June 19, 1962 M. LIEDEKER, JR 3,039,835

CABINET FOR CIGARETTE VENDER

Filed May 21, 1959 3 Sheets-Sheet 1

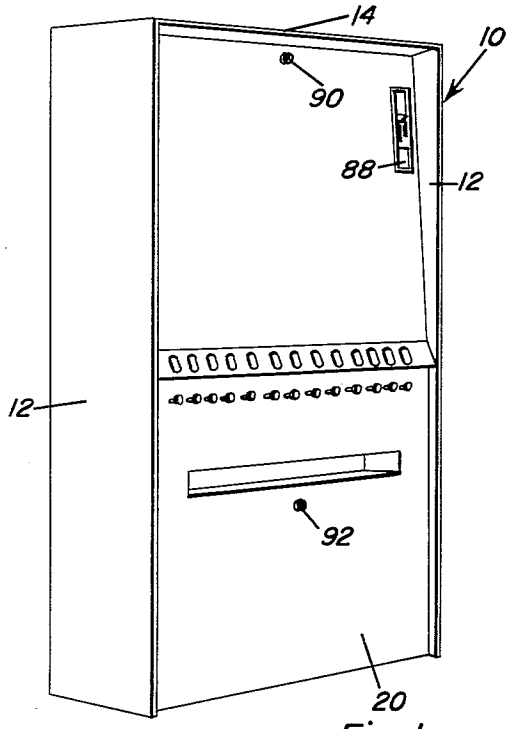


Fig. 1

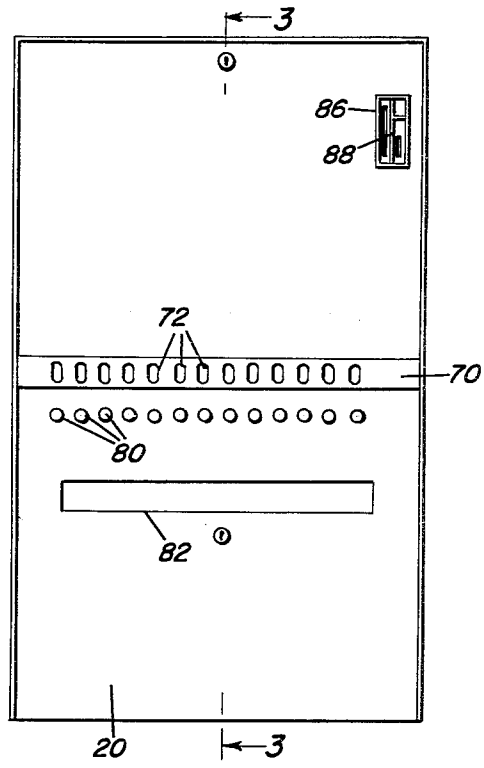


Fig. 2

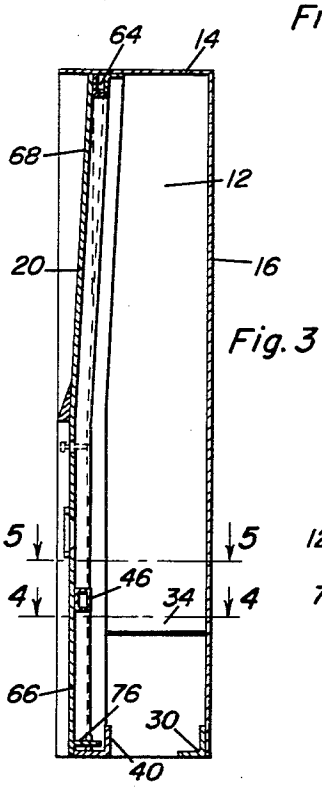


Fig. 3

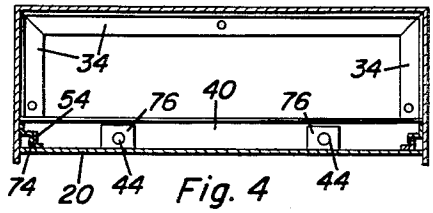


Fig. 4

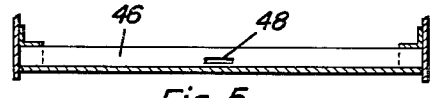


Fig. 5

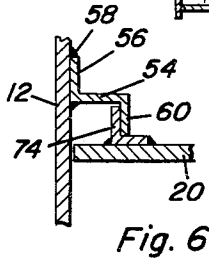


Fig. 6

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Filed May 21, 1959 3 Sheets-Sheet 2

