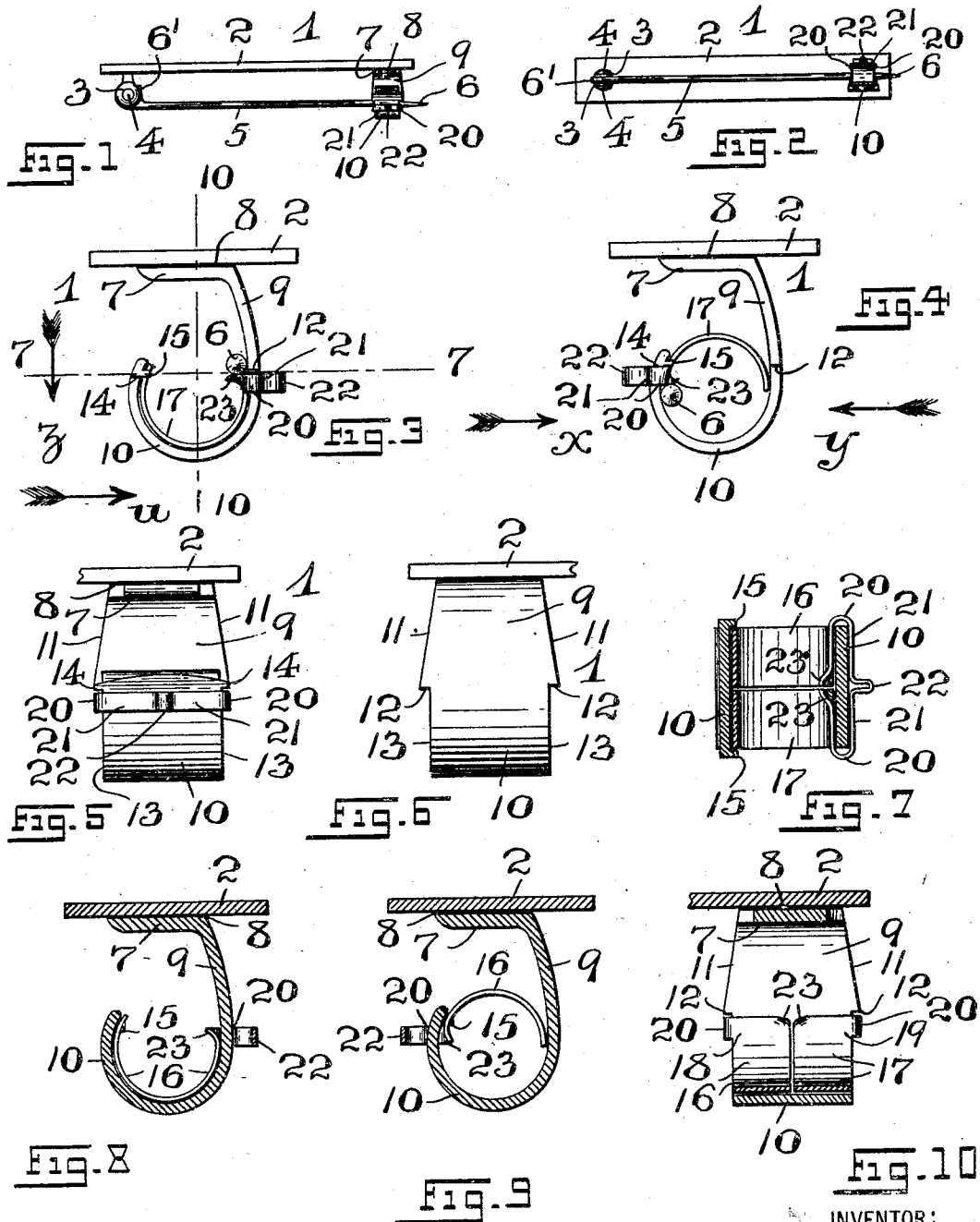


J. V. CHRISTL.
SAFETY CATCH FOR JEWELRY.
APPLICATION FILED MAR. 8, 1909.

937,988.

