

No. 770,304.

PATENTED SEPT. 20, 1904.

H. A. NORTON.

SAFETY PIN.

APPLICATION FILED MAR. 4, 1903.

NO MODEL.

Fig. 1.

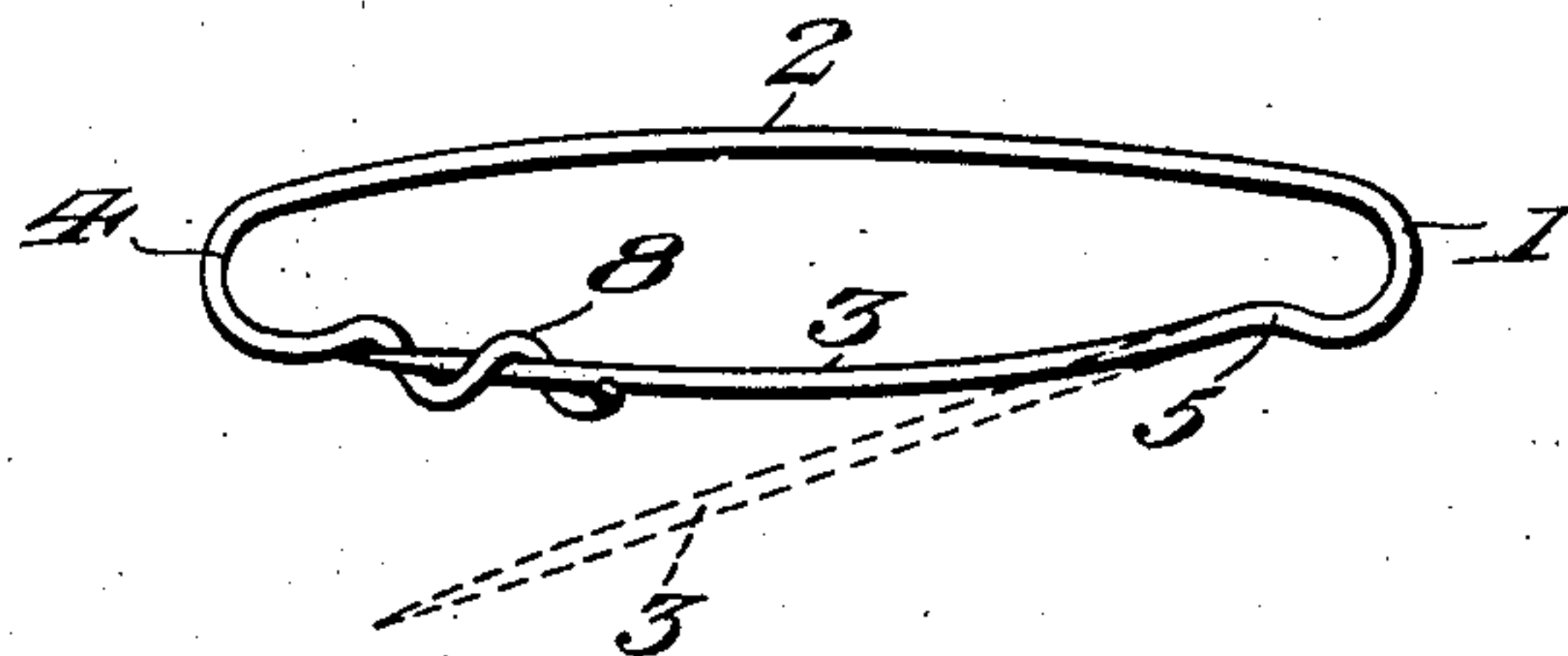


Fig. 2.

