

(No Model.)

W. E. MICHAEL.
SAFETY PIN.

No 601,666.

Patented Apr. 5, 1898.

Fig. 1.

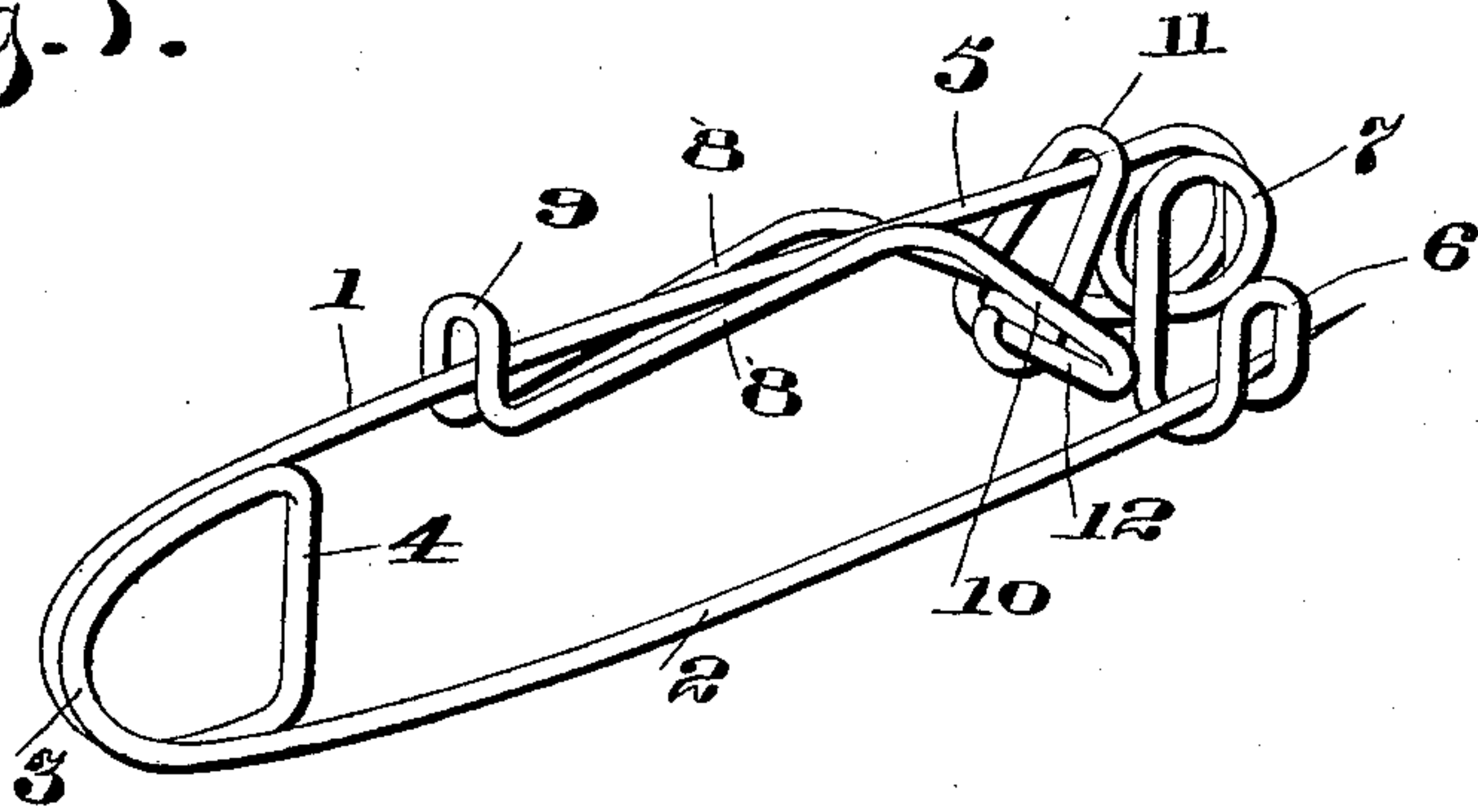


Fig. 2.

