May 26, 1925. 1,539,411

E. W. DAVIS

CARD INDEX SYSTEM

Filed March 11, 1921 2 Sheets-Sheet 1

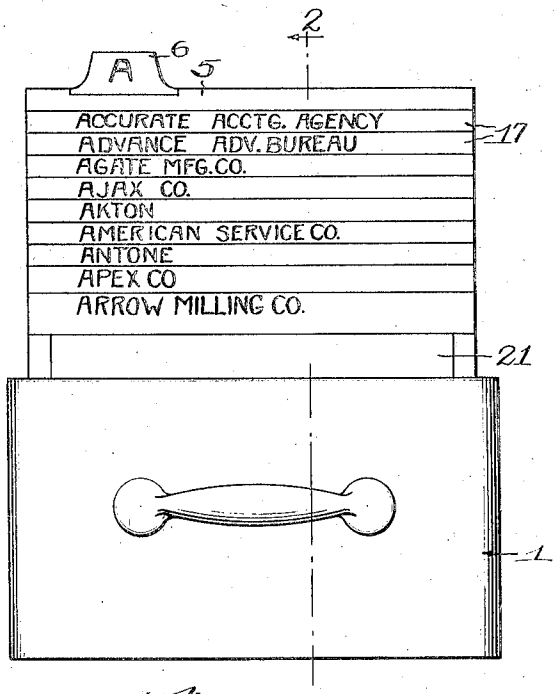



Fig. 1

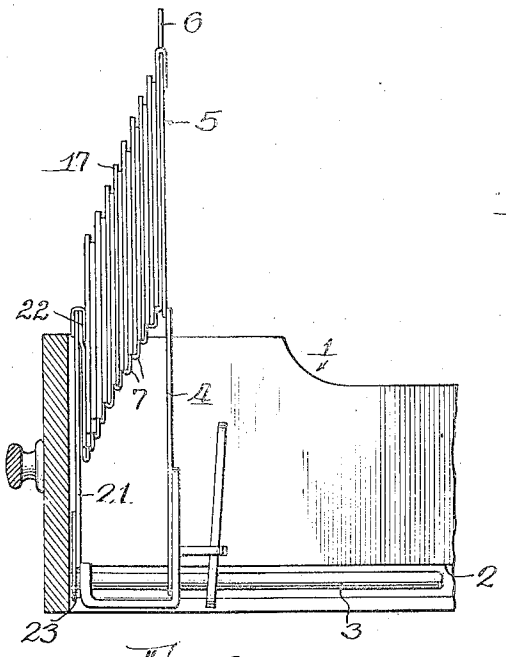



Fig. 2

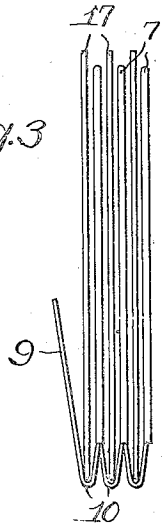



Fig. 3

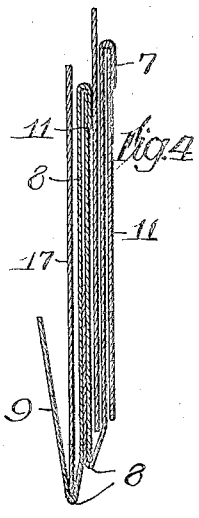



Fig. 4

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CARD INDEX SYSTEM

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Fig. 5

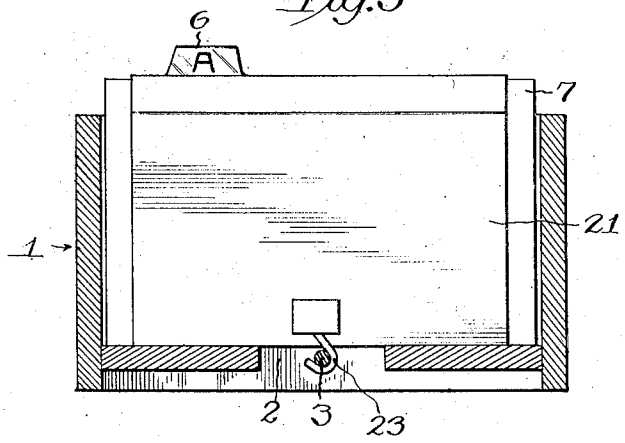
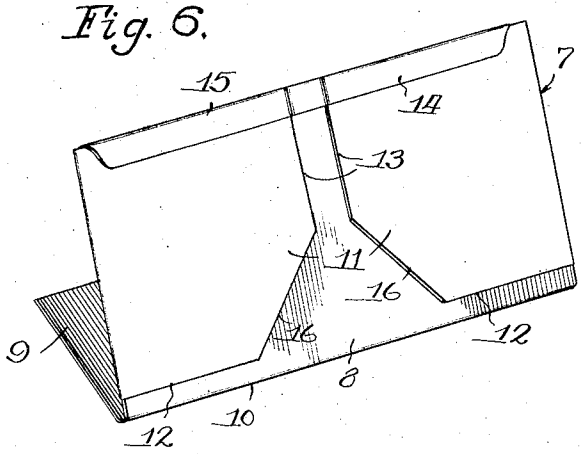



Fig. 6.



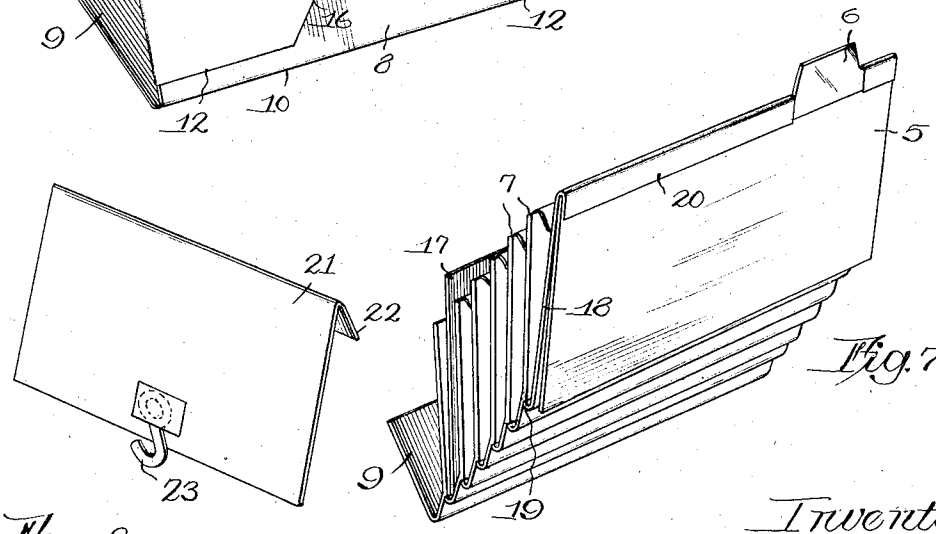




Fig. 7

Fig. 8

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# UNITED STATES PATENT OFFICE.

ELMER W. DAVIS, OF CHICAGO, ILLINOIS, ASSIGNOR TO SHAW-WALKER COMPANY, OF MUSKEGON, MICHIGAN, A CORPORATION OF MICHIGAN.

## CARD-INDEX SYSTEM.

Application filed March 11, 1921. Serial No. 451,544.

*To all whom it may concern:*

Be it known that I, ELMER W. DAVIS, a citizen of the United States, and a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Card-Index Systems, of which the following is a specification.

This invention relates to improvements in card index systems, and more particularly to systems in which series of alphabetically arranged cards are mounted within a drawer or other filing compartment, these cards being capable of being withdrawn from the container for the purpose of examination, or the entering of information thereon.

The present invention pertains to a construction for a vertically expansible card holding unit consisting of a series of interconnected or interlocked card-holding sections, each unit containing a desired number of card-holding sections, preferably confined to a single alphabetical or other division or unit of the filing system, such as would be designated by a tab bearing the alphabetic designation or character. In general, the purpose of the card-holding units is to facilitate the location and access to any desired card of a unit by the withdrawal in a vertical direction of the tabbed index card, the several card-holding sections being advanced upwardly and in stepped relation so that the upper margins of the individual cards are exposed simultaneously, and the title or subject matter indication appearing thereon readily visible to the operator.

The object of the present invention is to provide an improved construction for card index systems of the general type hereinbefore mentioned, these improvements involving certain departures in the construction and arrangement of the card-holding units, and in the means employed for securing or anchoring the several units in the drawer or container of the filing cabinet.

