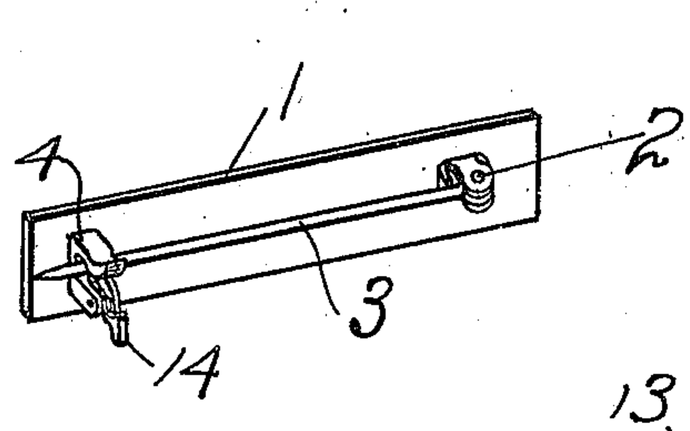
A. E. WALLER.

CATCH.

APPLICATION FILED JULY 9, 1909.

993,482. Patented May 30, 1911.

Fig. 1.



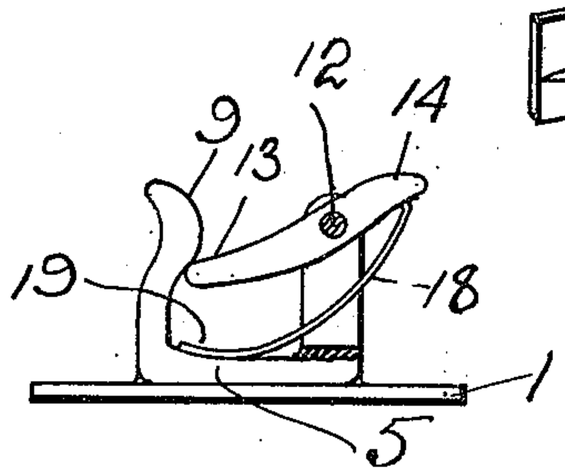


Fig. 4.

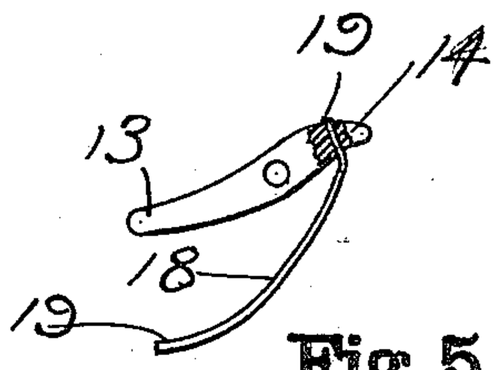


Fig. 5.

Fig. 2.

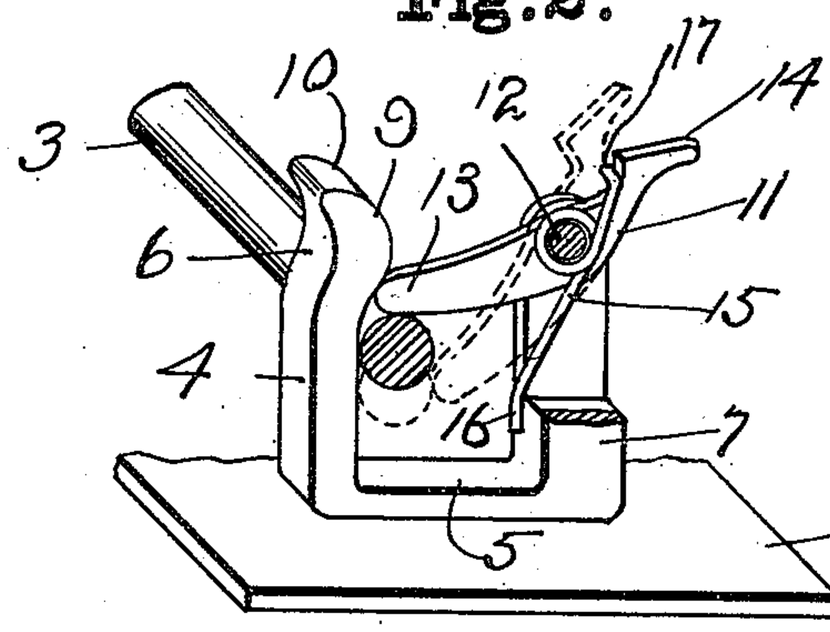


Fig. 3.

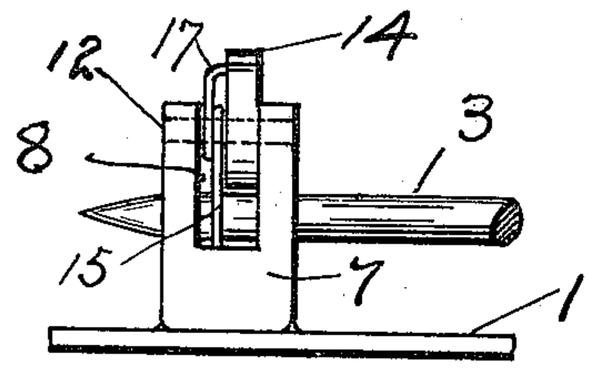
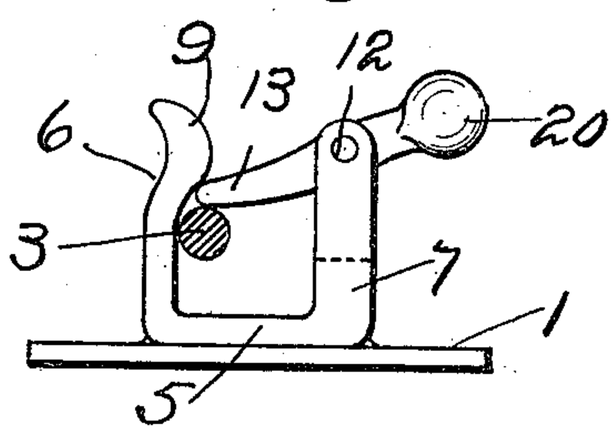


Fig. 6.