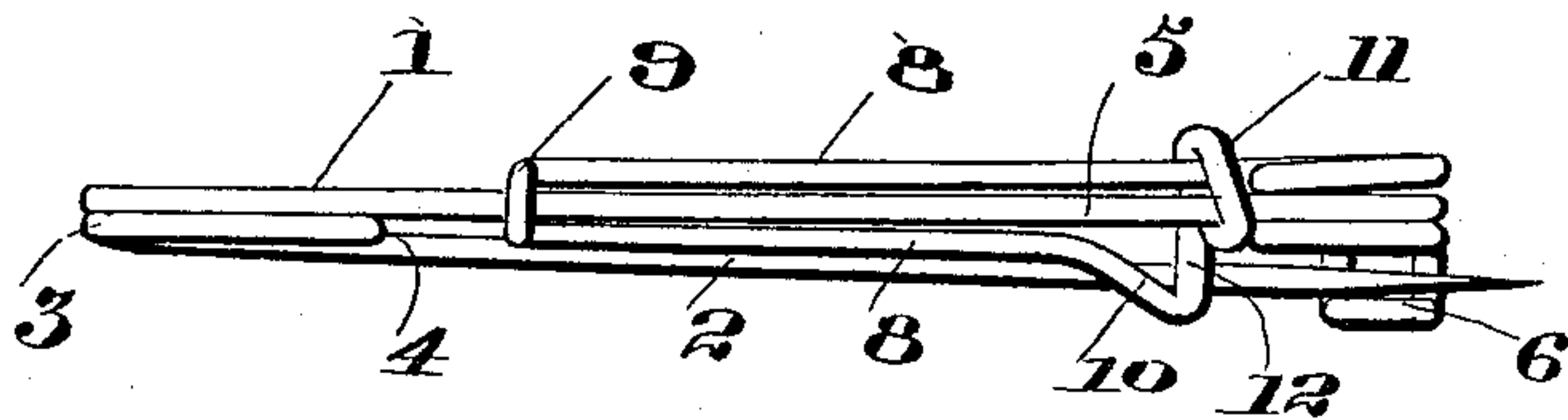


Fig. 3.

