No. 724,173. PATENTED MAR. 31, 1903.

C. A. EVANS.

INDEX CARD FILE.

APPLICATION FILED APR. 4, 1902.

NO MODEL.

Fig. 4.

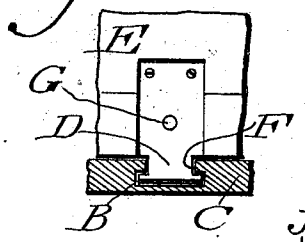


Fig. 1.

Fig. 5.

Fig. 6.

Fig. 7.

Fig. 2.

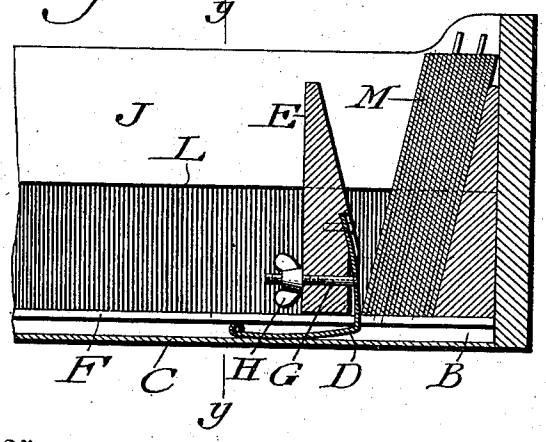
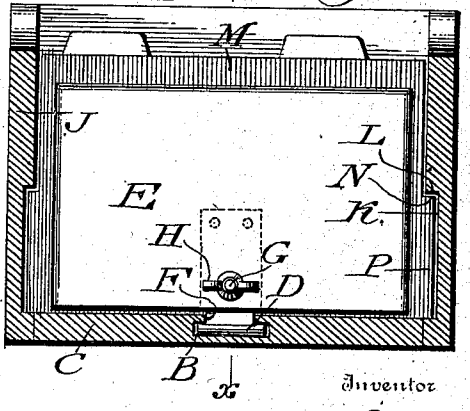


Fig. 3.



Witnesses

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INDEX-CARD FILE.

SPECIFICATION forming part of Letters Patent No. 724,173, dated March 31, 1903.

Application filed April 4, 1902. Serial No. 101,355. (No model.)

To all whom it may concern:

Be it known that I, CLARENCE A. EVANS, a citizen of the United States, residing at Upland, in the county of Delaware, State of Pennsylvania, have invented a new and useful Improvement in Index-Card Files, of which the following is a specification.

My invention consists of an improved index-card file, the object being to simplify the construction of the card file or tray and to provide means that permit the easy manipulation of the card to apply and remove the same and which also obviates the use of intricate mechanism and the perforation or otherwise cutting into the body of the card and mutilating the same and decreasing the writing-surface thereof in order to lock and secure it within the same.

The invention further consists of novel details of construction, all as will be hereinafter fully set forth, and particularly pointed out in the claims.

Figure 1 represents a perspective view of an index-card file or tray embodying my invention. Fig. 2 represents a vertical longitudinal section of a portion thereof on the line $x\ x$, Fig. 3. Fig. 3 represents a vertical transverse section on the line $y\ y$, Fig. 2. Fig. 4 represents a transverse vertical section of the lower portion of the follower and bottom of the tray, taken from the side opposite to that shown in Fig. 3. Figs. 5, 6, and 7 represent fragmentary transverse sections of modified constructions embodying my invention.

Similar letters of reference indicate corresponding parts in the figures.

Referring to the drawings, A designates a receptacle, tray, or drawer which in its general characteristics is of usual form.

B designates a suitable longitudinally-extending guide-slot in the bottom C of the tray, the same being adapted to receive the elbow or angular arm D on the follower E, said arm D being suitably secured at the upper end of its vertical limb to the said follower and provided with tongues F at its sides to engage the walls of the slot B, so that the lower limb can slide in said slot. The arm D is resilient, and it can be adjusted by means of the screw G in the follower and the nut H on said screw in an obvious manner, and thus increase and decrease the pressure of the lower limb of said resilient arm on the walls of the slot or channel B. The base of the follower is somewhat broad and rests flat upon the bottom C, so that it is sustained in upright position on the latter while the end of the lower limb of the resilient arm D presses against the wall of the slot B on the under side of said bottom and may have the pressure adjusted by the screw G, as has been stated.