Patented Oct. 26, 1909.

2 SHEETS—SHEET 1.



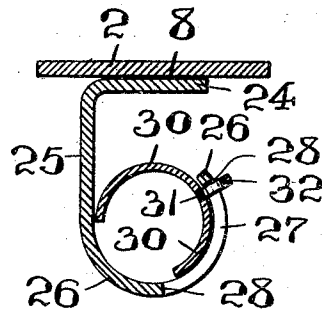
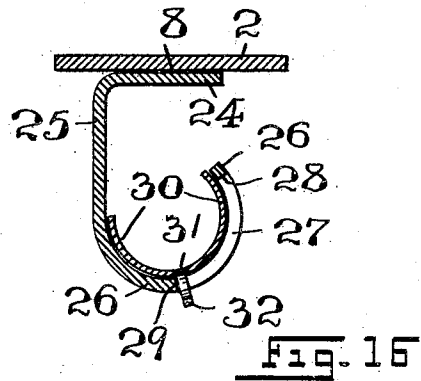
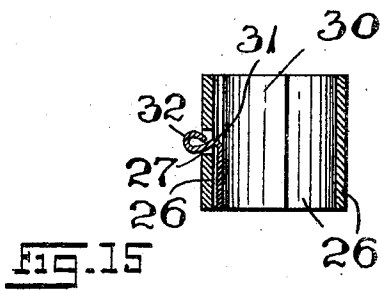
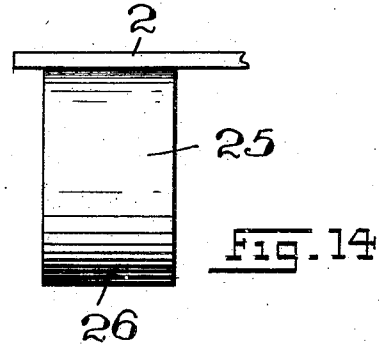
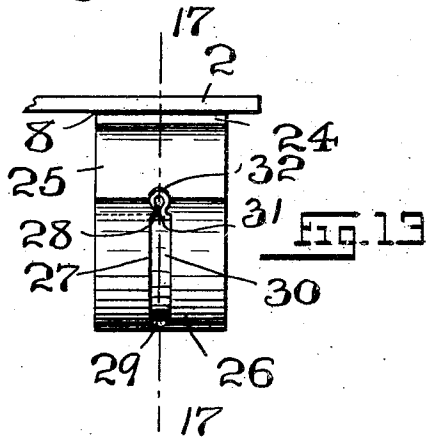
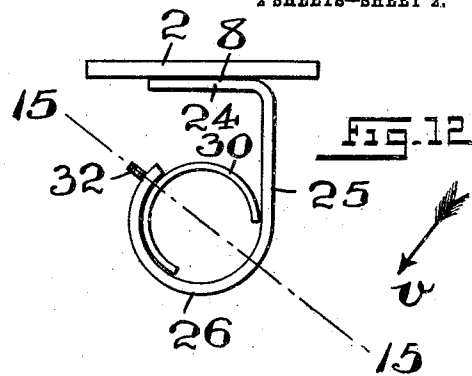
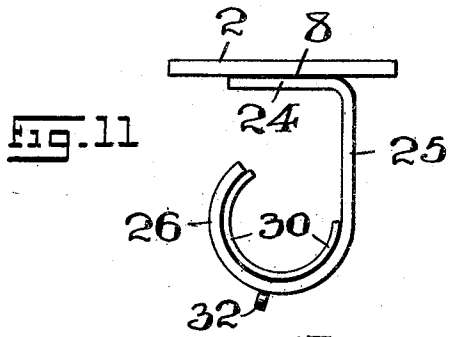
WITNESSES:
Fredk H. W. Fraentzel
Anna H. Alter

INVENTOR:
Joseph V. Christl,
BY
Fraentzel and Richards,
ATTORNEYS

J. V. CHRISTL.
SAFETY CATCH FOR JEWELRY.
APPLICATION FILED MAR. 8, 1909.

937,988.

