H. H. THAYER.
Safety-Pin.

No. 213,007. Patented Mar. 4, 1879.

Fig. 2.

Fig. 1.

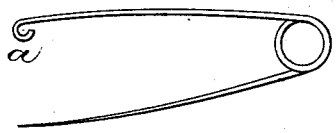


Fig. 3.

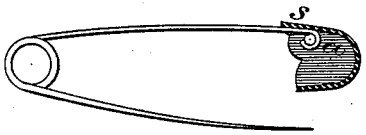
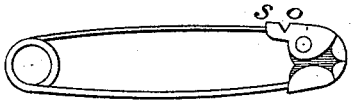


Fig. 4.



Witnesses:

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UNITED STATES PATENT OFFICE.

HIRAM H. THAYER, OF NEW YORK, N. Y.

IMPROVEMENT IN SAFETY-PINS.

Specification forming part of Letters Patent No. **213,007**, dated March 4, 1879; application filed October 17, 1878.

To all whom it may concern:

Be it known that I, HIRAM H. THAYER, of the city, county, and State of New York, have invented a new and useful Improvement in Safety-Pins, of which the following is an accurate description:

The purpose of my invention is to manufacture a plate-shield safety-pin that is simple in its parts and easily put together, so that when united it shall be firm and strong, and stable against loosening or dismemberment, and in its cost be cheap.

The pin consists of two pieces only, being a piece of wire of proper gage and length, bent or coiled in the middle, as shown at Figure 1, with one end or leg sharpened, and the other leg bent inward by a sharp loop or ring at its end, as seen at *a*.

The second part is the shield, consisting of a plate of thin brass or other proper metal cut in similar form, as shown at Fig. 2.

These parts are thus formed by, and are afterward further manipulated by, machinery. The shield-blank, Fig. 2, placed in a die, has its parts turned upward, as seen at Fig. 3, which shows a projecting lip or re-enforce, *s*, that gives steadiness to the holding-leg of the pin, which is now placed in position on the shield, as shown at Fig. 3, which brings the ring *a* about half-way down the shield. The flange folds being next bent down, closing over the pin, brings the ring *a* under the part marked *x*, Fig. 2, when, by a properly-fitting tool and slight blow from a hammer, or pressure, the shield is firmly closed on the fastening-loop *a*. At the same time a depression, or its equivalent puncture, as by a center-punch contrivance or other tool, is made in the shield-plate at *x*, Figs. 2 and 4, which depresses the plate into the ring and securely fastens the two parts together, and a corresponding depression or puncture may be made on the opposite side of the shield. Stability is also given by the re-enforce *s*, that is lapped on the outside of the holding-leg; and as an additional hold-fast endwise the sharp nick *o*, Fig. 4, is cut in the edge of the shield, depressing it into the wire.

My improvements consist in the form and functions of the shield, with the nick *o*, re-enforce *s*, and puncture *x*, with the peculiar parts, combined as described.

I do not claim a safety-pin formed of a bent wire and shield of bent thin metal, nor of such two combined. Nor do I claim a wire having its base end bent or curved and fastened within a collapsed plate or shield; but

What I claim, and wish to secure by Letters Patent, in a safety plate-shielded pin, is—

1. The re-enforce *s*, for stiffening and steadying, and provided with the nick *o*, holding the leg of a safety-pin to the shield, as described.

2. The ring or loop *a* of the holding-leg of a safety-pin, combined with the depression or puncture *x* and nick *o*, in the manner and for the purpose substantially as described.

3. The combination of the loop *a*, puncture *x*, re-enforce *s*, and nick *o* with a safety-pin, when constructed in the manner substantially as set forth.

HIRAM H. THAYER.

Witnesses:
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