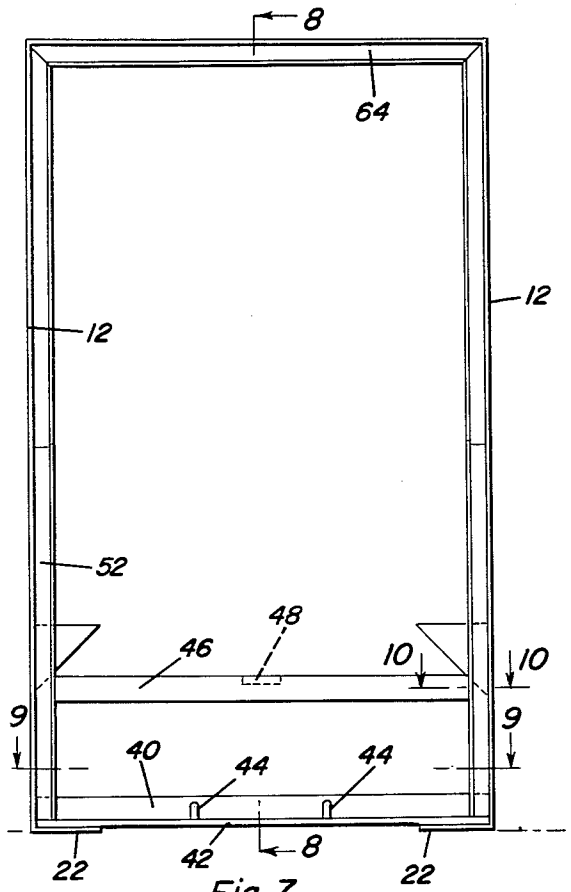


Fig. 7

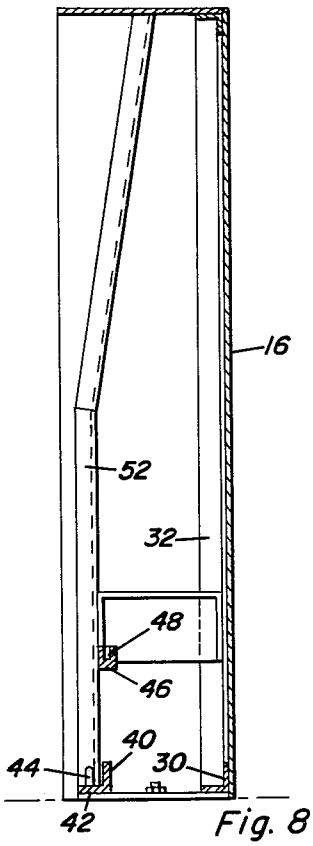


Fig. 8

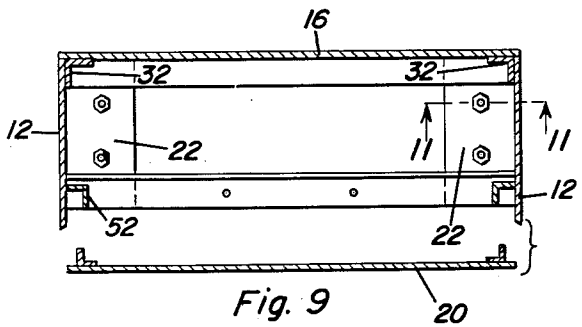


Fig. 9

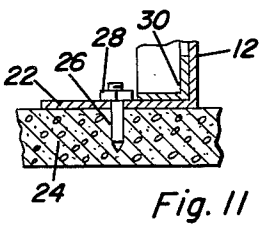


Fig. 11

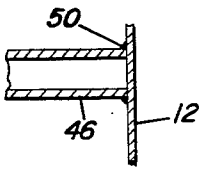


Fig. 10

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CABINET FOR CIGARETTE VENDER

