March 22, 1949. A. BRANDES 2,465,057

CASHBOX

Filed Aug. 2, 1947 2 Sheets-Sheet 1

Fig. 1

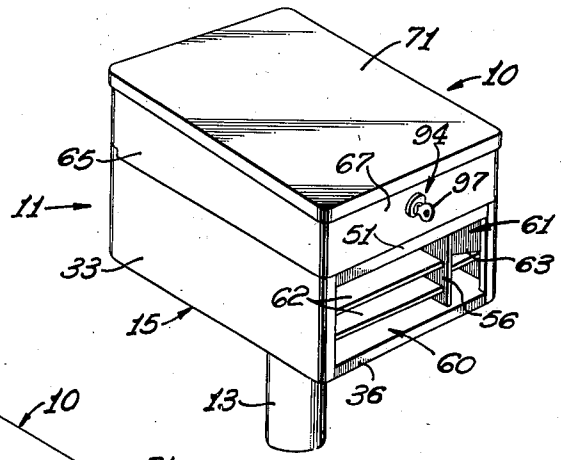
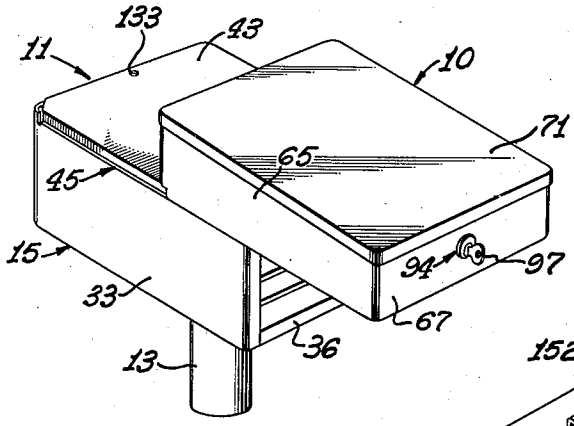


