

V. V. PITTMAN.

LOCK PIN.

APPLICATION FILED JULY 8, 1908.

913,560.

Patented Feb. 23, 1909.

Fig. 1.

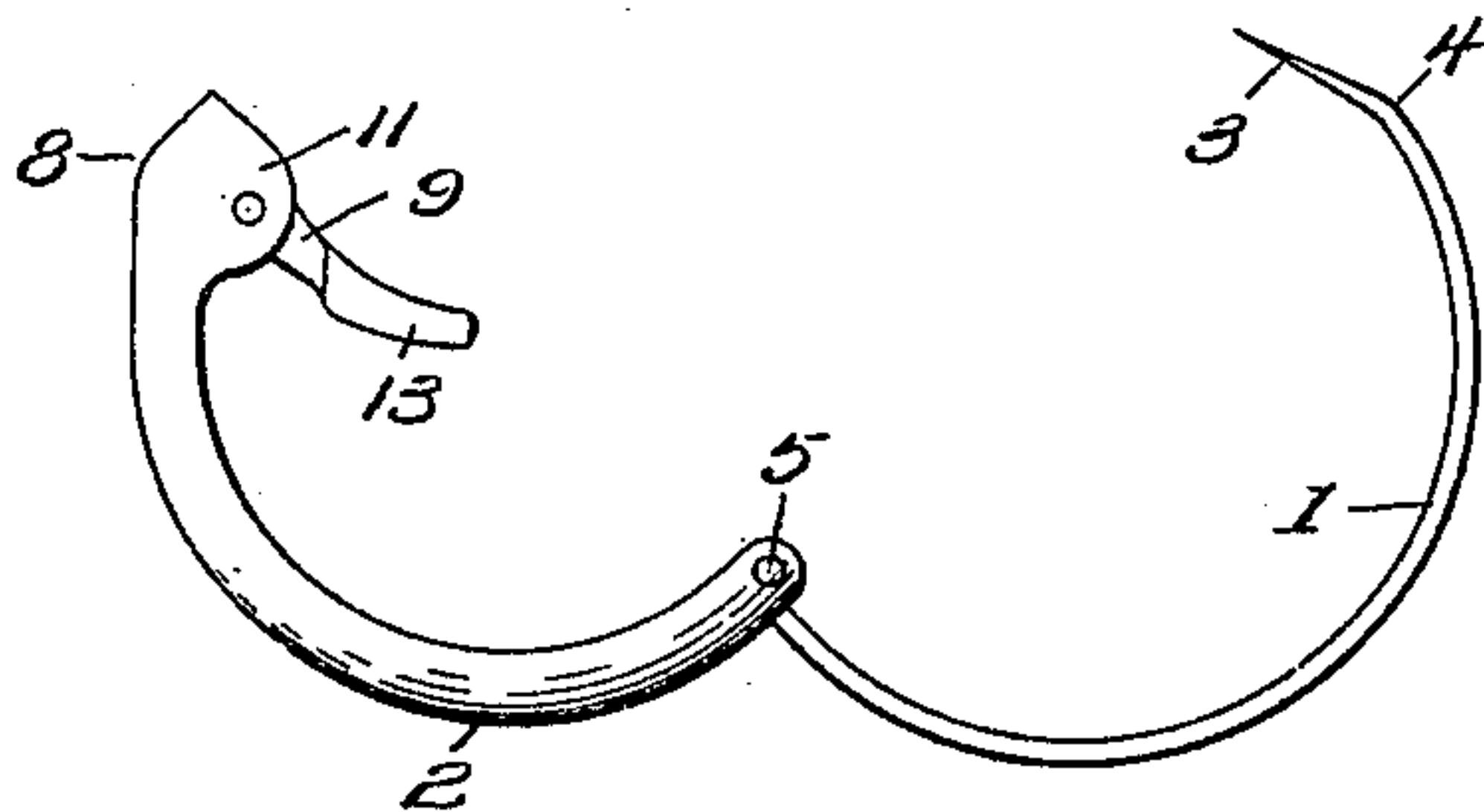


Fig. 2.