Patented Oct. 26, 1909.
2 SHEETS—SHEET 2.



WITNESSES:
Fredk. H. W. Fraentzel
Anna H. Alter

INVENTOR:
Joseph V. Christl
BY
Fraentzel and Richards
ATTORNEYS

UNITED STATES PATENT OFFICE.

JOSEPH V. CHRISTL, OF NEWARK, NEW JERSEY, ASSIGNOR TO TAYLOR & CO., INCORPORATED, OF NEWARK, NEW JERSEY, A CORPORATION OF NEW JERSEY.

SAFETY-CATCH FOR JEWELRY.

937,988.

Specification of Letters Patent.

Patented Oct. 26, 1909.

Application filed March 8, 1909. Serial No. 482,037.

To all whom it may concern:

Be it known that I, JOSEPH V. CHRISTL, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Safety-Catches for Jewelry; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to characters of reference marked thereon, which form a part of this specification.

This invention relates, generally, to improvements in safety-catches for brooches, chatelaines, breast-pins, badges, and other similar articles of jewelry; and, the present invention has reference, more particularly, to a novel form and construction of safety lock which is movably connected with the pin-receiving catch of the piece of jewelry, and is arranged in such a manner that the safety-lock may be manipulated by hand, or may be automatically operated by the closing action of the pointed end-portion of the pin when bringing said end-portion in its retaining or holding engagement with the receiving catch of the piece of jewelry.

The invention, therefore, has for its principal object to provide an improved piece of jewelry in the form of a brooch, breast-pin, chatelaine, badge, or the like, having a pin-receiving catch formed with a hook or arc-shaped receiving end, and a safety-lock movably arranged within the said hook or arc-shaped receiving end of the pin-receiving catch, the safety-lock conforming to the general arc-shaped or cylindrical configuration of the said pin-receiving end, so that in moving the safety-lock over the open space of the main catch, the said space is completely bridged over, resulting in a complete cylindrical or loop-shaped end-portion within which the pointed end-portion of the pin is safely retained against accidental or other disengagement from the pin-receiving catch, until the safety-lock is manipulated by the wearer of the piece of jewelry.

The invention has for its further object to provide a simple, cheap, neat and an easily operated safety-lock for the pin-receiving catches of jewelry, made principally as hereinafter more fully set forth, and the parts of the safety-lock being such that they can not

become inoperative, or the possibility of becoming inoperative being reduced to a minimum, while, if the safety-lock should by any means become inoperative, the removal of the pointed end-portion of the pin from the holding or retaining catch will not be interfered with.

Other objects of this invention not at this time more particularly mentioned will be clearly understood from the following detailed description of the same.

With the various objects of my present invention in view, the invention consists, primarily, in the novel safety-lock for the catches of jewelry of the various kinds; and, the invention consists, furthermore, in the novel arrangements and combinations of the various devices and parts, as well as in the details of the construction of the same, all of which will be hereinafter more fully described and then finally embodied in the clauses of the claims which are appended to and which form an essential part of this specification.

The invention is clearly illustrated in the accompanying drawings, in which:—

Figure 1 is a side elevation and Fig. 2 a back or rear view of a brooch, badge, or the like, provided with a safety-catch or lock for the pin thereof and made according to and embodying the principles of the present invention. Fig. 3 is an end view, on an enlarged scale, of the piece of jewelry and its pin-receiving catch or post, showing in connection therewith, and in elevation, one form of slidable safety-lock, the parts being represented in their open relation to receive the pointed end-portion of the pin, and said view showing in addition the position of said end-portion of the pin when used for automatically operating the safety-lock and closing the pin-receiving portion of the receiving catch or post. Fig. 4 is a similar view of the same parts, showing the safety-lock in its closed relation with the pin-receiving portion of the receiving catch or post. Fig. 5 is a face view of the said parts, looking in the direction of the arrow *x* in said Fig. 4; Fig. 6 is a face view of said parts, looking in the direction of the arrow *y* in said Fig. 4; and Fig. 7 is a horizontal section, taken on line 7—7 in Fig. 3, looking in the direction of the arrow *z*. Fig. 8 is a central longitudinal vertical section of the pin-receiving catch or post and the safety-lock,

