Jan. 3, 1950 W. P. DE SAUSSURE 2,493,530

CARD INDEX

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Fig. 1.

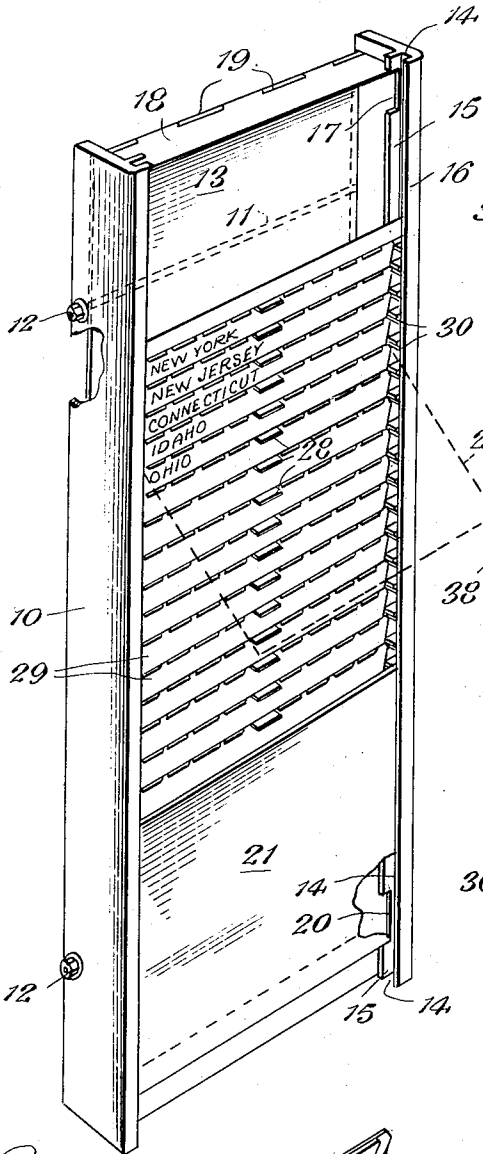


Fig. 2.

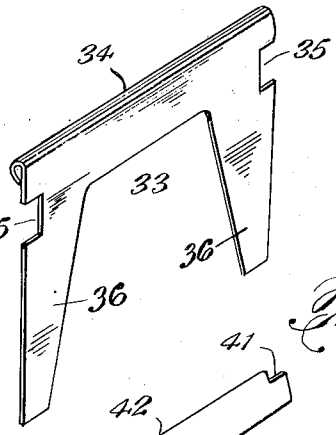


Fig. 3.

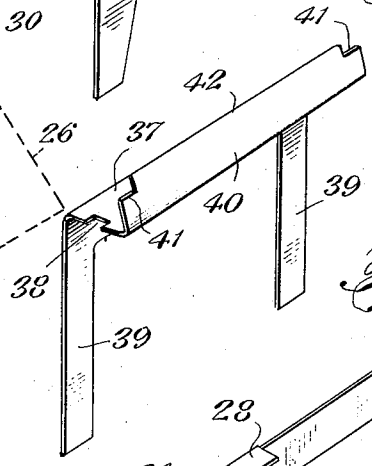


Fig. 4.

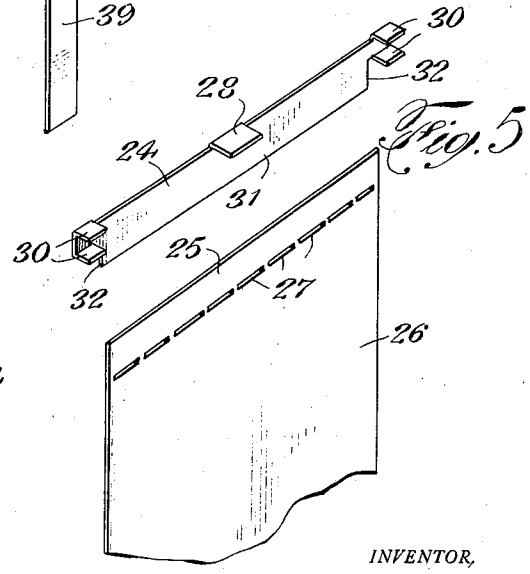
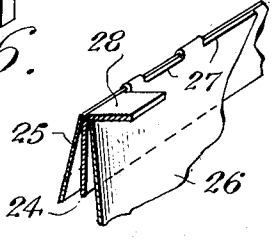


Fig. 5.

