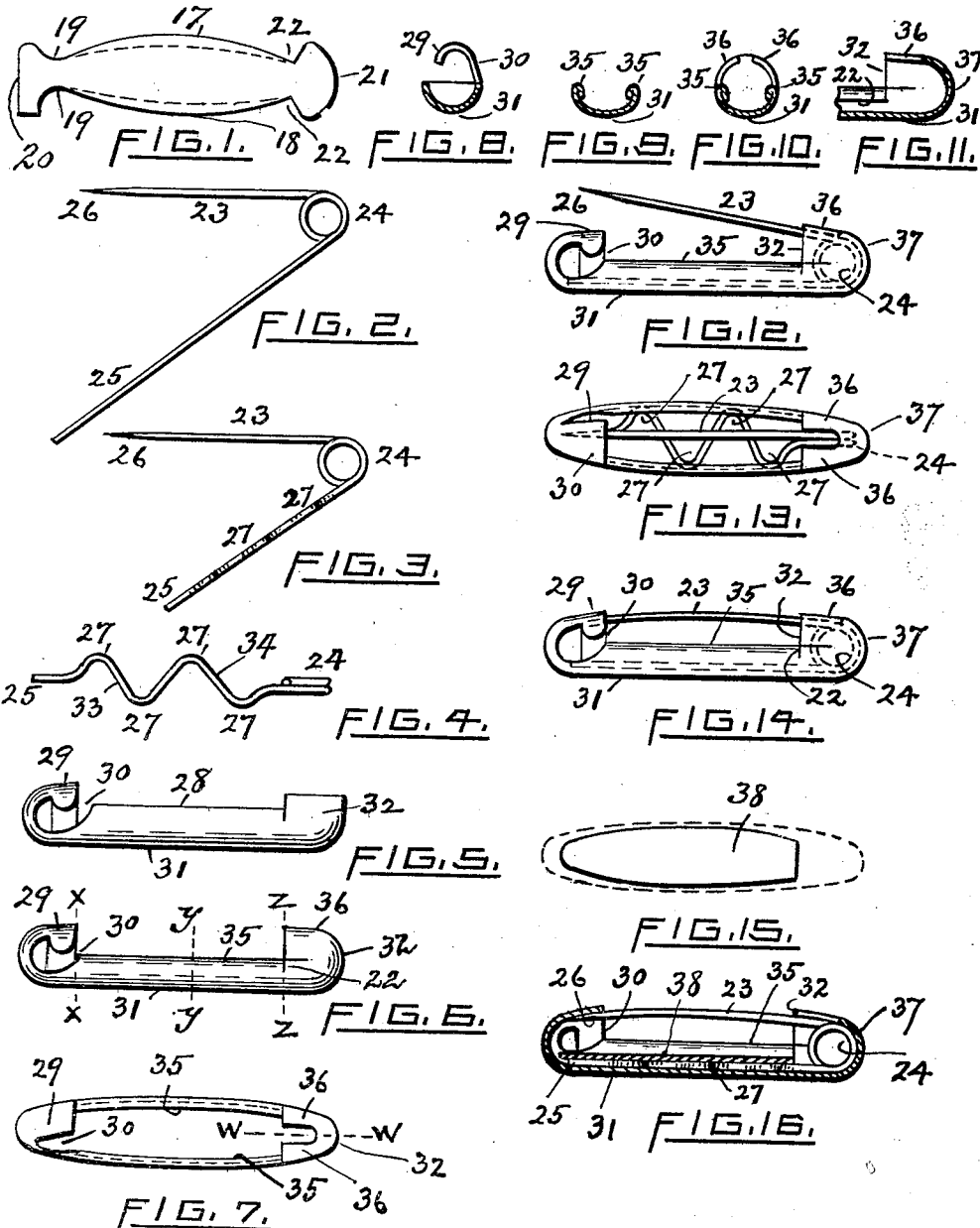


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CUFF PIN.  
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1,041,932.

Patented Oct. 22, 1912.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

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## CUFF-PIN.

1,041,932.

Specification of Letters Patent.

Patented Oct. 22, 1912.

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*To all whom it may concern:*

Be it known that I, WADE W. WILLIAMS, a citizen of the United States, residing at Providence, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Cuff-Pins, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to cuff pins, breast pins and similar articles, and the details of the construction thereof, as hereinafter described and claimed.

In the accompanying drawings like reference numerals indicate like parts in all the figures.