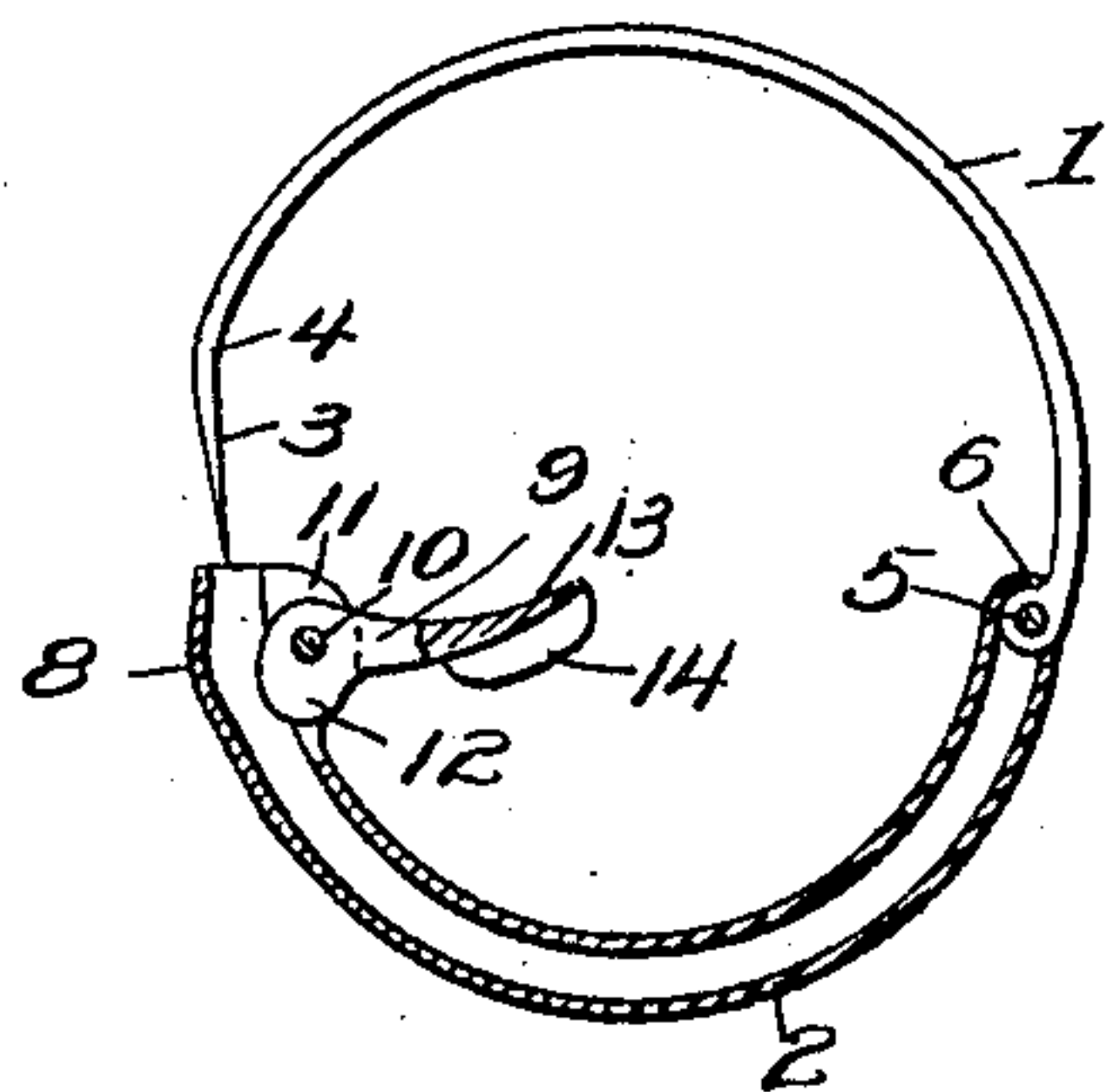


Fig. 3.

