

C. READ.
GARMENT FASTENER.
APPLICATION FILED JUNE 3, 1916.

1,268,278.

Patented June 4, 1918.

Fig. 1.

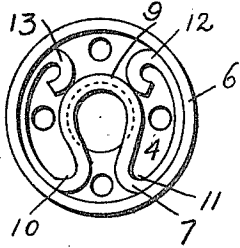


Fig. 2.

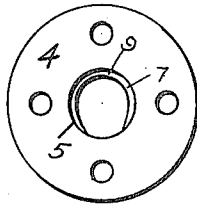


Fig. 3.



Fig. 4.

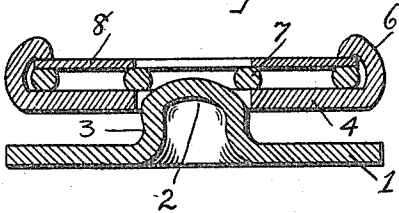


Fig. 5.

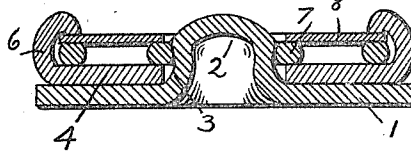


Fig. 6.

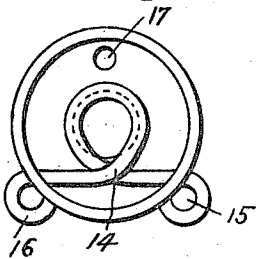


Fig. 7.

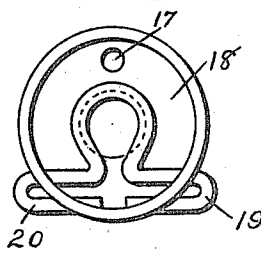


Fig. 8.

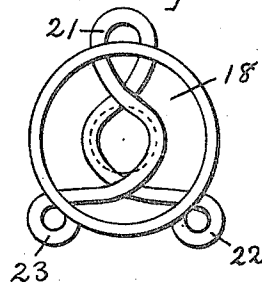
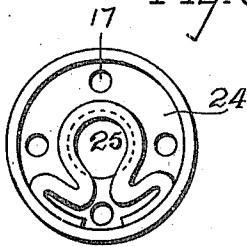


Fig. 9.



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CHARLES READ, OF RICHMOND HILL, NEW YORK.

GARMENT-FASTENER.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, CHARLES READ, a citizen of the United States, and resident of Richmond Hill, borough of Queens, State of New York, have invented certain new and useful Improvements in Garment-Fasteners, of which the following is a specification.

This device is a snap fastener, and while I am well aware that much development has taken place in this art, I believe that I have designed a fastener having distinct advantages.

The principal advantages of my invention reside in the fact that the fastener is flat in construction, and may be passed through a wringer or iron without destroying the possibility of operation.

I have avoided the socket usually found in snap fasteners, and at the same time obviated the necessity of milling the socket for the introduction of the spring.

I have provided a spring in line for direct engagement with the stud or post, and I have protected the spring against displacement or damage that might result from an exposed spring contacting with a portion of the garment or with other surfaces. All of these advantages and others not enumerated, and the peculiar construction of my device will be set forth as the specification progresses.

The following is what I consider the best means of carrying out this invention and the accompanying drawings form a part of this specification, in which—

Figure 1 shows a top plan view of a fastener.

Fig. 2 a bottom view thereof.

Fig. 3 an elevation of the stud member.

Fig. 4 an enlarged sectional view showing one operation of the device.

Fig. 5 a similar view showing another operation of the device.

The remaining figures are top plan views with a part removed to disclose to view the spring members.

Fig. 6 a construction wherein the spring member is secured by stitching.

Fig. 7 a construction wherein the spring member is of a different shape.

Fig. 8 a construction wherein the spring member furnishes the securing means, and

Fig. 9 shown an elevation, a disk of modified construction.

Similar reference numerals indicate like parts in all the figures where they appear.

My fasteners in common with other fasteners of this general class consists of two main body members, one of which is adapted to be inserted and secured into another.

The device having a projection I will term a plug member, and this consists of a plate 1, having a centrally raised plug 2, which plug is provided with an annular groove 3, continuing around its whole periphery, at a point about midway between the base and plate 1, and the top of the plug 2. It will be noted that in my fastener the plug 2, need not be high, and that the groove 3, is a sharp groove. This is important as a high standing plug member has been found objectionable, in that it will crush in ironing or wringing, thus making the entire fastener inoperative.

