be brought in engagement with said retaining lug or tongue, so as to be inseparable from said plate, substantially as and for the purposes  
 50 set forth.

7. A button and button-fastener comprising, in combination with a button-head and  
 its loop, a perforated plate into and through  
 55 which said loop is inserted, said plate being provided with a pair of outwardly extending members forming pin-receiving portions, a retaining lug or tongue projecting from one of said outwardly extending members into the receiving portion therebeneath, and a  
 60 retaining or holding pin, said pin consisting of a pair of spring-arms movably arranged in said receiving portions, said spring-arms being provided with oppositely extending curved elements in engagement with one of  
 65 said members, and a connecting element between said spring-arms adapted to be brought in engagement with said retaining lug or tongue, so as to be inseparable from said plate, and a finger-piece upon the free end of  
 70 each spring-arm, substantially as and for the purposes set forth.

In testimony, that I claim the invention set forth above I have hereunto set my hand this 24th day of May, 1907.

ALEXANDER EFFENBERGER.

Witnesses:

FREDK. C. FRAENTZEL,  
 F. H. W. FRAENTZEL.