C. F. QUINLEY.
Separable Button.

No. 221,189. Patented Nov. 4, 1879.

Fig. 1.

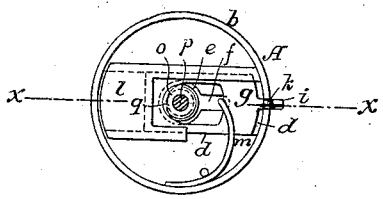


Fig. 2.

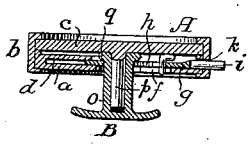


Fig. 3.

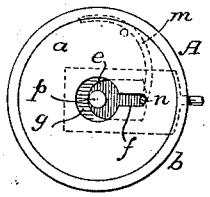
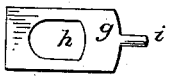


Fig. 4.



Attest:

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UNITED STATES PATENT OFFICE.

CHARLES F. QUINLEY, OF ATTLEBOROUGH, MASSACHUSETTS.

IMPROVEMENT IN SEPARABLE BUTTONS.

Specification forming part of Letters Patent No. **221,189**, dated November 4, 1879; application filed August 29, 1879.

To all whom it may concern:

Be it known that I, CHARLES F. QUINLEY, of Attleborough, Bristol county, Massachusetts, have invented an Improvement in Separable Buttons and Studs, of which the following is a specification.

My invention relates to separable two-part buttons for sleeves and other purposes of that class in which one part of the button is made with a hollow shank, and is held to the other part by fitting over a stud and engaging with a catch.

It consists in certain peculiarities of construction, by which the parts are held together and conveniently separated.

The object of the invention is to simplify and cheapen the construction of such buttons without sacrifice of strength or beauty of appearance.

In the drawings hereunto attached, and forming part of this specification, Figure 1 represents the interior plate of the larger or outer part of the button, with the outer shell removed to show the working parts. Fig. 2 represents a section on line *x x* of Fig. 1. Fig. 3 represents the inner surface of the larger portion of the button, with the smaller part removed. Fig. 4 represents the locking-plate detached.

The general form of the button does not differ materially from other buttons. The outer and larger part, A, is composed of a plate, *a*, a rim, *b*, and an outer plate, *c*. These plates, with the rim, form, when put together, a shallow inclosed chamber, in which are located the spring and catch.

The plate *a* is provided with a recess, *d*, formed when the said plate is stamped out. In this recess is a perforation, *e*, having on one side a slot, *f*. Within the recess is fitted a sliding plate, *g*, having an opening, as represented in Fig. 4. The opening *h* in this plate *g* is a little less in its greatest length than the corresponding opening in the plate *a*. The plate *g* is provided also with a projection, *i*, which projection, when the plate is in place, lies in a small notch, *k*, in the rim of the plate *a*. The plate *g* is held in place by the overlapping plate *l*, which is soldered or otherwise attached to the plate *a*, so as to hold the sliding plate *g* in place; but the parts are so constructed and adapted to each other that the plate *g* may be pushed back so as to cause the perforation in the plate *a* to register with the rounded rear part of the perforation in the plate *g*.

Sufficient space is left between the front edge of the plate *g* and the inner surface of the rim of the plate *a* to allow the said plate *g* to advance a sufficient distance to cause the rear edge to partially overlap the central perforation in the plate *a*. This sliding plate is held in normal position against the said inner edge of the rim by means of a wire spring, *m*, fastened in the manner shown to the plate *a*, and having an upturned end, *n*, resting in a small notch in the plate *g* and projecting through the slot in the plate *a*, so that the end itself limits outward movement of the plate.

The sliding plate *g* should be flush with the interior surface of the plate *a*, and, as before stated, is held in place by the plate, which overlaps it. The stud *i* projects sufficiently far outside of the rim of the plate *a* to allow the plate to be pressed back so as to bring the two rear edges of the orifice to coincide with each other.

The part B of the button is provided with a hollow stud, *o*, adapted to fit over the solid stud *p*, which is fixed centrally to the plate *a*. A rim or rounded flange, *q*, at the end of the hollow stud is so fitted to the openings in the sliding plate *g* and fixed plate *a* that it will pass through the opening in plate *a*, and be caught by the sliding plate *g* and held in place, from which it can be released only by pressing back the said sliding plate. It cannot be released in any other way.

I am aware that two-part buttons with a hollow stud upon one part, sliding upon a solid stud upon the other and held by a catch, are not new; and I am also aware that in such buttons a sliding catch pressed by a spring and released by means of a projection outside the rim has been before shown, and I desire to have it understood that I claim only the specific details of construction.

What I claim is—

1. In a two-part button, the combination, with the plate *c* and stud *p*, of the recessed

plate *a*, the sliding plate *g*, with pin *i*, and covering-plate *l* of the spring *m*, the parts being adapted to the hollow stud *o*, as set forth.

2. The combination of the recessed plate *a*, the plate *c*, and the sliding plate *g*, formed with an opening, as shown, with the wire spring *m*, fixed at one end to the inner side of the rim, and having the other end projecting through the opening in the plate *g* and through the slot in the plate *a*, the parts being all arranged to operate in connection with the studs of the two-part button, as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHARLES F. QUINLEY.

Witnesses:
H. T. MARSH,
J. B. CURTIS.