

I. C. REESOR.  
 SELF LOCKING SEAL FOR CARS, &c.  
 APPLICATION FILED SEPT. 10, 1907.

908,803.

Patented Jan. 5, 1909.

Fig. 1.

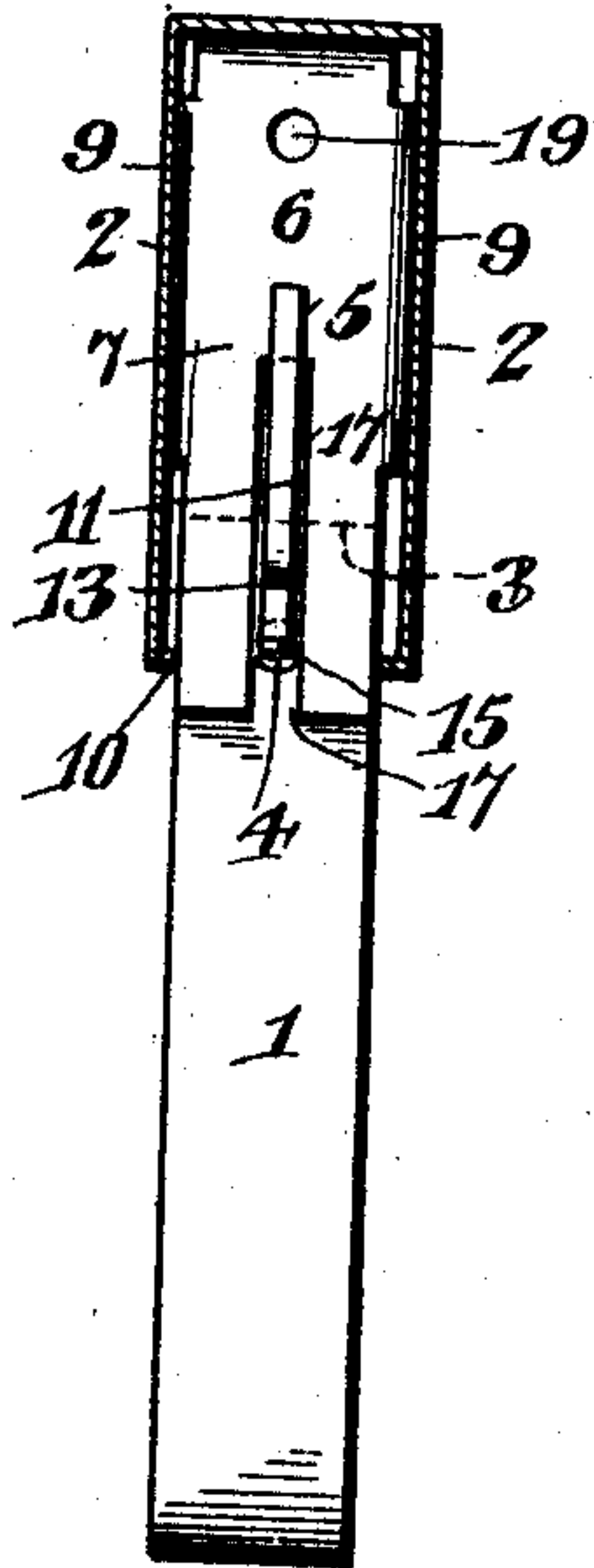


Fig. 3.