In accordance with the broad principle involved in my invention I provide the sides or side walls J of the tray with downwardly-facing shoulders L, that coact with upwardly-facing shoulders N upon the card M to hold the latter in place, but which by being bent can be disengaged to permit its removal. The shoulders L are at the upper ends of the grooves K in the sides of the tray, and the shoulders N are at the upper ends of the tongues on the sides of the card J. It is understood that the downwardly-facing shoulders of the wall of the tray are permanent and made as a part thereof, and the construction is such that no manipulation of the locking devices is required to secure or release the card, this being done by simply bending the card to reduce the distance between the ends thereof to clear the shoulders on the tray. One embodiment of this part of my invention is shown in Figs. 1, 2, and 3, in which there is a channel or groove or end-cut portion K at the lower side of each side wall, thus providing the downwardly-facing shoulders L, and this makes the distance between the sides of the upper portion of the tray less than the lower portion. The cards correspond to a cross-section of the tray—that is to say, the upper portion of the card fits between the upper portion of the tray, while the lower portion or tongues P enter the grooves or channels K in the side walls of the tray, as clearly shown in Fig. 3. In this way it is seen that when the cards stand as shown in Fig. 3 they are locked in position, while they can be moved back and forth in the ordinary way, and when they are to be removed all that is necessary is to bend the card until the distance between the ends of the tongues P is

less than that between the upper portions of the side walls of the tray, as shown in Fig. 1, and then withdrawing the card.

It will be seen that the card may be easily manipulated, while at the same time I obviate the employment of movable rods and similar devices that pass through the slots and openings in the cards as heretofore employed. Furthermore, the bodies of the cards are not cut or perforated and they present an increased writing-surface. The cards can be entirely removed and as readily replaced to reëngage the oppositely-facing shoulders of the same and the tray.

Another useful result and advantage of my invention is that, as shown in Fig. 1, a card may be exposed to view by raising it above the other cards without entirely removing it from the tray for inspection, reference, copying, &c., since the flexibility of the card will force the ends of the tongues P into contact with the upper portions of the wall of the tray, when the card is released in this position, and the engagement between the tongues and the tray due to the tension of the card is sufficient to support it in the position shown in Fig. 1, and thus the card can be read off without the necessity of either removing it entirely from the tray or holding it in the hands, leaving both hands free for other purposes.

In Fig. 5 I have shown a modified construction which consists in fastening strips Q to the sides of the tray to form overhanging portions and downwardly-facing shoulders and channels. This differs from the form shown in Figs. 1, 2, and 3 in that in the latter the parts are made integral, while the construction shown in Fig. 5 is applicable to trays for card-indexes now in present use and provided with other means for locking the cards, so that if it is desired to change these trays having other locking means the same can be accomplished by the addition of the strips Q.

In Fig. 6 I have shown another modification in the manner of securing the downwardly-facing shoulder on the tray and the upwardly-facing shoulder on the card. This construction embodies the formation of a rib R on the side wall J of the tray and a notch or cut-away portion S in the ends of the card.

In Fig. 7 I have shown another modification, and in this construction the downwardly-facing shoulder on the tray is formed by the groove T, situated a little distance above the bottom thereof, to receive the tongue U at the end of the card, and is, in effect, a reduction of the height of the groove or channel shown in Figs. 1, 2, and 3 from along the lower edge thereof.

In the present case the tongues having the "shoulders," as so termed, are formed of lateral extensions of the cards integral with the same or produced by making the portions of said cards partly or entirely wider than the other portion, or pieces may be attached to the cards in such manner as to project laterally therefrom, forming tongues without producing different results.

It will be evident that the shoulders on the cards may be made inclined as well as the shoulders on the tray, and I do not, therefore, desire to be limited to any particular form of shoulders, but desire to make such changes as come within the scope of my invention.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a device of the kind specified, a tray having a portion of the interior wider than the remainder, forming a downwardly-facing shoulder on each wall thereof and a card having extended therefrom, upwardly-facing shoulders to engage said shoulders of the tray when the card is placed therein and the narrower portion of the card being situated in the narrower portion of the tray.

2. In a device of the kind specified, a tray having a groove or channel extending along each side wall thereof, the lower edge of said grooves being situated at the bottom of the tray, in combination with a removable card having a tongue at each end adapted to fit within said grooves when said card is situated within the tray.

3. In a device of the kind specified, a tray, having a portion of its interior width wider than the remainder, said wider portion extending longitudinally thereof, and a removable card having a portion thereof wider than the remainder, said wide and narrow portions of the card fitting the wide and narrow portions of the tray.

4. In a device of the kind specified, a tray having a portion thereof wider than the remainder, said wide portion extending longitudinally thereof, and a card having a portion thereof wider than the remainder, said wide and narrow portions of the card fitting the wide and narrow portions of the tray when the card is in its normal position in the tray, said card being adapted to be curved to remove the same, and said narrow portion of the tray being adapted to engage with the wide portion of the card, whereby the latter can be held in elevated position with respect to its normal position in the tray.

5. In an index-card file, a receptacle, the latter having a longitudinally-extending slot therein, a follower, movably rested on the bottom of said receptacle, a resilient angularly-shaped arm connected with said follower and guided in said slot, and means on said follower and said arm for adjusting the pressure of the latter in said slot.

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