

(No Model.)

A. EISEN.
SEPARABLE BUTTON.

No. 441,294.

Patented Nov. 25, 1890.

Fig. 1.

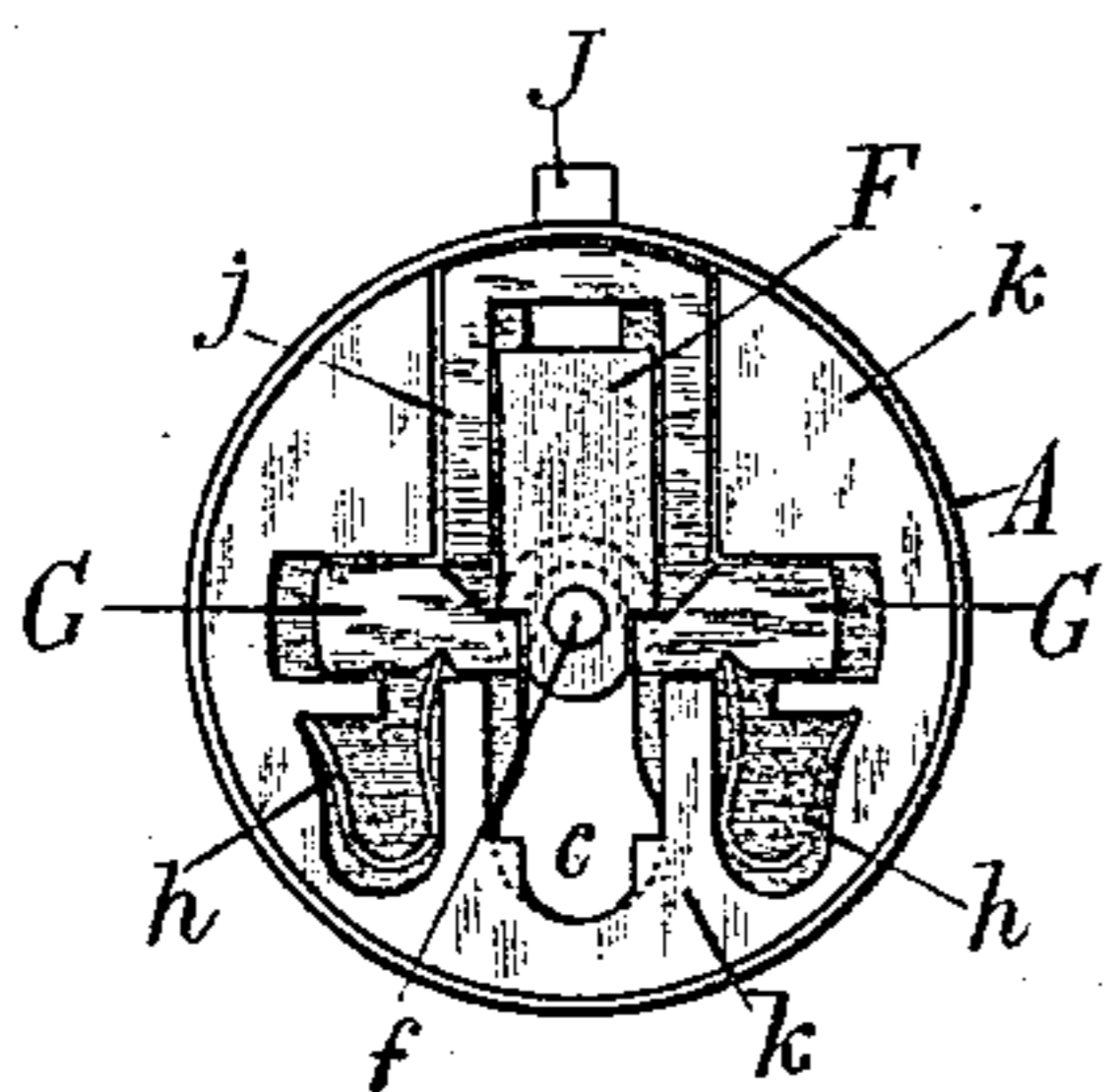


Fig. 2.

