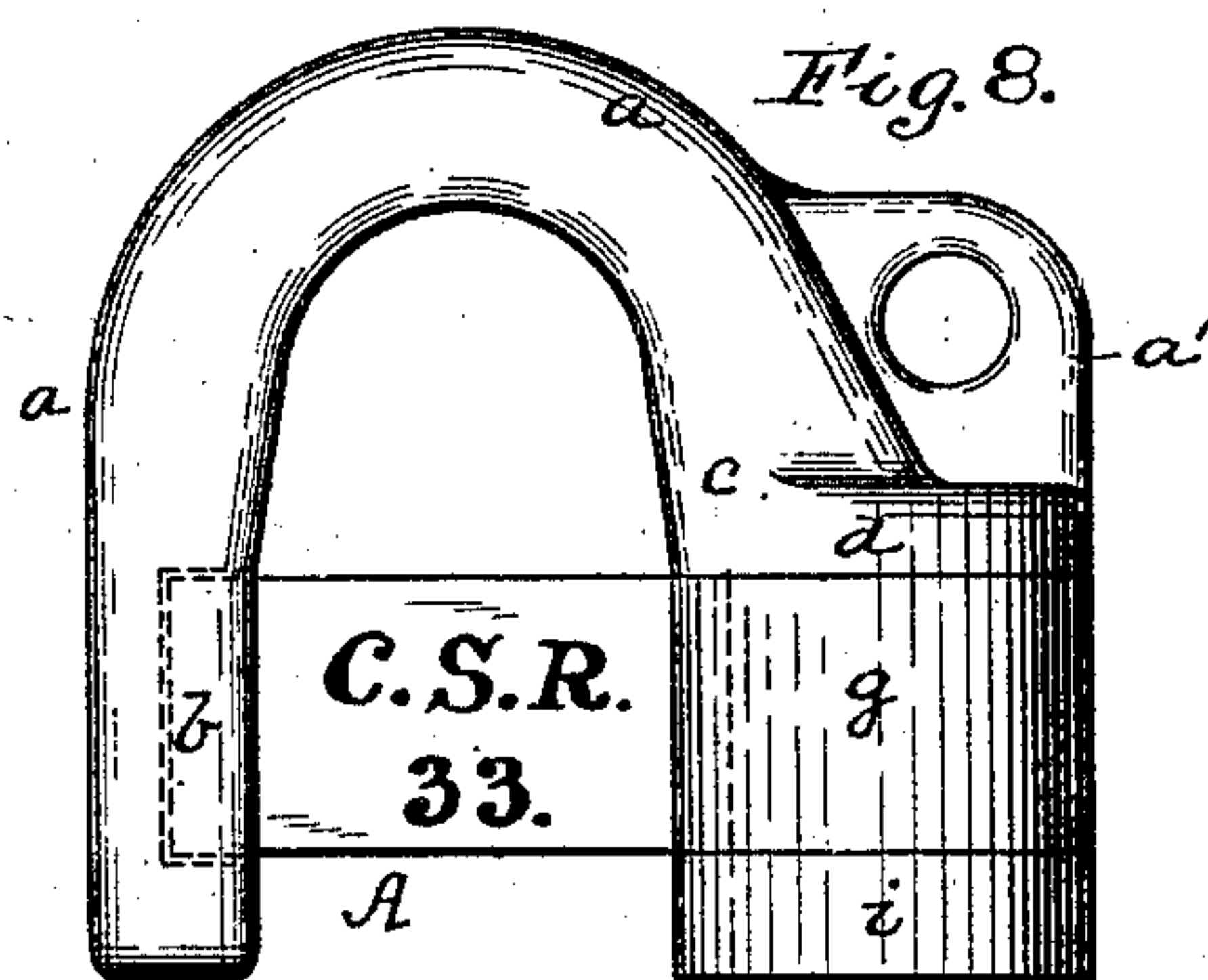
