No. 639,938. Patented Dec. 26, 1899.

C. E. RICHARDSON.

SEAL LOCK.

(Application filed Mar. 20, 1899.)

(No Model.)

Fig. 1.

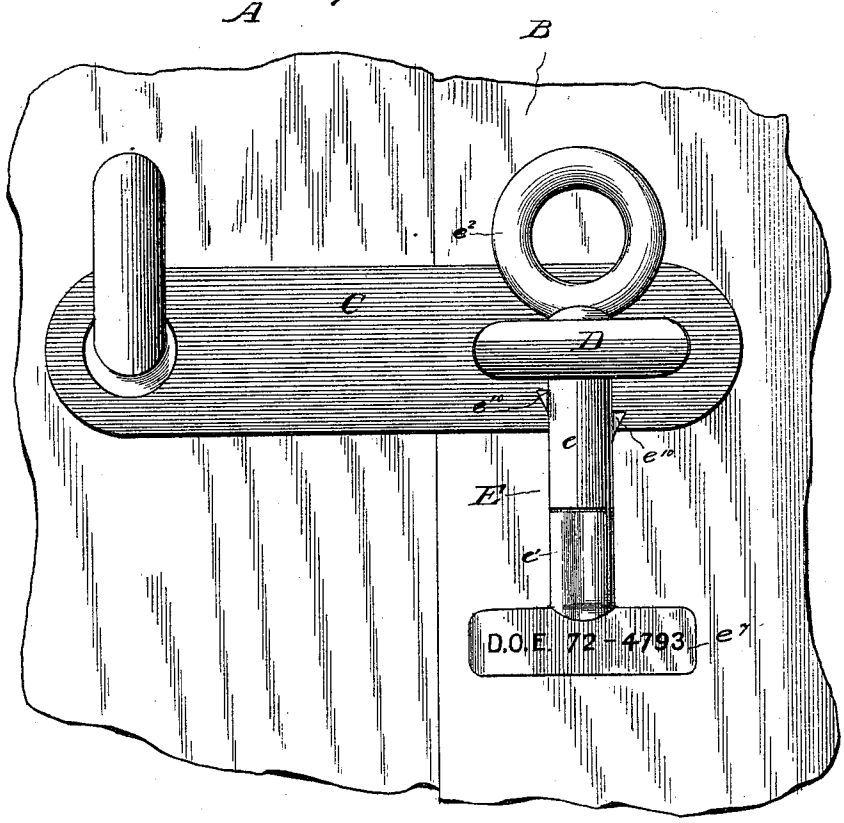
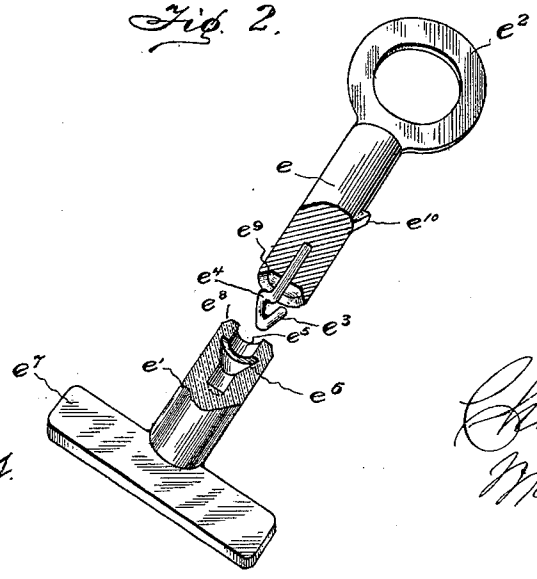


Fig. 2.



WITNESSES

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UNITED STATES PATENT OFFICE.

CHAUNCEY E. RICHARDSON, OF DULUTH, MINNESOTA.

SEAL-LOCK.

SPECIFICATION forming part of Letters Patent No. 639,938, dated December 26, 1899.

Application filed March 20, 1899. Serial No. 709,793. (No model.)

To all whom it may concern:

Be it known that I, CHAUNCEY E. RICHARDSON, a citizen of the United States, residing at Duluth, in the county of St. Louis and State of Minnesota, have invented certain new and useful Improvements in Seal-Locks; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to car seal-locks which are constructed of a fragile material and which cannot be opened without totally destroying the lock, the said lock being adapted to be applied to car-fastenings of ordinary construction or to other places; and the invention consists of certain novel constructions, combinations, and arrangements of parts, as will be hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a front elevation of a portion of a car door and framework with my improved car seal-lock applied thereto. Fig. 2 is a perspective view of my improved car seal-lock.

A in the drawings represents the car; B, the frame of the car; C, a hasp; D, a staple, and E my improved car seal-lock. The hasp C and staple D are of ordinary construction and are applied to the car in the usual manner.

