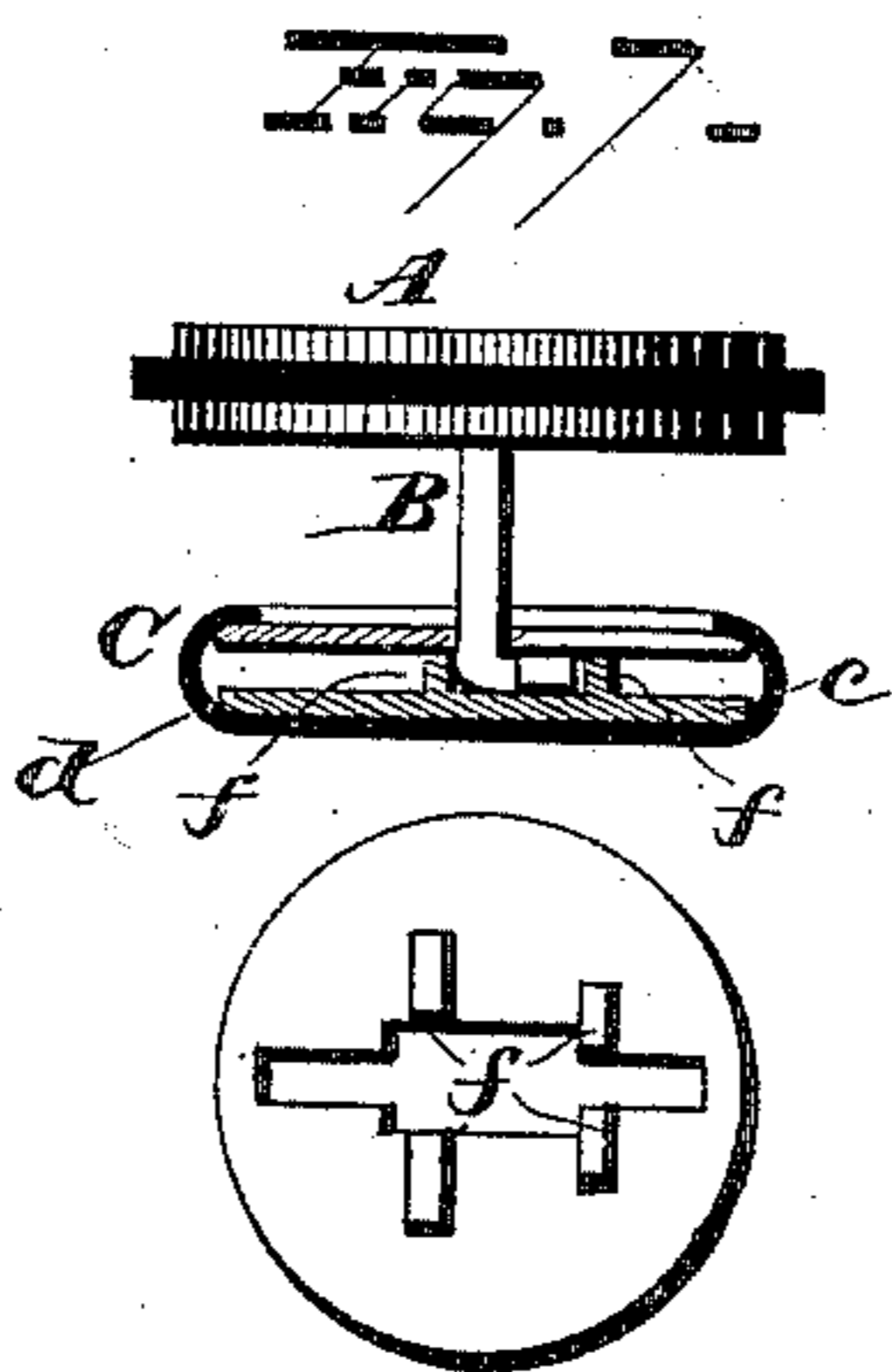
