H. S. WING.

BUTTONS AND STUDS.

No. 187,442. Patented Feb. 13, 1877.

Fig. 1.

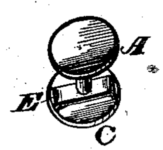


Fig. 2.

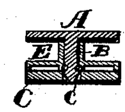


Fig. 3.

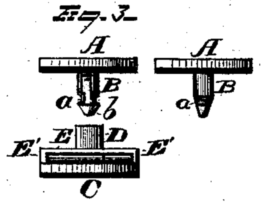
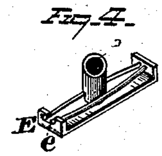


Fig. 4.



WITNESSES
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IMPROVEMENT IN BUTTONS OR STUDS.

Specification forming part of Letters Patent No. **187,442**, dated February 13, 1877; application filed August 15, 1876.

To all whom it may concern:

Be it known that I, HENRY S. WING, of Rochester, in the county of Monroe and State of New York, have invented certain new and useful Improvements in Studs or Jewelry-Buttons; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

My invention relates to studs, shirt and cuff buttons, and similar articles of dress-wear used for ornament, or as a means of fastening together different parts of articles of apparel.

Referring to the drawings, Fig. 1 is an isometric view of a stud or jewelry-button constructed according to my improvement. Fig. 2 is a vertical section through the standard of the stud transversely to the spring-bars. Fig. 3 is a detail of the face and base-plates, respectively, disunited. Fig. 4 is a view of a modification of my invention.

A is the stud or button of any desired design or material having a standard, B, centrally supporting same from its under or reverse side, and either of same piece therewith or firmly fastened thereto. Its lower extremity is provided with a conical wedge-shaped head, *b*, or it may be of an oblong wedge-shaped construction. Just above this part *b* is a recess, *a*, channeled upon two opposite sides only of the stem, and thus constituting a semi-annular groove, which is of suitable construction to engage with the locking mechanism which secures the standard to the lower or base plate C. This latter plate is also of immaterial form or composing matter; but, preferably, I make it corresponding to the face-plate in size and material. It is provided with a central perforation, *c*, of size adapted to the head on the lower end of the standard, and it receives same flush with its lower surface.

A sleeve, or tubular stem, D, supporting the base-plate is built up about the aperture *c*, so as to extend upward from the base-plate as a continuation of the aperture in same, and is adapted to inclose the stem and give it lateral bearing. It may be of the same or of a different piece from the plate.

Extending across the interior of the base-plate, and a little raised from its central plane, is the bridge E, through which the tubular stem D passes. Its supporting-standards E′ give journal-bearing to the two spring-bars F longitudinally located under the bridge, and passing through lateral slots *d* formed in the lower portion of the sleeve or tubular stem D. One of these standards E′ may be centrally recessed at *e*, to allow of one end of the springs being introduced freely into their bearings on either side of this recess, as shown in the modification drawing of Fig. 4. This construction I may use as desired, or I may confine myself to the construction shown as the main principle of my invention. By this modified form it will be seen that the springs may be readily introduced into their bearings and work freely therein, so that while they are securely retained in proper position they are yet capable of being easily removed, as may be desired or necessary. Thus upon accident to or breakage of one of the springs the parts may be removed and a new spring easily introduced in substitution thereof. These bars E are preferably of steel, but may be of any suitable composition, and are sufficiently elastic to snugly compress the groove with a binding hold upon the standard as they engage with said groove of the latter. To connect the two pieces, the upper and lower plates, the standard is introduced into the sleeve or tubular stem D, and by pressure the conical head *b* is forced in between the two springs, and as the lower end of the standard passes into the aperture of the base-plate the head of the latter overrides the spring-bars, and the bars sink into the recessed neck or groove *a*. This securely retains the two parts together, and they may be released by turning the face-plate or the base-plate a quarter revolution or thereabout, which disengages the spring from the groove and allows of the separation.

It is apparent that instead of pressing the standard strongly downward, so as to separate the spring-bars by force of the head on same, the latter may be introduced lightly in between the springs, and then locked securely

by a partial revolution by simply giving an oblong form to the lower extremity of the standard, whose less diameter is no greater than the open space between the springs, and whose diameter through the retaining-grooves is greater than such space. This would still allow of a binding hold upon the standard when locked.

It will be observed that the head *a* of the standard is provided with inclines or wedge-shaped planes *a'* upon opposite sides of the head, and alternating with the grooved sides of same. These wedge-shaped planes cause the standard carrying the stud to be forced upward by the contracting tension of the spring-bars, as the latter tend to come in straight line upon being released from the binding-groove of the standard as the latter is turned in its tubular stem. By this reaction or outward rebound the stud is at once disengaged from the springs, and easily removed from the tubular stem, so that the two parts, the stud or face-plate and the lower or base-plate, are at once separated from one another by a mere partial turn.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A stud or button fastening, consisting of a plate having a shank secured thereto, the latter constructed with two wedge-shaped faces, and the opposite and intermediate portions grooved, in combination with an under plate, which is provided with parallel spring-bars secured at both ends, substantially as and for the purpose specified.

2. In a stud or button fastening, the combination, with the cross-bar having parallel springs secured thereto, of a hollow standard suitably notched on opposite sides, whereby it is firmly secured to the cross-bar by means of the parallel springs, substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my own, I affix my signature in presence of two witnesses.

H. S. WING.

Witnesses:
F. O. McCLEARY,
A. W. BRIGHT.