(No Model.)

## H. H. BAKER, Jr. SHIRT STUD FASTENER.

No. 546,989.

Patented Oct. 1, 1895.

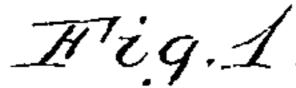
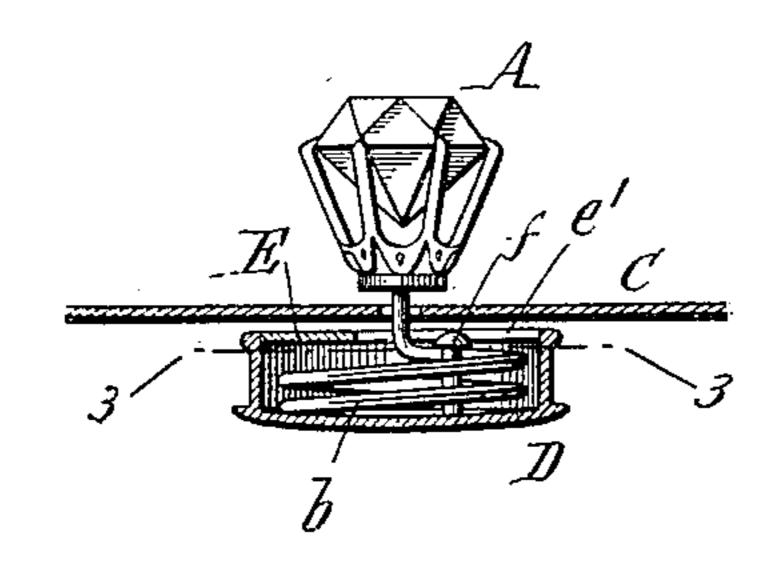


Fig. 2.



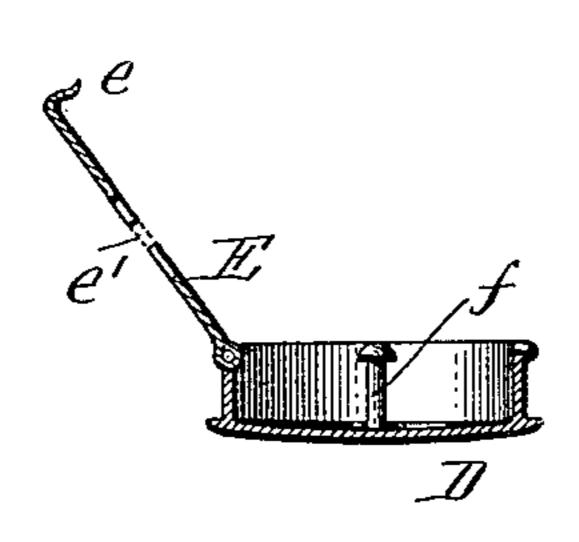
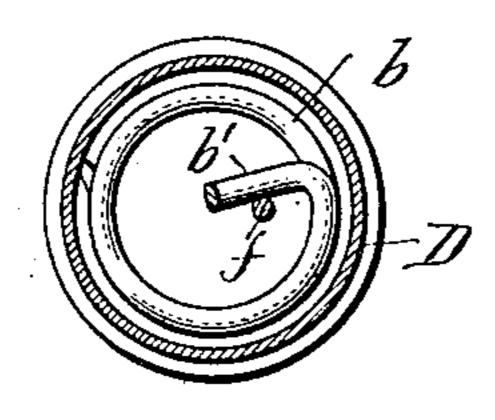


Fig. 3.

Fig. 4.



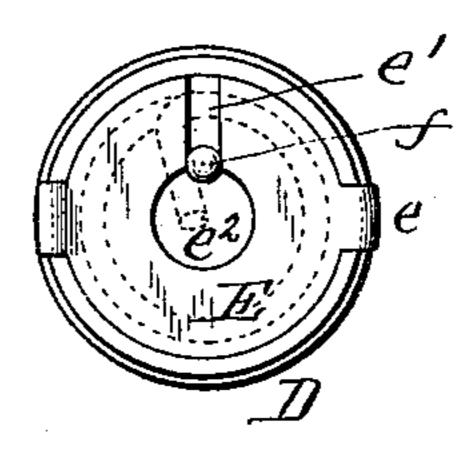
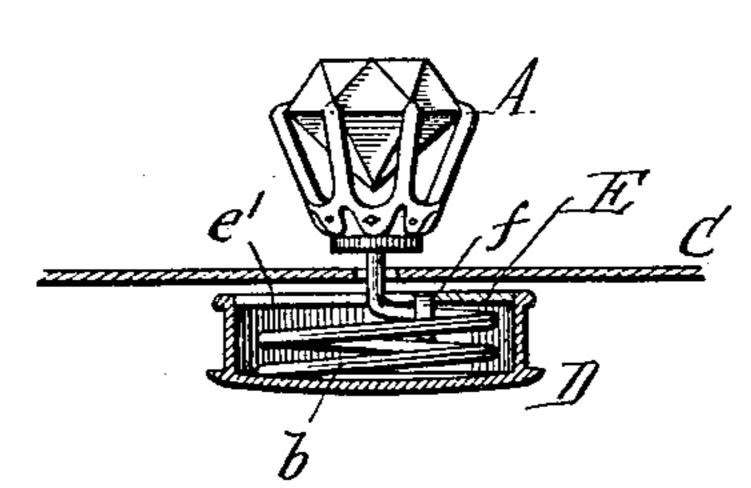


Fig.5.



WITNESSES:

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## United States Patent Office.

