May 22, 1934. H. S. BENJAMIN 1,959,809

WALL MOUNTING FOR VENDING MACHINES

Filed Nov. 25, 1931 2 Sheets-Sheet 1

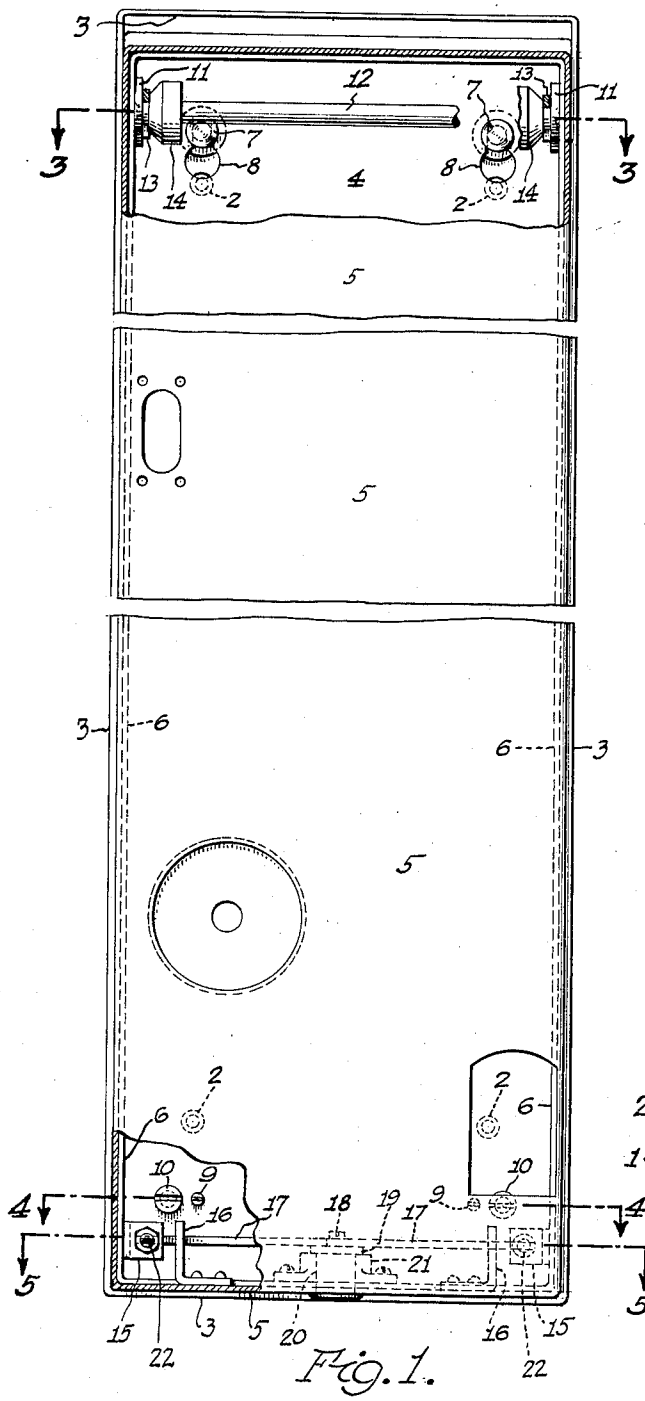


Fig. 1.

