BACKGROUND OF THE INVENTION

This invention relates to the art of card catalog drawers, and more particularly to an improved construction for a card catalog drawer particularly adapted for use in libraries where these drawers are subject to continuous manipulation, and are often removed from the cabinet to provide access to the catalog cards contained therein.

A variety of such card catalog drawers have been evolved over the years for use in libraries. These drawers must, of necessity, be sturdy constructed to accommodate the rather rigorous use to which they are put. In use, they are not only partially withdrawn from the cabinet to expose their cards for examination, but where the position of the card catalog drawer in cabinet is not at a comfortable eye level, the drawers are often completely removed from the cabinet and taken to a library table or cabinet ledge. The repeated opening and closing of the drawers, and their repeated removal and reinsertion into the cabinet, subjects these drawers to considerable shock load with resultant deterioration, particularly at the conventionally formed joints of the generally rectangular drawer.

Any loosening of the joints of the drawer results in an expansion of the drawer, making it difficult to move the drawer out of or into the cabinet, and further often results in the drawer coming apart when it is removed from the cabinet, with the cards contained therein being dispersed, and often lost in the process.

Additional problems arise in that the handles on the drawers employed to manipulate them with respect to the cabinet, are positioned on the front facade of the drawer. Even where these handles are large enough to be gripped by the full hand of the user, the turning moment about the wrist of the user produced by the weight of the card filled drawer is such as to generally require the use of two hands for removal of the drawer from the cabinet. This required use of two hands interferes with the free use of the card catalog when the user is encumbered by books or note pads, as is generally the case.

Further problems arise in connection with previously evolved card catalog drawers in that means must be provided to accommodate appropriate indicia identifying the contents of the drawer. Such indicia are generally accom-
modated by a face plate or frame in which an indicia bearing card is slidably retained. The conventionally provided face plate frame protrudes slightly beyond the face of the drawer front, and provides a relatively dangerously sharp edge against which the fingers of the user are often scratched or cut. Additionally, removal of the indicia bearing card from the frame presents a problem in that if the card is snugly retained in the frame, as it must be, removal of the indicia bearing card, or the like, requires careful, and generally awkward manipulation of the card with respect to the frame.

SUMMARY

It is with the above problems and considerations in mind that the present improved drawer construction has been evolved, a card catalog drawer particularly adapted for use in library card catalogs in which the number of joints in the drawers subject to detachment is reduced, and a handle arrangement is provided implementing one-handed manipulation of the drawer. Additionally, a novel arrangement of means for positioning the necessary indicia on the drawer are provided for facilitating the change of the indicia.

It is accordingly among the primary objects of this invention to provide an improved drawer construction particularly adapted for the rigorous use to which card catalog drawers are subjected in libraries. Another object of the invention is to provide a card catalog drawer with a handle serving to facilitate one handed manipulation of the drawer when in use.

A further object of the invention is to provide an improved means for supporting indicia bearing cards, or the like, with respect to the drawer so as to facilitate the provision and exchange of the indicia.

These and other objects of the invention, which will become hereafter apparent, are achieved by forming the generally rectangular card catalog drawer with its side and rear walls formed form a continuous member having inwardly turned front tabs thereon. This continuous member may be fabricated of moulded plywood, plastic sheeting, or anyone of a wide variety of materials lending themselves to desired contouring. A bottom plate is arranged between the continuous member and is secured thereto by means of a tenon and mortise joint. The continuous wall forming member, and the bottom wall are held in assembled relationship by virtue of a front wall plate which is secured to the tabs of the continuous member serving to maintain them in desired spaced relationship. This front wall is formed with a slot having overlying lips thereon within which an identifying member is slidably accommodated. By providing a chamfer preferably of a semicircular configuration at one end of the slot, manipulation of the identifying member is facilitated. A handle member is provided on this front wall which is contoured with a gripping portion inclined upwardly towards the wall with a greater distance between the lower end of the handle and the wall than exist between the upper end of the handle and the wall. By virtue of this inclination, the hand of the user in gripping the handle is normally inclined to orient the muscles of the arm so as to permit maximum resistance to the turning moment of the drawer without requiring the exertion of any great effort by the user.

An important feature of the invention resides in the fact that the inclination of the gripping portion of the handle serves to normally position the muscles of the arm of the user in a way so as to provide maximum resistance to the turning moment of the drawer.