the latter being represented in its open relation with the pin-receiving portion of the receiving catch or post; and Fig. 9 is a similar section of the same parts, showing the safety-lock in its closed relation to the main body of the receiving catch or post. Fig. 10 is a transverse section, taken on line 10—10, in Fig. 3, looking in the direction of the arrow *u* in said figure. Fig. 11 is an end view of a piece of jewelry and its pin-receiving catch or post, and an elevation of a sliding safety-lock of a slightly modified form of construction, but still embodying the principles of the present invention; and Fig. 12 is a similar view of the same parts showing this form of safety-lock in its closed relation with the pin-receiving portion of the receiving catch or post. Figs. 13 and 14 are a front and rear view, respectively, of the form of safety-catch represented in said Figs. 11 and 12; and Fig. 15 is a transverse section, taken on line 15—15 in Fig. 12, looking in the direction of the arrow *v*. Fig. 16 is a longitudinal central-vertical section of the parts represented in said Fig. 11; and Fig. 17 is a similar sectional representation of the parts of the safety-catch, said section being taken on line 17—17 in Fig. 13.

Similar characters of reference are employed in all of the above described views, to indicate corresponding parts.

Referring now to the said figures of the drawings, the reference-character 1 indicates a complete piece of jewelry, such as a breast-pin, badge, brooch, chatelaine, or the like, the same consisting of a suitable body or face-plate 2 which may be of any desirable marginal configuration, and may be provided with any suitable surface-ornamentation upon its face, as will be clearly evident. Suitably arranged and secured upon the back of the said body or face-plate 2 is any well-known form of pivoted support, as 3, which is provided with a pivot 4 upon which is pivotally arranged, in the usual manner the perforated end-portion 6' of a pin 5 formed with the pin-pointed end-portion 6, substantially as shown in Figs. 1 and 2 of the drawings. The lock-attachment for receiving and retaining the pointed end-portion of the pin in its closed relation to the said main body or said face-plate 2 comprises a pin-receiving catch or post which is provided with a foot or base-plate 7 secured upon the back or rear face of the said body 2 in any suitable manner, usually by means of solder, as 8. The said pin-receiving catch or post has a member or element 9 connected with or extending from said foot or base-plate 7, said member or element 9 terminating in a hook-shaped retaining end-portion 10, of a circular configuration, so as to form an open-sided hollow cylinder, substantially as illustrated in the several figures of the drawings. From an inspection, more par-

ticularly of Figs. 5 and 6 of the drawings, it will be seen that the marginal edge-portions 11 of the member or element 9 may be tapered, as shown, and the said marginal edges 11 terminate in suitable off-sets 12 forming stops for the purposes to be presently more fully set forth. At the free ends of the marginal edge-portions 13 of the said hook-shaped retaining end-portion 10 are suitable offsets 14, forming stops. Extending in inward directions from said portions 14, directly above each stop provided by said portions 14, are retaining guides or fingers 15 for slidably retaining the safety-lock or closing member to be presently more fully described in its slidable and operative relation to and within the hook-shaped retaining end-portion 10 of the pin-receiving catch or post. This safety-lock or closing member, as shown in Figs. 1 to 10 inclusive, consists essentially of a pair of curved plate-like members or elements 16 and 17 which are cylindrically curved so as to conform to and fit into the inner contour or barrel of the previously mentioned hook-shaped retaining end-portion 10, as clearly shown. Extending laterally from the opposite outer marginal edges of the said curved plate-like members or elements 16 and 17 are portions 18 and 19, said portions being bent in a loop-shaped manner, as at 20, which embrace the marginal edge-portions 13, and are adapted to move between the stops 12 and 14, substantially as shown in Figs. 3, 4, 5, 7 and 10 of the drawings. Connected with and extending from the said loop-shaped portions 20 are strap-like parts or elements 21 which are connected by means of an outwardly projecting and suitably bent portion 22 which provides a fingerpiece for producing the slidable movements of the said curved plate-like members or elements 16 and 17. From an inspection more particularly from Fig. 7 of the drawings, it will be clearly evident, that the said elements or members 16 and the parts forming the loop-shaped members 20, the straps 21, and the fingerpiece 22, are preferably formed in one integral piece, and that the said members or elements 16 are slidably retained in the said hook-shaped retaining end-portion 10 by means of the said loop-shaped portions 20 and the straps 21 and the said previously mentioned guides 15, which guides or fingers 15 also prevent any lateral spreading of the elements or members 16 and 20 in opposite directions, as will be clearly evident from an inspection of the several figures of the drawings. As clearly shown, the said curved plate-like elements or members 16 and 17 may also be provided at their upper marginal edge-portions with projections or inwardly extending parts 23, the purpose of which will be more presently fully set forth.