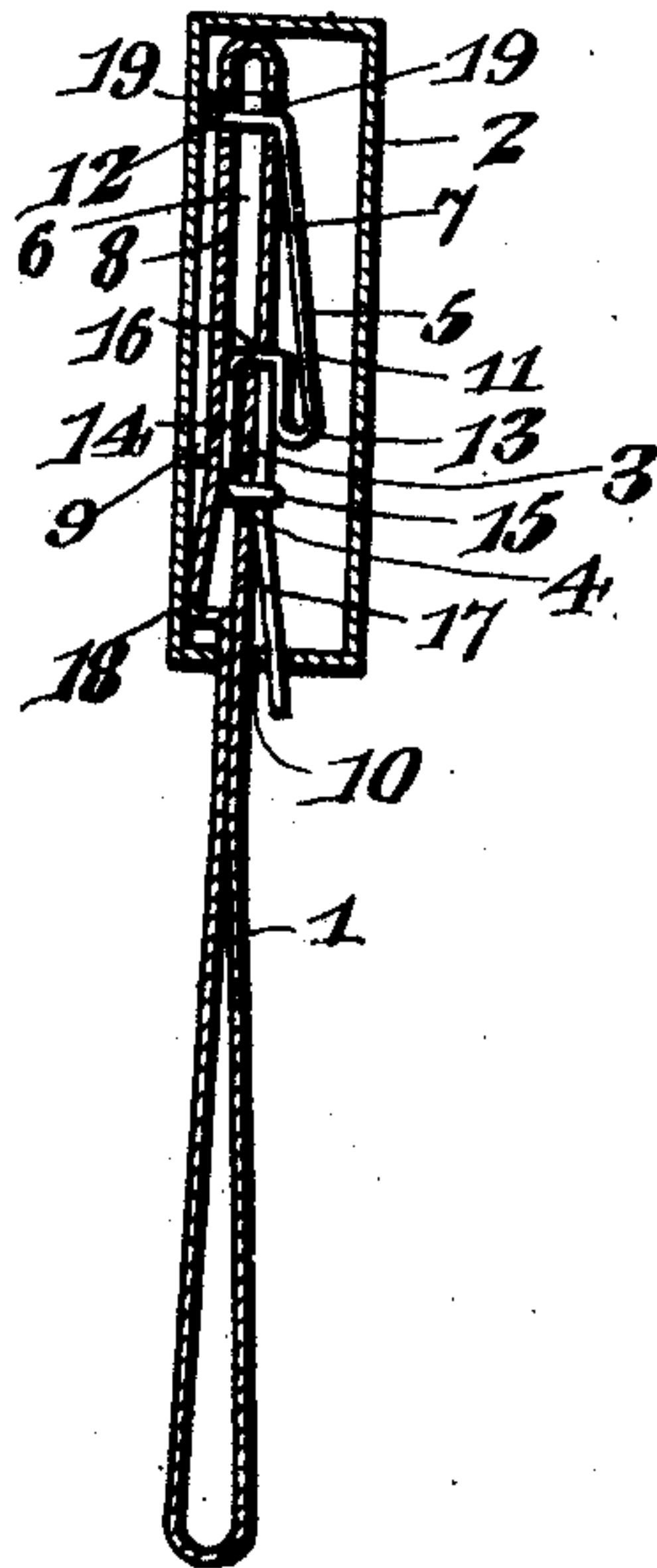


Fig. 2.

