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STORAGE FILE BOX

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3,275,392 STORAGE FILE BOX

Benjamin Fiterman, Minneapolis, Minn., assignor to Fidelity File Box, Inc., Minneapolis, Minn., a corporation of Minnesota Filed Jan. 16, 1964, Ser. No. 338,189

2 Claims. (Cl. 312-108)

This invention relates broadly to storage file boxes, more particularly to storage file boxes having a shell sec-10 tion and a drawer section slidable within said shell section, and more particularly to a storage file box having a reinforced shell section to facilitate free sliding movement of the said drawer section within said shell section when the filled assembled units are stored in stacked relation, 15 the one upon the other.

The principal object of this invention is to provide a reinforced storage file box having a shell section and a drawer section said shell section having reinforcing means whereby multiple units of the assembled storage file box 20 may be stored in stacked relation and still retain the mobility of the said drawer section operating within the said shell section.

A further object of this invention is to provide a storage file box that is completely collapsible with respect to both 25 its shell section and its drawer section to facilitate shipping and storage while in collapsed form.

A further object of this invention is to provided a storage file box having means whereby each assembled unit thereof may be detachably secured the one to the other at 30 the front and rear portions thereof to insure the stability of a plurality of such storage file boxes when the same are stored in stacked relation, the one upon the other.

A still further object of this invention is to provide a storage file box embodying novel interlocking means for 35 securing the same in assembled relation.

These and other objects of this invention will become apparent from the following specification and claims when taken in conjunction with the appended drawing which forms a part of this application and in which drawing, like 40 characters indicate like parts throughout the several views.

To the above end, generally stated, the invention consists of the following devices and combination of devices hereinafter described and defined in the claims.

Referring to the drawing:

FIG. 1 is a perspective view of the subject assembled storage file box.

FIG. 2 is a fragmentary perspective view of the front end portion of the shell section of the storage file box partially assembled with some parts being shown in ex- 50 ploded relation.

FIG. 3 is a fragmentary detailed view partly in section illustrating the embodiment of certain reinforcing means at the front end portion of the shell section.

FIG. 4 is a fragmentary view illustrating means for 55 interlocking assembled stacked units of the said shell section at the rear end portion of each thereof.

FIG. 5 is a fragmentary side elevational view of the elements shown in FIG. 4 on an enlarged scale taken on the line 5-5 of FIG. 4.

FIG. 6 is a perspective view of two assembled units of the shell section of the storage file box in stacked relation and illustrating means for securing the one unit to the other.

FIG. 7 is a fragmentary view on an enlarged scale 65 partly in section illustrating the means for securing the forward end portion of the storage file box the one to the other when the same are in assembled stacked relation.

FIG. 8 is a perspective fragmentary view of the rear end portion of the shell section of the storage file box 70illustrating means whereby said shell section is held in assembled relation, and, 2

FIG. 9 is a view similar to FIG. 8 further illustrating means for assembling the rear end portion of the shell section in interlocking relation.

The reference numeral 10 is directed to the shell section of a storage file box and the numeral 11 to the drawer section thereof having a hand grip 12 to facilitate endwise movement of the said drawer section 11 within the shell section 10. The said shell section 10 and the drawer section 11 are completely collapsible to facilitate shipment and storage of unassembled units of each thereof, however, as will presently appear, it is extremely simple to assembled these respective units into a complete storage file box.

As best seen in FIG. 6 the shell section 10 comprises a main top panel 13, a main bottom panel 14 and main side panels 15 and is assembled in a generally conventional manner by folding said panels along well defined scored lies into an erected position. The front end portion of the said shell section 10 is open to receive the drawer section 11 and is further provided with top and bottom foldable end panels 17 and 18 respectively together with foldable side end panels 19 all of which foldable panels are merely free extensions of the said main top panel 13, the main bottom panel 14 and the main side panels 15. The inner end portion of said panels at their junction with the said main panels also have well defined scored lines whereby the same may be folded into the open mouth portion of the shell section 10 into overlapping engagement with the inside surfaces of those main panel sections 13, 14, and 15, to facilitate the erected assembly of the front end portion of the said shell section 10.

The rear end portion of the shell section 10 is closed by means of foldable top and bottom panels 21 and 22 respectively, and side panels 23 all of which are provided with well defined scored lines 24 at the junction of the main body panels 14 and 15 and the said rear end panels 21 through 23 inclusive. These rear end panels 21, 22, and 23, are folded the one upon the other; see FIGS. 9 and 10 and held so positioned by means of tabs 25 formed integral with the said rear end panels, said tabs 25 having interlocking engagement with cooperating slots 26 also formed in the said rear end panels 21, 22, and 23, to thus complete the erection of the shell section 10.

A relatively heavy reinforcing rim 27, dimensioned to a close frictional fit with the open mouth of the shell section 10 substantially at the scored lines 16 and is positioned in the open mouth of said shell section 10 during the assembly thereof and prior to the inward folding of the front end panel members 17, 18, and 19, see FIG. 3, which panel members serve to hold the reinforcing rim 27 positioned at the forward open end of the shell section 10.

To further reinforce the top and side portion of the shell section 10 and to facilitate endwise movements of the drawer section 11 therein, an inner liner 28 is provided, said inner liner 28 having no bottom panel and being dimensioned to snugly fit within the said shell section 10 when the same is fully assembled.

