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54 Magazine holder.

57 A file for storing magazines and the like. The file is formed from sheet plastic and is completely unitarily formed in a single piece. The single piece is foldable and has a first or erected position for receiving and storing magazines and the like and a second, flattened position used for shipping or storing of the files themselves. When in the erected position, the file has a bottom wall portion, upright side walls extending from the bottom wall portion, upright end walls interconnecting the side walls and an open top portion, one of the walls being discontinuous and including means defined thereon in order to non-permanently secure and lock the foldable member in the second or erected position. When in the erected position, the foldable member is constructed and arranged to receive magazines through the open top portion. The magazines, when being stored in the file, are partially reviewable in the file. In the flattened position, the wall portions are in the folded down position and are selectively co-planar or substantially adjacent to each other in a top to bottom relationship, and the foldable member is readily storable in the flattened position when not in use.

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BACKGROUND OF THE INVENTIONField of the Invention and
Description of the Prior Art

5 This invention relates to a file or holder useful for storing magazines, paperback books, and the like and it particularly relates to such a file which stores a pre-selected number of magazines, such as a twelve-month supply, and which generally is of the cut corner type so the magazines are readily reviewable without actually removing the magazines from the file and also accessible.

10 Storage files for magazines, paperback books, manuscripts, and the like have been known and used for many years for collecting, such as by magazine collectors, libraries, and the like. These files, sometimes called "cut corner files" generally comprise a rigid bottom, an upright rear wall, a front wall of reduced height compared to
15 the rear wall, and a pair of spaced side walls interconnecting the end walls. The side walls generally have a slanted or cut corner along the front, upper edge. This arrangement permits easy handling and viewing of the books stored within the file or holder. Such files have usually been cut from corrugated paper board and then manually
20 glued together along one of the walls. The bottom wall is often foldable so that the carton may be generally folded into a flattened position. In the manufacture of these cardboard holders, however, it is generally necessary to have manual operations, such as, for example, a gluing operation. Corrugated paperboard is not generally
25 considered highly durable. For example, such paperboard is fairly easily damaged or creased. This is a particular disadvantage when the holders are frequently used such as at libraries. Such cut corner files or holders for storing magazines or the like have also been made out of plastic. Such plastic holders, however, have been injection
30 molded in one piece and cannot be collapsed. This creates storage and shipping problems for the manufactured holder. In other words, empty, non-collapsible holders are difficult and costly to store and ship as they cannot be stored in a flattened position. Therefore, there is considered to be a need for improved file folders which are
35 both durable, inexpensive to manufacture, and readily flattened into a stored position.

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SUMMARY OF THE INVENTION

5 It is therefore an important object of the present invention to provide an improved file for storing magazines or the like, such as those published over a twelve month period, wherein the file is formed in a single piece in a single manufacturing operation, and wherein the formed holder may be stored in a flat position.

10 It is also an object of the present invention to provide an improved file for magazines and the like wherein the file is characterized by its economy of construction and durability in use.

15 It is another object of the present invention to provide an improved holder for storing magazines and the like, wherein the holder is constructed of a plastic material and may be readily changed from being in a flattened, stored position to an erected position useful for storing magazines, paper backs, manuscripts and the like.

20 It is still another object of the present invention to provide an improved cut corner file assembly which is unitarily formed from polypropylene and is made by thermo-forming techniques so as to provide for economy of construction and durability in use.

Further purposes and objects of the present invention will appear as the specification proceeds.

25 The foregoing objects are accomplished by providing a file or holder useful for storing magazines and the like, wherein the file comprises or includes a unitarily or single formed and foldable member which defines the file, the foldable member having an erected position to receive and store the magazines and having a flattened position for storing the unused file, the formed and foldable member, in the erected position, including a bottom wall, upright side walls extending upwarding from the bottom wall, upright end walls interconnecting the side walls, and an open top portion, one of the walls being discontinuous and including unitary locking elements for locking the walls in the upright position and being constructed and arranged to receive the magazine through the open top portion, said locking elements being unlockable and the magazines being review-
30 able and conveniently removable when stored in the file when the foldable member is in the erected position and, in the flattened
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position, the foldable member having its side wall portions selectively substantially co-planar or adjacent each other in a top to bottom relationship, and said foldable member being constructed and arranged to be readily stored in the flattened position when not being used.

