

Sept. 11, 1962

C. GOLENPAUL

3,053,602

CABINET

Filed Dec. 7, 1959

2 Sheets-Sheet 1

FIG. 1

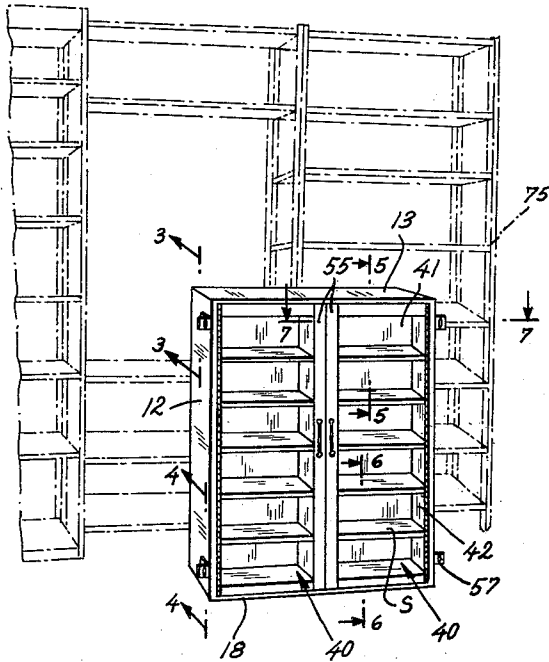


FIG. 3

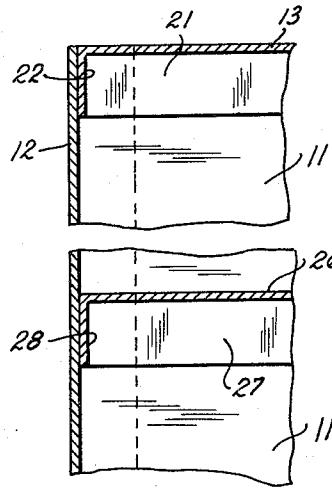


FIG. 2

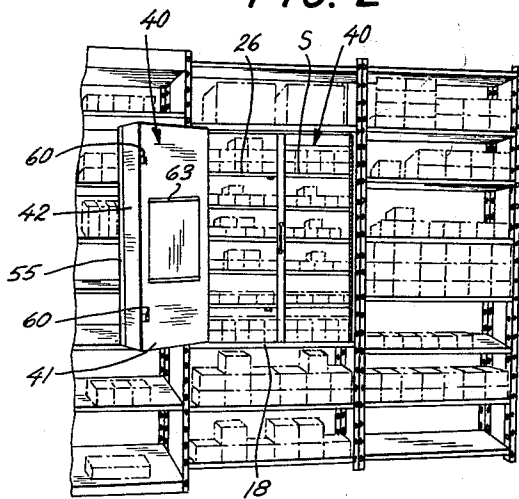
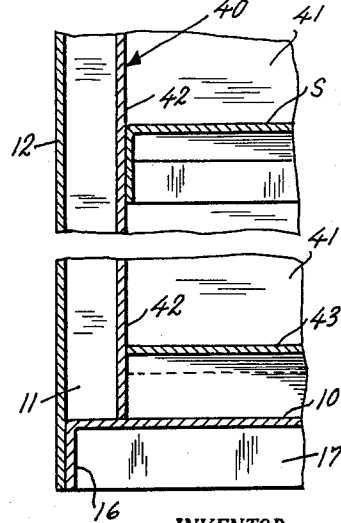