The novel features are illustrated in the accompanying drawings, in which—

Figure 1 is a view in front elevation of a single drawer of the filing cabinet, showing one of the card-holding units in withdrawn position, and the cards displayed for ready access.

Figure 2 is a cross-sectional view of the forward portion of a drawer as taken on line 2—2 of Figure 1,

Figure 3 is an enlarged detailed view in end elevation of several card-holding sections connected together, and cards mounted thereon,

Figure 4 is a similar detailed view in vertical section of two card-holding sections arranged in vertical offset relation, and showing their relative positions, as well as that of the cards, when the same are in extended position,

Figure 5 is a view in front elevation of a card-holding unit mounted within a drawer and showing the appearance thereof when in contracted position, and disclosing clearly the manner in which the unit is anchored to the drawer.

Figure 6 is a perspective view of a single card-holding section showing its construction,

Figure 7 is a perspective view of a unit in vertically extended position, and slightly expanded transversely to show the arrangement of the sections and the appearance of the unit from the rear, and

Figure 8 is a perspective view of a so-called anchored card as detached from a unit.

As hereinbefore indicated, a card index system embodying the features of the invention is preferably disclosed in connection with the ordinary type of filing systems comprising a single drawer or several drawers 1, slidably mounted in a cabinet. Within these drawers are mounted the card-holding units and index cards, the same being preferably arranged alphabetically from front to rear of the drawer. As ordinarily constructed, the drawer is provided with a longitudinal slot 2 extending centrally of the bottom wall from front to rear, and within this slot is mounted a rod 3. Slidably mounted on the rod is a follower comprising a vertical plate 4, forming an adjustable rear support for the unit and maintaining the same in upright position, as is the common practice.

For convenience, a single unit or alphabetical division of the filing system is illustrated, as, for instance, the unit A, which would consist of those cards whose titles would properly classify them under that alphabetical designation. Thus, as clearly

shown in Figure 1, these cards would in turn be arranged alphabetically, beginning at the rearmost card; namely, that adjacent to the tabbed card 5 bearing the letter A on the tab 6 thereof. It is to be understood, however, that the number of cards which may be filed in the unit may be increased at will by expanding the same in a manner which will be clearly understood as the construction of the unit is disclosed.

As has already been suggested, the unit is made up of a plurality of card-holding sections, and it is proposed first to describe in detail the construction of each section. Figure 6 clearly shows the manner in which one of the sections 7 is made. A blank is first cut from a sheet of paper in the shape and size of a rectangular body portion 8 conforming substantially in size to that of the cards. At the lower edge of the body portion is formed an upturned tongue 9, which is folded forwardly and upwardly along the fold line 10, constituting the lower edge of the section. The length of the tongue is less than the width of the body portion 8. Along the side edges of the body portion are formed flaps 11—11, which extend substantially thruout the full width of the body portion, but terminate in spaced relation from the fold line 10 along horizontal lower edges 12—12 parallel with said fold line. The flaps are folded inwardly and against the surface of the body portion 8, their vertical and parallel edges 13—13 being spaced apart centrally of the section. Along the upper edge of the body portion is formed a comparatively narrow flap 14 adapted to be folded along the fold line 15, constituting the upper edge of the body portion, and downwardly in overlapping engagement with the upper marginal portions of the flaps 11—11, said flap 14 being sealed by the application of adhesive. Thus a pocket is formed at the rear of the body portion 8 facing or opening in a downward direction. As a preferably formation, the free corners of the flaps 11—11 are removed by the provision of diagonal cuts 16—16.

The several card-holding sections 7 are connected together or interlocked in the manner clearly shown in Figures 4 and 7; namely, by inserting the upturned tongue 9 of each card into the pocket formed at the back of the preceding card, as hereinbefore described. As clearly shown, a card 17 is inserted downwardly between the up-turned tongue 9 and the body portion 8 of each section, these two parts of each section forming in effect a folder which is open at its sides and restrains the cards from downward movement only.

