## J. B. \& W. BENNETT. <br> STUDS AND BUTTONS.

No.171,644.
Patented Jan. 4, 1876.


WITNESSES:
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# United States Patent Office, 

JOHN B. BENNETT AND WALTER BENNETT, OF HALIFAX, OANADA. IMPROVEMENT IN STUDS AND BUTTONS.

Specification forming part of Letters Patent No. $\mathbf{1 7 1}$,644, dated January 4, 1876 ; application filed September 4, 1875.

## To all whom it may concern:

Be it known that we, John B. Bennett and Walier Bennett, of Halifax, in the county of Halifax, Province of Nova Scotia and Dominion of Canada, have invented a new and useful Improvement in Studs, of which the following is a specification:

Figure 1 is a side view of our improved stud; Fig. 2, a section of the same taken longitudinally with the stem. Fig. 3 is a detail under side view of the outer part of the same. Fig. 4 is a cross-section of the same.
similar letters of reference indicate corresponding parts.
The object of this invention is to furnish an improved stud, easily attached and detached, and not liable to become accidentally detached, and which shall be simple in construction and inexpensive in manutacture.

The invention consists in a stud or button comprising a head having a recess in its under side; a stem, provided with a pin attached to said head; and a back disk provided with a tube luaving a horizontal flange on its upper end, which enters the recess in the buttonhead, the flange and tube being slotted for the reception of the pin on the stem, which serves to lock the two parts together.

A represents the head or outer plate of the stad, upon the center of the lower or inner side of which is formed, or to it is attached, a stem, B , to which, near its upper end, is attached a pin, $b^{\prime}$, and the lower part of which is turned down or made smaller than its upper part. A recess, $a$, is formed in the lower side of the button-head, and the stem B extends from the center of said recess. C is the base or inner plate of the stud, upon the center of which is formed a tube, D , of a length equal to the length of the stem $B$, and the cavity of which is of such a size as to receive and fit upon the said pin $b^{\prime}$. On the upper end of the tube $D$ is formed a horizontal flange, $c$, made sufficiently large to enter the recess in the button-head.

A slot made in the flange and upper portion of the tube $D$ passes down vertically, turns to one side horizontally, and again passes up vertically nearly to the end of the tube, the said slot being thus made with two right angles. The slot $d^{\prime}$ of the tube D is desigued to receive the pin $b^{\prime}$ of the stem $B$.

The object of the recess in the button-head and the flange in the slotted tube is to provide a broad bearing or seat for the buttonhead, and also to bring the stud on the stem as near as possible to the lower surface of the button, thus preventing it from wearing out the button-hole or fabric:

E is a small coiled spring, of such a size as to fit in to the cavity of the tube D , and receive the lower part of the stem B, the shoulder of said stem resting against the upper end of the . said spring E.

In attaching the stud the stem $B$ is passed into the tube $D$, and pressed down until the pin $b^{\prime}$ reaches the horizontal part of the slot $d^{\prime}$. The stem B is then turned until the pin $b^{\prime}$ reaches the end of the said horizontal part of the slot, when it is released, and the elasticity of the spring $E$ forces the said pin into the second or inner vertical part of said slot, and holds it there securely. The stud is detached by reversing this operation.

Having thas described our invention, we claim as new and desire to secure by Letters Patent-

The combination of the head A, having a recess, $a$, stem B , and pin $b^{\prime}$, with the back plate C , provided with a tubular shank, D , having a tiange, $c$, aud a right-angled slot, $a^{\prime}$, at its upper end, all constructed and applied as herein set forth, for the purpose set forth.

> JNO. BENJAMIN BENNETT. WALTER BENNETT.

Witnesses:
Frank Stetison Rogers,