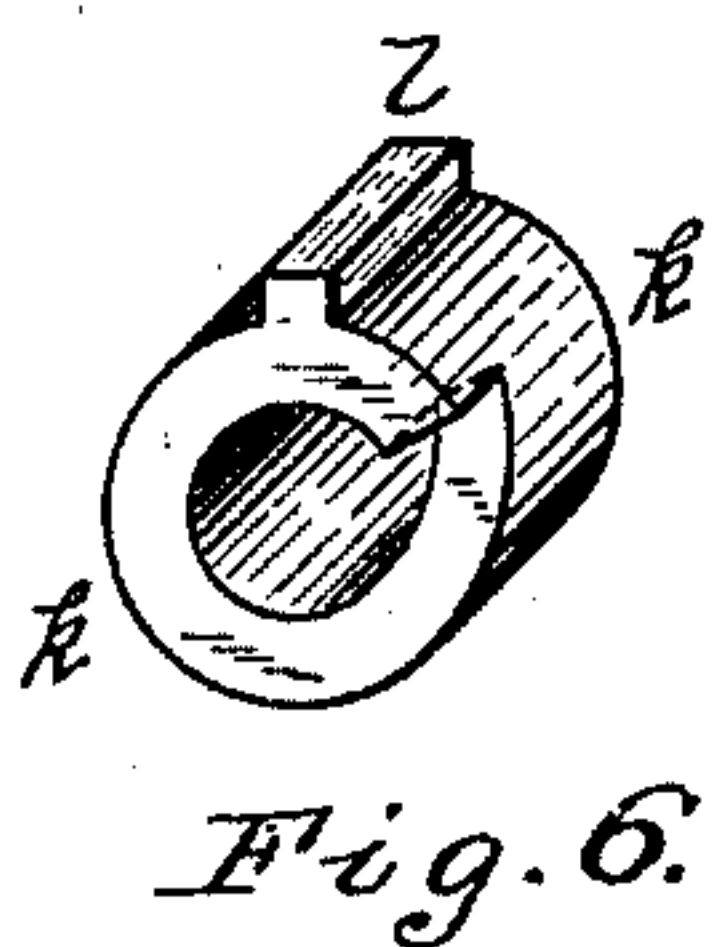
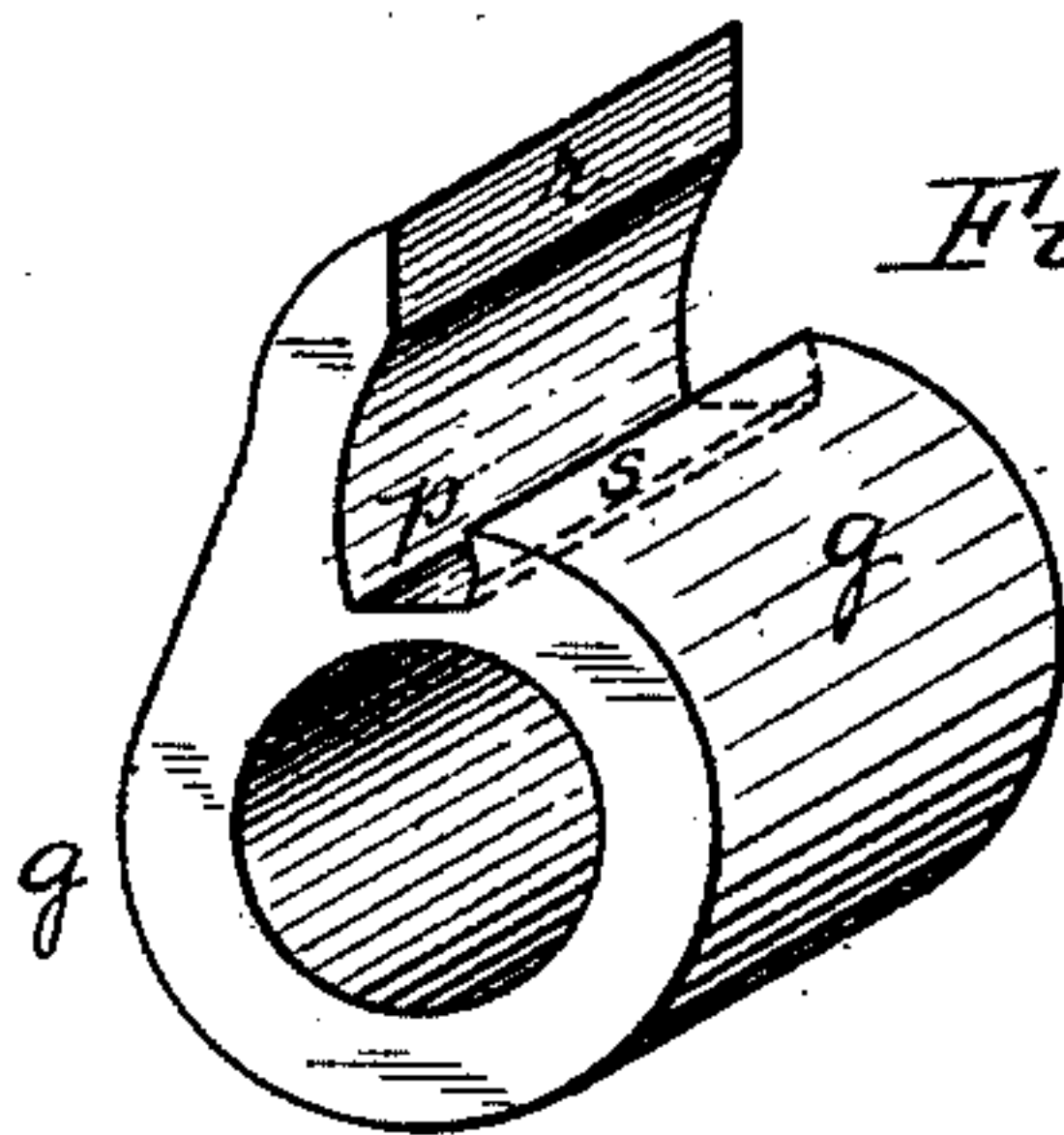