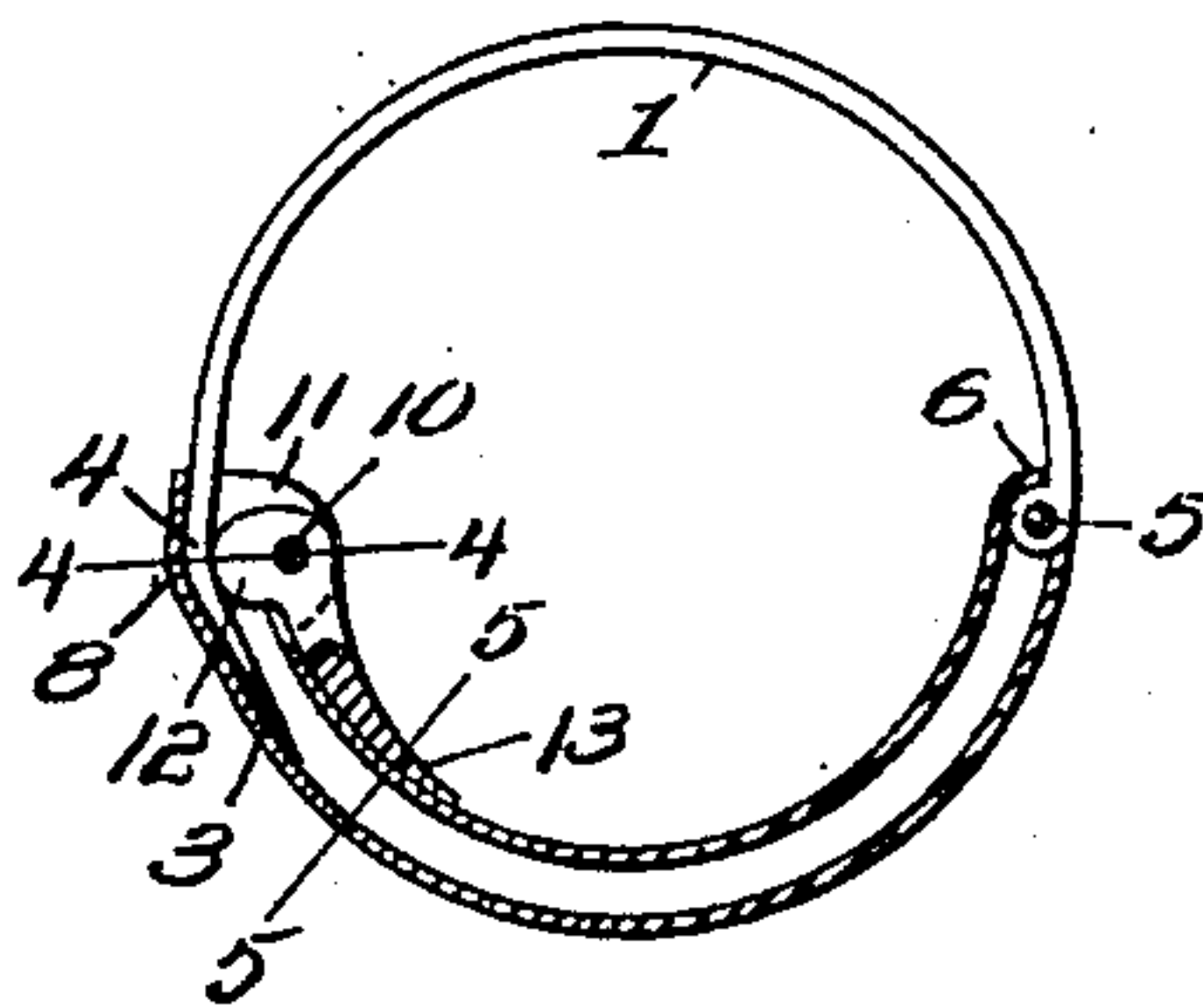


Fig. 4.

