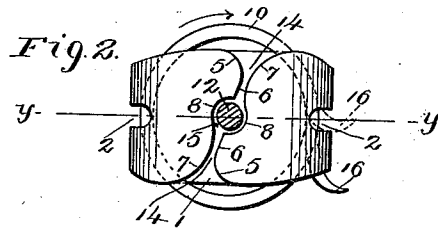
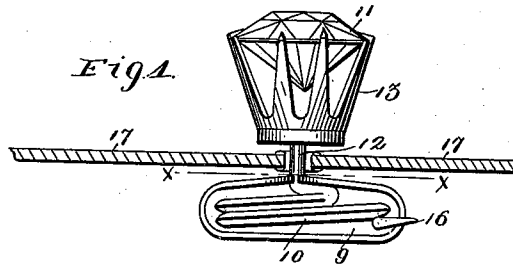


(No Model.)

H. WILD.  
STUD RETAINING CLASP.

No. 548,336.

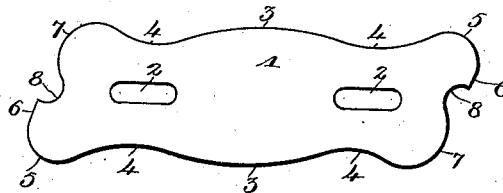
Patented Oct. 22, 1895.



*Fig. 3.*



*Fig. 4.*



Witnesses  
Alfred A. Maitoy  
Frank Wells

Inventor  
Henry Wild.  
By His Attorneys,  
Keller & Starek

# UNITED STATES PATENT OFFICE.

HENRY WILD, OF ST. LOUIS, MISSOURI.

## STUD-RETAINING CLASP.

SPECIFICATION forming part of Letters Patent No. 549,336, dated October 22, 1895.

Application filed August 30, 1895. Serial No. 560,980. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY WILD, a citizen of the United States, residing at St. Louis, in the State of Missouri, have invented certain new and useful Improvements in Stud-Retaining Clasps, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention has relation to improvements in stud-retaining clasps; and it consists in the novel arrangement and combination of parts more fully set forth in the specification, and pointed out in the claims.

In the drawings, Figure 1 is a side elevation of a stud having my invention applied thereto, showing the shirt-bosom in section. Fig. 2 is a section on  $xx$  of Fig. 1. Fig. 3 is a longitudinal section on  $yy$  of Fig. 2; and Fig. 4 is a plan view of the original blank from which the clasp is formed.

The object of my invention is to construct a clasp which will permanently prevent a stud from being accidentally or intentionally withdrawn or removed from its mounting, the invention being particularly applicable to shirt-studs which are often extracted or removed by pilferers and thieves from the shirt-bosoms of persons unaware of the thief's presence. To this end I have devised a clasp which in detail may be described as follows:

The device is best described by following the several mechanical steps involved in the manufacture of the clasp from the original blank.

Referring to the drawings, 1 represents a blank of any suitable metal and of an approximate contour, as represented in Fig. 4 of the drawings—that is to say, it is oblong in general character, having the openings 2 disposed along an axial line and equidistant on either side from the center thereof. The object of said openings will be presently described. The middle portions 3 of the longitudinal edges are outwardly convex. Both ends of the said convex edges are bordered by concave depressions 4, which latter are reversed at two diagonal corners of the blank into an outwardly-convex terminal edge 5. Two of the opposite diagonal terminal edges of the blank contiguous to the convex edges 5 are in the form of straight edges 6, making

an obtuse angle with the general axis of the blank. The other two diagonal corners 7 of the blank are outwardly convex, being connected to the straight edges 6 by a concave depression 8. The complete blank thus formed is then folded about the medial portion of the openings 2, so as to assume the form of the clasp shown in Figs. 1 to 3, the diagonal edge 6 occupying a contiguous relation to the edge 7 on the opposite end of the blank. The blank thus folded forms a chamber 9 for the reception of the ordinary spiral or screw spring 10 of the stud 11. The dimensions of the chamber 9 are such that the spring portion 10 must be slightly compressed to be properly inserted into said chamber, the said spring or screw being inserted from the open side of the chamber, and the projecting end or neck 12 of the spring—that is, the end which carries the retaining-prongs 13—being directed through the space 14, formed between the opposite ends of the folded blank, and when the parts are in position the spring 10, which was slightly compressed during the act of insertion, is now allowed to expand to its normal proportions by reason of the increased play allowed thereto for such expansion by the enlarged opening 15, formed by the juxtaposed depressions 8 of the original blank. When once in proper position in the chamber of the clasp thus formed, the stud, with its coiled retaining-spring 10, can be turned or rotated freely therein, the rotation, however, being limited in either direction by the terminal directing-hook 16 of the coil striking or abutting against the edges of the terminal walls of the chamber.

