Jan. 23, 1923. 1,442,812

M. C. LITTLEWORTH.
SEALING DEVICE.
FILED JUNE 21, 1921.

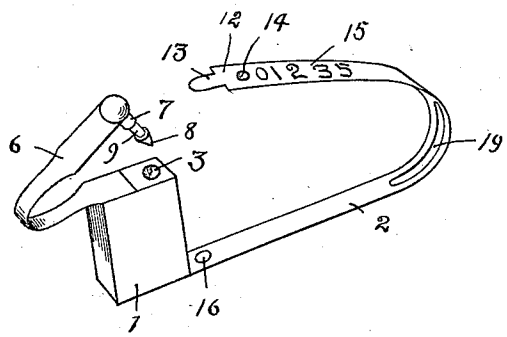


FIG. 1.

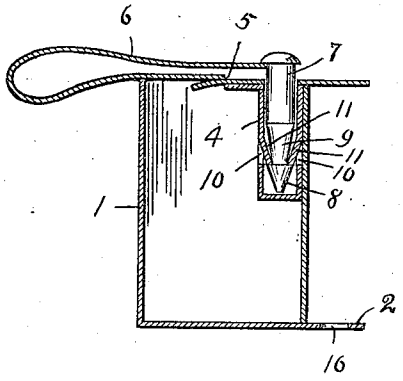


FIG. 2.

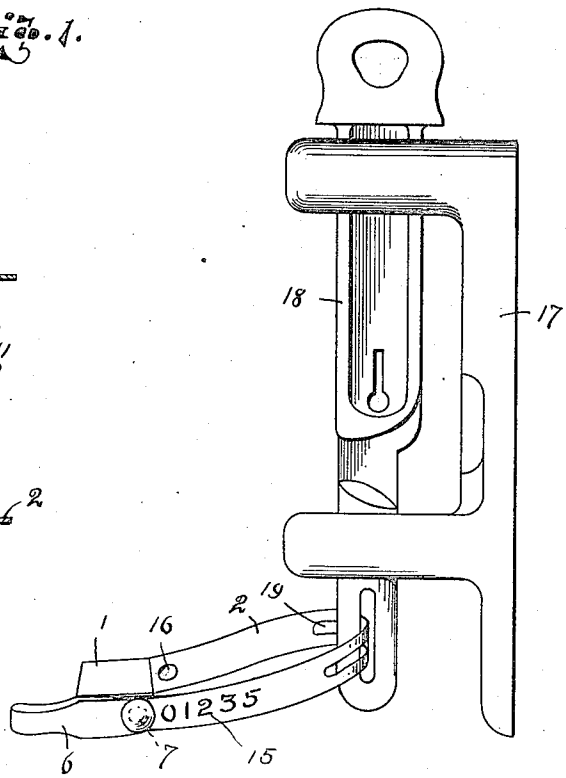


FIG. 3.

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UNITED STATES PATENT OFFICE.

MALCOLM C. LITTLEWORTH, OF DULUTH, MINNESOTA.

SEALING DEVICE.

Application filed June 21, 1921. Serial No. 479,360.

To all whom it may concern:

Be it known that I, MALCOLM C. LITTLEWORTH, 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 Sealing Devices, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to sealing devices and has special reference to those commonly known as car seals used upon doors of cars for the purpose of insuring them against being tampered with or accidentally unlocked.

The principal object of the invention is to provide a more reliable and satisfactory seal for such purpose than heretofore known.

Other objects and advantages of the invention will appear in the further description thereof.

Referring to the accompanying drawing forming part of this application in which like reference characters indicate like parts:

Figure 1 is a perspective view of one of the improved seals in its open receptive position,

Figure 2 is a central vertical sectional view through the locking portion of the seal, and

Figure 3 is a side elevation of a car door bolt and hasp to which one of the improved seals is applied.

1 represents a rectangularly shaped sheet metal receptacle, securely attached, as by solder or the like, to one end of an elongated narrow tin sealing strip 2, and the end of the strip 2 thus attached may be made to answer as the bottom for the receptacle, it thus being formed as substantially an intergral part thereof.

In the forward central upper end of the receptacle is a hole 3 which forms the upper open end of the small cylinder 4 which depends within the receptacle.

