April 24, 1962 D. L. FELTON 3,031,125

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Filed March 21, 1958 2 Sheets-Sheet 1

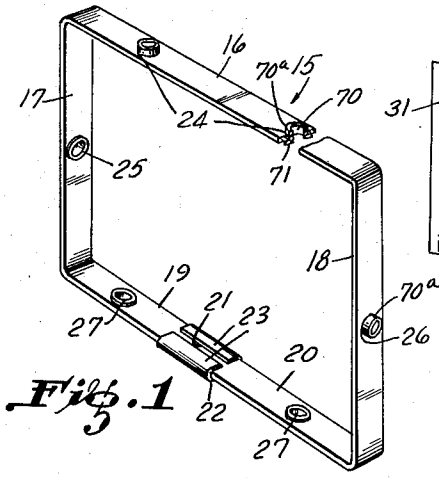


Fig. 1

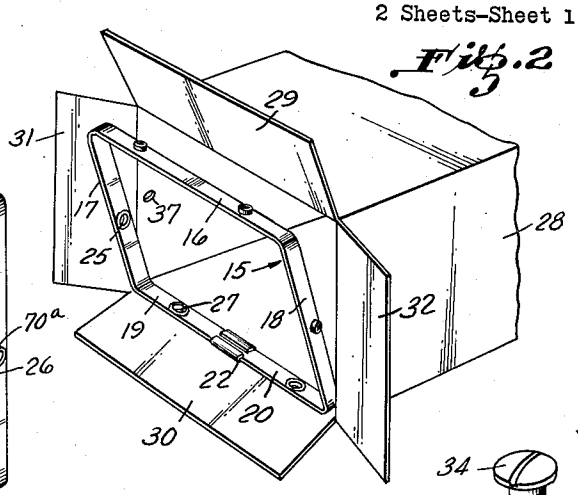


Fig. 2

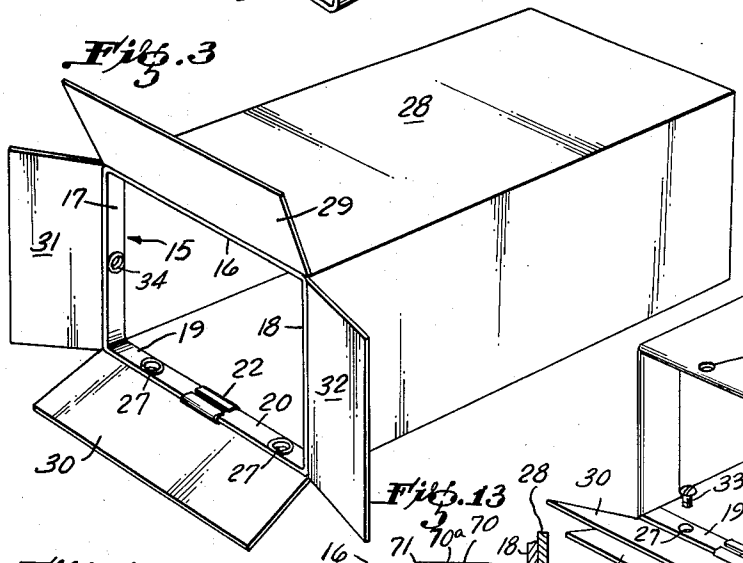


Fig. 3

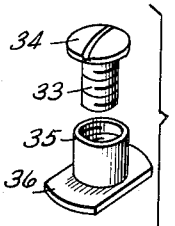


Fig. 6

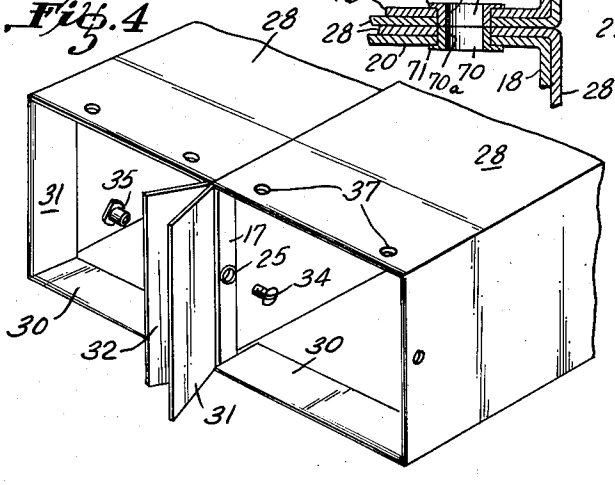


Fig. 4

Fig. 13

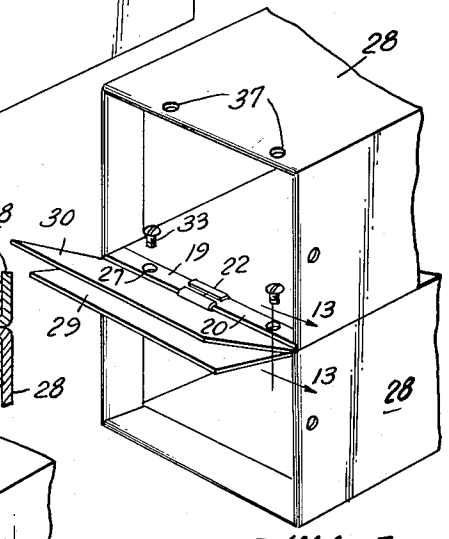


Fig. 5

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Fig. 12

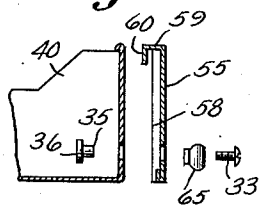


Fig. 7

Fig. 10

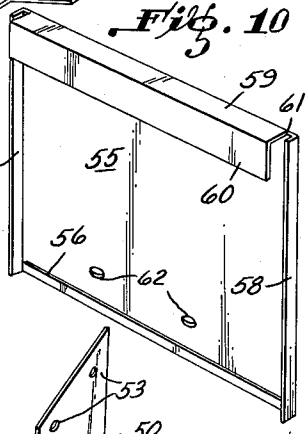


Fig. 8

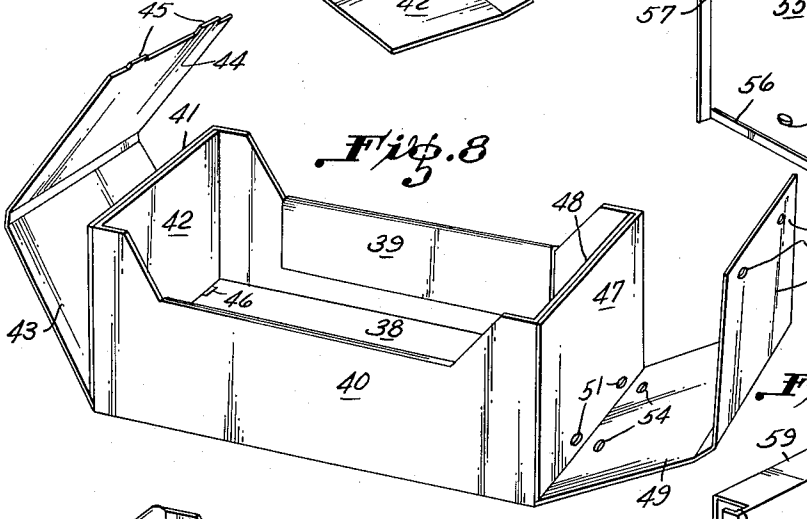


Fig. 11

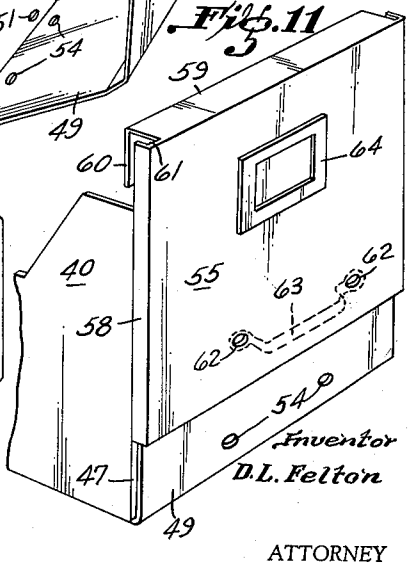
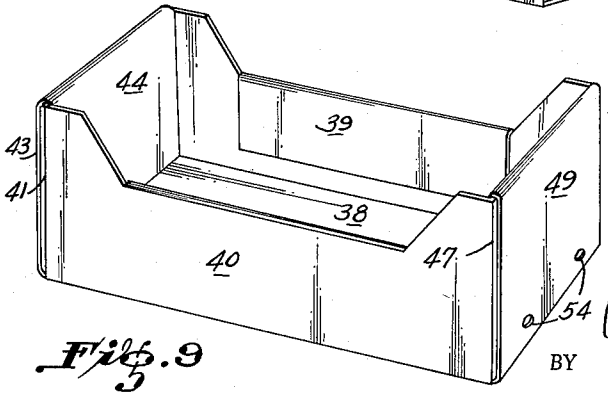


Fig. 9



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United States Patent Office 3,031,125 Patented Apr. 24, 1962

3,031,125

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Filed Mar. 21, 1958, Ser. No. 722,960
2 Claims. (Cl. 229—34)

The present invention relates to storage file and relates generally to the type of file disclosed in my prior Patent 2,785,940 granted March 19, 1957.

An object ol the invention is to provide a re-designed reinforcing frame for the open end of the jacket which is exceedingly tough and of great strength yet adding little bulk to the file with the result that the file of this invention is contained within small compass so that it takes less space than conventional files.

It is another object of the invention to provide complemental jackets and file drawers each of which may be assembled quickly into united strong units for the purpose of keeping little-used records conveniently accessible.