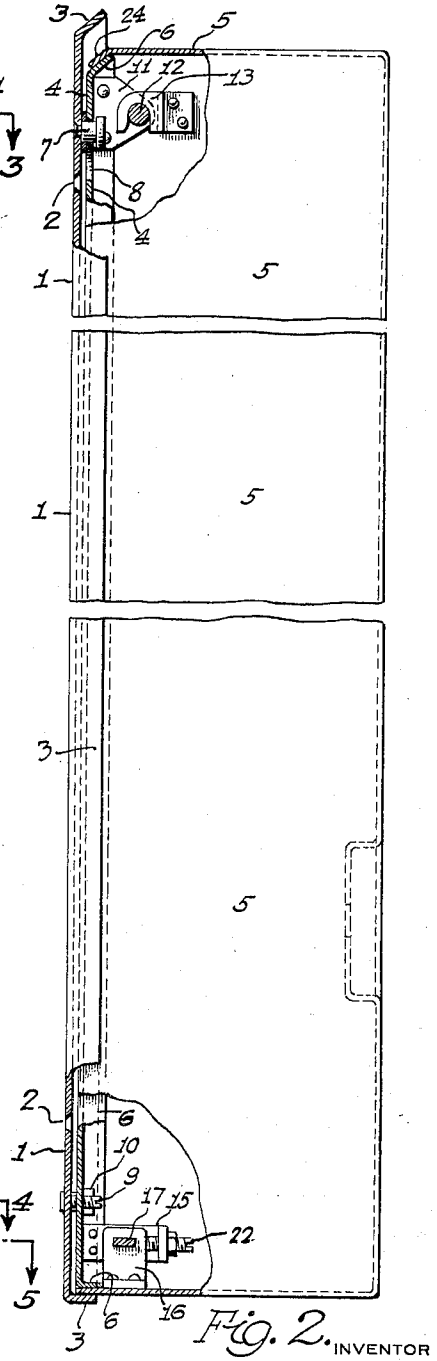


Fig. 2.

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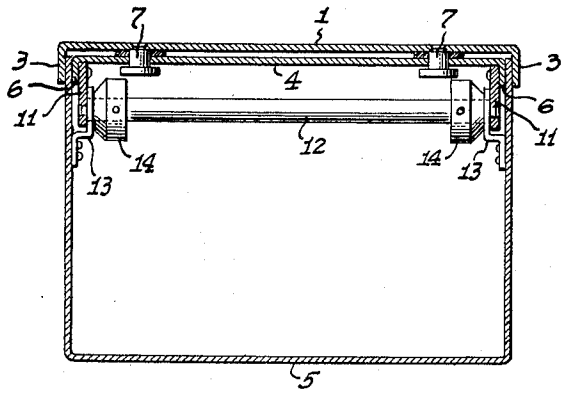


Fig. 3.

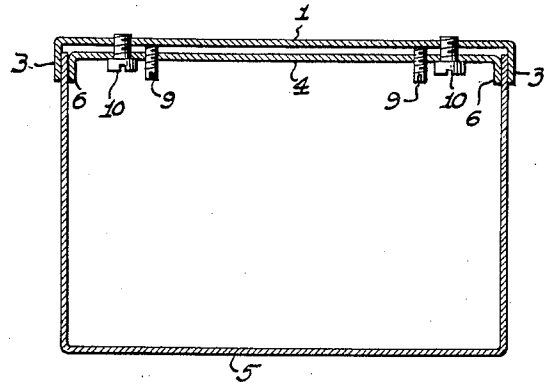


Fig. 4.

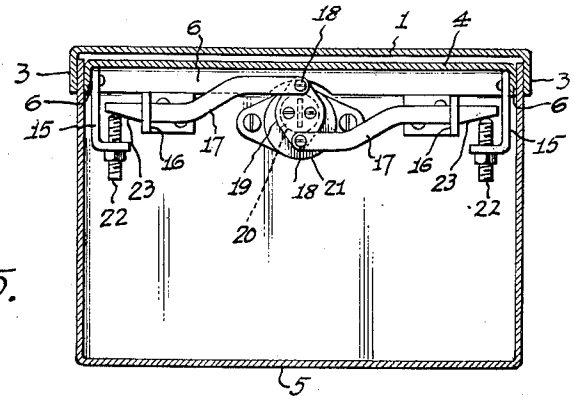


Fig. 5.

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WALL MOUNTING FOR VENDING MACHINES

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Application November 25, 1931, Serial No. 577,287

8 Claims. (Cl. 312—35)

This invention relates to means for detachably mounting a vending or other similar machine casing or cabinet upon a wall or other support, in such a manner that it can not be removed by an unauthorized person, and an object of the invention is to provide a mounting which is such that no warping or other strain will be put upon the back or other part of the casing in securing the machine to the wall upon which part of said casing, the vending mechanism of the machine is secured. A further object is to provide a wall plate which may be readily secured by screws or other suitable means, to a wall, to form a support for the machine and a backing for the attachment thereto of the back plate or other part of the machine carrying the vending mechanism, and further to provide an arrangement wherein such back plate to which the vending mechanism is attached, is inclosed within a suitable and detachable casing when the machine is in operative position, and in which casing suitable key operated locking mechanism is provided for detachably locking this casing in place upon said back plate, the arrangement being such that the fastening means for the wall plate is concealed by the back plate and the unauthorized removal of said back plate from the wall plate is prevented, by the locking of the casing thereto.

