

No. 620,091.

Patented Feb. 28, 1899.

E. R. APPLIN.
SEAL FOR SAFES.

(Application filed Apr. 25, 1898.)

(No Model.)

Fig. 1.

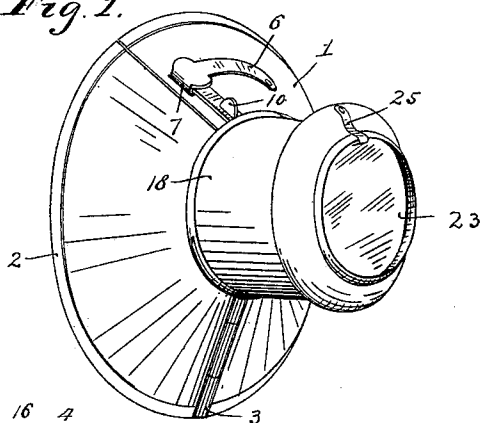


Fig. 2.

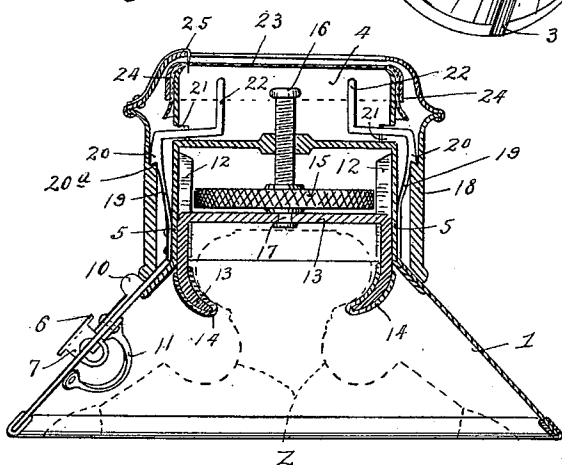


Fig. 4.

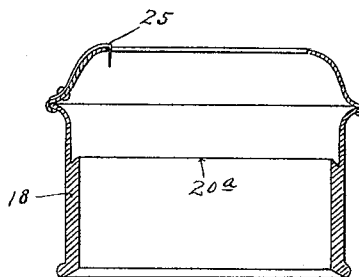


Fig. 3.

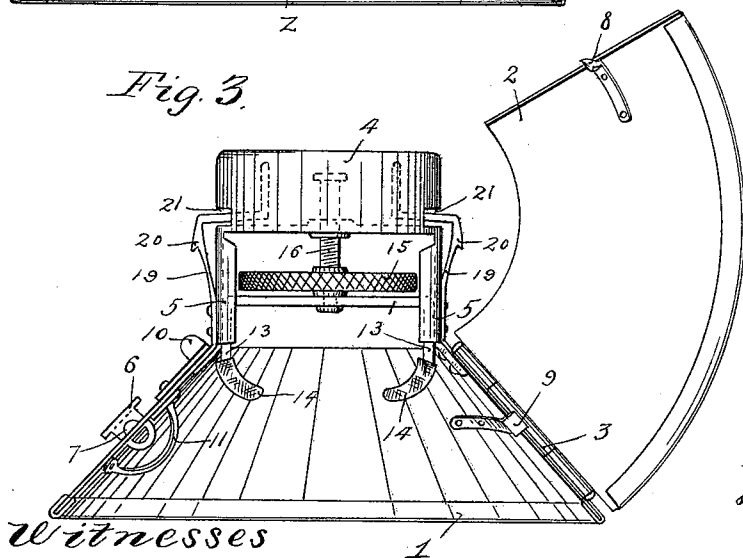


Fig. 5.

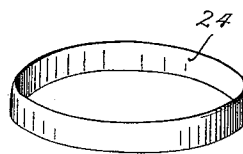
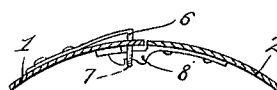


Fig. 6.



Witnesses

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SEAL FOR SAFES.

SPECIFICATION forming part of Letters Patent No. 620,091, dated February 28, 1899.

Application filed April 25, 1898. Serial No. 678,703. (No model.)