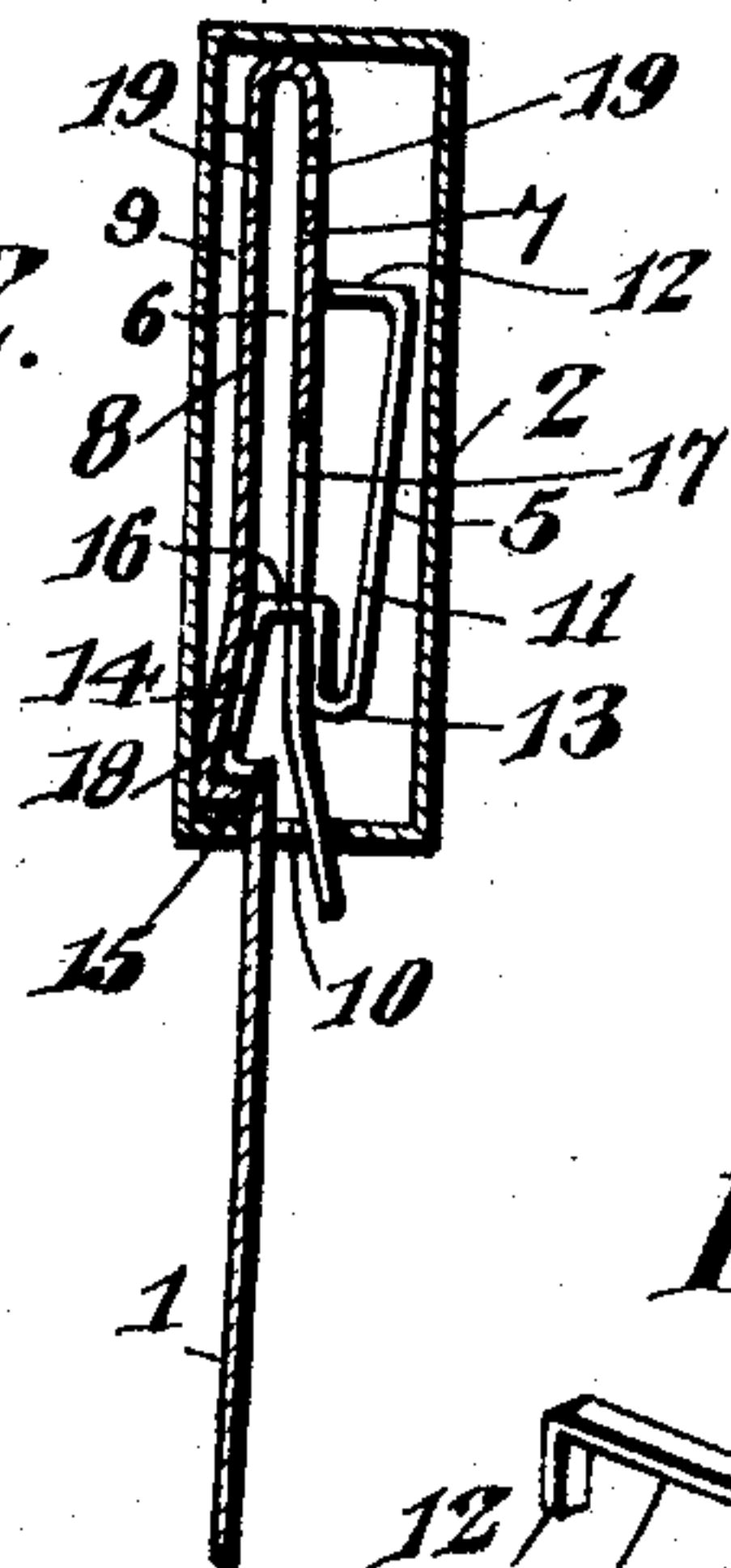


Fig. 4.

