(No Model.)

J. JENKINS.

SAFETY PIN.

No. 345,848. Patented July 20, 1886.

Fig. 1.

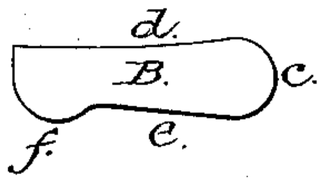


Fig. 2

Fig. 10.

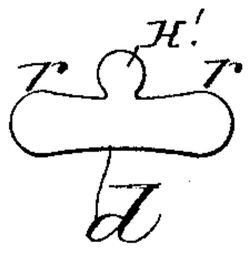


Fig. 3.

Fig. 4.

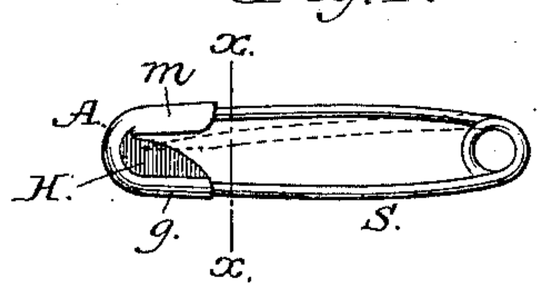


Fig. 8.

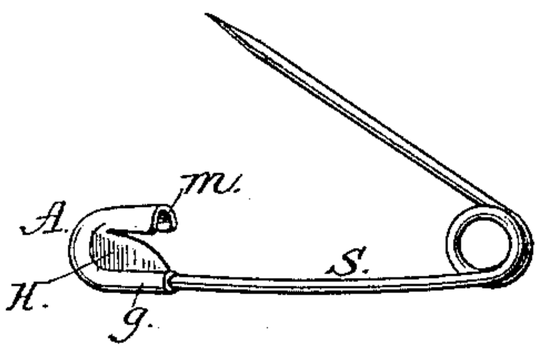


Fig. 5.

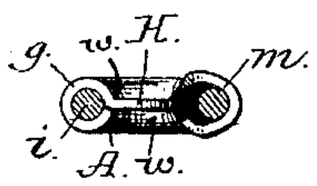


Fig. 9.

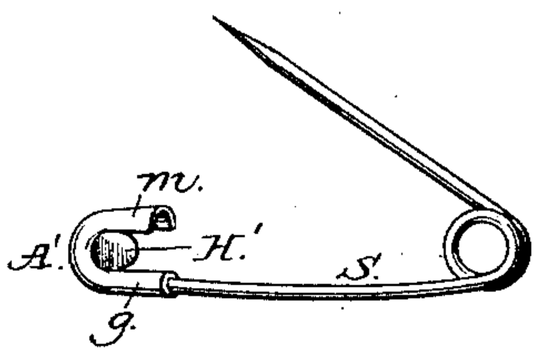


Fig. 6.

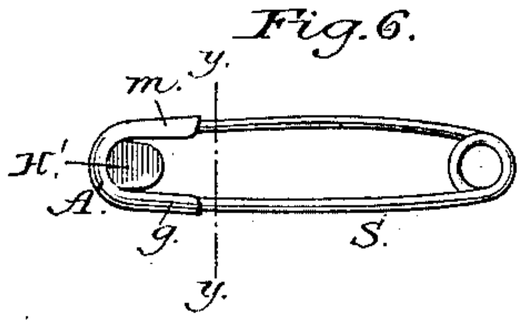
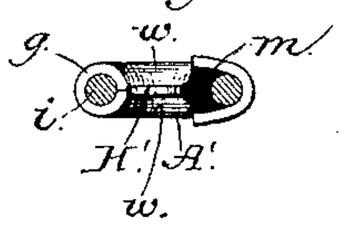


Fig. 7.



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UNITED STATES PATENT OFFICE.

JOEL JENKINS, OF MONTCLAIR, NEW JERSEY.

SAFETY-PIN.

SPECIFICATION forming part of Letters Patent No. 345,848, dated July 20, 1886.

Application filed April 1, 1886. Serial No. 197,376. (No model.)

To all whom it may concern:

Be it known that I, JOEL JENKINS, of Montclair, in the county of Essex and State of New Jersey, 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 that class of safety-pins in which the shield or guard for the pin-point is struck up from a single blank and is provided with a guide to conduct the point of the pin automatically into the catch-recess of the shield.

Heretofore in the construction of the shield or guard for this class of safety-pins, the guide has been formed from a parallel-sided piece of sheet metal provided on both sides near one end with two projections, said projections being made, when the blank is drawn up or pressed between dies in the customary manner, to incline toward each other from both sides of the shield, and to meet and to come into close contact at their edges, and thereby form jointly a central web or fin within the shield to extend from the fixed arm of the pin toward the catch-recess which engages the point of the opposite arm. In the guide-shields thus constructed, the two pieces which are inclined toward each other to come into contact and form a guide are constantly liable to spread apart at their free edges, and thereby catch and engage the pin between them when it is sought to disengage it from the catch-recess, so that while serving to guide the pin from either side automatically into the catch-recess, they may not be depended upon to guide the pin out from the recess. The double guide has also been brought near to the front or outer open end of the shield, so that it is struck by a thick portion of the pin, instead of by its point.