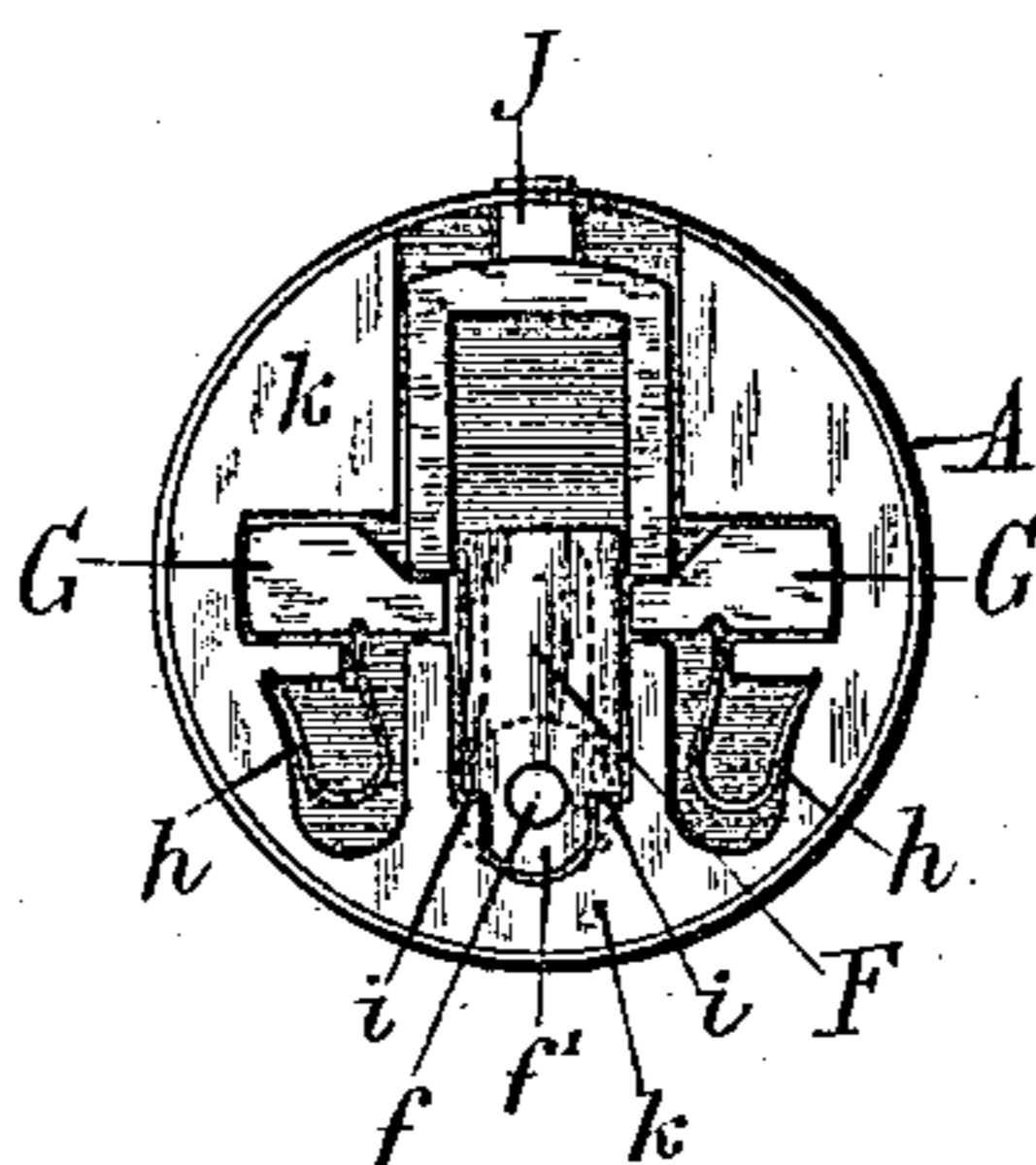


Fig. 3.