Fig. 2



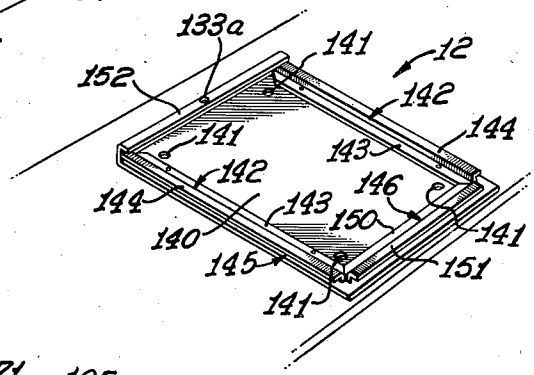


Fig. 3

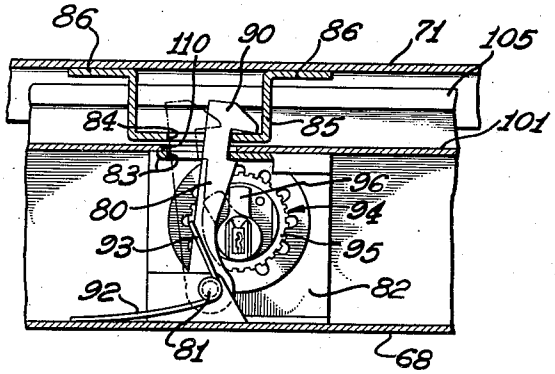


Fig. 5

Inventor
Arthur Brandes,
By Forrest J. Filby
Attorney

March 22, 1949. A. BRANDES 2,465,057

CASHBOX

Filed Aug. 2, 1947 2 Sheets-Sheet 2

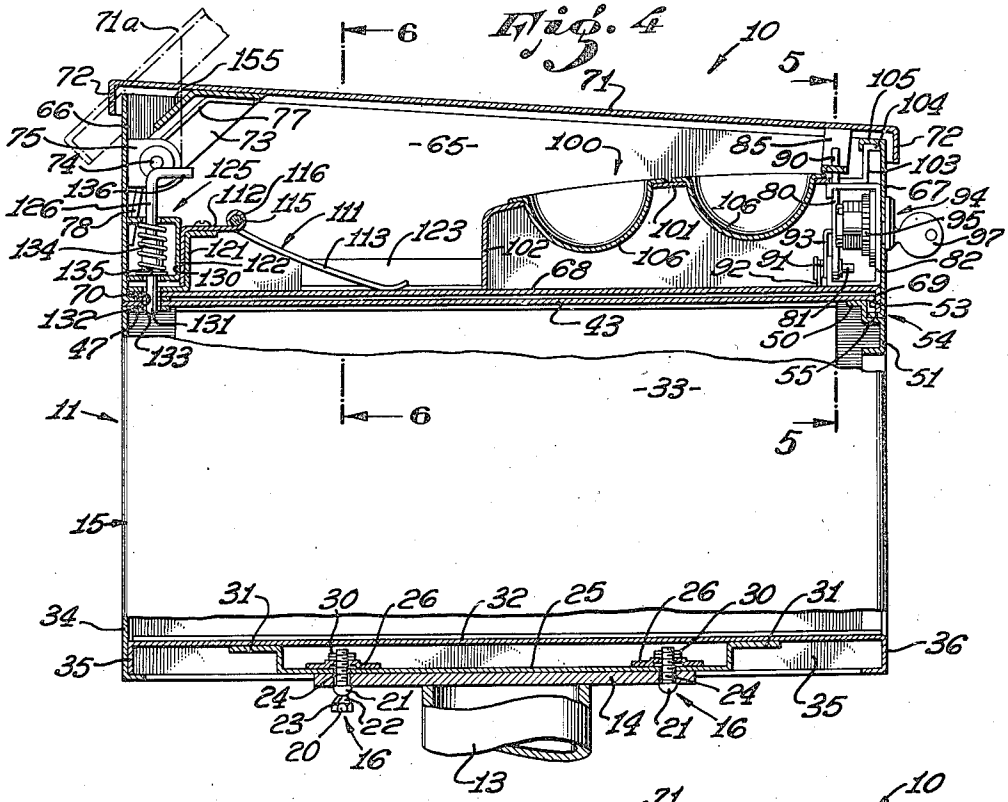


Fig. 4

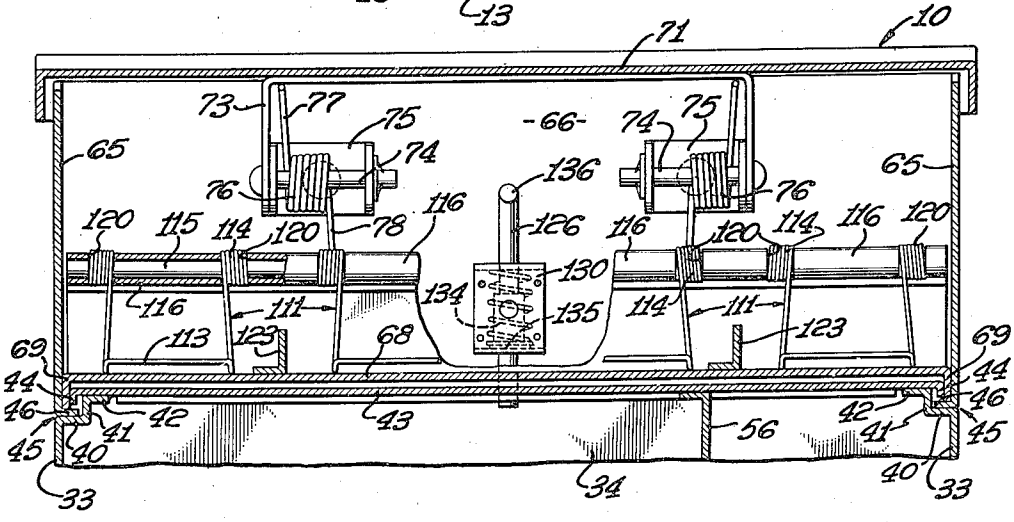


Fig. 6

Inventor
Arthur Brandes,
By Forrest H. Lilly
Attorney

Patented Mar. 22, 1949 2,465,057

UNITED STATES PATENT OFFICE

2,465,057

CASHBOX

Arthur Brandes, Arcadia, Calif., assignor to Worley and Company, Pico, Calif., a corporation of California