Filed May 21, 1959 3 Sheets-Sheet 3

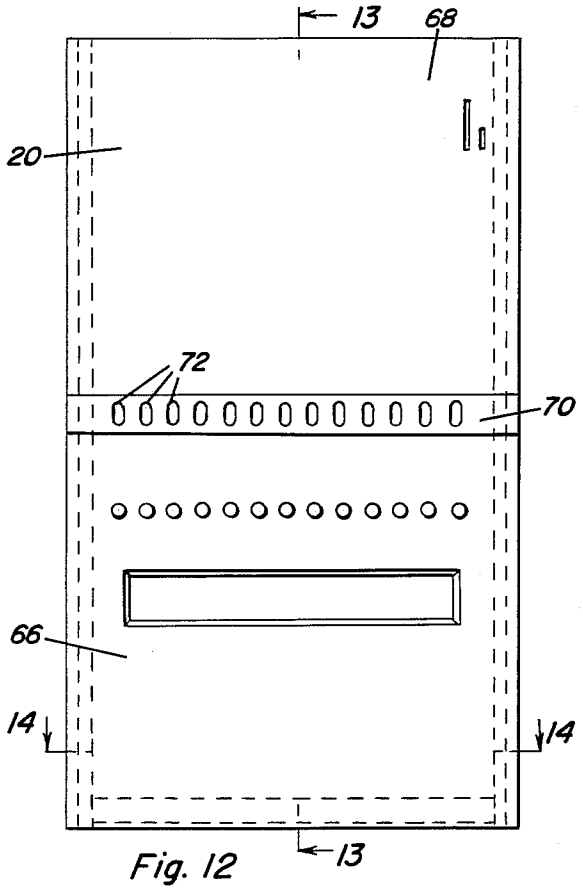


Fig. 12

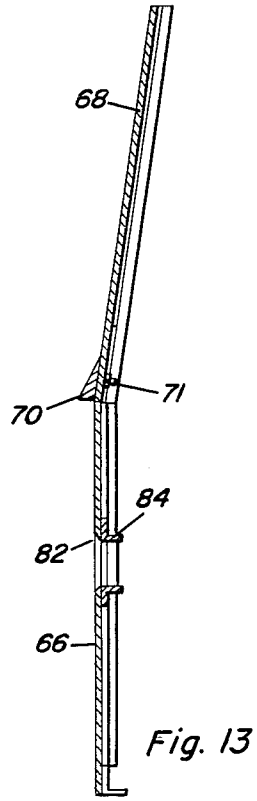


Fig. 13

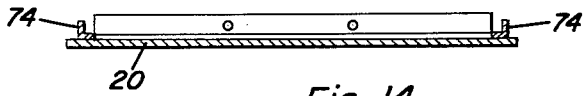


Fig. 14

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CABINET FOR CIGARETTE VENDER

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2 Claims. (Cl. 312—100)

This invention comprises a novel and useful cabinet for cigarette vender and more particularly relates to a weather-proof casing adapted to securing and safely house the mechanism of coin-controlled venders, such as cigarette venders and especially for use outdoors.

The principal purpose of this invention is to provide a cabinet for housing the mechanism of a vending apparatus and whereby the vender may be stationed outdoors and operated in any kind of weather.

A further object of the invention is to provide a cabinet especially adapted for vending machines which shall be so constructed as to afford a maximum of protection for the vending mechanism and the magazines of the articles to be vended thereby against theft, inclement weather and the like.

More specifically, it is an object of the invention to provide a cabinet for automatic coin-controlled venders which shall be of unitary metal construction and in which the removable door affording access to the interior of the cabinet shall be recessed into the walls of the cabinet in such a manner as to substantially eliminate the possibility of prying the door from the cabinet and burglary of the contents thereof, while affording a substantially water-tight seal between the door and the cabinet.

Yet another purpose of the invention is to provide a cabinet in accordance with the foregoing objects wherein the anchor means or hold-down bolts by which the cabinet is secured to a floor or other surface shall be disposed of any protector by the cabinet accessible only when the door is removed from the cabinet.

