

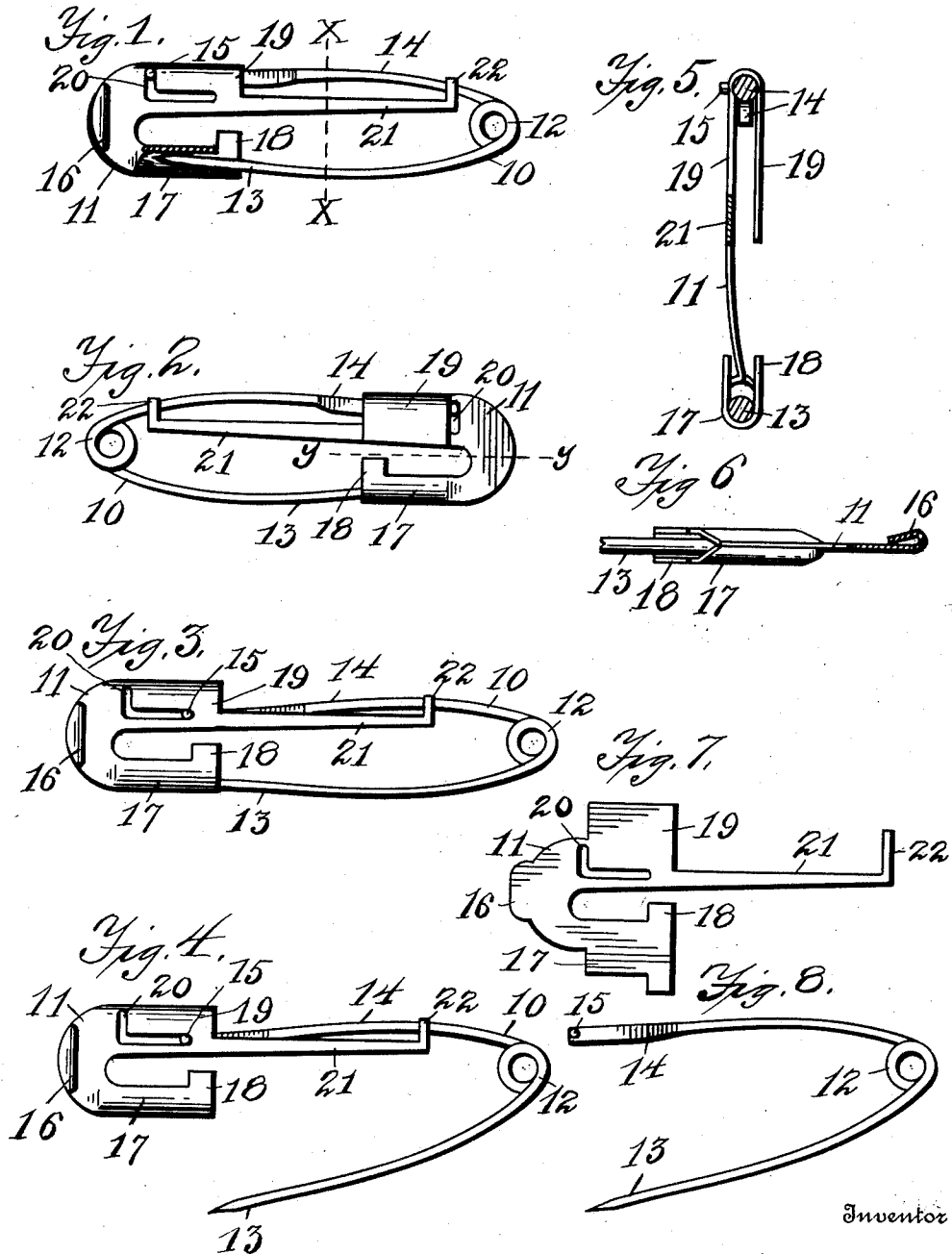
J. C. REYNOLDS.

SAFETY PIN.

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1,038,202.

Patented Sept. 10, 1912.



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Witnesses

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JOHN C. REYNOLDS, OF DERRICK CITY, PENNSYLVANIA.

SAFETY-PIN.

1,038,202.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JOHN C. REYNOLDS, a citizen of the United States, residing at Derrick City, in the county of McKean and State of Pennsylvania, have invented certain new and useful Improvements in Safety-Pins, of which the following, taken in connection with the accompanying drawings, is a specification.

The invention relates to pins and particularly devices for protecting the point in the construction of safety pins, and the object of my improvement is to provide an extensible safety pin having a spring lock whereby it cannot be opened until released from said lock, the point being retained in a closed sheath until so released, also providing a support to stiffen the back or that portion of the safety pin opposite the pointed or pinning portion; and the invention consists in the combination and arrangement of the parts as shown in this specification and the accompanying drawings, and pointed out in the claims.

