A. E. WALLER.

CATCH.

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967,090. Patented Aug. 9, 1910.

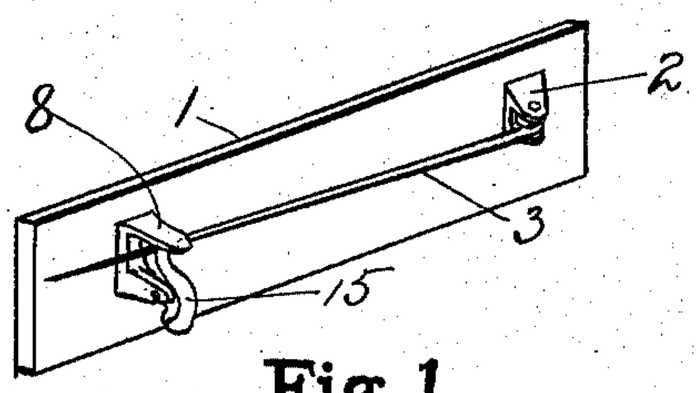


Fig. 1.

Fig. 3

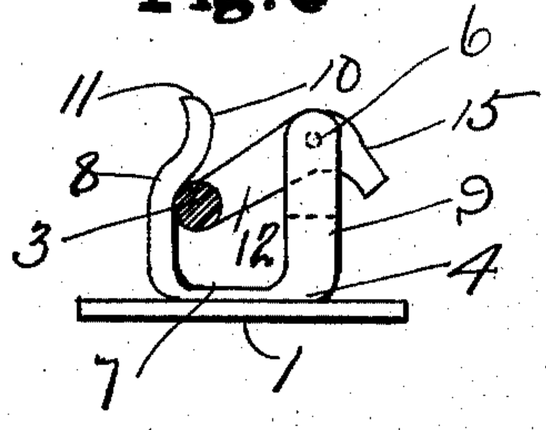


Fig. 2.

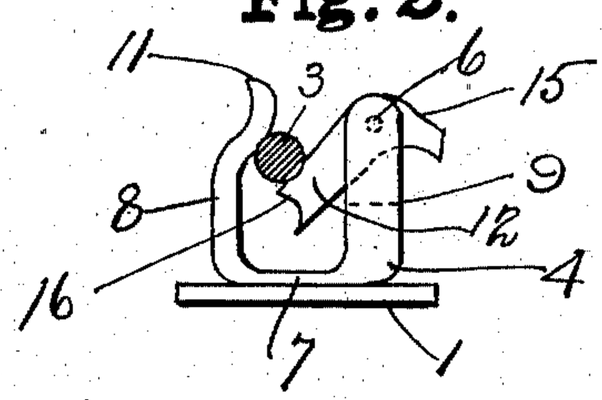


Fig. 4.

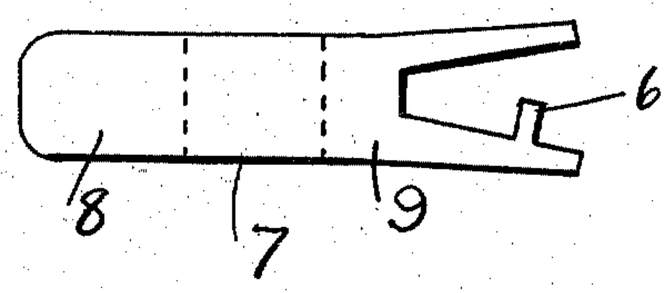


Fig. 6

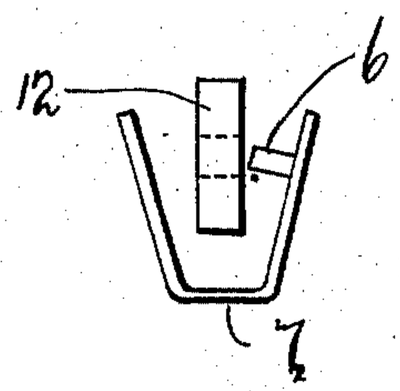
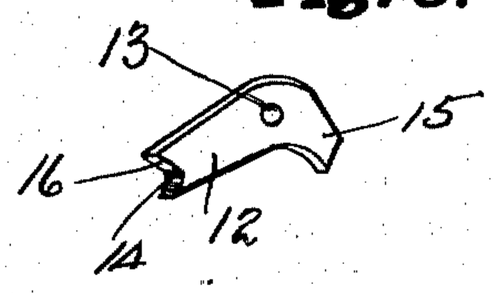


Fig. 5.



WITNESSES

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CATCH.

967,090. Specification of Letters Patent. **Patented Aug. 9, 1910.**

Application filed December 2, 1909. Serial No. 530,913.

To all whom it may concern:

Be it known that I, ANTHONY E. WALLER, a citizen of the United States, residing at Pawtucket, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Catches, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to a catch member for pins, brooches and analogous articles, and has for its object to provide a catch, of particularly simple and inexpensive as well as effective construction, that will automatically lock the free end of the securing pin-tongue, without the employment of a spring on the keeper, the same being adapted to be readily released when it is desired to remove the pin or brooch.

