Sept. 23, 1924. 1,509,640

W. G. CONOVER

CARD SYSTEM FILING DEVICE

Filed April 11, 1919 2 Sheets-Sheet 1

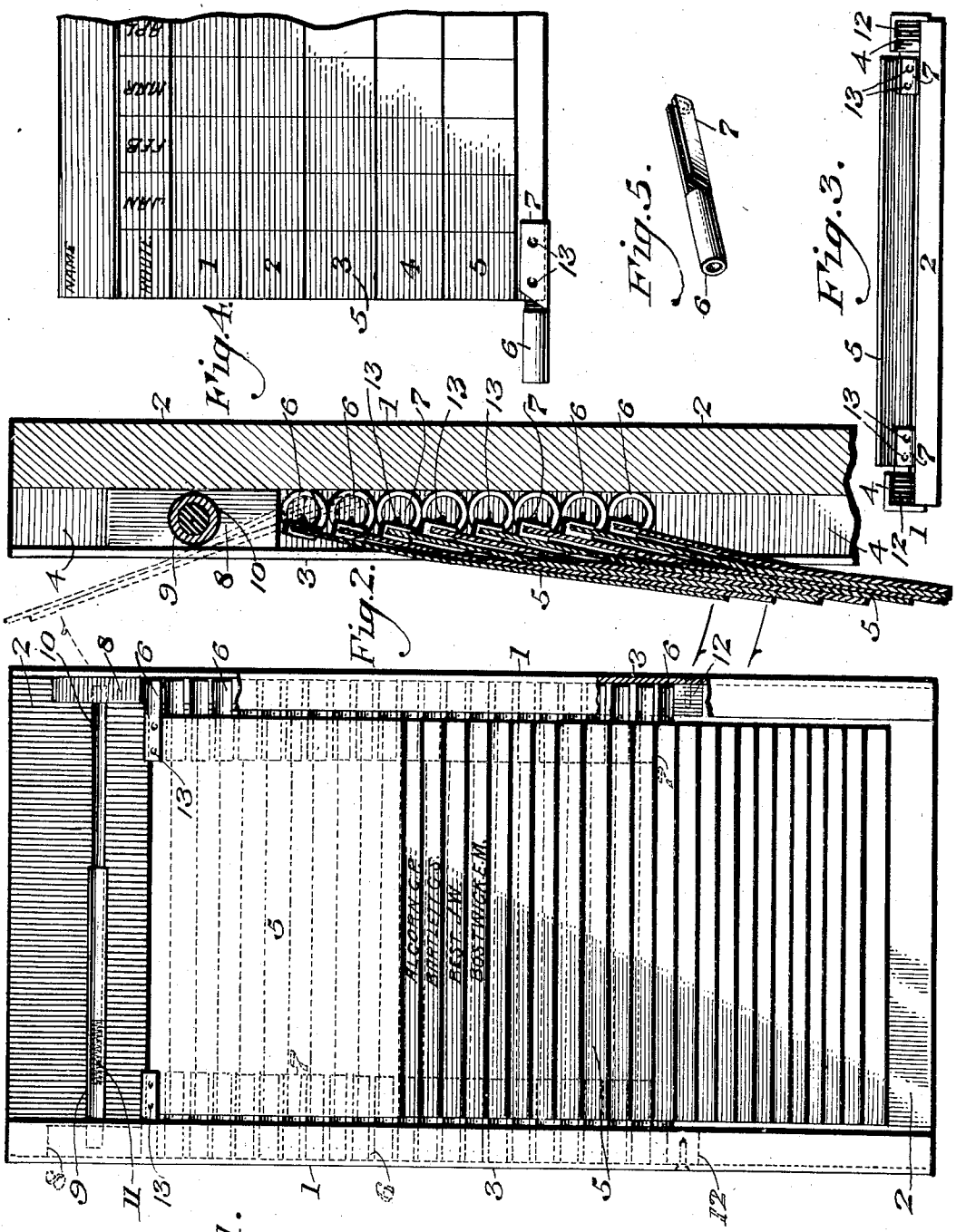


Fig. 1.