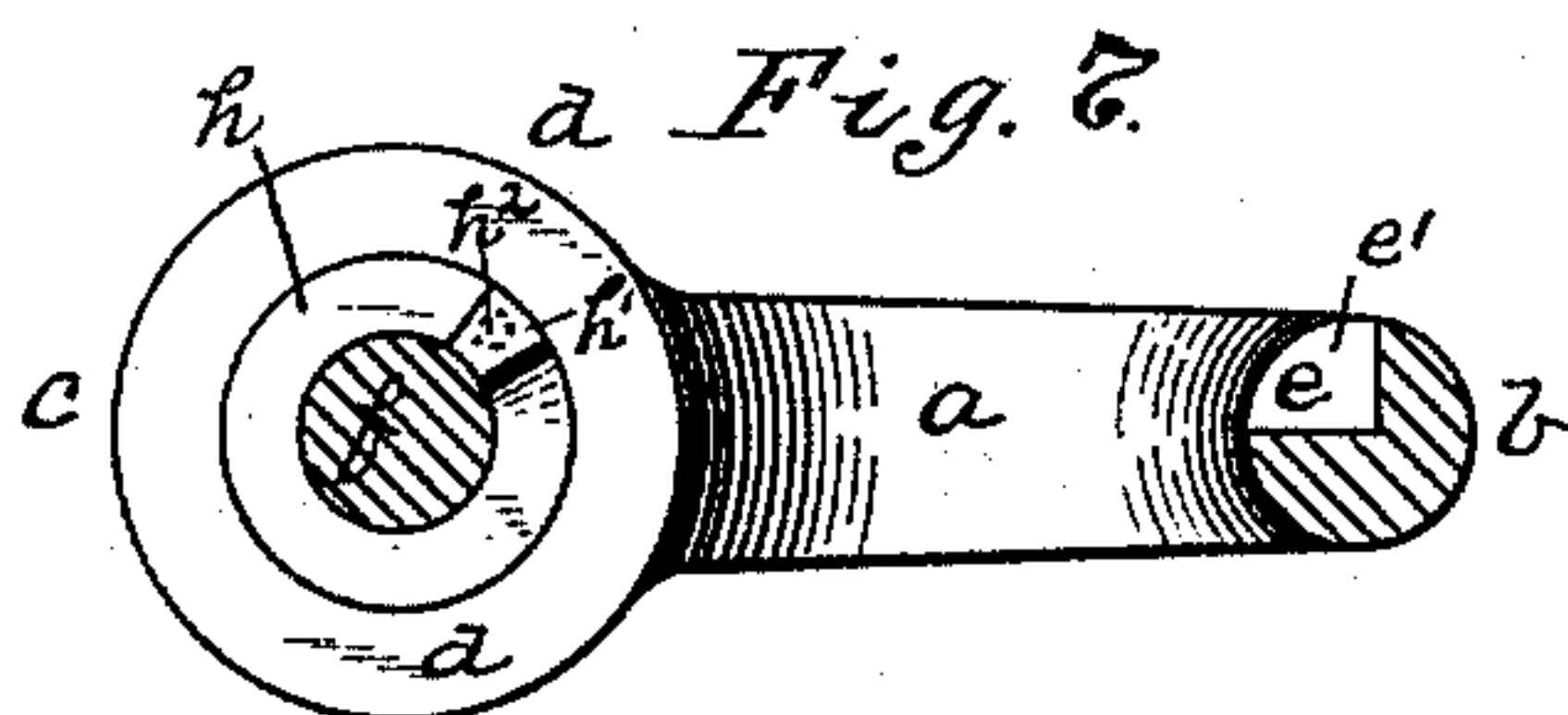
