Jan. 4, 1949. H. WESTON 2,457,855

ACCOUNTING AND FILING DEVICE

Filed Oct. 1, 1942

2 Sheets-Sheet 1

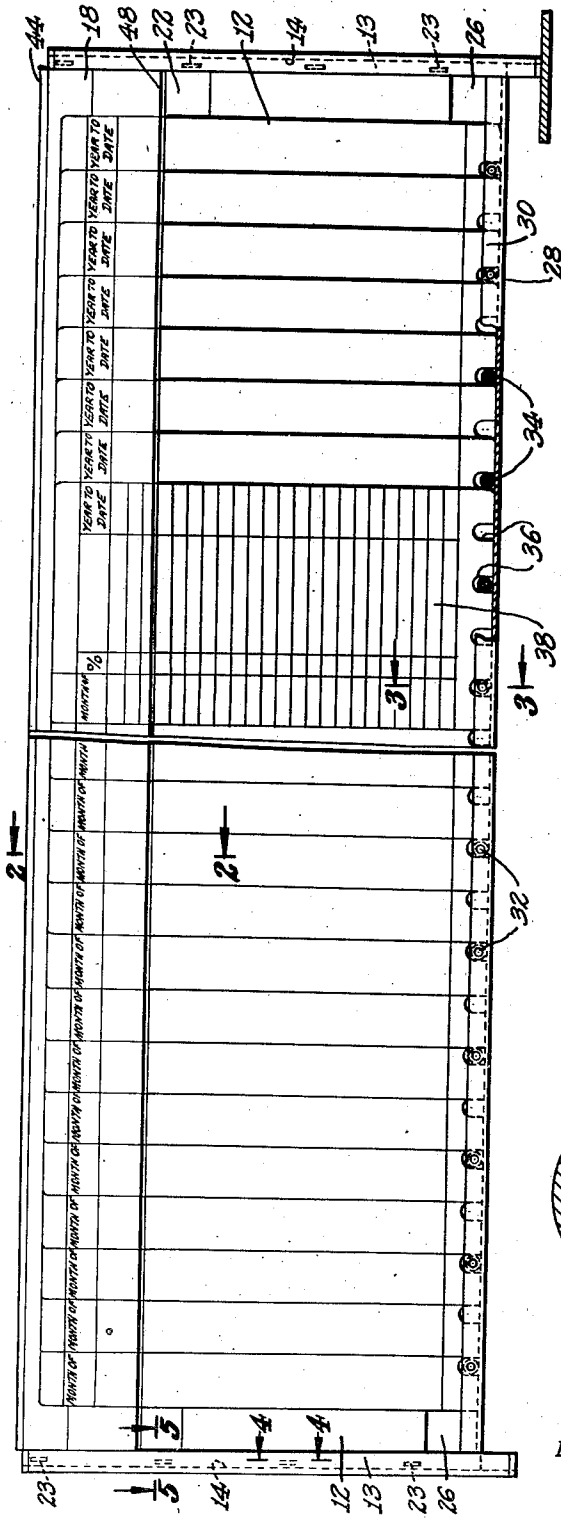


FIG. 1.

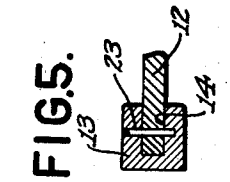


FIG. 5.

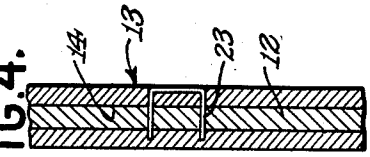


FIG. 4.

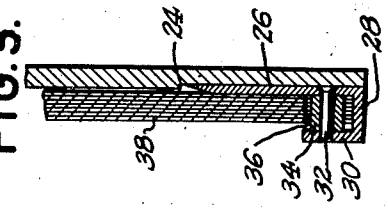


FIG. 3.

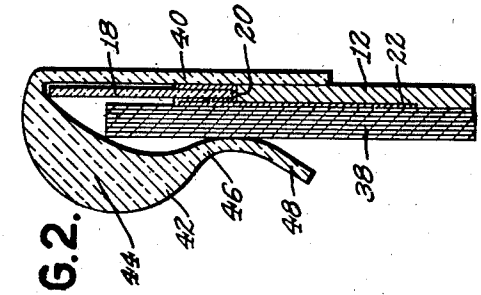


FIG. 2.

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FIG.6.

