O. D. BELL.

FASTENER.

APPLICATION FILED JULY 23, 1918.

1,306,369. Patented June 10, 1919.

Fig. 1.

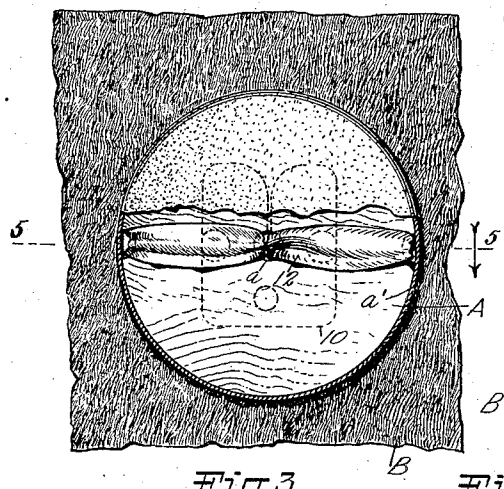


Fig. 2.

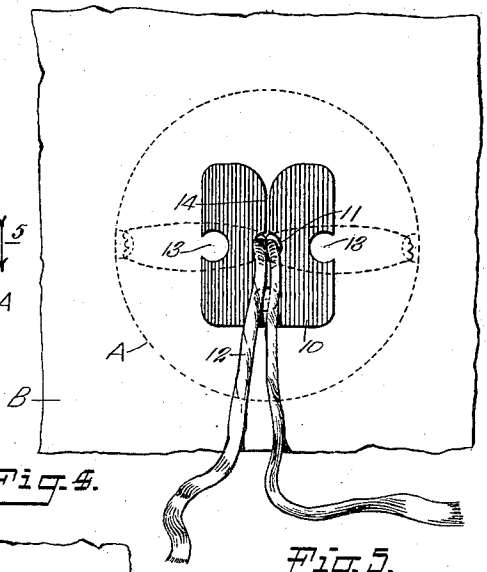


Fig. 3.

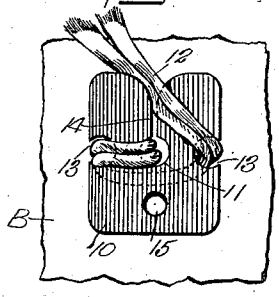


Fig. 4.

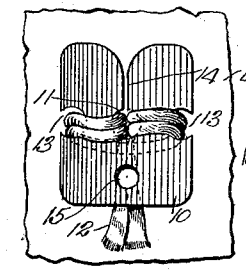


Fig. 5.

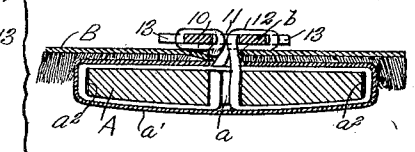


Fig. 6.

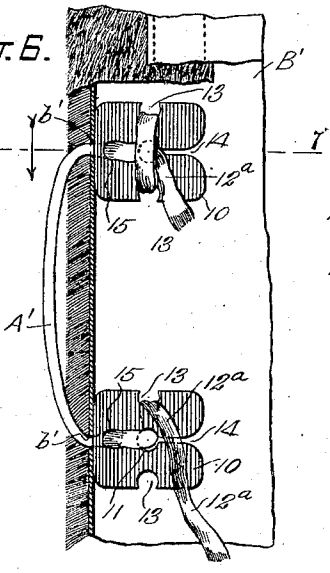


Fig. 7.

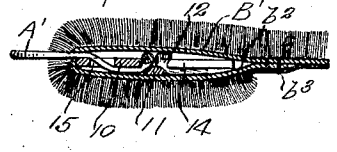
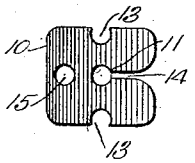


Fig. 8.



WITNESSES

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FASTENER.

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To all whom it may concern:

Be it known that I, OTIS D. BELL, a citizen of the United States, and a resident of the city of New York, borough of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Fastener, of which the following is a description.

My invention while capable of other uses is more particularly intended for embodiment in a fastener for securing a button or a loop to a garment, the invention being adapted more particularly for embodiment in fastening means for securing buttons or loops on fur garments.

With fasteners to which the invention particularly pertains, a tape, cord or like flexible medium is employed and a coacting fastener element, and the general object of my invention is to provide a fastener element for the tape having such formation that the tape may readily be passed through and about the fastener element in such manner as to hold the button or loop securely and avoid the necessity of knotting or sewing the tape.

Also, in using fasteners of the indicated character, it must be recognized in practice that the workers employed may be inexperienced or indifferent and this contingency has been kept in mind by me with the purpose of providing a fastener that will minimize the possibility of the tape or the like being improperly engaged with the fastener element.

Reference is to be had to the accompanying drawings forming a part of this specification, it being understood that the drawings are merely illustrative of practical examples of the invention.

Figure 1 is a front view of a button fastened to a garment with my improved fastening means, the button covering being partly broken away;

Fig. 2 is a back view of the fastener applied and indicating the initial step of engaging the tape therewith;

Fig. 3 is a view similar to Fig. 2 but showing a further step in the engagement of the tape with the fastener;

Fig. 4 is a view similar to Figs. 2 and 3 but showing the tape completely engaged with the fastener element;

Fig. 5 is a section on the line 5—5, Fig. 1;

Fig. 6 shows the mode of employing two of the fasteners to secure the ends of the loop on a fur garment, a fragment of which is shown with parts broken away and others in section, the fastening of one end of the loop being shown completed while the other end of the loop is shown partly engaged with the fastener element;

Fig. 7 is a transverse section as indicated by the line 7—7, Fig. 6;

Fig. 8 is a face view of the fastener element.