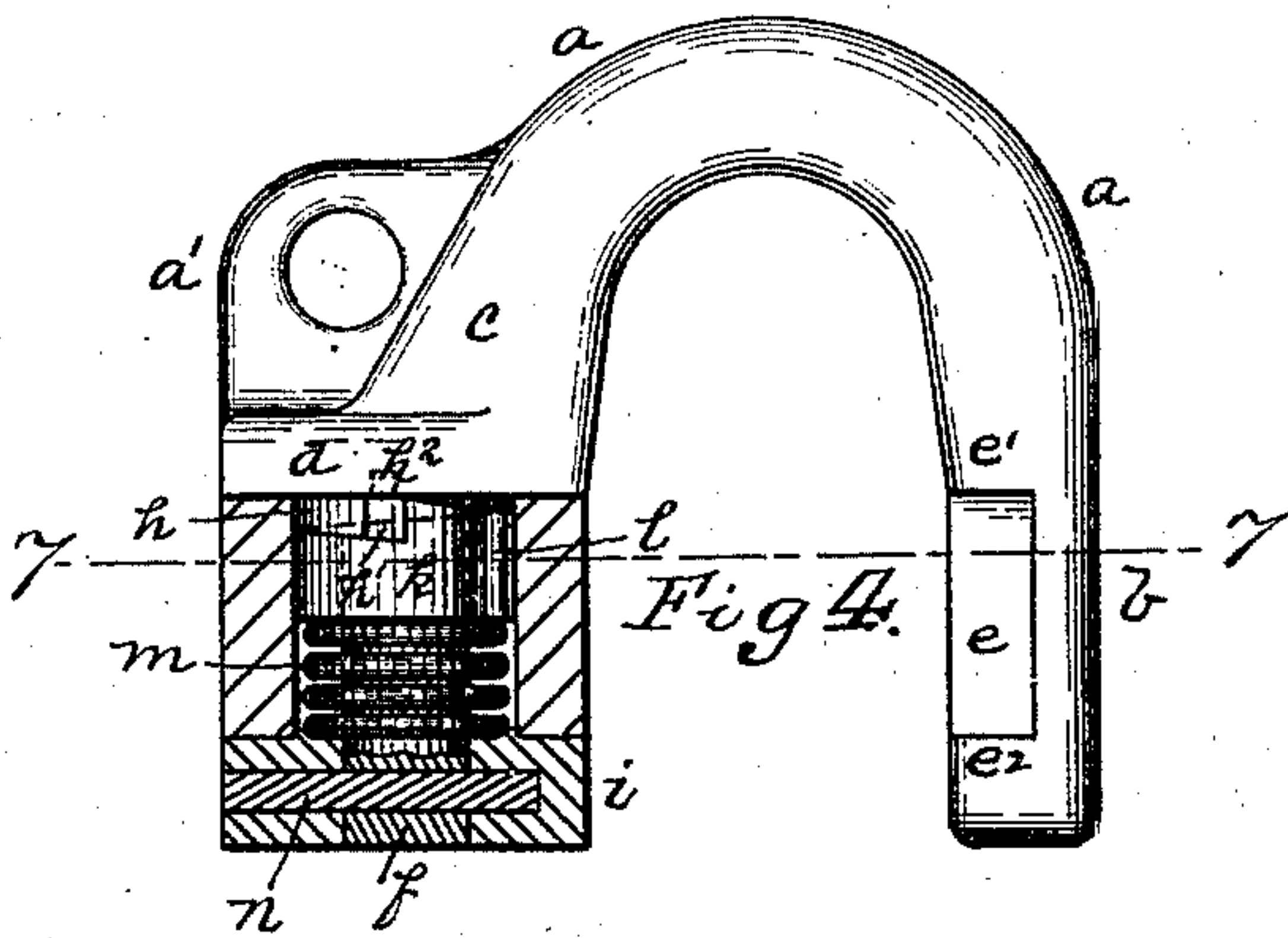
