June 23, 1931. LE ROI E. HUTCHINGS 1,811,633

VISIBLE FILE CASE

Filed July 26, 1927

Fig. 1

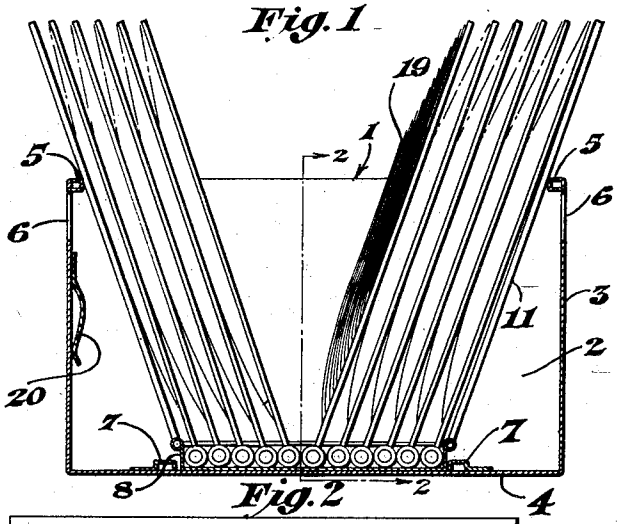


Fig. 2

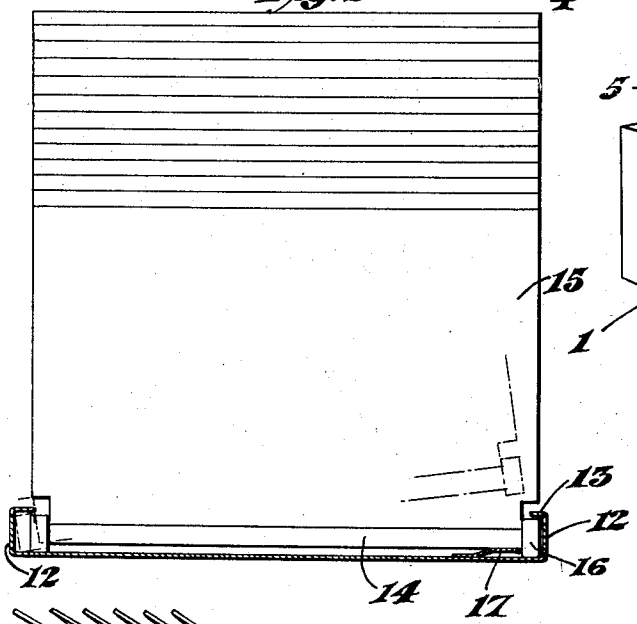


Fig. 3

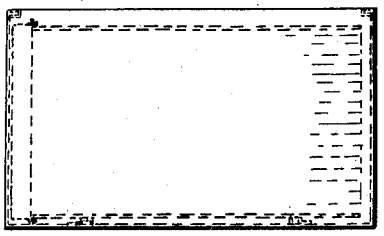


Fig. 5

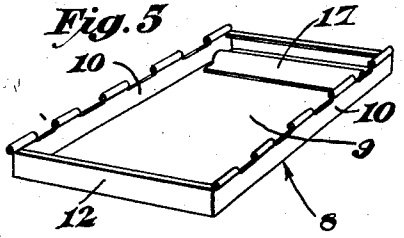


Fig. 4

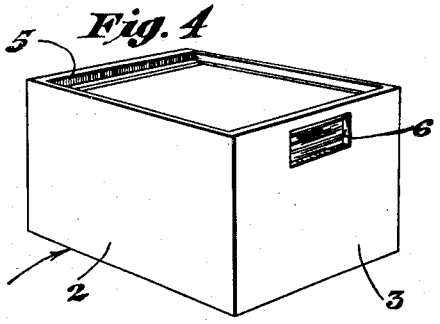


Fig. 6

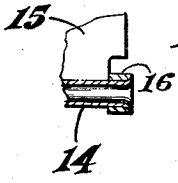
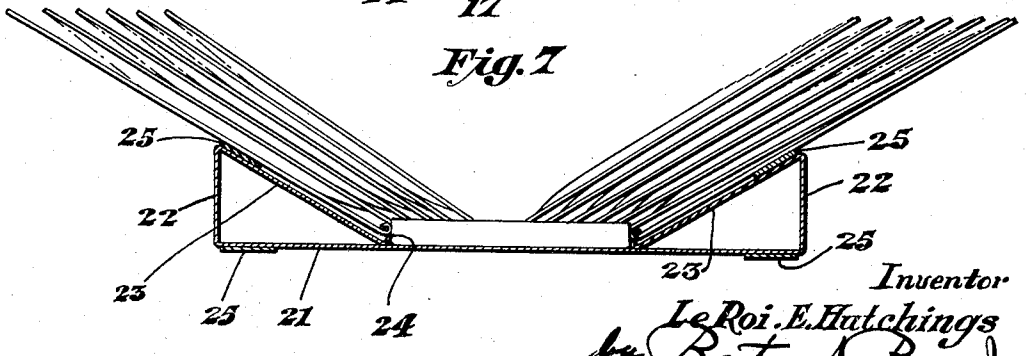


Fig. 7



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UNITED STATES PATENT OFFICE

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VISIBLE FILE CASE

Application filed July 26, 1927. Serial No. 208,499.

This invention relates to filing devices and more particularly to a visible filing device in which vertical panels carry suitable separators in which the matter to be filed is contained so that the indexes are all visible.

An object of this invention resides in providing a visible filing device having a panel unit including a plurality of relatively movable panels suitably mounted in assembled relation so that the unit may be removably inserted in a case formed to receive the panel unit in any one of a plurality of different positions, so that in one position access may be had to the panels for filing purposes while in another the panel unit will be housed within the case for storage purposes.

Another object of the invention resides in providing a visible file in which a panel unit including a plurality of relatively movable panels is adapted to be mounted in a case having an open upper end in such a way that it will be completely housed within the case and be retained therein through the cooperation of suitable means engaging the panel unit and the case, but which is readily operable to permit removal of the panel unit.

A further object of the invention resides in providing a case for a panel unit having a frame member holding the panels in assembled relation, which is formed with a plurality of stress-reducing sections extending transversely of the case in such a manner that they will receive the panel unit and center it in proper operative relation in the case.