WITNESSES

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CATCH.

993,482. Specification of Letters Patent. Patented May 30, 1911.

Application filed July 9, 1909. Serial No. 506,743.

To all whom it may concern:

Be it known that I, ANTHONY E. WALLER, a citizen of the United States, residing at the city of 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, the same being adapted to be easily and readily unfastened 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 a greatly enlarged perspective view of the catch member showing one of the bearing arms broken away to better illustrate the application of one form of spring to the retaining lever. Fig. 3— is a side elevation of the catch showing the retaining lever pivoted at the upper end of the bearing arms and the point of the pin-tongue in position in said catch. Fig. 4— is an end elevation of the catch member with one of the bearing arms removed showing a simple and effective arrangement of spring for normally holding the retaining lever in its closed position. Fig. 5— is a detail of the lever with the spring attached thereto showing one end of the spring as being riveted through the lever handle. Fig. 6— is a modification illustrating the retaining lever as being weighted at its outer end so as to normally hang in its closed position by gravity.

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 convenient or desired construction. Fixed to the body 1 by solder, rivets or in other convenient means is the U-shaped frame 4 of the catch member. This frame is formed with a base portion 5 and two upwardly extending side members 6 and 7 to form a recess between them to receive the pin-tongue, member 6 being provided with an inwardly projecting protuberance 9 to receive the end of the retaining lever as hereinafter described, the outer end of this arm is curved back as at 10 to facilitate the entering of the pin-tongue 3 into the catch. The opposite member 7 is slotted or split and forked as at 8, see Fig. 3, forming outwardly projecting bearing arms, in the outer end of which is mounted the retaining lever 11 on the pivot pin 12. The inner end 13 of this lever inclines toward the bottom of the recess of the frame and is adapted to engage the underside of the said protuberance 9 against which it is pressed by the operating spring to form a stop for this end when the same is in position to close the mouth of the catch member. The opposite end of this retaining lever extends out beyond the pivoting point and forms a handle 14 which is adapted to be engaged by the thumb or finger and pressed upward forcing the retaining end 13 downward toward the bottom of the recess to open the mouth of the catch member and release the pin-tongue therefrom. This retaining lever is normally held in its closed position by a spring 15 of any desired construction, one form of which is illustrated in Fig. 2 in which the lower end 16 of this spring engages the inner side of the yoke, the same then extends out, takes a single turn around the pivot pin, and the opposite end 17 then turns at right angles and engages a notch or shoulder near the outer end of the retaining lever holding the opposite end of said lever normally in its closed position.

The simple and inexpensive form of spring 18, illustrated in Figs. 4 and 5, is found to be very effective in its operation on this catch member. This spring consists of a slightly curved piece of spring wire one end of which may be swaged, riveted, or otherwise secured at 19 to the operating or outwardly extending end of the retaining lever. The opposite end 19 of this spring extends along beneath the closing end of the lever and rests against the base portion 5 of the catch member, as illustrated in Fig. 4.

Another feature of my invention is that the outer end of the retaining lever may be constructed with a comparatively heavy or weighted end 20, see Fig. 6, if desired, whereby the same is adapted to be normally held in its closed position by gravity and

without the employment of a spring for this purpose.

The operation of my improved catch is as follows: The pin-tongue being connected in the usual way to the joint member 2 is advanced toward the retaining lever. If this joint should be slightly loose and allow said tongue to spring off toward the back side of the catch, it will strike the sloping portion 10 of the entrance member 6 and be guided down onto the end 13 of the retaining lever, when by a slight pressure on the pin-tongue said lever will recede and allow the pin-tongue to enter the recess when said lever will immediately and automatically return to its closed position and effectually lock this end of the pin-tongue therein. When it is desired to release the pin-tongue, it is only necessary to engage the outer end 14 of this lever by the thumb or finger pressing the same up into the dotted position, illustrated in Fig. 2, when the closing end will swing back into the recess and release the pin-tongue.

The device is extremely simple, practical and inexpensive in construction and effective in its operation.

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

1. A pin-tongue catch member comprising a frame having two arms spaced to provide a recess between them, one of said arms having a protuberance facing the other arm, a lever pivotally connected to the other arm and crossing said recess and having an extension outwardly from its pivotal point, and means for normally holding said lever with its tip against the under face of said protuberance, the recess between the arms being of a size to receive the pin-tongue under the lower edge of said lever, and the face of the protuberance being rounded to present no obstruction to movement of the pin-tongue past it in either direction.

2. A pin-tongue catch member comprising a frame having two arms spaced to provide a recess between them, one of said arms being forked, the other arm being solid and having a protuberance facing the forked arm, a lever pivotally mounted in the forked arm and inclined toward the bottom of the recess and having a finger piece projecting outwardly from its pivotal point, and a spring connected to said lever and extending through the space in the forked arm under the lever to normally hold said lever with its tip against the under face of said protuberance, the recess between the arms being of a size to receive the pin-tongue under the lower edge of said lever, and the face of the protuberance being rounded to present no obstruction to movement of the pin-tongue past it in either direction.

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

ANTHONY E. WALLER.

Witnesses:

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E. I. OGDEN.