

W. W. MIDDLEBROOK.
SAFETY CATCH FOR PINS.
APPLICATION FILED DEC. 14, 1911.

1,049,383.

Patented Jan. 7, 1913.

Fig. 1..

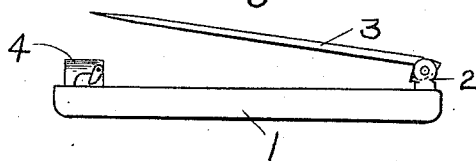


Fig. 2.

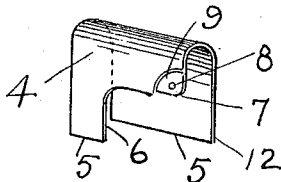


Fig. 3.

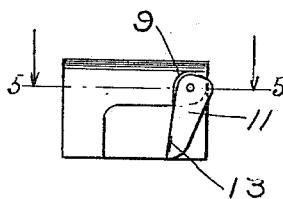


Fig. 4.

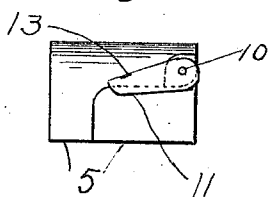
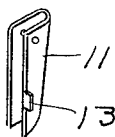


Fig. 5.



Fig. 6..



Witnesses

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SAFETY-CATCH FOR PINS.

1,049,383.

Specification of Letters Patent.

Patented Jan. 7, 1913.

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To all whom it may concern:

Be it known that I, WILLIAM W. MIDDLEBROOK, a citizen of the United States, and resident of the city of Yonkers, in the county of Westchester and State of New York, have invented certain new and useful Improvements in Safety-Catches for Pins, of which the following is a specification.

This invention relates to safety catches for pins and has for its object to provide a catch of this character that may be constructed of very thin metal which is accomplished by forming the catch member in a U-shape whereby both of its ends may be attached to the pin back for stability and removing a portion of one of the side walls for the reception of the pin-stem and pivotally mounting a gate member above the opening to close the same against the passage of the pin-stem.

A further object of the invention is to offset the stock about the pivoting point from the plane of the adjacent side wall to provide a friction control for the action of the gate arm.

A still further object of the invention is to form the gate arm into a U-shape in cross section and insert the side wall of the catch member about the pivoting point into the groove of the U so as to provide a maximum bearing for the gate arm and for the pintle on which the arm swings.

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

Of the accompanying drawings: Figure 1— is a side elevation of a pin having one of my safety catch members mounted thereon. Fig. 2— is a perspective view of my improved catch member with the gate arm removed. Fig. 3— is a side elevation of my catch member with the catch arm in closed position. Fig. 4— is a side elevation of my improved catch member with the gate arm in open position. Fig. 5— is a section on line 5—5 of Fig. 3 showing the plane about the pivoting point offset from the plane of the rest of the wall. Fig. 6— is a detail perspective view of the gate arm.

Referring to the drawings 1 designates the body of a pin to one end of which is secured a joint member 2 in which is pivot-

ally mounted the usual pin stem 3. At the opposite end of this pin body is secured my improved catch member 4. The ordinary hook-shaped catch member is necessarily made of comparatively heavy stock as one end is entirely unsupported, but when it is desired to form the catch member of the more precious metals and to make them of thin material it is found desirable that both edges or ends 5 of the body of the member should be attached to and supported by a common base. In carrying out my invention with this purpose in view I have provided a catch member formed of thin sheet metal and of inverted U-shape, having one plain side wall 12, the opposite side wall of this member being partly removed as at 6 to permit the entrance of the pointed end of the pin-stem. The stock at the inner corner 7 of this wall is preferably offset or set inward from the plane of the adjacent side wall forming a slight shoulder 9, see Figs. 2 and 5. This offset portion is pierced at 8 for the pintle 10 on which the gate arm 11 swings. This gate arm is preferably formed in a U-shape in cross section, see Figs. 5 and 6, whereby it is adapted to fit over and around and engage both sides of the wall of the catch member about the pivoting point thereby firmly supporting this gate in its pivoted position. Then again, by forming this gate in a U-shape it may be made of very light material and yet resist any tendency to bend. A laterally projecting ear 13 is provided forming a handle by which the gate may be manipulated.

A feature of my invention is the offsetting of the stock about the pivoting point, from the plane of the adjacent stock so that the shoulder 9 thus formed will provide a frictional stop for preventing the gate from being accidentally opened by an endwise pull of the fabric and to offer a slight resistance to frictionally retain this grooved gate arm when carried upward to its open position, as illustrated in Fig. 4.

I claim:

A safety catch for pins comprising an inverted U-shaped pin-stem receiving member, the outer ends of both side walls of this member being adapted to be attached to a common base, a portion of one of said side walls being removed to provide a lateral opening to receive the pin-stem, a gate arm pivoted to

said side wall above said opening whereby the latter may be closed when desired against the passage of the pin-stem, the plane of said side wall about the pivoting point being offset from the adjacent wall to provide
5 a frictional control for the action of said gate arm, said gate arm being U-shaped in cross section to engage both sides of the wall

of the catch member to provide a maximum bearing for said gate.

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

WILLIAM W. MIDDLEBROOK.

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."
