

E. MOREHOUSE.
SAFETY CATCH FOR PINS.
APPLICATION FILED SEPT. 7, 1910.

993,787.

Patented May 30, 1911.

Fig. 1.

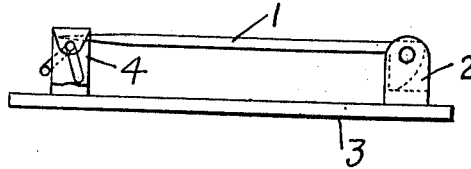


Fig. 2.

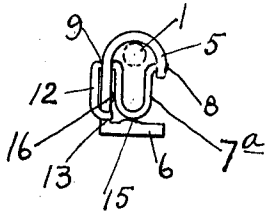


Fig. 3.

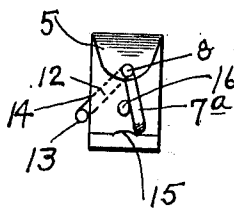


Fig. 4.

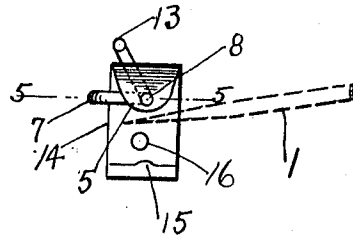


Fig. 5.

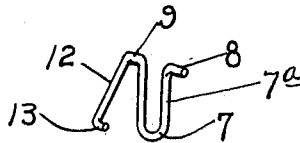
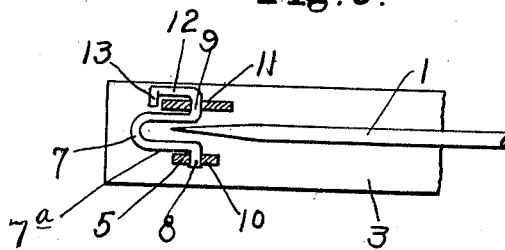


Fig. 6.

WITNESSES:

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SAFETY-CATCH FOR PINS.

993,787.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, EUGENE MOREHOUSE, a citizen of the United States, residing at the city of Providence, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Safety-Catches for Pins, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention has reference to improvements in a safety catch for pins, its object being to provide a strong and durable pivoted gate member adapted to swing across and close the entering mouth of the catch to positively prevent the point of the pin stem from being inadvertently removed therefrom.

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 claim.

In the accompanying drawings: Figure 1— is a side elevation of my improved safety catch retaining the point of an ordinary pin stem, the opposite end of said stem being secured to the pin body by a joint in the usual way. Fig. 2— is an enlarged end elevation of the catch showing the gate member in its closed position. Fig. 3— is an enlarged side elevation showing the gate member in its closed position. Fig. 4— is a side elevation of the catch showing the gate member in its open position with the point of the pin stem shown in dotted lines, in position to be passed into or out of the catch. Fig. 5— is a plan view showing a section of the catch on line 5—5 of Fig. 4. Fig. 6— is a perspective view showing a detail of the gate member.

Having reference to the drawings, 1 designates the pin stem of any desired construction which is pivotally mounted in the usual joint member 2 secured to the body 3.

My improved safety catch member 4 may be formed integral with the pin body or made separate and attached thereto to receive the point of the pin stem. Said catch may be constructed in the simplest possible form, its outer end 5 being turned over as illustrated in Fig. 2 having an overhanging lip and forming substantially a hook in cross section, into which the point of the pin stem 1 may be passed. The opposite end

6 of this member, when the catch is formed independent of the body, may be bent substantially at right angles to extend under the hook portion to serve as a foot, but this particular form of foot or base is not essential to the operation of the device.

My improved gate member is made in the form of a U-shape loop, 7, see Fig. 6, having the outer ends 8 and 9 of said loop turned outward forming trunnions which are adapted to enter corresponding holes 10 and 11 in the overhanging lip and back respectively of the hook-shaped catch. One end 12 of the loop is somewhat longer than the other end and after this long end is passed through the eye 11 in the back of the catch member it is bent downward at an angle to the arms of the loop, see Fig. 3, its end 13 then being bent inward to engage the edge 14 of the catch member, thereby forming a stop to limit the closing motion of the loop. By making this gate member in a U-shape and supporting both ends of the U by pivoting them in the catch member, it will be seen that this gate is rendered very strong and durable as the ends are protected and cannot be easily bent and rendered inoperative. Then again this closing or gate member is preferably made of springy material and a protuberance 15 may be provided on the foot 6 of the catch, if desired, over which the loop will have to be forced with a slight pressure in moving to its closed position, as illustrated in Fig. 3, or a protuberance 16 may be forced on the back wall of the catch, as illustrated in Figs. 2 and 3, over which the inner arm of the loop will be pressed in passing to its closed position. Either one or both of said protuberances may be employed to lock and retain the loop in its closed position.

In operating my improved safety catch the arm 12 and inwardly turned end 13 forms a very convenient handle by which the gate may be opened and closed. When it is desired to permit the point of the pin stem to pass into or out of the catch it is only necessary to swing the arm, and consequently the loop, upward into the position illustrated in Figs. 4 and 5, causing the bight of the loop to extend forward and beyond the point of the pin stem and substantially in line with the axis thereof when in its closed position, whereby said pin stem may then be freely passed either in or out

of the catch member. When it is desired to close the opening to the catch it is only necessary to swing the handle downward carrying the outer arm 7^a of the loop laterally across the mouth of the hook, closing the opening and securely retaining the point of the pin stem from being inadvertently removed therefrom.

It will now be understood that the portion 7^a of the loop constitutes a gate or barrier which, as indicated by comparing Figs. 2, 3 and 4, is movable in a plane parallel with the pin stem when the latter is engaged with the catch, so as to close the mouth of the catch member when the gate or barrier is in the position shown in Fig.

3, said mouth being open when the gate or barrier is moved to the position shown in Fig. 4.

I claim:

A safety catch comprising substantially a hook-shaped member, a gate member formed into a U-shape loop and pivoted both in the back and the end of the hook, said loop being adapted to swing laterally across and close the entering mouth of the hook.

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

EUGENE MOREHOUSE.

Witnesses:

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