Application August 2, 1947, Serial No. 765,693

6 Claims. (Cl. 109—51)

1

The present invention relates to cash boxes of the type adapted to be demountably secured and locked to a supporting stand or pedestal, so that the box may be removed therefrom and transferred to another location for safe keeping, as during the night time. Cash boxes of this general nature are particularly suited for use in gasoline service stations, owing to the convenience of being able to mount the box on an outside supporting stand adjacent the pump "island" during the day, while at night, or during inclement weather, the cash box can be brought inside the station and mounted on a counter plate. By thus mounting the cach box adjacent the pump island where the great majority of sales are made, the attendant is saved considerable time and energy in making change, and at the same time, customer waiting is reduced to a minimum, with increased opportunities for making extra sales.

The principal object of the present invention is to provide a new and improved arrangement whereby the cash box is positively and securely locked to its supporting structure, yet may be quickly and easily removed from one support and moved to another. I accomplish this end by providing a pair of laterally projecting flanges on the box which extend along opposite sides thereof, and which are engaged in tracks on the supporting structure by sliding the box longitudinally along the tracks until a spring-pressed latch pin projecting through an opening in the bottom of the box, drops into a detent hole in the support. The tracks and flanges cooperate to secure the cash box to the supporting structure, while the latch pin locks the box against sliding movement along the tracks so that the box cannot be removed.

Another object of the invention is to provide a cash box which is adapted to be interchangeably secured to either of two or more supports, and in which the box is locked to the selected support by locking means contained on the inside of the box and accessible only when the lid is opened. The lid is provided with a key-operated lock, and is kept locked at all times except when in use, so that the aforesaid locking means is inaccessible to unauthorized persons.

Still a further object of the invention is to produce a cach box with supporting structures therefor, which is simple to manufacture, durable, and attractive in appearance.

The foregoing and other objects and advantages of the invention will become apparent to those skilled in the art, upon consideration of

2

the following detailed description of the preferred embodiment thereof, reference being had to the accompanying drawings, in which:

Figure 1 is a perspective view, showing the cash box mounted on the utility cabinet stand;

Figure 2 is a similar view, showing the cash box partially withdrawn from the stand;

Figure 3 is a perspective view of the counter-plate to which the cash box may also be attached;

Figure 4 is an enlarged fore and aft vertical section, taken through the cash box mounted on the utility cabinet stand;

Figure 5 is an enlarged sectional view, taken along the line 5—5 in Figure 4; and

Figure 6 is an enlarged sectional view taken along the line 6—6 in Figure 4.

In the drawings, the cash box of the invention is designated generally by the reference numeral 10, and is adapted to be mounted on top of a utility cabinet stand 11, or alternatively, on a counter-plate 12, such as is shown in Figure 3.

The utility cabinet stand 11 is designed primarily for outside installation in gasoline service stations, and is usually located adjacent the pump "island," so as to provide a convenient storage box for clip boards, windshield cleaner bottles, wiping cloths, chamois, and the like, as well as providing support for the cah box 10. The stand 11 includes an iron pipe supporting pedestal 13 which may be bolted to any suitable base or sunk into the concrete of the pump island. Welded to the upper end of the pedestal 13 is a horizontal top plate 14, and the utility cabinet, or bottom box 15, is secured to the top plate 14 by screws 16.

