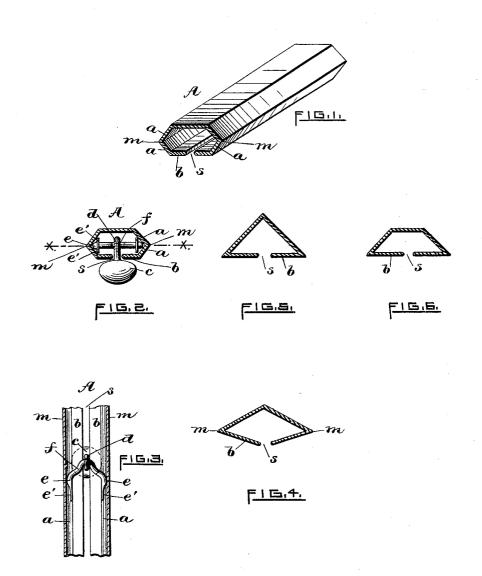
(No Model.)

J. F. THAYER.

BUTTON AND FASTENER HOLDER.

No. 373,540.

Patented Nov. 22, 1887.



UNITED STATES PATENT OFFICE.

JAMES F. THAYER, OF PROVIDENCE, RHODE ISLAND.

BUTTON AND FASTENER HOLDER.

SPECIFICATION forming part of Letters Patent No. 373,540, dated November 22, 1887.

Application filed October 1, 1887. Serial No. 251,167. (No model.)

To all whom it may concern:

Be it known that I, JAMES F. THAYER, a citizen of the United States, residing at Providence, in the county of Providence and State 5 of Rhode Island, have invented certain new and useful Improvements in Button and Fastener Holders; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in 10 the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

In the process of attaching buttons to shoes, &c., by the use of metallic fasteners, particularly when a machine is employed, it is common to insert or attach to the machine a metallic tube in which the buttons and fasteners, pre-20 viously threaded, are arranged and mounted. Such filled tubes or holders serve as a reservoir from which the buttons and fasteners are automatically withdrawn, through the medium of a suitable feeding device, and placed in po-25 sition preparatory to being secured to the fab-

ric or other material to which they are to be attached by the subsequent action of a clinching mechanism. Tubes of this character are provided with a slot which coincides with a 30 similar opening formed in the machine, the same leading to the point where the button is held in position while its fastener is being subjected to the clinching operation. These tubes are open at the ends and are readily 35 connected with or disconnected from the machine, as desired.

My invention herewith consists of a metallic slotted angular tube of somewhat novel construction, adapted for the reception of buttons 40 and fasteners when connected or threaded.

The object of my improved tube is to provide a superior guide for two-prong fasteners, whereby they are prevented from disarrangement when mounted therein. Usually, in tubes 45 of this character adapted as reservoirs for buttons and fasteners, the form of the tubes in cross-section has been such that a comparatively free movement of the fasteners in a lateral direction is permitted, thereby obviously 50 detracting from their efficiency. I overcome this disadvantage by making the sides of the | before described, having a slotted opening, as

tube contiguous to each prong of the fastener approximate a V-shape form, all as will be more fully hereinafter set forth.

In the accompanying drawings, illustrating 55 my improved button and fastener holding tube, Figure 1 represents a perspective view of the tube. Fig. 2 is a transverse sectional view thereof, showing a button and fastener in position therein. Fig. 3 is a partial longi- 65 tudinal sectional view, on line xx of the preceding figure, showing the relative arrangement of the prongs of the fastener to the angular sides of the tube, and Figs. 4, 5, and 6 represent cross-sectional views of slotted tubes 65 possessing the novel features embodied in the present invention.

Referring again to the drawings, A designates the tube as a whole, having a slotted opening, s, extending throughout its length on 70 one side, b, and adapted to freely receive the eye-shanks d of buttons c. The form of my improved tube in cross-section is polygonal or angular. The sides a of the tube across its major axis meet and form the apices m.

f indicates a fastener made of wire and having the lower portion of its two prongs swaged or flattened, as at e', the width of said flattened portion considerably exceeding that of the normal size of the wire. An example of this 80 form of staple-fastener is shown and claimed in the patent to George W. Prentice of February 15, 1887, No. 357,626.

It will be seen, referring to Figs. 2 and 3, that the extreme width of the fastener at the 85 junction of the head and prong, as at e, is substantially the same as the interior major diameter of the tube, thereby serving to accurately guide the fasteners along the V-shaped portion of the tube. The angle of this latter- 90 named portion of the tube is such that the swaged prongs e' of the fastener bear on opposite sides thereof, as clearly shown in Fig. 2, by means of which the fasteners are prevented from lateral movement and consequent disar- 95 rangement. Substantially the same result follows when the fasteners are mounted within tubes having cross sections, represented in Figs. 4, 5, and 6.

I claim-1. The button and fastener holder hereins, in one side thereof to receive the eye shanks |

s, in one side thereof to receive the eye shanks of buttons, and having V shaped sides adapted to receive the prongs of the fasteners in the angles formed by the intersection of said sides.

5 2. The angular or polygonal shaped tube hereinbefore described, having opposite transversely arranged V shaped sides adapted to receive and guide the fasteners, and also to hold them in proper relation to each other, o and, further, having a longitudinal opening

formed in one side of the tube intermediate of said ${f V}$ shaped sides, adapted to receive the eye shanks of buttons.

In testimony whereof I affix my signature in the presence of two witnesses.

JAMES F. THAYER.

Witnesses: CHARLES GREENE, GEO. W. PRENTICÉ.