A still further object of the invention is to provide a metallic cabinet which shall be rendered exceptionally weatherproof and shall substantially eliminate the necessity for painting or refinishing the same by virtue of the use of a plastic coating upon the exterior of the same.

These together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, wherein like numerals refer to like parts throughout, and in which:

FIGURE 1 is a perspective view of a preferred embodiment of a cabinet in accordance with this invention;

FIGURE 2 is a front elevational view of the cabinet of FIGURE 2;

FIGURE 3 is a vertical transverse sectional view taken substantially upon the plane indicated by the section line 3—3 of FIGURE 2;

FIGURES 4 and 5 are horizontal sectional detail views taken substantially upon the planes indicated respectively by the section lines 4—4 and 5—5 of FIGURE 3;

FIGURE 6 is an enlarged detail view of a portion of the left hand side of the sectional view of FIGURE 4 and showing in greater detail the associated structure of a channel member secured to the inner face of a side wall and of an angle member secured to the rear face of the door of the cabinet;

FIGURE 7 is a view of a cabinet of FIGURES 1 and 2 but with the door removed therefrom;

FIGURE 8 is a vertical transverse sectional view taken substantially upon the plane indicated by section line 8—8 of FIGURE 7;

FIGURE 9 is a horizontal sectional view taken substantially upon the plane indicated by section line 9—9 of FIGURE 7 and showing the position of the door with respect to the front opening of the cabinet;

FIGURE 10 is a detail view in horizontal section taken substantially upon the plane indicated by the section line 10—10 of FIGURE 7 and showing the disposition of the locking bar for the door of the cabinet;

FIGURE 11 is a detail view taken substantially upon the plane indicated by the vertical section line 11—11 of FIGURE 9 and in particular illustrating the manner in which the hold-down bolts or anchor means are associated with the cabinet structure;

FIGURE 12 is a front elevational view of the door of the cabinet;

FIGURE 13 is a vertical longitudinal sectional view through the door taken substantially upon the plane indicated by the section line 13—13 of FIGURE 12; and

FIGURE 14 is a horizontal sectional view taken substantially on the plane indicated by section line 14—14 of FIGURE 12.

Indicated generally by the numeral 10 in FIGURE 1 is a cabinet comprising a casing or housing in which the storage magazine and the article vending mechanism of any suitable character is housed. A particular use for which this cabinet is especially designed is that of vending cigarettes of various brands by an automatic coin-controlled mechanism.

As shown in the drawings, the cabinet 10 includes a pair of vertical side walls 12, a top wall 14 and a rear wall 16. Preferably the material of the cabinet is of a sturdy sheet metal as for example ⅜ of an inch aluminum plate, and the metal casing comprising the cabinet constitutes a unitary assembly with the back 16 welded to the sides 12 and the top 14. The cabinet thus has an open front and is open at its bottom as described hereinafter.

The open front of the cabinet is closed by a door 20, the cooperation of the door and of the front opening of the cabinet being such that the door is recessed into the front of the cabinet as will be best apparent from a comparison of FIGURES 1 and 3 and there is thus provided a weather and water-tight joint as well as a burglar-resistant mounting of the door in the cabinet.

As above mentioned, the bottom of the cabinet is open. However, as will be more readily apparent from FIGURES 7–9 and 11, the sides 12 of the cabinet are provided at their lower ends with integral, lateral, horizontally inturned flanges or end portions 22. These end portions thus extend beneath or within the enclosure of the walls, front door and back of the cabinet and as shown the detail view of FIGURE 11, are adapted to rest upon a supporting surface 24 such as concrete or the like and provide a means whereby the cabinet is securely anchored to this supporting surface. Conveniently, this anchoring means may take the form of hold-down bolts as at 26 which are shot through the flanges 22 and into the concrete 24 as by suitable conventional form of gun applicator, the bolts being threaded at their upper ends and provided with nuts 28 by means of which the cabinet may be releasably secured in its supporting surface. It will be observed that the hold-down means are thus located entirely within the interior of the cabinet and thus are protected from access by unauthorized persons.

