

No. 794,571.

PATENTED JULY 11, 1905.

P. A. VIERSEN.
BROOCH PIN FASTENING.
APPLICATION FILED SEPT. 12, 1904.

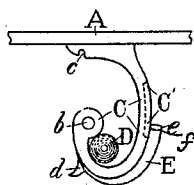


Fig. 1.

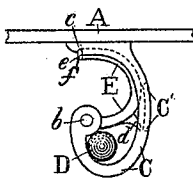


Fig. 2.

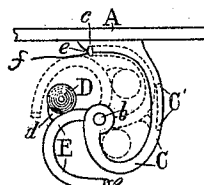


Fig. 3.

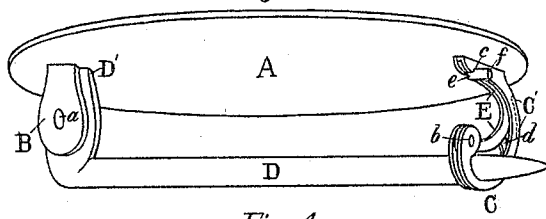


Fig. 4.

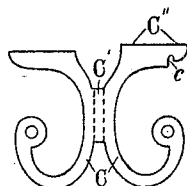


Fig. 6.

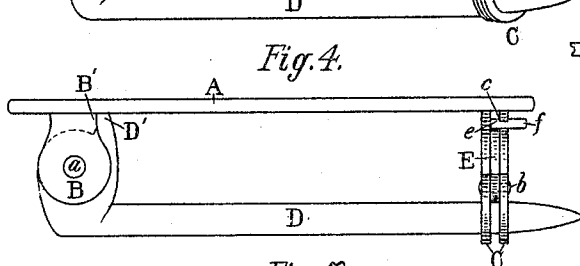


Fig. 5.

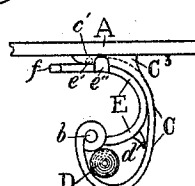


Fig. 7.



Fig. 8.



Fig. 9.



Fig. 10.

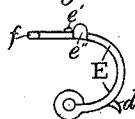


Fig. 13.

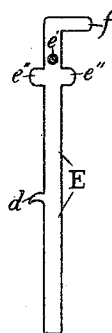


Fig. 11.

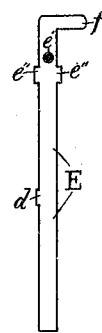


Fig. 12.

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PAUL A. VIERSEN, OF SIOUX CITY, IOWA.

BROOCH-PIN FASTENING.

SPECIFICATION forming part of Letters Patent No. 794,571, dated July 11, 1905.

Application filed September 12, 1904. Serial No. 224,088.

To all whom it may concern:

Be it known that I, PAUL A. VIERSEN, a citizen of the United States, residing at Sioux City, in the county of Woodbury and State of Iowa, have invented new and useful Improvements in Brooch-Pin Fastenings, of which the following is a specification.

The objects of my invention are to make a brooch-pin fastening which shall be secure, simple in construction and operation, and which shall have the other advantages incidental to the invention hereinafter described.

It is another object of my invention to provide means by which the normal operation of fastening the brooch when the pin is in its proper position shall also automatically catch and sheath the pin and then fasten the same even when the wearer has unwittingly failed to hook the same in its sheath.

In the accompanying drawings, Figure 1 is an end elevation of my improved fastening, showing the pin sheathed and the fastening open. Fig. 2 is the same closed. Fig. 3 is the same, showing successive positions during the closing. Fig. 4 is a perspective view of the entire brooch, showing the fastening closed. Fig. 5 is a side elevation of the same. Fig. 6 shows a form of blank from which may be made the part C, hereinafter described. Fig. 7 shows, in end elevation, a modified form of my fastening. Figs. 8, 9, and 10 show a blank and the successive folding positions of another form of the part C. Figs. 11, 12, and 13 show a blank and the successive folding positions of one form of the part E hereinafter described.

Referring to the drawings, A represents the brooch-plate or other mount to which the pin is affixed; B, the hinge of the pin, with its pivot *a*; C, the hook arranged to catch and sheath the end of the pin, and D the pin itself, which preferably is made of an elastic or resilient material and has a flange D', adapted to bear against the plate A when the pin is nearly closed to prevent further motion of the pin around the pivot *a*. Further depression of the point of the pin D in order to sheath it in the hook C is accomplished by springing the pin, and when thus sprung into

the hook the resilience of the pin causes it to press outwardly against the crown of the hook, and it is thus normally restrained. My device relates to means for introducing the pin into this position and for locking it there even should the resilience of the spring be absent or be overcome by some means before the wearer intends to remove the pin.

