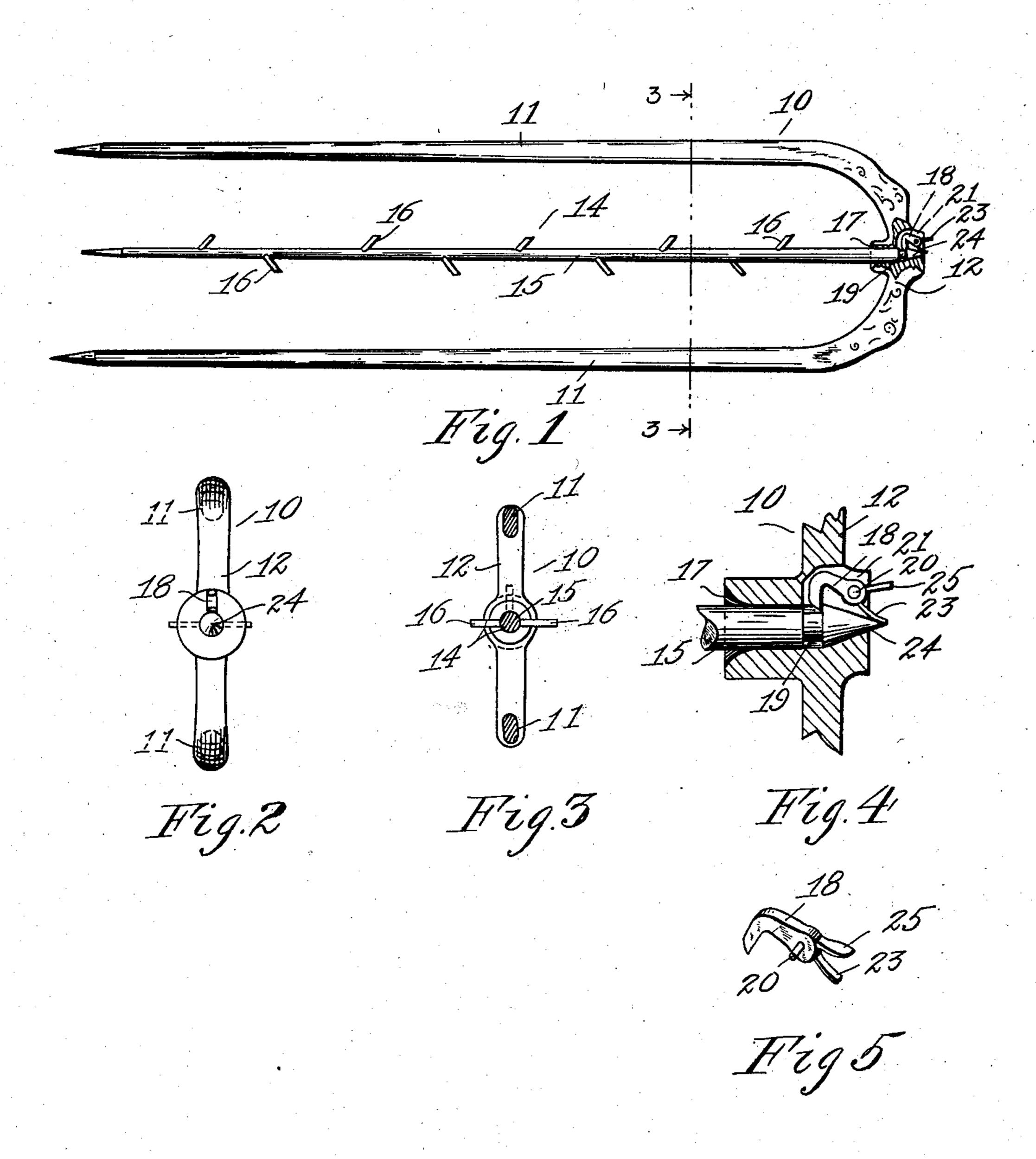
## W. F. ZWICK. SAFETY HAIR PIN. APPLICATION FILED APR. 14, 1902.

NO MODEL.



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## SAFETY HAIR-PIN.

SPECIFICATION forming part of Letters Patent No. 751,426, dated February 2, 1904.

Application filed April 14, 1902. Serial No. 102,931. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM FREDERICK ZWICK, a citizen of the United States of America, and a resident of the city of Seattle, in the county of King and State of Washington, have invented certain new and useful Improvements in Safety Hair-Pins, of which the following is a specification.

My invention relates to that class of pins adapted to hold the hair in place, and has special reference to a device of this class which embodies means whereby it is secured or anchored in place when arranged in the hair.

Among numerous objects attained by this invention and readily understood from the following specification and accompanying drawings included as a part thereof is the production of a simple and inexpensive hair-pin of this character embodying essential features of adaptability, utility, and general efficiency, which renders it easy of manipulation and insures its retention in the hair.

The above-mentioned and numerous other objects equally as desirable are attained by the construction, combination, and arrangement of parts, as disclosed by the drawings, set forth in this specification, and succinctly pointed out in the appended claims.

With reference to the drawings filed here-30 with and bearing similar reference characters for corresponding parts throughout the several views, Figure 1 is a side view of a hairpin embodying my improvement and indicated with a portion of the head broken out to bet-35 ter disclose the means employed to detachably connect the prong adapted to anchor the pin in the hair. Fig. 2 is an end view of the pin looking from the right of Fig. 1. Fig. 3 is a transverse section on line 3 of Fig. 1, viewed 40 as the arrow flies, but indicating the anchor at right angles. Fig. 4 is an enlarged view of a portion of the head of the pin in section and discloses the head of the anchor and the catch for detachably securing same in place, and 45 Fig. 5 is a perspective view of said catch.