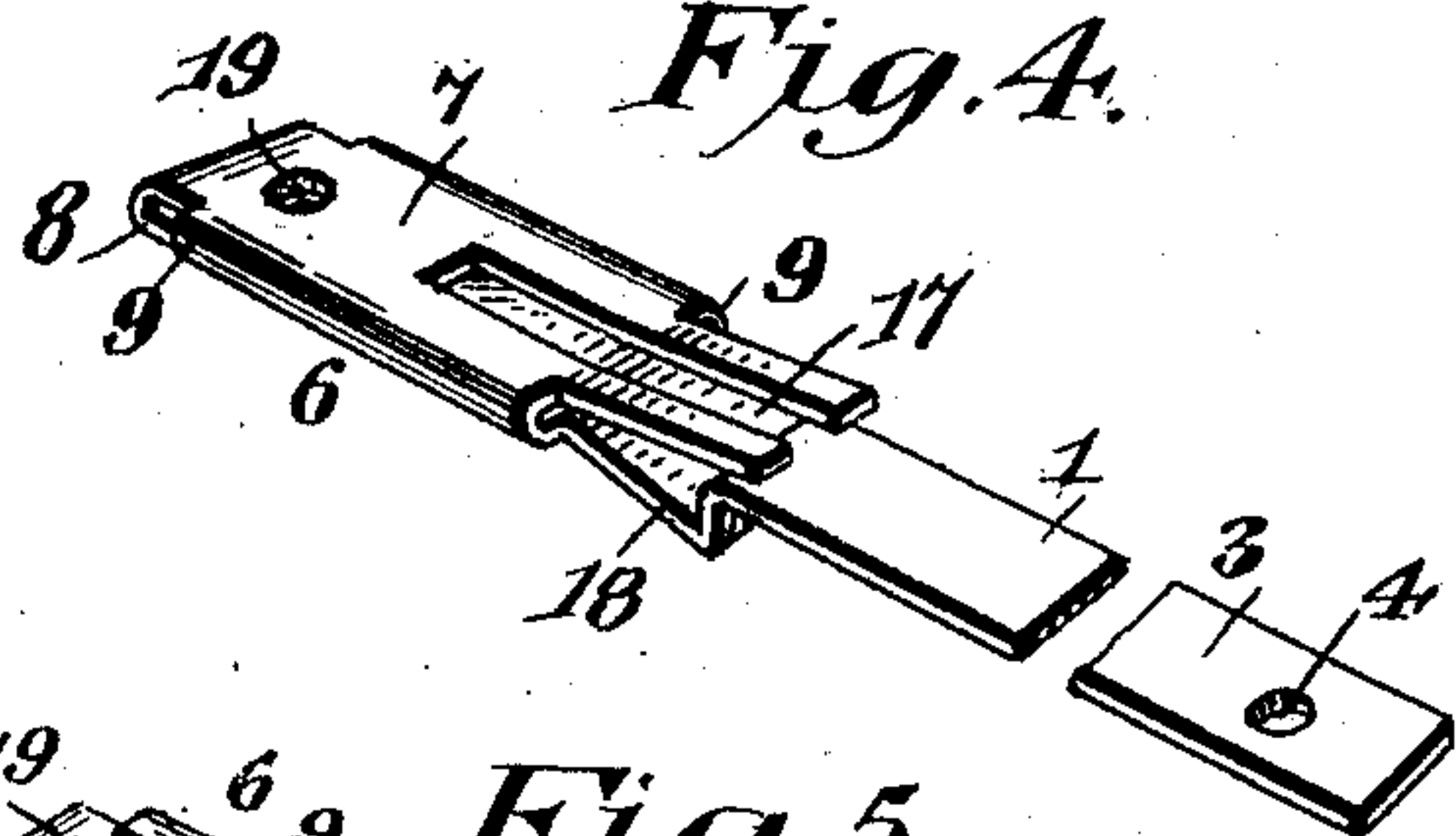


Fig. 5.