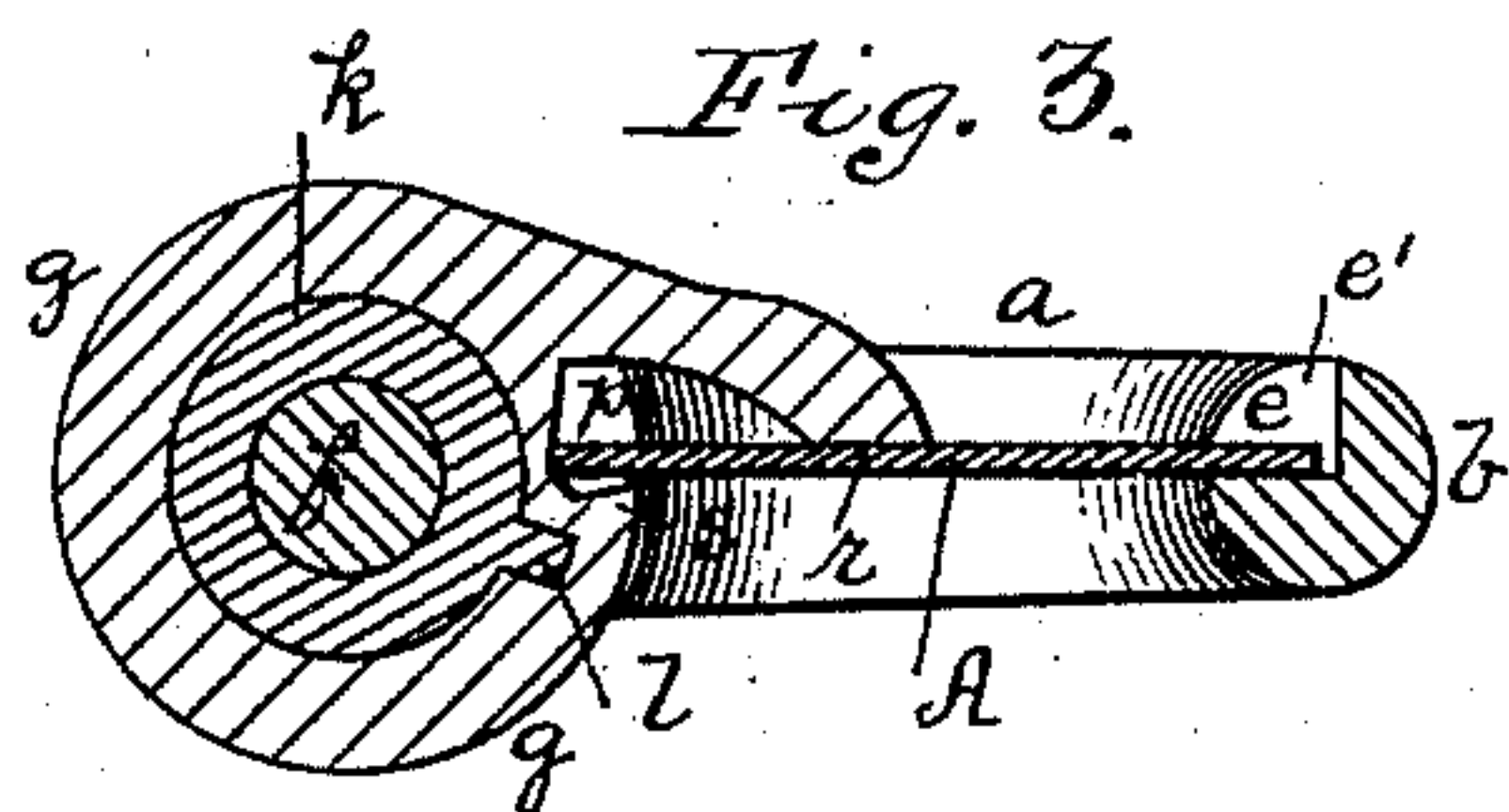
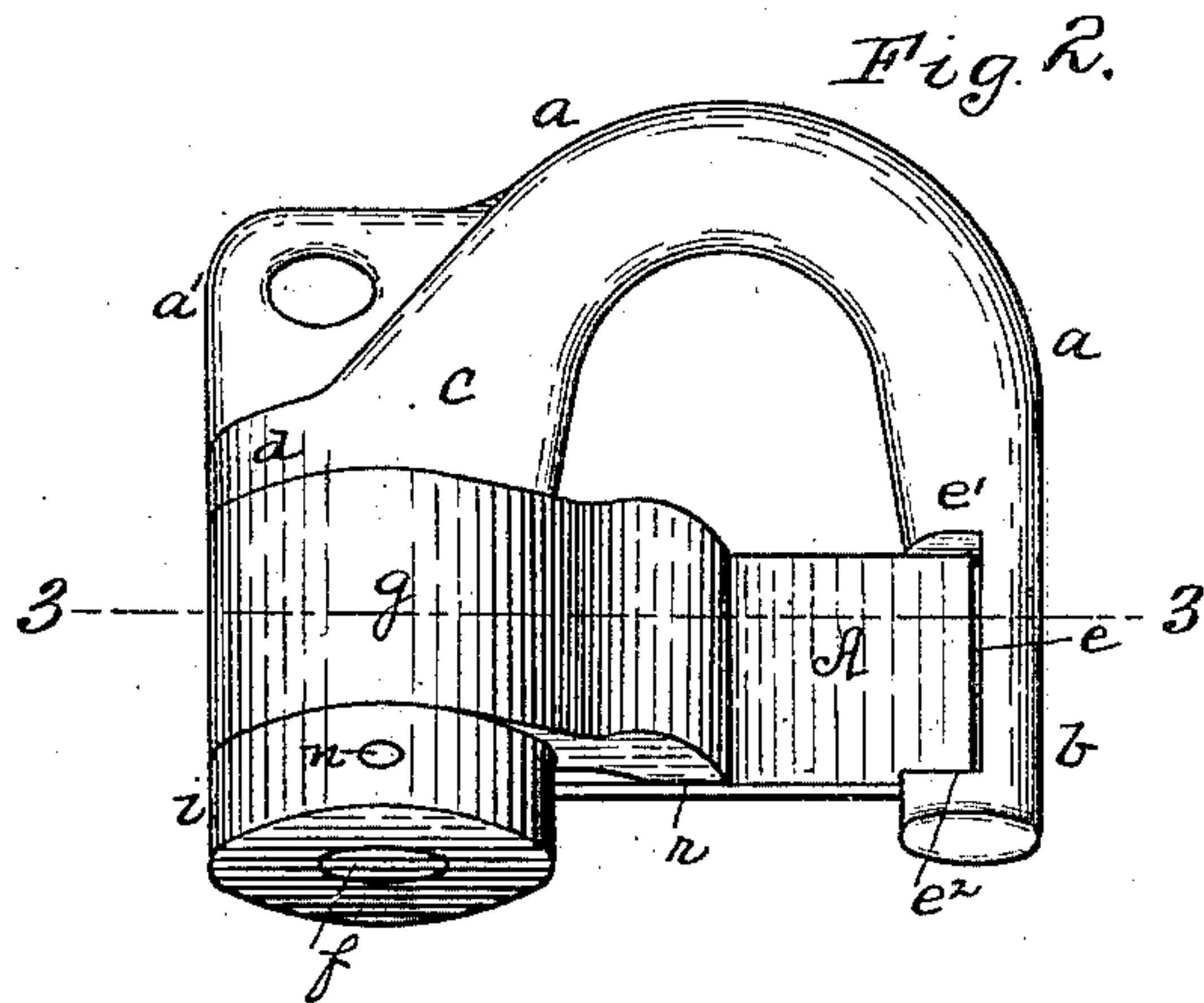
