

(Model.)

N. NELSON.
Button and Stud.

No. 234,604.

Patented Nov. 16, 1880.

Fig1.

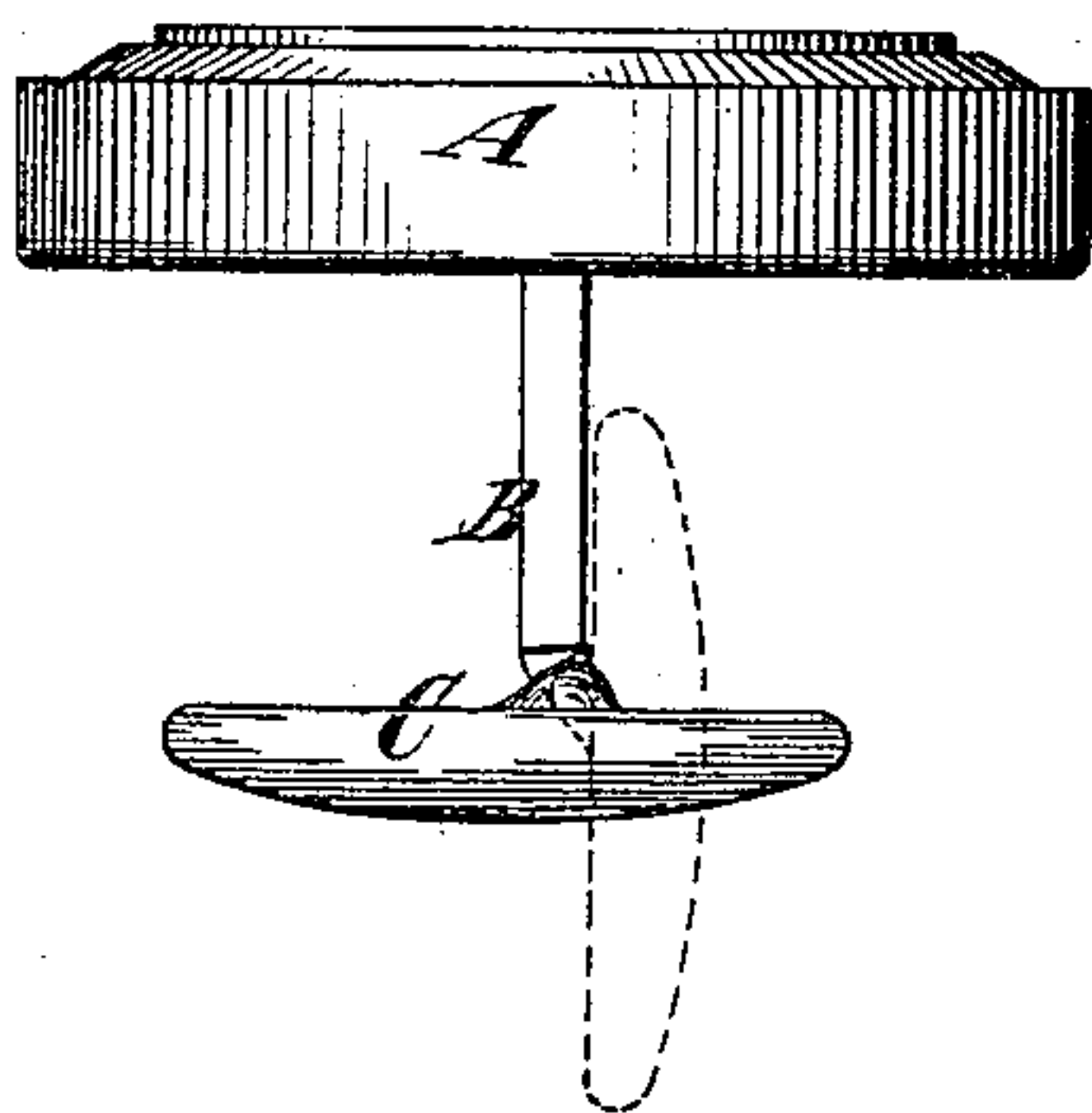


Fig2.

