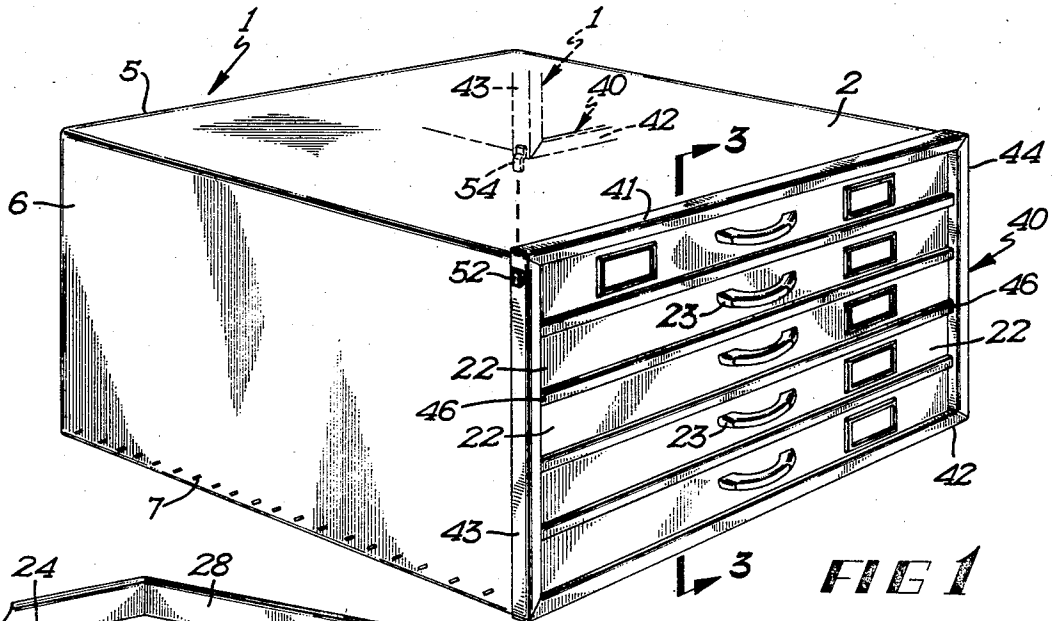
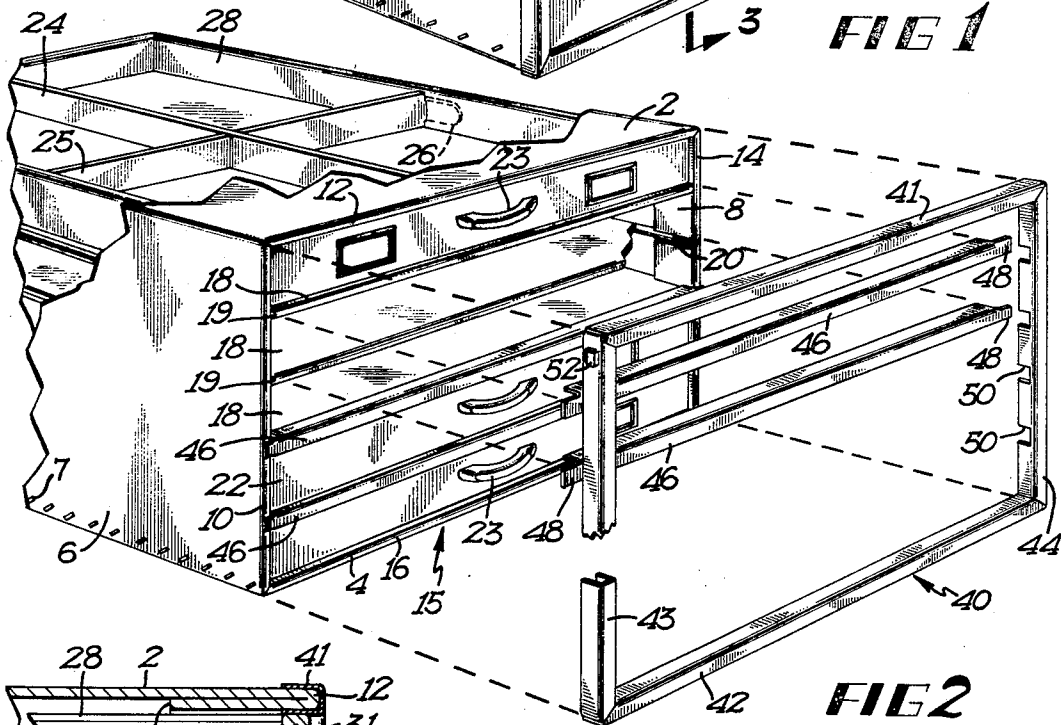
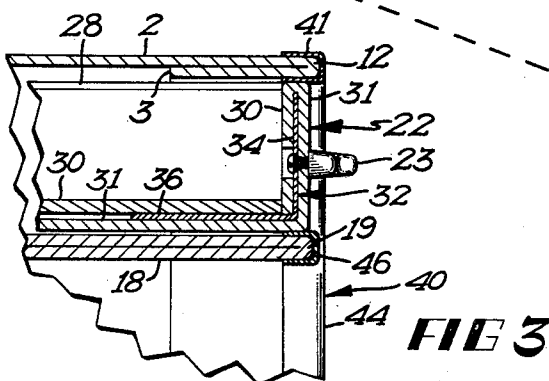