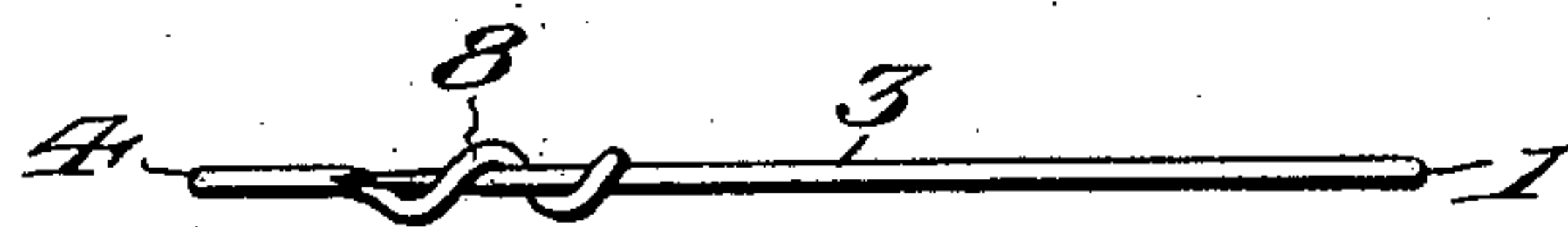
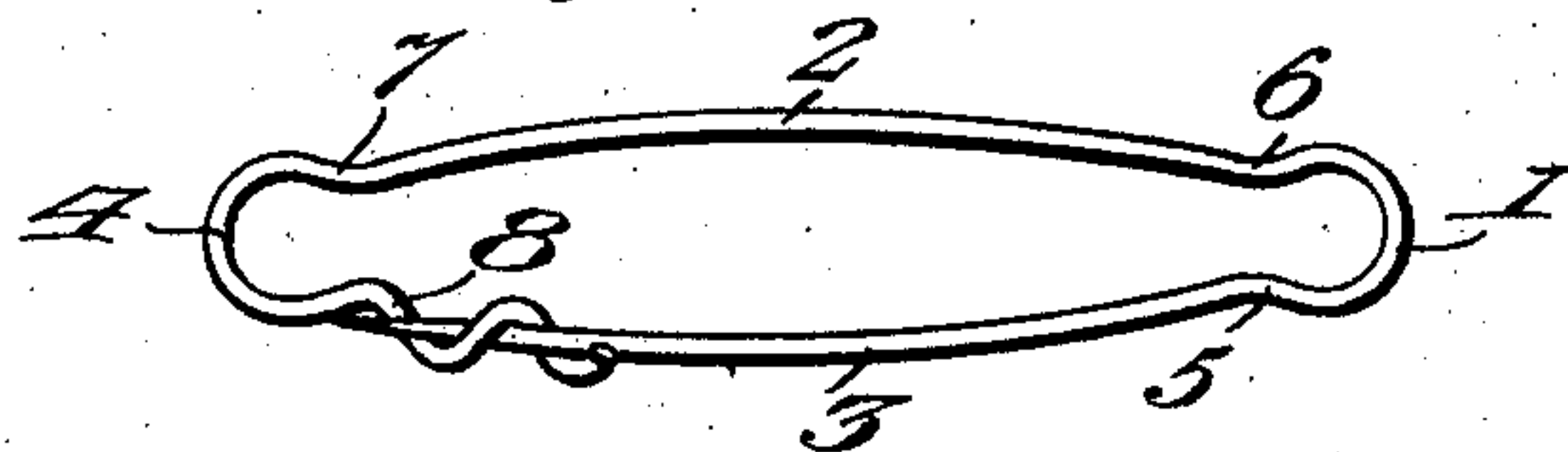


Fig. 3.



Witnesses

Edwin G. McKee
Chas. S. Hoyer.

Inventor
Henry A. Norton

By *Victor J. Evans*

Attorney

UNITED STATES PATENT OFFICE.

HENRY A. NORTON, OF WASHINGTON, DISTRICT OF COLUMBIA.

SAFETY-PIN.

SPECIFICATION forming part of Letters Patent No. 770,304, dated September 20, 1904.

Application filed March 4, 1903. Serial No. 146,149. (No model.)

