(No Model.)

C. A. BRYANT.

SAFETY PIN.

No. 561,200. Patented June 2, 1896.

Fig. 1.

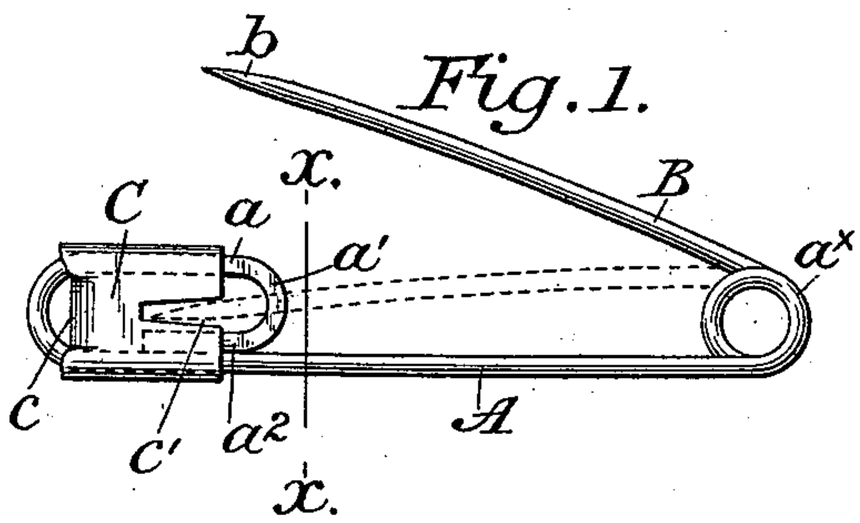


Fig. 2.

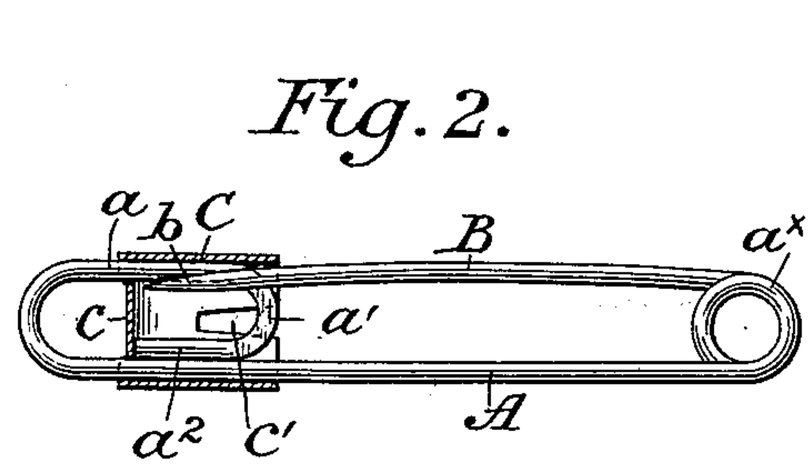


Fig. 3.

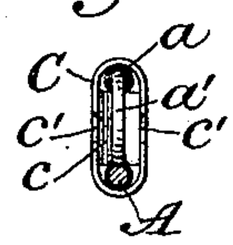


Fig. 4.

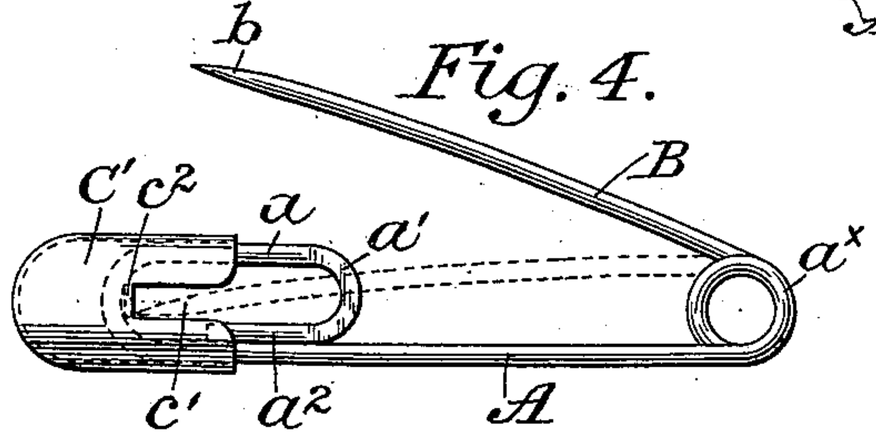


Fig. 5.

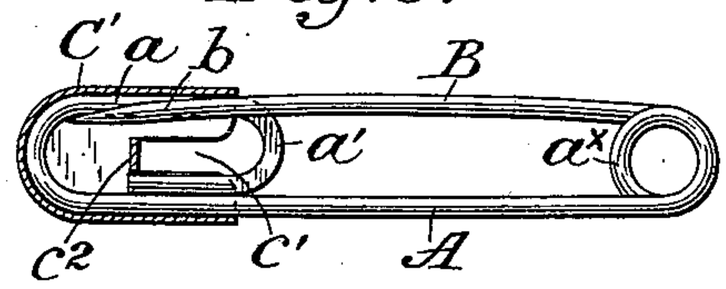


Fig. 6.