The subject invention has been described herein as a storage file box and in such capacity it is important to be able to store the respective boxes in stacked relation the one upon the other. In this stacked arrangement it is highly important that the respective drawer sections 11 of each unit be capable of being readily and easily withdrawn from its shell section 10 and hence the importance of the reinforcing rim 27 and inner liner 28 to overcome any inherent binding action of the shell section 10 on the drawer section 11 due to the weight of the stacked assembled units.

It is important to secure the respective assembled units the one to the other in stacked relation against

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shifting movements and for this purpose I provide a pair of laterally spaced bolts 29 each having a washer 29' and a nut 29" which bolts extend through the meeting surfaces of the respective shell sections 10 as the same are stored in stacked relation. These nut equipped bolts 29, see FIG. 6, are preferably positioned adjacent the forward open end portion of the shell section 10 and to provide clearance, with respect to the bolt heads 29, the top panel 28' of the inner liner 28 is notched, at its forward end portion in register with said nut equipped 10 bolts 29, see numeral 30.

The rear end portions of the stacked shell sections 10 are held secured, the one to the other by means of a relatively large U shaped staple that is inserted endwise into the corrugation of the material of which the 15 subject storage file boxes are preferably fabricated. As best seen in FIG. 5, the respective legs 32 of the staple 31 are inserted into the said corrugation of separate file boxes adjacent the upper and lower rear end portions of each thereof and at each side thereof, to thus 20 prevent forward tipping of the filled file box when its drawer section 11 is partially withdrawn as well as closing the same to prevent lateral shifting movements.

The drawer section 11 is generally of conventional construction and inasmuch as no inventive concept is 25 involved, it has not been thought necessary to describe the same herein except for its relationship to the shell section as a part of a complete unit.

While there are herein disclosed but a limited number of embodiments of the structure, process and product of 30 the invention herein presented, it is possible to produce still other embodiments without departing from the inventive concept herein disclosed, and it is desired, therefore, that only such limitations be imposed on the appended claims as are stated herein or required by the 35 prior art.

What I claim is:

1. A storage file box comprising in combination, a shell section and a drawer section, said shell section being collapsible and having a bottom panel, a top panel and 40a pair of side panels, said panels being defined by scored lines along which said panels are folded into assembled relation to form a main body portion of the shell section, top, bottom and side foldable rear end panels defined by scored lines, said rear end panels folded into over-lapping relation closing the rear end portion of said shell section, top, bottom and side front end panels defined by scored lines folded inwardly upon said main body panels in overlapping and spaced relation thereto, a liner having a top panel and side panels depending therefrom disposed 50within the interior of the body portion of the shell section in close working fit, said liner having open end portions and an open bottom portion, a metallic reinforcing ring dimensioned to be detachably mounted in the front end portion of the shell section substantially at the scored line of the foldable front end panels, said metallic ring sandwiched between the front end panels of the shell section and the main body panels and positioned at the scored line of the foldable front panels by the substantially abutting forward edge of the liner which is also sandwiched between the front end panels of the shell section and the main body panels of the shell section, and

means whereby a plurality of assembled storage file boxes are secured one to other in stacked relation by a pair of laterally spaced nut and bolt assemblies extending through the bottom of the one shell section and the top body panel of an underlying shell section spaced rearwardly of the metallic reinforcing ring, the nut and bolt assemblies underlying the bottom front end panel of the upper stacked shell section and underlying the top front end panel of the lower stacked container.

2. A plurality of assembled storage file boxes, each of said storage file boxes comprising in combination, a shell section and a drawer section, said shell section being collapsible and having a bottom panel, a top panel and a pair of side panels, said panels being defined by scored lines along which said panels are folded into assembled relation to form a main body portion of the shell section, top, bottom and side foldable rear end panels defined by scored lines, one of said side rear end panels having a slot therein and folded inwardly, the other of said side rear end panels folded into over-lapping relation with the first rear end panel having a tab thereon inserted into the slot in the first side rear end panel, the top rear end panel folded downwardly into over-lapping relation with the side rear end panel and having slots therein, the bottom rear end panel folded upwardly into over-lapping relation with the top rear end panel and having tabs therein engaged in the slots in the top rear end panel thereby closing the rear end portion of said shell section, the rear end portion receiving transverse clips joining a lower storage file box with an upper storage file box, top, bottom and side front end panels defined by scored lines and folded inwardly upon said main body panel in overlapping relation thereto, a liner having a top panel notched to receive nut and bolt assemblies and side panels depending therefrom disposed within the interior of the body portion of the shell section in close working fit, said liner having open end portions and an open bottom portion, a metallic reinforcing ring dimensioned to be detachably mounted in the front end portion of the shell section substantially at the scored line of the foldable front end panels, said metallic ring sandwiched between the front end panels of the shell section and the main body panels and positioned substantially abutting the scored lines of the foldable front end panels by the forward edge of the liner which is also sandwiched be-45 tween the front end panels and the main body panels of the shell section.

References Cited by the Examiner UNITED STATES DATENTS

		OMILD	SIAILS IAILAIS
	1,968,082	7/1934	Jensen 312—108
	2,088,315	7/1937	Zalkind 312-261
	2,121,190	6/1938	Fellowes 312-111 X
	2,225,958	12/1940	Mandel 312-111 X
2	2,268,236	12/1941	Baird 312-111 X
	2,339,339	1/1944	Kaser 312-108
	2,785,940	3/1957	Felton 312-111 X
	3,031,125	4/1962	Felton 312—111 X

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