The invention has for a further purpose to provide, in conjunction with an economical corrugated board drawer front a metal plate assembly which may be easily installed over the front or corrugated board of the drawer and by so doing making available to the trade a line of files with the attractiveness of metal front files.

A still further object of the invention is to provide a standard form of corrugated board file including the front wall of the drawer, which latter however is equipped to receive the metal face plate in such convenient construction and arrangement that it becomes only necessary for the dealers to have on hand the standard corrugated files with a supply of metal face plates in order to supply customers with either the paper front file or the metal front file.

A still further object of the invention is to produce a novel construction involving a new stacking principle by which files of the invention may be placed one above another or side by side and more securely held together with a considerable saving of floor space.

With the foregoing and other objects in view, the invention will be more fully described hereinafter, and will be more particularly pointed out in the claims appended hereto.

In the drawings, wherein like symbols refer to like or corresponding parts through the several views:

FIGURE 1 is an isometric view of a new form of reinforcing frame according to the invention.

FIGURE 2 is a fragmentary isometric view showing the open end of the jacket indicating the method of applying the new form of reinforcing frame thereto.

FIGURE 3 is an isometric view of a form of jacket with the new reinforcing frame in place therein.

FIGURE 4 is an isometric view showing two of the files arranged side by side indicating the method of securing the same together.

FIGURE 5 is a similar view with one file stacked above another and indicating the method of attaching the same.

FIGURE 6 is an exploded isometric view of a form of fastening employed.

FIGURE 7 is an isometric view of a blank out of which a form of drawer may be set up.

FIGURE 8 is an isometric view illustrating the partially set up condition of the drawer.

FIGURE 9 is an isometric view showing the fully set up position of the drawer.

FIGURE 10 is an isometric view of a form of metal front plate which may be applied over the corrugated front wall of the drawer.

FIGURE 11 is a fragmentary isometric view of the front

portion of the drawer showing the method of applying the metal plate thereto.

FIGURE 12 is a fragmentary section of the drawer and a section of the front plate with fastenings in exploded illustration.

FIGURE 13 is a section taken on the line 13—13 of FIGURE 5.

Referring more particularly to the drawings and for the present to FIGURE 1, a reinforcing frame is herein shown of a rectangular form comprising a top section 16, side sections 17 and 18 and bottom sections 19 and 20. The frame is preferably in one piece of bar metal in which the two ends of such bar come together in the meeting edges 21 about which may be arranged a metal or suitable sleeve 22 having clamp flanges 23.