Fig. 2.

Fig. 3.

Fig. 4.

Fig. 5.

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Fig. 9.

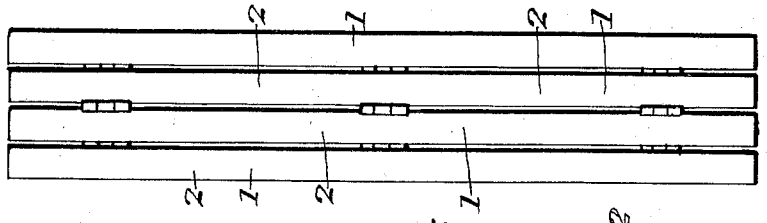


Fig. 8.

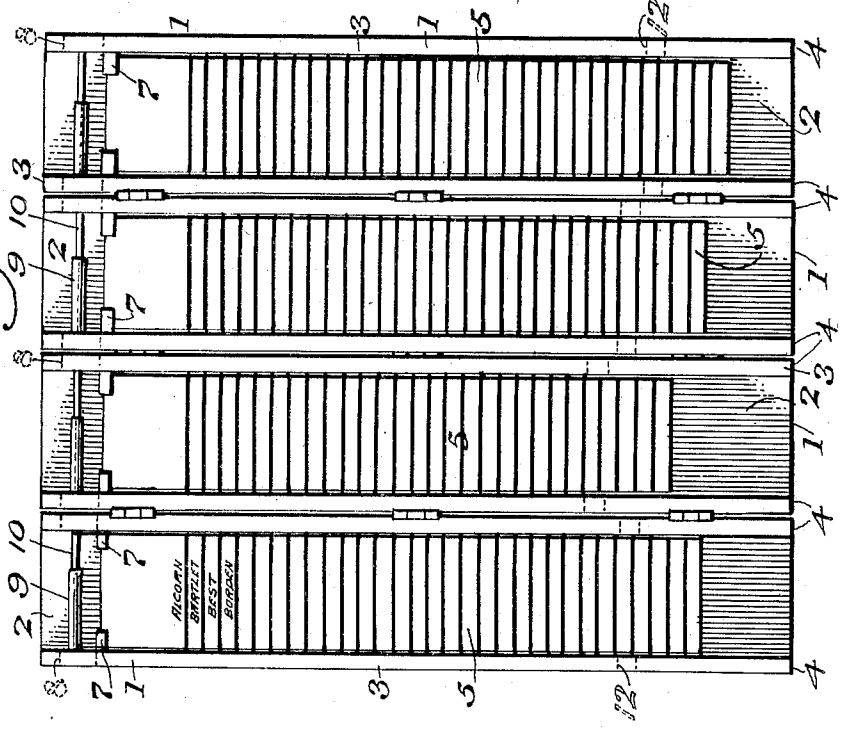


Fig. 6

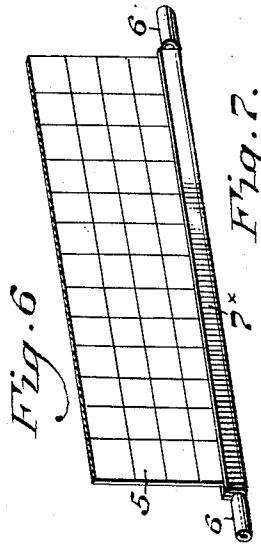
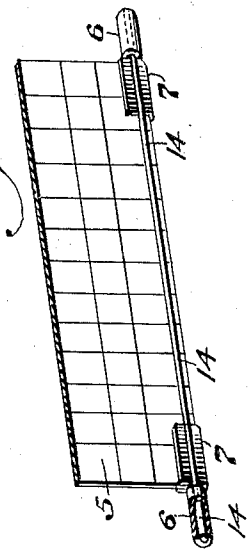


Fig. 7.