The screws 16 are preferably of a special type designed specifically to prevent removal by ordinary tools in the hands of a petty thief, and each screw is originally formed as shown in the left hand side of the pedestal in Figure 4, being provided with an auxiliary hexagonal wrench head 20 which is connected to the regular round-head 21 by a tapered, cone-shaped neck portion 22. The cross-sectional area of the metal at the junction 23 of the cone-shaped neck 22 with the round-head 21 is slightly less than the area of the shank 24 of the screw, and therefore weaker in torsion than the latter, so that when the screw is drawn up tight by application of a wrench to the head 20, the latter twists off at the weakened points 21, leaving a smoothly rounded head 21 having no slots or facets to provide purchase for a removal tool.

The screw at the right hand side of the pedestal 13 in Figure 4 shows the appearance of the same after the wrench head 20 has been twisted off.

The shank 24 of each of the screws 16 passes upwardly through aligned holes in the top plate 14, base plate 25 of the box 15, and bracket 26, and is threaded into a self-locking nut 30 which is attached to the bracket 26. The brackets 26 are spot-welded to the top surface of the base plate 25, and the latter has raised flanges 31 along its side which lie against and are spot-welded to the bottom panel 32 of the cabinet 15.

Box 15 is preferably fabricated of heavy gage sheet steel and has side wall panels 33 and a rear wall panel 34 which are formed in one piece. Downwardly bent flanges 35 along the side and rear edges of the bottom panel 32 abut against and are spot-welded to the side and rear walls of the box 15 adjacent the lower elges thereof, while the front edge of the panel 32 is bent downwardly and then rearwardly to form an apron 36 extending across the bottom front of the box.

The top edges of the side panels 33 are bent inwardly to form a narrow horizontal shoulder 40, and then upwardly to form a vertical riser 41, finally terminating in laterally inwardly directed mounting flanges 42 which support the top panel 43 of the box. The shoulders 40 extend the length of the box from front to rear, and these cooperate with downwardly turned flanges 44 along the side edges of the top panels 43 to form narrow slots or channel tracks 45 which receive locking flanges 46 on the bottom side edges of the cash box 10, to secure the latter thereto. The rear end of the top panel 43 rests on a flange 47 which is bent forwardly from the top edge of the rear wall 34, and the top panel 43 is spot-welded to the flanges 42, 47. The front end of the panel 43 is also welded to a horizontal mounting flange 50 on a cross-piece 51 extending across the top of the open front of the box 11, said cross-piece being likewise bent to form a set back or shoulder which cooperates with a downwardly-turned lip 53 along the front edge of the top panel 43 to form a forwardly opening slot 54 that is adapted to receive a rearwardly directed flange 55 on the bottom front edge of the cash box 10.

The interior of the cabinet 15 is divided by a vertical partition 56 into a left hand compartment 60 and a right hand compartment 61. The left hand compartment 60 is provided with suitable shelves or supporting flanges to receive two clip boards, designated at 62, which may be used to hold the various record sheets, sales slips, and the like, as required. The right hand compartment 61 is divided vertically by a downwardly and rearwardly inclined shelf 63 which may be used to hold a bottle of windshield cleaner, while the space below the shelf 63 may be used to hold sponges, wiping cloths, chamois, or the like.

The cash box 10 is also preferably fabricated of heavy gage sheet steel, and includes side walls 65, back wall 66, and front wall 67. The bottom of the box is formed by a flat rectangular panel 68 having downwardly turned flanges 69 along its side and front edges, which abut against and are spot-welded to the side walls 65 and front wall 67 of the box. The bottom edge of the rear wall 66 is bent under to form a flange 70 which is also spot-welded to the bottom panel 68. The side walls 65 and front wall 67 extend down below the bottom panel 68, and are bent horizontally inward under the flanges 69 to form the locking flanges 46 and 55 which are received within the tracks 45 and engage the lip 53, respectively, on the bottom box 15, or the corresponding elements of the counter-plate 12, which will be described presently. The cash box 10 is closed by a spring-hinged lid or cover 71 having a flange 72 extending downwardly from all four of its side edges to cover the top edge of the box. A U-shaped bracket 73 is welded to the cover 71 adjacent the rear edge thereof, and the arms of this bracket are pivoted on hinge pins 74 which pass through horizontally aligned holes in the arms of U-shaped brackets 75 that are welded to the back wall 66 of the box. The cover 71 is urged to the open position by torsion springs 76 which encircle the hinge pins 74 and have end portions 77 and 78 bearing against the lid 71 and rear wall 66, respectively.