Figure 1 is a plan view of the blank for the body of a cuff pin embodying my said invention. Fig. 2 is a side elevation of a combined pin tongue, presser foot and intermediate coil, all integral. Fig. 3 shows in side elevation the pin tongue, presser foot and intermediate coil of Fig. 2, after the presser foot has been bent into a series of alternately-directed lateral bends or curves. Fig. 4 is a top plan view of said presser foot after it has been so bent. Fig. 5 is a side elevation of my improved cuff pin after said blank, shown in Fig. 1, has been drawn up to form the body-portion of said cuff pin. Fig. 6 is a side elevation of the body of the cuff pin after its two opposite side flanges have been bent to form an inwardly-directed rolled edge or bead and the rolling of the joint member. Fig. 7 is an inverted plan view of the body of the cuff pin represented in Fig. 6. Fig. 8 is a cross-sectional view of said cuff pin body, as seen on section line  $x-x$  of Fig. 6. Fig. 9 is a cross-sectional view of said cuff pin body, as seen on section line  $y-y$  of Fig. 6. Fig. 10 is a cross-sectional view of said cuff pin body, as seen on section line  $z-z$  of Fig. 6. Fig. 11 is a longitudinal, central, sectional view of the pin joint and adjacent part of the cuff pin body, as seen on section line  $w-w$  of Fig. 7, a portion of this figure is seen in elevation. Fig. 12 is a side elevation of the completed cuff pin with the pin tongue, presser foot and intermediate coil in position, the presser foot and coil being represented in dotted lines. Fig. 13 is an inverted plan view of the completed cuff pin. Fig. 14 is a side elevation of the completed cuff pin, when the pin tongue is engaged in the pin catch, the coil and presser foot

being shown in dotted lines. Fig. 15 is a plan view of a lining plate which may be used in my cuff pin. Fig. 16 is a central longitudinal view of my cuff pin as modified by the use of the lining plate shown in Fig. 15, the pin tongue, coil and presser foot being shown in side elevation.

In Fig. 1 is shown the outline of the blank, from which the body or shell of the cuff pin is made. It has the two convex, elliptical sides 17, 18; the narrow neck portion whose opposite edges 19, 19, are concaved; the enlarged end 20, curved as shown; and the approximately semi-oval end 21, as also the two sharp indentations 22, 22. This blank is integral and is cut from sheet metal by a plunger and cutter, as is well-known in the manufacture of jewelry.

Fig. 2 represents a combined pin tongue 23, a coil 24, preferably of one and one-half turns, and a straight presser foot 25, all integral, and made of steel wire or other tempered metal. The pin tongue 23 has a pointed end 26. In Fig. 3, this combined pin tongue, coil and presser foot are shown, after the presser foot has been formed into a series of alternately-directed, lateral bends 27. These bends are illustrated in plan view in Fig. 4.

The blank, represented in Fig. 1 is shaped or drawn up by a die, cutter and plunger into the form seen in Fig. 5. A flange 28 is formed on both the longitudinal sides, and the bend or base thereof is along the dotted lines of Fig. 1. The parts 19, 19, 20, of said blank are longitudinally and transversely bent to form a pin catch 29, 30, of which the side 29 is open, to allow the insertion therein of the pointed end 26 of the pin tongue 23, but the side 30, being wider, is closed to stop the pin tongue 23 from passing out of the pin catch, on the farther side.

The portion of the blank between the dotted lines of Fig. 1, constitutes the ornamental front 31 of the cuff pin body, whose exposed surface may be curved, embossed, or engraved in any desired pattern or design.

The portion 21 of the blank shown in Fig. 1 is bent laterally into a U-shaped pin wheel, having its two sides parallel and its central part is longitudinally rolled through an arc of approximately 90° inwardly, to form a pin joint 32.

The combined pin tongue, coil and crinkled presser foot 25, 27, is placed in the

concavity of the body of the cuff pin. This is accomplished by means of pliers, or other suitable tools, which by application to two of the bends 27, 27, as, for example, at 33 and 34 (Fig. 4), draw said bends 27 together, thus temporarily shortening said presser foot. The coil end 24 is then inserted in the pin joint 32, and the free end of the presser foot 23 is inserted in the concavity of the shell or body of the pin beneath the pin catch 29, 30. The tool or implement is then disengaged from the bends of the presser foot, which is then free to expand, and by longitudinal, endwise pressure forces the coil into firm contact with U-bend of the pin joint 32 and at the same time forces the opposite end of the presser foot into firm contact with the adjacent concave surface of the body of the cuff pin beneath the pin catch 29, 30. This crinkled presser foot is then confined in said position to prevent displacement or separation thereof from the body portion of the cuff pin and also to prevent any lateral rocking movement. This result is effected by rolling over the raw edge of the two flanges 17 and 18, as indicated at 35. This rolled edge or bead 35 overlies the tips of the bends 27, in loose contact therewith.