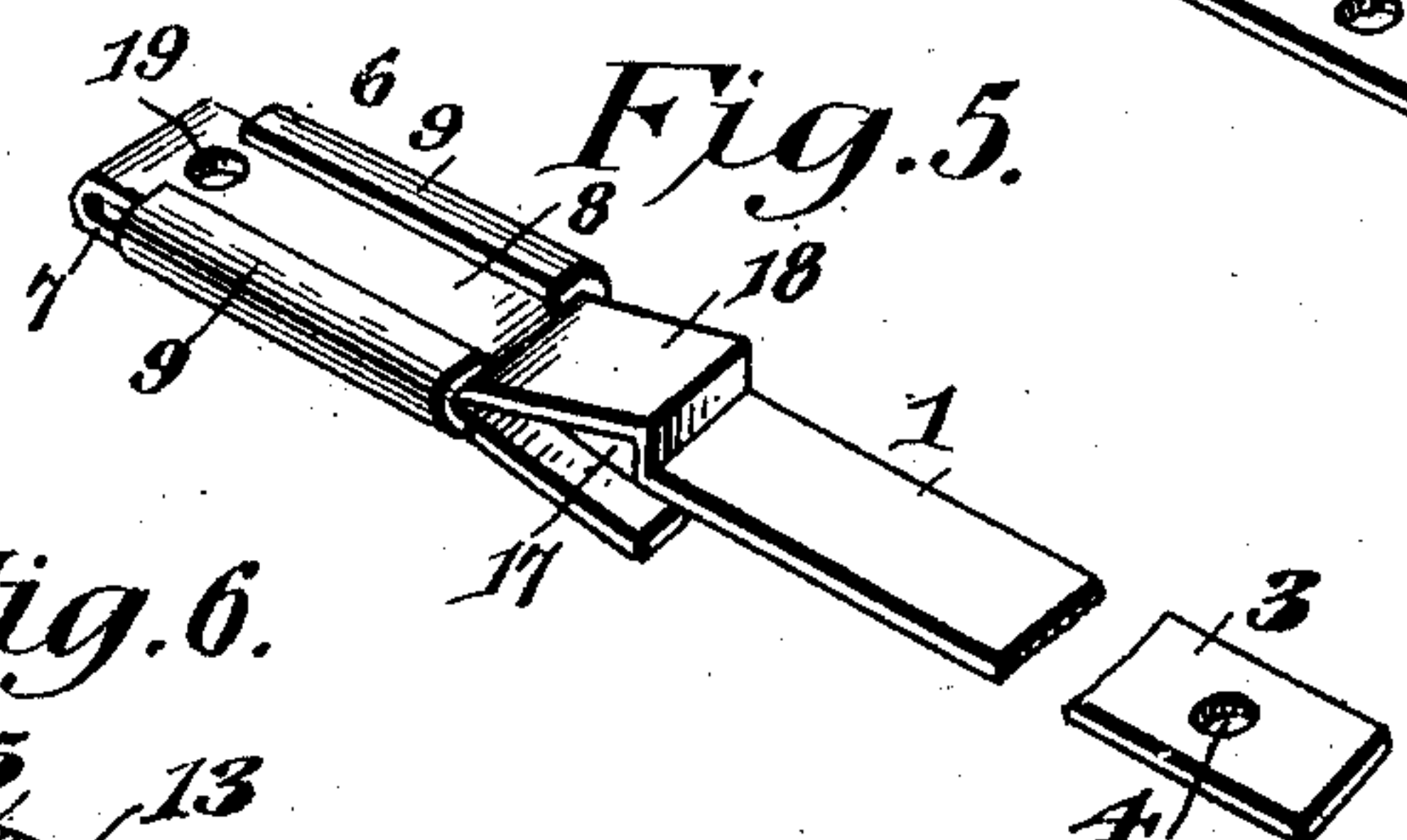
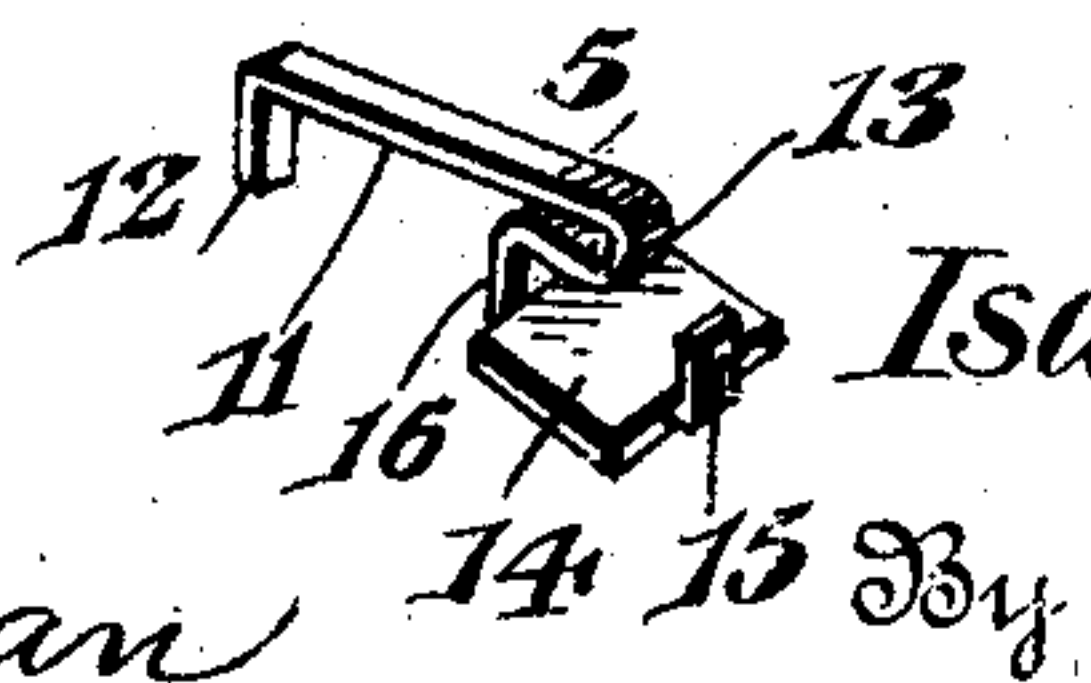


