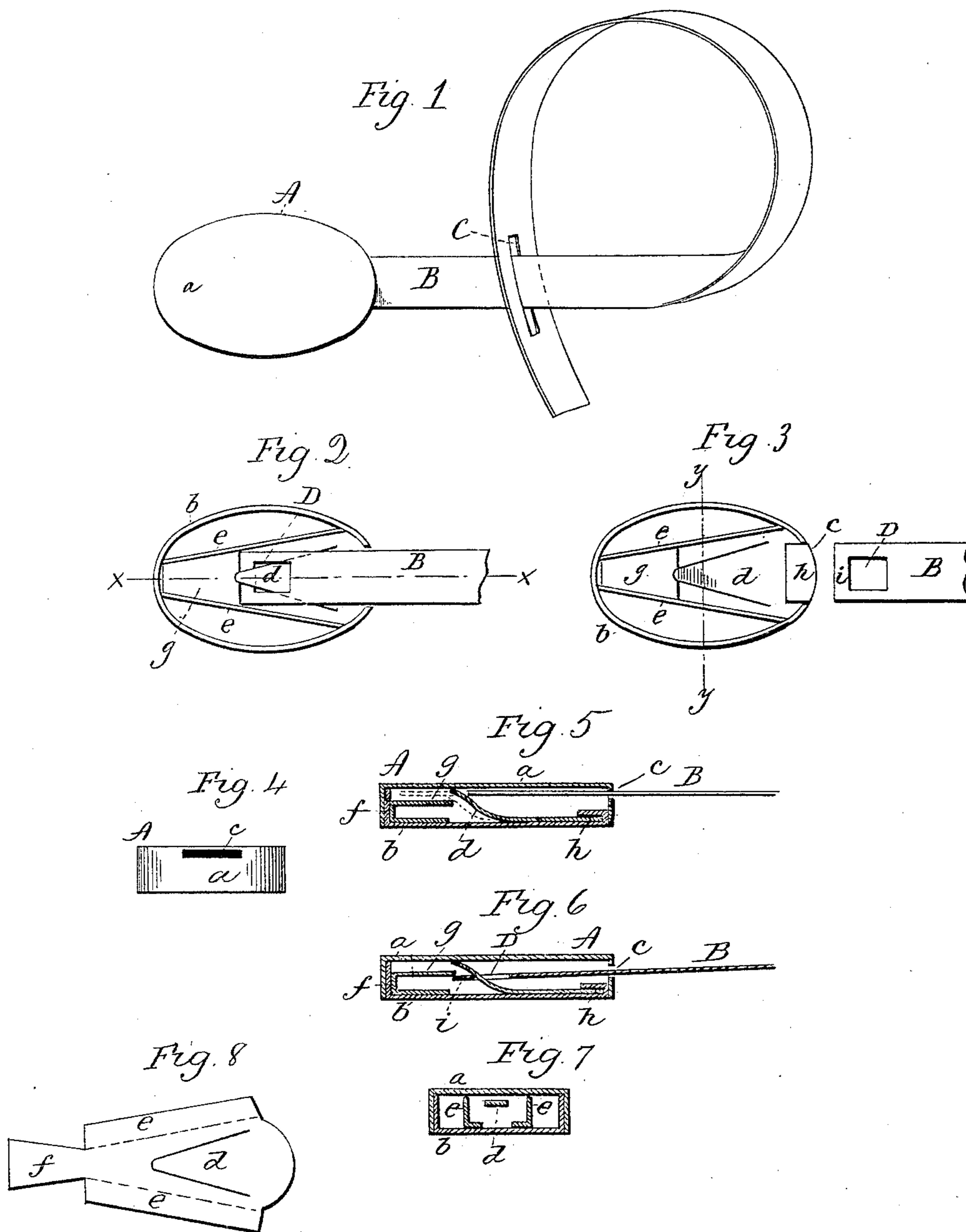


(No Model.)

E. S. WHEELER, Jr.  
CAR SEAL.

No. 460,766.

Patented Oct. 6, 1891.



Witnesses.  
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# UNITED STATES PATENT OFFICE.

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## CAR-SEAL.

SPECIFICATION forming part of Letters Patent No. 460,766, dated October 6, 1891.

Application filed May 4, 1891. Serial No. 391,489. (No model.)

*To all whom it may concern:*

Be it known that I, ELONZO S. WHEELER, Jr., of Saugatuck, in the county of Fairfield and State of Connecticut, have invented a new  
5 Improvement in Car-Seals; and I do hereby declare the following, when taken in connection with accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and  
10 which said drawings constitute part of this specification, and represent, in—

Figure 1, the seal as applied to a strap; Fig. 2, an inside view of the seal with the loop of the strap engaged therewith; Fig. 3, the same as  
15 Fig. 2, showing the loop as about to be inserted; Fig. 4, an edge view of the loop, looking toward the opening *c*; Fig. 5, a longitudinal section on line *x x* of Fig. 2, showing the loop as being introduced; Fig. 6, the same as Fig. 5,  
20 showing the loop as fully introduced; Fig. 7, a transverse section on line *y y* of Fig. 3; Fig. 8, the blank from which the spring-tongue is formed.