In the drawings, Figure 1 is an enlarged front elevation of the safety pin in the closed or locked position, with the sheath for the point in section. Fig. 2 is a rear elevation of the safety pin in the closed or locked position. Fig. 3 is a front elevation of the safety pin in the unlocked position without releasing the point; and Fig. 4 is a similar view with the point released from the catch; Fig. 5 is an enlarged sectional view at line X X in Fig. 1. Fig. 6 is a plan view of the sheath for the point with the end plate in section as shown at line Y Y in Fig. 2. Fig. 7 is a pattern of the sheet metal blank as struck out by the die for the cap or catch and the brace for the back of the safety pin; and Fig. 8 is an elevation of the wire pin portion with one end pointed and the other flattened and turned at right angles for locking, and the spring coil.

Like numerals of reference refer to corresponding parts in the several views.

The numeral 10 designates the wire pin or pinning portion and the numeral 11 the sheet metal cap portion. The pin portion 10 comprises a piece of wire coiled in the spring 12 midway of its length and having two legs 13 and 14 of about equal length; the leg 13 comprising the pointed pin or pinning end, and the leg 14 the partially flattened back portion with its locking end

15 turned at right angles to said flattened portion.

The sheet metal cap 11 comprises the end plate with its turned finger hold 16 and sheath 17 ending in the U-shaped catch 18 into which the point of the pin 13 is caught when in the unlocked position, as shown in Fig. 3. The opposite side 19 of the cap 11 is made sufficiently broad to contain the angular locking slot 20 therein which receives the turned locking end 15. The part 19 extends out in the back-brace 21, the upper side of which, as shown in the drawings, is cut away to permit pressure on the spring back 14, in pressing its end 15 out of the angular or locking end of slot 20 in order to release the pin 13. The flattened portion of the back 14 is inclosed within a return bend in the sheet metal part 19 a lap of the sheet metal being bent down over said flattened portion, allowing a sufficient space to slide said flattened portion easily therein as the locking end 15 works back and forth within the slot 20. The end 22 of brace 21 is turned and engages around the spring back 14 permitting said back to slidably move within the part 22.

It is apparent that the sheet metal portion 11 may be blanked out as shown in Fig. 7 by means of a suitable die, and by additional dies the sheath portion 17 and back portion or inclosure for the flattened back 14 may be bent into place, inclosing said flattened portion, after which the end 22 is bent around the back 14 thereby completing the assemblage of the safety pin.

The pin may be used as an ordinary safety pin when in the unlocked position shown in Fig. 3, and the two parts 10 and 11 may be pushed toward one another thereby permitting locking end 15 on back 14 to spring into the locking end of slot 20 and the point 13 to enter the sheath 17 from the open or U-shaped catch 18, and it is impossible to disconnect the parts 10 and 11 without pressing upon portion 14, thereby permitting the withdrawal of the part 11 from the part 10 sufficiently to admit the disengagement of the pin 13.

The back brace 21 with its end 22 engaging around the spring back portion 14, acts not only as a brace to greatly strengthen the parts in their connection with one another and to stiffen the entire safety pin, but also acts as a positive guide for the parts 10 and

11 as they move backward and forward upon one another while the locking end 15 snaps into the locking end of slot 20 and the point 13 enters the sheath 17. The brace 21 being a part of cap 11 is quickly and easily made only needing to attach the end 22 around the back 14 to complete the assemblage of the safety pin. Said brace with the sheath holds the two legs 13 and 14 of the part 10 so that they cannot be spread apart by the cloth or other material inclosed therebetween, thus greatly stiffening and strengthening the entire action of the pin.

I claim as new:

15 1. A safety pin comprising a pin having a front and back portion, a cap portion slidably mounted upon said pin, a back brace rigidly extending from said cap to slidably engage said back portion at a distance from said cap, said cap having a notch therein to receive the end of said back portion in locking engagement.

25 2. A safety pin comprising a pin portion having front and back legs connected by a coil spring, the front leg ending in a pin point and the back leg bearing an angular projection, a metal cap slidably mounted on said pin portion and having an angular locking slot therein to slidably receive the

projection of said back leg in locking en- 30 gagement, an arm extending from said cap portion between said front and back legs and having its end slidably engaging said back portion a spaced distance from said cap, and a catch at one side of said cap por- 35 tion to receive said pin point end of said front leg.

3. A safety pin comprising a sheet metal cap portion, one side of said sheet metal cap portion formed with a tubular sheath 40 ending in a U-shaped catch, the other side of said cap portion bent upon itself and having an angular locking slot therein, in combination with a wire pin portion com- 45 prising a pointed wire to engage within said catch and sheath, a flattened end and an angular projection to engage within said angular slot and beneath the bent over portion of said cap, said cap having an extension brace to hold said locking end in line, 50 and a spring coil on said wire portion, substantially as and for the purpose specified.

In testimony whereof I have affixed my signature in the presence of two witnesses.

JOHN C. REYNOLDS.

Witnesses:

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