The cover 71 is adapted to be locked closed by means including a lock finger 80 which is pivoted at its lower end on a pin 81 held by the bottom arm of a C-shaped bracket 82, the latter being welded to the front wall 67 of the box. The upper end of the lock finger 80 projects through a slot 83 in the top arm of the bracket 82, and is also adapted to pass through a slot 84 in the depending center portion of a lock strike 85. The lock strike 85 has outwardly turned flanges 86 at its ends which are spot-welded to the cover 71. A hook 90 at the top end of the lock finger 80 is engageable with the strike 85 at the right hand end of the slot 84 when the cover is closed, as shown in solid lines in Figure 5. The lock finger 80 is urged in a clockwise direction to the locking position by means of a torsion spring 91 encircling the pin 81 and having arm portions 92 and 93 which engage the bottom panel 68 of the box and the lock finger 80, respectively.

The lock finger 80 is adapted to be moved over to the unlocked position, shown in dot-dash line in Figure 5, by means of a cylinder lock 94 which extends through alined holes in the front wall 67 of the box and bracket 82, said lock being secured in place by means of a locking ring 95 which is screwed onto the threaded barrel of the lock and bears against the inside surface of the front wall. A finger 96 is mounted on the inside end of the cylinder of the lock and is engageable with the lock finger 80 to push the latter toward the left (Figure 5) when the key 97 is turned in the lock.

Disposed within the cash box 10 and occupying the front half thereof is a coin tray 100 comprising a sheet metal shelf 101 having a downwardly turned apron 102 along its rear edge which rests upon the bottom panel 68 of the box. The front end of the shelf 101 rests on the top of the bracket 82, and has an upwardly extending flange 103 with a forwardly bent lip 104 at its top edge which fits within a downwardly opening channel 105 formed in the top edge of the front wall 67 of the box. A plurality of hemispherical cups 106 are inserted down through circular openings in the shelf 101 and are provided with outwardly turned flanges which are spot-welded to the top surface of the shelf. A notch 110 is cut into the front end of the shelf 101 to pass the lock finger 80.

The rear half of the cash box 10 is provided with a plurality of spring currency holders 111 which are supported by a bracket 112 and extend forwardly therefrom. Each of the holders 111 comprises a U-shaped portion 113, which has coils 114 at the rear ends of the arms thereof, which encircle a rod 115. The rod 115 is inserted through rolled portions 116 in the front edge of the bracket 112, and these rolled portions are cut out at 120 to receive the spring coils 114. The

bracket 112 rests on the top flange of a Z-shaped bracket 121, the bottom flange of which bears on and is welded to the bottom panel 68 of the box. A downwardly turned flange 122 at the rear end of the bracket 112 extends downwardly behind the vertical portion of the bracket 121 and is welded thereto. Dividers, in the form of angles 123, are welded to the bottom panel 68 between adjacent pairs of the currency holders 11 to divide the rear portion of the box into compartments for bills of different denominations.

The cash box 10 is adapted to be locked with respect to its support against longitudinal sliding movement along the tracks thereof, by locking means designated generally at 125 and comprising a spring-pressed latch pin 126 which extends through vertically alined holes in the arms of a U-shaped bracket 130 welded to the back of the bracket assembly 112, 121. The lower end 131 of the latch pin 126 extends downwardly through an opening 132 formed in the bottom of the box at the rear end thereof, and is adapted to drop into a detent hole 133 formed in the top panel 43 of the box 15, or into a corresponding hole 133*a* provided in the counter-plate 12. The latch pin 126 is urged downwardly by a coil spring 134 which encircles the pin between the arms of the bracket 130 and bears at its lower end against a keeper 135 fixed to the pin. The upper end of the spring 134 bears against the top arm of the bracket 130, and the pressure of the spring is transmitted to the latch pin through the keeper 135. A forwardly bent portion 136 at the top end of the latch pin 126 provides a convenient handle for lifting the pin to withdraw the lower end 131 thereof from the detent hole 133 so that the cash box can be pulled forwardly along the track and removed from its support.

