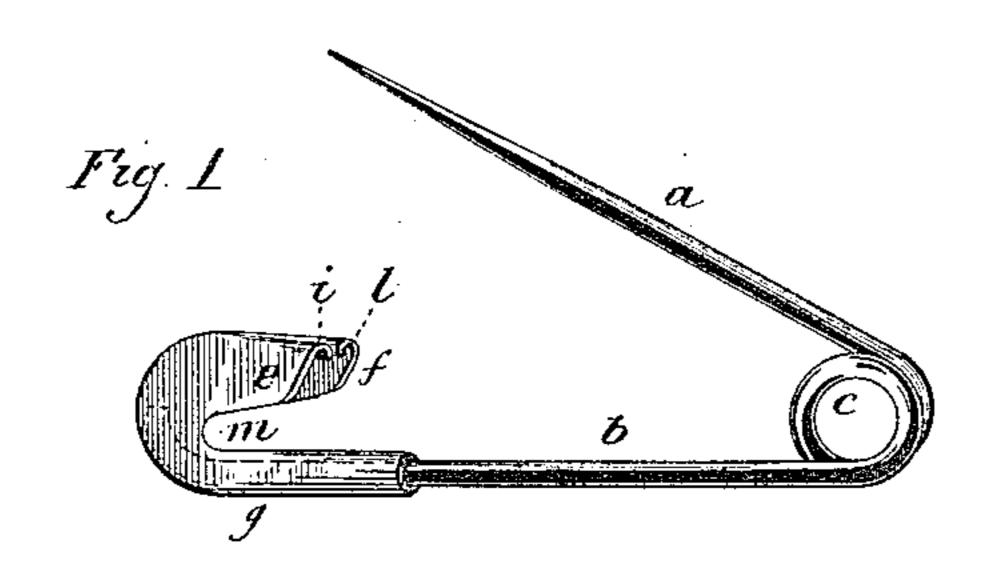
(No Model.)

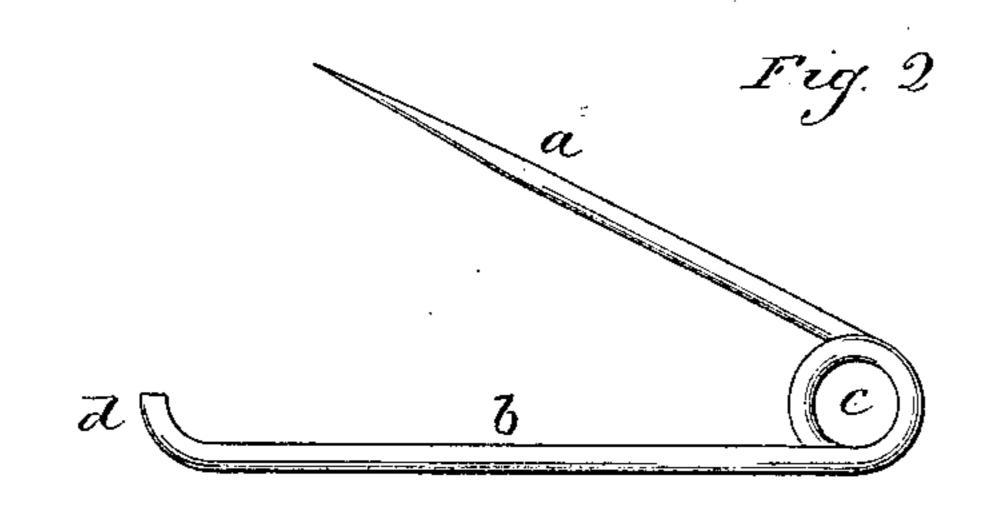
## E. PICKHARDT.