Another object of the invention resides in providing a special means for removably securing the panels in the frame member which more specifically includes the provision of a frame member having a pair of oppositely disposed channels for receiving collars on the panels and a resilient strip member associated with one of the channels in such a manner that it will co-operate with the collars on the panels for locking the panels in engagement with the frame member.

Another object of the invention resides in providing a tray member formed of a single piece of sheet material having the end portions provided with transversely extending frame engaging members forming stress-reducing sections with the adjacent portions of the ends of the tray for receiving, positioning and supporting the panel unit to provide access to the panels for filing or indexing purposes.

The invention comprehends numerous other objects which reside in the details of construction of the case and the panel unit and combinations thereof which are more particularly pointed out in the following detailed description and claims directed to the preferred construction, it being understood that various changes may be made in the size, shape and relation of these parts without departing from the spirit and scope of the invention as herein set forth.

In the drawings forming part of this application,

Fig. 1 is a verical longitudinal section through the improved file case,

Fig. 2 is a vertical transverse section taken approximately on line 2—2 of Fig. 1,

Fig. 3 is a side elevation of the case showing the panel unit in housed position,

Fig. 4 is a perspective of the case showing the panel unit in a position as illustrated in Fig. 3,

Fig. 5 is a perspective of the frame member of the panel unit with the panels and ends removed,

Fig. 6 is a detail showing the manner of securing a collar to the rolled edge of one of the panels.

Fig. 7 is a vertical longitudinal section through another form of tray construction showing the panel unit in operative position thereon.