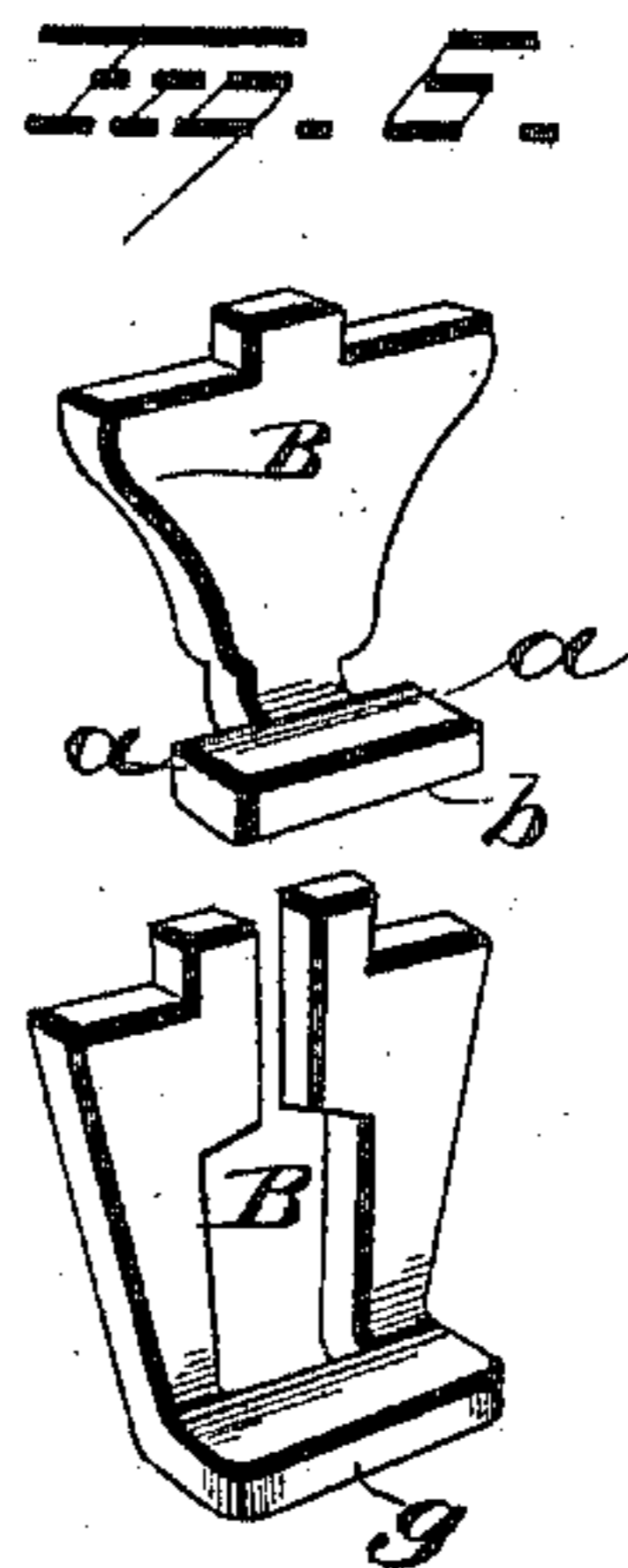
