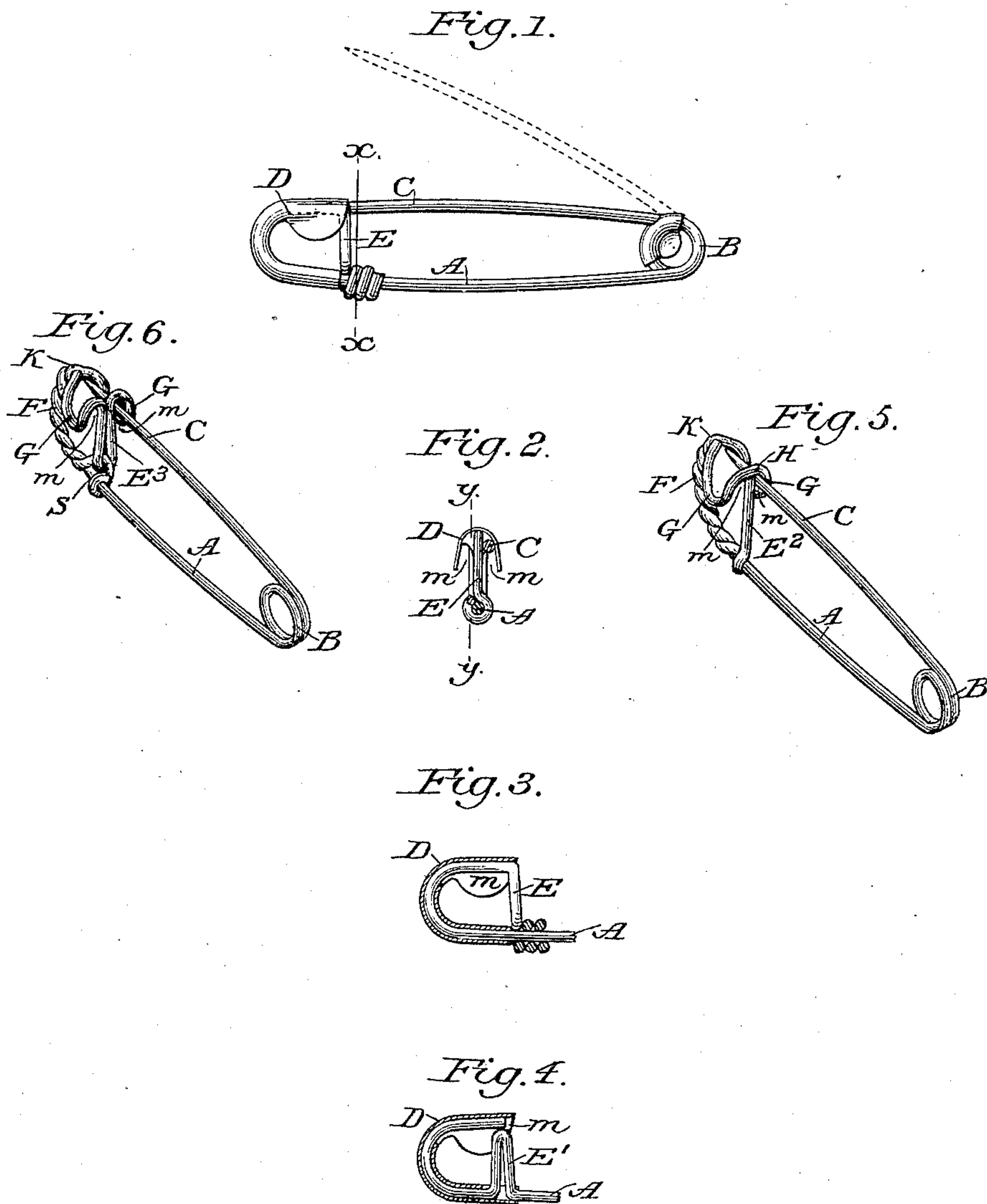


(No Model.)

G. P. FARMER.
SAFETY PIN.

No. 398,141.

Patented Feb. 19, 1889.



Attest:

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UNITED STATES PATENT OFFICE.

GEORGE P. FARMER, OF MONTCLAIR, NEW JERSEY.

SAFETY-PIN.

SPECIFICATION forming part of Letters Patent No. 398,141, dated February 19, 1889.

Application filed August 23, 1888. Serial No. 283,565. (No model.)

To all whom it may concern:

Be it known that I, GEORGE P. FARMER, of Montclair, in the county of Essex and State of New Jersey, have invented a new and useful Improvement in Wire 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, in which—

Figure 1 is a side elevation of my improved safety-pin constructed with a shield of sheet metal; Fig. 2, a transverse section in line *xx* of Fig. 1; Fig. 3, a longitudinal section of the shield end of said pin in line *yy* of Fig. 2. Fig. 4 illustrates a modification in the construction of the pin with a sheet-metal shield. Figs. 5 and 6 are views in perspective of pins embodying my invention, which are constructed with wire shields or guards.

The object of my invention is to render the pin more secure when fastened and to facilitate the fastening thereof by preventing positively the passage of the pin-point transversely through the shield from one side to the other after it has been entered under the same.

