No. 883,429. PATENTED MAR. 31, 1908.

J. E. SINGLETON.

SAFETY PIN.

APPLICATION FILED AUG. 28, 1905.

FIG. 1.

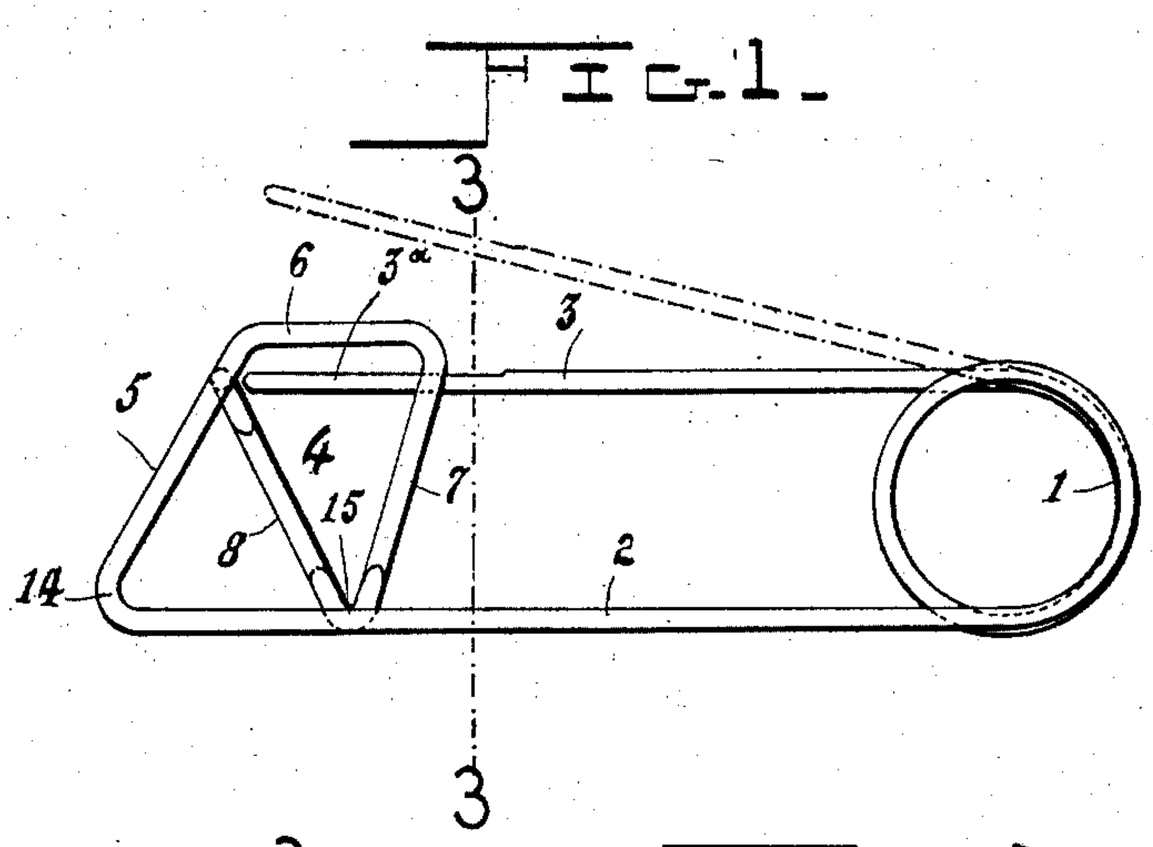


FIG. 3.

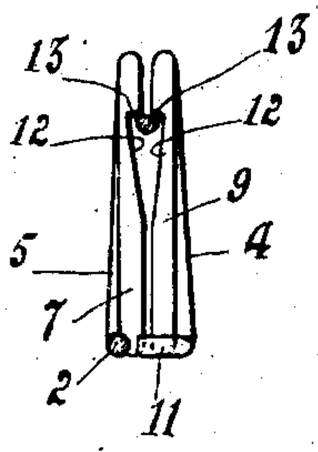


FIG. 4.

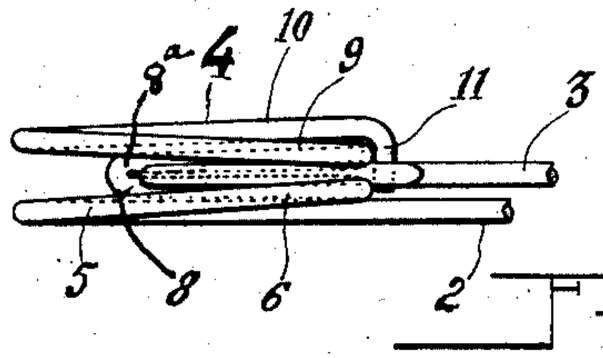


FIG. 5.