In the top section 16 of the frame suitable holes 24 are provided for fasteners as hereinafter explained and similar holes 25 are provided in the side section 17 and one or more holes 26 are provided in the opposite side section 18 while the bottom sections 19, 20 are pierced by holes 27 at suitable locations.

A jacket 28 of corrugated cardboard of rectangular or other construction is provided with a forward open end for receiving the drawer and at this open end are provided a top flap 29, a bottom flap 30 and end flaps 31 and 32 all foldable with the jacket so as to be pushed into the opening thereof.

Files or jackets according to the invention may be held in stacked relation as shown in FIGURE 6 or in horizontal side by side relation as shown in FIGURE 4 by appropriate fastenings passing through the holes in the frame and through registering holes in the jacket 28. Such jacket holes are shown at 37 in FIGURE 4.

Suitable fastenings, for instance of the type illustrated in FIGURE 6 are found appropriate for holding the sections together. In FIGURE 6, 33 indicates a threaded bolt shank having an enlarged head 34, while a nut socket 35, interiorly threaded to receive the threads on the bolt 33 is provided with flanges 36 which are of greater diameter than the holes 24, 25, 26 and 27 and holes 37 of the jackets. It is understood that the sockets 35 are of a diameter to fit snugly into the holes. The heads 34 of the bolts are also of greater diameter than the diameters of the holes so as not to be pulled therethrough but to engage the sides of the metal frame or cardboard of the jacket.

Referring more particularly to FIGURES 7 to 12 inclusive, a form of drawer for slidably fitting into the jacket is illustrated in which for convenience the drawer may be made from a single blank of cardboard material preferably of a corrugated construction.

The blank may be so cut and stamped out as to provide a bottom wall 38 flanked by side walls 39, 40 which may be folded upwardly from the side edges of the bottom wall 38. In turn these side walls 39, 40 carry rear end flaps 41 and 42 which are crease hinged to the side walls so that when the latter are in erect position the two rear end flaps 41, 42 may be interleaved as indicated in FIGURE 8.

An outer rear wall 43 is hinged to the inner end of the bottom wall 38 and an inner rear wall 44 is hinged to the upper edge of the outer rear wall 43 so that when the outer rear wall 43 is erected, as indicated in FIGURE 8 the inner rear wall 44 may be lapped over the interleaved flaps 41, 42. Tabs 45 or the like provided on the free edge of the inner rear wall 44 are positioned to enter slots 46 made in the bottom wall 38 adjacent the outer rear wall 43.

Referring to the front end of the drawer, front end flaps 47 and 48 are hinged to the forward edges of the side walls 39, 40 while an outer front wall 49 is hinged to the forward edge of the bottom wall 38 and an inner front

wall 50 is interconnected to the upper edge of the outer front wall 49 by a creased hinge strip.

Holes 51 and 52 are made in the flaps 47 and 48 and similar holes 53 and 54 similarly spaced are made in the inner front wall 50 and outer front wall 49.

When the flaps 47 and 48 are lapped together in the manner indicated in FIGURE 8 and the walls 49, 50 are folded as indicated in FIGURE 9 with the inner front wall 50 brought down inside the flap 48, all of the holes will arrive in registering relationship so that fastenings of the type already described may be placed through all of these holes to secure the walls and flaps together into a unitary corrugated board front wall for the drawer.

The drawer, in the condition illustrated in FIGURE 9, in which all parts are made of corrugated cardboard is intended to be the standard construction. The corrugated front walls however may be reinforced with supplemental front wall plates 55, preferably of sheet metal having the lower edges thereof overturned as indicated at 56 and crimped against the rear side of the plate 55. The plates are also provided with side flanges 57 and 58 and with a top flange 59 which projects rearwardly and has depending from its rear edge an apron 60. Cut-away portions 61 are provided for the top flange 59 and depending apron 60.

This supplemental or metal front wall 55 is adapted to receive the handle 63 indicated in FIGURE 11 and the label holder 64.

