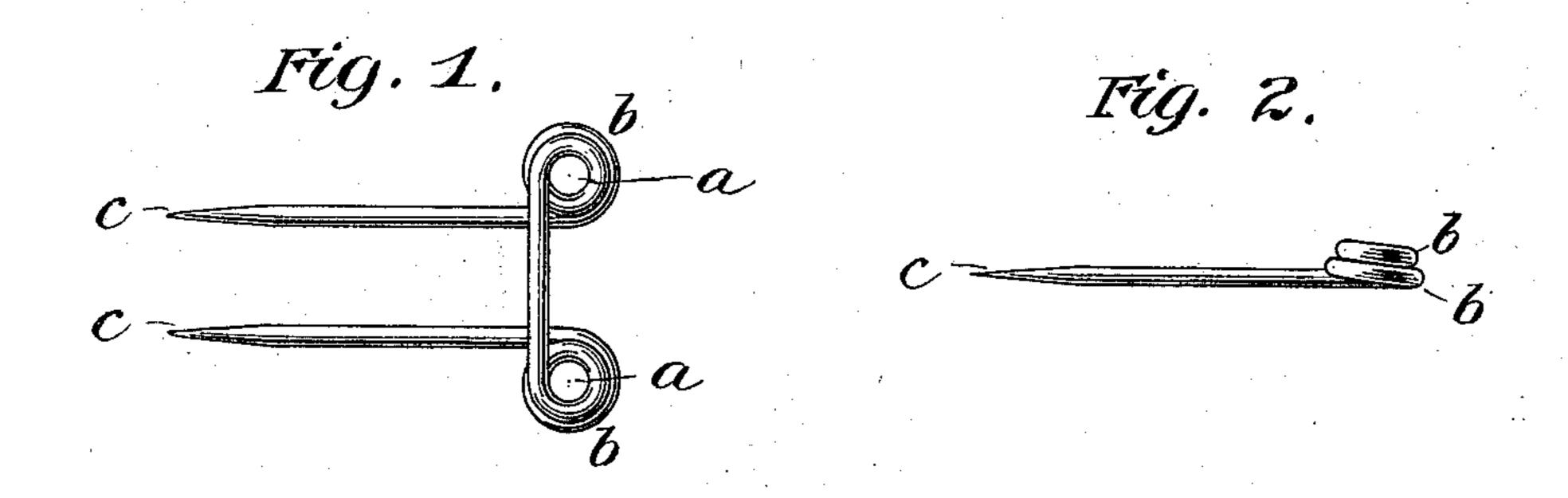
## W. A. CALLANAN. HAT FASTENER. APPLICATION FILED JUNE 27. 1

APPLICATION FILED JUNE 27, 1900.

NO MODEL.