The object of my invention is to provide a guide for the pin-point within a shield formed from a sheet-metal blank, which shall not only automatically guide the point from either side of the shield invariably into its seat in the catch-recess, but shall also as surely and effectually guide it out from said recess and set it free when it is sought to release and disengage the pin, and which shall engage primarily the extreme point of the pin for this purpose.

In the accompanying drawings, A represents the shield, and B the sheet-metal blank, which, being drawn or pressed between suitable dies in the customary manner, forms the shield. This sheet-metal blank B is cut in the novel and peculiar form which is illustrated in Figure 1—viz., with a rounded end, *c*, a continuous unbroken edge, *d*, extending the entire length of the blank on one side with a slight inward curve, an opposite edge, *e*, extending from the rounded end *c* in the same direction, with an inward inclination for about two-thirds the distance of the edge *d*, and which then projects outward in an abrupt curve to form a rounded lateral offset, *f*, at the opposite end of the blank. The blank B, cut from sheet-metal stock in substantially this shape and of any required size, is bent, folded, or struck up between suitable dies in manner well known to the art into the shield A, (see Figs. 2 and 3,) having a tubular receptacle, *g*, on one side, (see Fig. 5,) for the blunt end *i* of the wire S, forming the pin, an inwardly open recess, *m*, U-shaped in cross-section, on the other side to receive and guard the pointed end of the pin-wire, and a central fin or guide-plate, H, formed of a single thickness of metal projecting inward centrally and longitudinally from the tubular side of the shield, from the outer end of said tubular side toward the inner closed end of the shield, and having its sharp free edge cut at an angle with the length of the pin and with more or less of a curve. This single guide-plate H is made to extend in the exact longitudinal center of the shield from the middle longitudinally of the tubular portion *g* thereof, so that its upper edge will be in a longitudinal plane passing centrally through the recess *m*, forming the catch and guard for the pin-point, as is illustrated in Fig. 5 of the drawings, and will extend quite to the rear of the shield, its inclination adapting it to be first struck by the extreme point of the pin as the pin is depressed to carry it out of said guard-recess *m*, as shown in dotted lines, Fig. 4. A recess or depression, *w*, is formed on both sides of the shield with the guide-plate H as a partition between them. The shield thus constructed, with a central guide-plate and counterpart recesses *w w* on both sides thereof, is

secured to the wire S of the pin in the customary manner by inserting the blunt end *i* of the wire into the tubular recess *g* of the shield and creasing and clamping the edge of the shield down thereon, the creasing of the shield being so effected as that the lines of junction of the edge of the blank with the body thereof shall be scarcely visible, and the end *i* of the wire shall be completely encircled by the blank brought into close contact therewith around its entire circumference. (See Figs. 5 and 7.)

As a modification, a blank of the form illustrated in Fig. 10 may be employed—viz., rounded at both ends and having a continuous unbroken edge, *d*, on one side, which has a slight inward curve, and with the counterpart edge *r r* on the opposite side interrupted by a central circular projection, H′, which, when the blank is folded and formed into a shield, will constitute the guide-plate, therein, as shown in Fig. 9. This guide-plate H′, of a single thickness of metal, will project centrally between the tubular side *g* and the catch-recess *m* of the shield A′, wholly from the inner end thereof, (see Figs. 6, 7, and 9,) instead of from its tubular side *g*, as shown in Figs. 4, 5, and 8, and, occupying a central plane corresponding to that of the guide-plate H in the shield A, heretofore described, will leave a depression or recess, *w*, on both sides thereof, as clearly shown in Fig. 7.

It is evident that the configuration of the free edge of the guide-plate may be varied, but it is preferable that it shall incline, as shown, to first engage the extreme point of the pin when the latter is forced out of its recess.

I do not claim, broadly, as my invention in the shield of a safety-pin, a guide formed in one with the blank for the shield, as I am aware, as hereinbefore stated, that shields having guides constructed by drawing together from both sides thereof two separate projections have been heretofore manufactured.

My invention consists in an improvement upon such double guides made of two pieces, whereby the difficulties attending the use thereof are obviated; and

I claim as my invention—

1. A shield for the point of a safety-pin constructed with a single guide-plate projecting longitudinally from the center of the tubular side of the shield integrally therewith, substantially in the manner and for the purpose herein set forth.

2. A shield for the point of a safety-pin constructed with a single guide-plate projecting longitudinally from the center of the tubular side of the shield integrally therewith, and whose free edge is made to extend at an angle to intersect the inner end of the guard-recess of the shield, and thereby engage the extreme point of the pin as the latter is moved out from said recess, 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.

JOEL JENKINS.

Witnesses:
JOHN A. ELLIS,
S. M. MADDEN.