FIG. 4



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2 Sheets-Sheet 2

FIG. 5

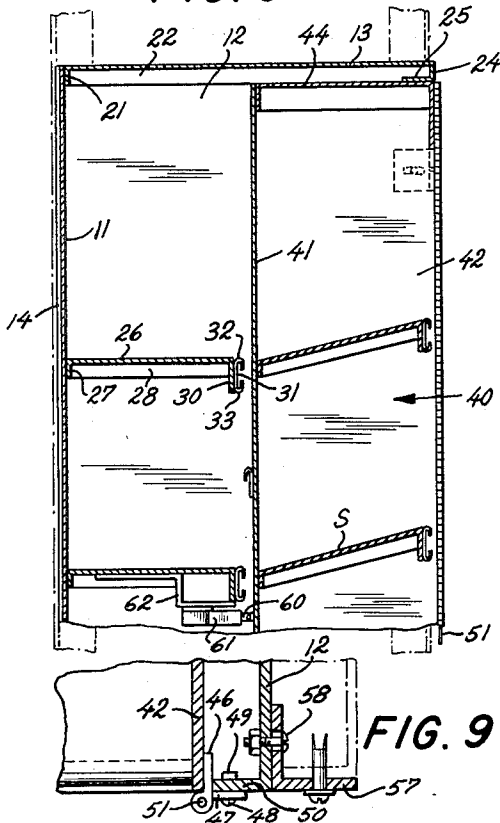


FIG. 6

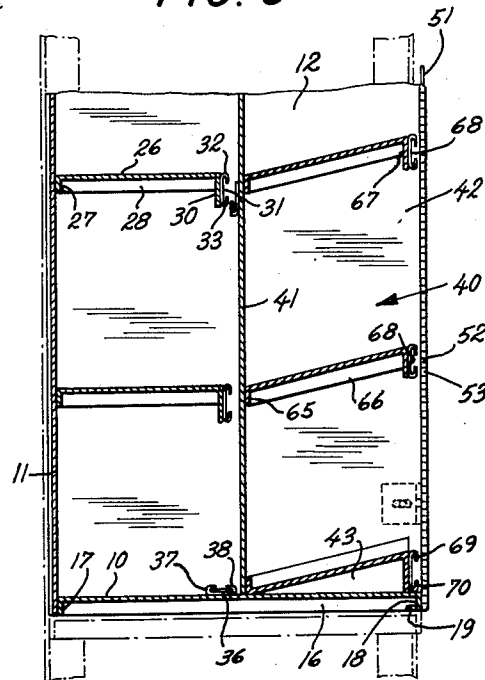


FIG. 9

FIG. 7

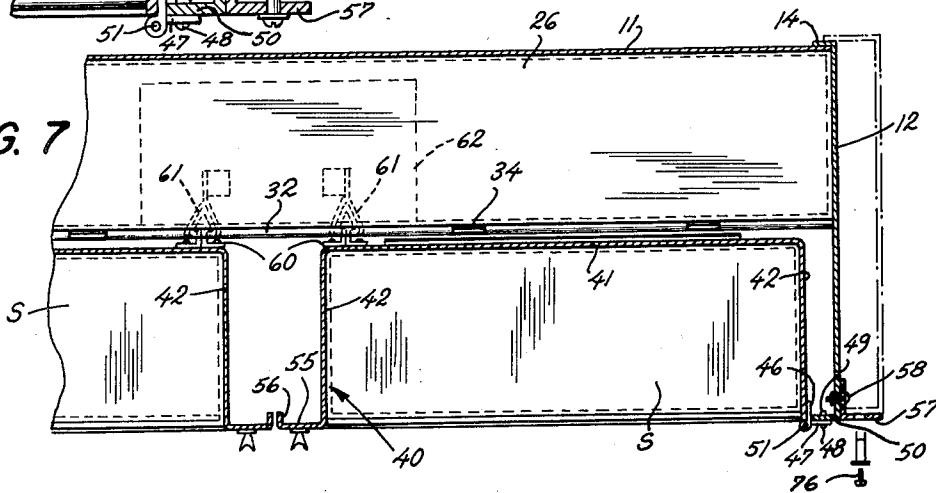
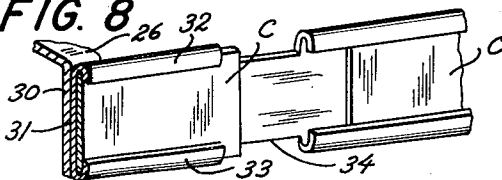


FIG. 8



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1

3,053,602
CABINET

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Aerovox Corporation, a corporation of Massachusetts
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2 Claims. (Cl. 312-201)

The present invention relates more particularly to cabinets of type especially useful for storing small articles of merchandise in the ware houses or stockrooms of jobbers and distributors generally.

