No. 865,313. PATENTED SEPT. 3, 1907.

J. B. ORBISON, F. C. KINGSBURY & A. J. PRAY.

SEAL PADLOCK.

APPLICATION FILED JUNE 4, 1906. RENEWED AUG. 1, 1907.

2 SHEETS—SHEET 1.

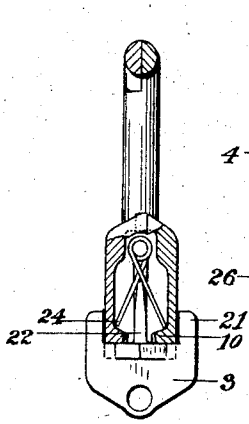

Fig. 2

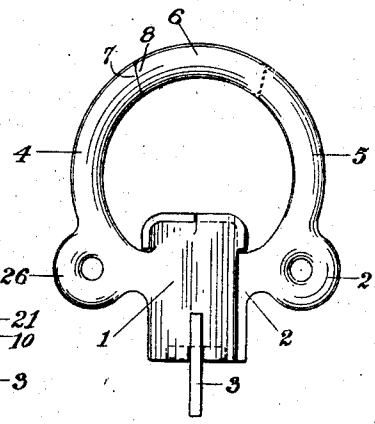

Fig. 1

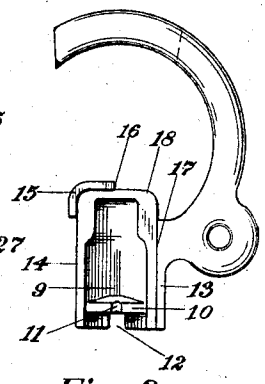

Fig. 3

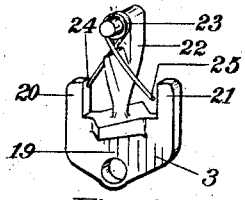

Fig. 5

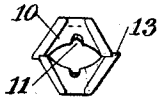

Fig. 4

WITNESSES:

H. E. Fleck

R. Rogers.

James B. Orbison
Frederick C. Kingsbury
Alvah J. Pray INVENTORS

BY

Geo. W. Pightling ATTORNEY.

No. 865,313. PATENTED SEPT. 3, 1907.

J. B. ORBISON, F. C. KINGSBURY & A. J. PRAY.

SEAL PADLOCK.

APPLICATION FILED JUNE 4, 1906. RENEWED AUG. 1, 1907.