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BRIEF DESCRIPTION OF THE DRAWINGS

One particular embodiment of the present invention is illustrated in the accompanying drawings wherein:

5 FIGURE 1 is a perspective or pictorial view of our improved file or holder for storing magazines, with magazines therein;

FIGURE 2 is a partially fragmentary pictorial view, opposite that of FIGURE 1, illustrating portions of the erected holder, the holder being empty;

10 FIGURE 3 is a pictorial view showing the holder being moved to the erected position for storing magazines;

FIGURE 4 is a top plan view of the blank or foldable member used for forming the magazine holder illustrated in FIGURES 1-3; and

15 FIGURE 5 is a cross-sectional view generally taken along the line 5-5 of FIGURE 4 illustrating the blank of FIGURE 4 being foldable to one selected position for storage purposes.

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DETAILED DESCRIPTION OF THE
PREFERRED EMBODIMENT

Referring to FIGURES 1 and 2, our improved holder assembly, generally 10, is pictorally illustrated. In FIGURE 1, the holder 10 is shown with a collection of magazines M or the like being stored therein. Although, as seen in FIGURE 1, the holder 10 is shown storing a collection of magazines, it is to be understood that the holder 10 may be utilized for storing a wide range of similar materials, including soft cover books, manuscripts, prints, and the like. The holder 10 is particularly constructed and arranged to store a selected number of magazines, such as magazines published over a year. Many people and institutions, such as schools and libraries, collect and store periodicals and journals for a wide variety of purposes, both for collecting and for educational purposes. Because of the durability of the holder 10, the holder 10 is particularly useful for storing documents and books that are frequently used, such as for library use.

Referring to FIGURE 4, in particular, the holder 10 is formed of a planar sheet plastic, preferably polypropylene, of a known type and utilizes thermo-forming techniques in manufacture. Since polypropylene is known to have unique properties enabling there to be selected hinging action between adjacent rigid parts of the same formed unitary sheet or blank, generally 12, polypropylene is highly preferred over other materials which, conceivably, could be used. For example, other plastics or possibly cardboard could be used to make the holder; however, cardboard is commonly used in other holders known in the prior art is not considered to be highly durable. A known property of polypropylene provides a "living hinge" that accomplishes the desired hinging action between the adjacent rigid or semi-rigid portions of the unitarily formed blank 12, which is specifically constructed and arranged to be erected into the holder assembly 10 as seen in FIGURES 1 and 2.

The blank 12 is illustrated in FIGURE 4, is substantially planar and generally includes a first side wall 14, a second side wall 16, and a rear end wall 18. The rear wall 18 is hingedly interconnected to the side wall 14 by a continuous corner hinge section 20 and is hingedly interconnected to the side wall 16 by a similarly unitarily formed

corner hinge section 22. Both of the hinges 20 and 22 extend for the entire length of the adjacent edges of the side walls 14 and 16 and end wall 18. The holder blank 12 further includes a first bottom section 24 which is hingedly connected to the lower or bottom edge of the first side wall 14 along a unitarily formed hinge section 26. A second bottom section 28 is hingedly interconnected to the bottom edge of the second side wall 16 along a continuous hinge section 30. The second bottom section 28 includes a tab 32 which projects laterally from the rear edge thereof, along a hinge section 36. A central slot 38 is provided along the hinge line of the hinge section 36 and is sized and arranged to receive a projecting tongue or tab 40 which is centrally located and projects downwardly from the bottom edge of the end wall 18 and is hingedly connected thereto along a hinge section 42.

Referring to FIGURES 1 and 2, a front wall, generally 44, is provided on the holder 10. The front wall 44 is not continuous as are the first and second side walls 14 and 16 and end or rear wall 18. Referring again to FIGURE 4, the front wall 44 is constructed from portions unitarily formed on the side walls 14 and 16 and second bottom section 28 and will be hereinafter described in greater detail.