Another feature of the invention resides in the provision of the undercut chamfer at one end of the slot to permit ready manual manipulation of the identifying card which must be inserted into the slot.
BRIEF DESCRIPTION OF THE DRAWING
The specific details of the preferred embodiment of the invention, and their mode of functioning will be particularly pointed out in clear, concise and exact terms in connection with the accompanying drawings wherein:

FIG. 1 is a perspective elevational view of a card catalog drawer made in accordance with the teachings of this invention;

FIG. 2 is a cross sectional elevational view taken on lines 2--2 of FIG. 1 illustrating the details of the interconnection of the components of the drawer;

FIG. 3 is a top plan view looking down at the drawer, with parts broken away to facilitate illustration; and

FIG. 4 is a cross sectional view taken on lines 4--4 of FIG. 3;

FIG. 5 is an enlarged detail view of the end of the drawer front wall, illustrating the indicia removing chamber formed in the indicia retaining slot of the drawer;

FIG. 6 is a schematic illustration showing how the contouring of the handle facilitates one-handed manipulation of the drawer.

DESCRIPTION OF THE PREFERRED EMBODIMENT
Referring now more particularly to the drawings, like numerals in the various figures will be employed to designate like parts.

The card catalog drawer 10, as illustrated in the drawings, is formed of the normally rectangular configuration common to such catalog drawers. The side walls 12 and 14 are formed integrally with rear wall 16 of a continuous member 17. This continuous member 17 is preferably fabricated of molded plywood. It will be understood by those skilled in the art that this continuous member may, however, be formed from a variety of sheet materials such, for example, as of that class of materials commonly designated as plastics. The continuous wall forming member 17 is formed with inwardly turned front tabs 19 and 20, as best seen in FIG. 3.

Overlying tabs 19 and 20, and secured thereto, is front facade wall 22. Securement of the front facade wall 22 to the tabs 19 and 20 is accomplished by means of front liner wall 24. The tabs 19 and 20, as best seen in FIG. 2, are sandwiched between linear wall 24 and facade wall 22. Assembly of the components is accomplished by means of front wall securing screw 26 which, as seen in FIG. 2, is arranged to extend between the liner wall 24 and facade wall 22 along a line downwardly inclined towards the front of the drawer. This downward inclination is important in serving to maintain the wall members 22 and 24 in assembled relationship when the drawer is removed from its case, as will be hereinafter more fully described. Though screw 26 may be extended through the tabs 19 and 20, a more satisfactory joining is provided by forming the linear wall 24 with shoulder 27 which abuts directly against facade wall 22, and tab engaging screws 28, as best seen in FIG. 3, extended between the tabs 19 and 20 and facade wall 22.

Walls 24 and 22 are formed with aligned apertures 29 and 30 respectively, with aperture 30 being larger in diameter than aperture 29. Extending through these aligned apertures 29 and 30 is a card aligning and holding rod 32 having flanged knob assembly 34 on the free end thereof which extends in press fit relationship through aperture 29.

The front facade wall 22 is formed with a slot 36 extending across the width of the wall 22. A transparent window member 37 of glass, or preferably a plastic, is arranged in channels 38, 39 respectively at the lower and upper edges of the slot 36, as best seen in FIGS. 1, 2, and 5, with the upper walls of the channel defining lips. Window 37 is preferably dimensioned to provide a force fit in channels 38 and 39. It will be observed that channels 38 and 39 are spaced from the bottom surface 40 of slot 36. The spacing between the surface 40, and channels 38 and 39 is such that when the window 37 is in position, as illustrated in FIG. 2, there will be sufficient clearance to permit free insertion of a card number 42 upon which the requisite indicia identifying the contents of the drawer may be applied. The indicia bearing card 42 is preferably dimensioned to provide a relatively loose press fit in the space between window 37 and surface 40. At one end of the slot 36, the wall 40 of the slot, as best seen in FIG. 5, is formed with a semicircular chamfer 45, preferably dimensioned to permit insertion of the tip of the index finger for frictional engagement with the undersurface of the indicia bearing card 42 to implement insertion and removal of the card 42.

The bottom wall 50 of the drawer is formed by means of a pliantly expandable peripherally extending tenon flange 52. The bottom wall plate 50 may be formed as a solid member, may be provided with a longitudinal slot to accommodate a card compressing assembly, such for example as the Weber-Knapp follower and latch assembly. This bottom wall plate 50 is dimensioned to fit within the confines of the wall forming members 17, 22, 24, and 26. Tenon 52 is received within a mortise slot 53 in the wall forming continuous member, as best seen in FIGS. 2 and 4. The retaining angle member 54 of the follower and latch assembly is driven between the bottom of liner wall 24 and bottom wall 50 as seen in FIG. 2.