2 SHEETS—SHEET 2.

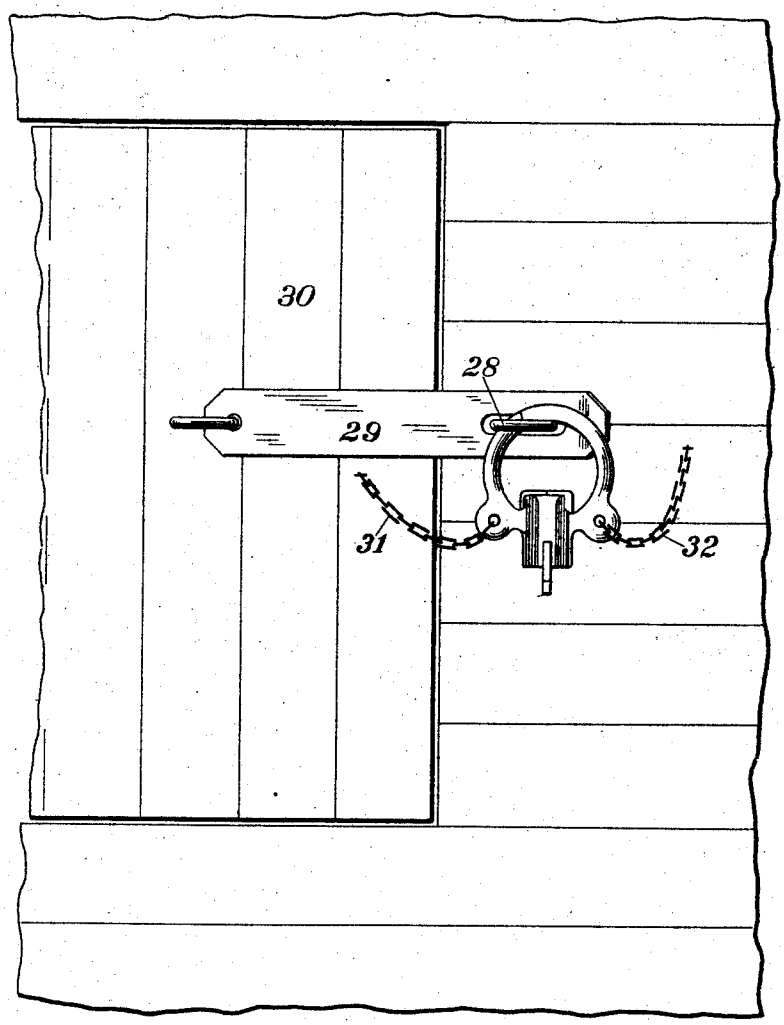

Fig. 6.

WITNESSES:
R. Micklejohn
Thos. E. Franck

James B. Orbison,
Frederick C. Kingsbury,
Alvah J. Pray, INVENTORS
BY
Geo. W. Rightmire, ATTORNEY.

UNITED STATES PATENT OFFICE.

JAMES B. ORBISON, FREDERICK C. KINGSBURY, AND ALVAH J. PRAY, OF COLUMBUS, OHIO.

SEAL-PADLOCK.

No. 865,313. Specification of Letters Patent. Patented Sept. 3, 1907.

Application filed June 4, 1906, Serial No. 320,013. Renewed August 1, 1907. Serial No. 386,509.

To all whom it may concern:

Be it known that JAMES B. ORBISON, FREDERICK C. KINGSBURY, and ALVAH J. PRAY, all citizens of the United States, residing at Columbus, in the county of Franklin and State of Ohio, have invented certain new and useful Improvements in Seal-Padlocks, of which the following is a specification.

Our invention relates to a locking or sealing device in which two similarly formed members are adapted to be placed together and locked at their front ends, whereby they are secured against separation; each member is provided with a curved arm, and each arm near its outer end is reduced thereby leaving a shoulder; when the members are placed in contact the arms overlap and the outer end of each abuts against the shoulder on the other, thereby rendering the union more firm as hereinafter explained.

In its essential features our improved device comprises a locking ring composed of two similarly formed members adapted to be positioned in contact with each other, and a key member adapted to lock the parts when thus positioned. It is adapted particularly for use on car doors with a hasp and staple, to take the place of the ordinary padlock or car seal in common use, and will now be described in detail.

In the accompanying drawings Figure 1 is a view of the parts in position; Fig. 2 is a vertical section through Fig. 1, the view being from the left; Fig. 3 is a view of one member showing the inner face thereof, and inasmuch as the other member is a duplicate, the single figure illustrates both members; Fig. 4 is an end view of the members in position to receive the key; Fig. 5 is a view of the key. Fig. 6 is a view of the padlock in locking position upon a staple.

Referring to the drawings, in which the same numerals indicate like parts throughout, 1 and 2 are the engaging members and 3 is the key; 4 and 5 are the curved arms of the members, overlapping at 6 and forming the ring; 7 is a shoulder on arm 4, against which the end of arm 5 abuts as shown at 8; the end of arm 4 abuts against a similar shoulder formed on the opposite side of arm 5. This overlapping of the arms prevents separation of the parts in one direction at a right angle to the plane of the curve formed by the arms, and the abutting of the end and shoulder limits the inward movement of the parts when placed in overlapping relation, and prevents pressure exerted inwardly on said device from straining the parts, whereby the key might be broken.

The members 1 and 2 are each formed with a channel 9, at the front end of which is a shoulder 10 having a recess 11 therein; the extreme front end of each member extending slightly beyond the shoulder 10, is notched at 12. One side of each member is provided with a flange like projection 13 formed along the margin thereof; the opposite side 14 is not provided with a flange except at 15 which flange is continued around the curve of the outer corner of the member, and is discontinued about the middle of the inner end of said member, as shown at 16. The outer side of each member has the curved arm attached thereto in such manner as to form the shoulder 17, just opposite the unflanged portion of the side 14.

