Jan. 8, 1929. 1,698,335

C. G. KING

PIN

Filed Feb. 15, 1927

Fig. 1.

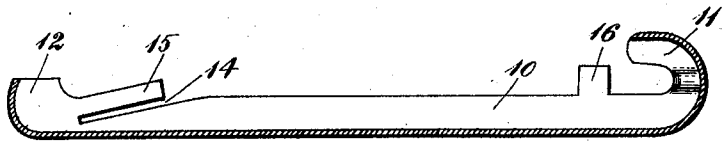



Fig. 2.

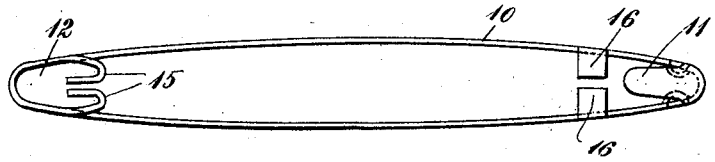



Fig. 3.

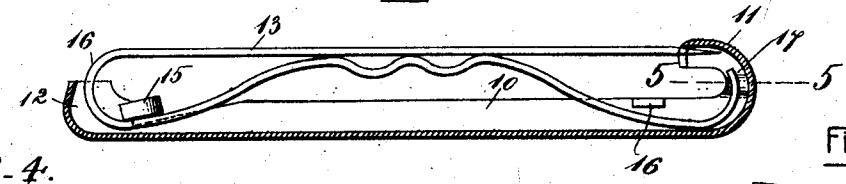



Fig. 4.

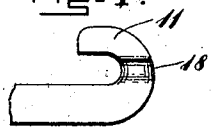



Fig. 5.

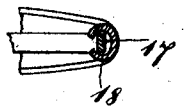



Fig. 6.

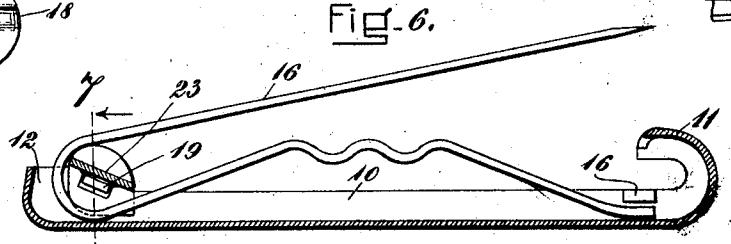



Fig. 8.

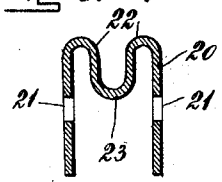



Fig. 7.

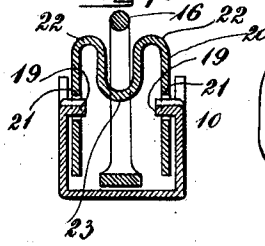
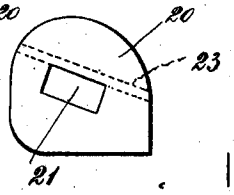



Fig. 9.




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# UNITED STATES PATENT OFFICE.

CLIFFORD G. KING, OF PROVIDENCE, RHODE ISLAND.

## PIN.

Application filed February 15, 1927. Serial No. 168,459.

The primary object of the present invention is to produce a pintleless pin having a pin-tongue that may readily be assembled with the front plate or back plate, as the case may be, and easily replaced by another in case it becomes damaged.

In the drawings accompanying and forming a part of this specification—

Figure 1 is a longitudinal section of a front plate or back plate of a pin in one stage of its construction;

Fig. 2 is a plan view showing the completed plate;

Fig. 3 is a longitudinal section of the completed pin;

Fig. 4 is a side view of the pin-point catch;

Fig. 5 is a section on the line 5—5 of Fig. 3;

Fig. 6 is a longitudinal section of a modification;

Fig. 7 is a transverse section on the line 7—7 of Fig. 6;

Fig. 8 is a transverse section of the spring clip; and

Fig. 9 is a side view of said clip.