Handle 55, as best seen in FIGS. 1, 2, and 5 is formed with an inclined manually grippable portion 56 inclined downwardly away from facade wall 22. Upper leg 57 of the handle fits into a slot 58 in the upper surface of facade wall 22, as best seen in FIGS. 1 and 3, and screw 59 extends through this upper leg 57 into the facade wall 22. It will be observed that the screw 59 extends transverse to the axis of legs 57, thereby eliminating any possibility of stripping the threads on this screw 59 by virtue of a pull on the handle 55. Lower leg 61 of handle 55 abuts against the front surface of facade wall 22, and is secured thereto by means of machine screw 63 extending through the front facade wall 22 from the rear thereof, as best seen in FIG. 2. Any turning moment such as would normally result when the handle is employed to support the drawer, will force the handle axially against the screw 63.

OPERATION
Production of the novel drawer is accomplished by utilizing conventional fabrication techniques to form the side and rear walls of the drawer of a single continuous member, preferably such as plywood, by steam molding techniques or the like. The continuous member is formed with the inturmed tabs 19 and 20, and mortise slot 53. Bottom wall 50, formed of plywood or the like, is arranged with its tenon flange 52 in mortise slot 53. An adhesive is preferably employed in forming this joint.

The handle 55 may be formed of a variety of materials, but is preferably fabricated of a strip of nonferrous material such as aluminum, or the like, and is shaped into the contour illustrated. This handle is assembled with respect to the front facade wall 22 by means of machine screw 59, and machine bolt 63. It will be observed that screw 59 extends perpendicular to the axis of bolt 63 so that tensile forces on one of these fastening members will be resisted by a shear force on the other.

The assembled handle and front facade wall 22 are secured to the inturmed tabs 19 and 20 by means of wood screws 28 extending from the tabs 19 and 20 into the rear of front facade wall 22. Thereafter, front liner wall 24 is positioned as illustrated in FIG. 2, secured in position by means of fastening screw 26 which extends at a skew angle with respect to the longitudinal axis of the drawer, thereby providing a shear axis to resist any tendency of front facade wall 22 to pull away from liner wall 24.

In use, the drawer is positioned in a cabinet, as in conventional fashion. It will be observed by those skilled
in the art that the rigors of use to which the card catalog drawers are normally subjected can have a relatively minimal effect in terms of breaking the joints of the drawer, since the number of joints have been considerably reduced.

In manipulating the drawer with respect to its cabinet, as best seen in FIG. 6, it will be observed that the angle of the hand of the user, in gripping the handle, serves to stretch the muscles along the upper portion of the arm of the user. As a result of this distension of the wrist muscles, the hand of the user becomes substantially rigid with respect to the arm, and one-handed manipulation of the drawer becomes possible.

In the event that it is necessary or desirable to change the indicia applied to the drawer, instead of the heretofore burdensome manipulation required to remove the indicia bearing card, the simple insertion of the tip of the index finger in the chamfer 45 permits displacement of the card with a portion of it sticking out of the opposite end of the slot 36 to permit it being gripped for removal.

It is thus seen that a simple card catalog drawer has been evolved having a minimum number of joints subject to coming apart, subject to ready one-handed manipulation, and subject to having its identifying indicia readily changed.

What is claimed is:

1. A card catalog drawer comprising: side and rear walls formed from a continuous member; inwardly turned front tabs on said continuous member formed integrally therewith; a mortise slot in said side and rear walls; a bottom wall plate fitted within said continuous member; tenon projections on said bottom plate dimensioned to fit securely in said mortise slot; a front facade wall overlying said tabs and secured thereto; a slot extending completely across the facade of said front wall; overlying lips on said slot; an identification member slidably in said slot beneath said lips; and a chamfer cut at one end of said slot; a handle on said front wall; a top leg on said handle extending in a slot in the top edge of said front wall; a lower leg on said handle having an end butting against the front surface of said front wall, said handle having a manually grippable portion upwardly inclined toward said front wall, to permit fulcruming about the wrist of the user implementing one hand manipulation.

2. A card catalog drawer, as in claim 1, in which a front liner wall is arranged over said tabs, sandwiching said tabs between said front liner wall and said front facade wall.

3. A card catalog drawer, as in claim 2, in which said liner wall is secured to said facade wall by a screw extending at a skew angle to the plane of said walls.

4. A card catalog drawer, as in claim 1, in which said chamfer cut at one end of said slot intersects the plane of said slot and the edge of said facade wall along a circular arc.

5. A card catalog drawer, as in claim 1, in which said slot is formed with channels beneath said lips; and a window force fit in said channels above said identification member.

6. A card catalog drawer, as in claim 1 in which said handle is secured to said front wall by fastening members extending at right angles to each other between said legs and said front wall.

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