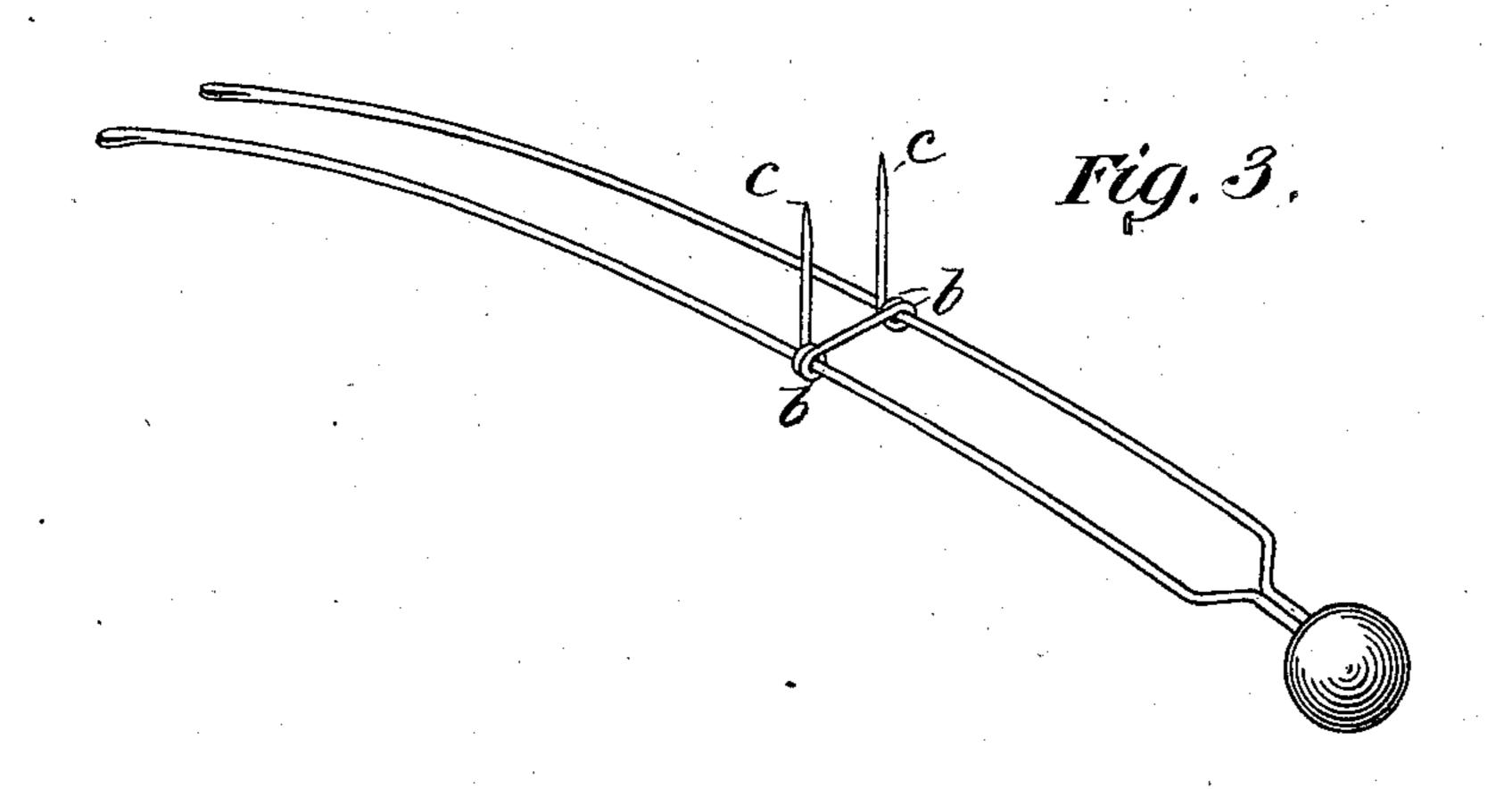
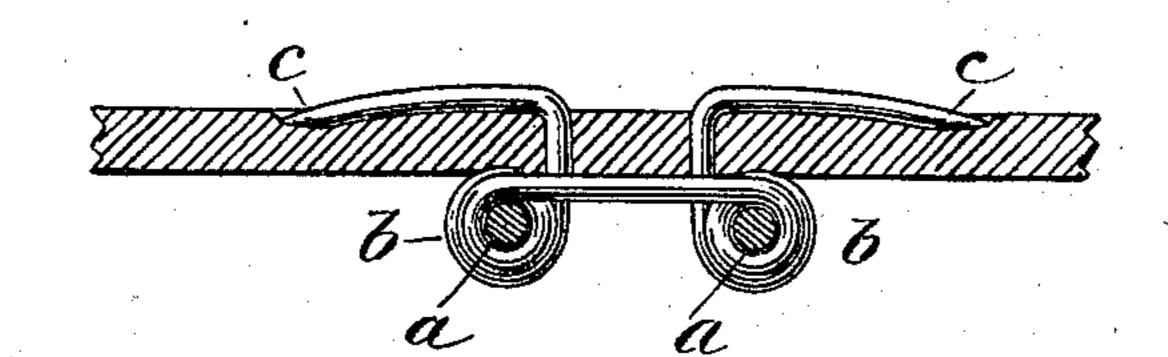


Fig. 4.



WITNESSES:

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ATTORNEY

## United States Patent Office.

WILLIAM A. CALLANAN, OF COLORADO SPRINGS, COLORADO, ASSIGNOR OF ONE-HALF TO PHILIP C. PECK, OF NEW YORK, N. Y.

## HAT-FASTENER.

SPECIFICATION forming part of Letters Patent No. 726,633, dated April 28, 1903.

Application filed June 27, 1900. Serial No. 21,781. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM A. CALLANAN, a citizen of the United States, residing at Colorado Springs, county of El Paso, and State of Colorado, have invented a new and useful Improvement in Fasteners for Hat-Pins for Ladies' Hats, of which the following is a specification.

My invention relates to an improved fastenio ing instrumentality by which the ordinary
two-pronged hat-pin having enlarged ends or
other means for preventing it from slipping
altogether out of the device may be with
greater convenience, accuracy, and operativeness associated permanently with the hat.

One of the difficulties in the use of a common hat-pin has been, as is well known, the wear upon the side or brim of the hat incident to repeatedly thrusting the pin there-20 through in different locations, thus not only wearing out the material of the hat, but also so reducing its retentive power relatively to the pin in those parts frequently punctured as to render it difficult if not impossible for the 25 pin to be retained in the requisite relation to the hat in order to prevent its being blown or otherwise dislodged from the hat of the wearer. The difficulty referred to has been in a large measure overcome by associating 30 with hat-pins small plates having perforations for the admission and retention of the pin, which plates being of more rigid material than the hat itself do not wear at the point of contact with the pin, and consequently 35 tend to maintain approximately a certain degree of friction upon the external surface of the hat. These plates are also adapted to be sewed and in some instances otherwise secured to the hat in the requisite positions; but 40 they involve an absolutely permanent and unadjustable aperture and the use of extraneous means of attachment to the hat.

