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CABINET WITH CASTERS AND LEVELING MEANS

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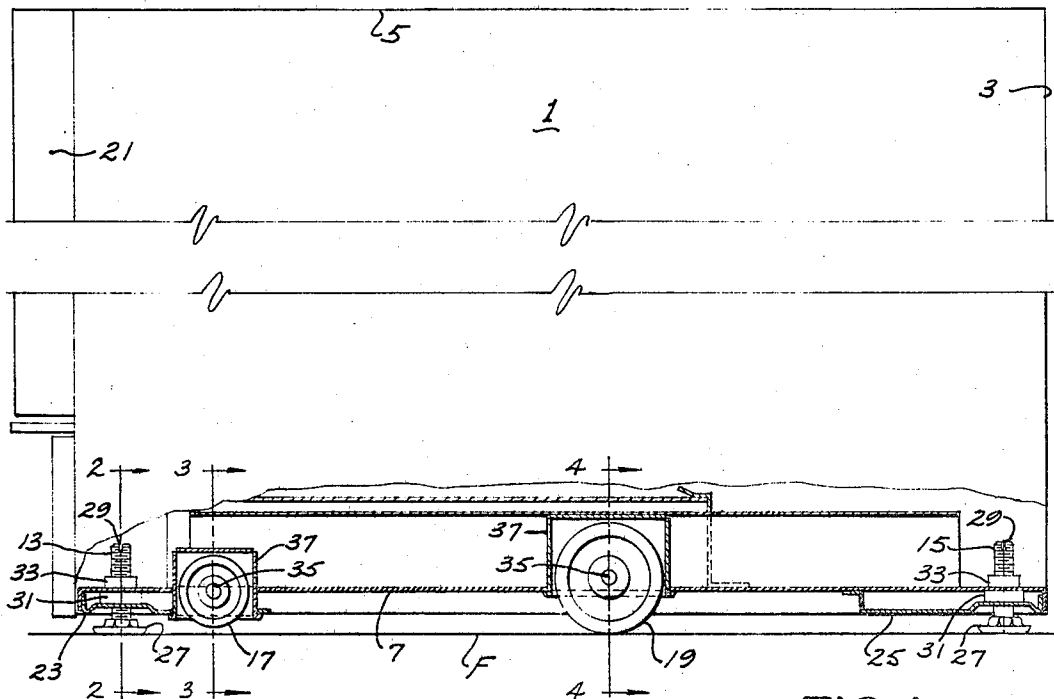


FIG. 1

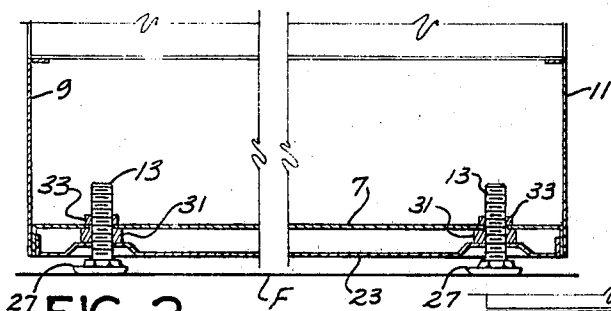


FIG. 2

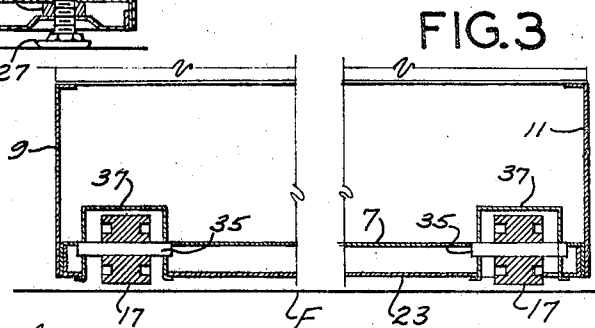


FIG. 3

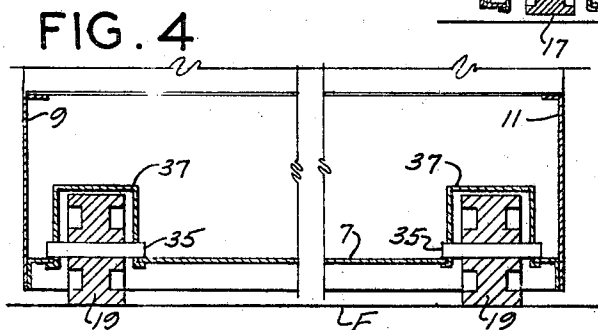


FIG. 4

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CABINET WITH CASTERS AND LEVELING MEANS
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7 Claims