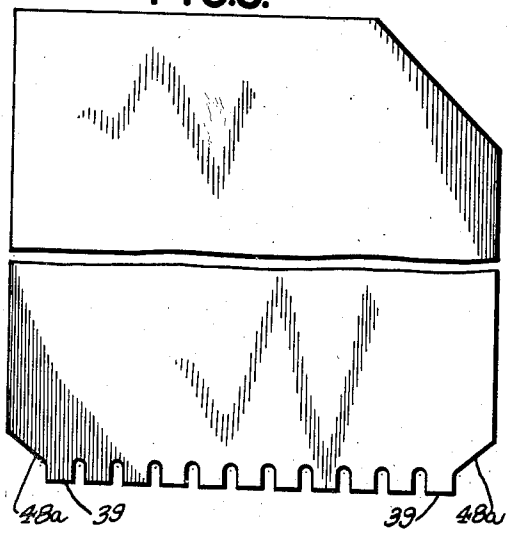


FIG.7.

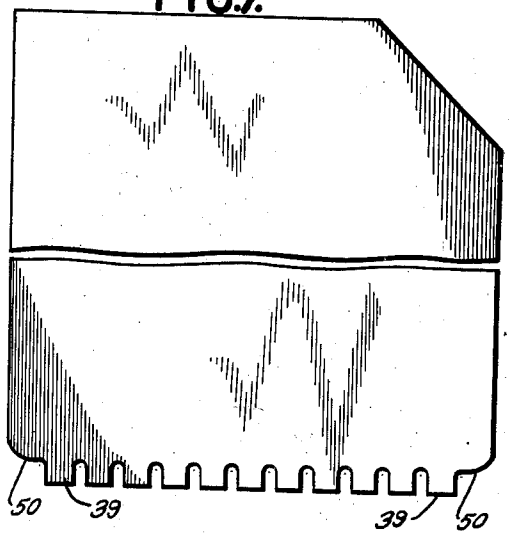


FIG.8.

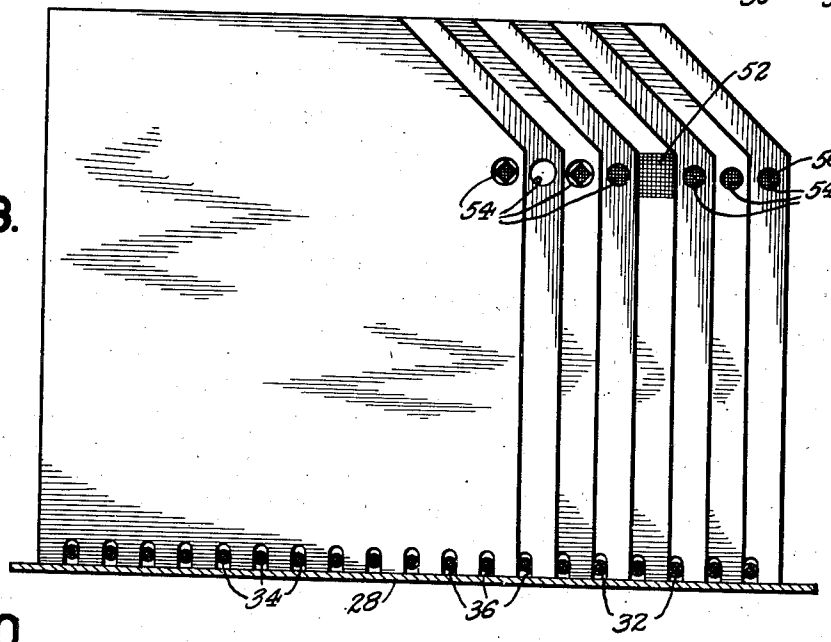


FIG.10.

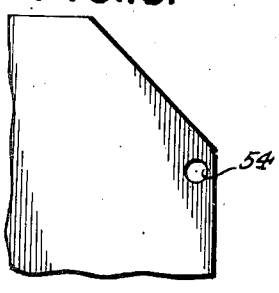
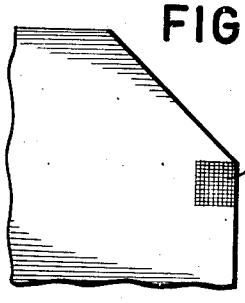


FIG.9.



