No. 645,679. Patented Mar. 20, 1900.

C. A. BRYANT.

SAFETY PIN.

(Application filed Aug. 12, 1899.)

(No Model.)

Fig. 1.

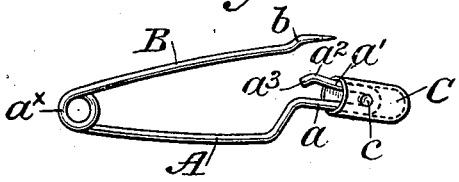

Fig. 2.

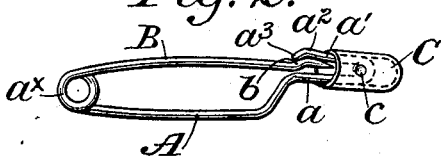

Fig. 3.

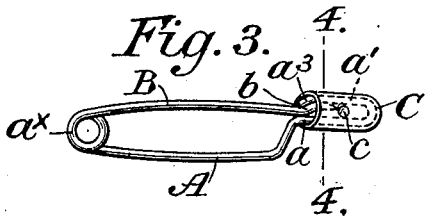

Fig. 4.

Attest:

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UNITED STATES PATENT OFFICE.

CHARLES A. BRYANT, OF WAKEFIELD, MASSACHUSETTS, ASSIGNOR TO THE CONSOLIDATED SAFETY PIN COMPANY, OF BLOOMFIELD, NEW JERSEY.

SAFETY-PIN.

SPECIFICATION forming part of Letters Patent No. 645,679, dated March 20, 1900.

Application filed August 12, 1899. Serial No. 726,967. (No model.)

To all whom it may concern:

Be it known that I, CHARLES A. BRYANT, a citizen of the United States, residing in Wakefield, in the county of Middlesex, State of Massachusetts, have invented certain new and useful Improvements in Safety-Pins, of which the following is a specification, reference being had to the accompanying drawings, forming a part hereof.

This invention relates to safety-pins of that class in which provision is made for the locking of the pin-point in the hood or shield, so as to prevent accidental disengagement thereof. The object in view, generally, in devices of this character has been to prevent the accidental disengagement of the pin-point when the point member and the back member are pressed together.

The object of the present invention, however, is to prevent the disengagement of the pin-point not only under the conditions just referred to, but also when a strain is applied which would tend to bend the point member and so withdraw the point from the hood or shield. In other words, this invention provides a positive lock for the pin-point, which can be disengaged only by pushing back the movable part and so releasing the pin-point from its engaging devices.

The invention will be fully described hereinafter with reference to the accompanying drawings, in which—

Figure 1 is a view in side elevation of a safety-pin which embodies the invention, the pin being shown open. Fig. 2 is a similar view showing the pin closed, but not locked. Fig. 3 is a view similar to Fig. 2, showing the pin locked; and Fig. 4 is a section on the plane indicated by the line 4 4 of Fig. 3, but on a somewhat-larger scale.

The invention is concerned only with the pin-point and the devices for engaging and locking the same, and as to its other parts the pin to which the invention is applied may be of any usual or preferred construction. As represented in the drawings, the back member A and the point member B may be united, as usual, by a spring-coil $a^{\times}$. The wire of the back member is extended and bent back upon itself to form two nearly-parallel members a and a', which are separated by a distance slightly greater than the thickness of the wire. The part a' is bent or curved outwardly to a slight extent, as at a^2, forming an exterior incline or cam-surface, and is also bent inward, as at a^3, to form an engaging toe or lock. A tubular shield or hood C is mounted upon the loop $a\,a'$ to slide longitudinally thereon and by engaging the outward curve or cam-surface a^2 to press the part a' toward the part a. An inward projection or indentation c prevents the complete withdrawal of the hood or shield by engagement with the end of the loop, and the forward end of the hood or shield is preferably cut off obliquely, so as to facilitate the engagement of the pin-point, the farther or longer wall of the hood or shield forming a stop for contact with the pin-point on that side, even when the hood or shield is pulled back to the limit of its movement. The pin-point is preferably formed with an offset, as at b, by bending or otherwise, for engagement with the toe or lock a^3 when the parts are in position for locking.

In using the pin which embodies this invention the pin-point is first laid between the parts $a\,a'$, the hood or shield C having been withdrawn as far as possible. Then with the pin-point in this position the hood or shield is pushed forward, not only covering the pin-point and preventing lateral disengagement thereof, but pressing the locking toe or projection a^3 down upon the pin-point, which then rests against the part a, and thereby locking it positively against withdrawal in the line of the hood or shield. The device, as will be seen, is exceedingly simple and inexpensive in construction, while it provides an absolute and positive lock for the pin-point. The hood or shield is not liable to accidental displacement, since the pressure of the point member against the part a prevents the fabric from working between them and pressing the hood or shield back by contact with its forward end.

I claim as my invention—

1. A safety-pin having a base part and a locking part adapted to receive the pin-point between them, and independent means to press said base part and locking part together upon the pin-point to lock the same between them, substantially as shown and described.

2. A safety-pin having its back member extended to form a loop for the reception of the pin-point and provided with independent means to press the parts of said loop together upon the pin-point to lock the same between them, substantially as shown and described.

3. A safety-pin having its back member extended to form a loop for the reception of the pin-point and a hood or shield sliding upon said loop to press the parts thereof together upon the pin-point to lock the same between them, substantially as shown and described.

4. A safety-pin having its back member extended to form a loop for the reception of the pin-point and a hood or shield sliding upon said loop to press the parts together upon the pin-point, the forward end of the hood or shield having one side wall extended beyond the other to form a guide for the pin-point, substantially as shown and described.

5. A safety-pin having its back member extended to form a loop for the reception of the pin-point, one member of the loop being bent outwardly to form a cam-surface and inwardly to form an engaging toe or lock, and a hood or shield sliding upon said loop to press the parts together upon the pin-point, substantially as shown and described.

6. A safety-pin having its back member extended to form a loop for the reception of the pin-point and said pin-point formed with an offset and independent means to press the parts of said loop together upon the pin-point to lock the same between them, substantially as shown and described.

This specification signed and witnessed this 29th day of July, A. D. 1899.

CHARLES A. BRYANT.

In presence of—
CHARLES F. HARTSHORNE,
FREDERIC S. HARTSHORNE.