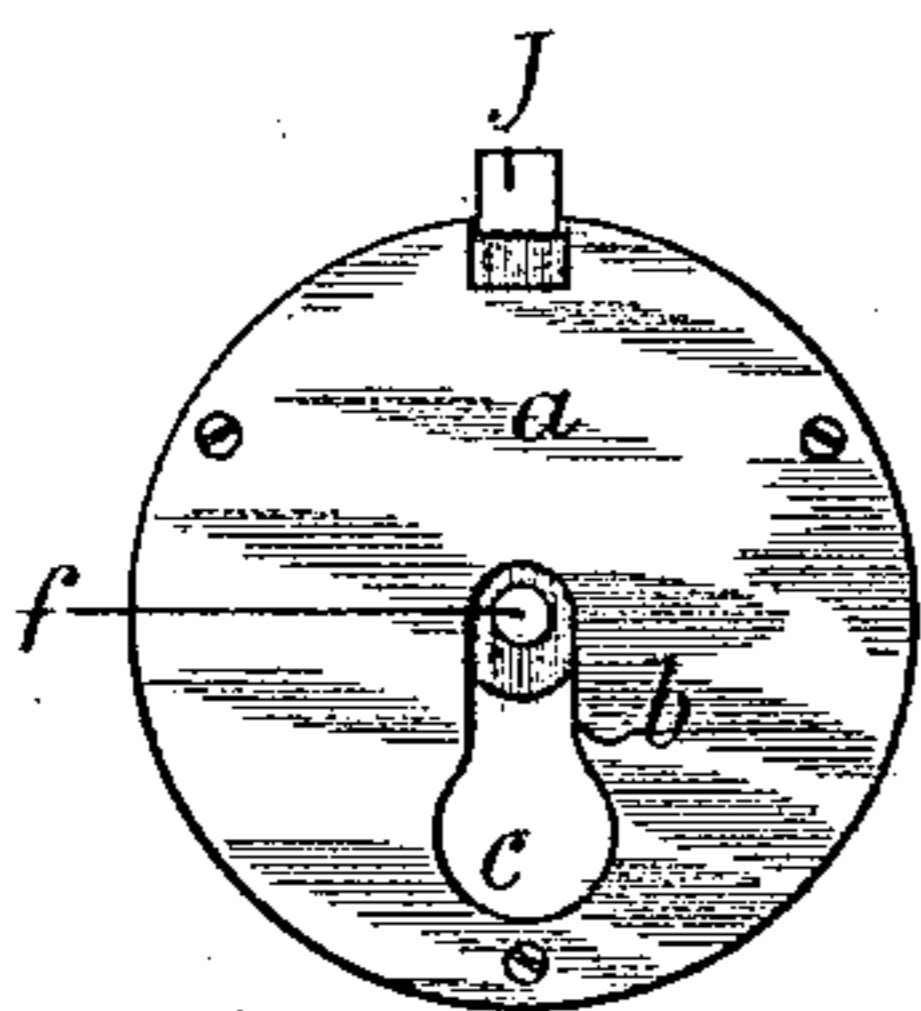


Fig. 4.

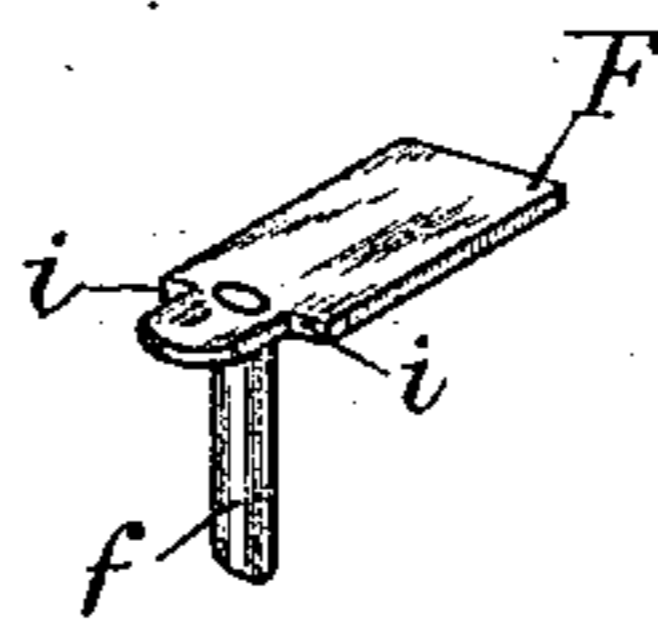


Fig. 5.

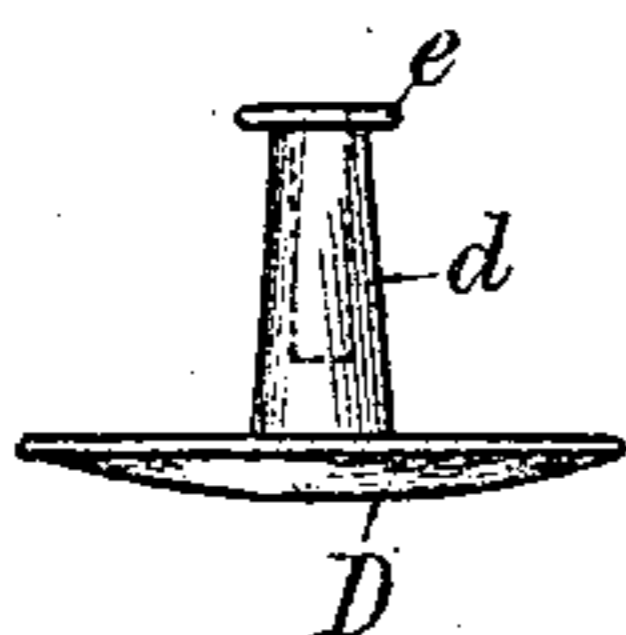
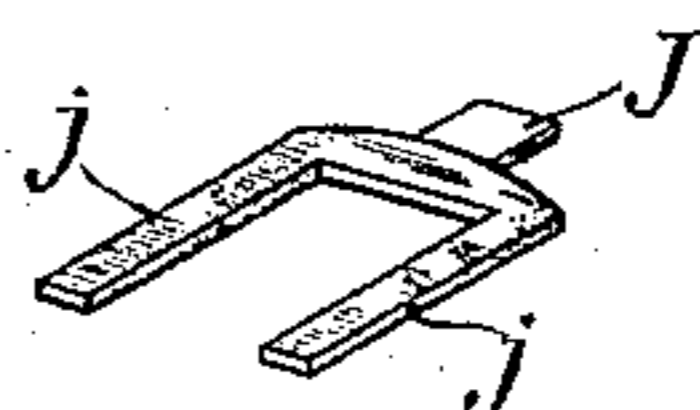


Fig. 6.