With these and other objects in view, the invention consists of certain novel features of construction, as will be more fully described and particularly pointed out in the appended claims.

In the accompanying drawings: Figure 1— is a perspective view illustrating a pin or brooch with my improved catch member attached thereto. Fig. 2— is an enlarged front view of the catch member showing the pin-tongue in the act of entering the catch member. Fig. 3— is an enlarged front view showing the pin-tongue as engaged by the keeper lever firmly holding the pin-tongue in position. Fig. 4— shows the shape of the yoke portion of this catch member as it is blanked from the stock. Fig. 5— is a detail of the keeper. Fig. 6— is an end elevation showing the keeper in position in the fork portion of the work, in which position the fingers of the fork are squeezed together to mount the keeper on the pivot.

Referring to the drawings, 1 designates the body, 2 the joint, and 3 the pin-tongue of the pin or brooch, which may be of any desired or convenient construction. Fixed to the body 1 by solder, rivets, or other convenient means is the yoke 4, which is preferably made in a U-shape. This frame is preferably blanked out of sheet stock, as illustrated in Fig. 4, in the form of an open fork at one end, one of the prongs 5 of said fork having an inwardly projecting teat 6 forming a pivot on which the keeper, hereinafter described, is arranged to oscillate. This frame is then bent up into substantially a U-shape, as illustrated in Figs. 2 and 3, having a base portion 7 and two upwardly extending side members 8 and 9, the outer end of member 8 being provided with an inwardly projecting portion or protuberance 10 against which the keeper lever presses the pin tongue while retaining the same in the manner hereinafter described. The outer end 11 of this member is slightly curved back to facilitate the entering of the pin-tongue 3 into the catch member. The opposite member 9 contains the open mouthed forked construction in which the keeper 12 is pivotally mounted. This keeper lever is pierced at 13 to receive the pivot teat 6 and is provided at its working end with a notch or recessed portion 14 for the purpose of receiving and retaining the pin-tongue when the same is pressed into the catch member. The opposite end of said keeper is preferably turned downward at 15 to form a suitable operating handle. To mount this keeper the same is placed into position between the fork prongs, see Fig. 6, and the same when pressed together carries the teat 6 into the opening 13, thus forming a simple, inexpensive and effective method of pivotally mounting the keeper in its supporting yoke member.

The operation of my improved catch is as follows: The pin tongue is connected in the usual way to the joint member 2 and when carried inward toward the catch member, if the joint should be slightly loose to allow the tongue to spring off to the back side of the catch, the sloping portion 11 of the member 8 will engage and guide the pin tongue down into said member onto the keeper 12. The end of this keeper is so arranged as to cause the pin tongue to spring backward in entering out of its normal working plane, as illustrated in Fig. 2, so that its natural tendency after passing the point 16 of this keeper is to spring forward again into the recessed portion 14 of the keeper and then when released from the pressure of the hand the natural upward or opening spring tension of this resilient pin tongue draws the keeper to its closed position binding the pin tongue against the wall 8 of the U-shaped member just beneath the protuberance 10, firmly securing the same in position within said catch member without the employment of a spring on the keeper.

To release the pin-tongue it is only necessary to press upward on the handle portion

15 drawing the engaging end of the lever downward and forward, the upper wall 16 of the engaging notch being on such an angle as to keep the pin tongue pressed firmly over 5 against the member 8 so that a slight downward motion of the keeper quickly disengages the pin tongue allowing the same to be instantly released and the pin unclasped.

The practical advantage of doing away 10 with a spring in a catch member is that these members are usually made up complete, independent of the jewelry to which they are subsequently attached. In mounting these catch members on a brooch or the like they 15 are preferably heated and soldered thereon, the heat in this case drawing the temper of the spring and rendering the same useless, therefore it is found of great advantage in catch members of this character to employ no 20 spring whatever in their manufacture, and in my improved device I have so constructed the same as to utilize the natural spring or resiliency of the pin tongue with which the same is always supplied, for operating the 25 keeper.

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

1. In a pin, the combination with a resili- 30 ent pin-tongue of a catch member comprising a substantially U-shaped frame one leg of which forms an abutment, a retaining lever arm pivotally mounted in the opposite leg of said frame and adapted to be depressed to receive and release said pin tongue, said 35 lever being of a length to substantially close the open side of said frame and provided with a recessed portion at its end for engaging said pin-tongue whereby the latter by its resiliency raises said lever and forces itself 40 against said abutting leg automatically locking itself within the catch.

2. In a pin, the combination with a resilient pin-tongue of a catch member comprising a substantially U-shaped frame, one leg 45 of said frame being bifurcated, a retaining lever pivotally mounted in said bifurcated portion and having an arm of a length to substantially close the open side of the frame, the end of said lever arm being pro- 50 vided with a recessed portion for engaging said pin-tongue whereby the latter by its resiliency raises said lever and forces the pin-tongue against the opposite wall of said frame, an inward projecting portion on said 55 opposite wall to assist in forming a stop and retaining said pin-tongue within said frame.

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

ANTHONY E. WALLER.

Witnesses:
HOWARD E. BARLOW,
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