ABSTRACT OF THE DISCLOSURE

A cabinet, particularly a cabinet for a vendor, has casters and leveling means so that the cabinet may be installed in a gap in a bank of side-by-side cabinets and leveled with the other cabinets in the bank. The cabinet has a front pair and a rear pair of leveling screws located at the bottom of the cabinet adjacent to the front and rear corners thereof, and a front pair and an intermediate pair of casters journaled at the bottom of the cabinet adjacent the sides thereof. The intermediate casters are located slightly to the rear of the vertical transverse plane of the center of gravity of the cabinet and the bottoms of the front casters are above the bottoms of the intermediate casters when the cabinet is leveled, thereby enabling the cabinet to be rolled about on all four casters by tipping the cabinet forward, and to be leveled by vertically adjusting the leveling screws.

Background of the invention

Vendors, such as used for vending cigarettes, candy, beverages, etc., are frequently installed side-by-side in rows or banks along the wall of a room. These vendors are generally of the same height and have similar styling for pleasing appearance of the bank. It is often necessary to move a vendor into a gap in such a bank of vendors and to level it with the other vendors in the bank. This has heretofore been relatively difficult and time consuming, noting that vendors are quite heavy, and that, once a vendor has been positioned in a gap in a bank of vendors, there is generally no access to it except from the front.

Summary of the invention

Among the several objects of the invention may be noted the provision of a cabinet, and particularly a cabinet for a vendor, which is highly mobile and maneuverable so as to enable the cabinet to be readily inserted in a gap in a bank of side-by-side cabinets; the provision of such a cabinet which may be easily rolled into position in a gap in a bank of cabinets; the provision of such a cabinet which may be pivoted about a vertical axis passing through the cabinet to align it with a gap in a bank of cabinets; the provision of such a cabinet which may be readily leveled after it has been rolled into the gap in the bank of cabinets; and the provision of such a cabinet which is characterized by simplicity of construction and low cost.

Briefly, a cabinet of this invention has a pair of vertically adjustable levelers at the bottom thereof adjacent its front corners and a pair of vertically adjustable levelers at the bottom thereof adjacent its rear corners. A first caster means is provided at the bottom of the cabinet adjacent the front thereof, and a second caster means is provided at the bottom of the cabinet between the first caster means and the rear of the cabinet. The bottom of the first caster means is above the bottom of the second caster means when the cabinet is level. Other objects and features will be in part apparent and in part pointed out hereinafter.

Brief description of the drawings

FIG. 1 is a side elevation of a vendor cabinet, with the side of the cabinet broken away at the bottom to show certain casters and leveling screws of a cabinet of this invention; and

FIGS. 2, 3 and 4 are vertical sections on lines 2—2, 3—3 and 4—4 of FIG. 1, respectively.

Corresponding reference characters indicate corresponding parts throughout the several views of the drawings.

Description of the preferred embodiment

Referring to the drawings, there is indicated at 1 a cabinet for a vendor or the like, incorporating the casters and leveling means of this invention. Briefly, the cabinet comprises a rear wall 3, top and bottom walls 5 and 7, and left and right side walls 9 and 11. At the bottom of the cabinet are a pair of front levelers 13 and a pair of rear levelers 15. Rearwardly of the front levelers 13, also at the bottom of the cabinet, is a first caster means comprising a pair of front casters 17. A second caster means constituted by a pair of intermediate casters 19 is provided at the bottom of the cabinet near its center. FIG. 1 shows the cabinet in leveled condition, the levelers 13 and 15 bearing on a floor F.

The cabinet 1 may be of any desired construction and configuration, depending upon the particular use for which it is intended. As shown, the cabinet is that of a vendor which typically has a door 21 pivoted on the front of the cabinet by hinges (not shown) along its left-hand edge for opening and closing swinging movement of the door about a vertical axis. Below the bottom wall 7 of the cabinet at the front thereof are channels 23 and 25. These extend from side-to-side of the cabinet. Each of the levelers 13 and 15 comprises a screw having a pad 27 at its lower end and a kerf 29 at its upper end for application of a screw driver. Each of the leveling screws 13 and 15 is threaded in a nut 31 fastened between the bottom wall and the respective channel. Each screw has a lock nut 33 threaded thereon above wall 7. The screws 13 are located inside of and closely adjacent the side walls 9 and 11 at the front corners of the cabinet; screws 15 are located inside of and closely adjacent the side walls at the rear corners of the cabinet. Their upper ends are accessible through the front of the cabinet for application of a screw driver on opening the door 21 to turn the screws for leveling the cabinet.