In applying my invention the stud is first screwed or inserted into the bosom 17 of the shirt in the usual manner, when the clasp is passed over the coiled spring or screw portion 10 of the stud, as already indicated.

It is obvious from the foregoing that should the stud be seized by unauthorized persons, such as thieves, and an attempt be made to unscrew the same from the bosom the terminal hook 16 would at once arrest the unscrewing operation by coming in contact with the terminal wall of the chamber of the clasp, (see Fig. 2,) and there would be no way of removing the stud except by first detaching the clasp from the under side of the bosom.

In some cases—where, for example, the spring 10, with its terminal hook 16, is too small for the particular size of clasp and there would be danger that the hook would not reach the terminal walls of the chamber of the clasp when once inserted thereinto—the coil may be so inserted as to pass the hook 16 into one of the openings 2, formed in the original blank, as seen in dotted lines in Fig. 2. In this way a large clasp can secure even a small stud—that is to say, a stud with a small securing-spring.

To insert the coil of the stud into the clasp, (or, what amounts to the same thing, to pass the clasp over the screw of the stud,) the hook end of the coil is always passed first into the chamber of the clasp. To remove the stud from the clasp, the clasp is seized by one hand and the stud is then turned by the other hand in the direction shown by the arrows in Fig. 2 until the hook 16 bears against the opposite terminal wall of the chamber of the clasp, when further turning in the same direction will dislodge the coil from the chamber, the hook 16 acting as a fulcrum, as it were, about which the entire stud is turned out of the confines of the chamber of the clasp. In this act of dislodging of the coil from the clasp the stem 12 is guided by the walls or edges of the passage 14, formed between the opposite contiguous ends of the original blank.

Having described my invention, what I claim is—

1. In a stud-retaining clasp, a suitable blank having its opposite edges brought into contiguous relation to form a chamber, and forming terminal walls against which the end of the coil or spring screw of the stud can come in contact and within which the said coil is adapted to rotate, substantially as set forth.

2. In a stud-retaining clasp, a suitable blank having its opposite edges brought into contiguous relation to form a chamber, said contiguous edges being separated a sufficient distance to allow for the passage of the stem of

the screw of the stud, and an enlarged opening formed at the middle of the contiguous edges to allow for the play incident to the expansion of the coil after the same has been inserted into the chamber of the clasp, substantially as set forth.

3. In a stud-retaining clasp, a suitable blank of oblong contour having the medial portion of its longitudinal edges outwardly convex, concave depressions at either end of the convex portions, outwardly convex diagonal ends, straight edges contiguous to two of the latter convex ends located at the diagonal ends of the blank, concave depressions connecting the straight edges with the remaining two convex corners of the blank, said blank being adapted to be folded to bring the ends thereof in contiguous relation to form a clasp, substantially as set forth.

4. A stud-retaining clasp comprising a blank folded to bring the opposite ends in contiguous relation, and an opening at either end of the blank and located at a suitable distance from the edge thereof about the medial portion of each of which openings the said blank is folded, said openings being adapted to receive the terminal hooks of the screw of the stud, substantially as set forth.

5. In combination with the spring coil or screw of a stud, a suitable clasp adapted to embrace said coil, a terminal hook on the coil adapted to abut against the edges of the terminal walls of the chamber of the clasp, a suitable passage formed between the contiguous ends of the blank of the clasp for directing the stem of the stud during the insertion of the latter into the chamber of the clasp, and an enlarged opening to allow for sufficient play for the stem of the coil, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

HENRY WILD.

Witnesses:

ALFRED A. MATHEY,  
EMIL STAREK.