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 REINFORCED FILE CABINET
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REINFORCED FILE CABINET

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5 Claims

ABSTRACT OF THE DISCLOSURE

A file cabinet of the lightweight, fiber or cardboard type having a plurality of vertically spaced, horizontally extending divider panels between which drawers may be slidably retained is provided with a supporting metal frame removably secured to the front edges of the front, open end of the cabinet; and a plurality of channel-shaped cross members held in notches formed in opposite sides of the metal frame slidably receive the front, lateral edges of each of the divider panels. Slotted tabs and connector fingers at the top and bottom of the metal frame serve to interconnect a plurality of the cabinets stacked on top of each other so as to prevent relative movement therebetween.

Lightweight, file cabinets made out of relatively inexpensive material such as cardboard or fiberboard are finding increasing utility in applications where extremely long life, durability, and large load carrying capacity are not required. Such cabinets normally consist of an outer casing or cabinet which houses one or more filing or storage compartments, which may be in the form of slidable drawers.

Among the disadvantages associated with presently available file and storage cabinets of the aforesaid type are their lack of sufficient strength for properly supporting a plurality of file drawers as well as a number of similar filing units stacked thereon. Prior art file casings and cabinets have also been lacking in the provision of simple and convenient means for securing adjacent cabinet units to each other when they are stacked vertically.

Having in mind the foregoing shortcomings associated with presently available lightweight, inexpensive file cabinets, we have designed an improved file and storage cabinet of the multiple compartment, flat file type. The file cabinet of this invention is particularly characterized by the combination of a rigid frame having a plurality of cross braces with the open, front end of a fiber or cardboard outer casing.

The cross braces of the frame assembly are provided with recesses or channels which slidably receive the front edges of a plurality of parallel divider panels which extend longitudinally within the outer casing. In addition to supportably engaging the divider panels, the cross braces serve to greatly add to the strength and rigidity of the front frame.

As a further desirable feature of our improved file cabinet, we provide a right angle reinforcing member embedded between the cardboard layers in the front and bottom walls of cardboard drawers which may be slidably inserted between the divider panels.

An additional and particularly beneficial aspect of the file cabinet of this invention resides in the forming of slotted tabs and vertically extending connector fingers at the top and bottom ends of the upright side members of

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the reinforcing frame. By inserting the connector fingers at the bottom of one cabinet in the slotted tabs at the top of a lower cabinet, a plurality of vertically stacked cabinets may be retained together as a unit.

These and other objects and advantages of our unique file cabinet will become readily apparent as the following description is read in conjunction with the accompanying drawings, of which:

FIGURE 1 is a perspective view of the file cabinet of this invention;

FIGURE 2 is a perspective view similar to FIGURE 1 with portions thereof broken away, and with the front frame shown in exploded form for clarity; and

FIGURE 3 is a vertical section view of the cabinet taken along lines 3-3 of FIGURE 1.