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2,457,855

UNITED STATES PATENT OFFICE

2,457,855

ACCOUNTING AND FILING DEVICE

Herbert Weston, New York, N. Y.; vested in the Attorney General of the United States

Application October 1, 1942, Serial No. 460,463

4 Claims. (Cl. 129—16)

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This invention relates generally to card indexes or card registers of the kind in which the index cards or sheets have certain structural characteristics adapted to cooperate with portions of a holder for the cards to permit the positioning of the cards in relative offset relation whereby portions of all such cards will be visible. More particularly, the invention relates to holders for the cards whereby the cards and holders may be readily arranged and handled. Accounting and filing systems of this general character are disclosed and claimed in United States Patents Nos. 1,713,945 granted May 21, 1929, and 1,975,566 granted October 2, 1934.

In the aforementioned patents, it has been proposed to employ slotted cards cooperating with supporting or positioning ribs and the like whereby the cards may be offset horizontally with respect to one another and in its simplest form, this arrangement involved slotting the cards along the lower edges thereof for horizontal offsetting. Such cards have been contained within cabinets or drawers having inclined and adjustable back rests to support banks of the cards, individual banks being separated by adjustable or readily movable partitions or dividers.

One object of the present invention is an improvement in the partitions or dividers in the interest of a simplification of manufacture and strength and durability in use.

Another object of the invention is the utilization of the divider construction as a support for a plurality of cards which permits the cards to be arranged in any desired manner thereon while any one such support or holder for one group of cards may be readily moved, with the cards still in position on the holder, from one position relative to other card holders to another, as circumstances require.

It is also an object of the invention to provide the divider or card holder with means for supporting and positioning a plurality of cards arranged in echelon on the aforesaid card holder and divider combined so that one of these combined card holders and dividers may be removed from a cabinet and carried to a place where an inspection is to be made or notations to be inscribed upon particular cards.

Yet another object of the invention is to provide a combined divider and card holder of the character described having means to retain the cards against displacement accidentally.

A further object of the invention is the provision of means to retain the upper edges of the cards to prevent their displacement or falling

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away from the card support during movement thereof while at the same time not obscuring the indicia on the cards.

It is also an object of the invention to provide cards for arrangement in echelon in the manner described which are particularly suitable for the combined divider and card holder of this invention whereby an increased capacity of cards is afforded. In carrying this aspect of the invention into effect, a plurality of the cards may be arranged one behind the other in register while the several such groups may be arranged in echelon, the respective cards affording visual illustration of the absence of any card from its proper position.

The invention also seeks to facilitate the reading of the identifying data on the respective cards. In carrying this aspect of the invention into effect, magnifying devices are utilized which not only serve to retain the upper edges of the cards in position but make more legible the identifying characteristics applied to the upper portion of the cards.

It is also an object of the invention to permit the ready removal, say, of a rearmost card on the combined divider and card holder without disarrangement of the remaining cards.

Still another object of the invention is to arrange cards in groups and to arrange the groups in echelon while at the same time affording visual indication of any card missing in the group.

The invention also seeks to provide for an increased number of cards in a given space in a cabinet while at the same time affording a clear indication of any card missing from the group.

Again an object of the invention is to equip cards formed with tabs along their lower edges defining slots to be received on longitudinal parallel positioning members with provision for the prevention of the mutilation of the end-most bottom corners of the cards.

These and other objects of the invention and the means for their attainment will be more apparent from the following detailed description, taken in connection with the accompanying drawings illustrating various embodiments by which the invention may be realized and in which:

Figure 1 is a view, in front elevation, showing the improved divider or holder of this invention adapted to hold a plurality of cards for ready reading and comparison;

Figure 2 is a fragmentary, transverse, sectional view taken in the plane indicated by the line 2—2 of Figure 1 looking in the direction of the

arrows and showing means retaining the upper edges of the cards in position on the card holder and, at the same time, magnifying the indicia appearing on the upper portion of the card;

Figure 3 is a fragmentary transverse sectional view taken in the plane indicated by the line 3—3 of Figure 1 and showing the lower edges of overlapping cards and illustrating one means of positioning the cards at their lower ends;

Figure 4 is a fragmentary, transverse, sectional view taken in the plane indicated by the line 4—4 of Figure 1 looking in the direction of the arrows and showing improved means of securing a panel to the end members of a divider or card holder;

Figure 5 is a fragmentary, transverse, sectional view taken in the plane indicated by the line 5—5 of Figure 1 looking in the direction of the arrows and at right angles to Figure 4, showing details of construction;

Figures 6 and 7 are views in front elevation showing cards provided with notches in their lower edges defining feet on which the cards rest on a support or bottom and having particular provision to prevent mutilation of the tabs defining the end-most slot at each side edge of the cards:

Figure 8 is a view showing a plurality of groups of cards in which cards of a group are arranged in register with one another, the groups of cards being arranged in echelon and provision being made for indicating the absence of a card from the group;

Figure 9 is a view of a card which may be the rearmost card of a group of cards arranged in register with another card as illustrated in Figure 8; and

Figure 10 is a fragmentary view showing a card provided with means for indicating the absence of a rearmost card.

