

No. 17060.

J. Wilcox,
Button.

Patented April 14, 1857.

Fig. 5.

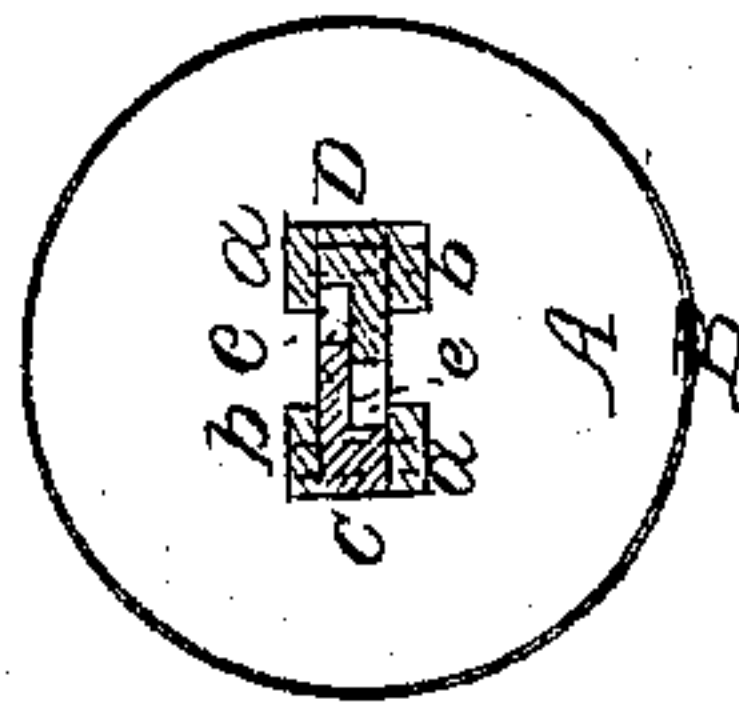


Fig. 4.

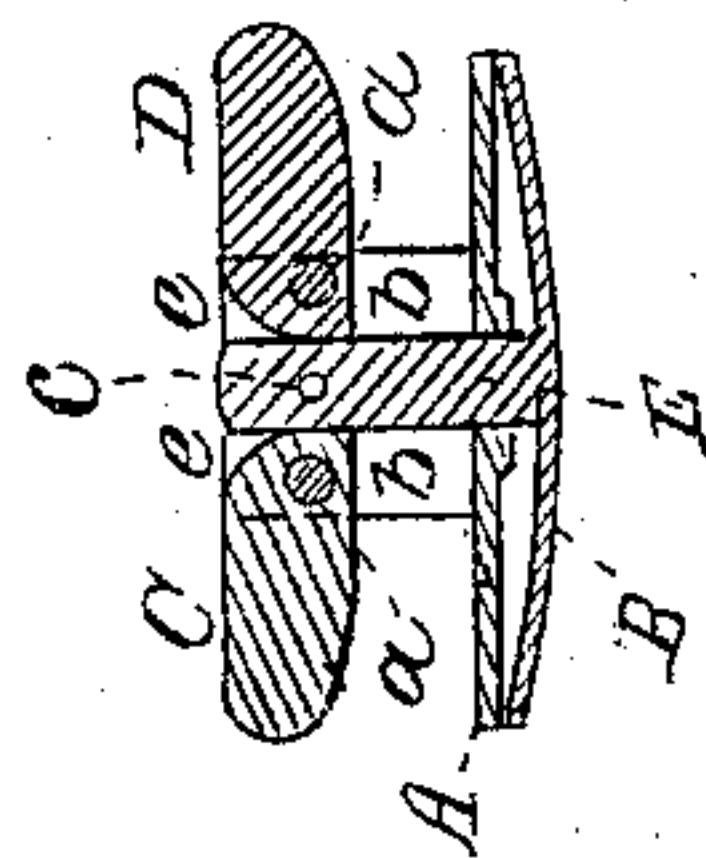


Fig. 3.