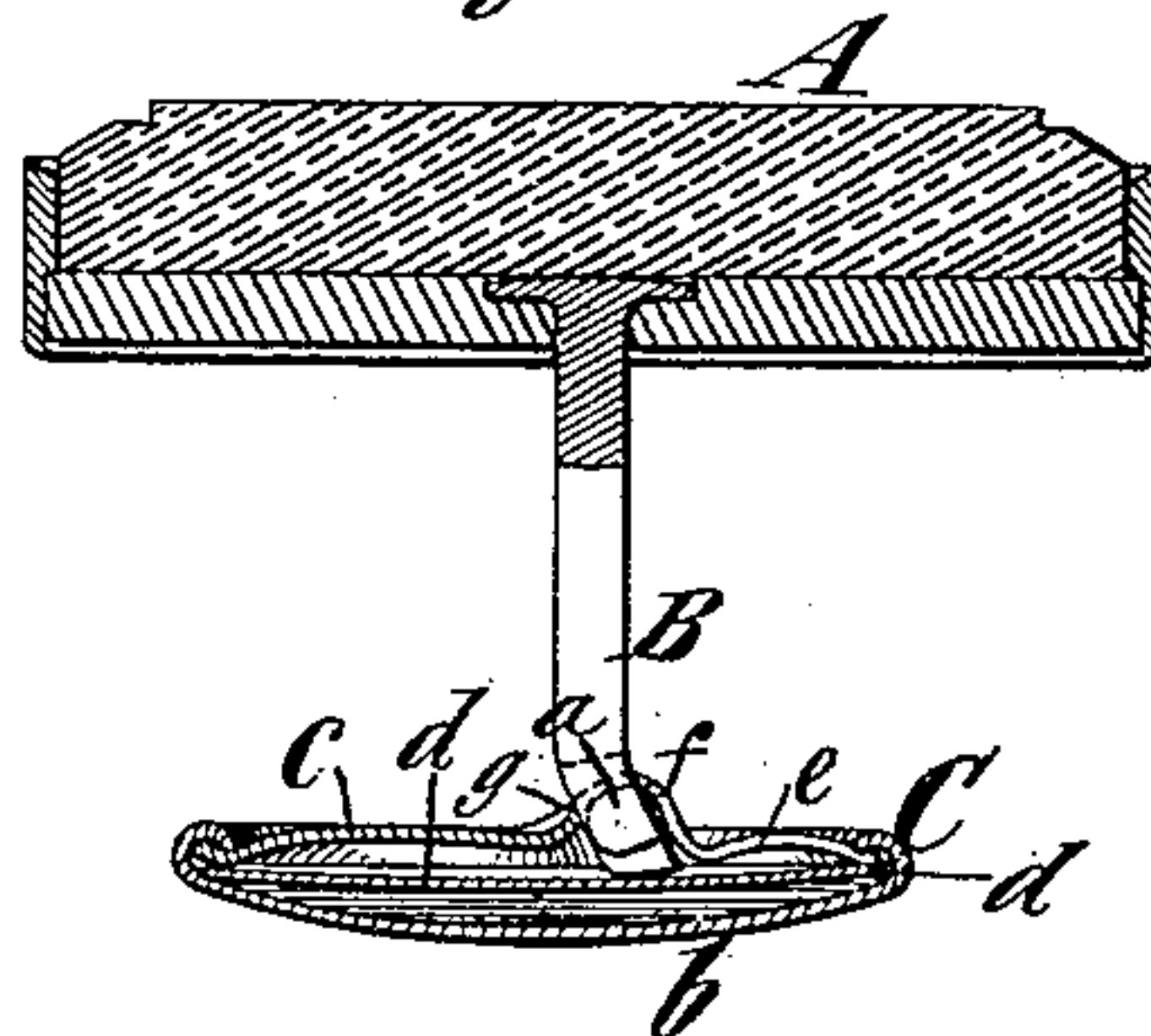


Fig4.

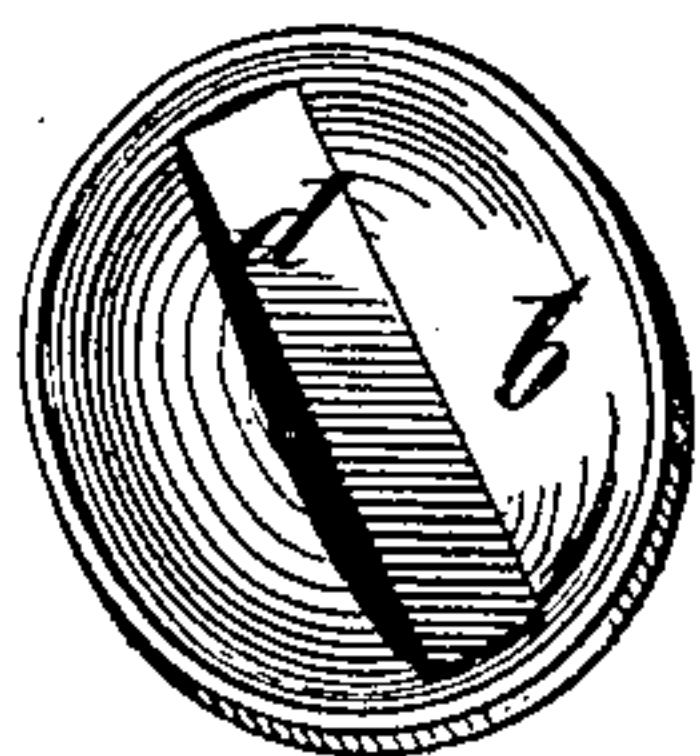


Fig5.