A case is indicated generally at 1 which includes side walls 2, end walls 3 and the bottom wall 4. The end walls 3 are formed at their upper free edges with rolled portions 5 as clearly shown in Fig. 1 and below these rolled portions with openings 6 to facilitate handling of the case.

A pair of positioning members 7 are mounted in spaced parallel relation on the inside of the case and secured to the bottom 4 thereof extending transversely between the sides 2. These positioning members form

stress-reducing sections in co-operation with the rolled edges 5 permitting the case to be constructed of relatively light material and at the same time to be substantially rigid and permit of the usual handling without losing its form.

These positioning strips 7 are spaced a distance apart to receive the frame member 8 of the panel unit therebetween in order to center the panel unit in the case for the normal use of the filing device for indexing or filing purposes in a manner as shown in Fig. 1. This frame member includes a bottom 9 and flanges 10 formed at their upper edges with hinge portions for hingedly mounting the end members 11. The sides of the bottom 9 are formed with flanges 12 having the upper edges provided with lateral extensions 13 to provide opposed channels at opposite sides of the frame member.

These channels are adapted to receive the ends of the rolled edges 14 on the panels 15 which are provided with collars 16 suitably swaged on the end portions of the rolled edges as shown in Fig. 6. The panels are narrower than the frame member so that they may be inserted between the lateral extensions 13 on the flanges 12 in the manner as shown in Fig. 2 by first placing one of the collars under one of the extensions 13 and in one of the channels of the frame member, then moving the lower end of the panel into engagement with the frame member and sliding the panel laterally to engage the other collar under the other flange 13. To retain the panels with the collars engaged under the lateral extensions 13 a leaf spring 17 is mounted on the bottom 9 of the frame member as shown in Figs. 2 and 5 adjacent one of the flanges 12 and spaced inwardly a distance sufficient to accommodate the collars 16 so that the edge portion of the spring will engage behind the edges of the collars 16 and lock the panels against lateral movement in the frame member. To disengage the panels from the frame member it is merely necessary to depress the leaf spring 17 by means of a pencil or other similar instrument inserted between the panels and reverse the operation above described.

Suitable separators 19 are mounted on the panels in the usual and well-known manner to provide pockets for receiving cards or other material to be filed preferably with a visible index.

Fig. 1 illustrates the position of the panel unit in the case for its normal use for filing purposes, the panels being freely movable in the frame member to provide access to any one of the panels while the end members 11 are supported by the ends of the case in the manner illustrated so that the panels are supported in relatively inclined position.

When it is desired to store this file the panel unit is removed from the case from the position shown in Fig. 1 and is inserted in the case from above with the frame member at one end of the case as shown in Fig. 3, in which position the end members 11 and the panels lie in substantially parallel relation with each other and the bottom 4 of the case so that the panel unit is completely housed by the case. It may then be stored in a convenient manner and the uppermost end member 11 forms a closure for the top of the case. The frame member 8 and the uppermost of the end members 11 cooperate with the rolled edges 5 on the case to lock the panel unit in the housed position. As shown in Fig. 1 a spring member 20 is mounted on one of the end walls 3 for engaging the bottom 9 of the frame member so as to normally retain the panel unit in this interlocking cooperation in the case. To insert the file into the case, the base or frame member is first inserted and moved against spring 20 under the flange on the end of the case with the spring 20 so that it compresses said spring. This will then permit the free ends of the panel members and the end members to move across the flange on th opposite end of the case and into the case to the position as shown in Fig. 3. The spring 20 will then move the ends of the panel members and end members to engage the opposite end of the case and will cooperate with the base portion to retain said base portion in the case in order to produce the interlocking association of the file unit in the case. The opening between the rolled edges 5 is sufficient to permit the insertion of the file unit and with the help of the spring 20 to normally retain the file unit in the case against accidental removal or displacement during the handling of the case for storage and the like. To remove the panel unit from the case it is merely necessary to shift it toward the end of the case for compressing the spring 20 which will permit the disengagement of the end members 11 and the leaves from the rolled edge at the opposite end of the case.

