W. ORR.
BUTTONS.

No. 178,552.

Patented June 13, 1876.

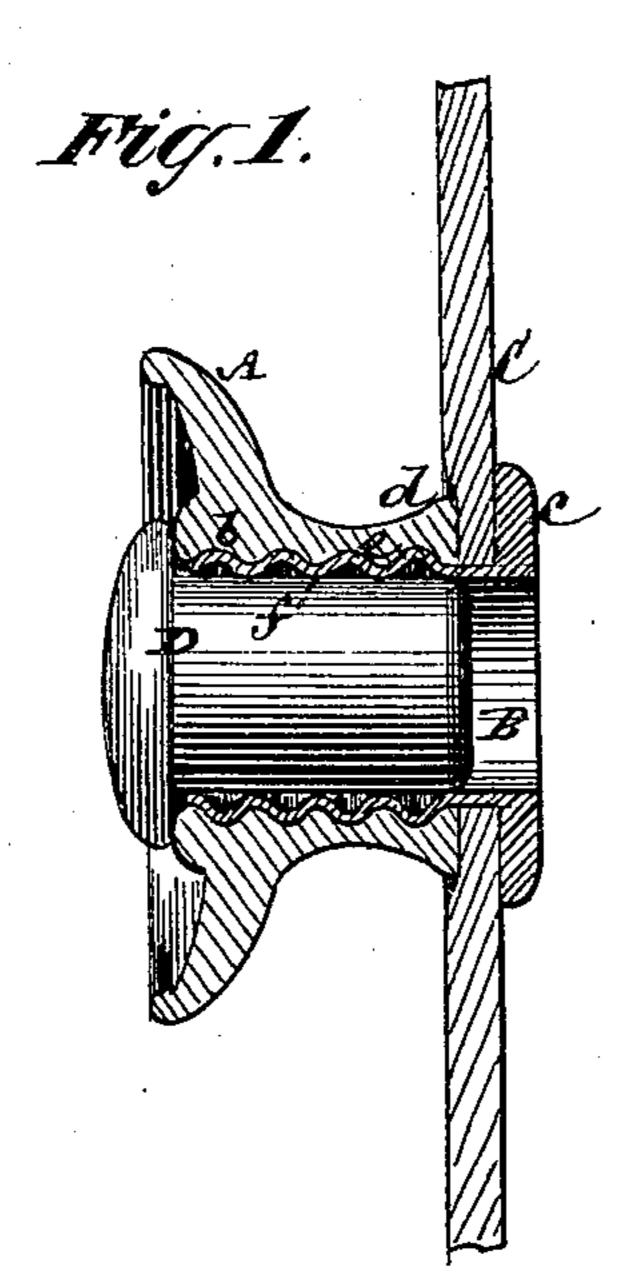
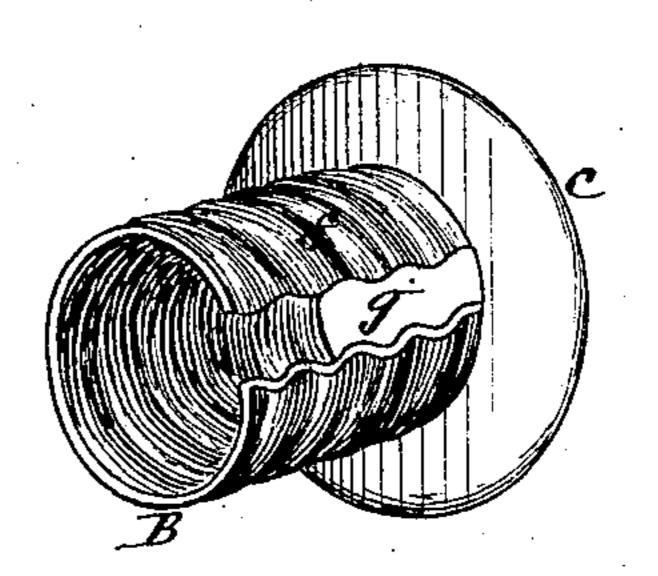


Fig. 2.