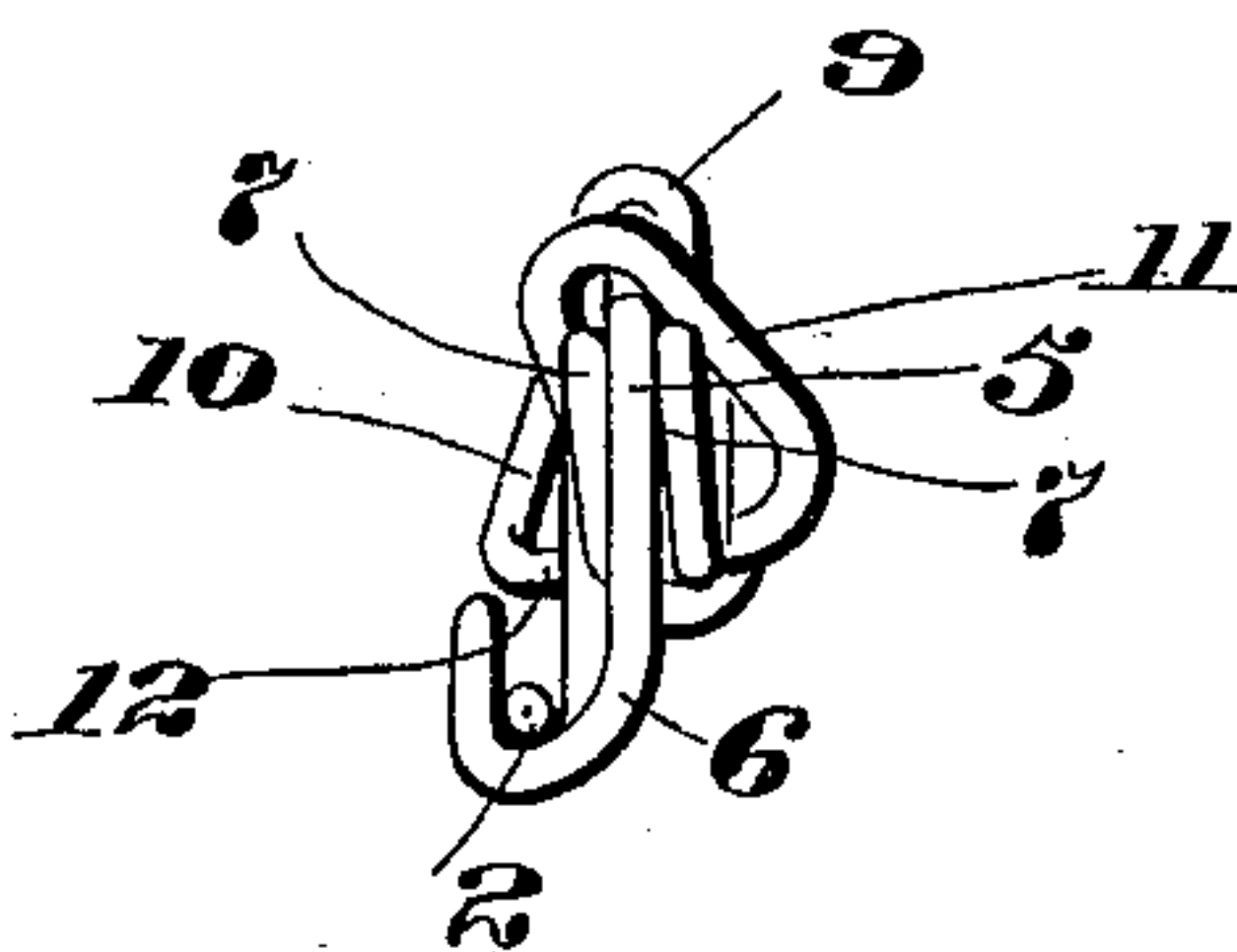
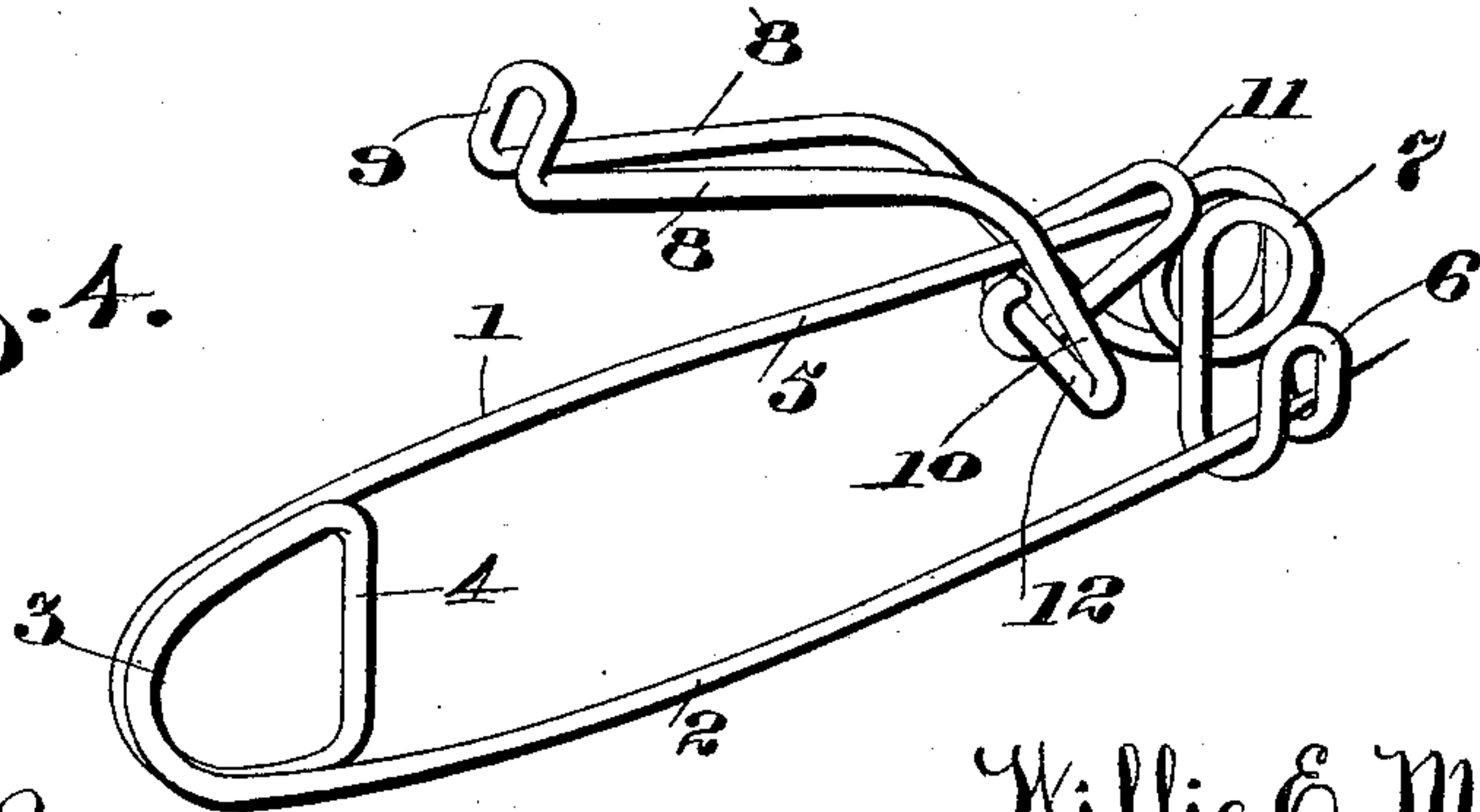