Referring first to Figure 1, the structure there shown is applicable to a readily movable partition or divider such as shown in United States Patent No. 1,975,566. The holder is illustrated as comprising a panel 12, Figure 1, having an end rail 13 at each end to which the panel may be fixed by insertion of the ends thereof in grooves 14, Figure 4, in the end rails 13. The end members 13 may be channel-shaped in cross-section to define the grooves and extend downwardly, conveniently, although not necessarily, a sufficient distance below the panel 12 so that the panel itself is raised slightly above the bottom of a cabinet or drawer in which the divider-like card support is disposed, such bottom or drawer frequently containing parallel positioning members, as at *b* in the aforesaid patent, over which the tabs on the bottom of the cards straddle whereby the cards stand on the bottom of the cabinet and the cards are supported above the positioning members. It will be apparent that a plurality of such divider-like holders 12, 13 may be disposed in parallel relationship and closely positioned with respect to one another in a cabinet, for instance, such as shown in United States Patent No. 1,713,945.

The end rails 13 are conveniently formed of plastic or other composition although they may be formed of metal. However, it has been found that the metal rails, striking against a metal cabinet or container, create unnecessary noise which non-metallic end rails overcome.

A transparent strip 18 above the top of the end rail or panel is illustrated as supported in a reversely bent holder 20 which is counter-sunk in the front face of the panel, as at 22, and is conveniently secured therein as by an adhesive.

This transparent strip 18 and the panel 12 are conveniently secured in channels or grooves 14 in the end rails by a plurality of staples 23 which are countersunk, as shown in Figure 5, in the one wall of the U-shaped or longitudinally grooved end rail, and the ends of the staples pass through the panel and enter the wall of the end rail on the opposite side of the groove, as shown in Figure 4. The transparent strip of plastic 18 in the metal pocket 20 lies in front of the top horizontal margins of cards arranged on a similar supporting panel therebehind, thus permitting clear vision of signalling and indexing features of as many record cards at a glance as are disposed behind the respective panels.

The lower edge of the panel is rabbeted, as at 24, and provided with a supporting base member or pocket consisting of a rear wall 26 of considerable height, a bottom wall 28 and a front wall 30 relatively low. Pins 32 pass through the front wall 30 and are seated in the rear wall 26. The pins 32 are provided with collars or bushings 34 of a size to be received within the notches 36 formed along the lower edges of the cards 38 thereby providing tabs 39 positioning the cards as illustrated. The positioning pins 32 and the coacting slots or notches 36 are so relatively positioned that the selected cards are offset laterally from one another whereby indicia along edge portions of the cards may be visible when the cards are arranged in echelon.

While the upper ends of the cards 38 may be retained by any suitable retaining member, there is shown a retaining member or laterally elongated clip in Figures 1 and 2 comprising a flat rear wall 40, and a forwardly and downwardly extending front wall 42. In the illustrated embodiment, the forwardly and downwardly extending portion is thickened, as at 44, and is made of a transparent plastic preferably having some of the surface contours and characteristics of a lens whereby the indicia along the upper edges of the cards are made not only visible but are magnified for ready reading. Below the lens portion 44, the front portion of this upper retaining member is bent rearwardly, as at 46, and then forwardly, as at 48, so that the reversely bent portion 46, 48 will engage the cards 38 and hold them in position. The member 40—46 as a whole serves as a spring clip to embrace fit down over the card support 12 with its upwardly projecting transparent strip 18, and the cards 38 to releasably retain the cards against displacement and prevent their upper edges from falling forwardly when a card support with its attached cards 38 is moved. If desired, the retaining member for the upper edges of the cards may be releasably secured to the panel as illustrated, for instance, in my copending application Serial No. 437,752, filed April 6, 1942 now abandoned.