As conducive to a clear understanding of the objectives of the invention, it is noted that where small articles, illustratively electrical or electronic components, such as capacitors, resistors, inductances, lamps, small electronic tubes, transistors and other articles of merchandise that are commonly individually packaged in cartons of length usually of 3" to 4", are stacked on the shelving, usually about 8" deep, commonly used in such warehouses, considerable storage space is wasted. Where it is attempted to stock the articles in a back row and a front row of stacks on a given shelf, access to the back or hidden stacks is difficult and necessitates removal of part or all of the front stacks, with loss of time, expense and confusion; also stacks of the cartons whose end dimensions are frequently 1½" are likely to fall in such handling and to drop behind the shelving or racks.

It is accordingly among the objects of the invention to provide a cabinet that may readily be mounted on the conventional shelf racks commonly used in warehouses for articles of the character set forth, and which admits of stacking small articles of the character set forth in a front or a rear row of stacks for better utilization of the storage space, and yet affords ready access to the back and normally hidden row of stacks of merchandise, without the need for removing some or all of the merchandise from the front row of stacks, which alone is normally exposed to view and which admits of convenient identification of the merchandise, not only in the front row of stacks, but in the back row of stacks as well.

In the accompanying drawings in which is shown one of various possible embodiments of the various features of the invention,

FIG. 1 is a front elevation showing the cabinet in closed position and in phantom view the shelving where the cabinet may be mounted;

FIG. 2 is a front elevation showing the cabinet in place on the shelving and with one cabinet door open, but not fully open, better to reveal the construction;

FIG. 3 is a fragmentary view in longitudinal cross section and on a layer scale taken on line 3-3 of FIG. 1;

FIG. 4 is a view similar to FIG. 3, taken on line 4-4 of FIG. 1;

FIG. 5 is a view in longitudinal cross-section through the depth of the closed cabinet, taken on line 5-5 of FIG. 1;

FIG. 6 is a view similar to FIG. 5 taken on line 6-6 of FIG. 1;

FIG. 7 is a view in transverse cross-section taken on line 7-7 of FIG. 1;

FIG. 8 is a perspective view, partly in section on a larger scale of a fragment of the identification card holder; and

2

FIG. 9 is a cross-sectional detail on a larger scale of the lower right hand corner of FIG. 7.

Referring now to the drawings, the cabinet, which may be of any suitable material, is rectangular in shape and is illustratively shown with six uniformly spaced shelves. The cabinet preferably comprises a floor 10, a back wall 11, side walls 12 and a top wall 13.

Where, as is preferred, the cabinet is made of sheet metal, the back edge of each side wall has a narrow flange 14 but at right angles thereto, extending the height of the cabinet and overlapping and welded to the edge region of the back wall 11.

The floor 10 of the cabinet when of sheet metal as preferred, has downturned side flanges 16 and a like downturned back flange 17 which extend flush with the lower edges of the back and side walls and are welded respectively to said walls. The floor also has a downturned front flange 18 overlapped at its lower ends by the lower end of the narrow flange or fin 50 at the front of the cabinet integral with and bent inwardly at right angles to the forward edge of the side wall 12. Flange 18 has inturned ledge 19 to guard against the exposure of a sharp edge.

The top wall 13 of the cabinet has a downturned back flange 21 and similar downturned side flanges 22 that are welded to the back wall and the side walls respectively of the cabinet, the top wall 13 extending flush with the upper edges of the back and side walls. The front of the top wall has a downturned flange 24, with an inturned ledge 25 extending the length thereof to guard against exposure of a sharp edge.

The cabinet has a number of shelves 26 extending the length of the cabinet but of width only substantially half the width of each side wall 12 of the cabinet. Illustratively five such shelves are shown in addition to the floor 10 of the cabinet, which, of course, serves as a shelf that affords storage space corresponding to that of each of the shelves thereabove. The shelves are desirably also of sheet metal. Each shelf 26 is rectangular, extending from side wall to side wall 12 along the back wall 11 and extending, as above noted, for only substantially one-half the width of the side walls.