Witnesses John Becker Fred. Haynes

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## UNITED STATES PATENT OFFICE

WILLIAM ORR, OF BROOKLYN, NEW YORK, ASSIGNOR OF ONE-HALF HIS RIGHT TO DAVID ELLIS, OF SAME PLACE.

## IMPROVEMENT IN BUTTONS.

Specification forming part of Letters Patent No. 178,552, dated June 13, 1876; application filed November 10, 1875.

To all whom it may concern:

Be it known that I, WILLIAM ORR, of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Button-Fastenings; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, which forms part of this specification.

This invention relates to that class of fastenings for attaching buttons to garments and other articles, in which the button is secured to the cloth or other material by means of a

metallic clamp.

'The invention consists in a combination of a button having an internally corrugated, toothed, or notched eye, a longitudinally split and corrugated, toothed, or notched clampingtube, and a locking-pin for holding said tube to its place within the eye. In the application of the device the split or contracting and expanding corrugated, toothed, or notched clamping-tube is passed through the cloth from the inside or back into or within the corrugated, toothed, or notched eye of the button, and serves by a flange on its back end to hold the cloth in between it and the buttonshank, after which the locking-pin is inserted within the split clamping-tube to expand the latter and firmly secure it by its corrugations, teeth, or notches within the corrugated, toothed, or notched eye of the button.

A button-fastening constructed as above described is not only simple and secure as regards its hold of the button, but provides for the accommodation of it to various thicknesses of material and may be readily applied and secured without any special tools; likewise provides for the ready detachment of the but-

ton when required.

The object and nature of the invention having been thus explained it will now be described with reference to the accompanying

drawing.

Figure 1 represents a longitudinal section of a button having the improved fastening, as applied to a piece of cloth or other fabric; and Fig. 2 a view in perspective of the split clamping-tube detached.

A is the button proper, which is made with

an internally-corrugated eye, b, the corrugations e being annular, or in transverse relation with the axis of the eye. B is the clamping-tube, which is passed through the cloth C from the inner side or back of the latter, and which has a flange or head, c, between which and the shank d of the button the cloth is clamped. This tube B, which also enters within the eye b of the button, and which may be made of any suitable metal or other material, has one or more longitudinal slits, g, in it to provide for its expansion and contraction laterally, and its outer surface, where it fits within the eye of the button is corrugated, as at f, to accord with the corrugations e in the eye of the button. The clamping-tube B being longitudinally split or slit, as described, admits of its being contracted, so that it can be easily pushed into the eye b of the button. as far as desired, according to the thickness of the cloth C, the corrugations on said tube conforming to the corrugations throughout the length of the button-eye, or for any given distance in its length, so that on pushing in a locking-pin, D, through the eye b for any desired distance within the clamping-tube, the split or slit portions of said tube are expanded, and its corrugations made to lock with the corrugations in the eye of the button. This firmly secures the fastening, yet provides for the ready detachment of the button when required, by simply pressing any suitable instrument against the end of the pin D to push it out, and afterward pulling on the button so as to contract the split clamping-tube.

Said clamping-tube, when made of springbrass or other spring metal, will, by reason of the shape of its corrugations and the corrugations in the eye of the button, readily snapto its place when inserted within the eye till the locking-pin is inserted to firmly secure and hold it there, and such snap-like construction of the fastening allows of the detachment of the button, as hereinbefore described.

It is not absolutely necessary that the corrugations e and f, of which there may be any number, should be carried all round the eye and clamping tube, and instead of the corrugations, teeth, and notches, which are virtually the same as the corrugations, may be ar-

ranged on and in the clamping tube and eye of the button, and the same, if desired, be disposed only on the one side of the eye. The corrugations in fact form but locking teeth and notches. Furthermore, instead of the shank of the button and its eye and clamping-tube being circular, as here shown, the same may be square, or of any other suitable form. The locking-pin may be inserted into the clamping-tube from the back or front.

The corrugations e and f or their equivalents instead of being annular or straight may be spirally disposed around or within the eye

of the button.

I claim—

The combination of the internally corrugated, toothed, or notched eye, the longitudinally split and corrugated, toothed, or notched clamping-tube fitting within said eye, and the locking-pin for securing or holding said tube to its place within the eye to form a button, substantially as specified.

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Witnesses:
MICHAEL RYAN,
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