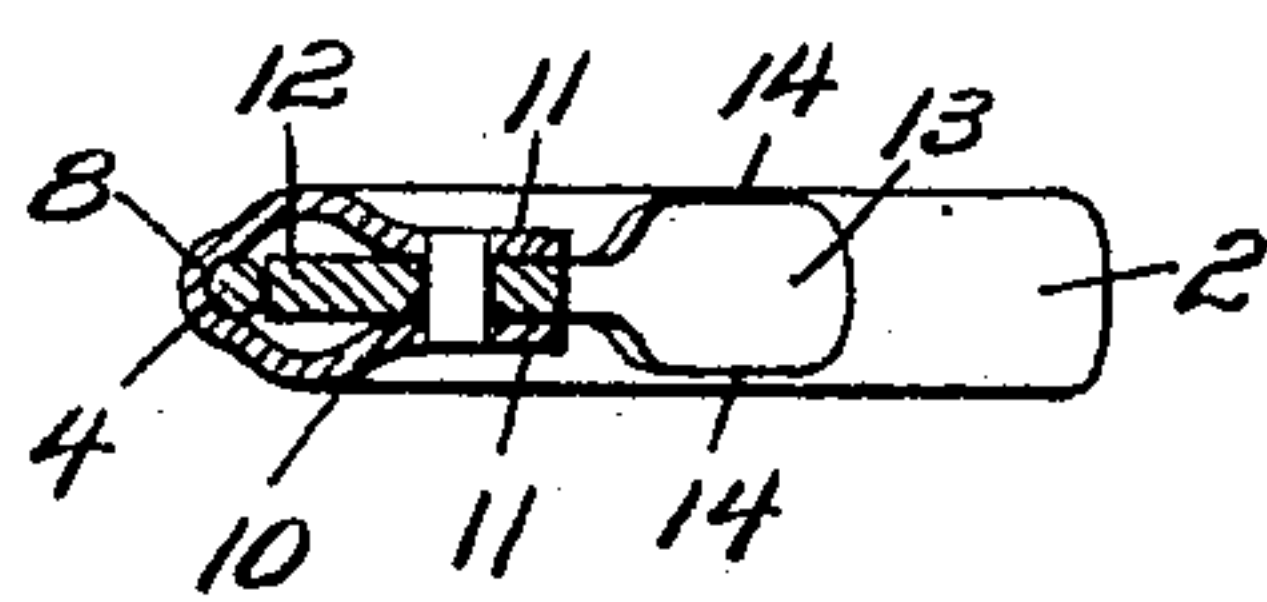


Fig. 5.

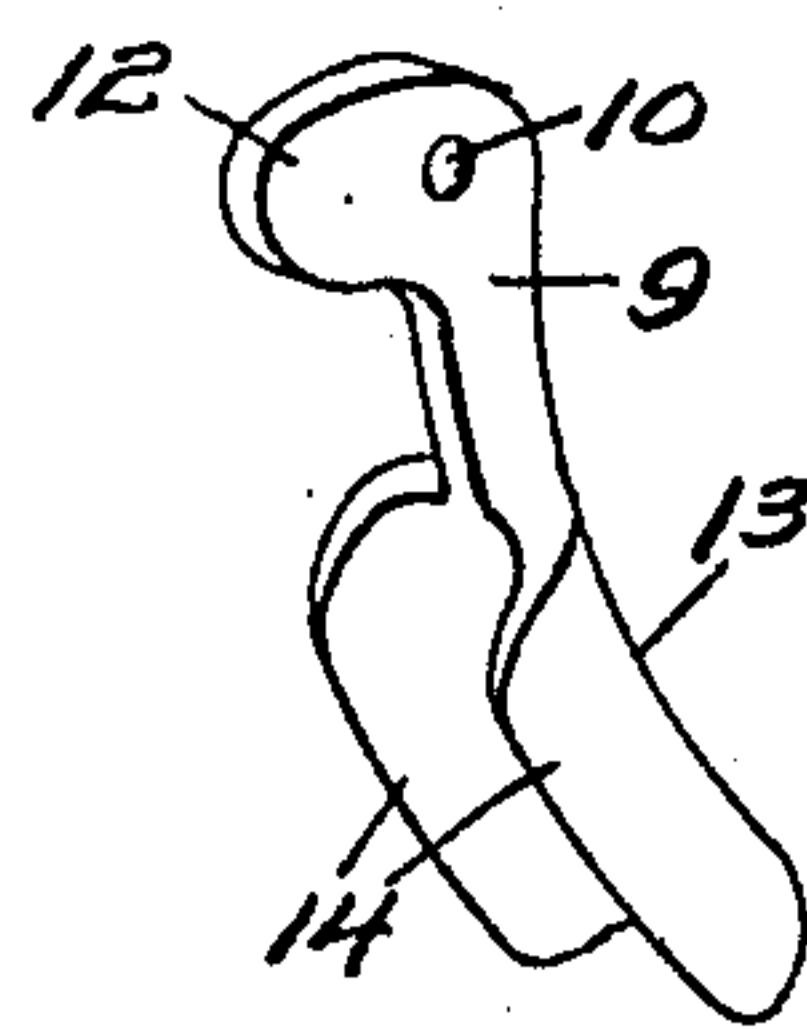


Fig. 6.