Fig. 6.



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Fig. 7.

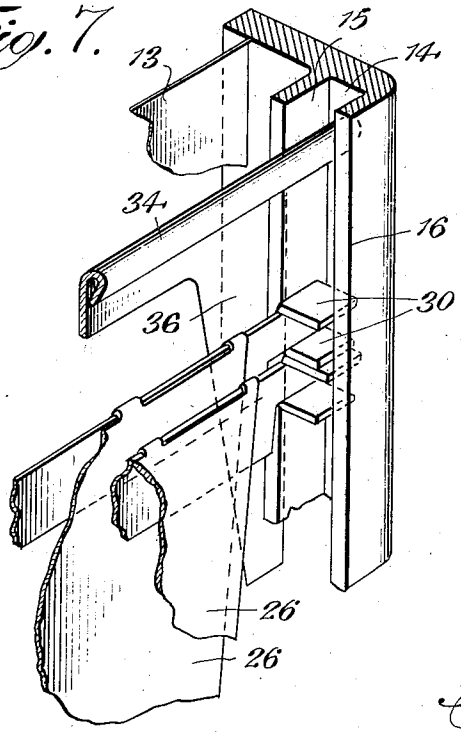


Fig. 9.

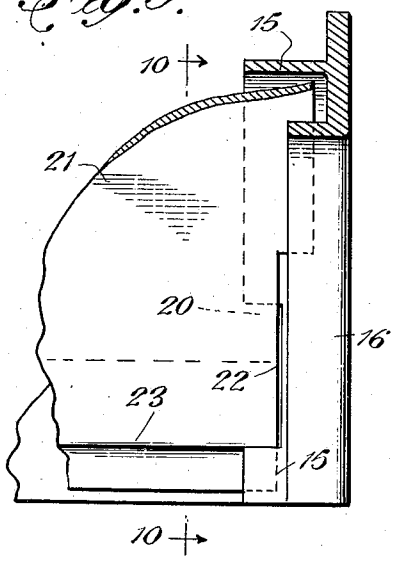


Fig. 10.

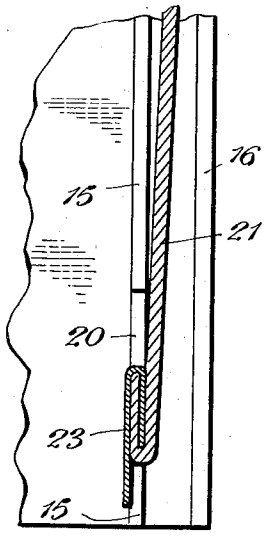
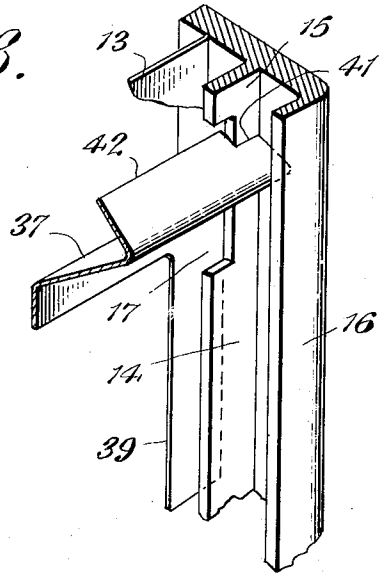


Fig. 8.



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2,493,530

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William P. De Saussure, Englewood, N. J.

Application January 11, 1946, Serial No. 640,551

2 Claims. (Cl. 129—16)

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My invention relates more particularly to certain improvements I have made in card-holders for visible card-indices whereof the cards are nested in overlapping positions so that a narrow portion of each card will be exposed for identification of the subject matter contained on the unexposed portion of the card. The improvements to which I refer have to do with the construction of the individual card-carriers and their relation to the frame of the card-holder, to permit ready insertion and removal of the cards separately or together and convenient access to the body of any particular card for examination or for making entries thereon without removing its carrier from the holder, also for permitting wide variation in the depth of the cards and for preventing tangling or misplacements thereof. Furthermore, my improvements include the designing of the individual card-carriers and the frame of the holder so that a minimum of thickness is added to the thickness of a card when attached to its carrier, with the result that the index in its normal or resting position with only a very narrow portion of each card exposed, presents a substantially flat unobscured surface for reading. Finally, the holder has been designed for the ready transfer of the contents as a whole from one holder to another.