HENRY H. BAKER, JR., OF BUFFALO, NEW YORK, ASSIGNOR TO KING & EISELE, OF SAME PLACE.

## SHIRT-STUD FASTENER.

SPECIFICATION forming part of Letters Patent No. 546,989, dated October 1, 1895.

Application filed February 4, 1895. Serial No. 537,164. (No model.)

To all whom it may concern:

Be it known that I, HENRY H. BAKER, Jr., a citizen of the United States, residing at Buffalo, in the county of Erie and State of New 5 York, have invented a new and useful Improvement in Shirt Stud Fasteners, of which the following is a specification.

This invention relates to a fastener for preventing a shirt-stud from becoming accident-10 ally detached and from being unscrewed from

the outer side of the shirt-bosom.

My invention has for its object to provide a simple and inexpensive device of this character which is readily applied and removed and 15 which reliably retains the stud in place, and at the same time serves as a hood or guard whereby the point of the spiral stud-shank is prevented from catching in the underwear or chafing the wearer.

In the accompanying drawings, Figure 1 is a sectional elevation of my improved fastener applied to a stud. Fig. 2 is a detached sectional view of the fastener, showing its slotted lid open. Fig. 3 is a cross-section thereof in 25 line 3 3, Fig. 1. Fig. 4 is a top plan view of the fastener with the slotted lid closed. Fig. 5 is a sectional elevation of a modified construction of the fastener.

Like letters of reference refer to like parts

30 in the several figures.

A is the shirt-stud, having the usual wire screw or spiral shank b, and C is a portion of a shirt-bosom having the usual opening for

the passage of the spiral shank.

D is a shallow box or case, preferably of cylindrical form, which forms the body of the fastener and which receives the spiral shank. The bottom of this case is closed, so as to present a smooth surface to the under garment 40 and keep the spiral shank out of contact therewith.

E is a lid or movable plate, which closes the open front end of the case, and which is preferably hinged to the case at one edge and pro-45 vided at its opposite edge with a spring catch or lip e, which engages over a projecting rim formed at the adjacent edge of the case, so as to hold the lid in its closed position and at

The lid E is provided with a radial slot e', 50 which extends from the edge of the lid to the middle thereof, and which receives the neck of the spiral shank preparatory to closing the lid. This slot is just wide enough to receive the neck of the spiral shank freely, and its 55 inner end preferably terminates in a circular aperture or enlargement  $e^2$ , through which said neck passes.

f is a stop, pin, or projection, which is arranged in the case D in the path of the ra- 60 dial portion b' of the spiral stud-shank, and whereby the case and the lid are compelled to turn backward with the shank, thus defeating any attempt to unscrew the stud from the outer side of the shirt. The stop-pin f is 65preferably arranged to register with the inner portion of the slot in the lid, so as to occupy and obstruct the inner end of the slot when the lid is closed, as shown in Fig. 4. In case the fastener should be used in connection 70 with a smaller spiral than the size for which it is intended, the radial portion or first convolution of the spiral is by this relative arrangement of the stop and the slot in the lid prevented from entering or protruding 75 through the inner portion of the slot and permitting the spiral to be started and unscrewed from the fastener. In order to further check the passage of the radial portion of the spiral shank through the slot of the lid, the stop- 8; pin is formed at its free end with a head, as shown.

In applying the fastener to the stud the lid is opened and its slot is passed over the neck of the spiral stud-shank until the neck enters 85 the enlargement at the inner end of the slot, and the case is then closed over the spiral and interlocked with the catch of the lid, thereby confining the lid between the back of the shirt-bosom and the front end of the spiral 90 shank and retaining the fastener on the shank. If a surreptitious attempt should be made to unscrew the stud, the radial portion of the spiral shank will strike the stop-pin fand compel the case and lid to turn with the 95 shank, thus effectually preventing the shank from turning backward independently of the the same time permit it to be opened easily. I fastener and rendering it impossible to start

the shank. The case completely incloses the shank, and the point of the latter cannot, therefore, penetrate the underwear and chafe or scratch the wearer, as it does when unprotected.

The wearer can readily detach the stud after removing the shirt by disengaging the catch of the lid from the case, swinging the case clear of the spiral shank, and stripping the slotted lid from the neck of the shank.

Instead of arranging the stop f on the bottom of the case, it may be located on the inner side of the lid, as shown in Fig. 5, so as to stand in the path of the radial portion of the spiral when the lid is closed. In this case the stop is preferably arranged at one edge of the slot and near the middle thereof, as shown.

I claim as my invention—

1. A shirt stud fastener, comprising a case adapted to receive the shank of a stud, a lid or removable plate closing the open end of said case and having a slot extending inward from its edge, and a stop or projection arranged in the path of the radial portion of the stud shank, whereby the fastener is com-

pelled to turn with the stud, substantially as

set forth.

2. A shirt stud fastener, comprising a case adapted to receive the spiral shank of the stud, a lid or movable plate closing the open 30 end of said case and having a slot extending inward from its edge, and a stop-pin projecting from the bottom of said case and arranged to enter the slot of the lid when the latter is closed, whereby the pin obstructs the slot, 35 substantially as set forth.

3. A shirt stud fastener, comprising a case adapted to receive the spiral shank of a stud, a hinged lid applied to the open end of said case and having a radial slot extending in-40 ward from its edge, and a stop-pin projecting from the bottom of the case and having a head which obstructs said slot when the lid

is closed, substantially as set forth.

Witness my hand this 1st day of February, 45 1895.

HENRY H. BAKER, JR.

Witnesses:
CARL F. GEYER,
KATHRYN ELMORE.