C. G. KING.

BROOCH.

APPLICATION FILED OCT. 13, 1913.

1,255,890. Patented Feb. 12, 1918.

Fig. 1.

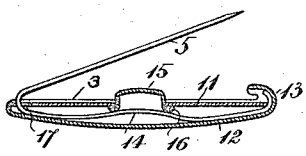



Fig. 2

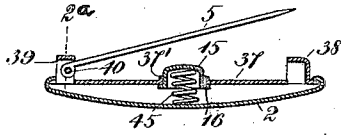



Fig. 2a




Fig. 4.

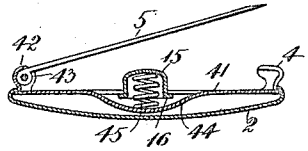



Fig. 3

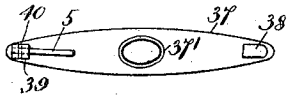



Fig. 5.

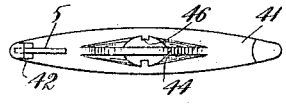



Fig. 8.

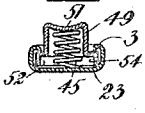



Fig. 6.

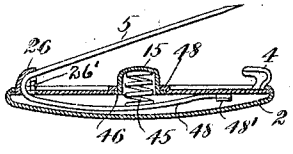



Fig. 7.

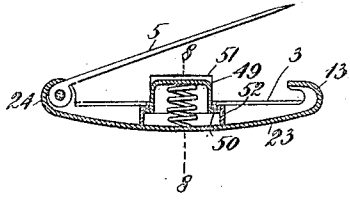
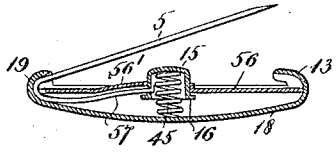



Fig. 9.




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Attys.

# UNITED STATES PATENT OFFICE.

CLIFFORD G. KING, OF PROVIDENCE, RHODE ISLAND.

## BROOCH.

1,255,890. Specification of Letters Patent. Patented Feb. 12, 1918.

Original application filed September 3, 1912, Serial No. 718,188. Divided and this application filed October 13, 1913. Serial No. 794,802.

*To all whom it may concern:*

Be it known that I, CLIFFORD G. KING, a citizen of the United States, and a resident of Providence, in the county of Providence and State of Rhode Island, have invented a new and useful Improvement in Brooches, of which the following is a specification.

My invention relates to brooches or similar pins and its object is to improve and simplify the construction thereof in the manner hereinafter set forth.

My invention will be described with reference to the accompanying drawings which show several specific embodiments thereof, while its scope will be more particularly pointed out in the appended claims.

In the drawings,—

Figure 1 is a longitudinal section of one embodiment of my improved pin or brooch. Fig. 2 is a longitudinal section of a modification. Fig. 2ª is a transverse section taken on the line 2ª of Fig. 2. Fig. 3 is a plan view of the back-plate shown in Fig. 2. Fig. 4 is a longitudinal section of another modification. Fig. 5 is a plan view of the back-plate shown in Fig. 4. Figs. 6 and 7 are longitudinal sections of further modifications. Fig. 8 is a transverse section taken on the line 8—8 of Fig. 7. Fig. 9 is a longitudinal section of still another modification.

In the particular drawings selected for more fully disclosing my invention, the back-plate 11 in Fig. 1 is secured to the front-plate 12, provided with the integral pin-tongue keeper 13, in the usual way by rolling the edges 3 of the front-plate over the back-plate. The pin-tongue is formed of elastic material bent upon itself in the usual way and comprises an upper pointed arm 5 and an upwardly-bowed unpointed arm 14, the end of which may be held in position as shown between the back-plate and the keeper. The back-plate is provided with an opening for receiving the thimble 15, which rests on the lower arm 14 of the pin-tongue and is provided with a flange 16 held in contact with the back-plate by said lower arm. The bent portion of the pin-tongue passes through a slot 17 in the end of the back-plate so that when the pointed end of the pin-tongue is depressed, the bent portion will have movement with respect to the back-plate through said slot.

The thimble 15 performs the function of a spring-bridge and affords a relatively large bearing surface for the fabric through which the pointed end of the pin-tongue is inserted.

In Fig. 2, the keeper 38 and the hood 39 are both struck up from the back of the back-plate 37, and the pin is pivoted as shown at 40 to the hood. The back-plate is provided with an opening having a raised rim 37′ for receiving the thimble or cup-shaped bridge 15, and the flange 16 of the latter is held in contact against the back-plate by the spiral spring 45. The edges of the front-plate 2 are rolled over the edges of the back-plate to hold the latter in position.