Each of the casters 17 and 19 has an axle 35 disposed horizontally at a fixed elevation with respect to the bottom of the cabinet and mounted in the side walls of an open-bottomed housing 37 inset in the bottom wall 7, the casters projecting down and out of these housing. The front casters 17 are located slightly rearward of the front leveling screws 13 adjacent the side walls 9 and 11 of the cabinet. The intermediate casters 19 are located adjacent side walls 9 and 11 in a vertical transverse plane of the cabinet which is slightly to the rear of the vertical transverse plane of the center of gravity of the cabinet. The caster axles extend transversely of the cabinet for rolling of the cabinet on the casters in front-to-rear direction. The intermediate casters 19 are of larger diameter than the front casters 17, and the caster axles are so located heightwise that the bottoms of the front casters are above the bottoms of the intermediate casters (and above the floor) when the cabinet is level as shown in FIG. 1.

The cabinet 1 may be rolled into a position in front of a gap therefor in a bank of cabinets by threading up the front leveling screws 13 to enable the cabinet to tilt forward on the intermediate casters 19 so that the front

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casters 17 bear on the floor. With both sets of casters bearing on the floor, the cabinet may be readily rolled on the floor into position in front of the gap. It may be readily aligned for entry into the gap (i.e., its sides brought into parallelism with the sides of the two cabinets on opposite sides of the gap) by tilting it back slightly so that its entire weight is taken by the intermediate casters 19, and then swinging it one way or the other about one of the intermediate casters as a pivot for alignment purposes.

Once the cabinet has been brought into position in front of the gap in the bank, and appropriately aligned with the gap, it is rolled into the gap on both sets of casters 17 and 19. Then, with the front door open for access to the rear leveling screws 15, and with the cabinet tilted forward so that the rear leveling screws are off the floor (in order that they may be turned), the rear leveling screws are turned to adjust them to a position such that, when the cabinet is tilted back on casters 19, its top rear is level with the top rears of the adjacent cabinets. This may require more than one adjustment until precise leveling of the top rear of the cabinet is obtained. After the top rear has been leveled, and with the weight of the cabinet bearing on the intermediate casters 19 and rear leveling screws 15, the front leveling screws 13 are screwed down to the point where their pads 27 engage the floor and the top front of the cabinet is level with the top fronts of the adjacent cabinets.

With the casters 19 slightly to the rear of the transverse plane of the center of gravity of the cabinet, it is easy to tilt the cabinet as required for the above operations. It is to be noted that, when the cabinet is leveled, the front casters 17 are raised above the floor F. It is also possible in some instances that the intermediate casters 19 may be raised off the floor in order to level the cabinet in relation to the adjacent cabinets.

In view of the above, it will be seen that the several objects of the invention are achieved and other advantageous results attained.

As various changes could be made in the above construction without departing from the scope of the invention, it is intended that all matter contained in the above description or shown in the accompanying drawings shall be interpreted as illustrative and not in a limiting sense.

What is claimed is:

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1. A cabinet having a pair of vertically adjustable levelers at the bottom thereof adjacent its front corners, a pair of vertically adjustable levelers at the bottom thereof adjacent its rear corners, first caster means at the bottom of the cabinet adjacent the front thereof and second caster means at the bottom of the cabinet between the first caster means and the rear of the cabinet, each of said caster means having a horizontal axis of rotation at a fixed elevation with respect to the bottom of the cabinet, the bottom of the first caster means being above the bottom of the second caster means when the cabinet is level.

2. A cabinet as set forth in claim 1 wherein the first and second caster means each comprises a pair of casters located at opposite sides thereof.

3. A cabinet as set forth in claim 2 wherein the casters of the second caster means are located closely adjacent and slightly to the rear of the transverse plane of the center of gravity of the cabinet.

4. A cabinet as set forth in claim 3 wherein at least the rear levelers are accessible for adjustment from the inside of the cabinet.

5. A cabinet as set forth in claim 3 wherein the casters of the second caster means are of larger diameter than the casters of the first caster means.

6. A cabinet as set forth in claim 5 wherein each of said front levelers comprises a leveling screw threaded in a fixed nut adjacent the respective corner of the cabinet, the upper end of each screw being accessible from inside the cabinet for turning the screw.

7. A cabinet as set forth in claim 6 wherein the casters of the first caster means are mounted on the bottom of the cabinet slightly rearwardly of the front leveling screws.

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