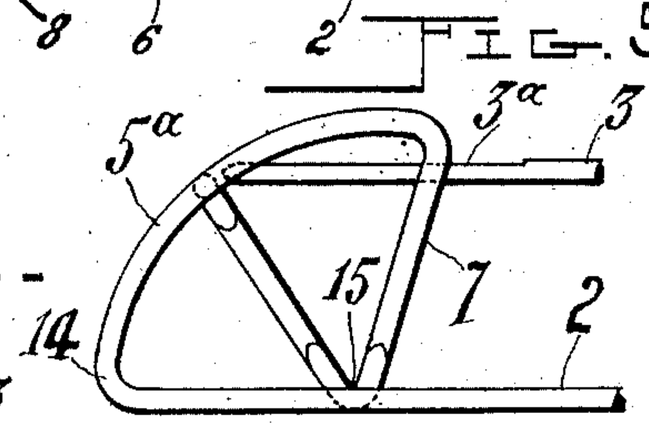
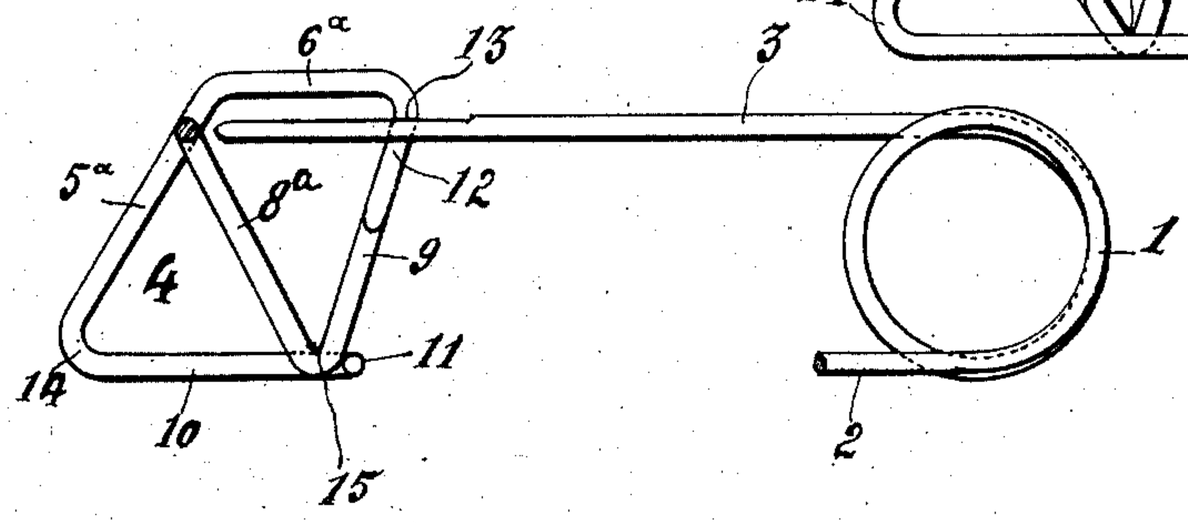


FIG. 2.



Witnesses:

C. Tacomprez

F. H. Gibbs

James E. Singleton

Inventor,

By Marion & Marion

Attorneys

UNITED STATES PATENT OFFICE.

JAMES E. SINGLETON, OF MORDEN, MANITOBA, CANADA, ASSIGNOR OF ONE-HALF TO JOHN FLETCHER GRIMMETT, OF BOISSEVAIN, MANITOBA, CANADA.

SAFETY-PIN.

No. 883,429. Specification of Letters Patent. Patented March 31, 1908.

Application filed August 28, 1905. Serial No. 275,984.

To all whom it may concern:

Be it known that I, JAMES EDWARD SINGLETON, a subject of the King of Great Britain, residing at Morden, county of Dufferin, in the Province of Manitoba, Canada, have invented certain new and useful Improvements in Safety-Pins; and I do hereby declare that the following is a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to safety pins; the object of my invention is to provide a construction for holding the pin proper of a safety pin between two resilient loops, so that the pin may be readily released by pressure on the retaining loops; and, my invention consists of the construction, combination and arrangement of parts, as herein illustrated, described, and claimed.

In the accompanying drawings, forming part of this application, I have illustrated an embodiment of my invention, in which drawings similar reference characters designate corresponding parts, and in which:

Figure 1 is a side elevation, showing the open position of the pin proper in dotted lines; Fig. 2 is a longitudinal vertical section through the pin, taken approximately centrally thereof; Fig. 3 is a vertical transverse section taken approximately on line 3—3 of Fig. 1 looking towards the retaining loop; Fig. 4 is a fragmentary detail, in plan, of the loop end of the pin; and, Fig. 5 is a fragmentary detail in side elevation of a modified form, in which the angular loop is replaced by a segmentary loop.