In order to permit a vertical relative movement or displacement between two adjacent card-holding sections, it is necessary to provide for a limited free sliding movement of the upturned tongue 9 of one section within a pocket of the preceding section. Provision is made for this movement by spacing the lower longitudinal edges 12—12 a predetermined distance above the fold line 8, as hereinbefore pointed out in connection with Figure 6. This distance is preferably an amount equal to the title margin of the index cards 17; that is to say, a portion of the upper margin of each card of sufficient width to receive the title or subject matter of the card. Thus, if the rearmost card-holding section in Figure 4 is lifted upwardly, this upward movement will be limited by the engagement between the lower edges 12—12 of the pocket-forming flaps 11—11 with the base of the tongue 9, as indicated by the fold line 10. It follows, therefore, that if any number of card-holding sections are interlocked in the manner already described, and cards 17 are inserted within the several sections, that, if the rearmost section is withdrawn vertically, each section and its associated card will be displaced vertically with relation to the section immediately in front a distance sufficient to expose the upper marginal portion of each card to observation from the front of the drawer or container 1 as shown in Figure 1. This relation between the several cards may be described as a stepped relation in a vertical direction from front to rear.

In addition to the interlocked sections, a complete unit includes the rearmost index card 5 bearing the index tab 6 along its upper edge, this index tab being preferably secured to the rearmost section 5 in a permanent manner. As clearly shown in Figure 7, an especially formed section 18 is provided, the same having an upturned tongue 19 along its lower edge, which is similar in all respects to the tongue 9 of the card holding sections, and along its upper edge with a flap or tongue 20, which is folded over the upper edge of the index card 5 and pasted down against the rear surface thereof. There is preferably a portion of the flap 20 cut away in order to accommodate the tab 6. In this manner, the index card 5 is made an integral part of each unit or alphabetical division of the filing system.

It is desirable, in order to prevent the unit being completely withdrawn from the drawer 1, when the unit is expanded vertically for the purpose of referring to a card thereof, that the foremost section be anchored to the drawer, and to thereby prevent the complete removal of the unit in the act of operating the unit. This is accomplished by the use of what may be termed an anchor card 21, Figures 5 and 8. An anchor card is preferably made of a rectangular sheet of paper, altho stiff cardboard is perhaps to be preferred. Along the upper edge of the

anchor card 21 is secured a flap 22, which may be formed either by a strip of paper pasted along the top edge of the card, as shown in Figures 2 and 5, or by folding the top marginal portion over, as shown in Figure 8. Along the lower edge of the anchor card and at a point midway between its side edges is fixed a hook 23 which projects downwardly beyond the lower edge of the card. As before suggested, the anchor card is connected with the foremost card-holding section 7, this being accomplished by means of the flap 22 which is adapted to engage the upper edge of the tongue 9 of said foremost card-holding section 7. The anchor card in turn is connected to the rod 3 of the drawer 1 by means of the hook 23 at the lower edge of the anchor card, this being clearly shown in Figure 5. It is also to be observed that the anchor card is somewhat less in length than the card-holding sections 7, as well as less than the width of the drawer 1. This reduction in size of the card is resorted to in order to facilitate the engagement of the hook 23 and the rod 3, as will be understood from the following. Assuming that it is desired to anchor the card 21, it would be inserted into the drawer so that the hook is offset to the right of the rod, and thus freely enter the slot 2 in the bottom wall. Then by sliding the card to the left, the hook 23 engages the rod and holds the card in a central position.

The anchor card may be connected with the adjacent or foremost card holding section in either of two ways; first, by the interlocking of the flap 22 with the tongue 9 of said section as it is withdrawn vertically with the remaining sections, in the manner shown in Figure 2; or, second, by engaging flap 22 over the top edge of the foremost section without using the tongue 9 at all. The method used is a matter of choice; the difference being that in the first instance the entire unit can be displaced vertically the distance to which the first section can be raised before the tongue 9 engages the flap 22, whereas, in the second method the first section is held stationary in its normal position and only the remaining sections are displaced, said first section in this instance being an extra or dummy section between the anchor card and the active card holding sections.

Having described a preferred construction embodying the invention, I claim as new and novel:

1. A card index system comprising a container, a file unit consisting of a plurality of card-holding sections adapted to be mounted in said container, said sections being provided with interlocking parts adapted to permit a limited vertical displacement of each section relative to an adjacent section, and means at one end of the unit for limiting the extent of vertical displacement of the adjacent end section relative to its normal position in said container, whereby the vertical withdrawal of a section at the opposite end arranges said sections in uniform staggered relation from end to end.

