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J. A. KRIEG

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SIGNAL CARD FILE

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Fig. 5

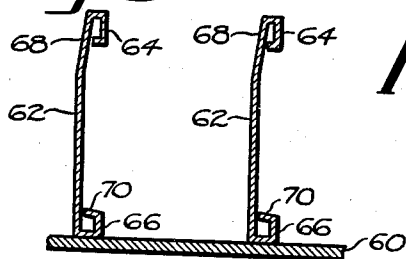


Fig. 2

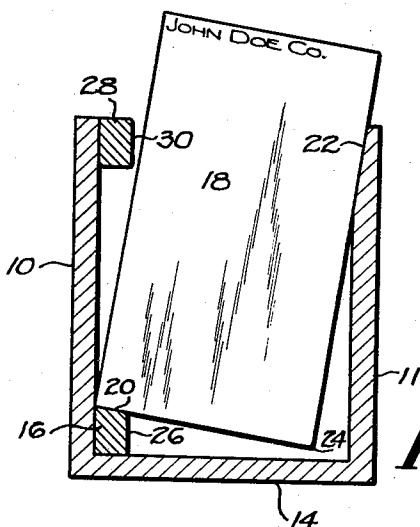
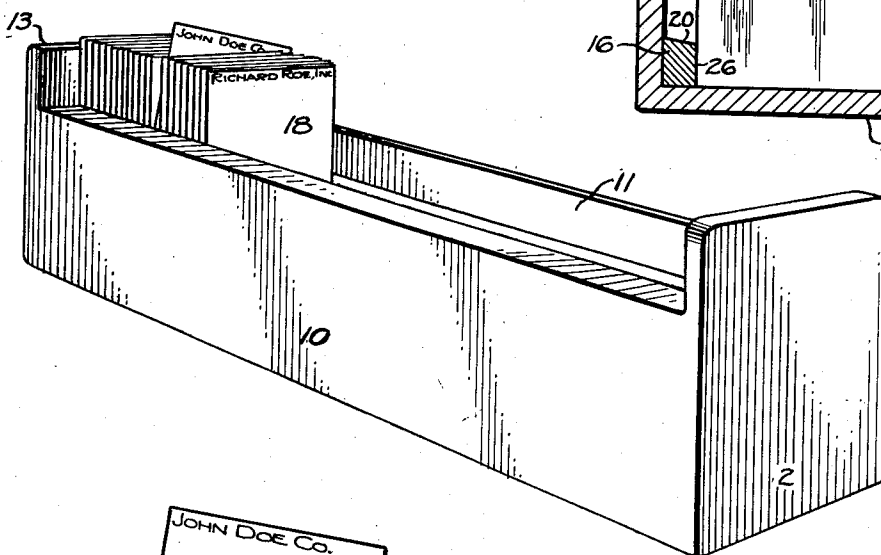
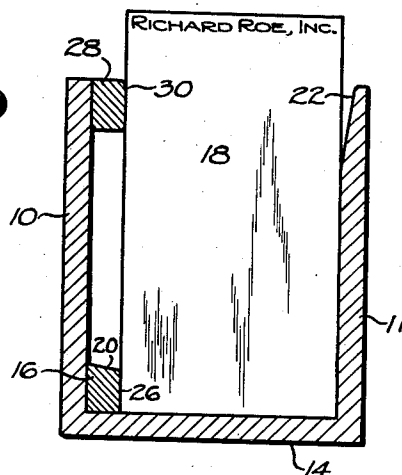


Fig. 1

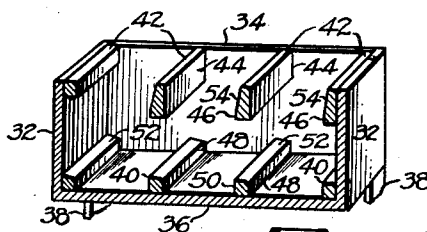


Fig. 3

Fig. 4

Inventor

JOSEPH A. KRIEG

By

Clayton R. Jenkins

Attorney

UNITED STATES PATENT OFFICE

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SIGNAL CARD FILE

Julius A. Krieg, Waterville, Conn., assignor to
E. Stanley Wright, Shrewsbury, Mass.