The first side wall 14 has a locking flange 46 hingedly interconnected thereto along a hinge section 48 at the front end thereof. The hinge section 48 is unitarily formed between the side wall 14 and the flange 46. The flange 46 includes an upwardly opening locking slot 50 and an outer tab 52 of reduced height relative to the overall height of the locking flange 46. A locking flange 54 also projects outwardly from the forward edge of the second side wall 16 and is hingedly interconnected thereto along a hinge section 56. The flange 54 includes a downwardly opening locking slot 58 and an outer tab 60 of reduced height relative to the flange 54. As will be described, the slots 58 and 50 are adapted to be moved into slidable, locking interrelationship in order to lock the flanges 46 and 54 to each other when the holder 10 is in the erected position.

The second bottom section 28 further includes an exterior wall or face 62 which is hingedly connected to the bottom wall section 28 along a hinge section 64. An outer tab 65 is hingedly connected to

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the wall 62 along a hinge section 66.

With reference to FIGURES 1, 2 and 4, it is seen that each of the side walls 14 and 16 includes a downwardly tapering upper and outer corner or edge 68. As best seen in FIGURE 1, this arrangement provides a "cut corner" for the file and facilitates handling of the magazines M, that is, placement and removal thereof to and from the holder 10. Also, titles, particularly those appearing along the edges can sometimes be more readily seen because the front edges of the side walls 14 and 16 and the front wall 44 of the holder 10 are of substantially reduced height relative to the rear wall or end wall 18. Preferably, both for aesthetic purposes and for rigidification, multiple continuous grooves 70 are spaced inwardly from the outer edges of the perimeter of both the side walls 14 and 16. Similarly, the rear end wall 18 includes an upper substantially rectangular groove 72 and a lower groove 74. Spaces defined within the groove 72 and 74 provide a convenient location for labels or the like describing the contents of the holder 10.

In order to form the holder 10, that is, from the blank 12, reference is directed to FIGURE 3. In order to erect and form the holder 10, side walls 14 and 16 are hinged or pivoted inwardly towards each other, about the hinge sections 20 and 22 interconnecting the rear wall 18 with the side walls 14 and 16. The bottom wall section 24 is pivoted about the hinge line 26 and the bottom wall section 28 is pivoted about the hinge 30. The exterior wall 62 is pivoted about the hinge line 64 and locking flange 46 is pivoted about the hinge section 48 which interconnects it to the side wall 16. Similarly, the locking flange 54 is pivoted about the hinge section 56. The direction of each pivot action is generally indicated by the arrows shown in FIGURE 3. Slot 50 of the flange 46 and the slot 58 of the flange 54 are moved into interlocking relationship. Similarly, the tab 40 on the lower edge of the rear wall 18 is moved into interlocking relation with the slot 38 adjacent the bottom section 28. The bottom section 24 is placed over the second bottom section 28 and the wall 62 is passed in front of the hinge section 64 while the tab 64 is folded downwardly about the hinge section 66. The tab 65 is tucked downwardly. The tab 64 locks and is confined in the folded down position. The side edges of the tab

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64 engage the upright front sections of the grooves in the walls 14 and 16 so as to provide locking relationship. The upper edge of the front wall 44 is defined by the hinge section 66. This not only provides a smooth edge along the upper edge of the front wall 44, but the wall 62 and tab 65 also hold the front section or portion of the bottom section 28 in a locked position and thereby also cooperate with the tab 40 in the slot 38 in such a way that the bottom sections 24 and 28 remain in a fixed position so as to support the magazine on the bottom portion of the holder 10.

From the foregoing, it is seen that all the foregoing objects have been accomplished. It is seen that the holder 10 has an erected or useful position, as seen in FIGURES 1 and 2 and a flattened position as seen in FIGURE 4. In FIGURE 5, it is seen that the blank 12 may be stored in a flattened, but folded position. In other words, the walls 14, 16, 18, 24, and 28 may be selectively entirely coplanar with each other, as seen in FIGURE 4, or positioned in a top to bottom relationship when in the stored or folded down position. The ability to be folded down into a flat position is of great convenience for shipping and storage purposes as the holder 10 may be readily erected by the user. The user may readily form the holder 10 into the useful position shown in FIGURES 1 and 2 in order to store the magazines M and the like. When in the useful position, the holder 10 is highly durable and is capable of receiving a multiple number of magazines M or the like therein. The polypropylene material forming the holder 10 is very durable and is not highly subject to creasing or the like.

