Jan. 4, 1938. J. J. MARTINEZ ET AL 2,104,204

SECURITY LOCKING DEVICE

Filed March 11, 1936 2 Sheets-Sheet 1

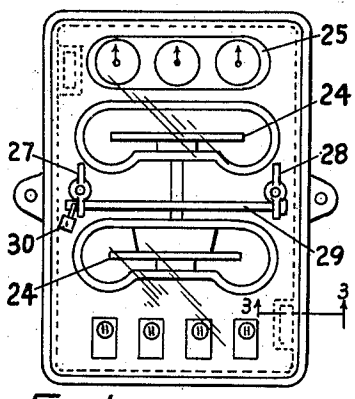


FIG. 1.

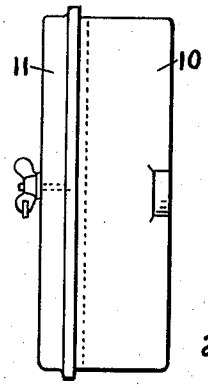


FIG. 2.

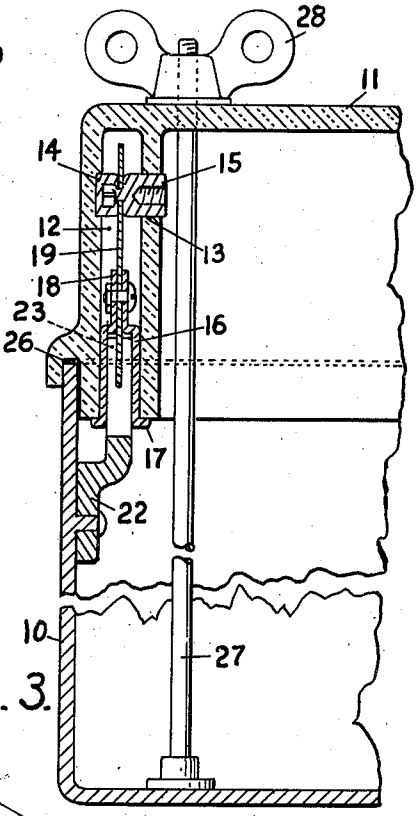


FIG. 3.

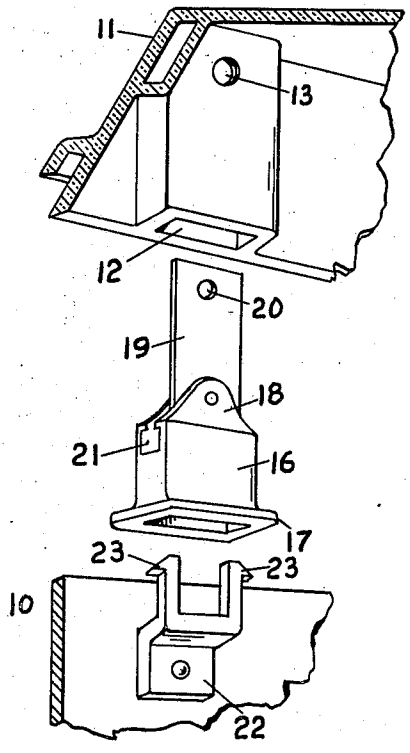


FIG. 5.

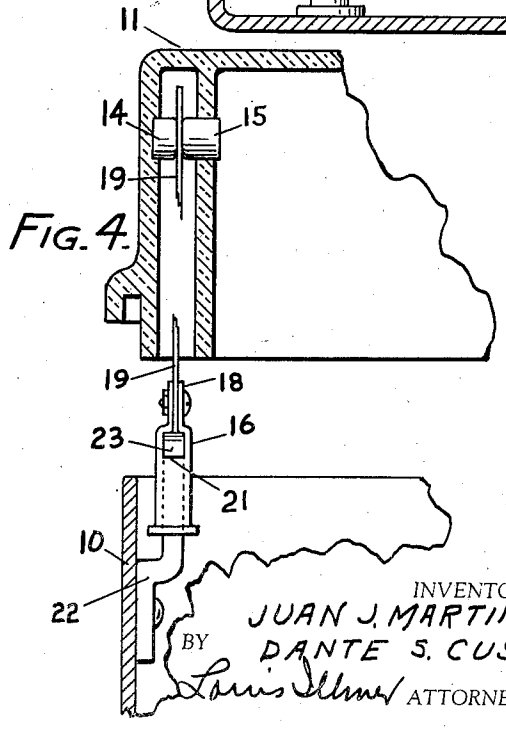


FIG. 4.