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7 Claims. (Cl. 129—16)

This invention relates to a signal card file, and more particularly to a receptacle which is so constructed and arranged that a plurality of cards may be filed therein and any desired card may be set in a prominent position where it will attract attention.

It is often desirable that one or more cards in a file be raised slightly above the remainder so that the exposed portion will act as a signal.

Various types of file boxes have been provided heretofore for that purpose, wherein a card may be moved from its normal position into a signalling position; but those not having special holding devices have depended largely upon the friction of one card against another to hold the signal card in place, so that the normal use of the card file for removing or inspecting other cards has often resulted in the signal card dropping back accidentally into its normal position.

The primary object of this invention is to provide a signal card file, wherein a group of cards may be filed normally with their tops at the same level, and any given card may be raised to a signalling position where it will be held positively during normal usage of the file and cannot drop back accidentally into its regular filing position.

A further object is to provide a simple, inexpensive and efficient construction to satisfy the above purposes and one which lends itself to innumerable uses and various systems of filing cards. Further objects will be apparent in the following disclosure.

Referring to the drawing which illustrates various embodiments of this invention, and wherein like reference numerals indicate like parts:

Fig. 1 is a perspective view of a signal card file containing a set of cards in a normal filed position and a single card displayed in a signalled position;

Fig. 2 is a transverse vertical section through the box with a card displayed in a normal filing position;

Fig. 3 is a similar transverse sectional view showing a card tilted into a signalling position;

Fig. 4 is a fragmentary perspective view of a modified form; and

Fig. 5 is a fragmentary sectional view of a further modification.

My card file comprises a receptacle arranged to hold a set of cards, one back of another, in a normal filing position and which is provided with a shelf so constructed and arranged outside of the normal filing position that a card may be tilted to a signalling position where it rests on that shelf and leans against the opposite side

wall of the box. The receptacle or box may be of any suitable shape and design arranged to hold one or more groups of cards of all sorts of types and shapes. It is, however, simply illustrated in the drawings as being substantially of the shape of a parallelepipedon open at its top and having the sides 10 and 11 secured together by the end walls 12 and 13 and a bottom 14. The box may be made of any suitable material, such as wood, metal and the like. The two side walls 10 and 11 are spaced apart by a distance considerably greater than the width of the card to be filed. Running lengthwise of the box and arranged in a lower corner between the walls 10 and 14 is a shelf or a strip 16 of suitable material which has such dimensions that the cards, as shown in Fig. 2, will fit properly between this shelf and the wall 11 while resting normally on the bottom 14 of the box.

When it is desired to move one of the cards into a signal position, this card is lifted by hand and tilted, as shown in Fig. 3, so that its lower corner rests on the top surface 20 of the shelf 16. This surface 20 is preferably at such an angle to the upper surface of the bottom 14 that the card 18 will make a line contact with the shelf and will not merely rest against a sharp edge thereof. Likewise, the opposite wall 11 is preferably beveled to provide an extensive plane surface 22 which is substantially at right angles to the surface 20, so that a rectangular card will make an extensive line contact with that wall 11 and thus cannot be nicked or otherwise injured by lying against a sharp corner of the wall. The height of the shelf 16 is also such that the lower corner 24 of the card 18 will preferably be out of contact with the bottom 14 of the box and so it will not be bent or otherwise injured. For many purposes, such as when the cards are to be run through tabulating machines, it is highly desirable that the cards be perfectly flat and present straight edges.

The side surface 26 of the shelf 16 is so spaced from the wall 11 that the cards will fit properly therebetween, as indicated in Fig. 2, and only a slight amount of play is ordinarily permitted in such a file. This surface 26 is perpendicular to the bottom of the box and parallel with the inner face of the wall 11 so that this wall 26 actually constitutes a side wall of the file. As a further support for the upper edge of the card when filed normally, a strip 28 of the same width as the shelf 16 is secured to the inside of the wall 10 or to the end walls 12 and 13 near the top of the box. Thus, the inner face 30 of that strip 28 and

the face 26 are aligned in the same plane and form what may be considered as the inner wall of the file which properly locates the cards in their normal position.