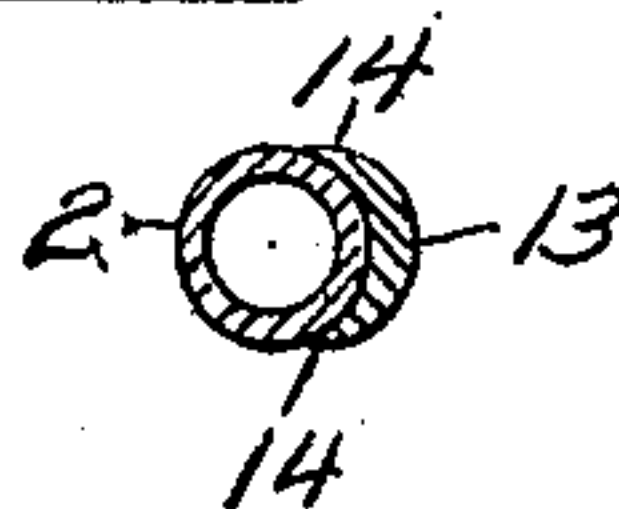
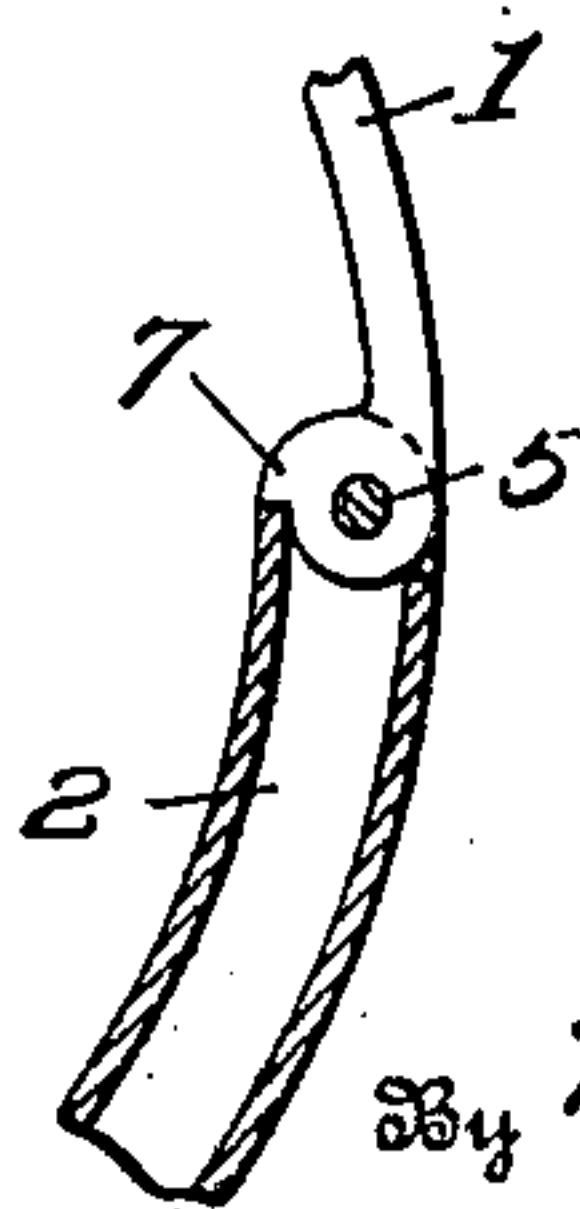


Fig. 7.



Witnesses

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UNITED STATES PATENT OFFICE.

VINCENT V. PITTMAN, OF SANTA CRUZ, CALIFORNIA.