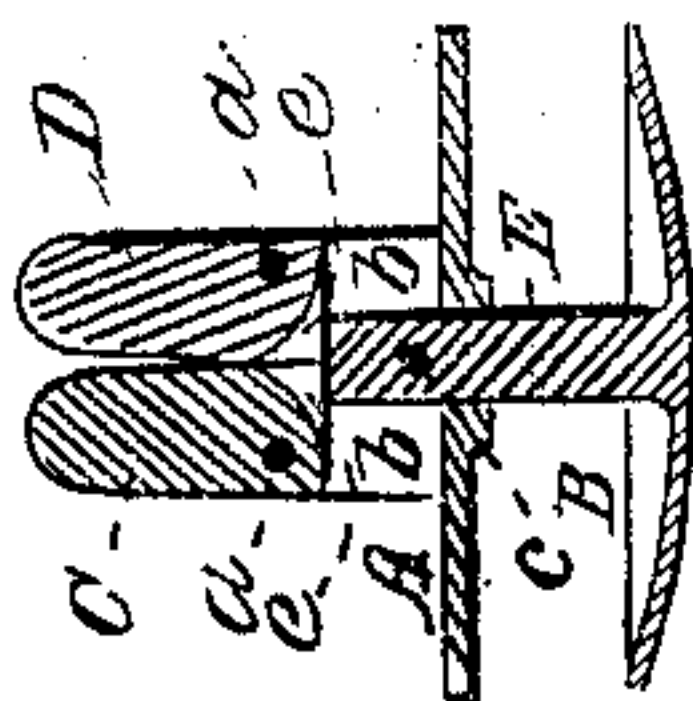


Fig. 2.

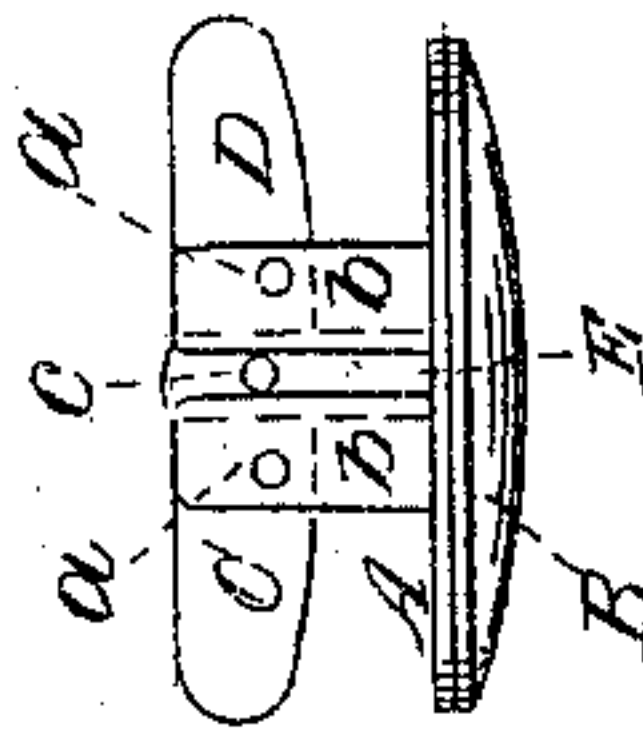


Fig. 1.

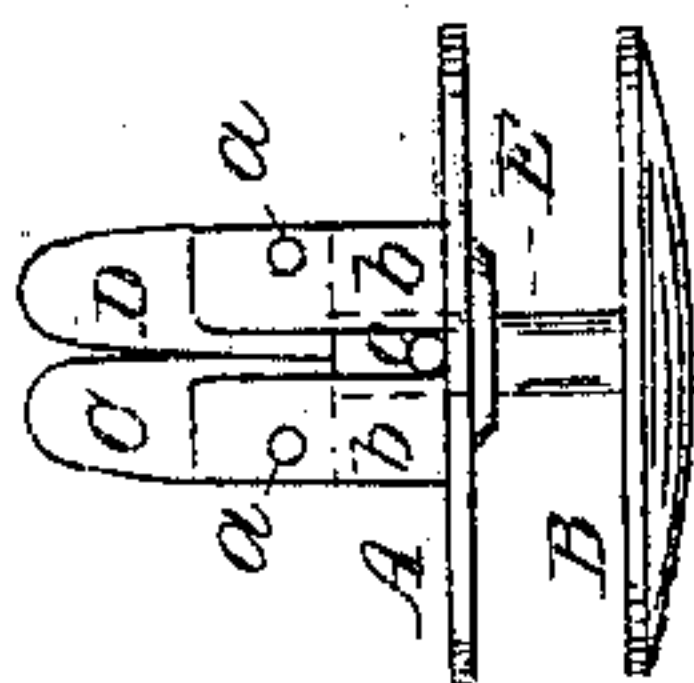


Fig. 9.