Witnesses:
W. H. Moss.
Robt. A. Blake.

Inventor:
Arthur Eisen,
per Henry H. Leigh
Attorney.

UNITED STATES PATENT OFFICE.

ARTHUR EISEN, OF PENTONVILLE, COUNTY OF MIDDLESEX, ENGLAND.

SEPARABLE BUTTON.

SPECIFICATION forming part of Letters Patent No. 441,294, dated November 25, 1890.

Application filed June 6, 1889. Serial No. 313,097. (No model.) Patented in England December 1, 1887, No. 16,546.

To all whom it may concern:

Be it known that I, ARTHUR EISEN, watch-maker, a subject of the Queen of Great Britain, residing at No. 5 Mylne Street, Pentonville, in the county of Middlesex, England, have invented certain new and useful Improvements in Solitaires and Studs, (for which I have obtained a patent in Great Britain, No. 16,546, bearing date December 1, 1887,) of which the following is a specification.

My invention relates to improvements in solitaires and studs the heads of which are adapted to be detached from the stems and re-engaged therewith without passing the back plates through the fabric.

In order that my invention and the means by which the same can be carried into practical effect may be thoroughly understood, I will now describe the same in detail, referring in so doing to the accompanying drawings, which are to be taken as part of this specification and read therewith.

The drawings illustrate the application of my invention to a solitaire; but I wish it to be distinctly understood that it is equally applicable and in the same way to a stud.

Figure 1 is a front view of a solitaire, showing the internal mechanism locked, but omitting the back-plate. Fig. 2 is a front view of a solitaire, showing the internal mechanism unlocked. Fig. 3 is a back view of a solitaire-head, showing the slide in the locked position. Fig. 4 is a perspective view of the slide and pin. Fig. 5 is an elevation of the back plate and stem. Fig. 6 is a perspective view of the releasing-stud.

A is the solitaire-head; *a*, its back; *b*, the slot cut therein and terminating in a hole *c*.

D is the back plate; *d*, the hollow stem fast thereto, and *e* the collar upon the outer end of the stem. The diameter of the collar *e* is rather less than that of the hole *c*, and that of the stem where it joins the collar rather less than the width of the slot *b*.

F is a slide, and *f* a pin projecting therefrom past the solitaire-back *a*, and adapted in point of diameter and length to be embraced by the hollow stem *d*.

G G are two detents kept in contact with the slide F by springs *h h*, which latter cause them to engage with the slide behind the corners *i* for the purpose of locking the back plate to the head.

J is a stud projecting beyond the head, and engaging with the detents G G by means of a fork *j*.

Suitable guides and recesses for the slide F, the fork *j*, the detents G G, and the springs *h h*, respectively, are furnished to a plate *k*, secured in any convenient way to the head A.

A solitaire or stud made according to my invention is used as follows: The stem *d*, having been passed through the fabric from behind the slide F, is released and drawn back until the end *f'* touches the plate *k*, when the pin *f* will be concentric with the hole *c*. The pin is then pushed into the bore of the stem *d*, the slide F released from the detents G, if it is made to be engaged by them when it is in the unlocked position, and the head A pushed past the pin *f*. When the end of the slot *b* farthest from the hole *c* reaches the stem, the detents engage with the slide F behind the corners *i* and the solitaire is locked. This engagement of the detents G with the slide F causes the stud J to project beyond the head A. To remove the solitaire from the fabric, the detents G are disengaged from the slide F by pressing the stud J in, and the head pushed past the pin *f* until the hole *c* is concentric with the collar *e*, when it is disengaged from the stem *d* by withdrawing the pin therefrom.

I claim—

In a stud or button, the combination of back having formed therein a slot and a hole in which the slot terminates, a back plate and hollow stem fast thereto, a collar on the outer extremity of the stem and of the same diameter as the hole aforesaid, a slide and a pin projecting therefrom at right angles through the back of the stud, detents adapted to engage and lock the said slide, and a push-piece adapted to disengage the detents from the slide, as and for the purpose set forth.

In witness whereof I have hereunto set my hand this 22d day of May, 1889.

ARTHUR EISEN.

Witnesses:

HENRY H. LEIGH,

22 Southamption Bldgs., London.

PERCY K. WOODWARD,

17 Gracechurch Street, London, E.C.