Fig. 6.



Witnesses  
 Jas. K. McLaughlin  
 H. F. Riley  
 Isaac C. Reesor, Inventor  
 By *E. J. Siggers*  
 Attorney



# UNITED STATES PATENT OFFICE.

ISAAC CHRISTIAN REESOR, OF DENVER, COLORADO, ASSIGNOR OF ONE-FOURTH TO PERCY W. ELLIS AND ONE-FOURTH TO GEORGE W. PERRY, OF DENVER, COLORADO.

## SELF-LOCKING SEAL FOR CARS, &c.

No. 908,803.

Specification of Letters Patent.

Patented Jan. 5, 1909.

Application filed September 10, 1907. Serial No. 392,135.

*To all whom it may concern:*

Be it known that I, ISAAC C. REESOR, a citizen of the United States, residing at Denver, in the county of Denver and State of Colorado, have invented a new and useful Self-Locking Seal for Cars, &c., of which the following is a specification.

The invention relates to improvements in self locking seals for cars, etc.

The object of the present invention is to improve the construction of self locking seals, and to increase their simplicity, durability and efficiency, and to provide an inexpensive self locking seal, which, when locked, cannot be surreptitiously unlocked by a knife blade, or other tool.

A further object of the invention is to provide a self locking seal having a locking spring, which will not be placed under tension until the free end of the sealing strip is introduced into the casing of the seal, whereby lapse of time and weather will not impair the efficiency of the locking spring.

With these and other objects in view, the invention consists in the construction and novel combination of parts hereinafter fully described, illustrated in the accompanying drawing, and pointed out in the claims hereto appended; it being understood that various changes in the form, proportion, size and minor details of construction, within the scope of the claims, may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawing:—Figure 1 is a plan view, partly in section of a self locking seal, constructed in accordance with this invention, the spring being in its unlocked position. Fig. 2 is a longitudinal sectional view of the same. Fig. 3 is a similar view, the seal being locked. Figs. 4 and 5 are detail perspective views of the sealing strip, illustrating the construction of the support for the spring. Fig. 6 is a detail perspective view of the locking spring.

Like numerals of reference designate corresponding parts in all the figures of the drawing.

