(No Model.)

C. G. DEMING.

SAFETY PIN.

No. 457,261. Patented Aug. 4, 1891.

Fig. 1.

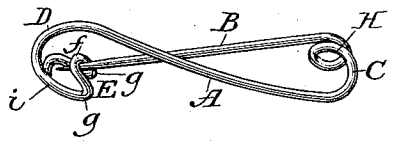


Fig. 2.

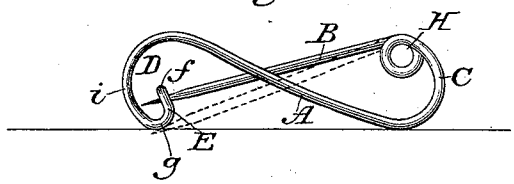
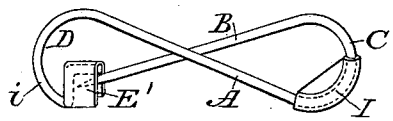


Fig. 3.



Attest:
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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

CHARLES G. DEMING, OF WOODSTOCK, NEW YORK, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, TO THE CONSOLIDATED SAFETY PIN COMPANY, OF BLOOMFIELD, NEW JERSEY.

SAFETY-PIN.

SPECIFICATION forming part of Letters Patent No. 457,261, dated August 4, 1891.

Application filed April 26, 1890. Serial No. 349,638. (No model.)

To all whom it may concern:

Be it known that I, CHARLES G. DEMING, of Woodstock, in the county of Ulster and State of New York, have invented a new and useful Improvement in Safety-Pins; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

My invention relates to an improvement in the construction of safety-pins, and has for its object to produce a pin which shall be self-fastening when inserted in a fabric and will admit of being unfastened by a simple outward pull thereon.

It consists in the novel combination and arrangement of the sharpened and unsharpened members and the shield of the safety-pin, substantially as hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a view in perspective of the improved pin; Fig. 2, a side elevation thereof, and Fig. 3 illustrates a modification in its construction.

My improved pin is preferably made of a single piece of wire bent in substantially the form of the figure **8**, as shown in the drawings, in which—

A represents the bar of the pin; B, its sharpened member or pin proper; C, its spring end; D, its head, and E the shield for the point. The bar A and pin B are connected at the spring end C of the pin, and, by a curvature in the latter, are made to cross each other about midway in their length. The unsharpened member or bar A is extended and curved at the opposite end to form the rounded head D, preferably made, for the sake of symmetry, to correspond substantially in form with the opposite end C, and which terminates in a shield E, adapted to receive and guard the point of the pin B. This shield is formed by bending the wire in customary manner to form a loop *f* transverse to the length of the pin, and which connects two lateral loops *g g*, the loop *f* serving to stop the pin-point and the side loops to guard it; but the open end of loop *f* of the shield is turned to face outwardly away from the opposite portion of the shield and the bar of the pin to which it is secured. The outer face *i* of the shield is preferably made to incline inward, so as to approach more or less a direction parallel with the length of the bar A. The curvature of the spring end C of the wire will operate, as shown in Fig. 3, to form a spring whose tendency, when free and unrestrained, will be to carry the pin-point automatically toward the open outwardly-facing loop of the shield. Its resiliency may be increased and the pin re-enforced by forming a coil H in said end, as shown in Figs. 1 and 2.

It is evident that without departing from my invention the head and shield of the pin or the shield alone may be formed of sheet metal bent or stamped up in proper form independently of the bar of the pin and attached thereto in manner as well known to the art, and which need not herein be more particularly described, (see E′, Fig. 3,) and that the spring end C may be variously shaped and may be re-enforced, as shown at I in Fig. 3; also, that the bar A may be variously ornamented and fashioned as taste and fancy may dictate, the main features of my invention consisting in so combining the shield with the pin that the open end or loop of the shield shall be turned away from the bar of the pin, and causing the bar to be intersected by the pin, so that the latter shall be normally held in the outwardly-facing shield, substantially in the manner and for the purpose set forth.

In operation my improved safety-pin constructed as described differs from the pins of this class heretofore manufactured in that in the old forms of pins the stress of the spring operates automatically to carry the pin-point away from the shield, whereas in my pin the spring operates automatically to carry the pin-point toward the shield.

In the use of this improved safety-pin it is automatically fastened in a piece of fabric by simply pushing the pin-point forward therein. So soon as the pin-point has taken hold and passed through the cloth so as to emerge on the same side or face as that which it entered,

it will automatically spring up toward and into the shield and thus be fastened. If held in the same position and pulled back, it will automatically unfasten itself; but if turned upon its side to lie flat upon the fabric it will be impossible to detach it unless the pin be forced outward by hand. The fact that the pin is self-fastening and self-detachable when held out at a right angle to the face of the fabric and simply pushed forward or drawn backward, and that it is not detachable when turned over into parallelism with the face without special effort to that end, renders it more useful and effective for various purposes than the customary forms of safety-pins.

I claim as my invention—

1. The safety-pin, substantially as described, having the open end or loop of the shield turned outwardly in the same plane as the body of the pin, and the unsharpened member or bar carrying the shield bent in form to cross the sharpened member or pin about midway its length, substantially in the manner and for the purpose herein set forth.

2. The combination, with the unsharpened member or bar of a safety-pin, of a shield for the point, the face of whose outer end is inclined or bent inward substantially into parallelism with said bar, and its open loop turned outward in the same plane as said bar, in combination with a spring-actuated pin intersecting said bar and held normally under the stress of its spring within the shield, substantially in the manner and for the purpose herein set forth.

3. The safety-pin constructed of a single piece of wire twisted in substantially the form of the figure **8**, and provided at one end with a shield having its open end or loop turned outwardly to receive the opposite sharpened end forming the pin-point, the intermediate portion of the wire being coiled to form a spring whose stress shall operate to carry the point of the pin automatically toward the open loop of the shield, substantially in the manner and for the purpose herein set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHARLES G. DEMING.

Witnesses:
A. N. JESBERA,
E. M. WATSON.