While in the foregoing there has been provided a detailed description of one particular embodiment of the present invention, it is to be understood that all equivalents obvious to those having skill in the art are to be included within the scope of the invention as claimed.

What we claim and desire to secure by Letters Patent is:

CLAIMS:

1. A file useful for storing magazines and the like, said file comprising an entirely unitarily formed and foldable member defining said file, said foldable member having a first erected position for receiving and storing said magazines and a second, flattened position, said formed and foldable member, in said first position, comprising a bottom wall portion, upright side walls extending upwardly from said bottom wall portion, upright end walls interconnecting said side walls, and an open top portion, one of said walls being discontinuous and including means for non-permanently securing and locking said foldable member in said second erected position, said member in said second position, being constructed and arranged to receive said magazines through said open top portion, said magazines being partially reviewable when stored in said file when said member is in said first position, and said member, in said flattened position, having said wall portions selectively co-planar or adjacent each other in a top to bottom relationship and being constructed and arranged to be readily storable in said flattened position when said file is not being used.

2. The file of claim 1 wherein said foldable member is a thermo-formed polypropylene material.

3. The file of claim 1 wherein said one wall is the front end wall.

4. The file of claim 3 wherein said locking means includes interlocking flange elements hingedly interconnected to the front edges of said upright rigid side walls.