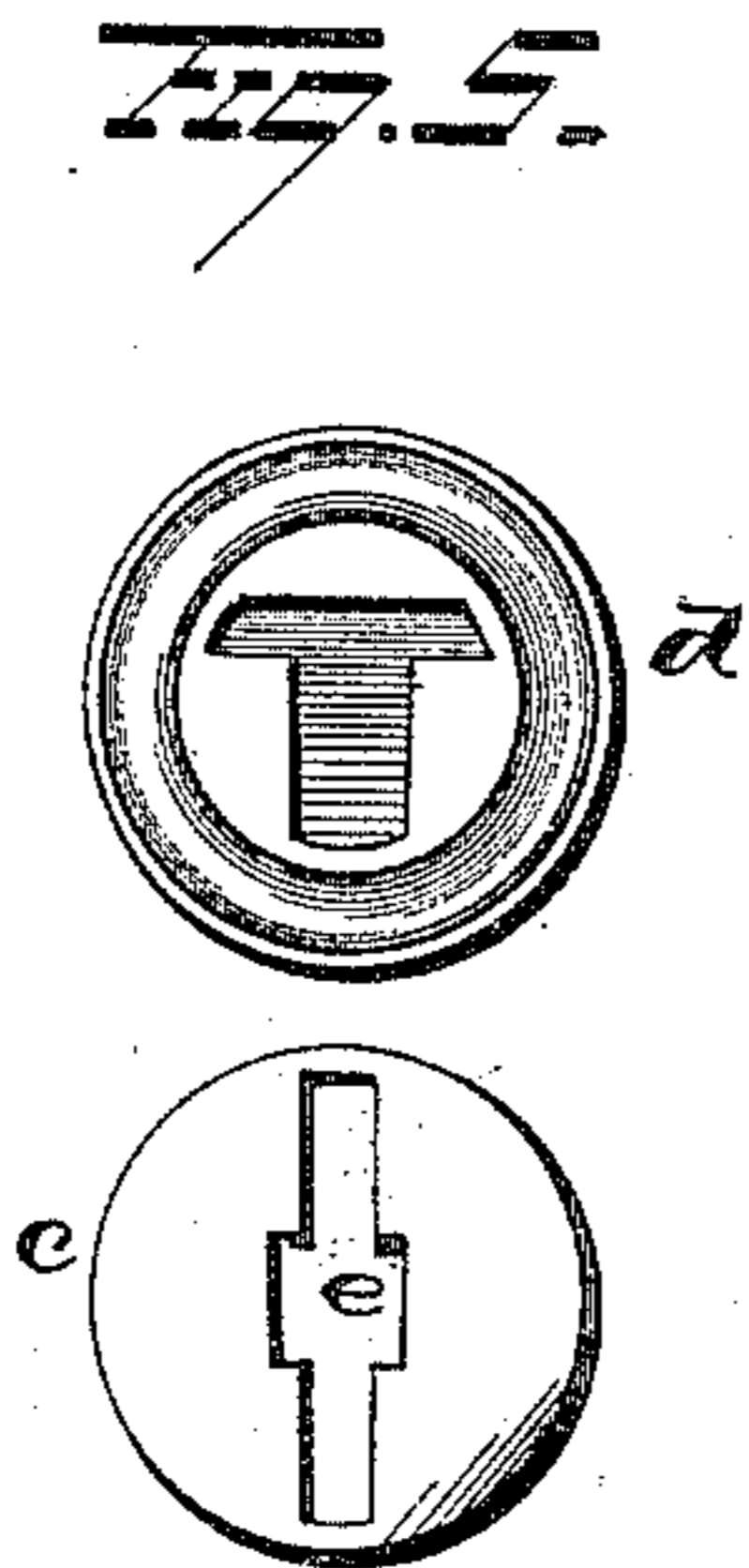
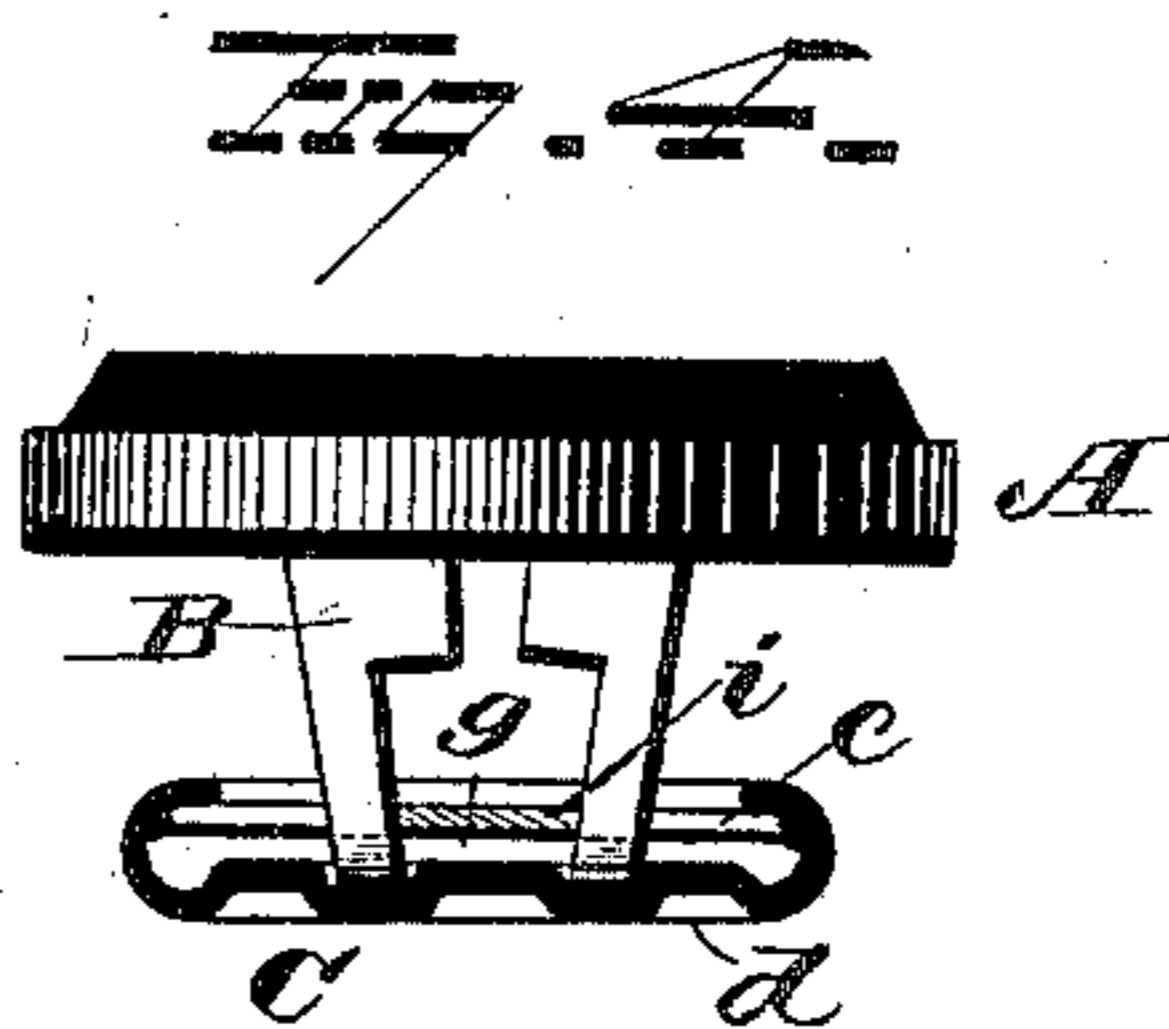