2. A card index unit comprising a plurality of card-holding sections adapted to be arranged in predetermined order in a suitable container, each section being provided with a locking member adapted to engage a coacting locking member of an adjacent section, whereby the vertical withdrawal of the rearmost section arranges the sections forwardly thereof in uniformly vertically spaced relation and means for limiting the vertical withdrawal of the foremost section relative to its normal position in said container.

3. A card index system comprising a container, a series of individual card-holding members adapted to be normally retained in said container in registering relation from front to rear thereof, said card-holding members being interconnected whereby each member may be displaced vertically a predetermined distance relative to the preceding member, by the vertical withdrawal of one of said card-holding members.

4. In a filing system, the combination of a plurality of card-holding sections having interlocking connection with each other, and adapted to be arranged in stepped relation by the vertical withdrawal of one of said card-holding sections, and means for anchoring one of the card-holding sections in said container.

5. A card index system comprising a container, a plurality of card-holding sections having interlocking connection with each other, whereby the vertical withdrawal of one card will arrange the preceding cards in stepped relation, and means for anchoring the foremost card-holding section in said container.

6. In a card index system, the combination of a container, a card-holding unit adapted to be mounted in said container, and comprising a series of interconnected card-holding sections adapted to be disposed in vertically stepped relation from front to rear, by the withdrawal of the rearmost section from the container, and means for detachably securing the foremost section in its normal position within the container.

7. A card index system comprising a container, a card-holding unit mounted in said container, and comprising a series of individual card-holding sections having interlocking connection with each other, permitting a predetermined vertical displacement of each section relative to the preceding section, a tabbed section forming the rearmost member of the unit, and connected with the adjacent card holding section, and a section

detachably connected with the foremost card-holding section, and provided with a member adapted to be detachably connected to the container.

8. A card index system comprising a container and a card-holding unit mounted in said container, and comprising a series of individual card holding sections having interlocking connection with each other, permitting a predetermined vertical displacement of each section relative to the preceding section, a tabbed card connected with the rearmost card-holding section, and means for anchoring the foremost card holding section to the container.

9. In a card index system, the combination of a container, a card-holding unit adapted to be mounted in said container, and comprising a series of connected card-holding sections adapted to be disposed in vertically stepped relation from front to rear, by the withdrawal of the rearmost section from the container, and a card provided with a tongue along its upper edge adapted to engage the foremost section, and a hook at its lower edge adapted to be detachably connected with the container.

10. A card index system comprising a plurality of card-holding sections, each consisting of a blank folded longitudinally to form an upturned tongue along its lower edge, and overlapping flaps along upper and side edges of said body portion, forming a rearwardly and downwardly facing pocket adapted to receive the tongue of the preceding section, said section being adapted to receive a card between said tongue and body portion.

11. In a filing system, the combination of a container, a filing unit mounted in said container and comprising a series of card-holding sections, each consisting of a sheet of paper having an upturned tongue along its lower edge, and flaps along its top and side edges folded to form a downwardly facing pocket adapted to receive the upturned tongue of the succeeding card-holding section, the lower edges of said pocket-forming flaps terminating short of the lower edge of each section a predetermined distance, thereby effecting a vertically stepped arrangement of said sections when one is withdrawn vertically.

12. A card index system comprising a series of card-holding sections, each consisting of a folded sheet of material having a tongue along its lower edge, and marginal flaps along its side edges folded to form a downwardly facing pocket adapted to receive the upturned tongue of an adjacent card-holding section, the lower edges of said pocket-forming flaps terminating short of the lower edge of each section a distance permitting the vertical stepped arrangement of said sections when the rearmost section is displaced vertically.

13. A card index system comprising a plurality of card-holding members, each consisting of a sheet having an upturned tongue along its lower edge, and side marginal flaps along its side edges, and terminating short of said lower edge, each tongue being inserted beneath the flaps of the member adjacent thereto.

14. A card index system comprising a plurality of card-holding members, consisting of sheets having an upturned tongue at their lower edges, and flaps along their side edges, having bottom edges extending parallel to and spaced a predetermined distance above said lower edge, said tongue and flaps being folded on opposite sides of said sheets, and the tongue of each member engaging within the flaps of the member adjacent thereto.

In witness whereof, I hereunto subscribe my name this 7th day of March, A. D., 1921.

ELMER W. DAVIS.