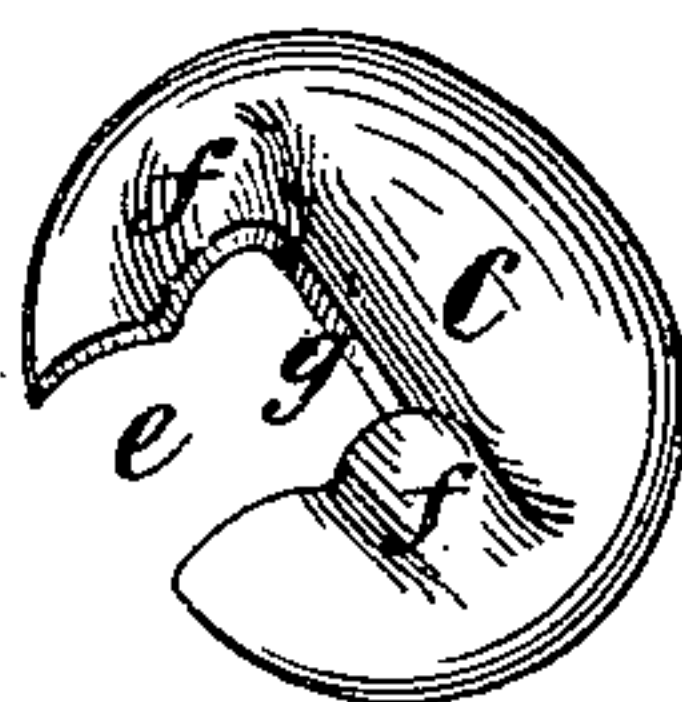
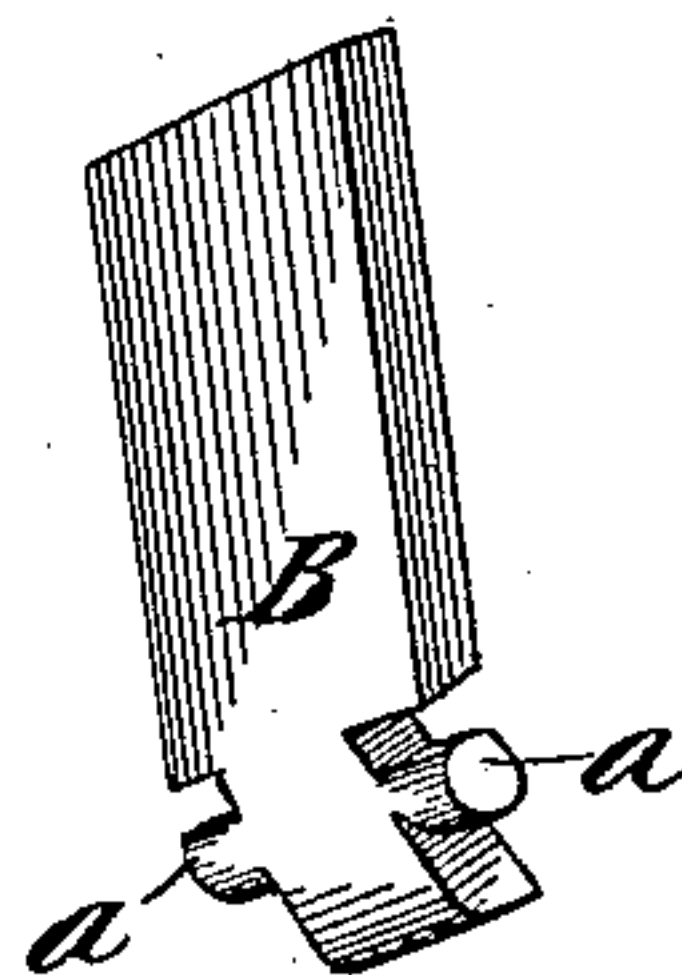


Fig3.



Witnesses:-

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Inventor:-

Nels Nelson
by his Attorneys
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UNITED STATES PATENT OFFICE.

NELS NELSON, OF PROVIDENCE, RHODE ISLAND, ASSIGNOR TO HOWARD & SCHERRIEBLE, OF SAME PLACE.