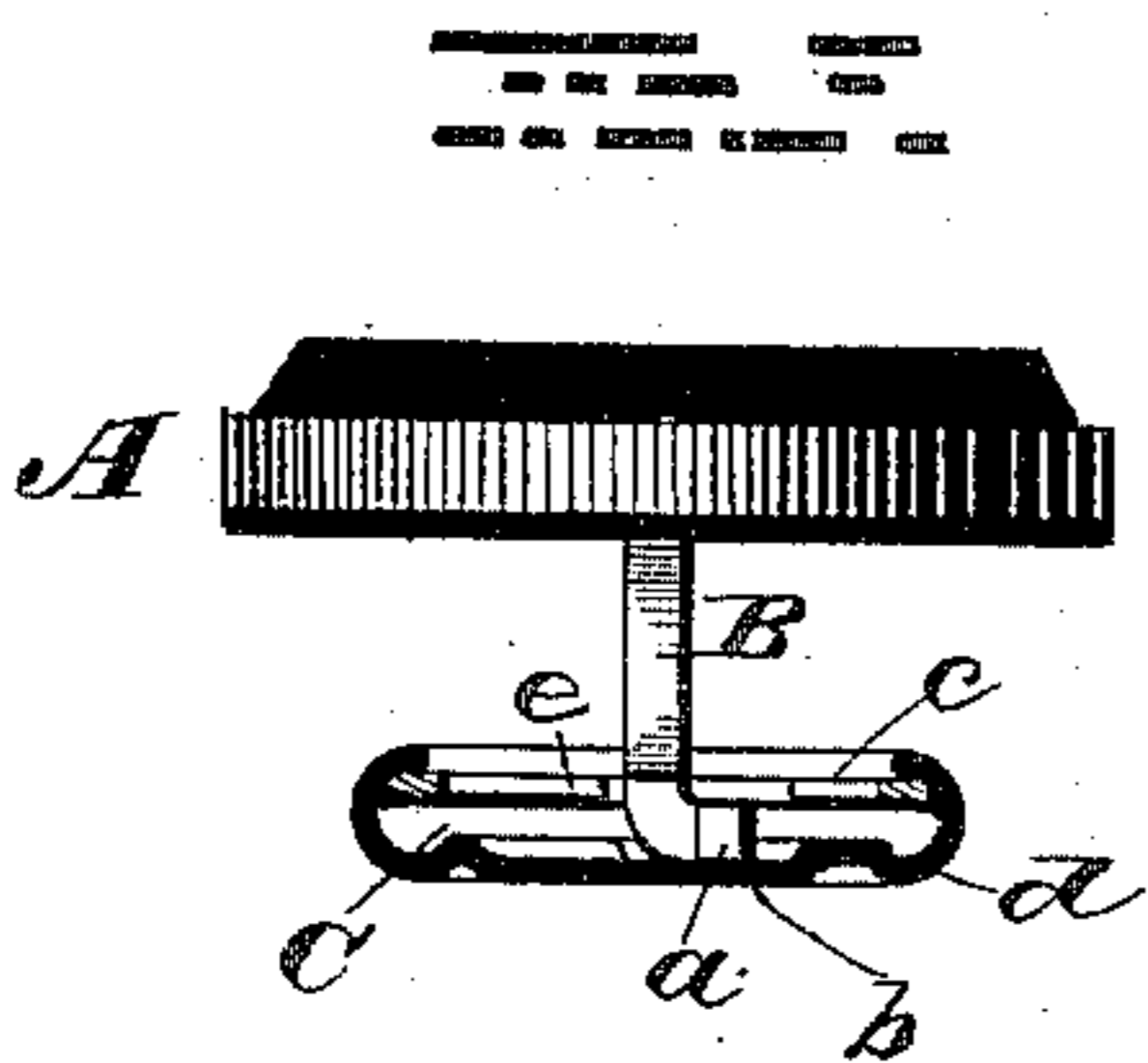
