C. A. DISBROW & C. S. BOLL.

CARD INDEX.

APPLICATION FILED APR. 28, 1913.

1,097,172.

Patented May 19, 1914.

FIG. 1

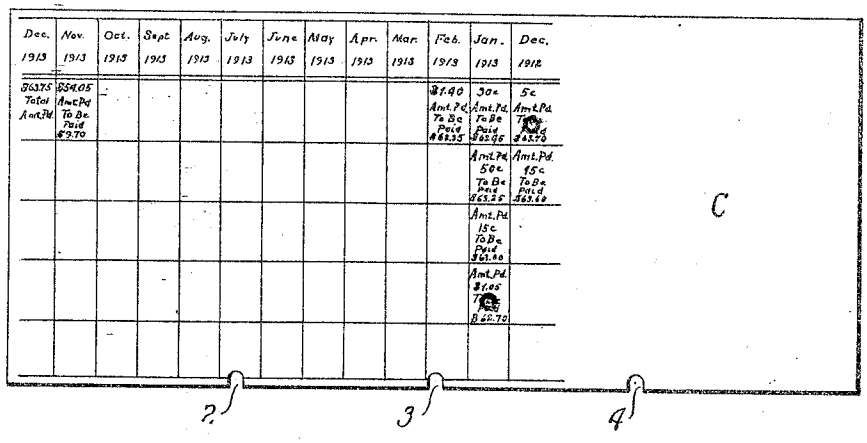


FIG. 2

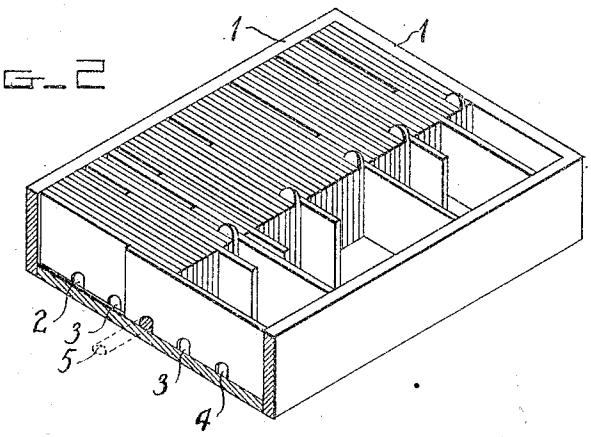


FIG. 4

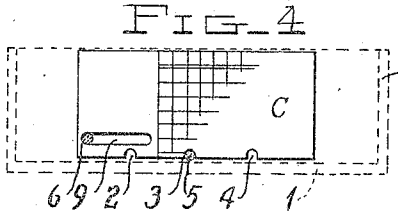
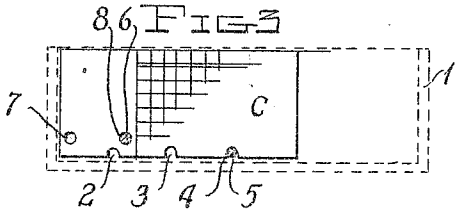


FIG. 3



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UNITED STATES PATENT OFFICE.

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CARD-INDEX.

1,097,172. Specification of Letters Patent. Patented May 19, 1914.

Application filed April 28, 1913. Serial No. 764,164.

To all whom it may concern:

Be it known that we, CHARLES A. DISBROW and CHARLES S. BOLL, citizens of the United States, residing at Harrisburg, in the county of Dauphin and State of Pennsylvania, have invented certain new and useful Improvements in Card-Indexes; and we do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to card indexes, and is particularly adapted for use in connection with said indexes when they are employed for the purpose of keeping accounts; and the object of the same is to provide means whereby at the end of a given period such as one day those persons whose names are indexed and who have paid may be readily distinguished from the others because of the position of their cards, and whereby at the end of a given period such as a week those persons who have not paid may be distinguished from those who have paid that day or that week because of the special position of their cards.

A further object is to provide peculiar means for locking the cards in their drawers or trays when the same are not in use.

These objects will appear from the following specification and claims, and are shown in the drawings wherein—

Figure 1 is a plan view of one of the cards which may be employed in this connection. Fig. 2 is a perspective detail of one of the trays, showing its cards in several different positions. Figs. 3 and 4 are diagrammatic elevations illustrating the cards in the tray or box and in different positions, these views being for the purpose of showing how the cards are locked therein when they are at their extreme left-hand positions or their intermediate positions as will be explained below.

The card C illustrated herewith in detail in Fig. 1 is that commonly employed with what is known as the "Christmas savings scheme" whereof we are the proprietors, and it is ruled and cross ruled to produce checks or squares properly inscribed to designate the date and the amount of weekly instalment payments which are to be made at a bank or designated place by the members of this club—such being the fundamental principle thereof. As the payments sometimes begin at five cents the first week and run upward by progressive steps, and sometimes begin at fifty-two cents the first week and run downward to one cent the last week, it is obvious that the instalments are small and the labor on the teller who receives them is considerable; and it is the purpose of the present invention to provide a card index system which will reduce the labor as much as possible.