The object of my invention is to provide a device for uniting the hat-pin to the hat and holding the pin in the requisite position there, which device shall be capable of being applied to and secured upon any hat without the aid of stitches or any other extraneous instrumentality and in such a way as to insure the firm attachment to the hat of the device with its associated pin and at the same time pro-

vide an aperture or apertures of a permanent character for the reception, passage, and retention of the pin, which apertures are of such a character that they may be readily 55 enlarged and, what is more important, constricted according to requirement. I accomplish these objects by my fastening device as illustrated by the drawings, in which—

Figure 1 is a perspective view thereof seen from one side ready for insertion and fastening to the hat; Fig. 2, a perspective view of one side of my device presented to the eye from a point of view at right angles to that of Fig. 1; Fig. 3, a view of my fastening defore combined with an ordinary two-tined or two-pronged pin having in this instance enlarged terminals to prevent absolute withdrawal; Fig. 4, a sectional view of a portion of a hat-brim, showing in perspective therein inserted and secured a specimen of my fastening device.

I produce my fastening device by taking a continuous strip or portion of material having the required flexibility and strength—as, 75 for instance, wire—and so bending and shaping the same as to produce therein at such a distance apart from each other as to receive the two tines or bifurcations of the hat-pin two apertures or openings  $\alpha$   $\alpha$ , each of sub- 80 stantially the same diameter as each of said tines, which apertures or openings are caused and surrounded by a helical winding of the said wire or strip of material composing my device, the said helical winding containing at 85 least two convolutions or turns of the wire, as shown, for instance, at b b, Fig. 1. The two extremities of the device c c are sharpened to a point in order to facilitate insertion. The convolutions or helices may be 90 produced in any convenient manner, as will be readily understood. Where a pin with enlarged terminals is used, it is often convenient to construct the helices by winding the wire at least twice around each tine or 95 arm of the pin.

My device is applied as shown in Fig. 4. Though not so shown in Fig. 4, the pin is preferably first associated with the device as shown in Fig. 3. Then the points c c are 100 thrust from the under side of the brim upward and through the same in close proxim-

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ity to the side of the hat and are carried through until the helices b b, containing the apertures, are brought into contact with the under side of the brim. The points are then 5 readily bent, preferably away from each other, as shown in Fig. 4, thus preventing the withdrawal of the device, and thus adjusting and holding the apertures a a down to the particular degree of constriction required. The 10 hat-pin is thus fastened to the hat. The device being constructed of slender wire is inconspicuous and in many cases substantially invisible. Nevertheless it is, by reason of its peculiar construction, possessed of great strength. 15 It may be removed as readily as secured, the material out of which it is constructed being flexible and the removal readily accomplished by lifting the points c c from their position as illustrated in Fig. 4 into the original posi-20 tion of parallelism illustrated in Fig. 1, and then merely withdrawing the device from the brim. By reason of the convoluted arrangement of the wire around the hat pin it will be observed that the size of the apertures a a25 may be readily diminished at will by tightening the convolutions, and thus adjustment may be effected between the apertures and the shank of the hat-pin, so as to cause the latter to be grasped as tightly as may be de-30 sired, thus increasing in many cases desirably the friction between the parts and tending to assist in the retention of the hat-pin in the desired position. The securing of the requisite adjustment and constriction is fa-35 cilitated and the same rendered substantially permanent by the bending away from each other into the final position, as described, and shown in Fig. 4, of the two points cc. I have found that two convolutions in each of the heli-40 cessurrounding the pin in order to produce the apertures aforesaid are essential in order to secure the beneficial qualities and results hereinabove pointed out, a single turn or convolution being insufficient and inopera-45 tive. It will of course be understood that the number of convolutions in each helix may be increased, if desired, and in some cases with I

beneficial effect, without departing from my invention.

The operation of the double helix or double 50 convolution is radically different relatively to the grasp thereof upon the prongs of the pin as compared to the operation of the single helix or convolution of the wire fastening device. In the case of a single turn or con- 55 volution around the prong lateral strain upon the latter repeatedly exerted in different directions tends to open the turns of the wire and to shift the position of the parts relatively to each other, whereby an undesirably 60 loose grip is obtained. On the other hand, the same lateral movements of the prong within the double convolutions of the wire, the extremities of the latter being substantially secured in position, operate to tighten 65 proportionately to the extent and number of such lateral movements the grasp of the wire upon the prong, this being because under the conditions described transverse or lateral movement of the object held in the grasp of 70 the two helices inevitably results in tightening around the object the complete or central helix as the half-helices on each side thereof are actuated by such strain.

What I claim as new, and desire to secure 75

by Letters Patent, is—

1. A hat-fastener comprising a pin having two prongs and in combination therewith a fastening member composed of continuous flexible wire connecting said prongs and 80 wound in a double helix around each of them, said helix comprising both a guiding and a grasping coil as set forth.

2. A hat-fastener comprising a pin having two prongs and in combination therewith a 85 fastening member composed of continuous flexible wire sharpened at both ends connecting said prongs and wound in a double helix around each of them, said helix comprising both a guiding and a grasping coil as set forth. 90

WILLIAM A. CALLANAN.

Witnesses:

PHILIP C. PECK, GEO. G. MEASURES.