

(No Model.)

W. BECHTOLD.
SAFETY PIN.

No. 516,997.

Patented Mar. 20, 1894.

Fig. 1.

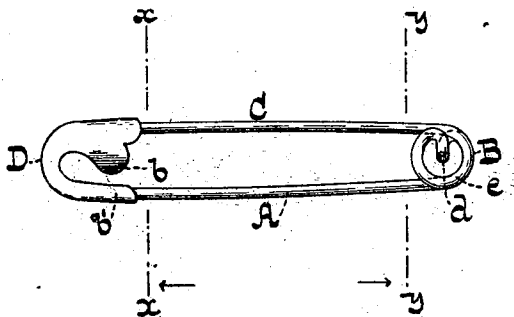


Fig. 2.

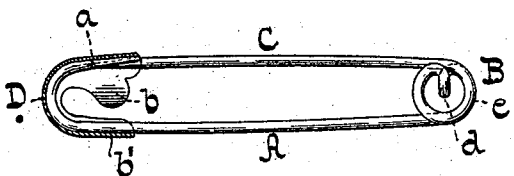


Fig. 3.

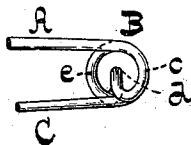


Fig. 4.

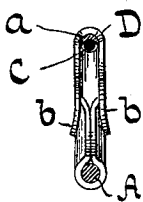
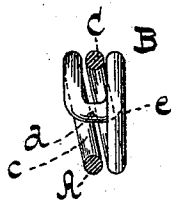


Fig. 5.



WITNESSES:

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WILLIAM BECHTOLD, OF BROOKLYN, ASSIGNOR OF TWO-THIRDS TO
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SAFETY-PIN.

SPECIFICATION forming part of Letters Patent No. 516,997, dated March 20, 1894.

Application filed March 22, 1893. Serial No. 467,118. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM BECHTOLD, a citizen of the United States, and a resident of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Safety-Pins, of which the following is a specification.

My invention has reference to improvements in safety pins and has for its object to insure against the entanglement of the fabric in the coil.

The nature of my invention will best be understood when explained with reference to the annexed drawings, in which—

Figure 1 represents an elevation of a safety pin embodying my invention. Fig. 2 is a sectional elevation of the same. Fig. 3 is an elevation, with part broken away, of the opposite side of the safety pin. Fig. 4 is a cross section in the plane $x x$, Fig. 1, on a greatly enlarged scale. Fig. 5 is a similar section in the plane $y y$, Fig. 1.

Similar letters indicate corresponding parts throughout the several views of the drawings.

In the drawings the letter A designates the bar of the pin; B its coil or spring; C the pin proper, and D the shield, for receiving the pointed end of the pin. The end of the bar A is bent round in a substantially U-shape and its free or parallel limb a is flattened, or preferably, has imparted thereto the crescent shape cross section shown in Fig. 4; the concave portion thereof conforms to the shape of the point of the pin C, so as to receive and retain the same. The shield D is secured to the U-shaped portion of the bar A and consequently is supported along its entire edge. The lips or offsets $b b$ of the shield are made to approach the bar, or rather the opposite limb b' of said shield, to within about the thickness of the wire; whereby the pin can become disengaged only by depressing the pin to a considerable extent. The lips $b b$

are also flared outwardly to throw the pin outwardly when depressed and to facilitate its insertion into the shield. It will be noticed that in view of the support offered to the pin by the limb a , the strain is substantially removed from the shield, which latter can in consequence be made of very thin material.

The important feature of my invention is the construction of the spring or coil B, previously mentioned, which, instead of consisting simply of one or more helical windings, as heretofore, is constructed as follows: The wire of the bar A is first turned through a partial convolution (Figs. 3 and 5), then bent radially inward, then transversely to form an offset d located at right angles, or substantially so, to the said partial convolution and about central with respect to the coil as a whole. From the offset the wire is bent radially outward (Figs. 1, 2 and 5), and then carried through approximately two thirds of a convolution, as at e , to the pin C. It will readily be seen that the fabric cannot pass the offset d which acts in the nature of a stop, and consequently there can be no entanglement of said fabric in the coil.

What I claim as new, and desire to secure by Letters Patent, is—

In a safety pin, the coil B consisting of a bend c at one end of the bar A, and a bend e at the end of the pin C, and an intermediate offset d connecting said bends, located centrally with respect to the bends and at right angles to the coil, substantially as and for the purpose set forth.

Signed at New York, in the county of New York and State of New York, this 15th day of March, A. D. 1893.

WILLIAM BECHTOLD.

Witnesses:

A. FABER DU FAUR, Jr.,
KLAS H. TERNSTEDT.