My improved fastener element 10, shown alone in Fig. 8, is formed with a transverse hole 11 to receive the tape 12, said hole 11 being approximately central of the element 10 or at all events inward from the respective edges of said element. In addition to the hole 11 I produce recesses 13 in opposite edge portions of the fastener 10, at opposite sides of the hole 11, and there is furthermore produced in said fastener element a narrow slot 14 extending from an edge of the fastener element between the recesses 13 and communicating with the hole 11, said slot being advantageously flaring as shown. An additional hole 15, hereinafter particularly referred to in connection with Figs. 6 and 7, is formed in the fastener 10, at the opposite side of the hole 11 from the slot 14.

The fastener is applicable to fasten buttons, finished with a tape, as are generally used in fur garments, or, even for buttons made with a shank or holes. Also, the tape or cord may be applied to the button in any approved manner leaving the free ends to be brought together at the back of the button. In the example shown in Figs. 1 to 5, the button has the tape passed diametrically across the inner face, then over diametrically opposite edge portions in recesses a^2 to the face of the button, over which the ends are passed oppositely to the central hole a illustrated in the present example, through which hole the tape or cord passes rearwardly to be brought together at the inner side, but the manner of securing the tape to the button is unimportant as stated. The button A illustrated is of the type having a fabric covering a'.

In fastening a button to a garment with my improved fastener, the tape or cord is passed through a hole or puncture b in the material B of a fabric or fur garment to the inner side of the latter. The two ends of the tape or cord 12 are now passed into the fastener, laterally through the slot 14 and pulled into the hole 11, the tape and fastener then being in the relation shown in

Fig. 2 with the fastener element 10 lying close to the inner side of the garment. The two tapes are now brought laterally about the fastener element 10 in the manner indicated in Fig. 3 by being carried from the hole 11 over the outer face of the said element and pressed laterally into one recess 13, said tapes being then carried beneath the fastener element between the same and the garment and carried laterally into the recess 13 at the opposite side edge of said element, all of which will be clearly understood from Fig. 3. The tape ends 12 are now passed in through the slot 14 back to the hole 11 again, whereby the free ends will be jammed and wedged against those runs of the tape that were first passed through the hole. In passing the tapes or the like the second time through the hole 11, it will depend on the thickness or bulkiness of the tape, cord, or equivalent medium, whether the two strands shall be forced together through said slot or forced in single succession to the opening 11. The fastener and tape will then have the relation shown in Figs. 4 and 5 with the fastening completed.

The recesses 13 are preferably reëntrant or undercut, which conveniently is produced by punching out the material at the opposite edges so that the reëntrant form while serving to readily permit the forced entrance of the tape in succession to said recesses will minimize the possibility of the tape being displaced after once having found entrance to a recess. Also, it is to be noted that the central hole 11 through which the initial and final runs of the tape extend accommodates four thicknesses, whereby the several runs will be jammed and wedge tightly in the hole, the several runs of the tape serving to cause it to be tightly held without the necessity of tying, knotting, or sewing.

In using the fastener to secure on fur garments the braid or elastic loops usually found on such garments, for being passed over the buttons, the fastener is employed as illustrated in Figs. 6 and 7 and the terminals 12^a of the loop, A′, are utilized as the flexible elements corresponding with the cord or tape 12. The said ends are passed through punctures b' in the fur or fabric B′ to the inner side of the latter. Each terminal 12^a being formed of a single strand, the hole 15 insures the fastening without reliance upon the jamming of the material of the braid in the hole 11. In using the fastener element 10 to fasten loops, the braid is passed first through the hole 15 from the under side of said element to the upper side or face and then through slot 14 into hole 11 to the under side of said element, after which the braid is brought across the underside of the fastener element to one recess 13 and then across the outer side or face of said element through the opposite recess 13 to the under side of said element and finally laterally inward through the slot 14 to the hole 11.

It is to be understood that in engaging the braid 12^a with the fastener element the latter is maintained close to the fabric surface and the braid is maintained taut while being manipulated.

Having thus described my invention, I claim as new, and desire to secure by Letters Patent:

1. A fastener element to be employed in securing a flexible fastening medium, said element having a central transverse hole therethrough and presenting reëntrant edge recesses at diametrically opposite sides of said hole, there being a radial slot extending from an edge of said element to said central hole between said recesses, and the latter being separated laterally from and being out of communication with said hole.

2. A fastener element to be employed in securing a flexible fastening medium, said element having an approximately central hole extending therethrough from one face to the other inward from the respective side edges of said element, said element presenting also recesses in opposite side edges, approximately diametrically opposite, and presenting also a slot leading to said hole from an edge portion between said recesses, the latter being separated by the material of said element from said hole and from said slot, so that entrance to the said hole from the edge is said element is provided solely by said slot, the said hole being of greater diameter than the width of said slot, to accommodate the strand of the fastening medium passed therethrough from said slot and to accommodate in addition the strands of the fastening medium lead to said hole from the said recesses.

3. A fastener element to be employed in securing a flexible fastening medium, said element having a transverse hole therethrough inward from the respective sides of said element, said fastener element presenting reëntrant edge recesses at opposite sides of said hole, and out of communication with said hole, there being a slot extending from an edge of said element to said hole between the said recesses, as well as a second hole in said element, said second hole and the said slot being at opposite sides of the first hole.

OTIS D. BELL.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."