Holes 62 are provided in the plate 55 to align with the holes 54 of the paper front wall.

The supplemental front wall is applied to the corrugated board front wall by a downward sliding movement in which the apron 60 is entered rearwardly of the wall 50 while the flanges 57 and 58 at the sides of the plate 55 move down and cover the edges of the walls 47, 49. When the plate 50 is in the lowermost position the holes 62 will register with the holes 54 and appropriate fastenings may then be passed through these holes and through the holes of the handle 63.

As shown in FIGURE 12 fastenings 33, 35, 36 may be employed either alone or in conjunction with a sleeve or grommet 65.

The plate 55 will give added strength to the front wall as well as a finish and appearance more characteristic of metal file cabinets.

The steel frame 15 of FIGURE 1 is introduced into the open end of the jacket 28 while the flaps 29, 30, 31 and 32 are in the open position of FIGURE 2. When the metal frame 15 is moved home it assumes the position of FIGURE 3 and suitable fastenings, such as shown in FIGURE 6, may be passed through the holes of the frame and the holes in the jacket to retain the frame in the assembled position. Thereafter the flaps may be folded inwardly by first swinging the upper and lower flaps 29 and 30 into the jacket and thereafter folding the side flaps 31 therein.

When two jackets 28 are to be assembled together the adjacent flaps 31 and 32 are pulled outwardly so as to expose the openings 25 and 26 in the adjacent frames and thereupon the screw fastenings 34, 35 are inserted so as to bind together the frame sections 17 and 18 of adjacent frames.

When two or more files are to be stacked vertically the uppermost flap 29 of the lower section is pulled out as is also the lowermost flap 30 of the upper jacket 28 in the manner indicated in FIGURE 6 which thus reveals the holes 27 in the bottom sections 19 and 20 of the frame for entry of the fastenings so that the lower frame sections 19, 20 of the upper jacket 28 may be securely fastened to the upper frame section 60 of the lower jacket 28.

Where the paper front alone is used without the metal front the handle 63 will be affixed directly to the wall 49 as shown in FIGURE 9 by fastenings which pass through the handle and through the holes 54.

Where the metal front is used after such metal front is put in position the drawer should be turned upside down and a number of flat headed pins should be inserted one at the bottom of the drawer and one at each side of the drawer in such position that they hold the drawer body and cardboard walls including the wall 49 tightly against the metal plate 55 which is held at its upper end by the apron 60 and at its lower end by the fastenings.

After stacking the files as shown in FIGURE 5, clips may be inserted into the corrugated board at the rear ends of the files one prong of each clip inserted in each file so as to keep the file from tilting when the drawer is pulled out.

Such clips are shown in FIGURE 5 of my prior Patent 2,785,940.

The steel reinforcing frame is preferably made of solid steel, one-eighth inch thick for greater strength. This gives a new solidity to the files and to the stacks and the new stacking principle holds the files firmly in place. The novel frame 15 saves space since it fits completely inside the file jacket. This new frame 15 paves the way for easiest, sturdiest stacking. When the files are stacked together the metal frames are locked together with metal screw posts. This may be done in a minimum of time and as a result the files are held solidly in place and cannot be moved or displaced unless the screw fastenings are first removed. Adjacent files are interlocked with each other in the same way.

Paper front files are standard and all files are made accordingly so that economy in manufacture is had by single uniform product. The metal plates 55 may be separately produced, elsewhere if desired, and stocked and affixed by the dealers.

The plate 55 may be made of elastic sheet metal with the apron slightly biased or bent to a position where it will have to be sprung away from the plate 55 to fit back of the paper front wall. This arrangement will cause the plate 55 at its upper portion and its apron 60 to resiliently hug the upper portion of the paper front wall. The cut-away portions will allow for the free flexibility of the flange 59 and apron 60 in swinging about the upper edge of the plate 55 to execute the motions of springing out and in when applied over the paper front wall and removed upwardly therefrom.