In the particular drawings selected for more fully disclosing my invention, and which are to be taken as illustrative merely, and not as restrictive, 10 represents a metallic shell which may be used either as a front plate, or as a back plate, in which case an ornamental front plate, enamelled or otherwise, will be soldered thereto. One end of said shell terminates in the catch 11 for the pin point, and the other in the up-turned housing 12 for the bent portions of the pin-tongue 13, which is made of spring material bent upon itself and comprising an upper and lower arm. The sides of the shell 10 are slotted at 14, leaving oppositely-disposed tongues 15, and near the other end the sides of said shell are provided with a pair of lugs 16. The two tongues are then reversely bent, as shown in Fig. 2, to form a spring lock through which the bent portion 16 of the pin-tongue is slipped, the upturned end 17 of the lower arm of said pin-tongue being housed within the catch 11, but is relatively movable therein.

In the present instance the sides 18 of said catch are slightly compressed to movably retain the upstanding end 17 of the pin-tongue in position. After the pin-tongue has been placed as aforesaid in the plate 10, the lugs 16 are bent inwardly, as shown in Fig. 2.

In case the pin-tongue becomes damaged, it may readily be removed by spreading the tongues 15 and drawing the same through the opening therebetween.

In the modification shown in Fig. 6, two inwardly-directed lugs 19 are formed on the walls of the plate 10, and are constructed and arranged to cooperate with the spring clip 20 having two substantially parallel side pieces provided with perforations 21 having the same inclination as the lugs 19. The two parallel side pieces of the spring clip are connected by an inclined top-piece 22, the central portion 23 of which is deeply grooved and inclined with respect to the base of the plate 10 so that when the pin is closed, the portion thereof adjacent to the bent end will lie within said groove.

To assemble the pin, the pin-tongue is placed in position in the plate and the spring clip is snapped onto the lugs 19. In case the pin-tongue becomes damaged, it may readily be removed by compressing the sides of the spring clip, and then removing the same, whereupon the damaged pin-tongue is taken out and replaced by another, after which said spring clip is again snapped in position.

As will be readily apparent, the locking device at the hinge end of the pin shown in Fig. 3 may be used with the catch shown in Fig. 6, and the locking device shown in Fig. 6 may be used with the catch illustrated in Fig. 3.

It will be noted that in both forms of the present invention, the bent portion of the pin-tongue is flexibly secured to the plate at the end opposite the pin-point-retaining means, and the free end of the lower arm is also flexibly secured to said plate.

Having thus described illustrative embodiments of my invention without, however, limiting the same thereto, what I claim and desire to secure by Letters Patent is:—

1. A pin having a plate, a pin-tongue of spring material bent upon itself and comprising an upper and a lower arm, pin-point-retaining means at one end of said plate, and resilient means at the other end of said plate for removably securing said pin-tongue to said plate.

2. A pin having a plate, a pin-tongue of spring material bent upon itself and comprising an upper and a lower arm, pin-point-retaining means at one end of said plate and a spring-lock at the other end of said plate for removably securing said pin-tongue to said plate.

3. A pin having a trough-shaped plate, and a pin-tongue of spring material bent upon itself and comprising an upper and a lower arm, the upstanding edges of said plate being slotted near one end thereof and the tongues thereby formed being bent inwardly to form a spring-lock for removably securing said pin-tongue to said plate.

4. A pin having a plate, a pin-tongue of spring material bent upon itself and comprising an upper and a lower arm, and a spring-clip removably secured to said plate for locking said tongue to said plate.

5. A pin having a trough-shaped plate, a pin-tongue of spring material bent upon itself and comprising an upper and a lower arm, a spring clip for removably securing said pin-tongue to said plate, said spring-clip having two substantially-parallel side pieces provided with perforations, and lugs extending inwardly from the upstanding edges of said plate and arranged to take into said perforations.

In testimony whereof, I have hereunto subscribed my name this 11th day of February, 1927.

CLIFFORD G. KING.