

J. FORSHEIM & J. KONIGSBERG.
PIN RETAINER.
APPLICATION FILED JUNE 30, 1914.

1,153,615.

Patented Sept. 14, 1915.

Fig. 1.

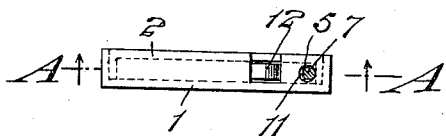


Fig. 2.

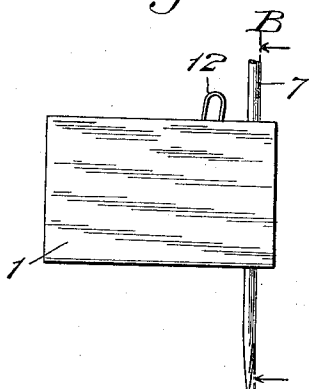


Fig. 4.

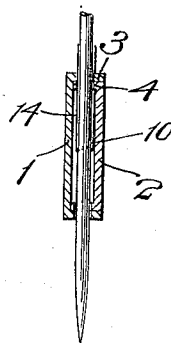


Fig. 3.

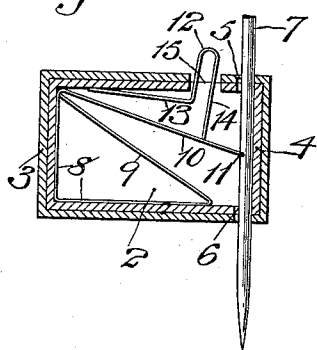
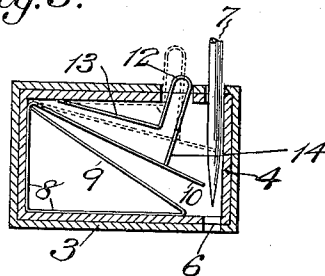


Fig. 5.



Witnesses:-
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UNITED STATES PATENT OFFICE.

JOSEPH FORSHEIM, OF GREAT NECK, AND JOSEPH KONIGSBERG, OF NEW YORK, N. Y.

PIN-RETAINER.

1,153,615.

Specification of Letters Patent.

Patented Sept. 14, 1915.

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To all whom it may concern:

Be it known that we, JOSEPH FORSHEIM and JOSEPH KONIGSBERG, citizens of the United States, and residents, respectively, of Great Neck, in the county of Nassau and State of New York, and of the borough of Manhattan, in the city and State of New York, have invented a new and useful Improvement in Pin-Retainers, of which the following is a specification.

The objects of our invention are to produce a very simple, effective, attractive and inexpensive retainer, in which no rivets, screws, or other fastening means are employed to hold the several parts in their assembled adjustment; said retainer being equally well adapted for use in connection with pins of various diameters; means being employed for insuring the ready attachment and separation of the pin and retainer.

A further object is to provide a retainer in which the insertion of the pin will automatically lock the several parts of the device in their proper relationship.

A practical embodiment of our invention is represented in the accompanying drawings, in which—

Figure 1 represents the retainer in top plan, the pin being shown in cross section, Fig. 2 is a front view of the retainer with the pin inserted therethrough, Fig. 3 is a section taken in the plane of the line A—A of Fig. 1, Fig. 4 is a section taken in the plane of the line B—B of Fig. 2, and Fig. 5 is a section taken in the plane of the line A—A of Fig. 1, with the pin released and partly withdrawn, the movable parts being shown in their normal position in dotted lines.

The retainer casing is herein shown as composed of two members 1 and 2 having their respective marginal walls 3 and 4 fitted and overlapping. The casing is herein shown as of rectangular form. Two opposite marginal walls of the casing have alined holes 5 and 6 through which a pin 7 may be inserted. When this pin is inserted through these alined holes 5 and 6, the two members 1 and 2 of the casing are automatically locked against separation.

A pin retaining element is located within the casing, which element comprises a flat wire bent to form an L-shaped portion 8, a diagonal portion 9 and a free portion 10. The L-shaped portion 8 and diagonal portion 9 of the retaining element serve as a tri-

angular brace for holding the element in position within the casing and for causing the free portion 10 to yield bodily at its junction with the triangular brace. The free end of this free portion 10 is preferably concave as shown at 11 where it engages the pin 7 for giving this portion 10 a more extended grip on the pin. This free portion 10 of the pin retaining element projects normally into the path of the pin and is forced out of its position by the insertion of the pin through the alined holes 5 and 6.