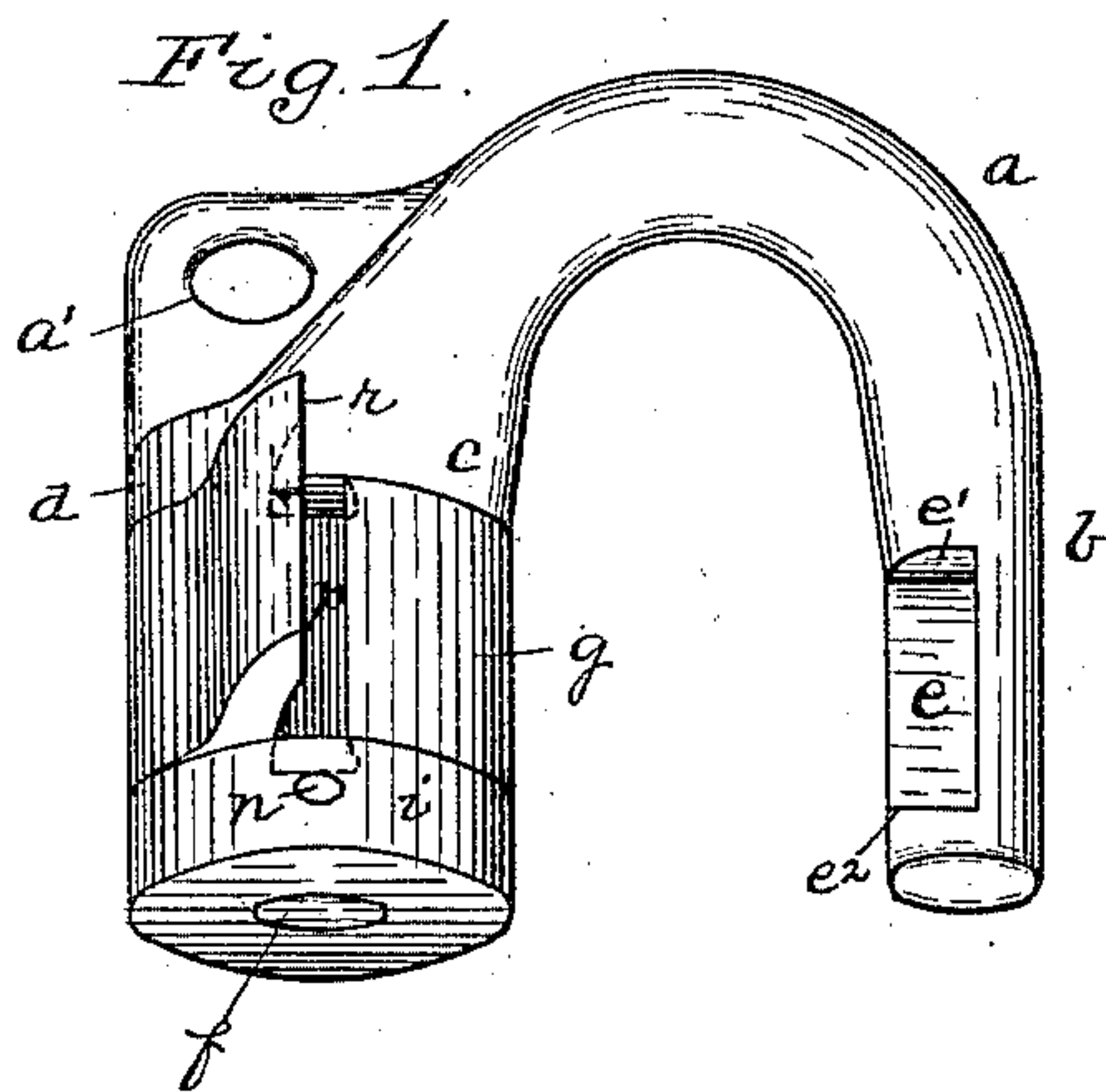