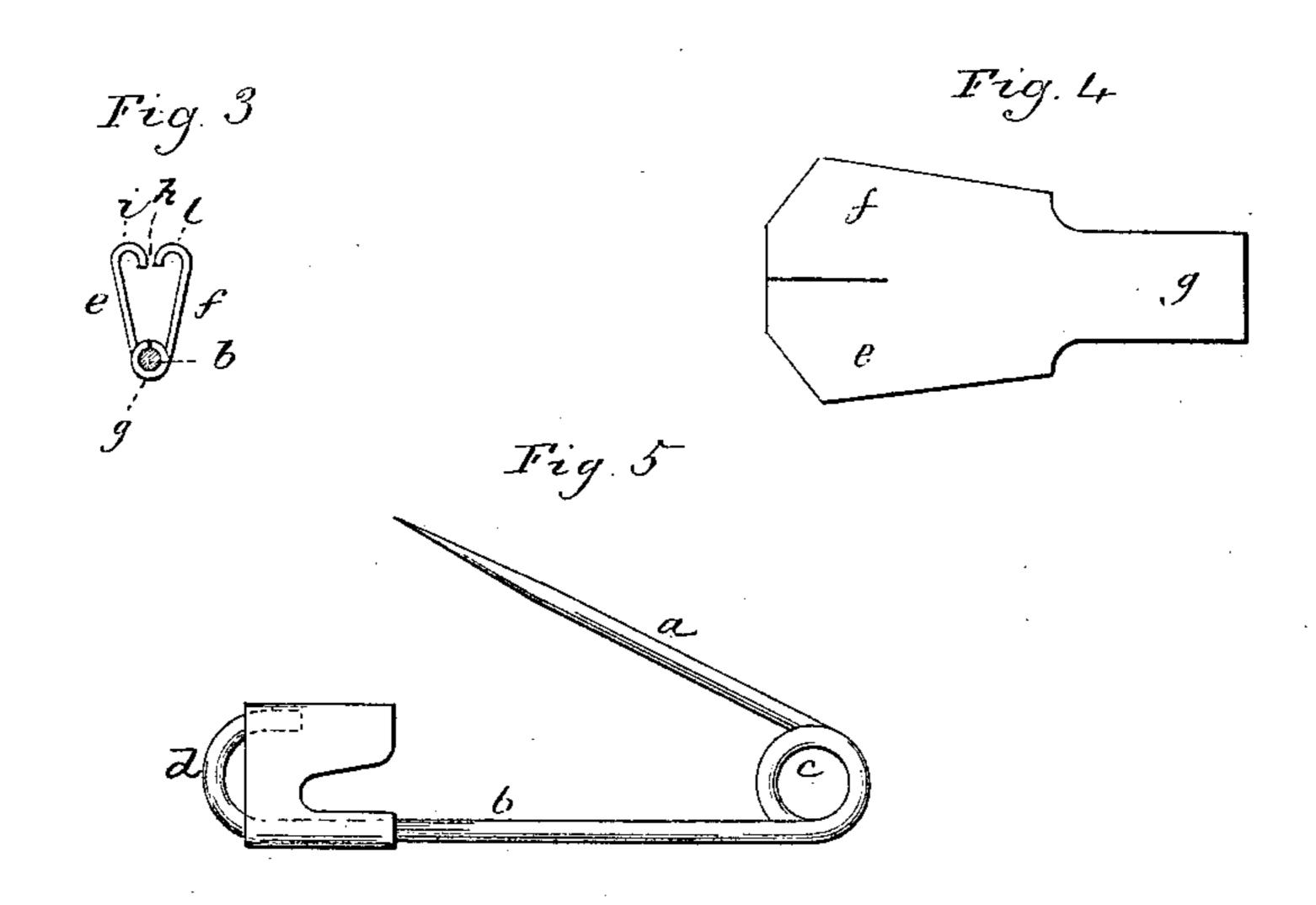
SAFETY PIN.

No. 362,780.

Patented May 10, 1887.







Witnesses. Set Chumivay: Fred Earle Emil Sickhardt By atty Inventor

## United States Patent Office.

EMILE PICKHARDT, OF SOMERVILLE, MASSACHUSETTS.

## SAFETY-PIN.

SPECIFICATION forming part of Letters Patent No. 362,780, dated May 10, 1887.