Another form of tray member for supporting the panel unit above described is illustrated in Fig. 7 which is preferably constructed of a suitable strip of sheet-metal having the center formed to provide a base 21. At the ends of the base are provided lateral extensions 22 which terminate in the downwardly inclined end portions 23 projecting toward the center of the base. The terminals of the strip are formed to provide terminal flanges 24 extending transversely across the base portion 21 in spaced parallel relation. The space between these flanges 24 is fixed to receive the frame member 8 of the panel unit so as to position and hold the unit in proper engaged relation with the tray so that the panels and end members may be supported in inclined relation by the oppositely inclined end portions 23. The ends of the base portion 21 and the inclined end portions 23 adjacent to the lateral extensions 22 have

suitable felt strips or the like 25 secured thereto for supporting the tray on a desk or the like and providing rests for the end members of the panel unit to prevent metallic contact of the tray, the panel unit and the support therefor.

What is claimed is:

1. In combination, a panel unit including a plurality of relatively independent card-carrying panels, and means for retaining said panels in unit form for relative pivotal movement, and a case formed to removably receive said unit in one position with the panels in adjacent substantially parallel relation, one of said panels forming a closure for the open side of said case, said case also forming a tray for receiving said unit in a position with the leaves approximately at right-angles to the last-mentioned position, the ends of said leaves extending outwardly from the case and adapted for a limited amount of free relative movement to provide access to the cards thereon.

2. In combination, a panel unit including relatively movable card-carrying panels, and a frame member detachably mounting said panels, and a case having an open top formed to receive said panel unit in either of two positions, said case containing said unit in one of said positions so that the panels are normally inaccessible and one of said panels cooperating with the case to form a closure for said case.

3. In combination, a panel unit, and a case for receiving said panel unit in either of two positions, said case having an open top formed with inwardly extending projections on the end walls, said panel unit being received and completely housed in said case in one position and adapted to have its end portions cooperate with said projections for retaning said unit in said case.

4. A file case comprising a panel unit including a frame member and a plurality of panels detachably connected at one end to said frame member for relatively pivotal movement, and a case having an open top adapted to receive said unit with the frame member seated on the bottom in one position, the end walls of said case providing rests for the end panels of the unit and permitting limited pivotal movement of said panels to provide access to separators carried thereby, said case being formed to completely house said unit in another position therein whereby said file may be stored.

5. A file case comprising, a panel unit including a frame member, a plurality of panels pivotally and detachably connected to said frame member at one end, and a plurality of separators hingedly mounted on each panel and forming a series of stepped card-receiving pockets, and a case for said unit having an open top, said case receiving said unit in one position with said frame member seated on the bottom, the end walls providing supports for said panels in an inclined position and permitting limited pivotal movement of said panels to provide access to the pockets between said separators, said case receiving said unit in another position and completely enclosing said unit whereby the file may be stored.

6. In combination, a frame member having channels formed at the opposite sides thereof, a plurality of separator supporting members having portions at the opposite sides on one end of said members for engagement in said channels to pivotally mount said supporting members in said frame member, said supporting members being removable from said channels by movement transversely thereof, and a releasable locking member on said frame member engageable with one of said portions on each supporting member for preventing removal of said portions from said channels.

7. In combination, a panel unit including a plurality of panels and a frame member mounting said panels, a case having bottom and side walls formed to house said unit in one position, and means on the bottom of said case for receiving and centering said frame member between said side walls when said unit is placed in said case in another position.

8. In combination, a frame member having spaced channels, a plurality of panels each having portions engaged in said channels, said panels being insertable or removable from said channels by movements transversely thereof, a resilient member mounted in said frame member adjacent one channel and having a resiliently projected portion adapted to engage a portion on each panel for normally preventing movement of the panel transversely of said frame member whereby said panels are locked in said frame member.

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