In the accompanying drawings, wherein a practical embodiment of my inmprovements is illustrated, Fig. 1 is a perspective view of the card-holder or frame with a column of card-carriers and attached cards disposed therein and shown in their normal relation to each other with a narrow portion of each attached card exposed to view. Fig. 2 is a perspective view of a keeper which rests upon the top of the column of cards and their carriers. Fig. 3 is a perspective view of another form of keeper. Fig. 4 is a perspective view of a card-carrier without an attached card. Fig. 5 is a perspective view of one of the cards which may be used in the holder, the bottom of said card being broken away to indicate that the cards may vary considerably in depth. Fig. 6 is a detail view of a portion of one of the card-carriers and its attached card. Figs. 7 and 8 are detail views on a larger scale, showing a part of the inner face of one of the side members of the holder or frame and its relation to the keeper and card-carriers. And Figs. 9 and 10 are detail views of the lower or bottom part of the holder or frame.

As will be understood from Fig. 1, my improved card-holder or frame, when in use, will be disposed in an upright and preferably vertical position. The side members 10 of the frame, which are relatively long and narrow and preferably of metal, are rigidly secured to each other by means, such as a couple of tie-rods 11 tightly fastened to the side members by nuts 12, so that when these parts are assembled they will constitute a substantially rectangular shallow frame to which a sheet-metal backing piece 13 is desirably added and secured to the rods 11 in any suitable manner. The inner faces of the side members of the frame are each provided, near the front of the frame, with longitudinal grooves 14 which desirably extend from the top to the bottom of the frame. Each of these grooves is preferably formed by a longitudinal ridge or strip 15 integral with the corresponding side member and a flange 16 constituting the front face of the side member and extending the full length thereof. Each of the ridges 15 has a recess 17 near its upper end, one purpose of which is to make room for the swinging of a hinged cover plate 18 at the top of the frame. The ends of the forward edge of this cover plate enter the recesses 17 when it swings into its closing position; and when in that position its further upward movement is checked by the upper edges of these recesses, as indicated in Fig. 1. The hinges 19 of the cover plate preferably operate with sufficient friction to hold the plate in any position to which it is moved.

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At the lower or bottom end of the frame a recess 20 is provided in each of the ridges 15 to permit a bottom plate 21 to be attached to and detached from the frame. The side edges of this bottom plate are received in the grooves 14 of the side members of the frame, and the lower edge or end of this plate is shortened by being cut away sufficiently as shown at 22 (Figs. 9 and 10) so that the lower ends of its side edges may enter these recesses and its lower edge rest upon the lower edges of said recesses. To retain or lock this plate in position, a strip 23 may be secured to its lower edge for engagement below said recesses with the rearwardly facing sides of the ridges 15. In attaching the bottom plate to the frame, its top end is inserted into the lower ends of the grooves 14 and the plate is pushed upwardly until the ends of the strip 23 can be passed through the recesses 20; then it is pushed down slightly so that the ends of its bottom edge will rest upon the lower edges of said recesses (Fig. 10). To remove this plate, these operations are obviously to be performed in reverse order.