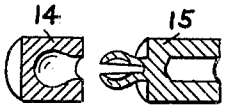


FIG. 6.

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SECURITY LOCKING DEVICE

Filed March 11, 1936 2 Sheets-Sheet 2

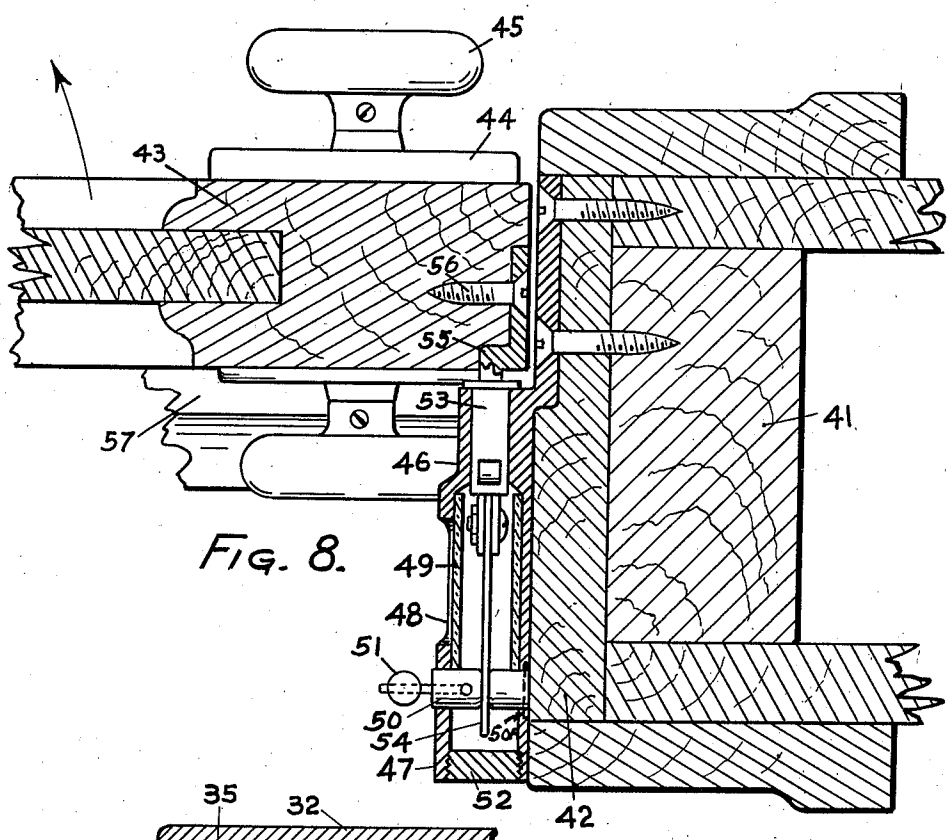


FIG. 8.

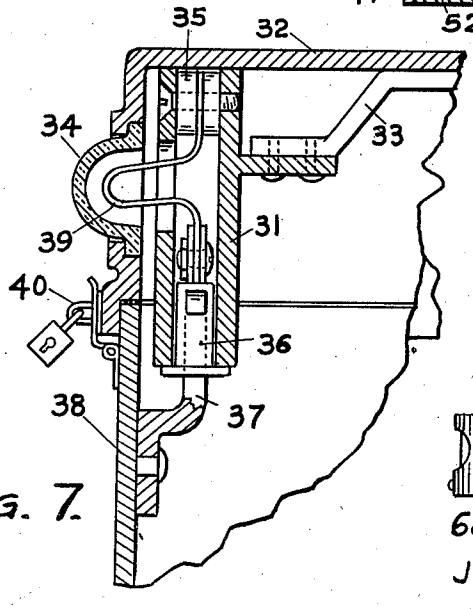


FIG. 7.

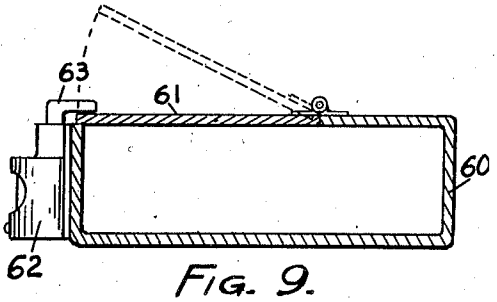


FIG. 9.

