H. Gerner.
Button.

No. 50.927. Patented. Nov. 14. 1865.

Fig. 4.

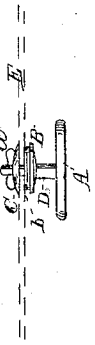


Fig. 1.

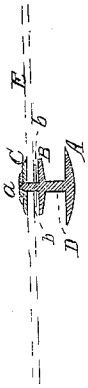


Fig. 3.

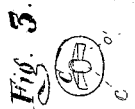
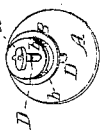


Fig. 2.



Witnesses:-
C. A. Smith
John A. Wedderburn

Heinz Gerner

UNITED STATES PATENT OFFICE.

HENRY GERNER, OF NEW-YORK, N. Y.

IMPROVEMENT IN BUTTONS.

Specification forming part of Letters Patent No. **50,927**, dated November 14, 1865.

To all whom it may concern:

Be it known that I, HENRY GERNER, of the city, county, and State of New York, have invented a new and useful Improvement in Button-Fastenings; and I do hereby declare the following to be a full, clear, and exact description of the nature, construction, and operation of the same, reference being had to the accompanying drawings, which are made part of this specification, and in which—

Figure 1 is a central section of my improved button. Fig. 2 is a perspective view of the button with the inner disk removed. Fig. 3 is a perspective view of the said inner disk. Fig. 4 is a side view of the button, showing a modification in the method of securing the detachable disk.

Similar letters of reference indicate corresponding parts in the several figures.

My said invention relates to the class of buttons which are individually made in detachable parts to admit of the application of the button without sewing. The most approved button of this character hitherto devised is composed of a shank, two disks, and an interposed spring of rubber, the part of the garment to which the button is ordinarily sewed being firmly clasped between the rubber spring and one of the disks, while the button-hole fits between the other disk and the clamped portion of the garment above alluded to. The rubber spring is fitted upon the shank and extends longitudinally thereon, so that the edges of the button-hole are always in contact with the rubber spring when the garment is buttoned. The friction to which the spring is subjected from the button-hole edges soon wears away the rubber to such an extent as to interfere with its efficacy, and the button, as a whole, is worthless. In such buttons the contact of the rubber spring also soils the exterior of the garment.

The object of my invention is to produce a button having the advantages of the one above cited, but adapted to obviate the objections named.

My improved button consists of a shank, two disks permanently fixed thereto, and a disk, which may be secured to or detached from the inner end of the disk at will. The button-hole portion of the garment having its place between the two fixed disks, while the portion to which the button is generally sewed, is clamped by rubber washers or springs between the inner detachable disk and the central fixed disk, so that the button-hole portion is not exposed to contact with the rubber, nor is the latter subjected to friction from the edges of the button-hole.

To enable others skilled in the art to which my invention appertains, to fully understand and use the same, I will proceed to describe its construction and operation.

In the accompanying drawings, A represents the button or disk, which is seen from the outside when the button is applied. B is another disk, which, with the first, may be made in one piece with the shank D. C is the inner disk by which the button is made fast to the garment.

To attach the button to the garment the shank is first inserted through an aperture in the material, and then the inner disk is secured to the end of the shank, either by the small pivoted button *a*, shown in Figs. 1 and 2, or by the key *a'*, shown in Fig. 4. When the button *a* is employed, the disk C, in order to correspond therewith, has a slot, *c*, and groove *c'*, which are at right angles to each other, and cross at the center of the disk. The slot *c* permits the button *a*, when turned parallel, to be passed through the disk, and after this has been done the button *a* is turned parallel with the groove *c'*, in which latter it has a firm bearing and cannot turn, provided the disk C is pressed inward with sufficient force to keep the button in the groove. This inward pressure on the disk is received from rubber washers or springs *b*, which encircle the shank D, and occupy a position between the central fixed disk, B, and the portion E of the garment—this portion being that to which the button is generally sewed. The number of these rubber washers are to be varied according to the thickness of the cloth or the distance asunder of the disks B and C.

If the key *a'* be used to secure the detachable disk on the shank, the inner end of the latter has an aperture to receive the key after the shank has been inserted through the cloth. The key *a'* has a central depression on its edge, and being pressed against by the disk C, it

cannot be accidentally displaced. The button-hole engages over the outer disk or button, A, and the material around its edges has its place between the fixed disks A and B. Thus, it is manifest that while the full benefit of the rubber spring is obtained, the rubber is preserved from injury by contact with the edges of the button-hole and the spring does not come in contact with the outer part of the garment.

The buttoning and unbuttoning of the garment, being similar to the ordinary way of doing it, need not be described.

To detach the button from the garment, it is only necessary to press the disk C toward the disk B and then turn the button *a* or withdraw the key *a'* to permit the disk C to be detached.

I do not confine myself to any particular form of parts, or to any mode of producing the same, as it is manifest that many modifications may be resorted to without departing from the essential principle of my invention.

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

1. In buttons having a spring to force the detachable disk against its locking device, the central fixed disk, B, constituting an abutment for the spring and separating the latter from the button-hole portion of the garment, substantially as described.

2. The combination of the disks A B and shank D with the washers or springs, *b*, and detachable disk C, the whole being arranged and employed in the manner and for the purpose specified.

HENRY GERNER.

Witnesses:
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