(No Model.)

J. H. SWADLING & H. H. KELLEY.

CAR SEAL.

No. 560,176. Patented May 12, 1896.

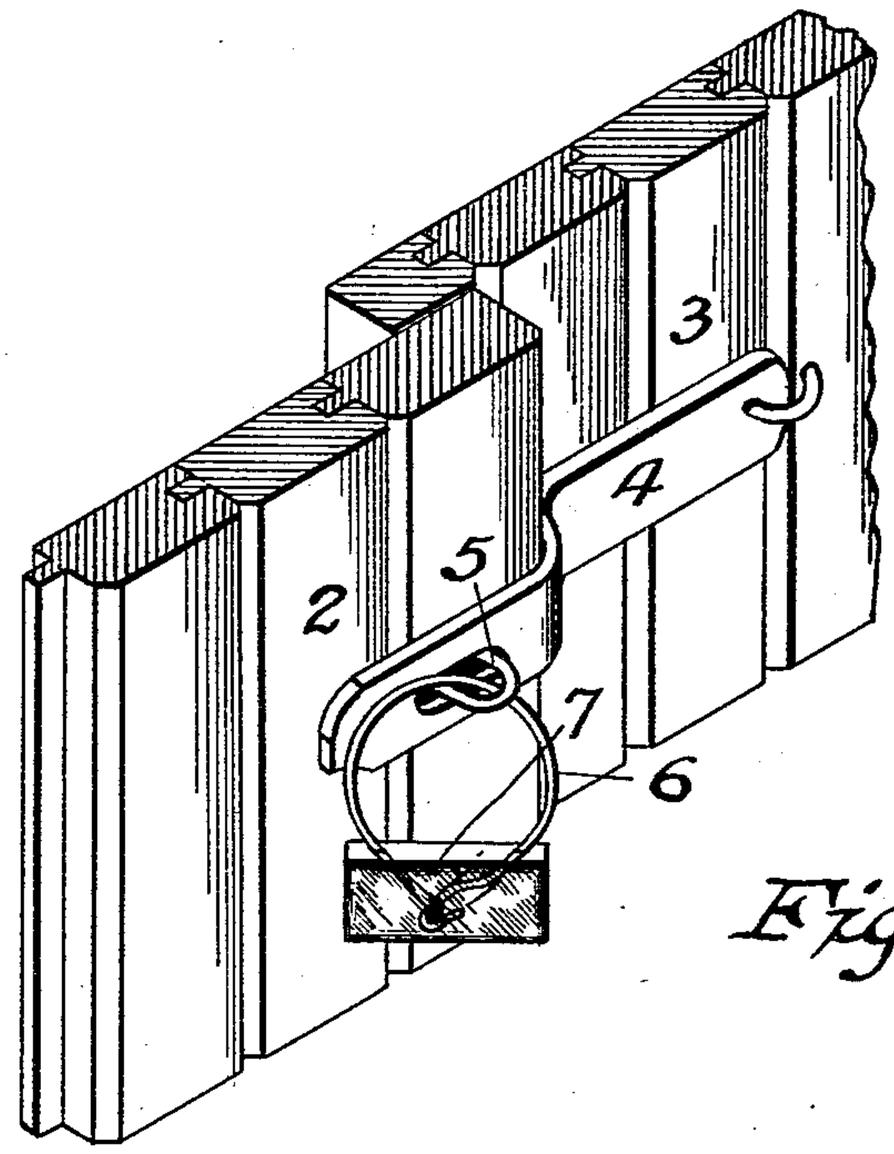

Fig. 1.

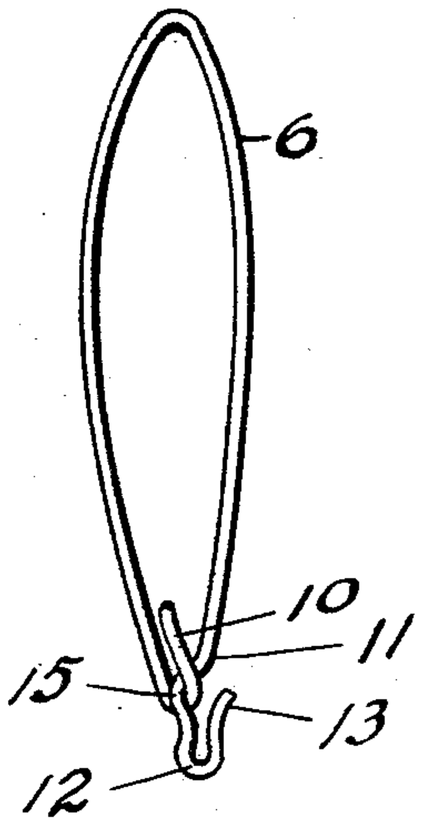

Fig. 2.