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UNITED STATES PATENT OFFICE.

WILLIAM G. CONOVER, OF PHILADELPHIA, PENNSYLVANIA.

CARD-SYSTEM FILING DEVICE.

Application filed April 11, 1919. Serial No. 289,220.

To all whom it may concern:

Be it known that I, WILLIAM G. CONOVER, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Card-System Filing Device, of which the following is a specification.

My invention consists of a filing device for a card system embodying journals of novel construction attachable to the cards, and a tray which is provided with runways in which said journals are freely mounted, whereby the cards may lie flat upon and close to each other and they may be turned with ease to present a desired card to view, and cards may be removed and other cards may be inserted according to requirements in a convenient manner.

It also consists of a multiplication of the trays so as to increase the range of the number of cards employed, and adapting the several trays to be folded in compact form.

The invention is satisfactorily illustrated in the accompanying drawing, but the important instrumentalities thereof may be varied, and so it is to be understood that the invention is not limited to the specific details shown and described, as long as they are within the spirit or scope of the claims.

Figure 1 represents a face view of a card system filing device embodying my invention.

Figure 2 represents a longitudinal section of a portion thereof on an enlarged scale.

Figure 3 represents a bottom plan view of the device.

Figure 4 represents an elevation of a portion of one of the cards in overturned condition.

Figure 5 represents a perspective view of one of the journals of a card.

Figures 6 and 7 represent perspective views of portions of other embodiments of the invention, one of the journals in Figure 7 being cut away to show the interior thereof.

Figure 8 represents a face view of a multiplicity of card system filing devices embodying my invention.

Figure 9 represents an elevation of the device shown in Figure 8, in folded condition.

Similar numerals of reference indicate corresponding parts in the figures.

Referring to the drawings.

1 designates a tray which is constructed of the back 2 consisting of a board or plate, and the longitudinally extending angular bars 3 on the sides thereof, said bars having side limbs secured to the sides of the back 2, and front limbs set out from the front face of the board forming together with said back the runways 4.

5 designates a series of filing cards which are imposed freely one on the other on the back of the tray with the lower portions of the several cards exposed, the same being adapted to have on each thereof designating matter such as the name of a customer, an index, or other matter. On the upper ends of said cards at the corners thereof are the journals 6 which extend laterally from the clips 7, the latter being secured to said ends and so supporting the journals in operative position or laterally outward from the cards in a firm and durable manner, it being noticed that the opposite journals of the cards occupy the runways 4 and are retained therein by the front limbs thereof, the several journals of each side being placed freely one against the other in horizontal position, independent of each other, so that they are rotatable and slidable in the runways, whereby any card can be turned up and over so as to present its under face to the front, said face having thereon columns of months, name and address spaces and other matter serviceable in a card index system, as shown in Figure 4.

In order to retain the several journals in position, there are placed in the runway against the journals of the upper card the blocks 8 which are connected by a cross rod formed of telescopic tubes 9 and 10 within which is the spring or resilient member 11 which serves to press said tubes 9 and 10, and consequently the blocks 8 in opposite directions and force the latter resiliently against the sides of the runways and hold them frictionally thereon, it being evident that when the tubes are pressed together the blocks 8 are relieved of pressure and so they may be moved in the runways to permit the cards to be separated to withdraw any of the same or apply additional cards to the tray, it being evident that any cards may be bent so as to reduce the right-lined width of the same when the journals may be manipulated to be slipped out from under the front limbs of the runways. The card may

be returned to or another card applied to the tray by bending it so that its journals may be inserted under the front limbs of the runways, when the card is let go and it springs back to its normal condition resting in the tray with the others in flat and straight condition.