Fig. 8.

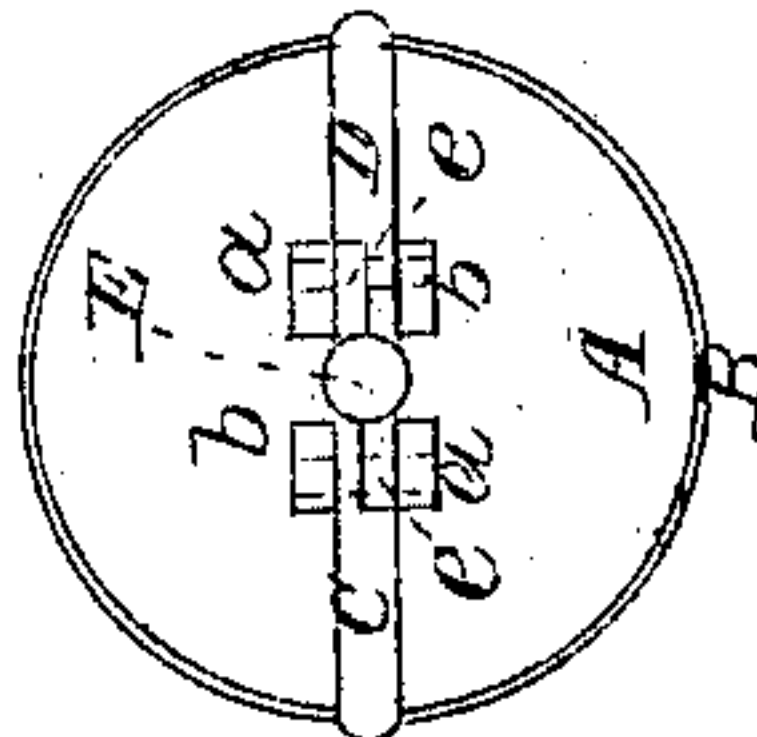


Fig. 7.

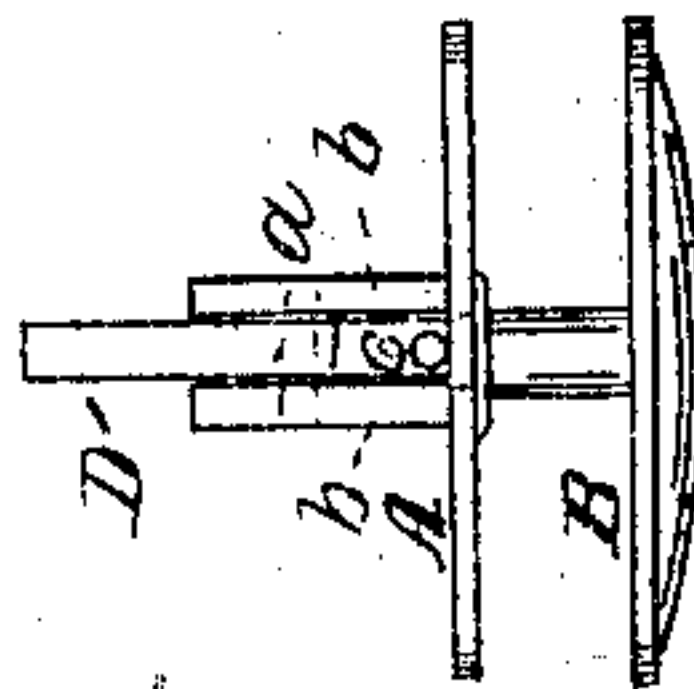
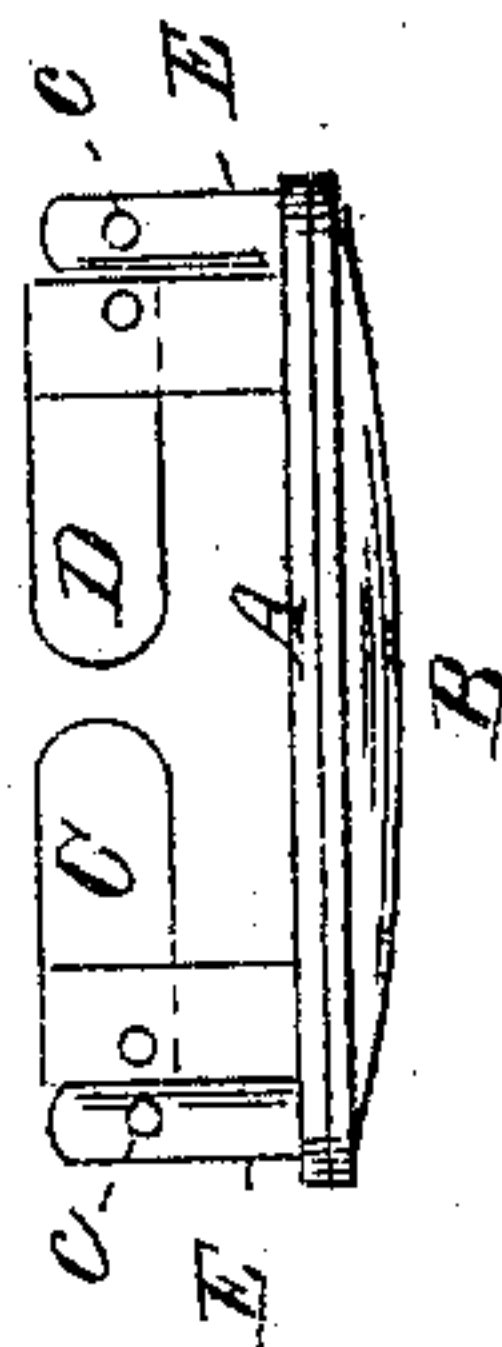