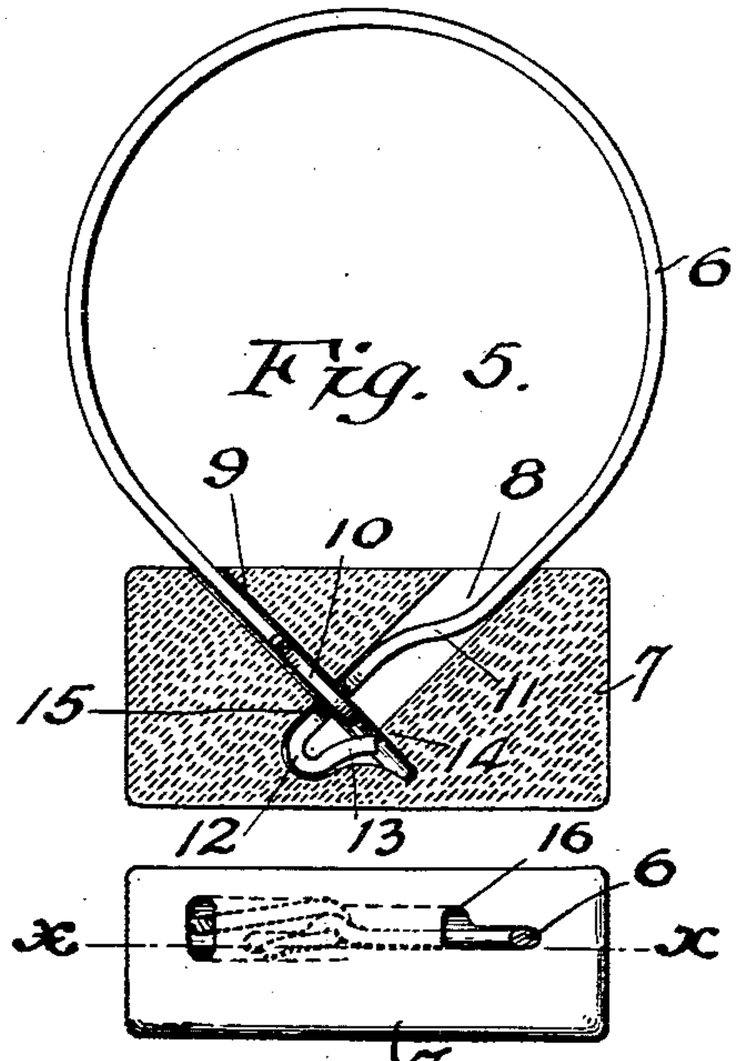

Fig. 5.

Fig. 4.

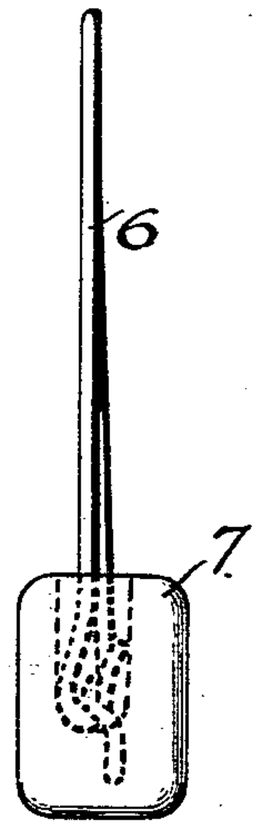

Fig. 3.

Witnesses;
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UNITED STATES PATENT OFFICE.

JOHN H. SWADLING AND HARRY H. KELLEY, OF MINNEAPOLIS, MINNESOTA.

CAR-SEAL.

SPECIFICATION forming part of Letters Patent No. 560,176, dated May 12, 1896.

