

1,431,796.

Patented Oct. 10, 1922.

Fig. 1.

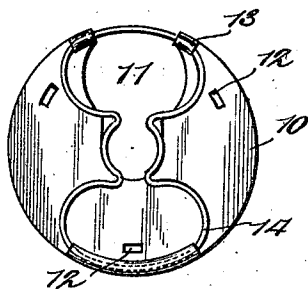


Fig. 2.

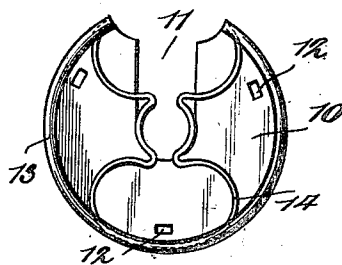


Fig. 3.

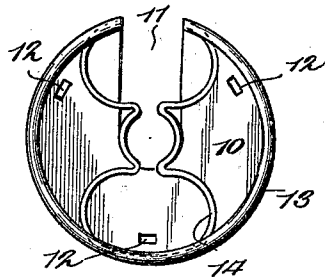


Fig. 4.

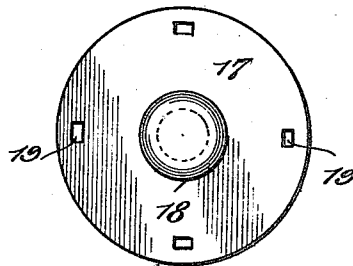


Fig. 5.

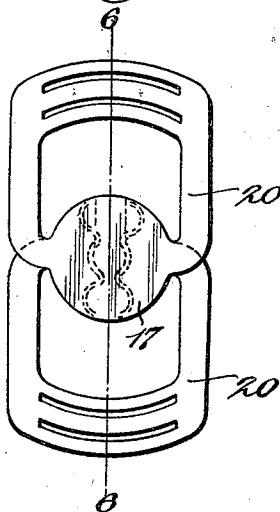


Fig. 6.

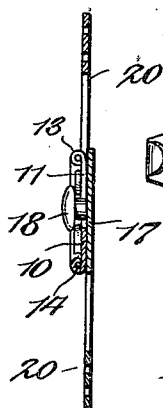
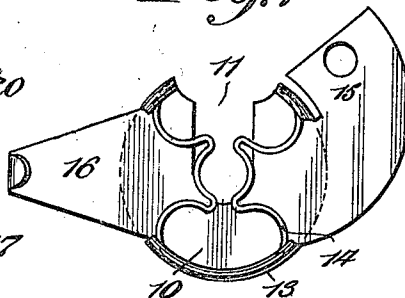


Fig. 7.



WITNESS: *J. W. Ely.*

*Patrick J. Hayes.*  
 INVENTOR  
 BY *Vieta J. Evans*  
 ATTORNEY

# UNITED STATES PATENT OFFICE.

PATRICK JOSEPH HAYES, OF NEW YORK, N. Y.

FASTENER.

Application filed May 16, 1921. Serial No. 470,108.

*To all whom it may concern:*

Be it known that I, PATRICK JOSEPH HAYES, citizen of Great Britain, residing at New York, in the county of New York and State of New York, have invented new and useful Improvements in Fasteners, of which the following is a specification.

This invention relates to fasteners and particularly to metallic slide fasteners, and one of the principal objects of the invention is to produce a device of this nature which shall be simple of construction, cheap to manufacture, and highly efficient for the purpose for which it is designed.

Another object is to produce a device of this nature which will readily lend itself to embodiment in various forms to suit various needs and purposes, as for instance, dress and garment fasteners; lapel, emblem and lodge button fasteners; buckle and slide fasteners; shirt stud and collar button fasteners; purse, pocket book and portfolio fasteners; spectacle chain or cord, watch chain and fob fasteners, etc.

With these and other objects in view, the invention resides in certain novel construction and combination and arrangement of parts, the essential features of which are hereinafter fully described, are particularly pointed out in the appended claims and are illustrated in the accompanying drawing, in which:—

Figure 1 is a bottom view of one form of female member.

Figures 2 and 3 are similar views of other forms of female members.

Figure 4 is a plan view of the male member.

Figure 5 is a plan view of an assembled clasp embodying the invention.

Figure 6 is a sectional view on line 6—6 of Figure 5.

Figure 7 is a view of a female member showing how the sides of the member may be extended for any desired purpose.

Like characters of reference refer to like parts in all views.

Referring to the drawing in detail, 10 represents the female member which is provided with a way 11 extending from its periphery into substantially the center of the member. This way 11 as shown in Figure 1 is formed with a large circular outer portion through which the entire head of the male member (later described) may be

thrust and with a narrower inner run which is wide enough to receive the neck of the male member but narrow enough to prevent the head from pulling out.

The member 10 is further provided with thread or attachment apertures 12 and has its edge rolled into a bead 13. A spring 14 is seated in the bead 13 and is provided with a constricted portion to catch about the neck of the male stud and prevent its accidental escape from the way 11.

In Figure 1 the spring 14 is shown as passing across the mouth of the way 11, but in the forms shown in Figures 2 and 3 this would not be possible, so that the open portion of the spring is located at the mouth of the way 11. It will be seen that only small portions of the bead 13 at opposite sides are required to hold spring 14 in place, and that therefor in stamping out the female member the metal may be extended at intermediate points as shown at 15 and 16 in Figure 7 or as shown in Figures 5 and 6.

The male member comprises a disk of sheet metal 17 having a headed stud 18 extruded from its center, and provided with a plurality of thread holes 19. The edge of the member may be rolled or extended in any direction into any shape desired.

In Figures 5 and 6, I have shown the invention as embodied in a clasp such as used on children's garments and underwear. Adjustable tape retainers 20 are stamped out integral with both the male and female members.

I have described my invention as made of metal; but the invention is in the device, not the material; and I do not limit myself as to the material. It is also obvious that the invention is susceptible of many variations in structure and form; and I therefore do not limit myself to the exact details of construction set forth, nor to anything less than the whole of my invention limited only by the appended claims.

What is claimed is:—

1. A fastener of the class described comprising a male member including a disk portion and a stud portion having a head element and a shank element, and a female member comprising a disk portion formed with a rolled edge and slotted from its edge to slightly beyond its center and provided with a piece of wire mounted in said rolled edge and formed at its ends to give resili-

ency and intermediate its ends with a portion extending across said slot and adapted to grip the shank of the stud of said male member when the fastener is closed.

5 2. A fastener comprising a female member having a plurality of peripheral rolled portions and intermediate extended portions, and formed with a way extending from its periphery towards its center and

terminating at a point distant from all of 10  
said rolled portions, a spring secured in said rolled portions and extended over said way at points intermediate its length, and a male member comprising a disk having a headed stud extruded from one face thereof. 15

In testimony whereof, I have affixed my signature.

PATRICK JOSEPH HAYES.