The plate 1, is provided with a plurality of perforations by means of which the plate may be secured to a garment.

The other portion of the fastener consists of a dished member having a flat disk 4, provided with an oval shaped perforation 5, at about its axial center.

The edges of the dished member 4, are upwardly and inwardly turned as indicated at 6, and within this member I arrange a spring 7, and over the spring I place another centrally perforated disk 8, which is retained by the inwardly turned portions 6, of the member with which it is associated, and it will be observed that the disk 8, retains the spring in position and protects it against contact with the material to which the fastener is secured.

The spring 7, in the device shown in Figs. 1 and 2, is formed with a central eye 9, which coincides with the perforation 5, and as the eye 9, is formed as a round loop, and the perforation 5, is oval, a portion of the eye 9, will over-lie and may be observed through the perforation 5.

After the eye 9, is formed the ends of the spring are caused to approach each other and then to diverge, assuming the contour of the walls 6, to accomplish this I produce return bends 10 and 11, which, although closely adjacent to each other, do not impinge upon each other, as it is desirable that a free movement of the spring be possible at all times.

Although the perforation 5, in the plate 4, is oval, the plug 2, which will be engaged in that plate is round. This suggests a function of my device that I have found important, and which materially adds to the satisfactory operation of the completed device. In Fig. 4, I have shown the normal position of the parts when they are engaged, and when no strain is placed upon the garment, but when a strain occurs the parts are drawn into the position shown in Fig. 5. The plug being locked upon the edge of the perforation, 5, and as the size of the perforation is less at this end, the plug may well be considered as jammed into a contracted opening. This adds materially to the strength of the fastener and its ability to resist strains, but when the strain is released the spring carries the plug to a position from whence it may be released without difficulty.

By utilizing two plates 4 and 8, and by arranging my spring 7, between these plates, I overcome the necessity of providing a socket for the reception of the plug 2, and further I add materially to the strength of this member, for as the plates 4 and 8, impinge upon the spring and are supported by each other, and by the spring, the socket member of my fastener cannot be crushed when the garment is laundered.

The principle of my invention is a spring circumferentially engaging a recessed post and in experimenting with the construction I have found that the advantages may be attained in a number of different ways. In Fig. 6, I have shown the spring formed in a different manner, here the ends of the spring are crossed as shown at 14, and the loops 15 and 16, are intended to receive the stitching and to serve with the perforation 17, in securing the device in operative position.

It may be found that for delicate garments the anchored spring shown in Fig. 6, would not yield with sufficient readiness, therefore I have shown in Fig. 7, a spring fashioned in the manner shown in Figs. 1 and 2, but with the ends extending beyond the periphery of the socket member 18, and shaped to provide stitching loops 19 and 20.

As in each of the Figs. 6 and 7, an additional perforation 17, is required for securing the member in position, the use of the loops 16 or 19 suggest that the spring may be formed as shown in Fig. 8, where

an additional eye 21, is shaped in the spring which eye will assist the loops 22 and 23, in completing the securing of the member in position.

I have not attempted to show all of the constructions possible, but have only set forth a few that have developed in my experiments and that I have found to contain the principle intended to be claimed by me, and I believe that it is obvious that other modifications may be made within the scope of the appended claims without departing from the principle of sacrificing the advantages of the invention.

The member, 8, may have a centrally arranged recess instead of a perforation for receiving or guiding the upper end of the post 2, such a disk is shown in Fig. 9, where 24 indicates the disk, and 25 the recess.

Having carefully and fully described my invention, what I claim and desire to secure by Letters Patent is:

1. A garment fastener comprising a plurality of disks, one of which supports a post, and the other of which is provided with a perforation, a spring having a substantially closed loop overlying a portion of said perforation, and adapted to engage said post, bends in said spring adapted to follow the contour of said disk.

2. A garment fastener comprising a post provided with a circumferential groove, a disk having a perforation adapted to receive said post and a spring provided with a plurality of substantially closed loops one of which is adapted to retain said post in said perforation.

3. A garment fastener having a grooved post, and a perforated disk, said post being adapted to engage upon the edges of the perforation of said disk and a spring having a substantially circular loop overlying said perforation for over one half of the periphery for moving said post away from one edge of the perforation of said disk.

4. A garment fastener having a post member, and a dished member, said dished member being provided with a perforation for the reception of said post, a spring in said dished member, and having an eye approximately coinciding with said perforation and a disk secured in said dished member for retaining said spring in operative position and for guiding said post.

CHARLES READ.