In Figure 8, a bank of cards is illustrated which is suitable for support on the panel just described although having other and wider uses. The cards are formed with notches 36 at predetermined intervals along their lower edges defining tabs or feet therebetween on which the cards rest upon the bottom 28, say, of the holder. The cards are retained in echelon by positioning members such as those illustrated at 32, 34 but the notches defined by the feet or tabs are of greater depth than the height of the positioning members above the bottom 28 so that the cards rest on the bottom or base plate.

Rough handling sometimes bends or breaks the respective end-most tabs on the bottom or lower edges of the cards and in order to avoid such mutilation which would obviously render difficult the insertion of the cards in the desired positions on the bottom of the cabinet, cards have been devised, as illustrated in Figures 6 and 7, wherein the bottom corners are cut away either on a slant as at **48***a*, as illustrated in Figure 6, or on a curve as illustrated at **50** in Figure 7. Thus the edges of the cards projecting outwardly from the tabs **39** protect the tabs against mutilation.

It has heretofore been proposed to provide the cards for arrangement in echelon with indicia such as marks or spots along such areas of their side or upper edges which are normally covered by the overlapping cards but which, if such overlapping card is missing, disclose indicia indicating immediately the absence of such a card. However, there are situations where for one customer, for instance, or one particular job a plurality of cards is required which could conveniently be arranged in register one behind the other except for the fact that no visual indication or signal would be given if a card were missing. To obviate this difficulty, some of the cards of this invention, as illustrated in Figure 9, are provided with a colored spot **52** while a corresponding card, at the same corresponding point, is provided with an aperture **54**, here illustrated as a round hole. When a card with a colored spot is in place behind a card with a hole, the color is visible through the hole, as at **56** (Figure 8), and indicates that the card belonging therebehind is in its place. On the other hand, if no color is visible through the hole, it is obvious that the card therebehind is missing. Similarly, if a card belonging in front of the colored spot is missing, instead of a round spot of color the large square spot of color **52** is displayed and this indicates immediately to the observer that the front card is missing. Obviously apertures of different shapes may be provided. For instance, a card intermediate the card with the round hole and the card with the colored area may be provided with a diamond shaped aperture. Therefore, if a diamond shaped colored spot is visible through a round hole, it is obvious that all three cards are in position whereas if a round spot is visible, it is obvious that the card with the diamond shaped aperture is missing.

It will thus be seen that an improved divider or separator for cards is provided which is ruggedly made in an expeditious manner so that it will not warp out of shape, is sturdy in construction and simple of manufacture and is capable of application as a card holder by the simple addition of a lens-like top card edge holding device and a bottom support. Furthermore, means are provided which enable the cards to be readily accounted for even where cards are arranged in register one behind the other and the cards may be so constructed as to avoid mutilation in insertion and removal. Such a holder for cards is readily carried about and moved from place to place in a cabinet or from a cabinet to a desk and back to the cabinet again, materially reducing the time to change the cards, individually, and the holders may be conveniently held against displacement and moved from place to place in the cabinet.

Various modifications will occur to those skilled in the art in the composition, configuration and

disposition of the component elements going to make up the invention as a whole as well as in the application of the divider as a card holder by the addition of supplemental parts as well as in the selection of signalling apertures, and no limitation is intended by the phraseology of the foregoing description or illustrations in the accompanying drawings except as indicated in the appended claims.

What is claimed is:

1. In a card register, a holder adapted to support cards in echelon comprising a panel, end members to support the panel, a supporting member for cards secured to the panel longitudinally along the lower portion thereof, pins disposed along the supporting member to position the cards, bushings on the pins, and a retaining member engaging the upper edge of the cards and panel and comprising a magnifying channel-shaped clasp.

2. In a card register, a holder adapted to support cards in echelon comprising a panel, end members to support the panel, a supporting member for cards secured to the panel longitudinally along the lower edge portion thereof, means to position the cards, and a retaining member engaging the upper edge of the cards comprising magnifying means.

3. In a card register, a holder adapted to support cards comprising a panel, means carried by the panel to support and position the cards in echelon and a retaining member engaging the upper edge of the cards and the panel and comprising a magnifying substantially channel shaped clasp.

4. In a card register, a holder adapted to support cards comprising a panel, means carried by the panel to support and position the cards in echelon and a retaining member engaging the upper edge of the cards and the panel and comprising a channel shaped clasp whereof at least that portion overlying the cards is magnifying.

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