This invention relates to an improvement  
25 in the device used for sealing car-doors commonly called "car-seals," and particularly to that class which are adapted to be secured to one end of a ribbon or band of metal, or other suitable material, and with which the seal automatically interlocks when the two are set  
30 together, so that the separation of the seal from its strap cannot be produced without the destruction of one or the other, the object of the invention being to produce an extremely cheap and simple seal, yet one which is effective and which cannot be tampered with, so as to produce separation of the seal from its connection; and the invention consists in the construction, as hereinafter described, and particularly recited in the claim.

The case of the seal *A* is composed of two cup-shaped disks *a b*. The outline may be of any desirable shape; but they are preferably of cup shape, so that one may be inverted and  
45 the flange of the one placed over the flange of the other and closed thereon, as seen in Figs. 6 and 7, so as to firmly secure the two parts together and form a chamber within.

At one point through the side of the case  
50 an opening *c* is formed in length and width corresponding substantially to the strap or connection to be introduced into the seal. As here

represented, this connection *B* is a flat metal strip constructed with a slot *C* near one end, through which the other end of the strip may  
55 be passed, so as to form a loop, and the other end of the strip constructed with an eye *D*, by which the seal may be engaged therewith, it being understood that before the loop is formed the strap is passed through the staple,  
60 or to whatever it may be desired to attach the seal, and as usual in car-seal locks.

Upon the inside of the case a longitudinal spring-tongue *d* is arranged, secured by one end at or near that point of the case through  
65 which the slot *c* is formed, and so that the spring will stand in line with the said slot. The free end of the tongue is turned upward toward the side of the case opposite that to which the fixed end of the tongue is attached,  
70 and preferably so as to bear against that opposite side, as seen in Fig. 5.

In the construction of the tongue, and as a means for securing it in place in the case, it is formed from a blank of elastic metal, as  
75 seen in Fig. 8, the tongue *d* being cut from the blank, leaving the fixed end of the tongue in connection with the blank, the tongue turned up from the plane of the blank. The sides *ee* of this blank are turned upward upon  
80 the same side that the tongue projects, and, as seen in Fig. 7, the sides or flanges *ee* being of a width corresponding substantially to the distance between the two sides of the case.

At the end of the blank opposite that to  
85 which the tongue is attached a projection *f* is formed, which is turned upward and over toward the tongue, forming a guard *g*, (see Figs. 5 and 6,) this guard standing in a plane midway between the two sides of the case and  
90 projecting inward below the turned-up end of the tongue, as shown. The length of the tongue-piece is substantially that of the interior of the cup in which it is placed, and so that when set therein, as seen in Figs. 2 and  
95 3, and the parts closed together the tongue-piece is held firmly in the seal.

The slot end of the inner cup in which the tongue-piece is placed may be in the form of a flap *h* and turned inward and down upon  
100 the tongue-piece, as seen in Figs. 5 and 6, so as to securely hold the tongue-piece at that end. The slot *c* comes between the tongue-piece and the opposite side of the case, as seen

in Fig. 5, and so that the passage into the case opens over the tongue.

To engage the seal with its strip, the loop or slotted end of the strip, or whatever the fastening may be, is introduced through the opening *c*, as seen in Fig. 5, and forced inward. It strikes the upturned surface of the tongue, the tongue yielding as the strip is forced forward, as indicated in broken lines, Fig. 5, until the loop or opening *D* of the strip has passed beyond the end of the tongue. Then the spring-tongue will react and pass through the said opening or loop, and so that the strip then being drawn outward its looped end will pass below the end of the tongue *d* and interlock therewith. Hence any strain upon the strap tending to draw it outward will but make the connection more firm.

The end *i* of the strip beyond the loop or opening *D* is so much greater than the distance between the end of the guard *g* and the tongue that when the loop is drawn upon the tongue it will pass below the tongue until the end of the loop is forced down below the guard by the spring of the tongue, and, as seen in Fig. 6, so that the guard serves to prevent the end of the strip or loop from again passing over the end of the guard. Any movement of the strip inward, instead of forcing the loop toward the end of the tongue, will simply force it farther under the guard. The guard therefore makes it impossible to disconnect the

loop from the seal without the destruction of some of the parts.

The side flanges on the tongue-piece serve to guide the loop to the tongue—that is, prevent it passing to the right or left of the tongue.

While I prefer to employ the guard *g* as a protection against any effective tampering with the seal, it may be omitted.

I claim—

A seal-lock consisting of a case, a slot opening into the case, a tongue-piece arranged within said case, the spring-tongue *d*, cut therefrom and turned away from the said tongue-piece, and the tongue-piece constructed with side flanges *e e*, turned from the tongue-piece in the same direction as the tongue and the end of the said tongue-piece turned toward the tongue to form the guard *g*, the said tongue-piece arranged within the case with the tongue in line with the said slot or opening in the case, combined with a loop adapted for insertion through said slot or opening and so as to be forced over and engaged with the said loop and with the said guard, substantially as described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

ELONZO S. WHEELER, JR.

Witnesses:

ROBINSON H. WHEELER,

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