(Model.)

E. MEISE.  
SEAL LOCK.

No. 445,597.

Patented Feb. 3, 1891.



Witnesses:  
J. H. Cooley.  
Robt. D. Totten

Inventor:  
Edward Meise  
By James D. Ray  
Attorney



# UNITED STATES PATENT OFFICE.

EDUARD MEISE, OF PITTSBURG, PENNSYLVANIA.

## SEAL-LOCK.

SPECIFICATION forming part of Letters Patent No. 445,597, dated February 3, 1891.

Application filed May 23, 1890. Serial No. 352,919. (Model.)

*To all whom it may concern:*

Be it known that I, EDUARD MEISE, a resident of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Seal-Locks; and I do hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to seal-locks for freight-cars, mail-boxes, express-boxes, &c., and relates to certain improvements in Letters Patent No. 380,446, granted to me April 3, 1888, and No. 395,792, granted to me January 8, 1889, one of its objects being to improve the construction of that class of seal-locks in which the bow forms the body of the lock and the seal closes the bow by extending across between the arms thereof, though the invention can be employed with other forms of body or frame.

In the seal-lock embodying the present invention I form in one of the arms of the body a seat to receive the end of the seal, and I mount upon the other arm a seal-carrier, the other arm forming the shaft or bearing on which the carrier is mounted and the seal-carrier by swinging on said arm and pressing against the opposite side of the seal from that engaged by the seat on the other arm, and so holding the seal in place, the seal-carrier being arranged so that it will turn in but one direction when locked, and when the seal is secured in place it being necessary to break the seal in order to free or open the lock.

The particular improvements embodying my invention will be hereinafter more particularly set forth and claimed.

To enable others skilled in the art to make and use my invention, I will describe the same more fully, referring to the accompanying drawings, in which—

Figure 1 is a perspective view of my improved seal-lock, showing the same when open ready to receive the seal. Fig. 2 is a like view showing the same closed with the seal therein. Fig. 3 is a cross-section on the line 3 3, Fig. 2. Fig. 4 is a side view, the seal-carrier being shown in section to show the interior construction of the lock. Fig. 5 is a perspective view of the seal-carrier. Fig. 6 is a like view of the shouldered washer therein. Fig. 7 is a cross-section of the bow on the line 7 7, Fig. 4, the movable parts being

removed; and Fig. 8 is a front view of the lock, showing the seal therein.

Like letters of reference indicate like parts.

The seal-lock illustrated has the body or bow *a* formed of the arms *b c* and connecting portion *a'*, such as described in the patents granted to me as aforesaid. The arm *b* of the bow has formed thereon the seat *e*, which is rectangular in cross-section, as shown in Fig. 3, and has the shoulders *e' e''* at the top and bottom thereof to confine the seal within the seat, preventing the vertical motion thereof. The seat is formed rectangular in cross-section, as shown, so that the seal *A* may swing into the same when held by the seal-carrier, as hereinafter described. The other arm *c* of the bow is formed of the annular head *d*, from which extends the shaft *f*, which is parallel to the arm *b*, and forms the shaft on which the seal-carrier *g* is mounted. Just below the head *d* and at its junction with the shaft *f* is formed the shouldered washer *h*, with which a shouldered washer *k* on or carried by the seal-carrier engages. The seal-carrier *g* fits around the shaft *f*, swinging thereon and being confined between the head *d* and the base-plate *i*, which is secured to the shaft *f* below the seal-carrier. The seal-carrier carries a spring-operated shouldered washer *k* or like device, which engages with the shouldered washer *h* on the arm *c*, and the construction of said washer preferred by me is illustrated in the drawings, this washer being formed separate from the seal-carrier and fitting within the same and around the shaft *f*, the washer engaging with the carrier by a key-and-feather connection, as shown at *l*, Fig. 3, so that it turns therewith. The washer is preferably made of brass, as that metal will not rust, and its vertical movement frees the operative parts of the lock from rust.

In order to permit of the vertical movement of the washer *k* on the turning of the seal-carrier, I employ the heavy brass spring *m*, confined between the face of the washer and the base-plate *i*, as shown. The base-plate *i* is secured to the shaft *f* by a pin *n*, which passes through the shaft, but the end of which does not extend through the opposite end of the base-plate, and this pin when driven to place and filed off renders it prac-



tically impossible to open the lock. As the  
 shoulder of the washer *h* if made of cast-iron  
 is liable to break off under a heavy strain,  
 which might be brought against it through  
 5 the seal-carrier, I prefer to employ an inserti-  
 ble steel shoulder *h'*, fitting into a recess in  
 the washer *h*, formed for its reception, the  
 shoulder *h'* having a tang *h<sup>2</sup>*, entering a corre-  
 spondingly-shaped bow in the body. It is  
 10 thus seen that I provide for the seal-carrier  
 a means of locking the same at a certain point  
 in its movement, though it is free to turn in  
 the opposite direction, as desired. Formed in  
 the seal-carrier and in line with the seat *e* of  
 15 the arm *b*, when the carrier is in its locked  
 position, is the groove or recess *p*, one edge *r*  
 of which forms the shoulder, against which  
 the front face of the seal-plate is pressed,  
 while extending out from the opposite end of  
 20 the groove *p* is the tongue *s*, which passes  
 against the rear face of the seal, so that when  
 the seal-plate is secured in place its front face  
 engages along the side edges thereof with  
 the seat *e* and shoulder *r*, and the tongue *s* by  
 25 pressing against its rear face, holds it within  
 the seats so formed for it and prevents its  
 withdrawal therefrom. It will be noticed  
 that the grooved recess *p* is made of greater  
 width than the thickness of the seal-plate,  
 30 and that the tongue *s* extends out from the  
 rear edge of said recess, so that it bears only  
 upon the seal at a point near the center  
 thereof. The purpose of this is to give free  
 space between the rear face of the seal and  
 35 the tongue, so that there is no opportunity of  
 the clogging of the recess by dirt or ice or  
 such like means, and the proper working of  
 the lock is always insured.