Forming a part of the upper end of the receptacle, and, extending in the form of a loop over one edge thereof, is the bolt carrying tin strip 6, the bolt on the free end of the strip being indicated at 7, and, transverse the centermost upper end of the receptacle thus formed by the strip, is a stepped portion 5. The bolt 7 is permanently attached to the free end of the strip 6 and is designed to extend within the cylinder 4 in the receptacle and is provided with a conically shaped head 8 for convenient entrance into the cylinder, it having an annular shoulder formed about the base of the head 8, with a reduced tapered shank 9 adjacent said shoulder. Within the opposite walls of the cylinder 4 are formed vertically disposed slots 10 by the punching inwardly of the tongues 11 where they remain as a secure holdfast means for the bolt 7 when the head of the latter is forced therebetween into the innermost end of the cylinder 4.

Now the free end 12 of the sealing strip 2 is provided with a reduced tongued portion 13 which is designed to enter the stepped portion 5 at the top of the receptacle when the seal is being closed and which operation will bring the hole 14 adjacent said reduced end portion of the strip in position to register with the hole 3 in the top of the receptacle. Then the bolt 7 is forced down through the holes 14 and 3 into the receptacle, where if such pressure is continued until the head 8 of the bolt 7 is positioned beyond the inwardly extending ends of the tongues 11, it will become automatically locked and from which state it is absolutely impossible to become disengaged except by rupture or complete destruction; it being obvious that the sealing strip 2 should first be placed through the bolt or hole prepared for it in the device to be sealed.

On the outer surface of the free end of the sealing strip 2 and adjacent the hole 14 therein, I propose to have established the serial number of the seal as indicated at 15, said number at all times being prefixed by a cipher so that if at any time a seal has been tampered with and the strip broken thus shortening same, the cipher would disappear under the free end of the locking strip 6 and thus become very noticeable to the checker; that is to say, the checker, knowing that a cipher may be always visible as a prefix to the serial number, would notice at a glance that it was not there.

The reduced end 13 of the sealing strip is made to conveniently enter the stepped portion 5 in the top of the receptacle so as to facilitate the adjustment and locking of the seal as well as to prevent any possibility of the corner of the strip being torn upwardly and one-half thereof broken through the hole 14, or in the event of the strip being broken a distance away from the receptacle the broken end can not be secluded adjacent the bolt 7 as the extreme reduced free end must remain permanently within the recep-

tacle as long as the bolt is in locked relation thereto.

A hole 16, similar to the hole 14, is formed in the permanently attached end of the sealing strip 2 adjacent the receptacle 1 to further protect against any shortening of the sealing strip without its being readily detected or noticed.

Intermediate of the ends of the sealing strip 2, an elongated slot 19 is formed, dividing the central portion of the strip into two, thus increasing the difficulty of cutting the seal through the center and re-uniting the ends by bending same and hooking them together, which is frequently practiced and deception accomplished.

The receptacle 1 is made of apparent abnormal size in proportion to the remainder of the seal for the express purpose of making it impossible to pull the seal through the hole or eye in the hasp 17 through which the locking bolt 18 extends, it being well known that such method of tampering with a car seal is common and to prevent which the practice of pulling the sealing strip through both bolt and hasp is resorted to, thus rendering the ready reading of the number on the seal difficult.

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

1. A seal of the character described comprising in combination a receptacle having a hole in the upper end thereof, a sealing strip fastened at one end to the opposite end of the receptacle and having a hole adjacent its opposite end, a bolt carrying strip attached to the other end of the receptacle, a bolt upon the free end of said last mentioned strip for insertion into the receptacle through the hole in the free end of the strip, and a locking device within the receptacle beneath the hole cooperatively engageable with the bolt, substantially as described.

2. The combination with a seal of the character described comprising a flexible sealing strip having a receptacle permanently fixed to one end thereof and manually adjustable means carried by the receptacle for optional lockable connection of the receptacle with the other end of the strip, of means for the reception of the extreme end of the strip within the receptacle beyond said locking means.

3. A seal of the character described comprising in combination a receptacle having a hole in the upper end thereof, a sealing strip fastened at one end to the opposite end of the receptacle and having a hole adjacent its opposite end, a bolt carrying strip attached to the other end of the receptacle, a bolt upon the free end of said last mentioned strip for insertion into the receptacle through the hole in the free end of the strip, means whereby the extreme end of the strip is concealed within the receptacle beyond said bolt when locked, and a locking device within the receptacle beneath the hole cooperatively engageable with the bolt.

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

MALCOLM C. LITTLEWORTH.

Witnesses:
S. C. BRONSON,
S. GEO. STEVENS.