LOCK-PIN.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, VINCENT V. PITTMAN, a citizen of the United States, residing at Santa Cruz, in the county of Santa Cruz and State of California, have invented new and useful Improvements in Lock-Pins, of which the following is a specification.

This invention relates to lock pins or pins of the safety type, the object of the invention being to produce a lock pin comprising two pivotally connected members one of which is circular and kinked or crimped near its free extremity while the other member embodies a tubular portion adapted to receive the extremity of the semi-circular member, combined with means for securely locking the free extremities of the two members together.

With the above and other objects in view, the nature of which will more fully appear as the description proceeds, the invention consists in the novel construction, combination and arrangement of parts as herein fully described, illustrated and claimed.

In the accompanying drawings:—Figure 1 is a plan view of a safety lock pin, embodying the present invention, shown open. Fig. 2 is a sectional view of the same shown partially closed. Fig. 3 is a similar view showing the pin entirely closed and locked. Fig. 4 is an enlarged detail cross section, taken through the lock joint, on the line 4—4 of Fig. 3. Fig. 5 is a detail cross section on the line 5—5 of Fig. 3. Fig. 6 is a detail perspective view of the clamp. Fig. 7 is a detail longitudinal section showing another manner of providing the shoulder adjacent to the pivotal joint of the two members.

The safety lock pin comprises two main members 1 and 2, the member 1 being substantially semi-circular and in the form of a solid pin having a pointed extremity 3 and provided adjacent to its point with a kink, crimp or bend 4. The other member 2 while shown in the preferred form as also substantially semi-circular, may be varied in shape without departing from the principle of the invention, it not being essential that the member 2 shall be exactly or even approximately semi-circular. The member 2 is hollow or tubular as shown thereby adapting the point of the member 1 to be inserted and received in the open end of the member 2 as indicated in Figs. 2 and 3. The two members are pivotally connected by a pin or rivet 5 and in order to limit the inward movement of the

members, a stop shoulder 6 may be formed either on a tubular member 2 as shown in Figs. 2 and 3 or said shoulder may be formed on the member 1 as shown at 7 in Fig. 7. 60

The receiving end of the member 2 is internally swaged in an outward direction to form an offset 8 adapted to receive a kink or crimp 4 of the member 1 as shown in Fig. 3 so that when the member 1 is inserted in the member 2, a frictional engagement will be established between the interfitting ends of the two members which will prevent their ready separation. 65

In order to securely lock the separable ends of the two members together, I provide a clamp 9 which is pivotally mounted at 10 between inwardly extending lugs or ears 11 on the member 2, said clamp being provided with a cam-shaped head or projection 12 adapted to bind against the concaved side of the crimp or kink 4 and prevent the withdrawal of the point of the member 1 from the member 2. The clamp also comprises an operating handle 13 which is curved to conform to the curvature of the member 2 and which is substantially semi-circular in cross section or provided with oppositely arranged curved wings 14 which closely embrace and fit against the inner side of the member 2. The wings 14 also provide convenient means for swinging the clamp inward from the position shown in Fig. 3 to the position shown in Fig. 2 to unlock the pin. 70 75 80 85

A safety pin constructed as herein described will be found very convenient to apply and remove and by providing the positive lock for securely holding together the separable ends of the two members, a perfectly reliable safety pin is produced. 90 95

I claim:—

1. A lock pin comprising two pivotally connected members one of which is semi-circular and kinked near its free extremity and the other of which embodies a tubular portion having a swaged offset to receive the said kinked extremity when the two members are moved endwise into engagement, and a cam-shaped clamp pivotally mounted on said tubular portion and adapted to operate against the kinked part of the other member. 100 105

2. A lock pin comprising two pivotally connected members one of which is semi-circular and kinked near its free extremity and the other of which embodies a tubular portion having a swaged offset to receive the said kinked extremity when the two mem- 110

bers are moved endwise into engagement,
and a cam-shaped clamp pivotally mounted
on said tubular portion and adapted to oper-
ate against the kinked part of the other mem-
5 ber, said clamp comprising a handle provided
with a semi-circular part which embraces
said tubular portion.

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

VINCENT V. PITTMAN.

Witnesses:

REXFORD M. SMITH,
JOHN L. FLETCHER.