Having thus in a general way described

and set forth one construction and arrangement of safety-catch for locking the pin of a breast-pin, badge, brooch, ear-ring, or the like, made according to and embodying the principles of the present invention, I will now describe the manner of its operation.

Suppose by means of the fingerpiece 22, the safety-lock, comprising the members or elements 16 and 17, has been moved within the hook-shaped retaining end-portion 10 against the stops 12, so as to bring the parts into their relative positions indicated in Figs. 3 and 8 of the drawings. Having forced the pin of a piece of jewelry through the fabric upon which the said piece of jewelry is to be worn, the pin-pointed end-portion of the said pin is forced over and into the open space of the hook-shaped retaining end-portion 10, and against the inner surface of the member or element 9, until the end-portion of the pin rests directly upon the previously mentioned projections 23 of the curved plate-like members or elements 16 and 17, as clearly shown in said Fig. 3 of the drawings. By applying a downward pressure upon the body-portion of the pin 5, that part of the pin which rests upon the said projections 23 will cause the safety-lock to be slid upon the inner surface of the hook-shaped retaining end-portion 10, until the loop-shaped portions 20 are brought against the stops 14, whereby the safety lock assumes the position indicated in Figs. 4 and 9 of the drawings and serves as a means for closing the gap or open space directly above the hook-shaped retaining end-portion 10, with the end-portion of the pin 5 retained within the said hook-shaped retaining end-portion and the closing means formed by the safety lock, against any displacement therefrom, until the safety-lock is again moved by means of the fingerpiece 22 into its former position indicated in Figs. 3 and 8 of the drawings.

It will be understood that instead of moving the safety-lock by means of the pressure applied directly to the pin 5 and against the projections or lugs 23 of the plate-like members or elements 16 and 17, the said parts can be moved from their normally opened positions into their closed positions by the manual operation of the fingerpiece 22, as will be clearly understood.

In Figs. 11 to 17 inclusive, I have shown a slightly modified construction of safety-catch and safety lock therefor made according to and embodying the principles of the present invention. In said figures of the drawings, the reference-character 24 represents a suitable foot or base-plate secured upon the back or rear face of the body 2 in any suitable manner, preferably by means of the solder 8, in the manner of the construction set forth in the above, and as shown in Figs. 1 to 10 inclusive.