It consists in the combination, in a safety-pin, with the shield or guard for the pin-point, of a bar or post made to subtend the arc formed by the bend in the shield and bisect the transverse arch under which the pin is caught, so as to reach centrally from the inner side of said arch to the body of the pin opposite thereto, and thereby divide the shield or hood centrally into two recesses or pockets, whereby the pin-point is positively prevented from passing under or within the shield from one side to the other or from the one pocket to the other, and is guided in its approach to the shield from either side directly into the retaining-pocket on that side.

The accomplishment of this end has heretofore been sought by the construction of a guard composed wholly of a central plate in the plane of the body and pin having oppositely-turning hooks at its outer free end, each adapted to receive the point of the pin; but in this construction, although the plate forms an impassable partition between the two hooks, it lacks proper support, affords no means for preventing the pin-point from be-

ing pressed forward longitudinally beyond the guard to prick the wearer, and is necessarily clumsy and ungainly in appearance. These disadvantages are overcome in my invention, wherein I combine with the strength, security, and neatness found in the best forms of safety-pins having an open shield the further security and ease in locking the pin, due to the use of a central partition to prevent a through lateral movement of the pin.

In the accompanying drawings, A represents the body of the pin; B, its coil or spring; C, the pin-point, and D the customary shield, secured to or formed integrally with the unsharpened end of the body of the pin to furnish the means for engaging and protecting the sharp point when the pin is in use.

In its several details, as above mentioned, the pin may follow any of the approved forms now in use.

In the construction of my improved pin with a shield of sheet metal the end of the wire forming its unsharpened member or body A, to which the shield is secured in the customary manner, is, after being so bent and extended as to afford an inner support for the shield to its extreme outer end, as shown in Figs. 1, 3, and 4, bent inward, as at E, in the plane of the body and pin, so as to intersect the body A of the pin at about a right angle therewith, and is preferably secured thereto by being coiled about the same, as shown in Fig. 1. The transverse bar or post E, thus extended as a chord across the arc formed by the curved shield D, divides the hood or recess under the shield adapted to receive the pin-point into two pockets, *m m*, (see Fig. 2,) one on each side of the central post, E, each of which is fitted to receive and securely hold and guard the pin-point C when it is entered therein. The portion of wire forming the post E is preferably flattened to reduce its thickness.

The pin-point C is readily passed into either of said pockets *m* by being simply pressed in against the post E and allowed to spring outwardly alongside thereof, and when entered will remain more securely fastened than in an ordinary safety-pin by reason of the impossibility of passing it laterally through the shield and out on the opposite side from that on which it entered the same.

Instead of first carrying the free end of the body or unsharpened member A of the pin around against the inner side of the sheet-metal shield to the outer end thereof, and then bending it across to engage the body A and form the partition-post E, as shown in Figs. 1 and 3, I contemplate, as an equivalent device, first bending the wire constituting the body A into a loop, E', Fig. 4, substantially at a right angle with its length, and then extending the wire within the shield to its outer end, as shown in Fig. 4, the loop being of such length as to enter and bisect the recess in the shield in the central longitudinal plane thereof, and to contact with the terminal point of the wire and thereby partition off the two pockets *m m*, so that the pin-point may not pass from the one into the other.

Although my invention is primarily designed as an improvement upon safety-pins constructed with a shield, D, made of sheet metal clamped and secured upon the end of the unsharpened member or body of the pin, it is likewise applicable to pins in which the shield is made integral with the wire forming the body of the pin, as shown in Figs. 5 and 6.

In the construction of these wire pins embodying my invention the unsharpened or free end of the wire constituting the body A is doubled or bent back upon itself and twisted, as at F, for a portion of its doubled length, and the looped end is opened and widened and its two sides bent to form two lateral curved parallel wings, G G, connected at their forward ends by the end of the loop bent to form a transverse connecting-arch, H, between them, (see Fig. 5,) and at their rear ends by the union at K of the two lengths of the wire of which they are formed. The twisted portion F of the doubled wire is then bent over in a semicircle to bring the two parallel wings G G in line with the pin-point C, and form, in the customary manner, a skeleton shield or guard therefor, the point

C being engaged by being sprung in under the arch H, and then confined by the lateral wings G G. The free end of the twisted portion F is finally bent up at a right angle, or nearly so, with the body A, so as to form a central post, E², extending into contact with the center of the arch H on its inner side to bisect it, so that the pin C will consequently be confined between the single post formed by the end E² of the wire and either of the wings G, and will be prevented by the post from passing through under the shield from the one side to the other.

As a modification in this construction of the pin, the loop connecting the wings G is extended and flattened to form a central double bar or post, E³, Fig. 6, midway the arch, and this central bar or post is bent inward, as shown in Fig. 6, into contact with the body A, so as to be caught and secured by the free end of the twisted portion of the guard or shield, as at S, this double post E³, Fig. 6, serving as an equivalent for the single post E², Fig. 5.

I claim as my invention—

The combination, with the retaining and protecting shield for the point of a safety-pin, of a dividing bar or post extending centrally from the inner side of the transverse arch of the shield to the opposite member of the pin, whereby the hood or recess under the shield is divided into two lateral pockets, and the pin-point is positively prevented from passing from the one to the other within 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.

GEORGE P. FARMER.

Witnesses:

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