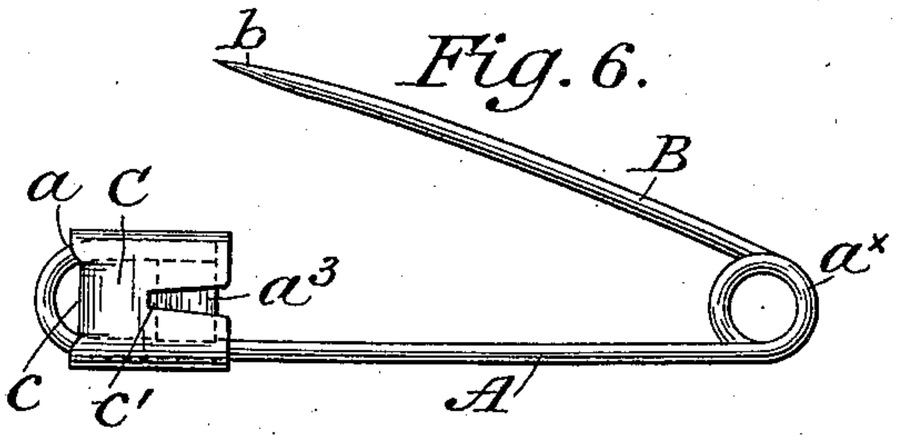
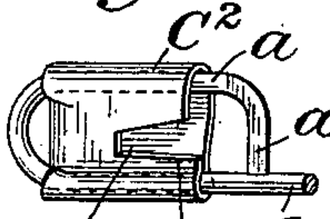


Fig. 7.

Fig. 8.



Attest:

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Attys.

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. 561,200, dated June 2, 1896.

Application filed February 6, 1896. Serial No. 578,213. (No model.)

To all whom it may concern:

Be it known that I, CHARLES A. BRYANT, of Wakefield, in the county of Middlesex and 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.

In another application for Letters Patent of the United States, filed February 6, 1896, Serial No. 578,212, I have shown and described a certain improvement in safety-pins and other devices of like character, which has for its object to provide a double-sided pin—that is to say, a pin in which the point may be engaged with the hood or shield from either side—with a device to prevent, positively, the accidental disengagement of the pin-point from the hood or shield. In that application the hood or shield was arranged to be rotated for the purpose of engaging the pin-point. In the present application I have had in view the same general object—namely, the provision of a safety-pin with means for preventing, positively, the accidental disengagement of the pin-point; but I have arranged the hood or shield to slide longitudinally upon the fixed member or back of the pin for the purpose of engaging the pin-point in a manner to prevent its accidental disengagement. In appearance, therefore, my improved pin does not differ substantially from the ordinary double-sided pin, and it may be used as an ordinary single or one-sided pin or as a double-sided pin, while at the same time, if the user desires the added sense of security, the pin-point may be positively locked against accidental disengagement.

My improvement may be embodied in various forms, and in the accompanying drawings I have illustrated and shall describe hereinafter certain of these forms which are practical and convenient.

In the drawings, Figure 1 is a side view of a double-sided safety-pin having my present improvement applied thereto in one of its forms, the hood or shield being represented in the open or unlocked position and the relation of the pin-point thereto while being engaged being represented by dotted lines. Fig. 2 is a similar view, but with the hood or shield in longitudinal section and with all the parts in the positions assumed when the pin-point is locked against accidental disengagement. Fig. 3 is a section on the line $x\ x$ of Fig. 1, looking toward the left. Fig. 4 is a view similar to Fig. 1, but showing a slightly-different embodiment of the invention. Fig. 5 is a view similar to Fig. 2, but showing the pin represented in Fig. 4. Figs. 6 and 7 are views similar to Figs. 4 and 5, but illustrating still another form. Fig. 8 is a perspective view of a portion of a safety-pin, showing the application of the improvement to a single or one-sided pin.

The safety-pin or other device of like character to which my present improvement is applied is substantially of ordinary form, having a back or fixed member A, which carries the hood or shield, and a pointed or movable member B, the two being preferably united by a spring-coil $a^{\times}$. The back or fixed member A may be slightly longer than in the ordinary pin and is specially formed to support and coöperate with the hood or shield C.

As represented in Figs. 1, 2, and 3, the end or outer portion of the member A is bent backward parallel with itself, as at a, to form a loop with substantially parallel sides, downward toward the main portion, as at a', to form a bar, and outward again in proximity to the main portion, as at a^2, to form a stop, thus constituting a support upon which the hood or shield C may slide longitudinally without lateral or swinging movement, and which also accomplishes certain other desirable results, as hereinafter described, although this precise formation of the wire is not essential. The portion a', if the pin is double, constitutes a stop for the pin-point to prevent the same from passing through the hood or shield from side to side, and in order to reduce the thickness of the hood or shield this portion a' may be flattened, as represented in Figs. 1, 2, and 3. Formed as described, this elongated loop not only properly supports the hood or shield C with sufficient frictional resistance to keep it from slipping accidentally, but the part a' also acts as a bar to prevent the cloth with which the pin may be engaged from pushing the hood or shield back.