1 designates a sealing strip, consisting of a thin strip or strap of sheet metal, or other suitable material and having one end attached to a casing 2, its other end 3 being provided with an aperture 4 and adapted to be inserted in the casing 2 and to be engaged by a normally inert locking spring 5, which is placed under tension by the outer or free

end of the sealing strip. The casing, which is substantially oblong, is constructed of sheet metal, or other suitable material, and the inner attached end of the sealing strip is bent upon itself to provide an interiorly arranged support 6. The support is composed of two sides 7 and 8 having inner or rear parallel portions spaced apart to provide an intervening passage or way for the free end 3 of the sealing strip. The side 7 is provided with side flanges 9, which are bent around the side edges of the opposite side 8 of the support, as clearly illustrated in Fig. 5 of the drawing. The casing is provided at one end with an opening 10 and the side 7 is extended through the opening a short distance and is arranged at a slight angle to the opposite side to form a flaring entrance for the free end of the sealing strip.

The locking spring, which is inert when at the limit of its outward movement, is movable longitudinally of the support and is composed of inner and outer engaging portions. The inner engaging portion 11 is in the form of a substantially L-shaped arm, forming a terminal tooth or projection 12 and connected with the outer engaging portion by a spring bend 13. The outer engaging portion consists of a substantially rectangular plate 14, provided at its outer edge with a centrally arranged projection or tooth 15, disposed at right angles to the plane of the plate and extending in the opposite direction from the inner tooth or projection 12. The inner engaging portion or arm 11 consists of a narrow strip of metal, and the spring bend is formed by bending the metal inward longitudinally of the arm 11, and then outwardly at right angles to the same to form a connecting portion 16, which off-sets the spring bend from the plate 14.

The side 7 of the support is provided at the front or outer portion with a longitudinal slot 17, and the opposite side 8 is angularly bent at the front or outer portion to form a seat 18, which has an inclined or angularly disposed longitudinal portion. The plate 14 of the locking spring is arranged within the seat, when the spring is in its unlocked position, and it fits against the inclined or angularly disposed portion, as clearly shown in Fig. 2 of the drawing. When the locking spring is in this position, it may be under little or no tension, and the plate of the outer engaging portion is arranged at an angle to



the passage of the inner portion of the support. The outer tooth or projection 15 is then flush with the outwardly extending portion of the sealing strip, so as not to interfere with the introduction of the free end of the sealing strip into the casing. When the free end of the sealing strip is introduced into the casing, it engages the connecting portion 16 of the locking spring, and its aperture 4 is then opposite the projecting portion or tooth 15 of the spring. The inward movement of the free end of the sealing strip carries the locking spring inwardly and moves the plate 14 from the seat 18 into the inner passage of the parallel portions of the sides of the support. This changes the position of the outer engaging portion with relation to the inner engaging portion and places the spring under tension, whereby the inner portion is caused to engage aligned apertures 19 of the support, when the tooth or projection 12 is carried to the same. The free end of the sealing strip is secured in the casing by the engagement of the teeth 15 of the spring with the opening 4 in the said free end and the tooth or projection 12 springs into the apertures 19, and locks the spring and the sealing strip against outward movement. The outer engaging portion by being carried into the passage of the parallel portions of the support is held against transverse movement, which effectually prevents the tooth or projection 15 from being disengaged from the free end of the sealing strip. With this arrangement, it is impossible to introduce a knife, or other tool into the seal and release the sealing strip, without destroying the seal and indicating clearly that the seal has been tampered with. The longitudinal slot 17 receives the connecting portion 16 of the locking spring, and the inner end wall of the said slot forms a stop for limiting the inward movement of the spring, so that the tooth or projection 12 cannot be carried inwardly beyond the apertures 19 of the support. As the spring is constructed of brass, or other material, which will not rust, and as it is not placed under tension until the sealing strip is introduced into the casing, the strength and efficiency of the spring are not impaired by lapse of time or the weather. Also as the spring cannot be moved inwardly without placing it under tension, it will not become locked by the jars incident to rough handling in jumping on and off trains and the like.