It is also an object to provide means for readily and detachably connecting the back plate to the wall plate and for properly aligning and relatively adjusting the same, and further, to provide means for detachably attaching the casing to and drawing it firmly into engagement with the back plate, said locking mechanism being operative in effecting such engagement.

Further objects in the construction and arrangement of parts will more fully appear by reference to the following specification and to the accompanying drawings, in which—

Figure 1 is a front elevation of a vending machine casing and mounting therefor, with portions of the casing broken away and in section to disclose internal parts, some of which are broken away and in section;

Fig. 2 is a side elevation of Figure 1, with parts broken away and in section;

Fig. 3 is a transverse section substantially upon the line 3—3 of Figure 1;

Fig. 4 is a transverse section upon the line 4—4 of Figure 1; and

Fig. 5 is a similar section substantially upon the line 5—5 of Figure 1.

In the drawings 1 indicates a supporting or wall plate which is adapted to be firmly secured to a wall or other support to which it is desired to securely fasten the vending machine in such a manner that it can not be removed by an unauthorized person, said wall plate being provided with holes 2 positioned inwardly from its edge to receive screws or other similar members for securely fastening said plate to the wall, not shown, and drawing it firmly thereagainst. This plate 1 is formed with an outstanding integral flange 3 along its entire edge and a back plate 4 of similar construction but of lesser dimensions, forms the back wall of a rectangular casing 5 which is the casing of the vending machine in which all of the vending mechanism, not shown, and merchandise to be vended, is inclosed. This back plate is also formed with an edge flange 6 to fit closely within the rear edge portion of said casing and to provide means for detachably attaching this back plate 4 to the wall plate 1 near the upper end thereof, the wall plate is provided with two, headed studs 7 to engage elongated or keyhole shaped openings 8 in the back plate, the lower ends of these openings being enlarged to permit the heads of the studs to pass therethrough and formed with slots or narrower portions to receive the neck portions of the studs when the plate is engaged over the studs and then moved downwardly.

The back plate 4 carries or has secured thereto all of the vending mechanism (not shown) of the vending machine and, therefore this back plate forms a support independent of the wall plate for said mechanism so that the wall plate may be secured to the wall independently of the back plate, and then the back plate with its vending mechanism and casing therefor, hung thereon. By this arrangement no warping or other strain is put upon the plate which carries the vending mechanism as might be the case if this plate were screwed directly to the wall, should this wall not be perfectly level, and such warping or twisting strains might throw the parts of the mechanism out of alignment and interfere with their proper functioning.

To provide spaced abutments for the back plate against the wall plate so that the back plate may be firmly attached, adjacent its lower end, to and drawn toward the wall plate without danger of distorting the back plate, abutment screws 9 extend through screw-threaded openings in the back plate into contact with the wall plate, and these screws may be adjusted to adjust the back plate relative to the wall plate so that the back plate will be perfectly level and yet

be firmly held against movement, by screws 10 passing through openings in the back plate into screwthreaded openings in the wall plate to draw the back plate toward the wall plate with the screws 9 abutting the back plate.

When the parts are in place, the marginal edge of the casing 5 fits closely within the marginal flange 3 of the wall plate along the sides and across the bottom of the wall plate, but at the upper end of the wall plate there is a space between this flange and casing edge so that in disengaging the back plate from the wall plate, the back plate may be moved longitudinally upward to disengage it from the studs 7. This flange 3 along the sides and bottom of the wall plate thus prevents the insertion of a tool between it and the casing for prying the casing loose from the wall plate and it also serves to align and assist in supporting the casing upon the wall plate.