Fig. 6.



UNITED STATES PATENT OFFICE.

DUTEE WILCOX, OF PROVIDENCE, RHODE ISLAND.

SHIRT-STUD.

Specification of Letters Patent No. 17,060, dated April 14, 1857.

To all whom it may concern:

Be it known that I, DUTEE WILCOX, of Providence, in the county of Providence and State of Rhode Island, have invented a new and useful Improvement in Shirt Studs, Buttons, or other Articles of Like Character; and I do hereby declare that the same is fully described and represented in the following specification and the accompanying drawings, of which—

Figure 1, exhibits a side view of one of my improved studs as it appears when open or ready for insertion in a shirt or other article of apparel. Fig. 2, is a representation of the same, when in a closed state, or as its parts appear while the stud is in place in a shirt, these figures being on an enlarged scale. Figs. 3, and 4, denote vertical and central sections of the stud, both in an open and in a closed state. Fig. 5, is a horizontal section taken through the fulcrum of the two locking levers, and so as to exhibit the manner in which they are formed so as to lap over one another at their heels, while they are being turned downward. Fig. 6 denotes a side view of a shirt, sleeve button or stud, constructed in accordance with my invention or improvement. Fig. 7, is an edge view or elevation of the bosom stud shown in Fig. 1.

In the said drawings, A and B, represent the two circular or other proper shaped disks or plates, constructed of metal or other suitable material, the latter, viz., B, being formed a little larger in diameter, than the former, in order that when the two are placed in conjunction, or in close contact, the periphery of the outer one may extend by that of the other one a short distance, while the two peripheries are concentric. The inner disk, A, has jointed or hinged to it, two levers, C, D, their fulcrum a , a being in projections b , b , or their equivalent extended from the inner side of the rear disk, A, as shown in the drawings.

By inspection of the drawings, it will be perceived, that the fulcrum of each of the levers is arranged close to the heel of the lever, and nearer to its outer than its inner corner. In connection with levers so arranged, I employ what may be termed a turning and locking slider E, which consists simply of a short rod fastened to the middle of the disk B, and made to slide freely through the central part of the disk or to any part of the stud except the front plate

or disk, B, and against the heels of the levers C, D, in such manner that when the two are in position as shown in Fig. 1, and the said slider is pressed forward against them it shall cause them to turn on their fulcrum and into positions as shown in Fig. 2, the slider pressing between their heels in such manner as to serve as a stop or locking bolt to prevent the levers from turning backward, while the said slider remains between them, and the disk, B, is in contact with the disk, A, as shown in Fig. 2.

Fig. 8, denotes a rear elevation of the stud, as it appears with its levers turned into parallelism with their disk A.

Fig. 9, is a side view of one of the levers and shows a recess, e , at its heel, the same being for the reception of the heel of the other lever, while the two levers are being turned downward. Each lever is provided with such a recess.