In the use of my invention the bow or body  
 40 is inserted in the hasp of the car or box, and  
 one edge of the seal placed in the recess *p* of  
 the seal-carrier, its front face bearing against  
 the shoulder *r* thereof, and its rear face bear-  
 ing against the tongue *s* thereof, and upon the  
 45 turning of the carrier the opposite edge of the  
 seal-carrier is forced into the seat *e*, its front  
 face bearing against said seat, and is held  
 therein by the tongue *s*, bearing against the  
 rear face thereof. As so confined the seal is pre-  
 50 vented from longitudinal or vertical move-  
 ment by the shoulders *e' e''* of the seat *e* and  
 by the head *d* and base-plate *i* of the arm *c*,  
 while, as before stated, its front face bears at  
 its side edges against the seat *e* and shoulder  
 55 *r* and its rear face is held by the tongue *s*.  
 When the parts reach this position, the shoul-  
 dered washers *h* and *k* have passed each other  
 and the spring *m* has forced the washer *k*  
 into line with the washer *h*, so that the seal-  
 60 carrier *p* and its tongue *s* cannot be turned  
 back, and the seal-plate is thus confined  
 within the bow, so that the bow cannot be  
 opened until the seal-plate is broken. This  
 may easily be done by grasping the seal-car-  
 65 rier and giving it a quick turn, when the lev-  
 erage of the tongue *s* upon the rear face of  
 the seal causes the fracture of the same.

The lock is of simple construction and can  
 be formed at but slight cost, as practically all  
 the parts can be cast to shape and require 70  
 but little finishing. At the same time the  
 washer and its operating-spring can be made  
 of brass and formed heavy and strong, so that  
 there is no fear of their rusting or being eaten  
 out by acid in an attempt to open the lock, 75  
 while the necessity of any special shoulders  
 or like devices upon the seal is overcome, the  
 seals being simply rectangular pieces of glass  
 or frangible metal which require no special  
 molds for their manufacture. 80

What I claim as my invention, and desire  
 to secure by Letters Patent, is—

1. In a seal-lock, a body having a lip or  
 shoulder thereon, in combination with a seal-  
 carrier mounted therein and provided with 85  
 a longitudinal groove or recess to engage with  
 the seal, and a seal entering said groove and  
 held by the seal-carrier against the lip of the  
 body, substantially as and for the purposes  
 set forth. 90

2. In a seal-lock, a bow having one arm  
 provided with a seat to receive one end of  
 the seal, in combination with a seal-carrier  
 mounted on the second arm and having a  
 tongue extending out therefrom and adapted 95  
 to press on the opposite face of the seal to  
 that engaging with the said seat, substan-  
 tially as and for the purposes set forth.

3. In a seal-lock, a bow having one arm  
 provided with a seat to receive one end of 100  
 the seal, said seat having end walls to hold  
 the seal against longitudinal motion, in com-  
 bination with a seal-carrier mounted on the  
 other arm and having a tongue extending out  
 therefrom and adapted to press on the oppo- 105  
 site face of the seal from that engaging with  
 the said seat, substantially as and for the  
 purposes set forth.

4. In a seal-lock, a bow having one arm pro-  
 vided with a seat to receive the end of the 110  
 seal, in combination with a seal-carrier mount-  
 ed on the other arm and having a groove or  
 recess formed therein of greater width than  
 the thickness of the seal, said recess having 115  
 a shoulder at the forward edge to engage with  
 the seal, and a tongue extending out from the  
 rear edge to engage with the back of the same,  
 substantially as and for the purposes set forth.

5. In a seal-lock, a body having a seat to  
 receive the seal and having a shouldered 120  
 washer, in combination with the seal-carrier  
 mounted on said body and having a shoul-  
 dered washer to engage with the washer of  
 the body, substantially as and for the pur-  
 poses set forth. 125

6. In a seal-lock, the combination of a shaft  
 provided with a shouldered washer, a seal-  
 carrier fitting around the same, and a shoul-  
 dered washer fitting around the shaft and  
 within the seal-carrier and engaging with the 130  
 seal-carrier by a feather, and a spring press-  
 ing against said washer, substantially as and  
 for the purposes set forth.

7. In a seal-lock, the body *a*, having the



shaft *f*, provided with the shouldered washer  
*h*, in combination with the shouldered washer  
*k*, mounted on said shaft, the spring *m*, and  
the seal-carrier fitting around said shaft and  
5 around said spring and shouldered washer  
and engaging with the washer by a feather,  
and the base-plate *i*, confining said spring and  
seal-carrier upon the shaft, substantially as  
and for the purposes set forth.

10 8. In a seal-lock, the combination of the  
body having a seat to receive the seal and a  
shouldered washer *h*, provided with an in-

sertible shoulder *h'*, in combination with the  
seal-carrier mounted in said body and having  
a shouldered washer *k* to engage with the 15  
inserted shoulder *h'* of the washer *h*, sub-  
stantially as and for the purposes set forth.

In testimony whereof I, the said EDUARD  
MEISE, have hereunto set my hand.

EDUARD MEISE.

Witnesses:

J. N. COOKE,

ROBT. D. TOTTEN.