In Fig 4, the back-plate 41 is provided with a keeper 4 and has an opening having inwardly-extending ears 46, which engage the flange 16 of the bridge 15. A strip 44 is bent down from the back-plate, as shown, to support the spiral spring 45, which holds the flange 16 in engagement with said ears. In order to assemble the device, the ears are bent upwardly at right angles to the back-plate, the bridge 15 inserted, and the ears then bent down to the plane of the back-plate. In the present instance, I have shown the pin pivoted at 43 to the trunnion 42, although it will be understood that any other suitable arrangement may be employed for associating the pin to the back-plate, such, for example, as shown in the other figures.

In Fig. 6, the rim 48 of the opening in the back-plate 47 is arranged to receive the flange 16 of the thimble bridge, so that the base of the latter will be flush with the back-plate. In this case, the spring 45, which holds the thimble bridge in position, may, as shown, rest against the lower arm 48, the forward end of which may be secured to the under side of the back-plate by the clip 48′. The hood 26, which may be formed by drawing up from the back-plate is provided with a lip 26′ which is folded over in front of the bent portion of the pin.

In Fig. 7, the thimble bridge 49 is shown in a slightly modified form. In this case the top thereof is depressed at 51 to receive the pin when the latter is closed, and the flange 50, which projects from the forward and rearward portions only of the bridge, engages the flange 54 of the cup 52. The rolled edges of the front-plate hold the cup in position, as clearly shown in Fig. 8. The

end of the pin may be flattened as shown and pivoted to the trunnions 24 integral with the front-plate.

In Fig. 9, which shows a further modification of the thimble bridge, the lower arm 57 of the pin tongue passes through an opening in the bridge, and that portion 56′ of the back-plate 56 which lies immediately above the outer end of the lower arm is bent upwardly so as to permit the free action of the arm. Here the front-plate 18 is provided with an integral hood 19 for inclosing the bent portion of the pin.

In the several examples of thimble pins which I have shown, the fabric is securely held between the pin-tongue and the thimble, and the pin or brooch is prevented from turning sidewise in the same way as when there is employed a spring bridge such as shown for instance in Fig. 2 of my application Ser. No. 718,188, filed September 3, 1912, of which the present application is a division.

I do not wish to limit myself to the specific details which I have illustrated herein, since these have been submitted for the purpose of more fully disclosing my invention and may be widely varied and altered within the scope of the appended claims without departing from the spirit of my invention.

I claim:

1. In a pin, a pin-tongue, a plate, a thimble having vertical movement with respect to said plate and adapted to coöperate with said pin-tongue, said thimble being independent of said plate and located approximately midway between the ends thereof, means for limiting the upward movement of said thimble, and spring means incased within said thimble for maintaining the same in pin-tongue-engaging position.

2. In a pin, a pin-tongue, a back-plate, a thimble having vertical movement with respect to said back-plate and adapted to coöperate with said pin-tongue, said thimble being independent of said back-plate and located approximately midway between the ends thereof, means for limiting the upward movement of said thimble, and spring means incased within said thimble for maintaining the same in pin-tongue-engaging position.

3. In a pin, a pin-tongue of spring material bent upon itself and comprising an upper and a lower arm, a back-plate and a thimble having vertical movement with respect to said back-plate and arranged to coöperate with both of said arms.

4. In a pin, a pin-tongue of spring material bent upon itself and comprising an upper and a lower arm, a back-plate, a thimble having vertical movement with respect to said back-plate and arranged to coöperate with both of said arms, and a resilient member interposed between said thimble and said lower arm.

5. In a pin, a pin-tongue, a plate, a thimble having vertical movement with respect to said plate and adapted to coöperate with said pin-tongue, said thimble being independent of said plate and located approximately midway between the ends thereof, means for limiting the upward movement of said thimble, and a spiral spring incased within said thimble for maintaining the same in pin-tongue-engaging position.

6. In a pin, a pin-tongue, a front-plate, a back-plate, a thimble independent of said plates, said thimble having vertical movement with respect to said plates and adapted to coöperate with said pin-tongue and spring means incased within said thimble for maintaining the same in pin-tongue-engaging position.

7. In a pin, a pin-tongue, a front-plate, a back-plate, a thimble independent of said plates, said thimble having vertical movement with respect to said plates and adapted to coöperate with said pin-tongue, and spring means located between said plates and incased within said thimble for maintaining the latter in pin-tongue-engaging position.

8. In a pin, a pin-tongue, a back-plate provided with a central aperture, a thimble independent of said plate and located in said aperture, said thimble being movable vertically with respect to said plate and having a flange arranged to coöperate with said back-plate for limiting its upward movement, and spring means incased within said thimble for maintaining the same in pin-tongue-engaging position.

In testimony whereof, I have hereunto subscribed my name this 3rd day of October, 1913.

CLIFFORD G. KING.

Witnesses:
JANE E. CLEGG,
ALFRED G. HOPPER.

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