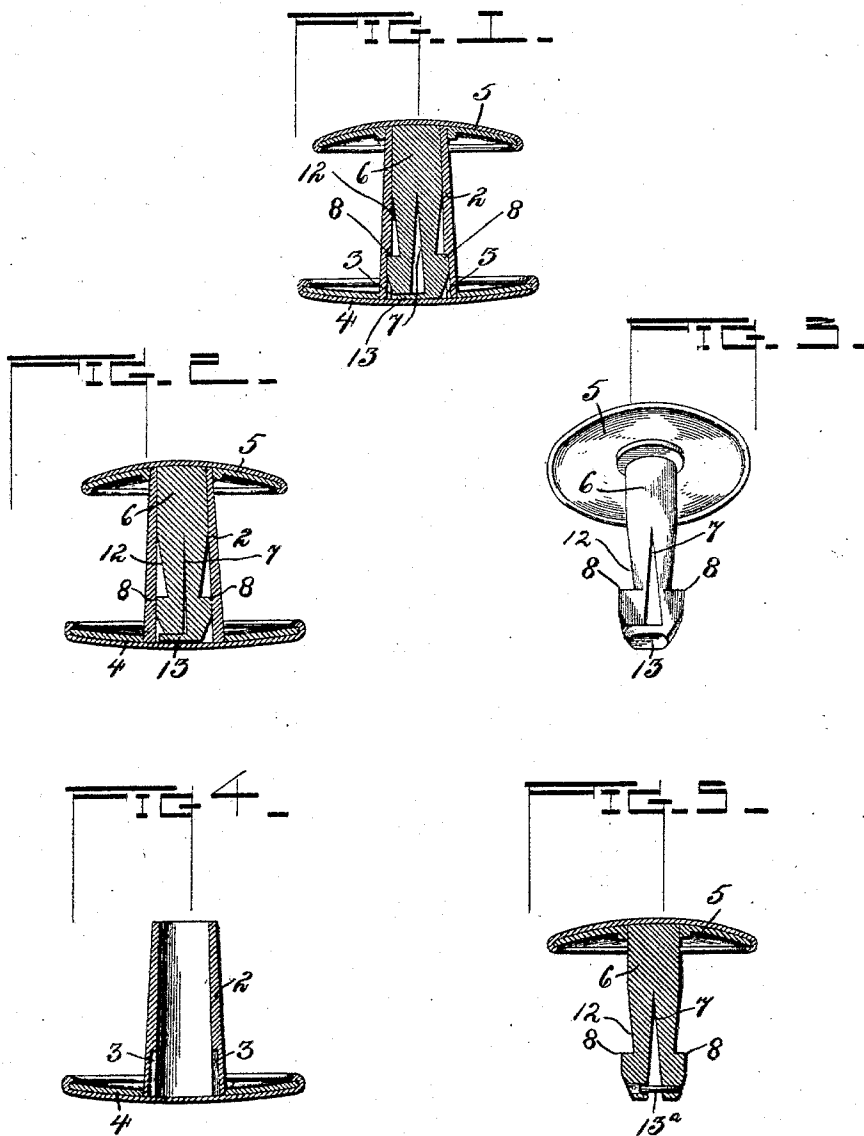


(No Model.)

P. A. EKLUND.
SEPARABLE BUTTON.

No. 584,036.

Patented June 8, 1897.



Inventor

Witnesses

Milton O'Connell,
U. B. Kellyard.

Pehr A. Eklund,
By *his* Attorneys,

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UNITED STATES PATENT OFFICE.

PEHR AUGUST EKLUND, OF ROCK ISLAND, ILLINOIS, ASSIGNOR OF ONE-
THIRD TO THEODORE A. SIEBERT, OF SAME PLACE.

SEPARABLE BUTTON.

SPECIFICATION forming part of Letters Patent No. 584,036, dated June 8, 1897.

Application filed June 13, 1896. Serial No. 595,468. (No model.)

To all whom it may concern:

Be it known that I, PEHR AUGUST EKLUND, a citizen of the United States, residing at Rock Island, in the county of Rock Island and State of Illinois, have invented a new and useful Separable Button, of which the following is a specification.

This invention relates to collar, cuff, shirt, or other form of buttons made separable so as to admit of them being readily applied to or removed from the article to which they may be applied.

The purpose of the improvement is the provision of a two-part or separable button which will comprise in its organization a minimum number of parts and which is not readily separable except at the pleasure of the user, and which will sustain a high degree of strain without giving way, and which will be neat in appearance, light, durable, and be satisfactory and effective when in service.