In Fig. 6, the two levers, C, D, are exhibited under a somewhat different arrangement each being operated by one of two slides E E, extended from the outer disk or plate B, and through the disk A. In this figure, the two levers C, D, turn inward toward one another, while the stud or button is being inserted in the sleeve. It will be evident, that the two levers might be arranged so as to turn in an opposite direction while being inserted in a shirt or article of dress. The slider E, is furnished with a pin e , or its equivalent, such pin being extended laterally through it for the purpose of arresting the backward motion of the slider.

Having thus described the improved stud, I will now proceed to explain in what manner it may be applied to a shirt, and also in what manner it may be removed therefrom, without, in either case, involving the necessity of one hand of the wearer being used on the rear side or sides of the cloth through which the article is to be inserted.

We will suppose, a shirt bosom to be provided with elongated eyelet holes, each being of a size, just sufficient to enable the levers, C, D, to be simultaneously inserted through any one of them, when said levers are in the position as seen in Fig. 1, the stud in such case being "open." Under these circumstances, we have only to insert the levers, C, D, of the stud into the eyelet hole, until the plate, A, is forced up against the material in which the eyelet may be formed. This

having been accomplished, we should continue to press the disk, B, inward so as to force the slider, E, against the heels of the two levers, C and D, in such manner as to
 5 cause each of the levers to turn on its fulcrum and into a position with respect to the disk, A, as shown in Fig. 2. When in such position and the slider is forced inward, the levers, C, D, prevent the stud from being
 10 drawn out of the eyelet.

In order to remove the stud from the eyelet or button hole, the periphery of the disk B, should be grasped by and between the flesh of the finger and thumb and the disk
 15 pulled forward. This will draw back the slider E and cause the levers, C, D, to be drawn against the cloth in a manner, which will cause them to turn back in their original position as shown in Fig. 1. Having
 20 attained such, they will offer no further resistance to the force operating to withdraw the stud from the cloth.

The recess, e, formed at the heel of each stud is for the purpose of receiving the heel
 25 of the other stud and allowing the two heels to freely pass and lap by one another during the operation of either opening or closing the stud. They also permit the two heels to be brought so close together as to
 30 enable the slider to lock the levers or prevent them from being drawn backward when parallel to the disk.

The principal advantage of this stud over most if not all others in use, is to be found
 35 in its capability of either being inserted in a shirt bosom, or of being removed therefrom, without the necessity of the wearer applying his hand to the rear side of the shirt bosom or to any part of the stud except the front plate or disk, B.

I am aware that it is not new to make a shirt stud with turning levers and a locking screw. Also, that it is not new to make one with turning levers, turning on one fulcrum
 45 and turned by means of a wedge actuated by a spring, and acting against curved levers or heels of the levers. Therefore, I do not claim such. My improved stud has great advantages over both the same. In the first
 50 place, as regards the first or that where the turning levers are affected by a screw, the

stud cannot either be removed from or inserted in the dress without being laid hold of by the hands of a person, such being very objectionable on account of soiling or
 55 rumpling the shirt bosom or article of dress. In respect to the other kind of stud wherein, the arms are actuated by a spring and wedge, the levers or heels of its arms are likely to cut or tear the stud hole of the
 60 dress and furthermore, the great strain which is required to overcome the force of the spring, during the operation of detaching the stud from an eyelet hole of a shirt bosom, is liable to tear, stretch or injure the
 65 said eyelet. Such is not the case with my improved stud for in the act of detaching it from an eyelet hole, its bolt slide easily slides nearly or entirely back before the arms begin to move on their fulcra, and thus the
 70 strain on the dress is very slight and not injurious. Therefore, what I claim in the stud made with turning arms, is—

1. My improved stud as constructed with the arrangement and application of a slide
 75 bolt, E, with respect to the disk, B, and the two arms turning on separate fulcra, and so as to operate therewith and be operated as described.

2. I also claim so constructing and arranging
 80 the disk, B, of the slider, E, that its periphery shall extend or lap beyond that of the disk, A, in manner and so as not only to cover the said disk when closed down upon it, but also to enable a person to grasp the
 85 said disk B, between his thumb and finger without at the same time grasping the disk A.

3. I also claim forming the two levers with recesses in their heels, so that they may
 90 readily lap over and pass by one another without interference, while being turned on their respective fulcra, and the heels be brought close up to the locking slide to enable it to lock them as set forth.

In testimony whereof, I have hereunto set my signature.

DUTEE WILCOX.

Witnesses:

R. H. EDDY,
 F. P. HALE, Jr.