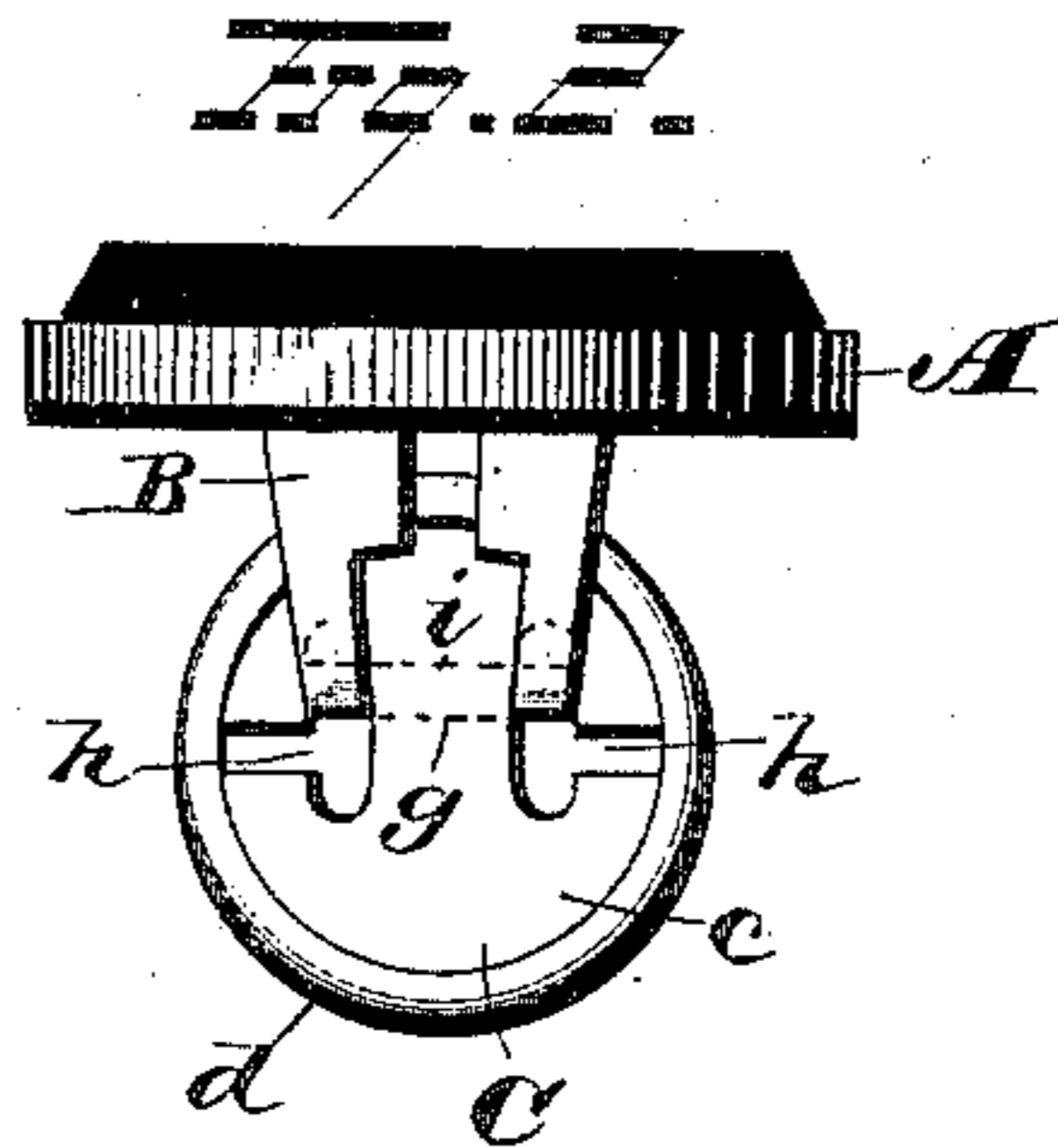
