(No Model.)

D. A. CARPENTER.

SAFETY PIN.

No. 381,613. Patented Apr. 24, 1888.

Fig: 1.

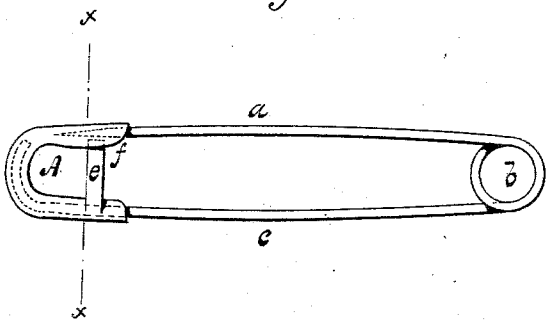


Fig: 2.

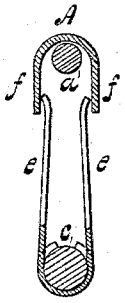


Fig: 5.

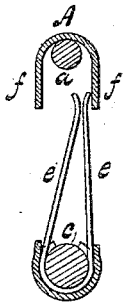


Fig: 4.

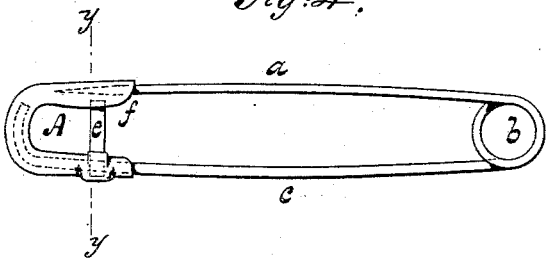
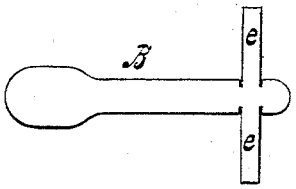


Fig: 3.



WITNESSES:

Chas. Nida

Geo. M. Field.

INVENTOR.

Daniel A. Carpenter.

UNITED STATES PATENT OFFICE.

DANIEL A. CARPENTER, OF NEW YORK, N. Y.

SAFETY-PIN.

SPECIFICATION forming part of Letters Patent No. 381,613, dated April 24, 1888.

Application filed June 6, 1887. Serial No. 240,379. (No model.)

To all whom it may concern:

Be it known that I, DANIEL A. CARPENTER, of New York city, in the county and State of New York, have invented a certain new and useful Improvement in Safety-Pins, of which I declare the following to be a full, clear, and exact specification, reference being had to the accompanying drawings, forming a part thereof.

This invention relates to improvements in safety-pins in which the locking of the sharpened member of the pin in the shield constitutes a special feature; and the invention consists of a safety-pin provided with substantially the means herein described and claimed for preventing the accidental disengagement of the sharpened member from the shield.

In the accompanying sheet of drawings, Figure 1 is a view of a safety-pin embodying the invention in one form; Fig. 2, a cross-section in the plane *x x*, Fig. 1. Fig. 3 shows the blank from which the shield as it appears in Figs. 1 and 2 is produced. Fig. 4 shows a second form of the invention. Fig. 5 is a cross-section in the plane *y y*, Fig. 4, when the guard on one side is pressed inward.

Similar letters of reference indicate like parts in the several views.

The application of the improvement herein described does not necessitate a change in the construction of any portion of the ordinary safety-pin excepting the shield. The several parts known as the "sharpened member," the "coil," and the "unsharpened member," and designated by the letters *a*, *b*, and *c*, respectively, in the drawings, need not therefore be described.

The shield A is formed from a blank in any suitable manner, and resembles in many respects some shields which are now in use. Across its throat extends a guard, as represented in the drawings. This guard may be either single or double—that is to say, it may consist of a single member, *e*, extending across one side of the shield, or of two such members extending across both sides of the shield, and it may be made either of a distinct strip of somewhat elastic material bent into the required shape and clamped between the shield and the unsharpened member or otherwise secured in the proper position, or it may be formed as an integral portion of the shield. Figs. 2 and 5 illustrate these two ways of constructing the guard, in each of which a double guard is shown. When this is an integral part of the shield, the blank B, from which the shield is formed, has the shape represented in Fig. 3. The construction last indicated is considered the one that is to be preferred, though it necessitates the employment of somewhat stiffer and more elastic material than that from which the shield is ordinarily made. The guard extends into the hood *f* of the shield, but is not united to it, and presses outward against the adjacent side or sides of the hood. The shield may be secured to the unsharpened member in any desirable manner.

Now, when the sharpened member of the pin is brought against the guard and a slight lateral pressure is exerted in the proper direction, the guard yields and the point passes into the shield, whereupon the guard automatically returns to its normal position and the point is securely confined by the parts surrounding it. It may be released at pleasure by pressing inward the guard and passing the member out through the temporary opening thus occasioned.

It will be observed that the guard also serves as a guide to assist in directing the point into the shield and that when the pin is provided with a double guard the sharpened member may be made to enter the shield or depart from it on either side with equal facility.

Of course when the pin is constructed with but a single guard, one side of the shield is continuous from the unsharpened member to the hood and the guard extends across the opening in the other side.

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

1. In a safety-pin constructed with the ordinary sharpened member, coil, and unsharpened member, a guard extending from the unsharpened member into the hood which receives the point of the pin and adapted to bar the passage of the point out of the shield, substantially in the manner described.

2. In a safety-pin constructed with the ordinary sharpened member, coil, and unsharpened member, a guard rigidly secured at the

back of the pin and extending to the hood, said guard being adapted to bar the passage of the point out of the shield, and also to yield and allow the point to pass out of or into the shield, substantially as and for the purpose described.

3. In a safety-pin constructed with the ordinary sharpened member, coil, and unsharpened member, a guard rigidly secured at the back of the pin and extending into the hood, against the side or sides of which it bears, said guard being constructed to yield when pressed inward and to return to its normal position, but not to be pressed outward, substantially as and for the purpose described.

4. In a safety-pin constructed with the ordinary sharpened member, coil, and unsharpened member, a shield having an integral portion extending across the throat of the shield into the hood and forming a guard that bars the passage of the point of the pin out of the shield, said guard being adapted to yield when pressed inward and then allow the point of the pin to pass, substantially as and for the purpose described.

5. In a safety-pin having the ordinary sharpened member, coil, and unsharpened member, a shield constructed from a blank, B, the arms *e* of said blank forming spring guard members integral with the shield and adapted to operate substantially as described.

DANIEL A. CARPENTER.

In presence of—
A. HOHLÉ,
LOUIS P. MAXHEIMER.