Coming now to the details of the present invention, the number 1 designates a box or tray, or it might be the drawer of a cabinet, in which the cards are to be kept. In large institutions where there are many members of a club, these trays may be of metal and are stored at night in the vault, and if possible each tray will be of a size to contain a thousand cards. The latter along their lower edges are notched as at 2, 3, and 4, the notch 3 being about intermediate the ends of the card and the other two notches 2 and 4 equi-distant from it on opposite sides. Along the bottom of the tray mid-way between its sides is a rod or wire 5, and the width of this tray is such that when the right hand notch 4 engages this rod the left end of the card will lie against the left side of the tray as seen in Fig. 3, the engagement of the left-hand notch 2 with the wire will cause the card to lie against the right side of the tray, and the engagement of the intermediate notch 3 with such rod or wire will cause the card to stand in an intermediate position as seen in Fig. 4.

Assuming now that all the cards are placed against the left side of the box, and a day's business begins. As soon as a member approaches the teller's window to pay his or her dues, the card is found by the member's name or number, taken out of the box, suitably marked or punched to indicate the payment, and returned to the box in proper order except that the left-hand notch 2 is engaged with the rod or wire 5 so that the card stands over against the right side of the box. This continues throughout the day, and at the end of the day those cards which stand against the right side indicate the payments received that day. These payments are called off and added up, and the total is checked up with the amount in the cash drawer; and then these cards are pushed back to an intermediate position within the box where their intermediate notches 3 engage the rod or wire 5. If we

assume that this is Monday evening, those cards which have thus been moved indicate the members who have paid on Monday. On Tuesday the same process is repeated, and by Tuesday evening those members who have paid that day will have their cards lying against the right side of the box; these are called off and added and checked up with the amount in the cash drawer, and then these cards also are pushed back to an intermediate position, and the cards which stand along the center of the box now indicate the members who have paid on either Monday or Tuesday. The process is carried out throughout the remainder of the week, and by Saturday night the bulk of the members will have paid their dues and their cards will lie along the center of the box while a few absent, sick or delinquent members will have their cards lie along the left side of the box, and proper treatment may be accorded them. If the instalment payment be weekly, on Monday morning all cards are again returned to the left side of the box for a repetition of the process during the next week.

So that the invention provides means in the three notches in the lower edge of the card and the one rod along the center of the box, whereby any card can be lifted out and restored to one of two other positions or to its former position. Of course if it is restored to its former position, it no longer differs from those cards from which it was taken and therefore designates nothing, but if it be changed to one of the other two positions it may be made to designate anything the user desires. Yet the invention does not contemplate that the card shall be permanently removed from the box, for after it is taken out and marked, punched or otherwise inscribed to indicate what has happened, it is restored to the box and to its proper position in line with the other cards, alphabetically, chronologically, or otherwise. The only feature of the present invention which comes into play at this time is the peculiar position transversely of the box which the card occupies after it is restored. As these boxes are sometimes trays which, morning and evening, are carried from the vault to the teller's desk and from his desk back to the vault, it may be that an accident might occur in transit either way so that a tray should be upset. This of course would result in the spilling and confusion of a thousand cards, and would require considerable labor to restore them to their former position. To prevent such an untoward accident, we prefer to provide the trays with locking rods 6 and the cards with two openings 7 and 8 each or with a single elongated opening 9 which is practically the same thing in effect as will be seen. Said openings 7 and 8 are spaced apart the distance of two of the notches, as 2 and 3, and the length of said opening 9 is the same as this spacing. The disposition of the openings 7 and 8 or of the extremities of the single opening 9 is such that the locking rod 6 will engage one opening or one end of the long opening when the cards stand in one extreme position, will engage the other opening or the other end of the long opening when the cards stand in the intermediate position, and will pass by one end of the card when the latter stands in the other extreme position. When the tray is brought out to be used and laid on the teller's desk, this locking rod is removed and immediately he is at liberty to use the cards as above described. After the cards at the left end of the box as seen in Fig. 3 are moved to an extreme right-hand position during the day and called off and checked up and moved back to an intermediate position that evening, the teller can reinsert the rod 6 and it passes through the right-hand openings of all those cards which have not been moved and through the left hand openings of those that have been moved in a manner which will be clear. Next morning when the tray is again brought into use, this rod can be withdrawn without disturbing the position of the cards that have been handled the day before. If it should so happen that at the end of a day's work for some reason the payments on the paid cards are not called off and checked up, the teller can insert the rod past the end of all these cards because they stand so far to the right, and defer calling off and checking up until the next morning.

Thus is produced an extremely simple lock for cards which are yet in two of the three positions described. As just suggested, the long opening 9 is the equivalent of the two independent openings 7 and 8, because its ends are spaced apart the same distance as are said independent openings, and we will refer to the openings in the plural in the claims below. The parts of this device are by preference of metal, or the rods might be metal and the drawer or tray of wood; and the cards will be of cardboard as usual. The sizes and proportions are immaterial to the successful operation of the device.

What is claimed as new is:

1. In a card index, the combination with a series of cards whereof each has in its lower edge a notch midway between its ends and other notches equally spaced on opposite sides of the intermediate notch; of a box wider than the length of the cards by the distance between its two most distant notches, and a rod along the transverse center of the bottom of the box, for the purpose set forth.

2. In a card system of bookkeeping, for instalment accounts, the combination with a series of account cards inscribed with

legends to be punched as instalments are paid, each card having three notches in its lower edge; of a box wider than the length of the cards, and a rod arranged substantially along the transverse center of the bottom of the box, for the purpose set forth.

In testimony whereof we have hereunto set our hands in presence of two subscribing witnesses.

CHARLES A. DISBROW.
CHARLES S. BOLL.

Witnesses:
E. A. NISSLEY,
RUSSELL S. SAYFORD.