5 It will be noted that the shelf 16 and the block 28 are spaced apart sufficiently and their dimensions are such relative to the beveled face 22 of the wall 11, that the card in its tilted position may lie partly beneath the block 28 and yet the 10 lower inner edge of that block will not normally contact with the tilted card and thus injure it. While various constructional arrangements may be employed, I have found that the relative proportions shown in Figs. 2 and 3 are suitable for 15 a card which is $3\frac{1}{4}$ inches wide and of a proportional height. In this construction, the plane surfaces 20 and 22 make angles of about $8\frac{1}{2}^\circ$ with the bottom 14 and the side wall 11 respectively of the box. The shelf 16 and the block 28 are 20 approximately one-half inch wide and the shorter vertical side 26 of the shelf 16 may be $\frac{5}{8}$ inch high. Other dimensions may, of course, be employed to meet the needs of the various types of cards and file systems which are to be used.

25 Since the surfaces 26 and 30 are parallel with the lower portion of the inner wall 11, these serve actually as the lateral wall which holds the cards 18 in position, and the wall 10 may therefore be wholly omitted, if this is desired for economy of 30 construction or because of space limitations. When the construction is to be built into a tub desk which has a plurality of partitions arranged to file a multiplicity of groups of cards side by side, then not only the partition 10 but also the 35 partition 11 may be omitted, since the left hand walls of the blocks 16 and 28 may serve as the defining surfaces which support the cards laterally on their right hand sides. This construction which lies within the scope of my invention 40 is illustrated in Fig. 4, wherein a tub desk comprises the side walls 32 and end walls 34 and the bottom 36 suitably mounted on legs 38. The two sets of surfaces which hold the cards in their normal and their signalling positions are formed 45 by shaping the shelf 16 and the spacer block 28 of Fig. 2 so that they now have the shapes illustrated in Fig. 4. That is, the shelves 40 are provided in parallel arrangement as illustrated on or near the bottom of the tub and these are 50 spaced apart and constructed as above defined. Likewise, the spacer strips 42 are suitably secured to the side and end walls of the tub as shown, so that their opposed parallel faces 44 and 46 are aligned respectively with the vertical 55 parallel faces 48 and 50 of the shelves to define the lateral supporting surfaces which hold the cards in their normal filing positions. The sloping tops 52 of the shelves and the beveled faces 54 of the spacer strips form the right angle 60 surfaces which support the cards in their signalling positions. It will, therefore, be appreciated that the walls mentioned in the claims are to be interpreted as covering these spaced surfaces illustrated in Fig. 4 as well as the wall 65 surfaces illustrated in Figs. 1, 2 and 3.

70 Since these wall surfaces may be constructed of metal, a very simple construction for the partition of a tub or for the similar parts of trays, cabinets, drawers and the like may be made as 75 illustrated in Fig. 5 of a single piece of thin strip metal bent to the configuration there illustrated and suitably secured in a receptacle 60. That is, the thin sheet metal may form a vertical partition 62 which supports the cards on the right side. The upper portion of this strip is bent to

form a loop having the vertical surface 64 which cooperates with the vertical surface 66 of a loop at the bottom to support the cards on the left hand side in the normal filing position. The sloping wall 68 at the top and the sloping shelf 70 at the bottom hold the cards in their tilted and raised positions. Many other variations in the constructional features of this file may be made within the scope of the appended claims.

10 The utility and the operation of this device may be illustrated by its application to a tabulating system. In such a system, certain master cards have their data in a definite arrangement so that they may be punched in a punching machine. This information is partly or wholly 15 transcribed from the master card onto various transaction cards, such as those containing the customer's name, the account number, territory, state, etc. The master cards, which are filed in this signal file may be made in duplicate and 20 filed in pairs in an alphabetical arrangement. For any transaction to be posted, reference is to be made to the master cards and the proper card selected in accordance with the account indicated by the invoice. One of the pair of 25 master cards is then withdrawn, and the other card is lifted onto the shelf where it will remain as a visible signal until the duplicate card is returned and filed therewith. The withdrawn card may be passed to a duplicating printing punch, 30 which automatically reproduces the punching from the master card on to one or more transaction cards. The master cards may ordinarily be withdrawn in an alphabetical sequence and retained in that order so that it will be very 35 simple to return the cards to the original file. For that purpose, it is merely necessary to place the card in front of or in back of the signal card and then lift the two slightly and drop them both into the normal position, as shown in Fig. 2. 40 Thus, it is possible to transfer the markings on these master cards to other cards which are used as are needed for registering trial balances, statements, sales analyses, expense analyses, purchases, etc. Likewise, a set of the pre-punched 45 transaction cards, as many as needed, may be placed in back of the master in the file and then withdrawn as needed. When this group of cards nears depletion, a master card may be placed in the signalling position and its duplicate withdrawn for creating a further supply of pre-punched transaction cards. 50