In order to further rigidify the construction of the cabinet, there is provided across the lower end of the back 16 and upon the top surface of the inturned horizontal flanges 22, a transversely extending angle member 30 which is welded to these members. In a similar manner, there are provided vertical angle members as at 32, see in particular FIGURES 8 and 7, which are welded to the inner faces of the back wall 16 and the sides 12 to rigidify the junctions of these members.

Secured to the inner faces of the sides and back of the cabinet in any secure manner as by welding or the like are a further set of horizontally disposed angle members 34, see also FIGURES 2 and 3, which serve as a support means upon which the article storage magazine and the article vending mechanism, comprising a complete unitary assemblage, may be supported within the cabinet.

At this point it should be observed that the present invention is concerned with the cabinet itself for housing the magazine and vending mechanism, and is in no way dependent upon any particular construction of such vending means. Since numerous types of conventional dispensing mechanisms are available for this purpose, this invention is in no way limited to the details thereof, it has been deemed unnecessary to illustrate the same in the drawings or refer to the same in the description of this application.

It may be observed, however, that such unitary assemblage of a storage magazine and a dispensing mechanism can be readily introduced into the cabinet as a unit or removed therefrom through the open front controlled by the door or cover member 20 when servicing, inspection, or replacement of the same is necessary.

There is also provided, at the lower edge at the front edges of the sides 12 of the cabinet a further angle member 40 which serves as the sill for the door 20 and also serves to lock the same in place. The member 40 as shown in FIGURE 7 rests upon the inturned horizontal flanges 22 of the sides and is provided upon its horizontal flat forwardly extending flange 42 with a plurality of upwardly extending projections or pins 44 which comprise locking projections as set forth hereinafter.

As will be understood, the member 40 is likewise welded to the flanges as well as to the sides 12 and together with the angle member 30 serves to increase the rigidity and strength of the lower portion of the cabinet structure.

Finally, there is provided a further transverse member 46 comprising a locking bar and which as shown in FIGURES 3, 7, 8 and 10, consists of a bar which is rectangular in cross-section, is preferably hollow, being provided with a longitudinally extending slot 48 in its upper surface at about the mid-portion thereof. This locking bar is welded as shown at 50 in FIGURE 10 to the sides 12 at the front edges of the latter and just above the support shelf assembly 34 previously mentioned.

From a study of FIGURE 3 in conjunction with FIGURE 8 it will be seen that the members 40 and 46 are re-set inwardly from the vertical front edges of the sides 12. This is to permit the closure in the form of a door 20 to be recessed into the sides of the cabinet and to be secured thereto by a means and for a purpose to be now set forth.

As shown best in FIGURES 7–9 the inner faces of the sides 12 have secured thereto channel members 52. The channel members 52 may consist of angle members as shown in FIGURE 9 which are welded to the side walls and provide a channel adjacent thereto; or may be of the Z-shaped configuration shown at 54 in FIGURE 6. In the Z-shaped configuration, the channel members include rearwardly and inwardly projecting vertical flanges 56 which are welded to the side walls 12 as by welding 58, together with parallel forwardly projecting vertical flanges 60. The channel members whether of the configuration of FIGURE 9 or of FIGURE 6 provide identical forwardly opening channels between the sides 12 and the laterally inner vertical flanges of the channel members with which complementary structure of the door 20 is to cooperate is set forth hereinafter.

It should be particularly noted that the lower portion of the channel members 52 or 54 extend vertically in parallel but recessed relation to the front edges of the sides 12, while the upper portions thereof are inclined upwardly and backwardly into the cabinet. As will be readily apparent, a similar channel member extends horizontally across the upper portion of the cabinet upon its interior, joining the vertical channel members 52, and being secured to the underside of the top 14, this horizontal channel member being in turn indicated by the numeral 64. The channel member 64 is shown particularly in FIGURES 3 and 7.

Referring now particularly to FIGURES 3, 12–14, it will be observed that the door 20 is of a shape complementary to that of the channel members previously described. Thus, the door consists of a single or unitary panel of sheet aluminum, having a lower portion 66 which from an intermediate vertical position to its lower end is disposed vertically, while the upper portion 68 thereof is tilted or inclined rearwardly and upwardly in complementary relation to the upper portion of the channel members previously described.