Each shelf has downturned flanges, flange 27 downturned from its back edge and preferably welded to the back wall of the cabinet. Flanges 28 extend down from the ends of the shelves 26 and are welded to the respective side walls 12 of the cabinet.

There is also a flange 30 downturned from the front of each shelf, and this flange is preferably of greater width than the flanges 27 and 28, for replaceably mounting identification cards C for merchandise to be stored on the corresponding shelf. To this end, the front flange 30 has a superposed sheet metal strip 31 with downturned narrow flange 32 at its top edge and upturned narrow flange 33 at its bottom edge. These flanges are slightly spaced from the strip 31 and are desirably interrupted illustratively as at 34, for facility of introduction and removal of identification cards C that are held between the strip 31 and the flanges 32 and 33, which serve as guides or runways for the identification cards C.

Upon the floor 10 immediately in front of the front flange 30 of the shelves 26, there is welded a strip 36 extending the length of the cabinet with lateral inturned flanges 37 and 38 similar to those of the strips 31 on the shelves thereabove and these flanges are interrupted just

as those on the shelves, for removably mounting identification cards C for the merchandise to be stacked upon the floor shelf.

In addition to the shelves within the cabinet above described, merchandise is accommodated by the door or preferably by the two doors 40 of the cabinet. To this end, each of the two doors is formed with a back wall 41, side walls 42, a bottom in the form of a shelf 43, and a top 44.

Preferably the back wall 41 and the side walls 42 of the door are made of a unitary blank of sheet metal, from the back wall portion of which are bent out at right angles thereto, the two side wall portions 42. The top 44 of the door has a downturned back flange 65 and downturned side flanges 66, welded to the inner faces of the back wall and side walls respectively of the door and a downturned front flange connecting the side walls of the door.

Each door is formed with a hinge along its forward edge adjacent the corresponding side walls of the cabinet. The hinge consists of a hinge leaf 46 extending the height of the door and welded to its side wall 42 and a companion leaf 47 which may be affixed as by bolts consisting of short male elements 48 and corresponding nuts 49 clamping the leaf 42 to the narrow flange or fin 50. The hinge pin 51 is a length of piano wire extending through the loops 52 and 53 of the two hinge leaves 46 and 47 for substantially the entire height of the cabinet. Thus there is afforded a very sturdy hinge which will sustain the weight of the door and the merchandise upon the door shelves even when the door is left wide open.

In view of the depth of the door, the effective width of each of the doors is somewhat less than half the length of the cabinet in order to afford the necessary clearance for opening and closing.

To close the vertical gap between the fronts of the doors when closed, the free side wall of each door preferably has an upright ledge 55 unitary therewith extending the height of the door, which ledge preferably has a fin 56 extending inward the height thereof from its outer edge.

The door has a plurality of shelves illustratively six, corresponding to those including the floor within the cabinet. Although these shelves may be horizontal just as are those within the cabinet, they are preferably pitched or inclined downwardly from front to rear as is also the floor or lowermost shelf of the door. Each shelf has downturned flanges, flange 65 being welded to the back wall, and downturned side flanges 66 welded to the side walls of the door. Each shelf also has a downturned front flange 67, preferably of greater width than the other flanges, which front flange has welded thereto a front strip 68 similar to those on the shelves 26 within the cabinet, with flanges 69 and 70 interrupted at 34 (FIG. 8) for identification cards C. The lowermost shelf, which constitutes the bottom of the door, comes flush with the lower edge of the back wall 41 of the door, and has lateral mounting flanges 71 extending upward as shown, which are welded to the respective back wall and side walls of the door. The index card carrier flange of the floor shelf is identical with those of the other shelves of the door.

The cabinet may be mounted on conventional shelving 75 and affixed in place by means of angle brackets 57 secured by bolts 58, the outstanding parts of the angle bracket being attached to the shelving 75 by screws 76.

Desirably the back of the door has latches 60 extending rearward therefrom to snap into corresponding latch holders 61 mounted on inturned ledges 62 unitary with shelves of the cabinet.