It will, therefore, be apparent that the master card should remain in its signal position and not be affected by any movement of the other cards, 55 such as when one is looking for particular information. In the construction above described, the surfaces 20 and 22 form a complete support for the card in its signalling position and any frictional movement caused by withdrawing or 60 inserting other cards will not move the signal card from its tilted location. Hence, any card will remain in either its normal or its signal position until it is positively moved therefrom by the operator. This construction has many ad- 65 vantages, such as its facilitating the handling of cards for reference within the file or for removal therefrom, it may signify what cards have been removed from the file, it directs attention to certain cards remaining in the file, it reduces 70 to a minimum the time required for refilling a card that has been withdrawn, it preserves the cards in such condition that they may be used for tabulating machine purposes and it permits cards to be filed as in an ordinary file without 75

reference to any signalling system. It will also be appreciated that various modifications may be made in the construction and arrangement of these parts within the scope of the appended claims.

I claim:

1. A signal card file comprising a receptacle having parallel vertical surfaces and a bottom which serve to hold cards in a normal filing position, and a shelf above the bottom and outside of the normal card position which is arranged to make an extensive line contact with and support a card tilted against an opposed surface adjacent to the top of the card and hold it in a raised and signalling position.

2. A signal card file comprising a receptacle having a bottom, a side wall and end walls which serve to hold cards in a normal filing position, a shelf above the bottom and outside of the normal card filing position which is arranged to support a card tilted against said side wall, the top surface of the shelf being a plane substantially parallel with the bottom of a rectangular card in said tilted position.

3. A signal file comprising a receptacle having a bottom, end walls and parallel side walls defining a space for filing cards normally, a sloping shelf located outside of said space and above but near the bottom, and a wall arranged at right angles to the shelf at the opposite side of the card space and near the top thereof which cooperates with the shelf to support a card with an extensive line contact on each surface in a raised and tilted signalling position.

4. A signal file comprising a receptacle having a bottom, a shelf near the bottom which has a top and a side wall, a spacer strip above the shelf having a side wall aligned with said side wall of the shelf, a wall having its lower portion parallel with said side walls and spaced therefrom to form with the bottom a normal card filing space, said shelf and spacer strip being located outside of said space and so arranged that a card may be supported in a raised position on the shelf and partly beneath the spacer strip and

tilted against an extension of said parallel wall in a signalling position.

5. A signal file comprising a receptacle having a bottom, a side wall, a shelf near the bottom, a spacer strip above and spaced from the shelf, said shelf and strip having aligned vertical walls spaced from and cooperating with said side wall to form a normal card filing space, the top of said shelf being located outside of said space and sloping at an angle so that a card may be supported thereon with an extensive line contact and tilted against the opposed side wall in a signalling position.

6. A signal file comprising a receptacle having a bottom, a shelf near the bottom having a sloping top and a vertical side wall, a spacer strip above the shelf having a side wall aligned with the side wall of the shelf, an opposed vertical wall forming with said side walls a normal card filing space at one side of the shelf, and a sloping wall at the same side of the card space as said last named vertical wall and near the top which is arranged at right angles to the shelf top, said parts being so constructed that a card may be raised from the normal filing space and supported in a tilted position on said sloping wall and shelf top.

7. A signal file comprising a receptacle having a bottom, end walls and a side wall, a shelf having a sloping top spaced a short distance from the bottom and a side face spaced from said side wall so as to provide a normal card filing space at one side of the shelf top, a spacer block above and having its side face substantially aligned with the side face of the shelf for laterally supporting a normally positioned card, the side wall having a beveled surface near its top which is substantially at right angles to the sloping top of the shelf, and the dimensions and angular arrangements of said parts being such that a card may be supported in a tilted position with extensive line contacts on the shelf and said beveled surface and out of contact with the spacer block and the bottom.

JULIUS A. KRIEG. 45