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2,104,204

SECURITY LOCKING DEVICE

Juan J. Martinez and Dante S. Cusi, Mexico, D. F., Mexico

Application March 11, 1936, Serial No. 68,245
In Mexico May 21, 1935

12 Claims. (Cl. 292—307)

Our invention broadly relates to a locking agency of the anti-theft type provided with a severable sealing strip or the like means, which is protectively housed and may be operatively set as a visible telltale to safeguard a cooperating primary lock against being forced and when violated, leaves an irretrievable and conspicuous trace of the act. A device of this kind is especially intended to supplement or displace ordinary locks and thereby more adequately secure certain covered receptacles or containers, such as the demountable cover of a sealed recording meter casing, also of a bond or legal testament container such as are commonly slipped into deposit boxes for safe keeping, the sealing of locked room doors and in other instances where unguarded locks need to be reenforced against tampering and to afford insurance that the contents of any such receptacle have not been disturbed. Our device may also be utilized as a primary lock.

To this end, we preferably resort to a suitable housing provided with an elongated interior mortise or chamber in which is suspended a virgin strip of paper, coated fabric, relatively thin metal or the like readily rupturable tie-piece so disposed interiorly of a closed receptacle that its cover cannot be opened without tearing or otherwise fracturing said sealing strip. For the purpose of visualizing whether such tie-piece remains unbroken and intact, we provide said mortised chamber with an inspection window or may make its entire housing of relatively transparent material so that the prevailing condition of said strip may at any time, be inspected therethrough without having to open the cover or door to which our sealing device has been applied.

In order to further prevent renewal of any ruptured strip by unauthorized persons after a seal has been forced, it is preferred to resort to special embossed strip material having a characteristic fret or other distinguishing insignia engraved thereon that is inherently difficult to counterfeit. One such strip end may be fixedly secured at the bottom region of said mortise by any suitable means. A clamping shell or cartridge is entered to close the mortise mouth in breechlike fashion and the suspended tearable strip extends between such clamp and said fastener. When an inspection window is resorted to in an otherwise opaque housing, this is located medially of the installed strip and the strip is protectively housed behind such window. Said clamping shell may be provided with one or more sockets respectively adapted to automatically receive a latch tongue after said strip has been operatively set in place. These oppositely disposed latch tongues may be carried by a bracket member fixedly attached either to the casing of the sealed receptacle or to its cover member.

Said bracket may also be given an L shape of which one leg overlies the swinging edge of an unlocked hinged lid to seal the container against access as long as the strip remains unruptured. Our self-locking device is so arranged that the tearable strip thereof may be readily replaced by authorized persons, there being easily manipulative means provided for strip renewal in the event the owner should find it necessary to gain access to any such sealed container. When forced, the sealing strip alone or its equivalent is severed without permanent injury to any other components of our protective safeguard.

These instrumentalities represent a decided advance over the conventional imprinted lead seal such as is exposed to manipulation and replacement, whereas in the present security devices, all corresponding parts are wholly mounted interiorly of the casing confines and not subject to access until after the seal has been broken. An important feature of our improvements resides in the use of an associated transparency through which to expose to view and thereby establish the prevailing condition of an installed telltale strip without having to open the sealed cover for inspection purposes.

The object of our invention is to devise improved anti-theft means of the character indicated that can readily be applied to various purposes at a relatively low installation cost and to be able to unmistakably detect whether or not a closure member after being sealed, has been removed from its associated container, particularly by the use of a severable sealing strip installed within a covered container and which by cooperating latchable means may be so suspended as to prevent manipulative access to said strip except by the severing thereof when the container is opened. Embodied herein are also structural aspects designed to promote the end in view and all of which will hereinafter be more explicitly set forth. Reference is had to the accompanying two sheets of drawings which are illustrative of certain preferred embodiments and in which drawings:

Fig. 1 represents an elevational front or face view of a service watt hour meter equipped with our devices and the transparent cover of which meter casing is mounted in place, and Fig. 2 is a side view thereof.

Fig. 3 shows an enlarged cross-sectional detail

taken along line 3—3 of Fig. 1, while Fig. 4 depicts the cover partially removed from its casing with a consequent tearing of the strip material.

Fig. 5 schematically illustrates the strip retaining parts prior to being assembled in place, and Fig. 6 shows separated snap fastener components for securing one strip end.

Fig. 7 shows a modified style of opaque casing cover that is equipped with a peep hole lens and has our sealing devices operatively mounted therebehind.

