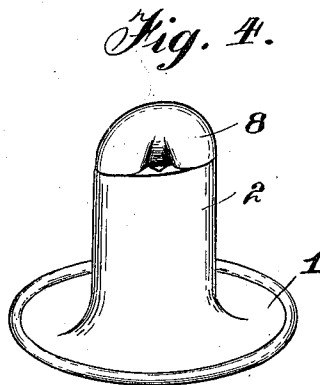
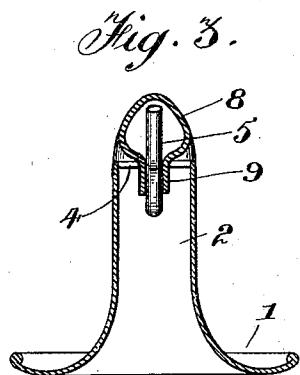
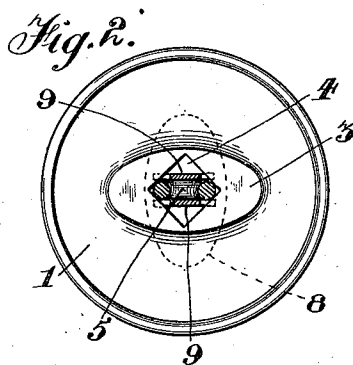
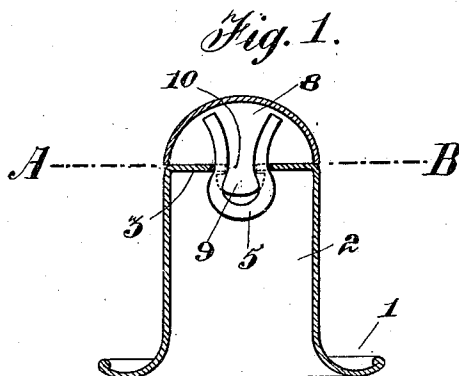


G. S. BUTTERFIELD.
COLLAR STUD.
APPLICATION FILED AUG. 5, 1910.

982,124.

Patented Jan. 17, 1911.



Witnesses.

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Inventor.

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UNITED STATES PATENT OFFICE.

GARRETT STEWART BUTTERFIELD, OF SAULT STE. MARIE, ONTARIO, CANADA.

COLLAR-STUD.

982,124.

Specification of Letters Patent.

Patented Jan. 17, 1911.

Application filed August 5, 1910. Serial No. 575,812.

To all whom it may concern:

Be it known that I, GARRETT STEWART BUTTERFIELD, a subject of the King of Great Britain, and resident of the town of Sault Ste. Marie, in the Province of Ontario, in the Dominion of Canada, have invented certain new and useful Improvements in Collar-Studs, of which the following is a specification.

The invention relates to improvements in collar studs, as described in the present specification and illustrated in the accompanying drawings that form part of the same.

The invention consists essentially in the novel construction and arrangement of parts, whereby a separable spring member is associated in operation with a rotatable head.

The objects of the invention are to lessen the cost of production in collar studs of a variety in which the head turns after being inserted through the collar stud holes, to provide a stud easily operated and not liable to get out of order, and generally to devise a stud of few parts and therefore simple to manufacture.

In the drawings, Figure 1 is a vertical sectional view of a stud. Fig. 2 is a horizontal section on the line A—B in Fig. 1. Fig. 3 is a vertical section of the stud taken at right angles to the vertical section in Fig. 1. Fig. 4 is a perspective view of the stud complete. Fig. 5 is a perspective detail of the head of the stud. Fig. 6 is a detail of the spring member.

Like numerals of reference indicate corresponding parts in each figure.

Referring to the drawings, 1 is the base of the stud from which extends preferably in the same piece of metal, the neck 2, the said neck being elliptical in shape in cross section and closed in at the top by the piece 3, said piece being preferably integral with the neck 2 and the base 1 and having the central square orifice 4 therethrough. It will be thus seen that in the preferable construction of this stud, only one piece of metal is used for the base, neck and the piece covering in the top opening of said neck.

5 is the spring member formed in substantially U-shape, of a piece of spring wire, and having its sides formed with the waist portion 6 producing the outwardly flaring ends 7, the spring member 5 is sprung into the orifice 4 so that the waist portion 6 of said

spring member engages in the corners of the squared orifice 4 the diagonals of said squared orifice being longitudinal and lateral in relation to said elliptical formation of the neck respectively.

8 is the head of the stud preferably of hollow formation and having a base correspondingly elliptical in shape to the neck 2 and having the lugs 9 extending centrally from the lower edge thereof and joined to the main body of the head by the neck 10, said lugs 9 being compressed to one another for insertion in the squared orifice 4 and splayed after insertion so that the corners of the lugs engage the under side of the piece 3, the said spring spreading the lugs sufficiently to keep the head on.

In the operation of this stud, the head is grasped between the thumb and a finger and turned cross-wise to the neck 2 and in turning the spring is carried with the head, the sides of said spring being compressed until the lateral diagonal line of a square is reached, that is to say, until said spring finds its way to the other corners of said square, and in use, this head in its crossed position engages the surface of a collar band around the button hole and retains the collar to the shirt.

This form of collar stud or button is not at all new, but it is entirely in the particular manner of its construction, for the elliptical neck and rotatable elliptical head have been known for some years, however, as far as I am aware, the construction described herein is novel, that is to say, in the use of a separable spring member.

What I claim as my invention is:

1. In a collar stud, a body formed of a base and an elliptical neck closed at the end thereof except for a squared orifice through the top diagonally arranged in diametrical relation to said elliptical formation, a spring member engaging the top of said neck in opposite corners of said orifice and a head having lugs inserted in said orifice and spread within said neck and arranged to turn with said spring in the operation.

2. In a collar stud, a body formed of a base and an elliptical neck closed at the end thereof except for a squared orifice through the top diagonally arranged in diametrical relation to said elliptical formation, a substantially U-shaped wire spring inserted in said squared orifice, and a head having lugs

inserted in said squared orifice and splayed within said neck and arranged to turn with said spring in the operation.

3. In a collar stud, a body formed of a
5 base and an elliptical neck closed at the end thereof except for a squared orifice through the top diagonally arranged in diametrical relation to said elliptical formation, a substantially U-shaped wire spring having its
10 sides inwardly bent to form a waist and engaging the said top of the neck in opposite

corners of said orifice and a hollow head terminating at its under side in substantially T-shaped lugs, said lugs being inserted in said squared orifice and engaging said
15 spring.

Signed at Sault Ste. Marie, Ontario, this
25th day of July, 1910.

GARRETT STEWART BUTTERFIELD.

Witnesses:

RHEA KAUPP,

DAISY QUESTARD.