Each card-carrier 24 is preferably made from

thin flat metal strip around which is folded the top edge portion 25 of a car 26 (Figs. 4, 5 and 6) which is thus hung on its carrier along its fold-line denoted in Fig. 5 of the drawings by the perforations 27. Each card-carrier has near its center an outwardly projecting lug or finger 28 which is passed through one of the perforations to position and hold the card thereon. The ends of these carriers are received in the grooves 14 of the side members of the frame and have a loose rectangular fit with said grooves the purpose of which is to permit the carriers to tilt slightly about their longitudinal axes when the cards are nested one above another in the holder, but at the same time to limit such tilting so that the visible or exposed narrow portions 29 of the cards when the latter are nested will each present a substantially flat vertical surface for reading and not be obscured by excessive tilting. If the grooves themselves are made rectangular, the loose rectangular fit therein of the card-carrier ends may be secured by providing each carrier end with a pair of spaced rectangular forwardly projecting ears 30 of suitable dimensions to permit the limited tilting desired. When the card-carriers, with their attached cards, are assembled as a column in the holder or frame one above another as shown in Fig. 1, and with the body of each card overlapping the body of the card next below it in the shallow space within the holder, each card-carrier will be supported by the one next below it on account of the ends of the former resting upon the ends of the latter in the grooves 14, except that the lowermost card-carrier in the column will be supported upon the top of the aforesaid bottom plate 21. Since each carrier, when made as specified of very thin metal strip for compactness and lightness, will be quite flexible, it is desirable to provide means for stiffening the column as a whole, that is, to give it more rigidity than the individual carriers alone possess; and this I accomplish by extending the lower edge 31 of each carrier substantially below the end portions thereof so that when the cards are nested in the frame, the lower edge of each carrier will overlap the upper edge of the carrier (and card attached thereto) next below it. This extension of the lower edges of the carriers, however, necessitates that portions of the lower edge of each carrier lying near the grooves of the frame be cut away slightly as shown at 32, to permit the insertion and removal of the carriers from the grooves 14 of the frame.

The insertion in the frame of a single carrier with its attached card is accomplished as follows: the lower end of the card is first introduced into the holder so that it will pass behind the card next below, and then the carrier is tilted sidewise so that its ends can be inserted in the grooves 14 in the side members, whereupon it will drop into place. If the insertion is to be made between two carriers and their attached cards already in the holder, the upper carrier is first lifted by its finger 28 (and carries with it all the carriers above it) and, while keeping these carriers raised, the new carrier, with its attached card, is inserted in the manner just explained. The withdrawal of an individual card-carrier, with its attached card, is accomplished in the reverse order. If it is desired to detach and remove a card from its carrier without removing the carrier from the frame, this is easily done by raising the carrier next above and inserting one's finger behind the flap 25 (Fig. 6) of the card to be removed so as to reach underneath the lower edge of said flap and lift it upwardly and outwardly, thereby disengaging the card from the finger 28 of the carrier, whereupon the card may be withdrawn from the frame, leaving its carrier in its normal position therein with its front face exposed, thus showing that it has no attached card. To all such carriers disposed in the frame with their front faces exposed, cards may be readily attached without removing them from the frame, all as will be understood from the foregoing.

Since the column of card-carriers and attached cards is freely slidable upward as a whole, and also from and above any intermediate card-carrier, the body of any particular card may be immediately exposed to view by simply pushing upwardly on the projecting finger 28 of the card-carrier to which that card is attached; and since the cards are nested compactly together, those cards above that particular card, together with the depending portion of the keeper hereinafter described, will cause that card to present a substantially flat surface for easy reading. Moreover, if entries are to be made on that card, its lower flap 26, after exposure in the manner just explained, may readily be withdrawn from the holder and the column then allowed to resume its normal position with said flap projecting from the holder, as indicated by the broken lines of Fig. 1. Thereafter, by holding a hard flat surface beneath the projecting flap, the entries may conveniently be made thereon.

To prevent sidewise tilting of the carriers in the column when the latter, as a whole or any of the carriers thereof, is raised, a keeper 33 may be provided. As shown in Fig. 2, this keeper has a top portion 34 adapted to rest on the top card-carrier in the holder (Figs. 1, 2 and 7), the ends of which portion are held in the grooves 14 of the side members, an intermedate portion the ends of which are recessed at 35 to engage or embrace the ridges 15, and a downwardly extending portion or portions 36 which may rest upon the back of the top card and thus keep the cards closely compacted and free from tangling. A modified form of keeper is shown in Figs. 3 and 8, whereof the intermediate portion 37 extends backwardly and its ends are recessed at 38 to engage or embrace the ridges 15 and from the rear edge of which the downwardly extending portion or portions 39 depend, and an upwardly and backwardly extending portion 40 of this keeper has the upper ends of its side edges cut away at 41. This keeper performs all the functions of the keeper first described and, in addition, when the column of card-carriers is raised so that the upwardly extending portion 40 of the keeper is on a level with the recesses 17 of the ridges 15, the weight of the intermediate portion 37 and the depending portions 39 cause the ends of its upper edge 42 (Fig. 8) to engage the upper edges of the recesses 17 and check the further upward movement of the keeper and column. Hence, when this modified form of keeper is used, the cover plate 18 may be dispensed with.