Fig. 4.



Witnesses
Marcus L. Byng.
Victor J. Evans

Inventor
Willie E. Michael
by John Wedderburn.
Attorney

UNITED STATES PATENT OFFICE.

WILLIE E. MICHAEL, OF ENTERPRISE, WEST VIRGINIA.

SAFETY-PIN.

SPECIFICATION forming part of Letters Patent No. 601,666, dated April 5, 1898.

Application filed July 29, 1897. Serial No. 646,398. (No model.)

To all whom it may concern:

Be it known that I, WILLIE E. MICHAEL, of Enterprise, in the county of Harrison and State of West Virginia, have invented certain
5 new and useful Improvements in Safety-Pins; and I do hereby declare the following to be 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
10 use the same.

This invention relates to safety-pins, the object of the same being to provide a simple and cheaply-constructed device of this character which is provided with means for lock-
15 ing the pin in its keeper and with means whereby the lock may be released when it is desired to detach the pin.

The invention consists of a safety-pin constructed of a single piece of wire whose body
20 portion is formed with a keeper at its forward end and has a coil located just above said keeper, rearwardly-extending parallel arms having a flange at one end thereof, constituting a finger-engaging portion by means of
25 which it may be turned, and an offset or shoulder formed on said arms at a point adjacent to said coil, the said offset or shoulder serving as a stop for preventing the pin from slipping out of its keeper.

30 The invention also consists in other details of construction and combinations of parts, which will be hereinafter more fully described and claimed.

In the drawings forming a part of this specification, Figure 1 represents a perspective
35 view of my improved pin. Fig. 2 is a plan view of the same. Fig. 3 is an end view. Fig. 4 is a view similar to Fig. 1, with the lock for retaining the pin in its keeper elevated.
40

Like reference-numerals indicate like parts in the different views.

