

*J. M. Johnson.*

*Button.*

*N<sup>o</sup> 54736*

*Patented May 15. 1866*

Fig. 1.

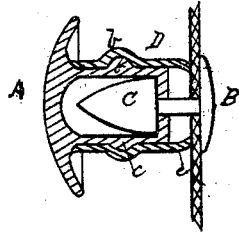


Fig. 3.

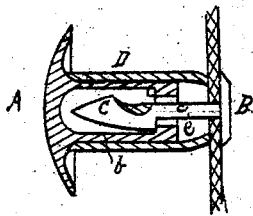


Fig. 2.

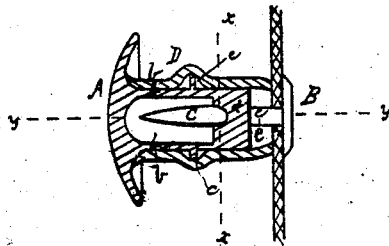
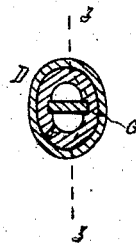


Fig. 4.



Witnesses.

*Alex. A. C. Klaucke*  
*W. F. Hall*

Inventor.

*J. M. Johnson*  
*By Munn & Co*  
*Attorneys*

# UNITED STATES PATENT OFFICE.

JOHN M. JOHNSON, OF NEW YORK, N. Y.

## IMPROVEMENT IN BUTTONS.

Specification forming part of Letters Patent No. 54,736, dated May 15, 1866.

*To all whom it may concern:*

Be it known that I, JOHN M. JOHNSON, of Station D, of the city, county, and State of New York, have made new and useful Improvements in Button-Fastenings; and I do hereby declare the following to be a full, clear, and exact description of the same, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a longitudinal section of a button in the line *yy*, Fig. 2, representing my invention. Fig. 2 is a longitudinal section thereof in the line *zz*, Fig. 4. Fig. 3 is a longitudinal section thereof in the same plane as Fig. 2, with the barb partially rotated. Fig. 4 is a transverse section in the line *xx*, Fig. 2.

Similar letters of reference indicate corresponding parts in the several figures.

This invention consists in the arrangement of a barbed piercing-stud in combination with the shank of a button and with a suitable spring secured thereto in such a manner that by means of the stud the material to which the button is to be attached can be readily pierced, and by introducing said stud into the shank and partially turning it catches in the bottom of the shank and is securely held by the action of the spring and by the compression thereof, and again turning the stud the latter may be released and the button detached from the material.

*A* represents the button-head, and *b* the shank thereof, which is secured to the head in the usual manner. The lower end is closed, and is provided with a slot corresponding with the width of the stud which enters therein. The inner face of this lower end is depressed in a direction opposite to the opening, so that when the stud is turned after entering the shank the shoulder of the barb will rest in the depression.

*B* is a disk or back plate, from the center of which rises a shank, *c*, to which is attached the barb *C*. This barb is of lance form, with cutting-edges and a sharp point, and is intended to enter through the material to which the button is to be secured and into the shank of the button where it is secured, as herein-after explained.

A suitable rubber spring, *D*, is secured to the shank of the button, and is prevented from slipping off by means of a pin, *e*, secured to the shank, and which enters the inner side of the rubber.

A projection or ridge may be formed on the shank for the same purpose; but I do not limit myself to any particular mode of securing the spring thereon. I prefer the pin, for, being placed in a line with the direction of the slot in the bottom of the shank, it assists the operator in the insertion of the stud.

The ends of the spring *D* press against the inner side of the button-head and of the disk, and serve to press the shoulders of the barb against the inner side of the bottom of the shank and to keep the head and back plate apart, and thus secure the button when in use.

Instead of the depression in the inner side of the bottom of the shank, a thimble, *d*, may be secured therein, fitting closely, and being provided with a recess on either side, in which the barb will rest.

It will be readily seen that the making of button-holes or any apertures previous to the securing of the button to the garment is obviated.

The operation is as follows: The head and back plate are detached or separated, and the barb then forced or pierced through the material at the desired point, and inserted into the shank and pressed therein to its full extent, and then a half-turn is made, and the shoulders will sink into the depression or recess made to receive them and rest there, and the pressure of the spring will keep the parts secured in place.

The utility of this device is apparent. A simple slot or cut is made by the barb in the act of entering or piercing the garment or material.

All the friction to which the material around the opening is subjected is merely that portion of it immediately being pressed by the ends of the spring and the inner face of the disk or back plate and around the shank of the barb, the barb or lance being securely incased or inclosed within the shank of the button.

When the head wears out or a change of style is desired, it can be readily displaced and another substituted, and also when the disk or

barb breaks or becomes useless, new ones can take their place. I do not limit myself to shape, size, or style.

A cheap button is thus made, which house-keepers can recommend, for sewing is obviated and a saving of time is effected thereby.

The spring D may be made of india-rubber, or it may be a metallic spiral spring, or a strip of spring steel or other suitable material, secured on the exterior or interior of the tubular shank in any suitable manner.

Having thus described my invention, what

I claim as new, and desire to secure by Letters Patent, is—

The barbed piercing-stud C, in combination with the rigid tubular shank of the button A and the spring D, and operating in the manner and for the purpose herein specified.

The above specification of my invention signed by me this 29th day of March, 1866.

JOHN M. JOHNSON.

Witnesses:

JOHN A. WIEDERSHEIM,  
EDWARD H. KNIGHT.