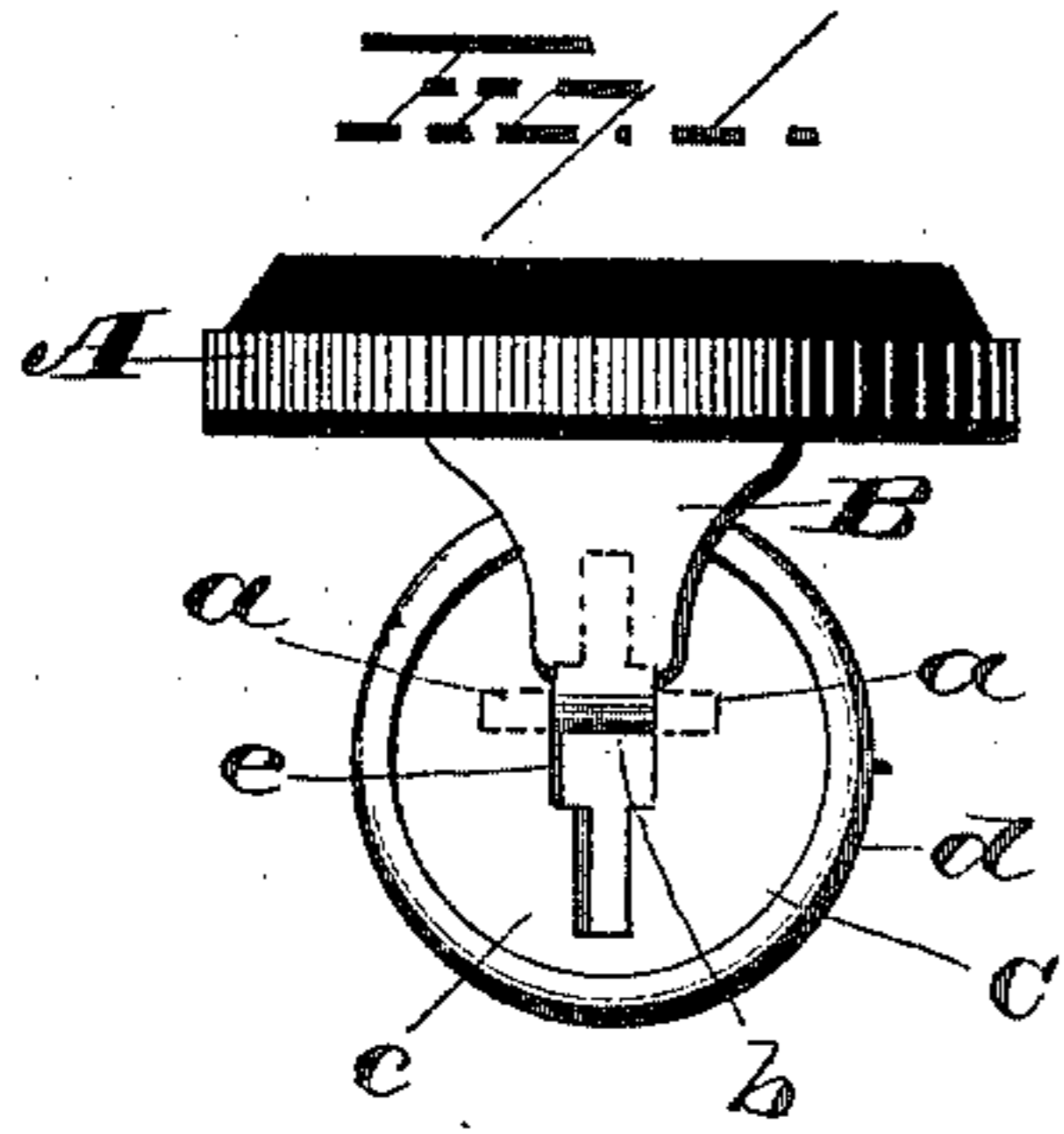