The counter-plate 12, which serves as an alternative support for the cash box 10, comprises a flat base plate 140 having screw holes 141 adjacent the corners thereof which enable the plate to be screwed down to a counter or tabletop. Fixed to the top surface of the plate 140 adjacent the side edges thereof are fore-and-aft extending members 142, each of which has an inwardly extending bottom flange 143 that rests on and is spot welded to the plate, and an outwardly extending top flange 144 that is raised up from the plate. The top flanges 144 cooperate with the edges of the plate 140 to form outwardly facing channel tracks 145 which are adapted to receive the inwardly turned flanges 46 on the bottom of the cash box 10. Extending across the front of the plate 140 is a third member 146 having a rearwardly extending bottom flange 150 that is welded to the plate, and a forwardly extending elevated top flange 151 which serves as a lip to engage the flange 55 on the bottom front edge of the cash box 10. The rear end of the plate 140 is bent upwardly and then forwardly to form an elevated flange 152 which is perforated at its midpoint to form the detent hole 133*a*.

To mount the cash box 10 on the bottom box 15 of the utility cabinet stand, the rear ends of the side flanges 46 on the box are led into the channel tracks 45, and the box 10 is then pushed rearwardly to the position shown in Figure 1. As the cash box reaches the limit of its rearward travel, the flange 55 at the bottom front edge thereof slips into the slot 54 on the front of the bottom box 15 and is engaged by the lip 53, limiting the box against further rearward movement. At the same time, the spring-pressed latch pin 126 drops down into the detent hole 133, locking the box 10 against sliding movement forwardly along the track 45. When the cover 71 is locked down in closed position, the latch pin 126 is inaccessible to unauthorized persons, and the box cannot be removed from the stand. The locking flanges 46 and 55 provide continuous locking engagement for the box 10 along the entire length of both sides and across the front, making it impossible to insert any ordinary tool into the space between them so as to pry the cash box 10 off the bottom box 15.

When the station attendant desires to remove the cash box from the outside utility cabinet stand 11 to the inside counter-plate 12 he has merely to unlock the cover 71 with the key 97, whereupon the springs 76 raise the cover to the position shown in dot-dash lines at 71*a* in Figure 4. A backstop 155 on the bracket 73 engages the back wall 66 of the cash box to limit the opening movement of the cover to the position shown. The attendant then reaches inside the box and lifts the latch pin 126 by the handles 136, withdrawing the bottom end 131 of the latch pin from the detent hole 133. The cash box can then be withdrawn forwardly from the bottom box 15 by sliding it along the track 45. The cash box 10 is mounted on the counter-plate 12 by leading the side flanges 46 into the tracks 145, and then pushing the box rearwardly until the front flange 55 slips under the lip 151 on the counter-plate, and latch pin 126 drops into the detent hole 133*a*.

While I have shown and described in considerable detail what I believe to be the preferred form of my invention, it is to be understood that such details are merely illustrative, and that various changes may be made in the shape and arrangement of the several parts without departing from the scope of the invention as defined in the broader claims appended hereto.

I claim:

1. A cash box comprising, in combination, a box having side walls extending downwardly below the bottom of the box and terminating in laterally inwardly directed flanges, a supporting structure having outwardly facing guide ways adapted to receive said flanges and cooperating therewith to hold said box to said structure, said box being slidable longitudinally along said guide ways to engage the same, a latch pin disposed within said box, said pin being adapted to project through an opening in said box to engage said structure and prevent sliding movement of the box along said track, spring means urging said latch pin to project through said opening, and a lid for said box that can be closed and locked to cover said latch pin, the position of the pin with relation to the lid being such that movement of the pin is independent of whether the lid is open or closed.