The attempted withdrawal of the pin will cause the portion 10 to swing back toward its normal position thus cramping the pin between the free end of said portion 10 of the pin retaining element and the inside of the marginal wall of the casing. These holes 5 and 6 are made sufficiently large to accommodate pins of various diameters in connection with which the pin retaining element 8, 9, 10, will operate with equal facility.

We provide a releasing element which comprises a flat wire bent to form a loop 12 having one arm 13 bent at right angles and engaging the inner side of the marginal wall of the casing and its other arm 14 engaging the yielding free portion 10 of the pin retaining element. This loop portion 12 projects exterior to the casing through a hole 15 in the marginal wall of the casing adjacent to the hole 5 and forms a finger-piece for swinging the free portion 10 of the pin retaining element away from its engagement with the pin 7 to permit the free withdrawal of the pin when so desired.

For permitting the ready assemblage of the parts, the portion of the hole 15 in the marginal wall 3 of the casing member 1 may open through the edge of the said wall, as shown clearly in Figs. 1, 3 and 5.

The peculiar construction of the pin retaining element 8, 9, 10, will cause the element to be held at all times in its position within the casing and will cause the portion 10 of the element to yield bodily at its junction with the triangular brace.

It is evident that slight changes may be resorted to in the form, construction and arrangement of the several parts, without departing from the spirit and scope of our invention; hence we do not wish to limit ourselves strictly to the structure herein set forth, but

What we claim is:—

1. A pin retainer comprising a rectangu-

lar casing having alined pin receiving holes through its marginal wall, and a pin retaining element located within the casing comprising a wire bent to form a triangular
5 brace with a free portion projecting into the path of the pin whereby the pin will be cramped between said portion and the inside of the marginal wall of said casing.

2. A pin retainer comprising a rectangular casing having alined pin receiving holes through its marginal wall, a pin retaining element located within the casing comprising a wire bent to form a triangular brace with a free portion projecting into the path
10 of the pin whereby the pin will be cramped between said portion and the inside of the marginal wall of said casing, and a releasing element projecting exterior to the casing.

3. A pin retainer comprising a rectangular casing having alined pin receiving holes through its marginal wall, a pin retaining element located within the casing comprising a wire bent to form a triangular brace with a free portion projecting into the path
15 of the pin whereby the pin will be cramped between said portion and the inside of the marginal wall of said casing, and a releasing element projecting exterior to the casing comprising a loop having one end engaging the marginal wall of the casing and its other end engaging the free portion of the pin retaining element.

4. A pin retainer comprising a rectangular casing having alined pin receiving holes through its marginal wall and a pin retaining element comprising a wire bent to form an L-shaped portion, a diagonal portion and a free portion yielding bodily at its junction
20 with the L-shaped portion and the diagonal portion.

5. A pin retainer comprising a rectangular casing having alined pin receiving holes through its marginal wall, a pin retaining element comprising a wire bent to form an L-shaped portion, a diagonal portion and a
45 free portion yielding bodily at its junction with the L-shaped portion and diagonal portion, and a releasing element projecting exterior to the casing through its marginal wall.

6. A pin retainer comprising a casing composed of two members having marginal walls adapted to lock one within the other, said walls having pin receiving holes arranged in alinement through the opposite
50 pairs of walls and a pin retainer located between the two members in position to engage a pin passing through said holes in the marginal walls.

7. A pin retainer comprising a casing composed of two members having marginal walls adapted to lock one within the other, said walls having pin receiving holes arranged in alinement through the opposite
60 pairs of walls and a pin retainer located between the two members in position to engage a pin passing through said holes in the marginal walls, and a releasing element between the two members projecting through the
65 marginal walls.

In testimony that we claim the foregoing as our invention, we have signed our names in presence of two witnesses, this tenth day of June 1914.

JOSEPH FORSHEIM.
JOSEPH KONIGSBERG.

Witnesses:

F. GEORGE BARRY,
C. L. LUNDGREN.

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