On the back face of one or both doors 40 there is adequate room for the rectangular frame 63 for removably mounting a catalog or inventory sheet (not shown) of everything contained in the cabinet.

It will thus be seen that the cabinet is an inexpensive

structure that admits of ready accommodation on standard shelving in a stockroom, to which it may be bolted.

The cabinet admits of economy of storage space, in that, when of depth in the order of say 8 inches corresponding to standard steel shelving, it admits of utilization for two rows of stacks of merchandise, one behind the other at each of the shelf levels. Each door may readily be fully opened, completely to expose the shelves within the cabinet and the merchandise mounted thereon. Accordingly, the cabinet provides a great convenience to the jobber or distributor in affording ready accessibility to small articles of merchandise on the door shelves and just as ready accessibility by simply opening the door or doors, to the articles on the shelves within the cabinet, without the waste of storage space by having only one row of stacks of merchandise in a cabinet of sufficient depth to accommodate two such rows of stacks, or on the other hand, causing inconvenience and loss of time in handling, where it is attempted to accommodate two sets of stacks, one behind the other, on an ordinary shelf.

The cabinet of the present invention also affords the greatest of convenience in inventory control, as the available stock on the rear series of stacks may readily be determined without physically removing the merchandise in the front stacks as would be necessary in the absence of the present invention.

As many changes could be made in the above construction, and many apparently widely different embodiments of this invention could be made without departing from the scope of the claims, 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.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent of the United States is:

1. A sheet metal cabinet suitable for storing small articles in a stockroom and having a back wall, side walls, a floor and a top wall, said cabinet having a plurality of shelves along the back wall, extending forward for substantially half the width of the side walls and a pair of sheet metal doors hinged to the fronts of the respective side walls of the cabinet, each of said doors having a back wall, side walls, a bottom wall and a top wall, said side walls of the doors being of a substantial width less than half the width of the side walls of the cabinet, so that the doors when closed will extend well into the space in the cabinet in front of the shelves in the latter, each of said doors having a series of shelves extending across the width and depth thereof to substantially the front of the door, the combined effective width of the doors being less than the width of the cabinet in order to afford clearance for opening and closing the doors, each door having an upright sheet metal ledge, integral with the free side wall thereof as a lateral extension of the front wall of each door, each of said ledges having a fin integral therewith, extending inwardly at right angles thereto and substantially the height thereof, the ledges of the two closed doors extending in side by side relation and substantially filling the open space between the fronts of the doors, and the fins being in face to face relation with each other.

2. A sheet metal rectangular cabinet for storing of small articles of merchandise in a storeroom for convenience in making up orders, said cabinet comprising a back wall, side walls, a floor and a top, a series of shelves extending the width of the cabinet and engaging and attached to the back and the side walls of the cabinet, each shelf being of width of substantially half the width of the end walls, said cabinet having a pair of sheet metal doors hinged to the fronts of the side walls thereof, each door being of sheet metal and comprising a door body made up of a blank comprising a back wall and side walls integral therewith, said side walls being of width substantially half the width of the side walls of the cabinet, each door being

5

of width somewhat less than half the width of the cabinet to afford opening and closing clearance, each of said doors having shelves accessible from the front of the cabinet, said shelves extending from the back wall of the door along the side walls thereof and sloping rearwardly, each shelf comprising a unitary piece of sheet metal with downturned back and side flanges affixed to the back and side walls of the door, each shelf also having a downturned front flange extending across the width of the front part of the door, each shelf also having affixed to the front flange thereof in face to face relation therewith, a sheet metal strip with out turned flanges top and bottom extending parallel to the strip and having interruptions for facilitating introduction and removal of cards to identify the merchandise to be stored on the shelves, each door having a mounting hinge plate welded to the outer face of the front part of its side wall, and a mounting fin for the other leaf of the hinge extending substantially the height of the cabinet at its front and integral with the side wall of the cabinet, each door having a ledge extending substantially the height thereof, integral with

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and at right angles to the side wall of the door near the midsection of the cabinet, each ledge having an intumed fin along the height thereof, said ledges being in side by side relation, with their fins in substantially face to face relation, to close the space between the doors.

6

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