To all whom it may concern:

Be it known that I, HENRY A. NORTON, a citizen of the United States, residing at Washington, in the District of Columbia, have invented
5 new and useful Improvements in Safety-Pins, of which the following is a specification.

This invention relates to safety-pins; and the purpose of the same is to provide a novel
10 form of shield for the pin and to dispense with coils to give the said pin a spring action, thereby economizing the cost of manufacture of the device as an entirety and at the same time producing a strong and durable device of this class.

15 The invention consists in the construction and arrangement of the several parts, which will be more fully hereinafter described and claimed.

In the drawings, Figure 1 is a side elevation of a device embodying the features of the invention and showing the pin open in dotted lines. Fig. 2 is a bottom plan view of the device. Fig. 3 is a side elevation of a slightly-modified form of the device.

25 Similar numerals of reference are employed to indicate corresponding parts in the several views.

In the present form of pin the usual spring-coil is dispensed with and replaced by a single bend 1 between the back bar 2 and pin 3, the extremity of the back bar opposite that continuing from the bend 1 being formed with a bend 4. The bend 4 is merged into or attached to a shield, which differs in construction in the several forms of pins. The pin 3
35 is given a resilient or spring action to cause it to fly outwardly when released from the shield by an inward bend 5 adjacent to the bend 1, this bend 5 being common to all forms shown, and in addition the pin shown by Fig. 3 has a supplementary bend 6 opposite the bend 5 and a similar bend 7 adjacent to the bend 4, thus giving the bends 1 and 4 a substantial circular contour. The bend 5, however, is the most essential feature of construction relative to the spring control and operation of the pin 3 and replaces the usual form
45 of coil and renders the pin effective in an automatic outthrow or movement when released and also a tight engagement between the point 50 of the bar 3 and the shield when said bar is closed.

of coil and renders the pin effective in an automatic outthrow or movement when released and also a tight engagement between the point 50 of the bar 3 and the shield when said bar is closed.

The improved form of shield consists of an elongated spiral 8, which is continuous with the wire forming the bend 4 and opens or has
55 the terminal thereof disposed in such position that the point of the bar 3 may be readily engaged therewith or withdrawn therefrom in the operations of closing and opening the pin. In detaching the pin from the elongated open
60 spiral 8 said pin is drawn longitudinally and sprung laterally, and in securing this pin to the spiral shield a reverse operation ensues, or the pin is first pushed laterally in one direction against the spiral and then in an opposite direction to set up a connection between
65 the pin and shield which will resist accidental disengagement.

It will be understood that the body of the pin will be constructed of spring-wire of suitable gage and tempered sufficiently to prevent bending or misshaping the parts 2 and 3 by use.

The improved pin in its different forms is applied as ordinary devices of this class, and
75 it will be seen that the elongated spiral shield 8 will firmly hold the point of the pin against accidental disengagement, and in all the forms of the device shown as soon as the pin is released it will be thrown outwardly away from
80 the shield through the use of the bend 5.

Less material is required to make the improved device, owing to the absence of the usual spring-coil, and time and labor are saved in securing the ordinary sheet-metal shield in
85 place by continuing the wire into an elongated spiral to provide a shield 8.

It is proposed to ornament the device by plating the same, and such metal will be used in constructing the device as is best adapted
90 for the purpose.

Having thus fully described the invention, what is claimed as new is—

A safety-pin having a back bar shaped at

its opposite terminals to form single bends,
one of the said bends being continued into a
point and the opposite bend extending longi-
tudinally inward and constructed in the form
5 of an elongated open spiral having the bends
thereof separated by wide spaces which per-
mit the entrance laterally of the pin-point
into the open spiral and its withdrawal there-

from when pressure is applied to the pin and
body members. 10

In testimony whereof I affix my signature in
presence of two witnesses.

HENRY A. NORTON.

Witnesses:

W. P. JONES,
C. A. OBENCHAIN.