My improved seal-lock consists of two members *e e'*, both or one of which is constructed of fragile material—such as glass, clay, or porcelain—or partially of such material and iron, steel, brass, copper, or aluminium, though I prefer to construct the member *e* of metal and the member *e'* of a fragile material. The member *e* is formed with a head e^2, which is shown in the drawings as circular in form, though it is obvious that it may be made of any suitable shape—as, for instance, lozenge-shaped, square, or flat. The shank portion may be round, as indicated, or it may be square, oval, or flattened in cross-section. The member *e* is provided with an arrow-shaped spring-head e^3, which is firmly secured in position within the member *e*, as shown. One end of the spring-head is left free, and said head being tapering in shape and formed with a shoulder e^4, forming an acute angle, it can be readily passed through the entrance-passage e^5 of the outer member *e'*, and after passing the same can spring out into an enlarged recess e^6 and be retained by the walls thereof against any possible disengagement without destroying the seal. The spring barb or head e^3 is preferably constructed of round metal and preferably of aluminium, so as not to be affected by the atmosphere, though I do not wish to limit my invention to the use of aluminium nor to the use of round metal, as I have so constructed the seal-lock, as will be hereinafter described, that moisture will be prevented from entering the same and ruining the barb or injuring the temper of the same. The spring barb or head e^3 being constructed of a single piece of material is very simple yet efficient in its operation and much cheaper to produce than a barb or head constructed of several parts. The member *e'* of the lock is provided with a head or enlargement e^7, which, with the head e^2 on the member *e*, renders it absolutely impossible for the lock to become disengaged from the staple D. The member *e'* is provided at its inner end with a reduced or tapered portion e^8, which extends slightly beyond the main body portion of said member and is designed to fit into a recessed portion e^9, formed in the member *e*, for the purpose of forming a telescoping joint and preventing water or moisture from entering into the interior of the lock and also preventing the lock from being picked by the insertion of a tool at the meeting edges of the members.

To prevent any liability of the lock being accidentally broken by coming in contact with the under side of the staple by reason of the movement which is imparted thereto by the motion of the train or by rough handling, the upper member *e* of the lock is provided with projections e^{10} e^{10}, which would engage the under side of the staple D unless carefully drawn through the same and guided in said movement by the hand of the operator, the opening in the staple being large enough to admit of the projections passing therethrough. The upper member *e* may be secured to the car against loss by means of a suitable chain or otherwise.

By constructing the seal-lock with practically a straight shank and upper and lower heads it hangs perpendicularly and is not so

liable to strike against the sides of the car and be broken as would be the case if it were made in U or other shape.

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

1. A seal-lock comprising in its construction two separable members, one of which is formed with a head and a straight shank and a longitudinally and centrally arranged spring-barb which projects outwardly from the inner end of the said member, said barb being constructed of a single piece of metal and having engaging projections and the other member formed with a head and a straight shank and a centrally inwardly and longitudinally extending small aperture terminating in an enlarged recess which aperture and recess are surrounded on all sides except at the entrance by the material constituting said member, the spring-barb being adapted to be passed through the small aperture and compressed thereby and to enter the recess and to spring out and engage the walls of the recess, the coupling action being entirely automatic in its operation and not requiring the spring-barb to be operated by hand, one of the members of the lock being constructed of fragile material, substantially as described.

2. A seal-lock comprising two separable members, one of which is formed with a head and a straight shank and a longitudinally-arranged spring-barb which extends from the inner end of said member and is constructed of a single piece of metal and the other member formed with a head and a straight shank and a centrally-arranged longitudinally-extending small aperture terminating in an enlarged recess through which the spring-barb is adapted to be passed and be engaged by the wall of the enlarged recess, the ends of the said members being constructed to fit one within the other, whereby moisture will be prevented from entering the interior of the lock and whereby it will be impossible to pick the said lock, one of the members being constructed of fragile material, substantially as described.

3. A seal-lock comprising in its construction two separable members, one of which is formed with a head and a straight shank and a spring-barb, and the other member formed with a head and a straight shank and a small aperture terminating in an enlarged recess through which the spring-barb is adapted to be passed and be engaged by the wall of the enlarged recess, the inner ends of the said members being constructed to fit one within the other, one of the members being constructed of fragile material and the other member being provided with projections for preventing the seal coming accidentally in contact with the under side of the staple and being broken, the construction and arrangement being such that moisture will be prevented from entering the interior of the lock and it will be impossible to pick the said lock, substantially as described.

In testimony whereof I hereunto affix my signature in presence of two witnesses.

CHAUNCEY E. RICHARDSON.

Witnesses:
H. C. MEYNES,
CASSELL SEVERANCE.