Referring to the drawings: 1 designates a spring coil formed integral with the body 2 and continued into a pin 3, all of ordinary and common construction. The body 2 is formed into double loops, described generally by the reference letter 4.

Referring particularly to the securing loops 4, the base portion 2 is extended to form a portion of this loop, said base member being thence bent rearwardly and upwardly along the line 5, thence in a direction rearwardly along the line 6, thence is bent downwardly and slightly forwardly along the line 7, at the base of which portion 7 an acute angle is formed by the member 7 and the forwardly and upwardly bent portion 8, which is doubled upon itself, as shown in Fig. 4, and in Fig. 2, wherein the other part of 8 is designated as 8^a, and forms an acute angle at the base with the member 9, which member 9 is slightly separated from, but parallel with the member 7.

The material of the pin is bent from 9 forwardly parallel with the portion 6, as shown at 6^a in Fig. 2, after which it is bent downwardly and forwardly at 5^a parallel with the member 5. At the base of the portion 5^a, the metal of the pin is again bent rearwardly to form the member 10, which is parallel with that portion of the base member 2 which forms a portion of said loop 4, after which the material of the pin is bent laterally in a direction toward the base member 2 to form the stop member 11.

The portions 5 and 5^a of the loop have oppositely disposed beveled faces 12, which terminate in shoulders 13, which shoulders serve as stops for the pointed member 3 to secure said pointed member 3 in a closed position, as shown by the full lines in Fig. 1.

The whole structure is formed of spring metal, and the corners 14 formed perspectively by the parts 2 and 5 and the parts 5^a and 10 extend beyond the fulcrum 15, which is formed by the members 7, 9, 8 and 8^a, so that when the pointed member 3 is inserted in the cloth and forced downwardly between the members 7 and 9 below the shoulders 13, the natural resiliency of the metal will close said members 7 and 9 upon the pointed member, so that said pointed member will be locked by the shoulders 13 to prevent accidental displacement of said pointed member, and to assist in holding the pointed member 3 in position, the upper face thereof is flattened, as shown at 3^a, and as best shown in the sectional view Fig. 3, so that said flattened portion 3^a will rest in contact with the shoulders 13.

The modified form shown in Fig. 5 is substantially the same as that shown in the preferred form, the only difference being that the bend between the members 5 and 6 and 5^a and 6^a is not a sharp angle, but the corresponding members are merged into an arcuate member, as shown.

When it is desired to release the pointed member 3, all that is necessary is to press the corners 14 together, using the angles 15 as a fulcrum, and thereby spread apart the members 7 and 9, thus distending that portion of the loop in which are located the shoulders 13, so as to permit the natural resiliency of

the loop 1 to throw the pointed member 3 outwardly to the position shown by the dotted lines in Fig. 1.

Instead of forming the members 7 and 9 with the beveled and shouldered portions referred to, it is evident that one recess may be formed in one of said members if it is deep enough, and the other member may be left straight, and be within the spirit of the invention.

Having described my invention, what I claim and desire to secure by Letters Patent is:—

1. In a safety pin, a spring coil, an integral pointed member, and a two part retaining loop, said loop having a folded portion between the parts thereof which serves as a fulcrum in separating the parts.

2. In a safety pin, a spring coil, an integral pointed member, and a two part retaining loop of resilient material, said loop having a folded portion between the parts thereof which serves as a fulcrum in separating the parts.

3. In a safety pin, a spring coil, an integral pointed member, and a two part retaining loop, all formed of resilient material, said loop having a folded portion between the parts thereof which serves as a fulcrum in separating the parts.

4. In a safety pin, a spring coil, an integral pointed member, and a two part retaining loop having a recess therein adapted to engage said pointed member, said loop having a folded portion between the parts thereof which serves as a fulcrum in separating the parts.

5. In a safety pin, a spring coil, an integral pointed member, and a two part retaining loop having recesses in approximately parallel portions thereof adapted to engage said pointed member, said loop having a folded portion between the parts thereof which serves as a fulcrum in separating the parts.

6. In a safety pin, a spring coil, an integral pointed member, and a two part retaining loop having recesses with angular upper portions adapted to engage said pointed member, said loop having a folded portion between the parts thereof which serves as a fulcrum in separating the parts.

7. In a safety pin, two substantially parallel coils wound in reverse directions, a folded portion connecting said coils and acting as a fulcrum in separating the same, and recesses in the adjacent faces of said coils adapted to receive and hold the prong of the pin.

8. In a safety pin, two substantially parallel coils wound in reverse directions, a folded portion connecting said coils and acting as a fulcrum in separating the same, recesses in the adjacent faces of said coils and shoulders in said recesses adapted to engage and hold the prong of said pin.

In witness whereof I have hereunto set my hand in the presence of two witnesses.

JAMES E. SINGLETON.

Witnesses:

WM. G. MACKENZIE,

GEO. CORMER.