Connected with and extending from the foot or base-plate 24 is a member or element 25, said element or member 25 terminating in a suitable hook-shaped end-portion 26 of the general shape and configuration of the hook-shaped retaining end-portion 10 described in connection with the construction shown in Figs. 1 to 10 inclusive. The said hook-shaped retaining end-portion 26 is provided with a slot 27 forming suitable stops 28 and 29, as clearly shown. The safety-lock which is slidably arranged within the said hook-shaped retaining end-portion 26 is made in the form of a suitably curved plate-like member or element indicated by the reference-character 30, the said member or element 30 having a portion of its metal body cut so as to provide a suitable tongue 31 which is passed through the slot or opening 27 and then bent or doubled upon itself, so as to form a loop-shaped finger-piece 32. By means of this finger-piece 32, the safety-lock 30 can be moved back and forth within the hook-shaped retaining end-portion 26 of the pin-receiving catch or post, the movement of the safety-lock being limited by the length of the slot or opening 27, and the safety catch can be moved from its open relation with the said hook-shaped retaining end-portion 26, shown in Figs. 11 and 16, by means of this fingerpiece 32, into its closed relation with the said hook-shaped retaining end-portion, as clearly indicated in Figs. 12 and 17 of the drawings, to securely retain the pin-pointed end-portion of the pin within the hook-shaped retaining end-portion of the pin-receiving or holding catch or post of the piece of jewelry, in substantially the same manner as hereinabove described.

From the above description it will be clearly evident, that I have devised a simple and cheap, as well as an operative construction for the purposes hereinabove set forth; and, a safety-catch is provided which can be put to various uses for locking or retaining the pin of a breast-pin, badge, or a brooch, or of ear-rings, in a closed position against accidental displacement. It will also be evident that the construction of safety catch herein described may be put to other uses.

I claim:—

1. In an article of jewelry, as a breast-pin, brooch, badge, or the like, the combination with the fastening-pin, of a pin-receiving post, said post being provided with a hook-shaped retaining end-portion, in the form of a part of a hollow cylinder, a correspondingly formed and concentric closing member slidably arranged within said hook-shaped retaining end-portion, loop-shaped portions connected with said closing-member, said loop-shaped portions embracing the marginal edges of said hook-shaped retaining end-portion, and a strap-like element

upon the outside of said hook-shaped retaining portion connecting said loop-shaped portions.

2. In an article of jewelry, as a breast-pin, brooch, badge, or the like, the combination with the fastening-pin, of a pin-receiving post, said post being provided with a hook-shaped retaining end-portion, a closing member slidably arranged within said hook-shaped retaining end-portion, loop-shaped portions connected with said closing member, said loop-shaped portions embracing the marginal edges of said hook-shaped retaining end-portion, and a strap-like element upon the outside of said hook-shaped retaining portion connecting said loop-shaped portions, the said hook-shaped retaining end-portion being provided upon its marginal edges with stops with which the loop-shaped portions of said closing member are adapted to be brought in engagement so as to limit the movements of said closing member.

3. In an article of jewelry, as a breast-pin, brooch, badge, or the like, the combination with a fastening-pin, of a pin-receiving post, said post being provided with a hook-shaped retaining end-portion, and inwardly projecting fingers forming guides, a closing member comprising a pair of plate-like elements slidably arranged within said hook-shaped retaining end-portion and between the guides thereof, a loop-shaped portion connected with each plate-like element, said loop-shaped

portions embracing the marginal edges of said hook-shaped retaining end-portion, and a strap-like element connecting said loop-shaped portions.

4. In an article of jewelry, as a breast-pin, brooch, badge, or the like, the combination with a fastening-pin, of a pin-receiving post, said post being provided with a hook-shaped retaining end-portion, and inwardly projecting fingers forming guides, a closing member comprising a pair of plate-like elements slidably arranged within said hook-shaped retaining end-portion and between the guides thereof, a loop-shaped portion connected with each plate-like element, said loop-shaped portions embracing the marginal edges of said hook-shaped retaining end-portion, and a strap-like element connecting said loop-shaped portions, the said hook-shaped retaining end-portion being provided upon its marginal edges with stops with which the loop-shaped portions of said closing member are adapted to be brought in engagement so as to limit the movements of said closing member.

In testimony that I claim the invention set forth above I have hereunto set my hand this fourth day of March, 1909.

JOSEPH V. CHRISTL.

Witnesses:

FREDK. C. FRAENTZEL,

FREDK. H. W. FRAENTZEL.