The key 3 has the head 19 provided with the depending lugs 20 and 21 therein and the stem 22, fitted with a spring wire 23, having the arms 24 and 25. The key is applied to the members to lock the same by inserting the stem 22 into the opening between the members at their outer ends, and as it is pressed inwardly the spring ends are contracted to pass the shoulder 10 through the recesses 11, and then spring outwardly and engage against the inner faces of the shoulders, thereby preventing the withdrawal of the key. Meanwhile the head of the key has engaged the ends of the members, has entered the notches 12 thereon, and the depending lugs 20 and 21 engage the outer faces of the sides.

Reference being had to the view of the parts as shown in Fig. 1, the term lateral is intended to mean a direction to the left or right; vertical is intended to mean a direction substantially towards the top or bottom of teh sheet; the twisting movements mentioned are intended to designate a separation of the parts outwardly away from the sheet or inwardly through the sheet. When the key 3 is in position as illustrated in Fig. 1, the parts of the padlock are prevented from separation by the flanges and lateral arms above described as follows: Lateral separation outwardly is prevented by the coaction of the flanges 15 with each other; lateral separation inwardly is prevented by the coaction of the outer ends of the lateral arms with the shoulders 7 formed thereon, in conjunction with the coaction of the shoulder 17 and flange 13 with the edge 14. Vertical separation in either direction is prevented by the coaction of the flange 15 with the edge 18 and the inner side of the lateral arm; if these parts functionate properly their coaction affords adequate provision against vertical separation; however, auxiliary means to prevent vertical separation is provided in the engagement of the spring arms 24 and 25 and the base of the key with the shoulder 10 and the notch 12 respectively. Twisting in one direction is prevented by the overlapping lateral arms in conjunction with the engagement with the inner faces of the members 1 and 2; twisting in the opposite direction is prevented by lugs 20 and 21 engaging the outer faces of the members 1 and 2.

The key is frangible, and can be removed readily by breaking the head from the stem by a tap at one side thereof; therefore, after the device is locked into position it cannot be removed without leaving evidence thereof. This is the chief value in the construction; it is not intended to be burglar proof, but is to act as a seal which cannot be broken without detection.

The device is adapted to be quickly positioned by inserting the arms through the staple, 28, having a hasp 29 secured to the door 30 in locking position thereon, then bringing them into overlap relation, and adjusting the members in the manner described above; the key is quickly applied, whereupon the door is securely locked against tampering which cannot be detected. The removal is effected almost instantly by snapping the head from its stem and permitting the parts to swing out of contact. This is aided by providing the rings 26 and 27 to which chains 31 and 32 are attached, the former being secured to the door, the latter to the body of the car; in this manner it is provided that the parts are always in place for ready locking, and when released, that they will swing into convenient positions.

Applicants do not desire to be limited to the specific construction shown, but desire to claim all modifications which are properly within the scope of the invention.

The chief advantages claimed for our improved device herein described are simplicity of construction, cheapness with which the parts can be produced, quickness and ease of application to a car door and removal therefrom, and an arrangement for suspending the parts in convenient position for bringing them into operative contact.

What we claim as new and desire to secure by Letters Patent is:—

1. A sealing device for car doors and the like comprising two members adapted to be placed in overlap relation, means thereon for preventing separation laterally, lateral curved arms on said members adapted to be inserted through a staple and to overlap at the outer ends, and a frangible key adapted to be applied to said members to lock the same together.

2. A lock for car doors and the like comprising two similarly formed members adapted to be placed in contact along their inner faces, a curved flange on each member adapted to engage a curved edge on the other member, a curved arm on each member adapted to abut against said curved flange on the other member, said curved members lying in contact at their outer ends, and means for securing said members together.