To detachably attach the upper end of the casing 5 to its back plate, brackets 11 are secured to the flange 6 of the back plate and extend inwardly of the casing, and secured at its ends in these brackets and extending horizontally across the upper end of the back plate, is a rod 12 adapted to be engaged adjacent each bracket, by downwardly open hooks 13 on the side walls of the casing 5, and to guide these hooks into place in engaging them over the rod, disks or enlargements 14 are provided on said rod, each disk being formed with an inclined side or end sloping toward the adjacent bracket 11, so that said hooks will be guided and wedged between said disks and brackets, thus facilitating attachment of said casing to its back plate and preventing relative movement therebetween.

At its lower end, said casing 5 is detachably secured and locked to its back plate when engaged over the rim or flange 6 thereof, by providing brackets 15 on said flange adjacent the lower end of the plate, to extend inwardly of the casing, and secured to the bottom wall of the casing and extending upwardly therefrom adjacent the brackets 15, are brackets 16 having openings adjacent their upper ends forming guides for longitudinally movable locking bars 17, the opposite or inner adjacent ends of which are pivotally attached, as at 18, to the opposite ends of a plate 19 secured upon the inner or upper end of a barrel 20 of a key lock mounted within a suitable bearing member 21 and extending through the bottom wall of the casing so that a key may be inserted in the outer or lower end of this barrel in the usual manner, for unlocking the lock and turning the barrel, the rotation of which barrel swings the plate 19 secured to its upper end, in a horizontal plane and thus moves the locking bars 17 simultaneously endwise in opposite directions. Carried by each of said brackets 15, is an adjusting screw 22, the inner ends of which screws are adapted to be engaged by beveled end portions 23 of the ends of said bars 17 so that when said bars are moved endwise, they will engage the ends of said screws and thus secure the casing to its back plate. The end portions of said bars are beveled or inclined as at 23 longitudinally of said bars so that as these ends engage the ends of said screws 22 and move outwardly toward the brackets 15, the back plate will be drawn inwardly of the casing by such inclined ends until the flange 6 comes into firm contact with the brackets 16. The casing is thus firmly attached to the back plate and held by the key lock so that it can not be removed without the insertion of a proper key in the lock at the bottom of the casing and the turning of the lock barrel thereby, which turning withdraws the ends of the locking bars from engagement with the adjusting screws 22, when the lower end of said casing may be swung outwardly, out from between the flanges 3 and 6, then lifted to disengage the hooks 13 from the rod 12, the edge of said casing across its upper end and the flange 6 extending across the upper end of said back plate, being preferably bent or inclined inwardly as indicated at 24 to permit of such swinging of the casing upon the rod 12. To insure a firm contact between the flange 6 of the back plate and the brackets 16 when the locking bars are moved endwise in contact with the screws 22 and prevent any movement of the casing relative to the back plate, these screws 22 or either of them, may be adjusted endwise so that they will properly engage the inclined sides 23 of the ends of these bars to cause both bars, when moved endwise in contact therewith, to draw the casing toward the back plate the proper distance and firmly hold the same.

Obviously changes may be made in the construction of locking and attaching means for holding the casing in place upon its back plate, and other changes may be made in the construction and arrangement of parts within the scope of the appended claims, without departing from the spirit of the invention and such changes are contemplated.

Having thus fully described my invention, what I claim is:—

1. The combination with a vending machine casing, a back plate for said casing adapted for the support of vending mechanism within said casing and having a marginal flange extending along two sides and an end edge thereof to closely engage within said casing, means for attaching said casing to said back plate with said mechanism enclosed within said casing, a wall plate having a marginal flange extending along two sides and an end edge thereof to closely embrace the edge portion of said casing and confine the same between said flanges, means for securing said wall plate to a wall or similar support, and means for attaching said back plate to said wall plate.

2. The combination of a wall plate having a marginal flange, means for rigidly securing said wall plate against a wall, a casing to closely fit at its rear marginal edge portion within said flange, a back plate for said casing adapted to support vending mechanism within said casing and separate from said wall plate, and means for detachably and adjustably securing said back plate to said wall plate including adjustable abutment means carried by said back plate to contact said wall plate, and means carried by said wall plate and engaging said back plate to secure the plates together with said plates in opposed face to face relation.