To all whom it may concern:

Be it known that I, EBY R. APPLIN, a citizen of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in Seals for Safes; 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 has for its object to provide a simple and efficient seal or sealing device especially adapted for application to the tumbler-operating knob of a safe, to thereby prevent said knob from being manipulated without detection.

To the end above indicated my invention consists of the novel devices and combinations of devices hereinafter described, and defined in the claims.

The preferred form of my invention is illustrated in the accompanying drawings, wherein like characters indicate like parts throughout the several views.

Figure 1 is a perspective view of the sealing device. Fig. 2 is a transverse section taken on the axis of the device. Fig. 3 is a view in side elevation, showing the device as opened up. Fig. 4 is a detail view of the cap of the seal removed, the same being shown as sectioned on the same line as Fig. 2. Fig. 5 is a perspective view of a clamping-ring, and Fig. 6 is a detail view showing a lock connection between two hinged parts of the device.

The body of the device is made up of a pair of conic sections 1 2, hinged at 3, a cup-like section 4, of approximately the diameter of the smaller circle or end of the truncated portion formed by the sections 1 and 2, and a pair of diametrically-spaced legs or bars 5, connecting said portion 4 with the section 1. The sections 1 and 2 are adapted to be detachably locked together at their free ends by means of a lock device which, as preferably constructed, comprises a leaf-spring 6, riveted to the section 1 and provided with an inwardly-projecting perforated free end 7 and a cooperating cam-acting nose or hook 8, secured to the section 2 and adapted to be cammed into the perforation of the extremity 7 to lock the

said sections together. A spring 9, which, as shown, is secured at one end to the section 1, bears with its free end against the section 2 and tends to throw said sections apart. The hook 8 may be released from the perforated end 7 of the spring 6 simply by pressing on the outer surface of the free end of said spring 6.

10 indicates a sliding detent which is mounted for movement to and from the free end of the spring 6 and is itself normally held in an inoperative position by means of a U-shaped spring 11, secured thereto at one end and to the section 1 at its other end. When this detent 10 is forced downward, as hereinafter described, it will be moved under the free end of the spring 6 and will so hold the same that the hook 8 cannot be released therefrom.

Mounted in suitable guides or keepers 12, formed on the inner surfaces of the legs 5, are the downturned ends of a grapple 13, the prongs of which are turned toward each other and preferably covered with chamois leather or other material 14, which will not mar the nickel-plating of the knob. This grapple 13 is adapted to be moved by means of a large knurled wheel or finger-piece 15, having a stem or shaft 16, which is swiveled to the transverse portion of said grapple, as at 17, and works with screw-threaded engagement through the bottom of the cup-like section 4.

Access to the wheel or finger-piece 15 is adapted to be cut off by means of a barrel-like cap or collar 18, which is open at its ends and is removably securable around the section 4, legs 5, and parts within the same, this, as shown, being accomplished by means of a pair of spring-catches 19, secured to the legs 5 and provided with hook or nose portions 20, that engage an annular ledge or shoulder 20^a, formed on the interior of said cap 19. The free ends of these spring-catches 19 extend inward through perforations 21 in the sides of the section 4 and terminate within said section 4 in finger-pieces 22. By pressing the free ends of the spring-catches 19 together by applying the fingers to the finger-pieces 22 thereof the cap or collar 18 may be released and then removed. When the said cap or collar 18 is secured in working position, as

shown in Figs. 1 and 2, its inner end engages the sliding detent 10 and forces the same under the free end of the spring 6, and thus locks it outward, so that the hook 8 cannot be released, as previously indicated.

It will be noted that access can be had to the finger-pieces 22 of the spring-catches 19 only by placing the fingers through the openings in the outer ends of the cap or sleeve 18 and the cup-shaped portion 4. When the device is sealed, this access is cut off by means of a sealing disk or piece 23, which is clamped onto the flange of the portion 4 by means of a clamping-ring 24. This sealing-piece 23 is preferably constructed of paper, but may be constructed of any suitable material which may be punctured, broken, or easily cut. It is proposed to mark or stamp these sealing-pieces 23 in some peculiar manner which cannot be easily imitated, and these blanks will be kept in the possession of the person or persons whose duty it is to seal the safe. In Fig. 2, z indicates the tumbler-operating knob of the safe, the same being shown by dotted lines.

