No. 619,756. Patented Feb. 21, 1899.

I. INNES.

SAFETY PIN.

(Application filed June 24, 1898.)

(No Model.)

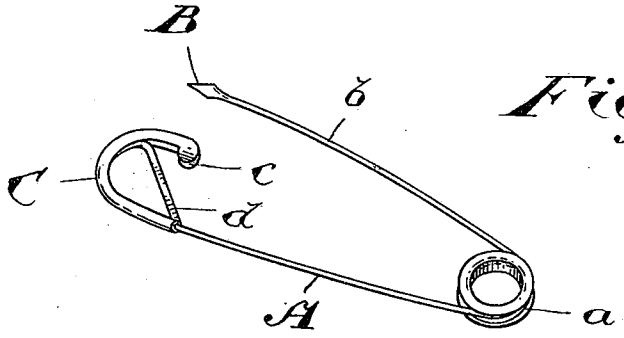


Fig. 1.

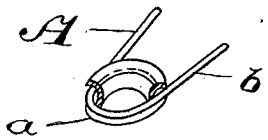


Fig. 4.

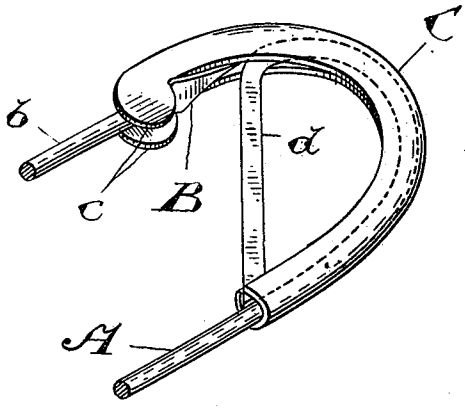


Fig. 2.

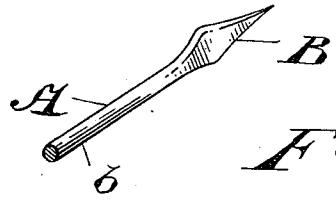


Fig. 3.

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UNITED STATES PATENT OFFICE.

ISABELLA INNES, OF TORONTO, CANADA, ASSIGNOR OF ONE-FIFTH TO GEORGE A. HARPER, OF SAME PLACE.

SAFETY-PIN.

SPECIFICATION forming part of Letters Patent No. 619,756, dated February 21, 1899.

Application filed June 24, 1898. Serial No. 684,369. (No model.)

To all whom it may concern:

Be it known that I, ISABELLA INNES, of the city of Toronto, in the county of York and Province of Ontario, Canada, have invented certain new and useful Improvements in Safety-Pins, of which the following is a specification.

The object of my invention is to devise a safety-pin of simple construction in which the pin will be guided with certainty into its proper position in the head and in which the pin will be so securely held in the head when the pin is closed that no strain or bending will displace it; and it consists, essentially, of a safety-pin the pin portion of which is provided with a spear-head adapted to engage a shouldered recess in the head, the head being provided with a suitable diagonal guide formed integral either with the head or with the pin.

Figure 1 is a perspective view of my improved safety-pin. Fig. 2 is an enlarged perspective detail of the head of the same. Fig. 3 is an enlarged perspective view of the spear-head of the pin. Fig. 4 is a perspective detail showing the eyelet inserted in the coil-spring of the pin.

In the drawings like letters of reference indicate corresponding parts in the different figures.

A is the pin, which is of the ordinary shape, being bent to form a coil-spring *a*. The free end *b* of the pin has a spear-point B formed thereon. The exact shape of this is immaterial so that a sharp point be provided to penetrate the goods and a shoulder or shoulders formed to engage the head C, as hereinafter described. The head C is recessed to receive the spear-head and is provided with two shoulders *c* to engage the shoulders of the spear-head.

The head C is formed of sheet metal and is stamped about the end of the pin A, which is curved, as shown, and then turned to form a diagonal piece *d*, which is turned back to meet the main body of the pin. This makes a very simple and cheap construction, and the diagonal portion *d* forms a very efficient guide to cause the spear-head B to enter the recess in the head and accurately engage the shoulders on the head. Of course such a diagonal strip might be made integral with the head C; but I prefer the construction shown.

When it is desired to use the pin, the free end is passed through the goods and the spear-head pressed inward and held in contact with the diagonal piece *d*. On relieving the pressure the natural spring of the pin causes the spear-point to move outwardly till it engages the head, as described, the shoulders *c* and the diagonal piece *d* being so shaped and proportioned that the spear-point engages the shoulders at or about the time it leaves the diagonal piece.

I prefer to stamp an eyelet in the spring portion *a* of the pin, which produces a neat finish and holds the coils in position.

From the above description it will be seen that I have devised a safety-pin which will be neat in appearance, simple in construction, and absolutely reliable in use, inasmuch as no ordinary strain upon the pin can pull out the spear-head, which is an accident liable to happen with the ordinary safety-pin.

What I claim as my invention is—

1. A safety-pin comprising the main portion A, bent to form a coil-spring *a;* and the free portion *b* having a spear-point B, formed thereon, the other end of the main portion being bent round and provided with the diagonal portion *d* returning toward the main portion of the pin, in combination with the head C, secured upon the main portion A, and provided with a recess having the shoulders *c* formed at each side thereof, substantially as and for the purpose specified.

2. A safety-pin comprising the main portion A, bent to form a coil-spring *a;* and the free portion *b* having a spear-point B, formed thereon, the other end of the main portion being bent round and provided with the diagonal portion *d* returning toward the main portion of the pin, in combination with the head C, secured upon the main portion A, and provided with a recess having the shoulders *c* formed at each side thereof; the shoulders *c* and the diagonal piece *d* being so shaped and proportioned that the spear-point engages the shoulders at or about the time it leaves the diagonal piece, substantially as and for the purpose specified.

Toronto, June 21, 1898.

ISABELLA INNES.

In presence of—
J. EDW. MAYBEE,
A. J. COLBOURNE.