

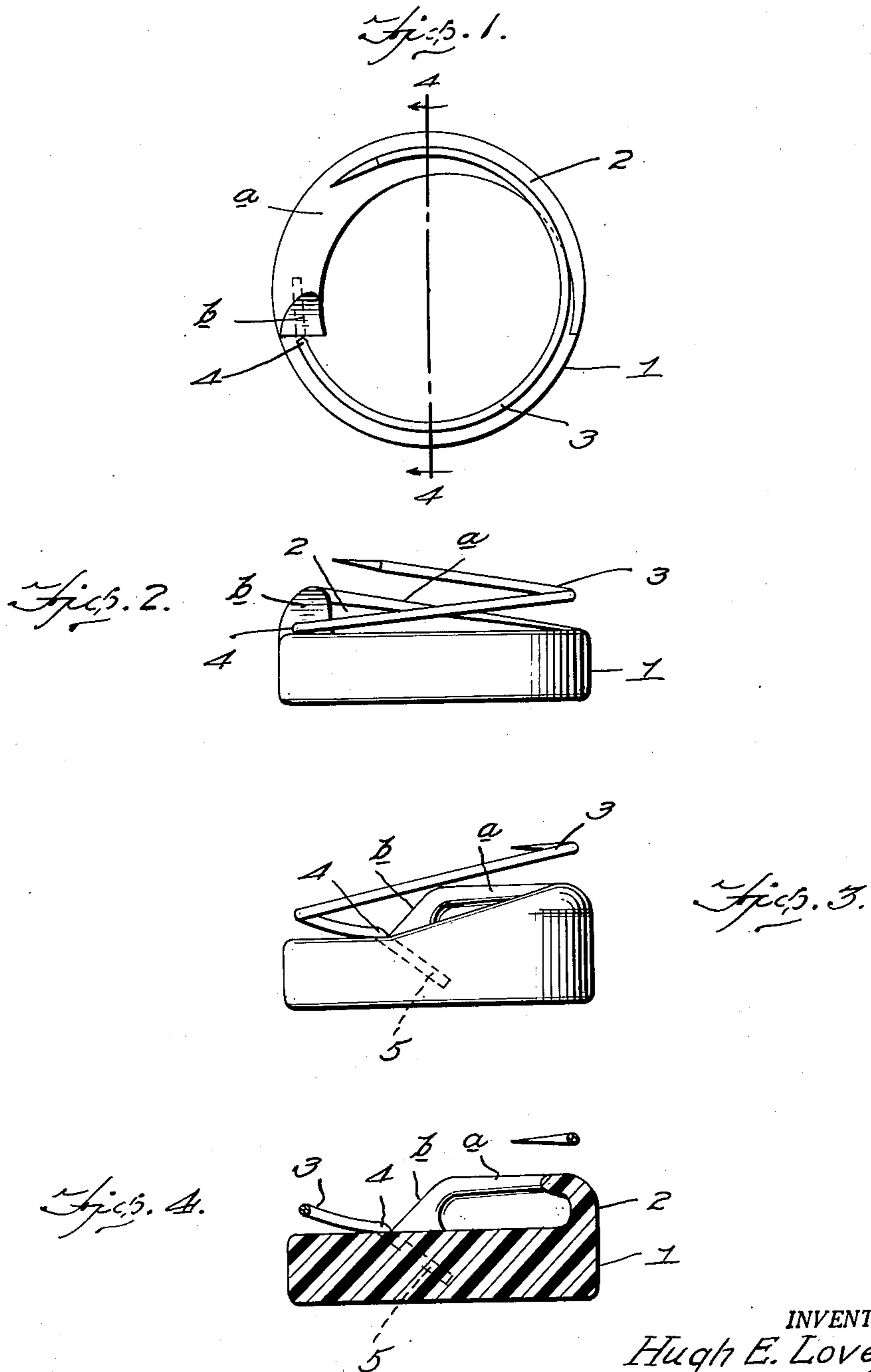
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PIN

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2,624,087

PIN

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1 Claim. (Cl. 24—150)

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This invention relates to a pin and pertains more particularly to an article of this kind especially adapted for use in connection with garments for infants.

It is an object of the invention to provide an article of this kind which is readily applied or removed by a rotary action.

The invention consists in the details of construction and in the combination and arrangement of the several parts of my improved safety pin whereby certain advantages are attained, as will be hereinafter more fully set forth.

In order that my invention may be better understood, I will now proceed to describe the same with reference to the accompanying drawings, wherein:

Figure 1 is a view, in plan, of a pin constructed in accordance with an embodiment of the invention;

Figure 2 is a side elevational view of the device illustrated in Figure 1;

Figure 3 is a side elevational view opposite to Figure 2; and

Figure 4 is a sectional view taken substantially on the line 4—4 of Figure 1.

In the embodiment of the invention as illustrated in the accompanying drawings 1 denotes a circular head or button of desired dimension and which may be made of a plastic or other material.

Disposed slightly more than one-half way around the head or button 1 at the periphery thereof is a flange 2 extending outwardly from and substantially at right angles to the inner face of the head or button.

The outer edge face *a* of the flange 2 gradually rises or increases in height in the nature of a helix from the button back face, or from a "zero" height at one end, to a point close to the opposite end thereof. The end portion *b* of the edge face of the flange 2 remote from the low or "zero" end thereof terminates in an inclined face having an angle of approximately 45°.

As shown in Figure 1, the face *a* of the flange is also of gradually increasing width from the low end of the flange to the high end thereof.

Overlying the edge face *a* of the flange 2 but normally spaced therein is helical pin 3 which has an end portion anchored as at 4 to the head or button at a point immediately adjacent to the outer extremity or base of the portion *b* of the flange 2. As herein disclosed pin 3 has an angularly disposed tail extension, or shank, 5 which is embedded within the head or button 1.

The pin 3 extends from its anchorage 4 across the space between the ends of the flange 2 and continues in overlying relation with respect to the flange 2 from the "zero" end thereof, terminating short of, but relatively close to, the end portion *b* of the flange 2.

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It is believed to be obvious that upon rotation of the head or button 1 in one direction about its axis, the pin will be carried to penetrate the garment or the like as desired and the inherent resiliency of the pin 3 will allow the pin to serve as a clamping medium coacting with the edge face *a* of the flange 2 to maintain the applied device in applied position. In the initial application of the article, the end portion *b* of the flange 2 will assure the portion of the garment or the like to be penetrated by the pin 3 to be in the best position for such penetration.

Upon reverse rotation of the head or button, to free the pin 3, the coaction of the face *a* and the flange 2 with the material of the garment or the like will materially facilitate the freeing or withdrawal of the pin 3.

The efficiency of the article is further increased by the fact that the portion of the pin 3 which is opposed to the face *a* of the flange 2 is normally equidistantly spaced at all points therealong from said face *a*.

From the foregoing description it is thought to be obvious that a safety pin constructed in accordance with my invention is particularly well adapted for use by reason of the convenience and facility with which it may be assembled and operated.

I claim:

30 An article of the character described comprising a button body having a back face, an arcuate flange rising from said face in the nature of a helix from a low end to a high end, and a pin having an end secured to said face at the said high end of the flange and rising in a helix of the same hand as and in spaced relation with the flange, said flange at the high end thereof having an end face disposed at an angle of approximately 45° with respect to the adjacent face of the button body, the said secured end of the pin having a shank portion entering and embedded in the button body at the bottom of said inclined face.

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