Preferably the cap or collar 18 is provided with a projecting cutter 25, which when the cap is in working position perforates the sealing-piece 23, and if turned will cut a large disk-like section out of the central portion of the same.

The device is applied in working position, as shown in Fig. 2, first by engaging the in-turned prongs of the grapple 13 with the tumbler-operating knob z by lateral movement, while the section 2 is opened up, as shown in Fig. 3. The section 1 is then closed and secured by the engagement of the hook 8 with the perforated free end 7 of the latch-spring 6. The jaws of the grapple 13 are then drawn tightly against the knob z by means of the knurled wheel 15 and its screw-threaded stem 16. Next the sealing piece or disk 23 is secured over the end of the section 4 by means of the clamping-ring 24, and then to complete the sealing operation the cap or collar 18 is forced into working position, where it will be held by the spring-catches 19.

As previously indicated, this sealing device may be removed so as to afford access to the tumbler-operating knob of the safe only by first breaking the sealing-piece 23, so that the fingers may reach the finger-pieces 22 of the spring-catches 19. As is obvious, this sealing-piece 23 may be broken by means of the fingers; but it may be much more easily and neatly accomplished by turning the cap or collar 18, thereby causing the knife 25 to cut out the center of the said sealing-piece.

The many possible uses to which this device may be put will be amply illustrated by briefly indicating the specific use for which the device was particularly designed. The device was especially designed to give additional security against express-safes being tampered with while in shipment from one point to another.

The combination of the safe must be known by a number of persons on the line, and hence if opened between the ultimate points of its destination no notice of this fact will be given until internal examinations of the safe disclose the fact; but with my improved sealing device applied to the tumbler-operating knob of the safe the fact that the sealing-piece remains intact will give positive assurance that the safe has not been opened. This sealing strip or piece is exposed at a very prominent place.

It will of course be understood that various alterations in the specific details of construction above described may be made within the scope of my invention.

What I claim, and desire to secure by Letters Patent of the United States, is as follows:

1. A seal for safes, &c., comprising a shield applicable to cover the knob thereof, a grapple engageable with the knob to hold said shield in position, a cap or collar covering said grapple, a latch for securing the same in position, and a sealing-piece secured in position to cut off access to said latch, but adapted to be readily broken or punctured, substantially as described.

2. A sealing device for safes, &c., comprising a two-part shield, a latch for locking said parts together, a grapple for securing said shield to the knob, a cap or collar which, when secured in working position, locks said latch against releasing movement and cuts off access to the interior of said shield, except through a sealed passage therein, and a sealing-piece normally cutting off access through this passage, but adapted to be readily broken or punctured, substantially as described.

3. In a sealing device of the character described, the combination with the two-part case-section securable together by a latch, of a detent for locking said latch against action, a grapple for securing said case to a knob, a grapple-actuating device, a cap or collar surrounding said grapple-actuating device and rendering said detent active, when in working position, one or more spring-latches securing said cap or collar in working position, and a sealing-piece cutting off access to said spring-catches and grapple-actuating device, substantially as described.

4. In a sealing device of the character described, the combination with the case-sections 1, 2, hinged at 3 and securable by the latch device 6, 7, 8, of the detent 10, the cup-like section 4 connected to said section 1 by the legs 5 having channels 12, the pronged grapple 13 working in said channels 12, the grapple-actuating wheel 15 with screw-threaded and swiveled stem 16, 17, the sealing-piece 23 held by the clamping-ring 24, the rotary cap or collar 18 with annular ledge 20^a and cutter 25, and the spring-catches 19 secured to the body of said seal and provided with the lug or nose portions 20 and finger-pieces 22, substantially as described.

5 In a seal of the character described, the combination with a body-section and means for securing the same to a device to be sealed, such as a knob, of a sealing-piece, and a rotary collar or barrel-like cap securable to said body portion and provided with a cutter arranged to cut said sealing-piece, when said collar or cap is rotated, and thereby afford access to the internal mechanism of said seal, substantially as described. 10

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

EBY R. APPLIN.

Witnesses:

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CLEMENTINA H. WILCOX.