The upper edges of the U-shaped pin joint 32 on the two sides thereof, are rolled over, as represented at 36, 36, into a partial overlying contact with the coil 24, and also the portion 37 of said pin joint is rolled over in the direction of the longitudinal axial line of the cuff pin body and adjacently thereto, so as to overlie and cover some of the outer portion of the periphery of the coil, preferably one-half or the whole of one coil, thus holding it in position against any tendency to rise from the pin joint 32, or to be accidentally displaced or removed therefrom. The radial edges of the portion 21 of the blank are by these bendings brought into contact with the adjacent edges of the body portion, as illustrated in Figs. 10, 11, 12 and 14. The portion 21 is slotted, as seen in Figs. 1, 7, 10, 11 and 13, to allow the free movement of the pin tongue therethrough when out of engagement with the pin catch.

The cuts or indentations 22, 22, in the blank serve to limit longitudinally the ends of the rolled edge or bead 35.

As shown in Figs. 7, 10, 11, 13 and 16, there is a slot formed between the parts 36, 36, through which slot the pin tongue 23 extends, when opened, as seen in Fig. 12, and is protected when closed, as seen in Figs. 13, 14 and 16.

If desired, a lining plate 37 may be used, whose shape is exhibited in Fig. 15, where it is shown as lying under the bends or rolled edges 35 of the cuff pin body or shell. This lining plate, however, has no function, except to conceal the crinkled presser foot.

Instead of forming the coil with one and one-half spiral turns, the bend may be approximately 180° in extent, or may be formed with two or more turns.

If desired, the presser foot may be secured to the inner surface of the shell or body portion of the cuff pin by soft solder.

I claim as a novel and useful invention and desire to secure by Letters Patent:

1. The improved cuff pin or similar article herein described, consisting of the combination of a pin tongue, coil, and presser foot, all made of one piece of tempered metal, which presser foot is formed with a series of alternately arranged oppositely directed, lateral bends; and a cuff pin body comprising a metallic, concavo-convex shell, whose edges on the two longitudinal sides thereof are rolled over to contact with and cover the extreme tips of said bends of the presser foot; a pin joint integral with said shell at one end thereof rolled and bent to cover partially and hold the coils in position; and a pin catch at the opposite end of said shell adapted to engage at will the pointed end of the pin tongue, said presser foot and coil being confined in position by their expansive pressure endwise into holding contact with said shell at the opposite ends thereof and also by the rolled edges overlying said coil and lateral bends.

2. In a cuff pin or similar article, the combination of a body having a U-shaped pin shell at one end; a pin tongue having a coil and a longitudinally expansible presser foot, which coil is inserted in said shell and held therein by the rolling of the U-shaped pin shell into overlying contact with the adjacent peripheral surface of said coil; means for engaging at will the pointed end of the pin tongue; and resisting means on the body to receive the end thrust of said presser foot.

3. In a cuff pin, or similar article, the combination of a body portion having a U-shaped end rolled through an arc of approximately 180° inwardly; a pin tongue having a coil or bend inserted in said pin joint and sufficiently covered by said rolled end to be confined in position therein, said tongue having a presser foot provided with lateral extensions; means integral with the body portion for confining said extensions in position within the body portion; and means for engaging at will the pointed end of the pin tongue.

4. In a cuff pin, or similar article, the combination of a shell; a pin joint thereon; a spring coil held in operative position in the pin joint; a tempered pin tongue integral with the coil; a longitudinally-expansible spring presser foot integral with said coil; means extending from the shell for holding said presser foot from lateral and outward displacement therein; means limit-

ing the longitudinal expansibility of the presser foot; and means for engaging at will the free end of the pin tongue.

5 In a cuff pin, or similar article, the combination of a shell; a pin joint thereon; a pin tongue and presser foot with an intermediate turn, all integral and made of one piece of tempered metal which presser foot has bends allowing its longitudinal expansion; means extending from the shell for  
10 holding the presser foot from lateral and outward displacement therein, means comprising abutments at the ends of the shell to limit the longitudinal expansion and  
15 movement of the presser foot, and a pin catch for engaging at will the free end of the pin tongue.

6. In a cuff pin, or similar article, the

combination of a shell; a combined pin tongue and presser foot with an intermediate curvature which presser-foot has bends allowing its longitudinal expansion; means for supporting said pin tongue and presser foot in said shell at said curvature; an abutment at the opposite end of the shell to receive and limit the end thrust of the free end of the presser foot, and a pin catch for engaging at will the free end of the pin tongue.

In testimony whereof I affix my signature 30  
in presence of two witnesses.

WADE W. WILLIAMS.

Witnesses:

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MARIE BOHL.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."