The file cabinet of this invention has been particularly designed with a view towards the filing and storage of relatively lightweight, flat articles such as drawings, blueprints and printed matter. To this end, the cabinet has a generally rectangular configuration generally indicated by reference numeral 1 in FIGURE 1. File cabinet 1 is preferably formed from a single blank of fiber or cardboard which has been cut and scored, and then bent into the rectangular shape shown in a manner well known in the art. After bending the cardboard blank along the scored lines so as to provide top and bottom walls 2 and 4 and side walls 6 and 8, side wall 6 is stapled as indicated at 7 along its lower edge to an upwardly turned edge of bottom wall 4 in order to fasten the outer housing or casing together. The back of the casing is fully closed by a wall 5 which may either be a separate piece of cardboard fastened to side walls 6 and 8, or hinged extensions of the side or top and bottom walls. Although the preferable material of construction is fiberboard applied in one or more layers, plastic or lightweight sheet metal could also be employed to form the outer casing. When fiberboard is used, a moisture proof, plastic coating of decorative design is advantageously applied to the outer surface thereof.

As is indicated in FIGURE 2, front edges 10, 12, 14, and 16 of the side and top and bottom walls define an open, front end generally indicated by reference numeral 15. For the purpose of providing a plurality of compartments within which flat material such as drawings, blueprints or the like may be filed and stored, a plurality of generally horizontally extending divider panels 18 are positioned within the outer casing in vertically spaced relationship. Panels 18 are secured in longitudinally extending grooves or recesses 20 formed in the inner surfaces of side walls 6 and 8. With reference to FIGURE 3, it will be seen that divider panels 18 are comprised of two layers of fiberboard 17 and 19 folded back on each other to provide a unitary divider member of sufficient strength and rigidity to be self-supporting. Top panel 2 and bottom panel 4 (not shown) are similarly strengthened by bending a portion 3 thereof back under the main body section so as to form a hemmed or beaded front end.

Divider panels 18 may serve as trays on which drawings or paper work of any kind can be directly stored. A filing and storage arrangement of this type with no drawers or front closure member of any type being employed, would be particularly suitable for applications where repeated use dictates the storage of flat material in such a way that it is readily accessible. Where the safety and cleanliness of the material to be stored are

significant considerations, then drawers 22 may be inserted between adjacent divider panels 18 and slidably supported thereon. Drawers 22 are also preferably constructed of folded cardboard or fiberboard and are provided with handles 23 at their front ends. Drawers 22 are braced and reinforced by removable cross members 24 and 25 having tabs 26 at their outer ends which are inserted within complementary slots in side walls 28 of drawers 22, in the manner shown in FIGURE 2. Cross members 24 and 25 may also be made out of cardboard. As is best shown in FIGURE 3, drawers 22 have front and bottom walls comprised of two layers 30 and 31 of fiberboard. In order to strengthen drawers 22, particularly at the front end where outward force to open the drawers is exerted on handles 23, we utilize right angle braces 32. Braces 32 are comprised of perpendicular legs 34 and 36 which are disposed between laminated layers 30 and 31 of drawers 22.

For the purpose of strengthening the entire file cabinet 1, we employ a frame assembly 40 which is shaped to conform to the rectangular cross section of front opening 15. Frame assembly 40 is comprised of top and bottom members 41 and 42 and upright, side legs 43 and 44. These four members may be formed out of a single piece of sheet metal, or they may be separated strips of metal which are secured together at their ends, as by spot welding. The four sides 41, 42, 43, and 44 of frame assembly 40 are preferably channel-shaped aluminum or sheet steel as is indicated with respect to upright leg 43 in FIGURE 2 and top member 41 in FIGURE 3. Frame assembly 40 is removably secured to file cabinet 1 by snugly fitting channel-shaped sides 41, 42, 43, and 44 thereof over front edges 10, 12, 14 and 16 of front opening 15. FIGURE 1 shows frame 40 in place on the front of cabinet 1 and the manner in which front edges 10, 12, 14 and 16 are slidably received in channel members 41, 42, 43, and 44 is illustrated in FIGURE 3 with respect to front edge 12 and top frame member 41. Front frame 40 is a rigid strengthening member, adding greatly to the ability of cabinet 1 to sustain the weight of additional cabinets stacked thereon, and also serving as a decorative trim for the front of the cabinet.