Fig. 8 cross-sectionally represents a fragment of an ordinary room door provided with our devices, and Fig. 9 presents still another modification in which a safe deposit box is likewise equipped.

Referring now in detail to the Figs. 1 to 6 disclosures, this style of electric or gas meter protector or seal may comprise a heavy metal box-like casing 10 and a flanged transparent cover 11 that is preferably cast from glass or the like material and sealed to the casing by one or more severable strips. Cover partitions may provide for one or more inbuilt mortised compartments or the like strip receiving housing means 12 respectively disposed alongside the cover flange as in Fig. 3. The mouth region of each such chambered housing may be faced flush and complementary dowel receiving holes such as 13 are disposed transversely of each mortised pitlike compartment near the bottom thereof. One such aligned recess opens into the interior of the cover confines and the other is blinded, as shown. Mated cylindrical snap fasteners of the two-part glove button type are intended to snugly fit into and span said dowel holes. As detailed in Fig. 6, the female fastener component 14 may be flaringly undercut while the male component 15 is equipped with resilient prongs shaped to interlock therein.

A sheet metal clamping shell or cartridge 16 is shown provided with a tubular, cross-sectionally oblong shank portion that is enterable into the mouth of the housing 12 in breechlike fashion. The exterior shank end is shaped into a stop flange 17 while its opposite end may be extended to terminate in a pair of split eyelets such as 18 that are clamped together by screw or the like means. The readily rupturable strip material 19 may be perforated as at 20 in proper spacing for reception of the eyelet screw and the separable dowel pin 14—15. In addition, the opposed side walls of the cartridge shank may each be provided with mated locking sockets such as 21.

A bracketed latch piece 22 may be welded or similarly secured to the interior of the casing 10 and have a pair of laterally spaced, resilient prongs formed thereon, each provided with reversely disposed barbs or latch tongues such as 23. When snapped into a cartridge 16 in the assembled relationship of Fig. 3, the latch tongues automatically spread apart to interlock with their respective sockets 21.

Prior thereto, a perforated end of the strip 19 is intended to be tightly clamped between the eyelets 18. The female dowel pin element 14 having been inset into the blind aperture 13, the other strip end may now be fed into place over said element and the stop flange 17 brought into abutment with the faced mouth of the cover mortise 12. Thereupon, the male fastener 15 may be entered into place through the hole 13. The loaded cover is now ready to close the casing 10. In so doing, said latch tongues 23 will automatically engage their respective sockets 21. If the cover should now be removed, the latch piece 22 will withdraw the cartridge 16 therewith and cause a severing of the sealing strip in the manner indicated in Fig. 4 or tearing through one of the strip perforations. By virtue of our transparent cover, the prevailing condition of such assembled strip at all times remains visible so that any mending of a divided original strip can readily be detected upon inspection, should any unauthorized person attempt to reinstate a broken seal.

It is emphasized that the novel latch means cooperating with one end region of our seal permits of suspending such severable tie-strip 19 in a virtually taut condition and thereby prevents opening the cover 11 sufficiently to gain access to said strip without first rupturing the same. In addition, the effective length of our strip is purposely inset to one side face of the cover parting plane so as not to become partially exposed to view through such opening when the cover is initially lifted.

As applied to the Fig. 1 polyphase electric service meter for measuring household lighting or other outside power circuits, the meter proper may comprise one or more motor driven discs such as 24 whose revolutions are totalized by the register 25, all securely and protectively mounted behind our transparent cover 11. This cover may be made moisture and dust proof by an endless gasket 26. In addition, said cover may be fastened in place by the use of several casing stanchions of the conventional type such as 27 extending through the cover face and each having an apertured winglike nut 28 threaded thereon. A tie rod 29 may extend through the respective nut apertures and be locked or otherwise sealed as at 30. When thus equipped and supplemented by our security locking devices, it becomes virtually impossible for others to tamper with the encased meter mechanism or to alter its recorded registration.

In Fig. 7 there is disclosed a substantially similar installation except that the cover need not as a whole, be kept transparent. As a further alternative, we provide for a separate mortise housing 31 preferably made of Bakelite that may be held in place within an opaque dished cover 32 by means of a fixed support 33. A side wall of said housing is apertured and a peep hole lens or the like transparency 34 may be inset in alignment therewith, said clear lens preferably being of the beehive type having a brim flange that is fixedly inset, as shown. The closed housing end may be provided with jaws such as 35 for clamping the severable tie-piece and the open lower end of which housing is shaped to receive a strip retaining shell 36 that corresponds with the previously described similar cartridge 16. Entered into the mouth of said shell is a bracketed latch piece 37 essentially similar to the piece 22 and here fastened to the container casing 38. In this instance, it is preferred to loop the rupturable strip 39 somewhat so as to bring it into closer proximity for inspection through the lens 34. It will be obvious that the closed cover may be further sealed by means of a locked hasp 40 or the like.