The hood or shield C is formed of sheet

metal in any suitable manner and is arranged to slide to and fro upon the pin member A and to permit or prevent the disengagement of the pin-point *b* therefrom. It is preferably formed as a flattened tubular and practically continuous hood to embrace both members of the elongated loop of the member A, heretofore referred to, having ears or lugs *c* turned in from its side between the members of said loop to prevent the disengagement of the hood or shield from the pin-wire.

The portion a^2 of the pin-wire forms a stop which, by contact with the lugs or ears *c*, prevents the hood or shield C from being pushed too far forward upon the pin. The side walls of the hood or shield are provided with apertures *c'*, so that when the hood or shield is pushed back, as represented in Fig. 1, the pin-point *b* may be introduced into the hood or shield, as represented in dotted lines, from either side. Thereafter the hood or shield may be pushed forward upon the pin into the position shown in Fig. 2, in which position the pin-point is held positively from accidental disengagement from said hood or shield.

In the construction represented in Figs. 4 and 5 the pin-wire is formed as already described, while the hood or shield C' is modified in form, so as to cover entirely the end of the loop. The shield is struck up as before from sheet metal, and the lug or ear c^2, which prevents the removal of the hood or shield from the pin, is turned in at the end of the slot or opening which is formed in each side of the shield to permit the introduction of the pin-point.

In the construction shown in Figs. 6 and 7 the pin-wire is not continued and bent to form the complete loop for the support of the hood or shield; but between the portion *a* and the main body of the pin-wire is secured, by solder or otherwise, a plate a^3, which completes the loop, constitutes a stop to prevent the passage of the pin-point through the shield from side to side, and also prevents the disengagement of the shield from the pin by contact with the lug or ear *c* of the shield. The latter is represented in these figures as formed exactly as in Figs. 1, 2, and 3, having in each side wall the slot or opening to permit the introduction of the pin-point. As represented in these figures, the loop which supports the hood or shield does not interpose any obstacle to the thrusting back of said hood or shield by the pressure of the fabric with which the pin is engaged.

In Fig. 8 I have illustrated the application of the improvement to a single or one-sided pin, in which the pin-point can be introduced into the shield from one side only. The shield C^2 is formed substantially as shown in Figs. 1, 2, 6, and 7, except that it is thinner, has but one side slotted, as at *c'*, to permit the introduction of the pin-point, and has its former part turned in over the pin-wire, as at c^3, to coöperate with the bar a^4, which operates, as before, as a stop and a guard.

The mode of use of my improved pin will be readily understood. When the shield is in the position represented in Figs. 1, 4, and 6, the pin is used in all respects as an ordinary pin; but when it is desired, after engagement of the pin-point with the fabric and with the hood or shield, to guard against accidental disengagement of the pin-point the hood or shield is pushed forward into the position shown in Figs. 2, 5, and 7.

It will be observed that my improved pin is hardly to be distinguished in appearance from the ordinary safety-pin, that the cost of manufacture is not materially greater, and that while the pin is capable of use as an ordinary safety-pin it has also the added advantage of enabling the disengagement of the pin-point from the hood or shield to be prevented positively.

I claim and desire to secure by Letters Patent—

1. The combination with one member of a safety-pin or other like device bent to form an elongated loop with substantially parallel sides, of a flattened tubular hood or shield of sheet metal formed to embrace both sides or members of said loop and to slide thereon longitudinally and held thereby from lateral or swinging movement and having lugs or ears bent into the loop from its side to limit its movement, said hood or shield having a slot or opening to permit the introduction of the pin-point, substantially as shown and described.

2. The combination with one member of a safety-pin or other device of like character bent to form a loop with substantially parallel sides and having a transverse bar between said parallel sides, and a hood or shield formed to embrace said loop and to slide thereon and having in each side a slot or opening to permit the introduction of the pin-point, and having a lug or ear bent into said loop to prevent the removal of the hood or shield therefrom, substantially as shown and described.

3. The combination with one member of a safety-pin or other device of like character bent to form a loop with substantially parallel sides and having the wire of said loop continued and bent backward in proximity to the main portion of said wire, of a hood or shield formed to embrace said loop and to slide thereon and having in each side a slot or opening to permit the introduction of the pin-point and having a lug or ear bent into said loop to prevent the removal of the hood or shield therefrom, and to engage the end of said wire to limit the forward movement of the hood or shield upon the pin, substantially as shown and described.

This specification signed and witnessed this 4th day of February, A. D. 1896.

CHARLES A. BRYANT.

In presence of—
FREDERIC S. HARTSHORNE,
PHILIP J. FLANDERS.