2. A cash box comprising, in combination, a box having sheet metal side walls extending downwardly below the bottom of the box and terminating in inwardly turned flanges, said box also having a sheet metal front wall extending downwardly below the bottom of the box and terminating in a rearwardly directed flange, and a utility cabinet stand having a top structure provided at opposite sides with a pair of outwardly facing longitudinal ways slidably engageable by said side wall flanges and at its forward end with a lip under which said front wall flange may engage said ways and said lip cooperating with said flanges to hold said box to said utility cabinet stand.

3. A service stand comprising, in combination:

a utility cabinet box having vertical side panels, the top edge of each of said side panels being bent inwardly to form a narrow horizontal shoulder, then upwardly to form a vertical riser, and then horizontally again to form a mounting flange, a flat top panel resting on and attached to said mounting flanges and having marginal portions of said top panel cooperating with said vertical risers and said horizontal shoulders to form oppositely facing channels, and a cash box adapted to be detachably mounted on said utility cabinet box and having at its bottom inwardly turned flange means slidably engageable in and along said channels, said flange means holding said cash box against vertical separation from said utility cabinet box.

4. A service stand comprising, in combination, a utility cabinet box having vertical side panels, the top edge of each of said side panels being bent inwardly to form a narrow horizontal shoulder, then upwardly to form a vertical riser, and then inwardly again to form a horizontal flange, a flat top panel resting on and attached to said horizontal flanges and having marginal portions projecting outwardly beyond said vertical risers, said marginal portions of said top panel being bent downwardly so that the edges thereof are spaced only a short distance above and cooperate with said horizontal shoulders to define oppositely facing narrow slots, and a cash box adapted to be detachably mounted on said utility cabinet box and having inwardly projecting flanges spaced downwardly from the bottom panel thereof along the side edges of the box, said flanges being slidably engageable in and along said oppositely facing slots.

5. A service stand comprising, in combination, a utility cabinet box having vertical side panels and a horizontal top panel, said box being formed with opposite, outwardly facing longitudinal channels extending along the side panels adjacent the top edges thereof, and a cash box adapted to be detachably mounted on said utility cabinet box, said cash box having a bottom panel and side panels extending downwardly below the bottom panel, said bottom panel having downwardly bent mounting flanges along the margins thereof attached to said side panels, said side panels being bent horizontally inward below the bottom edges of said mounting flanges to form attachment flanges which are slidably engageable in and along said outwardly facing channels, said attachment flanges securing said cash box against vertical separation from said utility cabinet box.

6. A service stand comprising, in combination, a sheet metal utility cabinet box having vertical side panels, the top edges of said side panels being bent inwardly to form narrow horizontal shoulders, then upwardly to form vertical risers, and then inwardly again to form horizotal flanges, a flat top panel resting on and attached to said horizontal flanges, said top panel having marginal portions projecting outwardly beyond said vertical risers and bent downwardly so that the edges thereof are spaced only a short distance above and cooperate with said horizontal shoulders to define outwardly facing narrow slots along the sides of said utility cabinet box, and a cash box adapted to be detachably mounted on said utility cabinet box by sliding movement longitudinally along said slots, said cash box having side panels, and a bottom panel having downwardly bent mounting flanges along the side margins thereof spaced by a sufficient distance apart to receive between them said downwardly bent portions of said top panel of said utility cabinet box, said mounting flanges being attached to said side panels a short distance up from the bottom edge thereof, said side panels being bent horizontally inward below the bottom edges of said mounting flanges to form attachment flanges which are engageable in said slots to secure said cash box against vertical separation from said utility cabinet box, said attachment flanges along the side panels of the cash box riding longitudinally along said horizontal shoulders formed at the top edges of the side panels of said utility cabinet box, with said downwardly bent mounting flanges of said bottom panel of said cash box in sliding engagement with said downwardly bent marginal portions of said top panel of said utility cabinet box.

ARTHUR BRANDES.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
188,566	Barnes	Mar. 20, 1877
951,090	Kilian	Mar. 1, 1910

FOREIGN PATENTS

Number	Country	Date
392,557	Great Britain	May 17, 1933