Fig. 8 shows still another modification in which our security locking devices are applied to an ordinary house door leading to a storage room or the like, which it is desired to seal. Here the door post 41 may be of conventional construction including an upright trim board 42. This illustrative exemplification cross-sectionally rep-

resents the swinging edge of a paneled door 43 equipped with the usual complementary lock plates such as 44 and with latch actuating knobs 45. Partially inset into said board is the extended fastening toe of a mortised housing 46 provided with a tubular tail end 47 having a side outlet or peep hole 48. Said tail end may be lined with a tubular glass section 49; to the rear thereof is a transversely mounted, two-part dowel pin 50 that corresponds in purpose to the similar snap fastener elements 14 and 15 of Fig. 6. The rear end of the housing 46 may be permanently closed by the plug 52. One such element may be apertured and have a sealed wire 51 threaded therethrough. As shown in dotted outline, the dowel 50 may also have a head 50A thereon placed adjacent to the trim board 42, in which event the housing toe screws need to be released for the insertion of such dowel.

The mouth of said housing may again have a clamping shell 53 assembled therein to grip one end of the severable tie-piece 54. The loosely fitted latch piece 55 may remain substantially identical in structure with the previously described part 22, concealed screws 56 being used to fasten the same to the door frame. Said door is intended to swing open away from the jamb strip 57 in the direction of the arrow. It will be apparent that the sealed door after being unlocked, cannot be opened without rupturing the sealing strip 54. After being entered, a renewed strip may readily be inserted in our housing by authorized persons.

Lastly, attention is directed to Fig. 9 in which a safe deposit box 60 or the like storage receptacle having a liftable hinged lid 61, is shown provided with our devices. As here used, the compact housing 62 and its embraced cartridge may be similar in type to that detailed in connection with Fig. 8, except that the latch piece 63 is now unattached and given a hook shape adapted to retain the swinging marginal edge of said lid and thereby prevent unobstructed opening after the lid has been sealed by an unsevered tie-piece. Such a container is admirably suited for the safe storage of wills and the like personal documents to which occasional access must be had but with the assurance that no unauthorized person has in the interim disturbed the same. The lid 61 need not however, be hingedly attached when resort is had to a plurality of tie pieces in the Fig. 1 manner.

These several selected embodiments will make evident that our devices are likely to find a diversified usage. Not only is the telltale medium kept visible behind a housed transparency but it is adequately sheltered interiorly of a sealed container so that its characteristic markings may not readily be counterfeited by a duplicate insertion. It is believed the foregoing disclosures make apparent to those skilled in this art, the intended function, mode of operation and the resulting advantages afforded by our improvements. For instance, it will be obvious that the component members of our sealing device may be reversely mounted by forming a suitable housing within the container rather than in the cover, as shown. It is to be understood therefore, that various changes in the illustrative structural details and arrangement thereof may be resorted to in likewise carrying out the broad underlying principle involved, all without departing from the spirit and scope of our invention heretofore described and more particularly pointed out in the appended claims.

We claim:

1. In a protective sealing agency including a cover member and a closable container member cooperating therewith, the combination of chambered housing means fixedly associated with one such member, a latch piece secured to the other member, and a readily severable tie-piece extending as an unbroken safeguard between said housing and the latch piece, the tie-piece when operatively installed to seal the cover being mounted wholly within the interior of the covered container, and which tie-piece is suspended with a sufficient degree of tautness to prevent any substantial opening of the cover member without rupturing said tie-piece.

2. In a protective sealing agency including cover member and a closable container member cooperating therewith, the combination of chambered housing means fixedly associated with one such member, a latch piece secured to the other member, a readily severable tie-piece extending as an unbroken safeguard between said housing and the latch piece, the tie-piece when operatively installed to seal the cover being mounted wholly within the interior of the closed container, and a transparent medium associated with one of said members and which medium is located to reveal the prevailing condition of said tie-piece without having to open the cover member.