As now considered, this invention embodies a suitable body, as 10, which may be of any desired or adapted form in the main and as now constructed is rendered in the usual well-

known U shape and comprises oppositely-dis- 50 posed prongs 11 and a cross-piece or bridge 12, connecting the prongs and adapted as the head of the pin. Combined with this body is a suitable anchoring device, as 14, which is detachably connected thereto in a manner which 55 permits of ready disconnection, and as now considered this anchor includes a shank 15, conveniently consisting of a long tapering prong. This prong is provided with barbs or catches, as 16, which are arranged in a suit- 60 able manner to pass freely through the hair when the anchor is moved longitudinally in one direction, but to act as flukes to prevent the anchor from being withdrawn by a reverse movement.

As now considered, the barbs or catches 16 comprise laterally-projecting pins or studs, which are conveniently secured to the shank 15 at desired points throughout its length and are inclined rearwardly respecting the point 70 of the shank, so as to separate the hair and pass freely therethrough when the anchor is moved point foremost; but should the anchor be urged to move reversely either by its own weight or added force these barbs serve to engage the hair and prevent displacement of the anchor.

In the present embodiment the detachable prong or anchor 14 is disposed parallel the prongs 11 of the body 10 and is connected to 80 the head thereof substantially midway its length. This connection is conveniently made by providing a suitable socket, as 17, in the bridge of the pin, which consists of a bore of suitable depth and form to receive the head 85 end, as 24, of the prong 14, and an operative detent, as 18, is mounted on this bridge, so as to engage the prong and secure it in position.

The head end 24 of prong 14 is preferably rendered conical at its extremity, and 90 the socket 17 is preferably flared or beveled outwardly at its mouth to facilitate entrance of the head of the prong, and an annular groove 19 is formed at the base of this conical portion, which is of suitable depth to receive the nose 95 of a detent, as 18. This detent operates on a suitable pivot 20, which is conveniently mounted on the bridge 12 by providing a recess, as

21, therein and forming apertures in the side walls of this recess to receive the ends of the pivot.

The detent 18 is provided with a lip, as 23, 5 composed of material of resilient nature and secured to the hub of the catch substantially diametrically opposite the nose with suitably lateral projection to cause its free end to normally lie in the path of movement of the head 10 end 24 of the detachable prong, so that the final action of the prong, as seated in the socket 17, will bend this lip, and thereby face the nose of the detent upon the tapering surface of the end portion 24, and as the base of 15 this portion clears the nose this lip will force the detent to engage in groove 19. This detent is also provided with a thumb-piece, as 25, by which it is operated to release the prong 14, and as now considered this piece consists 20 of a laterally-projecting lug suitably positioned on the hub of the detent, so as to be readily reached by the finger or thumb of the person using the pin.

As will be readily understood, this hair-pin is employed in the usual manner of ordinary pins of this class and is preferably inserted in the hair with the detachable prong connected in place, when, if desired to remove the pin, the catch 18 is operated to release the body from the anchor. The body is then withdrawn and the anchor is pushed through the hair and

taken from the opposite side.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent of the United States of America, is—

1. In a hair-pin, a body comprising a head, prongs extending from the head of the pin, and means on one of said prongs for preventing its withdrawal from the hair while attached to the head of the said pin, said prong being removably secured in said head whereby the head and the prong are withdrawn in opposite directions to disengage the same from the hair, substantially as described.

2. In a hair-pin, a body comprising a head, prongs extending from the head, one of said prongs being removably secured in the head, a detent for locking said prong in the head of said pin, and means on said prong for preventing its withdrawal from the hair while at-

tached to the head of the pin.

3. In a hair-pin, the combination of a body

portion having a socket therein, a detachable prong having one end formed to fit said socket, a detent mounted in said portion and adapted 55 to engage and normally secure the prong in the socket, and resilient means for normally holding the detent in engagement with the end of the prong.

4. In a hair-pin; a body consisting of oppo- 60 sitely-disposed prongs and a bridge connecting said prongs; of a detachable anchoring-prong having barbs arranged thereon throughout its length, a socket for the head of said anchoring-prong arranged on the bridge of 65 said body and means to normally secure said

detachable prong in the socket.

5. In a hair-pin; a body consisting of oppositely-disposed prongs and a bridge connecting said prongs; of a detachable anchoring- 70 prong having barbs thereon inclined rearwardly from its point, a socket for the head of said anchoring-prong formed in the under surface of said bridge and an operative detent arranged to normally secure said detachable 75

prong in the socket.

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6. In a hair-pin; a body consisting of oppositely-disposed prongs and a bridge connecting said prongs; of a detachable anchoring-prong comprising a shank having a portion of the head end formed conical and an annular groove at the base of said portion and laterally-projecting barbs throughout its length inclined toward said end, a socket for said head end formed in the under surface of said bridge and a spring-pressed detent arranged on the bridge to engage in said groove when the anchoring-prong is inserted in said socket.

7. In a hair-pin; the combination with a body portion having a socket thereon, and a 90 detachable prong having one end formed to fit said socket; of a detent mounted on said portion and adapted to engage and normally secure said prong and having a resilient leaf projecting into the path of movement of said 95 end of the prong to cause the detent to engage the prong when the prong engages the leaf.

Signed at Seattle, Washington, this 31st day of January, 1902.

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WILLIAM FREDERICK ZWICK.

Witnesses:

WILLIAM P. SMITH, JOHN A. WHALLEY.