(No Model.)

J. COSTELLO.
SLEEVE BUTTON OR STUD.

No. 301,340.

Patented July 1, 1884.



WITNESSES
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UNITED STATES PATENT OFFICE.

JOHN COSTELLO, OF ATTLEBOROUGH, MASSACHUSETTS.

SLEEVE BUTTON OR STUD.

SPECIFICATION forming part of Letters Patent No. 301,340, dated July 1, 1884.

Application filed November 9, 1883. (No model.)

To all whom it may concern:

Be it known that I, JOHN COSTELLO, of Attleborough, in the county of Bristol and State of Massachusetts, have invented certain new and useful Improvements in Sleeve Buttons and Studs; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improvement in that class of sleeve buttons and studs which have at the end of the post a hinged shoe adapted to be tilted and brought nearly in line with the post to facilitate insertion through the button-hole, and then to be turned back to retain the button in place.

To prevent the button from turning unnecessarily it has been customary to secure a spring between the inner and outer faces of the shoe, so that the free end of the post could bear thereagainst for the purpose of holding the shoe in position. This construction of parts necessitated the employment of ribs and other devices for preventing the shoe from turning on the post, and, besides being expensive, was liable to be easily deranged.

The object of my present invention is to obviate the objections above noted by providing a hinged-shoe button that will combine simplicity and economy in construction with durability and efficiency in use; and with these ends in view my invention consists in the parts and combinations of parts, as will be more fully described, and pointed out in the claim.