3. In an antitheft sealing agency including a transparent cover and a closable container cooperating therewith, the combination of clamping means carried by said cover interiorly of the perimeter thereof, a readily severable tie-piece having one end suspended from said clamping means, and supplementary clamping means associated with the container for retaining the other end of said tie-piece, both clamping means and the tie-piece being cooperatively installed wholly within the confines of the closed container and kept inaccessible until after the tie-piece has been forcibly severed and which unsevered tie-piece is visible through the transparent cover.

4. In a protective sealing agency including a transparent cover and a closable container cooperating therewith, the combination of housing means formed within said cover, separable dowel pin means for the housing means, cartridge means provided with a socket and with clamping means thereon enterable into the housing means, a readily severable tie-piece extending unbroken between the clamping means and the dowel pin means, and a latch piece secured to the container and which latch piece includes a resilient tongue adapted to automatically engage the aforesaid socket when the cover closes the container.

5. In a protective sealing agency including a cover member and a closable container member cooperating therewith, the combination of elongated chambered housing means fixedly associated with one such member, a dowel pin disposed transversely of one end region of the housing means, cartridge means provided with a socket and with clamping means enterable into the other end region of said housing means, a readily severable tie-piece extending unbroken between the clamping means and the dowel pin means, a latch piece secured to the other member and which latch piece includes resilient tongue means disposed to snap into the aforesaid socket when the cover closes the container, and inspection means for one such member, said cartridge, latch

and tie-piece being located wholly within the confines of the closed container and a portion of which tie-piece is kept visible as seen from the exterior of the closed container through said inspection means.

6. In a protective sealing agency including a cover member and a closable container member cooperating therewith, the combination of chambered housing means associated with one such member, a cartridge provided with a cross-sectionally tubular shank portion that is enterable into the housing chamber and which shank is equipped with stop means at one end region thereof and with clamping jaw means at its opposite end region, a severable tie-piece of unbroken length whose one end engages the clamping jaw means and the other end is detachably fastened to the housing, and latch means carried by the other member arranged to snap into said cartridge.

7. A protective sealing agency comprising a tubular housing, a cartridge including a socket that is enterable into one end of the housing, snap fastener means associated with the other housing end region, a severable tie piece suspended between the cartridge and said fastener, and a cooperative latch piece including a resilient tongue disposed to automatically engage the cartridge socket.

8. In a protective sealing agency including a closable container member and a chambered cover member therefor, the combination of a readily severable tie-strip having one end region secured to and interiorly of one such member, latchable piece means secured to and interiorly of the other member, and cartridge means attached to the opposite end region of the tie-strip and serving to cooperatively engage the latchable piece, said tie-strip being operatively installed wholly within the confines of the closed container and disposed to prevent access to said tie-strip except by the severing thereof.

9. In a protective sealing agency including a closable container member and a cover member therefor, the combination of a readily severable tie-strip having one end region secured to and interiorly of one such member, latch means attached to the opposite end region of said tie-strip and arranged to engage the other member, said tie-strip being operatively installed wholly within the confines of the closed container to prevent access to said tie-strip except by the severing thereof, and a transparent medium associated with the closed container serving by exterior inspection to detect whether said tie-strip has been severed by an opening of said container.

10. In a protective sealing agency including a closable container member and a chambered cover member therefor that are separable along a parting plane, said agency comprising a readily severable tie-strip having one end region secured to and interiorly of one such member and the opposite strip end region arranged to latch into engagement with the other member, the severable length of said tie-strip being installed within the confines of said one member and lying wholly to one side face of said plane.

11. A protective sealing agency including a chambered housing having a mouth, the combination of fastener means demountably associated with said housing at a point remote from the mouth region thereof, a readily severable tie-strip mounted within said housing with one strip end region secured to said fastener means, and cartridge means provided with clamping means enterable into the housing mouth, said clamping means serving to grip the opposite strip end region and suspend a medial tie-strip portion in a substantially taut condition with respect to the fastener means, said fastener means being mounted into place subsequent to the entered clamping means.

12. In a protective sealing agency including a closable container member and a cover member therefor that are separable along a parting plane and which members are overlappingly telescoped crosswise of said plane, said agency comprising a readily severable tie-strip having one end region secured interiorly to one such member with the opposite strip end region secured interiorly to the other member and which tie-strip is suspended wholly within and between the closed members with a sufficient degree of tautness to preclude separating the installed cover from its container to an extent greater than the telescopic overlap thereof without severing said tie-strip.

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