The cards are prevented from shifting downwardly or dropping out of the runways by means of the stop pieces 12 which are fixed in the lower portions of the runways against the journals of the lower cards, so that said journals rest on said pieces, the effect of which is evident. The journals and clips are integral, formed each of a piece of suitable metal cut so that a portion thereof may be curved into the form of a tube, (the meeting line of the edges being indicated by dotted line in Figure 5) which comprises a journal, and another portion is bent into the form of a channel which comprises a clip, said channel being adapted to receive the edge portion of a card. Then the walls of the clip are prick-punched as at 13 so that the punches enter the card and cause the latter to have the clips firmly connected therewith, it being seen also that the journals and clips are strong, light and inexpensive in construction.

In Figure 6, I show the opposite clips 7 of a card continuous with each other as at 7^{x}, serving as a brace or stiffener for the entire width of the upper edge of the card to which it is secured.

In Figure 7 I show a piece 14 say of resilient wire or other material which extends along the upper edge of the card and has its ends inserted freely in the tubular journals of the card serving as a guide so that if a flexible card in the process of handling should have its journals withdrawn from the runways, when the pressure is released, the journals may follow the wire as a guide and occupy the journal position with respect to the other journals in the runway.

In Figure 8 I show a multiplication of trays each to be equipped with cards having appurtenances as hereinbefore described to increase the range of the number of cards, said multiplication of trays being shown folded as in Figure 9, producing a unit of said tray convenient for handling, packing, transportation, storage and space preserving.

It will be seen that cards may be inserted in any location of the series thereof, and the journals are of uniform diameters which results in the preservation of complete alignment of the lower edges of the cards, and moreover makes the marginal edges for indexing equidistant.

It will be seen also that owing to the stiffening member where cards of extra width or great flexibility are employed, which in rough or rapid handling would have their journals withdrawn from the runways, such cards may have the journals automatically regain their proper position when the pressure is released by finding their way along the stiffener into their former positions in the runways.

Having thus described my invention what I claim as new and desire to secure by Letters Patent is:

1. In a card system filing device, a journal for a card adapted to extend laterally therefrom and permit the card to be rotatable and slidable on its mounting, and a clip from which said journal extends, said clip being adapted to be attached to the card, said clip being formed with means which are adapted to penetrate the card and fix the clip thereto.

2. In a card system filing device, a journal member for a card adapted to extend laterally therefrom and permit the card to be rotatable and slidable on its mounting, and a clip from which said journal extends, said clip being of channel form adapted to embrace the edge portion of a card and to be secured thereto, said clip and journal being integral.

3. In a card system filing device, a card provided with journals, the latter being adapted to extend laterally from said card and to be mounted on a tray thereby adapting the card to be connected with said tray and made rotatable and slidable thereon, said journals being connected with clips which are integral therewith and adapted to be connected with the edge portion of the card and means whereby they are secured thereto.

4. In a card system filing device, hollow journals adapted to extend laterally from a card, a card, clips on said journals adapted to connect the latter with said card, and a stiffening member adapted to extend across the card and have its end portions freely occupy said journals.

5. In a card filing device, a tray with runways thereon, journal members for a card adapted to extend therefrom into said runways and permit the card to be rotatable and slidable in said runways, and clips adapted to support said journals, said clips being of channel form adapted to embrace securely the edge portion of a card, said clips being respectively integral with their journals.

6. In a card filing device, a tray with runways thereon, a series of cards, journal members for said cards adapted to extend therefrom into said runways and permit the cards to be rotatable and slidable in said runways, clips two for each card adapted to support said journals, said clips being of channel form adapted to embrace securely the edge portion of a card and having means to engage and hold the card in the channels, said journals having uniform diameters adapting

said series of cards to be spaced equidistantly, thus providing uniform marginal spaces where they overlap for indicating matter.

7. In a card filing system, a tray having a runway therein, and means for connecting a card with said tray rotatable and slidable in said runway, said means consisting of members of the form of a tubular journal, and a channeled clip integral therewith, the latter being adapted to embrace tightly the edge portion of a card, and the former extending laterally from the card and adapted to freely occupy said runway.

WILLIAM G. CONOVER.

Witnesses:
MAY F. HILES,
MRS. M. MELLOY.