My improved safety-pin is made from a single piece of wire so bent as to form a
45 body portion 1 and a pin proper, 2, the same being connected one to the other through a coil 3, which is formed with a straight portion 4 for preventing the tearing of the goods in which the pin is inserted. The said coil 3
50 acts as a spring to hold the pin proper normally away from the body portion. The strand 5, constituting the main portion of the

body part 1, is bent downwardly at its forward end and thence upwardly, forming a
keeper 6, above which keeper a double coil 7
55 is formed, as clearly shown. Leading rearwardly from the coil 7 are double arms 8 8, which are formed with a flange 9 at their extreme rear ends, constituting a finger-engaging
60 portion, for a purpose which will hereinafter appear. The said arms 8 lie on opposite sides of the strand 5, and one of them is bent downwardly and laterally away from the strand 5
65 to form the inclined portion 10 and is then bent to form the stop 12, which extends transversely across above the pin 2, at a right angle thereto and adjacent to the keeper 6. The wire is then bent upwardly and on the outer
70 side of the other arm 8 and then downwardly to form a loop 11, which straddles the strand 5, and the extreme end of the wire is folded over onto the stop 12 to loosely engage it in
75 a plane between the arms 8. The loop 11 forms a spring which normally tends to hold the stop 12 projected across the pin 2.

From the foregoing description it will be seen that with the parts in the position in which they are shown in Fig. 1 of the drawings the stop 12 serves to lock and hold the
80 pin proper, 2, in its keeper 6. To permit of the removal of the pin from the keeper, the thumb or finger is placed against the flange 9, raising the double arms 8 and separating the stop 12 from the keeper 6. When the pin
85 has been removed from its keeper, the said double arms will be returned to their normal position by the spring-pressure exerted by the coils 7. To return the pin 2 to its keeper
90 6, it is not necessary to raise the double arms 8. The engagement of said pin with the inclined portion 10 will force the stop 12 laterally against the spring action of the loop 11
95 and permit the pin to pass into the keeper, and as soon as the pin passes out of engagement with the inclined portion 10 the spring-loop 11 will again project the stop across the pin.

Having now described my invention, what I claim as new, and desire to secure by Letters
100 Patent, is—

1. A safety-pin formed from a single piece of wire, and comprising a body portion, a pin proper, a keeper, a spring-actuated arm having a lateral projection normally lying across

the pin to hold the latter in its keeper, said projection being movable vertically and laterally out of the path of travel of the pin, substantially as described.

5 2. A wire safety-pin, comprising a body portion and a pin proper, a keeper formed at the forward end of the body portion, a coil located above said keeper, rearwardly-extending arms leading from said coil, one of said arms being
10 bent at its forward end to form a stop having a downwardly and outwardly inclined portion and a horizontally-disposed portion extending across above the pin to hold it in its keeper, said stop being movable vertically with the
15 arms and laterally by the engagement of the pin with the inclined portion of the stop, substantially as described.

3. A wire safety-pin, comprising a body portion and a pin proper, a keeper formed at the
20 forward end of the body portion, a coil located above said keeper, rearwardly-extending arms leading from said coil and lying on opposite sides of the body portion, one of said arms being bent at its forward end to form a stop
25 having a downwardly and outwardly inclined portion, and a horizontally-disposed portion extending across above the pin to hold it in its keeper, and then being bent to form a spring-loop to straddle the other arm and the
30 body portion, said stop being movable verti-

cally with the arms against the spring action of the coil and laterally against the spring action of the loop by the engagement of the pin with the inclined portion of the stop, substantially as described.

4. A wire safety-pin, comprising a body portion and a pin proper, a keeper formed at the forward end of said body portion, a coil located above said keeper, rearwardly-extending arms leading from said coil, and a stop at
40 the forward end of one of said arms.

5. A wire safety-pin, comprising a body portion and a pin proper, a keeper formed at the forward end of said body portion, a coil located above said keeper, rearwardly-extending arms leading from said coil, located one
45 on each side of the strand constituting the main portion of the body part, and having a flange constituting a finger-engaging portion, one of the said arms being bent at an angle
50 at its forward end, forming a stop, the spring-pressure exerted by said coil serving to hold said arms in their normal position.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

WILLIE E. MICHAEL.

Witnesses:

ALLISON ROBINSON,
D. A. RIBLET.