While the sealing strip is designed particularly for use on cars, yet it will be apparent that it may be advantageously employed in various other places where a seal of this character is desired.

Having thus fully described my invention, what I claim as new and desire to secure by Letters Patent, is:—

1. A self locking seal for cars, etc., comprising a casing, a sealing strip connected at

one end to the casing, a support arranged within the casing, a normally inert spring movable inwardly on the support and arranged to engage the free end of the sealing strip and to be actuated by the same, and cooperating means on the spring and on the support for flexing the spring to place the same under tension to cause the spring to engage the support and the sealing strip when the spring is moved inward by the free end of the sealing strip.

2. A self locking seal for cars, etc. comprising a casing, a sealing strip connected at one end to the casing, a normally inert spring having inner and outer engaging portions, the outer engaging portion being adapted to lock the free end of the sealing strip, a support receiving the spring and provided with means for changing the relative position of the inner and outer engaging portions of the spring to flex the said spring and place the same under tension for causing the inner portion thereof to engage the support when the spring is moved longitudinally of the latter.

3. A self locking seal for cars, etc. comprising a casing, a sealing strip connected at one end to the casing, a support arranged within the casing and provided with a passage and having a seat communicating with the passage, and a locking spring having inner and outer portions, the inner portion being arranged to engage the support and the outer portion being adapted to engage the free end of the sealing strip, said spring being movable longitudinally of the support, whereby when the outer portion is carried from the said seat the spring will be placed under tension and caused to engage the support.

4. A self locking seal for cars, etc. comprising a casing, a support arranged within the casing and provided with an inner or rear passage and having an outer seat arranged at an angle to the passage, a spring movable longitudinally of the support and provided with inner and outer teeth or projections, the outer portion of the spring being arranged at an angle to the said passage and located in the seat when the spring is in its unlocked position, and a sealing strip connected at one end with the casing, the other end of the sealing strip being adapted to be engaged by the outer tooth or projection of the spring, which is adapted to move the spring inwardly into the said passage to place the spring under tension and cause the same to engage the support.

5. A self locking seal for cars, etc. comprising a casing, a sealing strip, a support having an inner passage, a locking spring having inner and outer engaging portions, the outer portion being adapted to engage the sealing strip and to be moved inwardly into the said passage by the sealing strip, whereby the spring is placed under tension to cause the inner portion thereof to engage the support,



and means for placing the spring under tension when the sealing strip is introduced into the casing.

5 6. A self locking seal for cars, etc. comprising a casing, a support having a passage, a sealing strip, and a locking spring composed of a substantially L-shaped inner engaging portion, an outer engaging portion and a connecting spring bend, the outer portion of the spring being adapted to engage the sealing strip and being moved by the same into the said passage to place the spring under tension and cause the inner portion thereof to engage the support.

15 7. A self locking seal for cars, etc. comprising a casing, a sealing strip, a support arranged within the casing and having a passage, and a spring movable on the support and composed of an inner substantially L-shaped arm, an outer plate provided at the front or outer side with a tooth or projection, and a spring bend connected with and off-set from the inner edge of the plate.

20 8. A self locking seal for cars, etc. comprising a casing, a support having an inner or

rear passage and provided at the inner portion thereof with opposite apertures, said support being provided at one side of its outer portion with a longitudinal slot and having a seat at the other side thereof with 30 an inclined or angular disposed wall, a sealing strip, and a spring movable along the support and composed of an inner substantially L-shaped arm adapted to engage the apertures of the support when the spring is 35 moved inwardly, an outer plate provided with a projection for engaging the sealing strip and adapted to be moved inwardly by the same, and a spring bend connected with the inner L-shaped arm and provided with a 40 connecting portion operating in the slot and connected with the said plate.

In testimony, that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

ISAAC CHRISTIAN REESOR.

Witnesses:

HENRY N. BENNETT, Jr.,  
T. W. HOYT.