Application filed May 13, 1895. Serial No. 549,164. (No model.)

To all whom it may concern:

Be it known that we, JOHN H. SWADLING and HARRY H. KELLEY, of Minneapolis, Hennepin county, Minnesota, have invented certain new and useful Improvements in Car-Seals, of which the following is a specification.

Our invention relates to car-seals, and the object of the same is to provide a seal which cannot be opened without breaking the seal.

To this end our invention consists in the combination, with a light wire to be passed through the parts used for securing the car-door and having hook ends, of a seal or block having intersecting openings adapted to receive the looped ends of the wire, said openings permitting one end of the wire to pass beneath the other, whereby when the ends are drawn out the loop at one end will interlock with a section of the opposite end.

Our invention consists generally in various details of construction and combination, all as hereinafter described, and particularly pointed out in the claim.

Figure 1 is a perspective view of a section of a car door and side, showing a seal embodying our invention applied thereto. Fig. 2 is a perspective view of the wire, showing the ends of the hooks together. Fig. 3 is an end view of the seal complete. Fig. 4 is a plan view of the same with the upper part of the wire loop cut away. Fig. 5 is a vertical section on the line $x\,x$ of Fig. 4.

As shown in the drawings, 2 represents the car-door, and 3 the side of the car, on which are the hasp 4 and the staple 5, which parts are intended to be secured together by the small seal. The seal comprises the wire 6 and the block or seal proper, 7. The block, as shown in Figs. 4 and 5, is provided with recesses or holes 8 and 9 to receive the two ends of the wire. These recesses or holes are elongated in cross-section and the recesses intersect one another within the block and are also at right angles with respect to elongation of the holes, as above spoken of. The two ends of the wire are hooked and the hooks bent to be at right angles to one another and brought together. The hook 10, which is adapted to be inserted in the slot 9, is simple in form. The other end of the wire is bent at the point 11 to cross the slot or opening and so close the same at the top, while the lower end is provided with a hook 12, having an outwardly-turned point 13, adapted to catch behind the shoulder 14, formed at the intersection of the two holes, which are preferably enlarged somewhat beneath the shoulder to permit the point 13 to project outwardly, as shown. Further, just above the hook 12 the wire is provided with a slight crimp 15, and to permit it to be inserted in the slot or opening 8 an additional groove 16 is provided at the side and upper edge of the recess. As shown by the dotted lines in Fig. 3, the inner part of the hole or recess 9 is enlarged to permit the hook 10, when it is inserted, to pass beneath the crimp 15, when, by the inclination of the wall of the opening, the hook is pressed upwardly, so that its point will pass above the crimp and be locked by engagement with the other end of the wire, which forms a small cross-bar directly across the opening 9.

In practice the hook 12 is forced into the position shown, while the other hook or end of the wire is left free to be inserted through the hasp or staple on a car before it is inserted and secured in the block or seal proper. Thus it will be seen that the hook 12 serves simply as a fastening for that end of the wire, the part 11 serving to close the opening 8 and prevent the hook 12 from being tampered with, while that part of the wire with the crimp 15 at the intersecting points of the two openings serves as a bar or pin, on which the smaller hook fastens itself on being forced into the hole. When the two ends of the wire are thus secured within the box, neither one may be removed without breaking the block or seal, which is always of fragile material and preferably of glass, so that any alteration in the form or shape of the parts within the block could be instantly noticed by one looking at the seal while on the car.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

The combination, with a block of fragile material provided with intersecting recesses or openings, of a wire loop provided at its opposite ends with the hooks 10 and 12, substantially at right angles to one another, and adapted to be inserted within said intersect-

ing openings, said hook 12 having its point in engagement with the shoulder formed by said intersecting openings, said loop being also provided with a crimp 15 near said hook 12, the recess beneath said crimp being enlarged to permit the hook 10 to pass beneath the same, and the wall above said crimp being inclined to permit the end of the hook 10 to pass above said loop, whereby when drawn out, said hook 10 will interlock with said crimp, substantially as described.

In testimony whereof we have hereunto set our hands this 4th day of May, A. D. 1895.

JOHN H. SWADLING.
HARRY H. KELLEY.

In presence of—
A. C. PAUL,
M. E. GOOLEY.