M. H. LE MARR.

SAFETY CATCH.

APPLICATION FILED JULY 2, 1919.

1,379,110. Patented May 24, 1921.

Fig. 1.

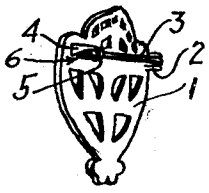

Fig. 2.

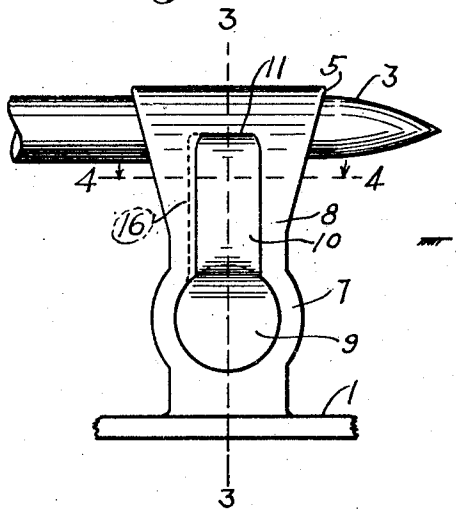

Fig. 3.

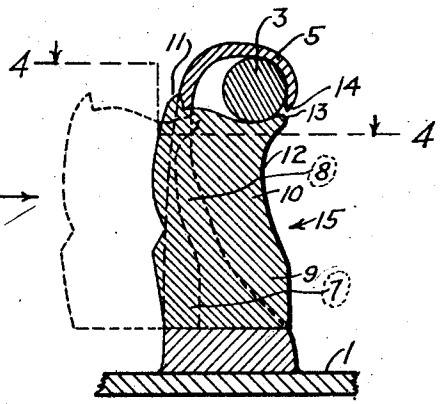

Fig. 5.

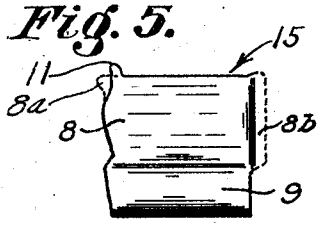

Fig. 4.

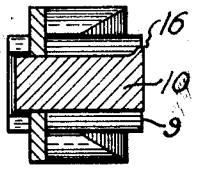

Fig. 6.

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SAFETY-CATCH.

1,379,110. Specification of Letters Patent. Patented May 24, 1921.

Application filed July 2, 1919. Serial No. 308,241.

To all whom it may concern:

Be it known that I, MOAD H. LE MARR, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented new and useful Improvements in Safety-Catches, of which the following is a specification.

My object is to make a safety catch for brooches and the like, and my invention consists of the novel features herein shown, described and claimed.

Specifically my object is to provide a safety pin construction for brooches and the like which cannot be accidentally or easily unhooked.

Figure 1 is a perspective from the rear side of a brooch provided with a safety pin construction having a catch embodying the principles of my invention.

Fig. 2 is a greatly enlarged fragmentary side elevation showing the pin and hook and safety catch, the view being taken looking in the direction indicated by the arrow 2 in Fig. 3.

Fig. 3 is a cross sectional detail on the line 3—3 of Fig. 2.

Fig. 4 is a longitudinal sectional detail on the lines 4—4 of Figs. 2 and 3 and looking downwardly as indicated by the arrows.

Fig. 5 is a side elevation of the catch member removed from the mounting and illustrating the process of construction.

Fig. 6 is a top plan view of the parts shown in Fig. 5.

The brooch frame 1 has a bearing bracket 2 extending from one side and the pin 3 is hinged to the bearing bracket. The hook bracket 4 is rigidly fixed at the opposite side of the brooch frame 1 from the bearing bracket 2 and has a hook 5 to receive the end of the pin 3 as in a safety pin construction. The object of my invention is to provide a safety catch 6 to hold the point of the pin 3 locked in the hook so that the brooch cannot become disconnected from the garment accidentally or easily removed intentionally.

In Figs. 2, 3 and 4 I have shown the safety catch construction greatly enlarged relative to the normal size and the details are as follows:

The hook bracket 4 is a post of considerable size comparatively and an opening is formed through the post transversely of the pin 3 and between the pin and the rear face of the frame 1, said opening comprising the lower circular portion 7 and the upper extension portion 8. The safety catch member is slidingly mounted in the opening portions 7 and 8, and the safety catch member comprises the lower circular portion 9 and the upper tongue-shaped portion 10 fitting tightly in the portions 7 and 8 of the opening.

A lug 11 projects upwardly from the outer end of the portion 10 to form a stop and hold the catch member from sliding through the opening. A concavity 12 is formed in the upper face of the portion 10, thus producing an edge 13 which is normally in opposition to the point 14 of the hook 5.

The catch member 15 thus constructed is moved to the left in Fig. 3, as shown in dotted lines, then the pin 3 is placed in the hook 5 and the catch member 15 is moved to the right thus pressing the edge 13 under the pin 3 and straining the hook 5 until the edge 13 snaps past the pin and rests in the concavity 12. The catch member 15 is upset after being placed in the opening to form a stop 16 to prevent the catch member from being withdrawn from the opening.

In actual practice the brooch or the like is applied to the garment with the pin 3 hooked through the garment and placed in the hook 5; then sufficient force is applied to the catch member 15 to snap the catch member into place, as shown in full lines in Fig. 3, and the tension of the hook 5 will hold the pin 3 in the concavity 12 and the safety pin construction cannot be unhooked except by pressing against the catch member 15 with the thumb or finger nail hard enough to snap it past the pin 3, so that the brooch or the like cannot accidentally be unhooked and can only be intentionally unhooked with care and ingenuity.

In Figs. 5 and 6 I have illustrated the process of constructing the catch member 15. The lower circular portion 9 is preferably cut from a piece of round rod, and the upper extension portion 8 is cut from a bar of soft metal and soldered or welded to the portion 9.

The bar has a portion 8^a, shown in dotted lines, which is knocked up to produce the lug 11, and at the other end the bar 8 has a portion 8^b, shown in dotted lines, and this portion 8^b is knocked around sidewise to produce the stop 16.

Various changes may be made without departing from the spirit of my invention as claimed.

I claim:

1. A safety catch for pin constructions comprising a post terminating in a hook, a latch member mounted to slide bodily through the post below the hook and having a lip adapted to ride past a pin member received within said hook whereby the pin member is held within the hook.

2. In a safety catch for brooch pins and the like a base, a spring hook mounted upon the base adapted to spring outwardly therefrom, a latch member slidably mounted upon the base and in a slot in the hook, means for retaining the latch member from being moved out of the slot in the hook, a lip upon an upper edge of the latch member positioned to operate under the hook, a concavity in the top of the latch member back of the lip, the lip being disposed at such a height relative to the hook that in passing under a pin member seated in the hook it will spring the hook upwardly and snap past the pin member whereby the pin member will become seated in the concavity behind the lip.

In testimony whereof I have signed my name to this specification.

MOAD H. LE MARR.