At the junction between its lower vertical portion 66 and its tilted upper portion 68, the door has a transversely extending intermediate panel 78 thereon.

As shown more clearly in FIGURE 13, this panel 70 may be secured as by fastening bolts 71 to the upper section 68 of the door 20 at the junction of these two portions, and serves as a means to support labels 72, which designate the different brands of cigarettes disposed in the vending apparatus within the cabinet.

Secured to the inner face of the cover 20 and adjacent to but spaced slightly inwardly from the vertical edges thereof are a pair of angle members 74 whose vertical rearwardly extending flanges are adapted to be slidably received within the channel members previously mentioned in the manner illustrated in FIGURES 3, 5, 6 and as suggested in FIGURE 9. If desired, the upper portion of the door may have a horizontal angle member cooperating with the horizontal channel member 64 to continue the sealed engagement of the door with the cabinet at this point.

At its lower end the inner face of the door is provided with a plurality of horizontal laterally inwardly projecting plates or flanges as at 76 which are apertured and are adapted to receive therein the upwardly projecting members 44 previously described. The arrangement is such that when the door is placed in the opening and slid downwardly, the apertured plates 76 will thus engage over the upward projections 44 and securely lock the lower end of the door in place. Thereupon the door may be pushed inwardly so that its vertical angle members 74 will engage in the vertical channel members 52 or 54 and thus establish a water-tight secure engagement therewith.

Below the transverse handle 70, the cover is provided with a plurality of correspondingly placed apertures 80 through which are adapted to pass the conventional push-buttons by which the coin controlled dispensing mechanism of the vending machine may be operated. There is further provided below these apertures a transversely extending slot 82 having, as shown in FIGURE 13, an inwardly projecting flange 84 secured thereto and which is adapted to register with the discharge chute of the vending mechanism, not shown.

At the upper right hand portion of the door there is also provided an opening as at 86 in which is received the usual coin inlet chute and coin return chute indicated generally by the numeral 88 by which the mechanism of the dispensing apparatus is operated.

Finally, through suitable apertures in the door there are provided upper and lower locks 90 and 92 by which the door is secured within the open front of the cabinet. The lock 92 is provided with the usual latch, not shown, which is adapted to be engaged and received in the previously mentioned slot 48 and locking bar 46 whereby the door may be removably secured in place.

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention

to the exact construction and operation shown and described, and accordingly all suitable modifications and equivalents may be resorted to, falling within the scope of the invention as claimed.

What is claimed as new is as follows:

1. A weather-proof cabinet for vending machines comprising a metal casing including a unitary top, back and sides with an open front and a removable door comprising a closure for said open front, vertical members secured to the inner faces of said sides and forming therewith channels adjacent said open front, said door having vertical members on the inner face thereof and adjacent the side edges of said door and with vertical flanges, rearwardly projecting therefrom into said channel members and having a snug engagement with the latter, said door having all of its edges recessed rearwardly into the open front of said cabinet, said vertical channel members, said door and said vertical members being each inclined at their upper portions towards the back of said casing from a lower vertical portion thereof whereby the upper portion of said door will be recessed in rearwardly tilted position in the upper portion of said cabinet.

2. A weather-proof cabinet for vending machines comprising a metal casing including a unitary top, back and sides with an open front and a removable door comprising a closure for said open front, vertical members secured to the inner faces of said sides and forming therewith

channels adjacent said open front, said door having vertical members on the inner face thereof and adjacent the side edges of said door and with vertical flanges, rearwardly projecting therefrom into said channel members and having a snug engagement with the latter, said door having all of its edges recessed rearwardly into the open front of said cabinet, said channel members, angle members and door from a mid-portion thereof downwardly being vertical and from their mid-portion are upwardly and rearwardly inclined toward said back, said door having its lower vertical portion and its upper rearwardly inclined portion joined by an angulated transversely disposed panel, means in said panels for displaying labels indicative of the articles to be vended by said cabinet.

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