3. The combination of a flat wall plate having a laterally projecting marginal flange, means passing through openings in said wall plate for rigidly securing the same to a wall, a casing, a back plate for said casing for the support of mechanism within said casing and having a marginal flange to fit within the rear marginal portion of said casing, means adjacent one end of said back plate for loosely attaching said back plate to said wall plate, spaced apart abutment screws carried by said back plate to engage said wall plate to adjust said back plate and the vend-

ing mechanism carried thereby relative to said wall plate, and means for securing said back plate to and drawing the same toward said wall plate.

4. The combination of a substantially flat rectangular wall plate having an outstanding marginal flange, means for securing said wall plate to a wall with its margin in firm contact with the wall, a casing with the edge portion of said casing embraced by said flanges, a back plate for said casing for the support of mechanism within said casing, means for attaching said back plate to said wall plate, means adjacent one end of said back plate for attaching said casing thereto, and a key operated lock adjacent the opposite end of said casing and operable from outside said casing, for locking said casing to said back plate.

5. The combination of a substantially flat rectangular wall plate having an outstanding marginal flange, a back plate having an outstanding marginal flange, a casing having an open rear side with its edge portions fitting over said flange on said back plate and of dimensions to fit closely within said marginal flange on said wall plate, means for securing said wall plate to a support with its edge portions in firm contact with said support, means for detachably securing said back plate to said wall plate, and locking means for securing said casing in place upon said back plate.

6. The combination of a substantially rectangular wall plate having a marginal flange, means for securing said wall plate to a wall with the marginal portion of said plate in firm contact with said wall, a substantially rectangular casing with the edge portion of said casing fitting within said flange, a back plate for said casing, means for detachably attaching said back plate in place over said wall plate, means adjacent one end of said casing for loosely attaching said casing to said back plate and permitting swinging movement of said casing thereon to engage its edge portion within said flange on said wall plate, longitudinally movable locking members carried by said casing adjacent its opposite end and adapted to engage means on said back plate for securing said casing to said back plate and drawing said casing toward said back plate, and a key operated lock operable from outside said casing and carried thereby, for moving said locking members into engagement with said means on said back plate to draw said casing toward said back plate.

7. The combination of a substantially rectangular wall plate having a marginal outstanding flange, means for securing said wall plate to a wall with its margin in firm contact with said wall, a substantially rectangular casing of such dimensions that its rear edge portion will fit closely within said flange, a back plate for said casing, means for detachably attaching said back plate in place over said wall plate, means adjacent one end of said casing for loosely attaching said casing to said back plate and permitting swinging and upward endwise movement of said casing thereon, brackets on said back plate at opposite edges thereof, adjustable members carried by said brackets, longitudinally movable bars to engage said members, guides for said bars on said casing, a key lock barrel mounted in a wall of said casing and extending therethrough for turning movement by the insertion of a key within its outer end, and a plate secured to the inner end of said barrel and to the opposite ends of which plate said bars are pivotally attached for simultaneous longitudinal movement in opposite directions upon the turning of said barrel.

8. The combination of a substantially rectangular wall plate having a marginal outstanding flange, means for securing said wall plate to a wall with its margin in firm contact with said wall, a substantially rectangular casing having an open rear side and marginal edge portion to fit closely within said flange, a back plate for closing the open side of said casing having a marginal flange spaced from said flange on said wall plate, means for detachably attaching said back plate to said wall plate over the same, brackets on said back plate adjacent the upper end thereof and at opposite sides thereof, a rod mounted on said brackets and extending across said plate, members on said rod spaced from said brackets and each having an inclined side toward the adjacent bracket, downwardly open hook members on said casing to engage said rod between said members and brackets, locking bars carried by said casing adjacent the lower end thereof, guides on said casing for said bars, brackets on said back plate to extend into said casing adjacent the ends of said bars, adjusting screws carried by said brackets and adapted to be engaged by said bars, said bars being formed with longitudinally inclined sides to be engaged by said screws, and a key operated lock carried by a wall of said casing and extending therethrough for moving said bars longitudinally in contact with said screws.

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