3. The combination with a staple and a hasp engaging therewith, of a separable ring constructed with overlapping parts, means thereon to prevent vertical and lateral separation of said parts, means applied to said parts to lock the same together, said parts when inserted through said staple and positioned against said hasp and secured together forming a locking device for securing said hasp against separation from said staple.

4. A padlock composed of two similarly formed members, each member having a body portion and an arm curving laterally therefrom, a flange extending along one edge of said body portion, a shoulder near the outer end of said body portion, a notch at the outer end of said body portion, said arm being provided with a shoulder adjacent said flange, said body portions being adapted to be placed in contact along their inner faces, and said arms being adapted to overlap at their outer extremities.

5. A padlock composed of two similarly formed members, each member having a body portion and a curved arm extending outwardly therefrom, said body portion being channeled longitudinally for the reception of a key and having a flange along one edge, a shoulder in said channel near the outer end thereof and a notch in the outer end of said body portion.

6. A padlock composed of two similarly formed members, each member having a body portion, a curved arm extending outwardly therefrom, said body portion being provided with a flange adjacent its inner end, a flange along one side, a shoulder near the outer end, a notch in the outer end, said body portion being recessed for the reception of a key.

7. A padlock composed of two similarly formed members, each member having a body portion and a curved arm extending laterally therefrom, the inner end of said arm forming a shoulder adjacent the body portion, said body portion having a flange adjacent its inner end, a notch in its outer end, a channel for the reception of the key, and a shoulder near the outer end of said channel.

8. A padlock composed of two similarly formed members, each member having a body portion and a curved arm, said body portions being adapted to be placed in overlap relation along their inner faces, said arms being adapted to be placed in overlap relation adjacent their outer ends, projections on each body portion adapted to prevent lateral separation of parts outwardly when said parts are in operative relation, and means adapted to be applied to said body portions adjacent their outer ends to lock the same together, and means for securing said means in operative position.

9. A padlock composed of two similarly formed members, each member having a body portion and a curved arm, said body portions being adapted to be placed in overlap relation along their inner faces, said arms being adapted to be placed in overlap relation adjacent their outer ends, projections on each body portion adapted to prevent lateral separation of parts outwardly and vertical separation of the parts when said parts are in operative relation, and means adapted to be applied to said body portions adjacent their outer ends to lock the same together, and means for securing said means in operative position.

10. A padlock composed of two similarly formed members, each having a body portion and a curved arm, a shoulder adjacent the outer end of said arm, said body portions being adapted to be placed in overlap relation along their inner faces, said arms being adapted to be placed in overlap relation adjacent their outer ends, projections on each body portion adapted to prevent lateral separation of the parts outwardly and vertical separation of the parts, projections upon each body portion adapted to coact with the inner ends of the curved arms in conjunction with the engagement of the outer ends of said arms with said shoulders to prevent lateral separation of the parts inwardly, and means adapted to be applied to said body portions adjacent their outer ends to lock the same together.

11. A padlock composed of two similarly formed members, each member having a channeled body portion, a curved arm extending from said body portion, said arms being adapted to overlap at their outer ends, and said body portions being adapted to be placed in overlap relation to leave an opening between the same at their outer ends, a key adapted to be inserted into said opening longitudinally, means for preventing said key from being retracted, and extensions on said key adapted to engage said body portions on their external sides to lock the same together.

12. A padlock composed of two similarly formed members each having a channeled body portion, said members being adapted to be placed in overlap relation to leave an opening between the same adjacent their outer ends, a key adapted to be inserted into said opening longitudinally, extensions on said key adapted to engage said body portions on their external sides to prevent separation of said members by a twisting movement in one direction, lateral arms on said members adapted to overlap at their outer ends, said overlapping of said arms and said members respectively being adapted to prevent separation by a twisting movement in the opposite direction.

In testimony whereof we affix our signatures in the presence of witnesses.

JAMES B. ORBISON.
FREDERICK C. KINGSBURY.
ALVAH J. PRAY.

Witnesses:
WALTER B. O. FRANK,
LOU MATHEWS,
WILLIAM MARCHANT,
GEORGE LEWIS HOPPES,
LAURA E. PRAY,
CARL REYNOLDS.