The hook C is soldered or otherwise made fast to the plate A and may be of any ordinary or suitable construction. At the point or toe of the hook is a pivot *b*, on which swings a lever E, which forms a safety-fastening for the pin. This lever is preferably made in a curved shape suitable to fit the inside curve of hook C, as indicated in Figs. 2 and 7, leaving a space for the pin D to rest between it and the crown of the hook C. Means are provided to lock the lever E in this position. In the form of fastening illustrated in Fig. 2 this consists of a notch *c* in the base of the hook C, Figs. 1, 2, 3, and 6, adapted to receive a latch *e*, projecting from the lever E, and the said lever E is made of an elastic material or is pressed inward by elasticity of the hook C, so that when closed, as indicated in Fig. 2, the latch *e* will spring into the notch *c* and be held there until released by the wearer. To conveniently effect the release of the latch, a projection *f* is provided as an extension of the latch, as in Figs. 1, 2, 3, 4, and 5, or adjacent thereto on the lever E, as in Figs. 7 and 13, which the wearer may depress with the finger-nail, and thus unlock the lever. The lever E carries a reversely-curved spur *d* so situated and arranged that when the lever E is locked and the pin is in place the pin will be completely encircled by metal composed of the crown of the hook C, the hinge and shank of the lever E, and the spur *d*, as clearly shown in Figs. 2, 3, 4, and 7. When in this position the pin normally presses outward on the crown of the hook C because of its own elasticity; but if such elasticity should be absent or the pin should become bent or if accidentally it should be pressed toward the base of the hook C while being worn the safety-lever E will prevent the pin's escape from the sheath, for the lever, its spur *d*, and its latch *e* are so arranged

with respect to the pivot *b* of the lever that any tendency of the pin to move away from the crown of the hook serves only to hold the lever *E* tightly fastened in its lock *e* and *c*.

5 The practical advantage of this is manifest, in that the pin cannot be released by pressure away from the crown of the hook until some outside force has first grasped the projection *f*, which lies in a protected position
10 close under the plate *A*, and moved it toward the crown of the hook to release the lock, thus unfastening the lever *E*, after which the pin may be unsheathed in the ordinary way.

A further feature of my invention is illustrated in Fig. 3. Assume that the wearer of the pin has inadvertently failed to sheath the pin in the hook *C*. In that case if the pin were provided with no sort of locking device it would remain unhooked and liable to be
20 lost, while even if provided with a locking device of some other sort than that here described it might happen that the wearer would clasp the said locking device in the habitual manner, ignorant that the pin was not
25 in place and not locked thereby, and the pin might thus likewise remain unhooked. In the device here described the spur *d* serves the further function of engaging the loose though supposedly fastened pin *D* while still
30 outside the hook at the position shown in full lines in Fig. 3, and then as the wearer proceeds with the habitual motion to turn said fastening-lever *E* into place said lever automatically conveys and shifts the pin into the
35 interior of the hook *C* and then fastens it there, as before described. Fig. 3 shows the successive positions of this operation.

The separate parts of the device may be designed and constructed in various ways, and
40 the patent is not to be limited to the specific forms and constructions here shown, but is to include equivalents also. Thus while in Figs. 1 to 6 I show a latch and notch fastening in the remaining figures I show a fastening consisting of a small hole *c'*, into which a
45 projection *e'* in the lever *E* fits. So, also, I show two forms of constructing the hook *C*, that shown in Fig. 4 being made from a blank stamped in the form shown in Fig. 6. In
50 that figure the two halves are to be folded together, leaving the metal *C'* between them, and the part *C''* folds down also between them, thus giving a wide base for attachment to the plate *A*. The form shown in Fig. 7 is
55 made from a blank shaped as shown in Fig.

8, folded, as indicated in Fig. 9, into the final form shown in Fig. 10. The portion *C³* is cut obliquely in the blank, Fig. 8, in order when folded to furnish a longer base for attachment to the plate *A*, as shown in Fig. 10. In
60 Figs. 11, 12, and 13 I show the blank and manner of folding for forming the lever *E* shown in Fig. 7. This is provided with ears *e''*, which serve as guides to center its locking end with respect to the base of hook *C*. 65

What I claim is—

1. In a brooch-pin fastening the combination of a hook-catch for the pin with a lever pivoted at the point of the hook and having
its loose end adapted to be fastened to the
70 base of the hook, thereby to inclose and lock the pin within the crown of the hook.

2. In a brooch-pin fastening the combination of a hook-catch for the pin with a lever pivoted at the point of the hook, shaped and
75 adapted to engage the pin outside the hook and convey the same into the hook; and means to lock the lever in its closed position.

3. In a brooch-pin fastening the combination of a hook-catch for the pin with a lever
80 pivoted at the point of the hook, the lever being curved similarly to the hook; a reversely-curved spur on the lever arranged to engage the pin outside the hook and convey the same into the hook; and means to lock the lever in
85 its closed position.

4. In a brooch-pin fastening the combination with a hook-catch for the pin of a lever pivoted at the point of the hook, the lever being
90 arranged also to engage the base of the hook; and a spring-latch at the base arranged to lock said lever and base together.

5. In a brooch-pin fastening the combination with a hook-catch for the pin of a lever pivoted at the point of the hook, the lever being
95 arranged also to engage the base of the hook; a spring-latch at the base to lock said lever and base together, the whole arranged with the crown of the hook projecting outwardly from the under side of the brooch and
100 with the releasing movement of the latch also directed outwardly therefrom and toward said crown.

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

PAUL A. VIERSEN.

Witnesses:

F. H. BEAMER,
J. W. HUBBARD.