Whenever it is desired to transfer the whole or part of the contents of one holder or frame to another, the hinged cover 18 of the former is swung back out of the way and after the bottom plate 21 of the new holder is removed its lower end is placed flush aaginst the top end of the first holder so that grooves 14 in the side members of both holders will be in register. While the two

holders are held in that position, either manually or by a suitable frame-connector (not shown), the transfer may be made by sliding the card-carrier column upwardly from the first holder into the new one and then restoring the bottom plate of the new holder to its operative position.

I desire to call attention to the fact that in addition to having the advantages particularly alluded to in the beginning, my improvements make it practicable to enclose and retain index cards entirely within a container (save for their index portions which are always visible) and at the same time provides ready and immediate access thereto for examination or new entries. In respect of this, one important feature of my invention which I believe to be new in this art, is the passing of each card over the front face of its carrier (so that its narrow index portion will always be visible) and thence back into the frame of the container behind the card on the carrier next below where it will be out of the way and therefore less liable to become tangled, worn or injured than if constantly exposed to contact from the outside.

I claim as my invention:

1. A card-holder for a visible card-index in combination with cards disposed entirely within the frame of the holder so that no portion of any card is normally positioned at or in front of the face of the holder except a narrow visible index portion near the top of the card, said holder including a column of individual flat card-carrier strips whereof the front face of each strip is covered by the index portion of the card supported thereon, said card passing over said face and thence into the interior of the holder and behind the card supported on the carrier strip next below, said holder having side members rigidly secured to each other and provided in their respective inner faces with longitudinally extending grooves rectangular in cross section and wherein the ends of the carrier strips are received, each end of each carrier strip having a pair of spaced rectangular ears substantially perpendicular to its face, each successive carrier strip in the column being supported on the ears of the carrier strip next below it, and said ears having a free fit in said grooves so as to permit a slight tilting of each carrier strip for nesting the cards without obscuring the index portion of any card, and characterized by this: that the side members of the frame of said holder each have a longitudinally extending inwardly facing ridge, these ridges forming with the front faces of said side members the grooves aforesaid and having recesses therein near their lower ends, and said holder having a detachable bottom plate the upper edge of which supports the column of card-carrier strips and the side edges of which are disposed in said grooves and are cut away at their lower ends so that the ends of the lower edge of said plate may rest upon the lower edges of the aforesaid recesses in the ridges, and means to retain the lower ends of the edge of said plate in engagement with the lower edges of said recesses.

2. A card-holder for a visible card-index in combination with cards disposed entirely within the frame of the holder so that no portion of any card is normally positioned at or in front of the face of the holder except a narrow visible index portion near the top of the card, said holder including a column of individual flat card-carrier strips whereof the front face of each strip is covered by the index portion of the card supported thereon, said card passing over said face and thence into the interior of the holder and behind the card supported on the carrier strip next below, said holder having side members rigidly secured to each other and provided in their respective inner faces with longitudinally extending grooves rectangular in cross section and wherein the ends of the carrier strips are received, each end of each carrier strip having a pair of spaced rectangular ears substantially perpendicular to its face, each successive carrier strip in the column being supported on the ears of the carrier strip next below it, and said ears having a free fit in said grooves so as to permit a slight tilting of each carrier strip for nesting the cards without obscuring the index portion of any card, and characterized by this: that each of said side members of the frame has a longitudinally extending inwardly facing ridge, these ridges forming with the front faces of said side members the grooves aforesaid and having recesses therein near their upper ends, and that the column of card-carrier strips has a keeper resting on the top strip of the column to prevent endwise tilting of the strips when the column is raised, said keeper comprising a strip having a backwardly extending portion recessed at its ends to embrace said ridges and an upwardly extending portion the ends of which lie in said grooves and the upper portion of the side edges of which are cut away, whereby when the column is raised the weight of the backwardly extending portion of the keeper will cause the upper edge of its upwardly extending portion to engage the upper edges of said recesses.

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