Application filed February 14, 1887. Serial No. 227,523. (No model.)

To all whom it may concern:

Be it known that I, EMILE PICKHARDT, of Somerville, in the county of Middlesex and State of Massachusetts, have invented a new 5 Improvement in Safety-Pins; and I do hereby declare the following, when taken in connection with accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a perspective view of the pin open; Fig. 2, the body and the pin as bent into shape to receive the guards; Fig. 3, a transverse section through the body, showing an end view of the guards and the shanks as closed around the body; Fig. 4, the blank from which the guards are formed; Fig. 5, a modification in the forma-

tion of the guards.

This invention relates to an improvement in the article commonly called "safety-pins," and particularly to that class in which the body and pin are made from a single piece of wire pointed at one end, the pin portion bent from the body portion so as to form a spring between the two, and so as to bring the pin into a position nearly parallel with the body, the other end of the wire provided with a guard made from sheet metal, and with which guard the point is engaged, the object of the invention being to facilitate the introduction of the pin to the guard.

The body and pin are formed from a single piece of wire. The pin a is bent from the body b, and so as to form a spring, c, at the junction of the two, the tendency of the spring being to force the pin from the body. The end d of the body opposite the spring is curved upward toward the point of the pin, as seen in Fig. 2.

40 This method of forming the pin and body is that commonly practiced in making this class of pins. The guard as generally produced

has a hook formed on one side and what may be called the "upper edge," with which the point of the pin is engaged to hold the pin in the closed position. In such construction of guards it is necessary to introduce the pin on the open side of the hook. The guard is always small, and in use the pin is quite as lia-

50 ble to be forced down upon the closed side of the guard as upon the open side, so that en-

gagement of the pin with the guard is uncertain, and this uncertainty is a source of great annoyance to users of this class of pins. To overcome this difficulty, I form a double or 55 two guards, ef. These are made from a blank cut from sheet metal, as seen in Fig. 4, and bent to shape. The guards are formed with an extension, g, which embraces the curved end and a portion of the body and closed 60 thereon, as seen in Fig. 1 and as represented in Fig. 3. The two guards are separated at the top and so as to leave a space, h, between them. The adjacent edges of the guards at the opening are turned under to form hooks, 65 respectively, i l. The space between the two hooks or guards is sufficient to permit the entrance of the pin when forced down thereon, and the curved uppersurfaces of the two guards serve to deflect the pin into the opening be- 70 tween the guards should it strike upon either one or the other, and so soon as the pin is free below the opening it will, under the reaction of its spring, fly into either one or the other of the guards and there be securely held. 75 Near the body of the pin each side or guard is cut away to form transverse openings  $m_{\tau}$ through either of which the pin may pass out when disengagement is desired.

While I prefer to secure the guards upon 80 the body of the pin by closing the shank portion g of the guard around the body, the guards may be made from sheet metal and doubled around the body, the bent end of the body extending up so as to be embraced by 85 the guard-piece, as seen in Fig. 5, and the

guard soldered to the body.

I do not wish to be understood as claiming, broadly, a double guard for a pin, as such, I am aware, is not new; but

What I do claim is—

1. The herein-described safety-pin, consisting of a pin, a, body b, and spring c, made from a single piece of wire, combined with the two guards ef, made from sheet metal, having 95 an opening between them, the adjacent edges at the opening turned inward and downward, forming hooks il, and secured to the end of the body opposite the spring, the said guards constructed with a transverse opening, m, below the hooks, substantially as described.

2. A safety-pin consisting of the pin a, the

body b, and the spring c, made from a single piece of wire, the end of the body opposite the spring curved toward the pin, combined with two hooked guards, e f, made from a single piece of sheet metal and having an opening between them, the edges of the opening turned inward to form hooks i l, the shank of the guards closed upon the bent end of the body

and so as to leave transverse openings m between the body and the guards, substantially 10 as described.

EMILE PICKHARDT.

Witnesses:

WALTER C. MITCHELL, GEO. A. FROST.