BUTTON AND STUD.

SPECIFICATION forming part of Letters Patent No. 234,604, dated November 16, 1880.

Application filed October 14, 1880. (Model.)

To all whom it may concern:

Be it known that I, NELS NELSON, of the city of Providence and State of Rhode Island, have invented certain new and useful Improvements in Buttons and Studs, of which the following is a specification.

My invention relates to that class of sleeve and collar buttons and studs in which the shoe is hinged to the post, so that it may be turned down parallel therewith to facilitate the insertion of the shoe and post in a button-hole to hold the button in place.

The invention consists in certain novel features in the construction of the shoe and post and in the manner of securing them together, whereby I greatly simplify the construction as compared with that of other buttons and studs of the same class.

In the accompanying drawings, Figure 1 represents a side view of a button embodying my invention. Fig. 2 represents a vertical section of the button. Fig. 3 represents a perspective view of the post detached from other parts. Fig. 4 represents a perspective view of a cap-plate forming a part of the shoe, and of a spring contained therein; and Fig. 5 represents a perspective view of a top plate, also forming part of the shoe.

Similar letters of reference designate corresponding parts in all the figures, and the drawings are made upon an enlarged scale for greater clearness.

A designates the head, B the post, and C the shoe, of a button embodying my improvements.

The post is rigidly fixed to the head in any suitable way; and my invention relates only to the construction of the shoe and post and the manner of securing them together.

The shoe C is hinged to the post upon one side of the center, so that when turned down, as shown in dotted outline in Fig. 1, there will be room enough between the upper edge of the shoe and the head to receive the two or more thicknesses of cloth.

The post B, as most clearly shown in Fig. 3, has upon opposite sides projecting ears or prongs *a*, which form the pivots upon which the shoe is hinged, and which are formed integral with the post by punching or cutting.

The pivots *a* are provided with suitable bearings in the shoe C, and the post may be of round, oval, or flat transverse section, the flat form, as here shown, being preferable, as it is of less width, and may be more easily inserted through a button-hole when the shoe C is turned down against it.

As will be clearly seen in Fig. 3, the post is bent to one side at the end having the pivots *a*, so that when the shoe is turned down it may come tightly up against the side of the post and be in line or parallel with the post—a result which would not be attained if the pivots *a* were in line with the center of the post.

The shoe C is composed of a cap-plate, *b*, and a top or securing plate, *c*, and between the cap and top plates, *b* and *c*, is arranged a flat leaf-spring, *d*. The cap-plate *b* has its edge turned up to give it a cup shape. The spring *d* is of a length to fit therein, and the top or securing plate, *c*, is of a diameter to fit therein. The top or securing plate, *c*, has in one side a slot or opening, *e*, wide enough to receive the notched part of the post B, just above the pivots *a*, and upon each side of the slot or opening, at the inner end thereof, are recesses or depressions *f*, of a size to receive the pivots *a* of the post B, and formed by stamping. At the end *g* of the slot or opening *e* the top or securing plate is deflected slightly to form a stop, which bears against the side of the post B and prevents the shoe from moving past a position at right angles to the post. After inserting the post in the slot or opening *e* in the top or securing plate, *c*, the said plate is placed in the cup-shaped cap-plate *b*, and the edge of the latter is crimped or folded over to secure the several parts of the shoe firmly together. The slot or opening *e* in the top or securing plate, *c*, is of such width that the spring *d* is received within it, and the said spring is prevented from turning in the shoe.

The bottom or lower end of the post projects sufficiently beyond the pivots *a* to form a spring-support, and the turning of the shoe from a position parallel with the post to a position at right angles thereto, and vice versa, is resisted by the elasticity of the spring bearing against the end of the post B.

The several parts of the shoe may all be

made of light metal, and therefore there is little liability of breaking the dies used in the making thereof.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In a sleeve button or stud, the post B, provided with the integral pivots *a a* on each side, and having its end bent to one side and adapted to be pivotally attached to a shoe, substantially as and for the purpose specified.

2. In a sleeve button or stud, the combination of the post rigidly attached to the head and provided near its end with integral pivots, and the shoe consisting of a cap-plate and a top or securing plate provided with depres-

sions or recesses to receive the pivots of the post, thereby forming a hinge-connection, permitting the shoe to be turned into a position parallel with the post, substantially as and for the purpose specified.

3. The combination of the head A, the post B, having pivots *a*, and the shoe C, composed of the cap-plate *b*, the top or securing plate, *c*, having a slot or opening, *e*, and depressions or recesses *f*, and the spring *d*, fitting in said slot or opening *e*, substantially as specified.

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Witnesses:

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