5. The file of claim 4 further including an exterior wall positioned over said interlocking flanges.

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Fig. 1

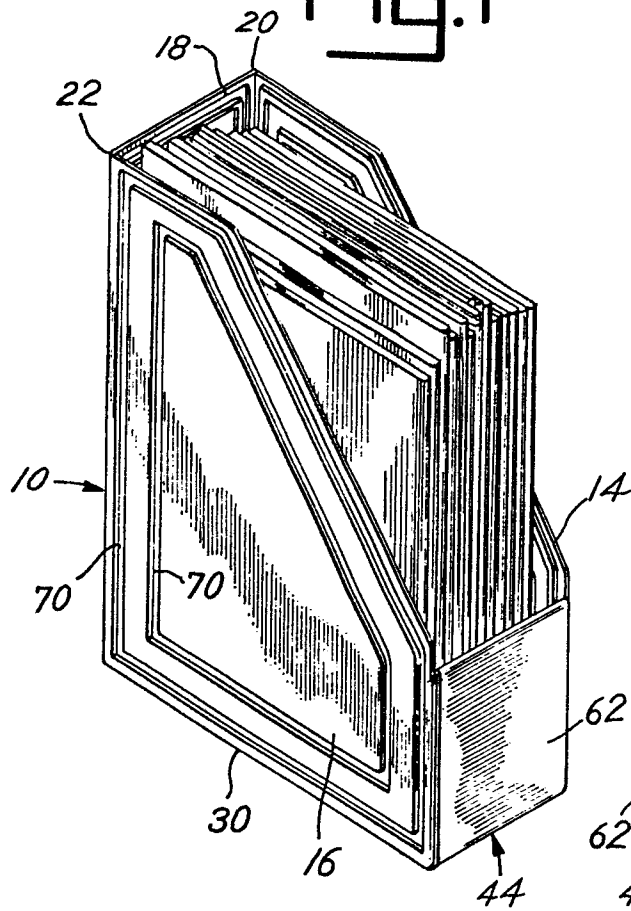


Fig. 2

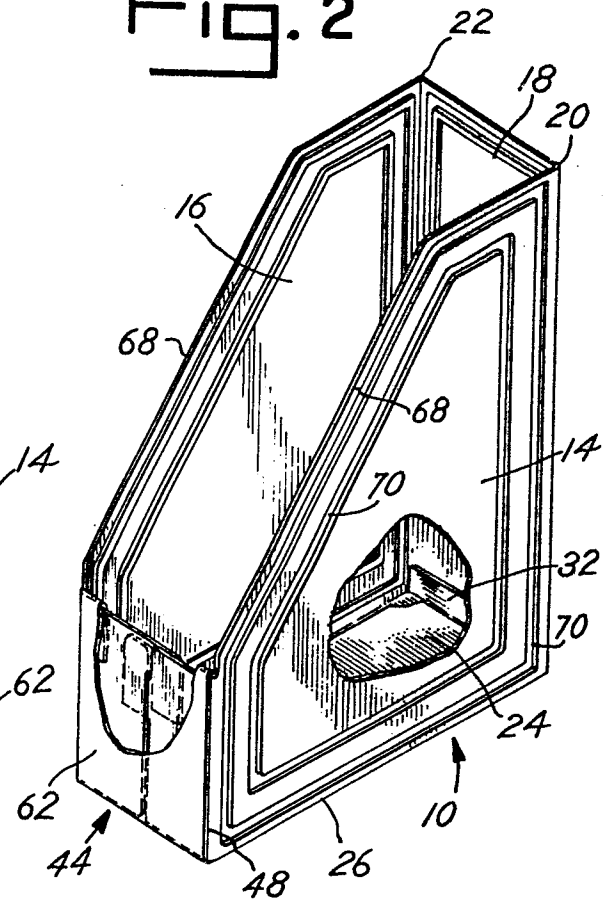


Fig. 3

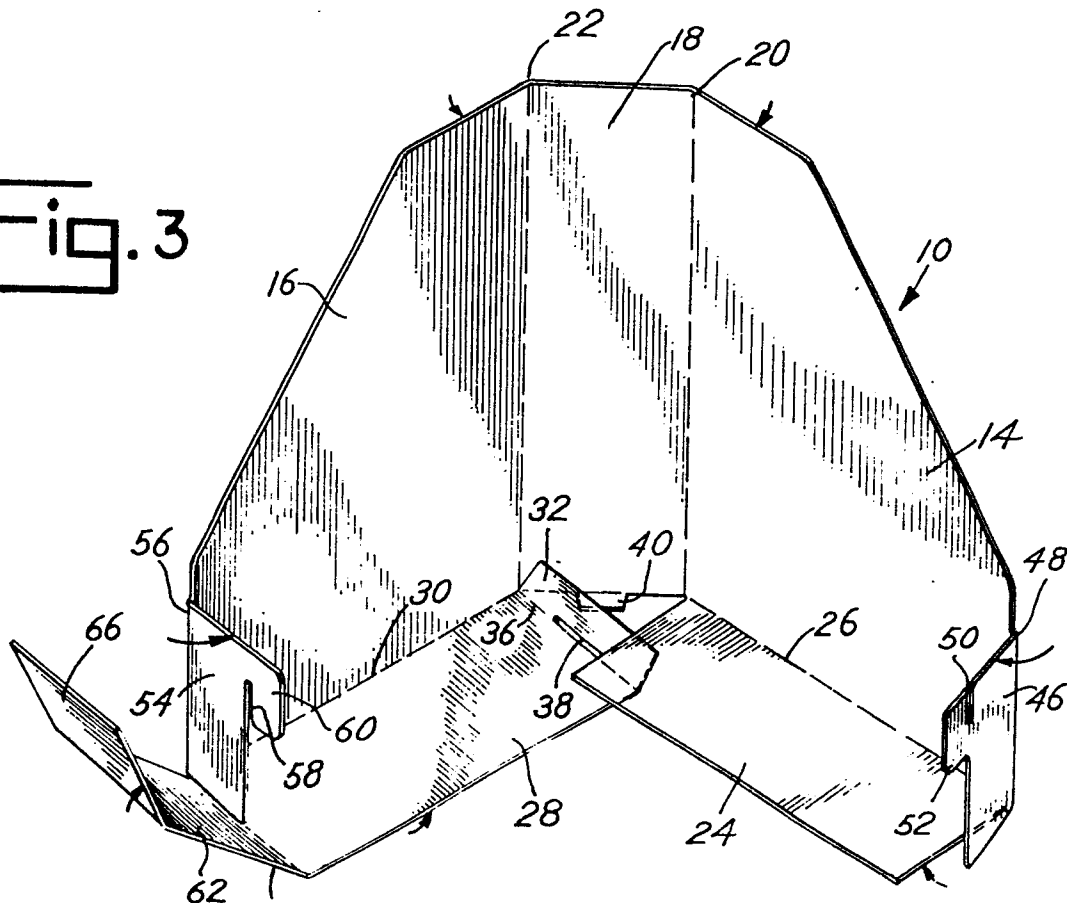




Fig. 5