With reference to FIGURE 2, it will be noted that frame assembly 40 further includes a plurality of transversely extending cross braces 46. Braces 46 are made out of the same sheet metal employed for frame sides 41, 42, 43, and 44, and are also channel-shaped as is indicated in FIGURE 3. Channel-shaped cross braces 46 slide snugly over lateral, front edges 19 of divider panels 18 when frame assembly 40 is mounted over front opening 15. Cross braces 46 serve several useful purposes. First of all, by supportably engaging front edges 19 of divider panels 18, they keep panels 18 from bowing or sagging as so frequently happens when such cardboard dividers are supported only along their longitudinal edges. Secondly, as is clearly indicated in FIGURE 3, cross braces 46 provide a bearing surface for the bottom walls of drawers 22 as these drawers are slid in and out of cabinet 1. Furthermore, braces 46 function to greatly strengthen and rigidify frame assembly 40, thereby further enhancing its usefulness as a reinforcing structure.

As a convenient means for attaching cross braces 46 to frame assembly 40, we provide vertically spaced notches 50 in upright legs 43 and 44 of a frame assembly 40, and complementary extension tabs 48 at the opposite ends of cross braces 46. Braces 46 are retained in frame 40 by inserting tabs 48 in notches 50.

A number of cabinets 1 may be stacked on top of each other in order to provide additional flat filing space where more space than that contained within one of such cabinets is required. In order to insure that the stacked cabinets do not move relative to one another, we provide cabinet interlocking means in the form of tab slots 52 and downwardly depending fingers 54 at the top and bottom of upright legs 43 and 44 of frame assembly 40.

Guide slots 52 may be formed by welding a separate piece of metal to upright legs 43 and 44; however, they are preferably formed integral therewith by striking short lengths of metal from the outer channel walls thereof. FIGURE 1 illustrates in phantom lines how the downwardly depending insert finger 54 at the bottom of the front frame 40 of an additional file cabinet 1 would be aligned with and moved downwardly into guide slot 52 on the base cabinet. The interlocking engagement of fingers 54 within guide slots 52 prevents the upper cabinets from sliding or moving relative to each other and the base cabinet when subjected to any external force.

Those skilled in the art will readily appreciate that the above-described file cabinet advantageously combines the desirable features of lightweight and inexpensive construction with structural strength and rigidity which is not normally found in file cabinets constructed of fiberboard or the like. The additional strength is of course contributed primarily by unique frame assembly 40 which not only engages the front edges of the cabinet so as to hold it in its basic rectangular shape, but also furnishes support for divider panels 18 by means of cross braces 46. We contemplate that our improved file cabinet may be modified in various ways without departing from the spirit and scope of our invention.

What we claim is:

1. A fiberboard file cabinet comprising:

top, bottom and side walls hingedly connected along their longitudinal edges;

a back wall attached to said top, bottom and side walls; a plurality of substantially parallel, vertically spaced, divider panels within said cabinet;

a unitary, four sided supporting frame extending around the peripheral edges of the open, front end of said cabinet in supporting engagement therewith, said frame including a plurality of transversely extending cross braces having channel portions, each of which receives and supportably engages the front, transverse edge of one of said divider panels.

2. A file cabinet as defined in claim 1, and further including:

a plurality of drawers slidably housed between said divider panels; and wherein

said channel portions of said cross braces include a generally horizontally extending flat top piece over which said drawers may be slidably reciprocated.

3. A file cabinet as defined in claim 1, wherein:

said frame includes upright side members which engage the front, vertical edges of said side walls and which have a plurality of vertically spaced horizontally extending notches which tightly receive outwardly extending tab portions located at the opposite ends of each of said cross braces.

4. A file cabinet as defined in claim 1, wherein:

said frame includes channel-shaped upright side members which engage and receive the front, vertical edges of said side walls, each of said upright members including slotted tab portions at the top ends thereof adapted to receive vertically extending connecting members, whereby a plurality of said file cabinets may be stacked upon each other and secured together by means of said connecting members extending through said slotted tabs.

5. A file cabinet as defined in claim 2, and further including:

a plurality of cardboard drawers slidably inserted between adjacent ones of said divider panels, each of said cardboard drawers having front and bottom walls comprised of at least two layers of cardboard; and further including

a right-angle brace having horizontal and vertical legs disposed between said layers of cardboard in said front and bottom walls of said drawers.

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