For a full understanding of the merits and advantages of the invention reference is to be had to the accompanying drawings and the following description.

The improvement is susceptible of various changes in the form, proportion, and the minor details of construction without departing from the principle or sacrificing any of the advantages thereof, and to a full disclosure of the invention an adaptation thereof is shown in the accompanying drawings, in which—

Figure 1 is a vertical central section of a separable button embodying the essence of this invention, the parts being shown locked. Fig. 2 is a view similar to Fig. 1, showing the parts released and in position to be separated. Fig. 3 is a detail view of that part of the button carrying the spring-shank. Fig. 4 is a sectional view of that portion of the button bearing the interlocking tube or sleeve. Fig. 5 is a detail view showing different means for preventing the tubular part entering the space between the members of the spring shank or stem.

Corresponding and like parts are referred to in the following description and indicated in the several views of the drawings by the same reference-characters.

The button is composed of two parts 4 and 5, which represent the ends or plates corresponding to what is generally termed the "head" and "back." The plate 4 is provided with a tube or sleeve 2, which preferably flares toward the end joined to the said plate 4. Openings or recesses 3 are provided at the inner or lower end of the tube 2 to receive the shouldered end of the stem or shank 6. Usually two openings or recesses 3 will be had and located at diametrically opposite points, but it is contemplated increasing the number of these openings or depressions corresponding to the size of the button and the number of shoulders 8 at the head or entrance end of the shank or stem 6.

The plate 5 bears the shank or stem 6, and the latter has a longitudinal slit 7, forming members which normally stand apart and are adapted to be pressed together, so as to admit of the shank or stem entering the tube or sleeve 2 when placing the parts of the button together.

The entering end of the shank or stem tapers so as to admit of the stem readily entering the tube 2, and the shank or stem is reduced a short distance from the head or tapering end, as shown at 12, forming shoulders 8, which are adapted to enter and engage with the openings or recesses 3, thereby locking the parts when placed together. A guard 13 is attached to or forms part of one of the spring members and extends across the slit or space 7, separating the said members, and is designed to prevent the end of the tube 2 from entering the said slit or space 7 when fitting the parts of the button together. This guard 13 is preferably an integral part of the stem or shank and is located at the extremity of the entering end. As shown in Fig. 5, the guard 13^a is a pin fastened at one end to a spring member and having its other end operating loosely in a transverse opening formed in the opposite member.

The parts comprising the button are constructed and proportioned so that the shoulders 8 normally stand apart a distance greater than the diameter of the bore of the tube or sleeve 2, so that upon inserting the stem or shank 6 into the tube 2 the shouldered por-

tions of the spring members will be compressed, and when the stem or shank has moved within the tube 2 a proper distance, so as to bring the shouldered portions 8 opposite the openings or recesses 3, the said parts 8, previously compressed, will automatically separate and enter the said openings, thereby locking the parts. When the stem or shank has moved within the tube 2 to its full limit, the shouldered portions 8 will be in the plane of the openings or recesses 3, and in the event of the parts 3 and 8 not registering a turning of the stem or shank within the tube will bring the parts 8 in register with the openings 3, when they will spring apart and lock the parts. When it is required to separate the parts 4 and 5, the stem or shank 6 is turned relative to the tube, thereby withdrawing the shouldered portions 8 from engagement with the openings or recesses 3 by a wedging or cam action, after which the parts are readily separable. It must be remembered that some force must be exercised to turn the stem within the tube so as to effect a withdrawal of the shouldered portions 8 from the openings or recesses 3. In ordinary usage sufficient force will not be applied accidentally, so as to effect a release of the parts. Hence the button is practically proof against accidental separation and will not come apart except at the pleasure and will of the user.

Having thus described the invention, what is claimed as new is—

1. In a separable button, the combination of a part having a tube, and a second part having a shank comprising spring members and constructed to enter and interlock with the tube of the first-mentioned part, and having a guard to extend across the space formed between the said spring members, substantially as and for the purpose set forth.

2. In a separable button, the combination of a part provided with a tube having openings or recesses at intervals in its inner wall, and a second part having a shank slitted longitudinally, forming spring members having shouldered portions to spring into the aforesaid openings or recesses and lock the parts when the shank is thrust within the tube, and which are withdrawn from engagement with the aforesaid openings or recesses upon relatively turning the parts; one of the spring members having its end bent to extend across the slit or space and form a guard, substantially as and for the purpose described.

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

PEHR AUGUST EKLUND.

Witnesses:

JNO. J. ROACH,
H. N. HANSEN.