In the accompanying drawings, Figure 1 is a view in side elevation of one form of button provided with a solid post. Fig. 2 is a similar view of a button provided with a slotted post. Fig. 3 is a view in section of the shoe and head, showing the solid post in elevation. Fig. 4 is a similar view of the button shown in Fig. 2. Fig. 5 is a detached view of the shoe. Fig. 6 shows the two forms of posts detached, and Fig. 7 shows a modified form of button.

A represents the head of the button, B the post, and C the shoe. The head A is of any suitable construction, and is secured to the post B by riveting, soldering, or brazing, as desired. The upper or enlarged end of the

solid post is secured to the head, while the smaller end thereof is bent at right angles to the body portion and provided with the angular lateral arms or extensions *a*, which latter, when the parts are secured together, rest between the inner and outer faces of the shoe and hold the shoe on the post. The extreme outer end, *b*, of the post is flat, so that when the shoe rests at right angles to the post it will have a firm and solid support, and will be prevented from wobbling. The arms *a* rest between the inner and outer faces of the shoe, and when the shoe rests at right angles to the post the latter is in a direct line with the center of the shoe. When, however, the shoe is turned so as to rest parallel with the post, the end of the post is thrown below the center of the shoe, thereby utilizing the depth of the latter to increase the length of the post. The shoe C is composed of the inner face, *c*, and the outer face, *d*, the former being slotted for the reception of the end of the post and secured to the outer face in the usual manner. For a solid post, similar to that shown in Fig. 1, the plate *c* would have a single slot, *e*, starting at one side of the plate and terminating slightly beyond the center thereof, so as to enable the post to rest directly in the center of the shoe.

In all buttons it is necessary to provide means for preventing the shoe from turning on the post; and to accomplish this end I prefer to stamp the plate *d*, so as to form depressions corresponding to the flat end and arms of the post. This construction of parts forms a figured shoe, the outer plate, *d*, showing the depression; but, if desired, I can employ a plain shoe, as shown in the modification, and answer all the necessary purpose. This shoe, which is plain on its outer face, is provided on its inner face with a series of ribs, *f*, formed thereon, so as to correspond with the free end of the post. These ribs are formed by dies in the usual manner, and can be made as cheaply as the figured shoe. The depression in the figured shoe, or the space between the ribs, corresponds in shape and size to the end of the post and the arms thereof, and when the parts are secured together the shoe is prevented from turning only in one direction. If desired, the plate *c*, instead of being provided with an open slot for the entrance of the post B, can be made in

two parts, or divided centrally, and answer all the necessary purposes.

In the slotted posts shown in Fig. 2 the lateral arms *a* are dispensed with. In this form the lower end of the post is turned at right angles, and the part *g*, which connects the two arms thereof, is made angular to prevent the shoe from unnecessarily turning. In this instance the plate *c* is provided with diametrically opposite slots *h*, which latter are provided with enlarged inner ends, the said enlarged ends being separated by the bridge *i*, under which the part *g* of the post B rests. In this slotted-post button the outer plate, *d*, of the shoe is provided with a depression corresponding to the lower end of the shoe, or with the ribs previously described. The plate *c* in both instances is a spring-plate, and rests on the bar *g* or the arms *a* with sufficient force to hold the shoe in either of the two positions it can assume. When the shoe rests parallel to the post, by simply pressing against the end of the shoe farthest from the head the shoe will immediately turn and rest at right angles to the post, where it is held by the spring-plate against accidental displacement. If the arms *a* and the bar *g* were made cylindrical instead

of angular, the shoe would be free at all times to move without any interference.

If desired, the ribs shown in the modification can be formed either on the plate *d* or the plate *c*, as the only function they perform is to prevent the shoe from turning on the post.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

In a sleeve button or stud, the combination, with a head and post rigidly secured together, the outer end of the post being provided with arms or equivalent devices whereby it is held in the shoe, of a shoe composed of two plates rigidly secured together, one of the said plates being made of suitable spring metal, and shoulders formed integral with one of the plates of said shoe, whereby the latter is prevented from turning on the post.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

JOHN COSTELLO.

Witnesses:

LEMUEL T. STARKEY,
FRANK DEAN.