The flange 59 and apron 60 cooperate with the frame 15 of the jacket in that when the drawer is moved completely into the jacket the flange 59 will fit at least partially within the confines of the rigid frame 15 thus contributing mutually to the strength and rigidity of the file as a whole. This is important in stacked files and those connected horizontally in that when one drawer is opened the adjacent files above and below or on both sides will resist any distortion of the open end of the jacket weakened by the withdrawal of the metal plate 55 therefrom. It will be understood that in the closed positions of the drawers the metal plates fit into the jackets and the flaps thereof. In FIGURE 3 the frame 15 is shown as fitted flush with the open end of the jacket but it may be set backwardly a small distance from this position but the flange 59 of the plate 55 will ordinarily enter at least partially within the included space of the frame.

Referring more particularly to FIGURES 1, 2, 3 and 13, eyelets 70 of brass or other material may be inserted through the holes in the frame 15 until their flanges 71 encounter the inside surfaces of the frame in which position the outer ends 70^a project beyond the frame a distance equal to or greater than the thickness of the walls of the jacket. In the situations of FIGURES 4 and 5 the ends 70^a abut, as shown in FIGURE 13, the advantage being that when the files are stacked one on top of the other, the weight or load of the file is supported entirely by the frame quite independently of the jacket material.

Also the eyelets secure the frame in the proper position in the jacket when they engage the holes in the jacket. The arrangement furthermore makes a perfectly smooth exterior.

The improved frame because of its design and the position of the eyelets and punching makes it impossible to put the frame in the jacket in the wrong position. The frame cannot be put in the jacket upside down or backwards.

Although I have disclosed herein the best form of the invention known to me at this time, I reserve the right to all such modifications and changes as may come within the scope of the following claims.

What is claimed is:

1. A file drawer comprising a body of foldable and creasable corrugated board creased and folded to provide a bottom, side walls, rear end wall and a front wall being a 4-ply wall composed of an inner side flap and an outer side flap in overlapped relationship, said flaps being of equal dimension and surface area with the adjacent surfaces of said inner and outer flaps in abutting relationship throughout the surface area of one side of each flap, a front flap section comprising inner and outer wall sections interconnected by a creased hinge strip, said front flap section being folded rearwardly to embrace by the inner wall section the inner flap substantially along its entire inner surface area and the outer flap substantially along its entire outer surface area by the outer wall section, said creased hinge strip lying flat across a substantial portion of the top edges of the two side flaps so as to prevent side or vertical weaving of the overlapped side flaps such as may be caused by lateral forces, and a metallic resilient supplemental front wall having lateral rectangular flanges extending rearwardly a sufficient distance to embrace in common both the exposed side edge of one of the flaps and the exposed side edges of the front walls section, said flange extending throughout the height of the supplemental front wall and being uniform in cross section throughout its length, said supplemental front wall having at the lower edge thereof an upturned portion lying against the rearward surface thereof to thereby present a downwardly directed crease to permit assembly by downward movement of the supplemental front wall along the front wall section of the file drawer, said supplemental front wall having a top flange extending rearwardly with an apron depending from the rear side of the top flange, said apron being slightly biased to a position where it will have to be sprung away from said 4-ply front wall to fit back of the innermost wall section of said 4-ply wall upon being applied thereover, said biased apron serving to hug the upper portion of said innermost wall section, said top flange lying across a substantial portion of the creased hinge strip to further strengthen the 4-ply front wall so as to prevent side or vertical weaving of the side flaps, said side flaps, said front flap inner and outer wall sections and said supplemental front wall having apertures in their lower portion when in assembled position, said apertures being in alignment when the 4-ply wall and supplemental front wall are in assembled position, fastenings entered through the aligned apertures to prevent casual rising of the supplemental front wall or the dismemberment of the overlapped flaps and interconnected inner and outer wall sections from one another and from the supplemental front wall.

2. A file drawer as claimed in claim 1 in which said top flange and apron terminate short of the lateral flanges at both sides of the supplemental front wall providing cutaway portions between the ends of the top flange and flap on the one hand and the upper portions of the lateral flanges on the other hand permitting free flexibility of the top flange and apron in swinging about the upper edge of the supplemental front wall.

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