Sept. 17, 1929. A. N. DOE ET AL 1,728,672

VISIBLE CARD RECORD

Filed Nov. 17, 1925 2 Sheets-Sheet 1

Fig. 1.

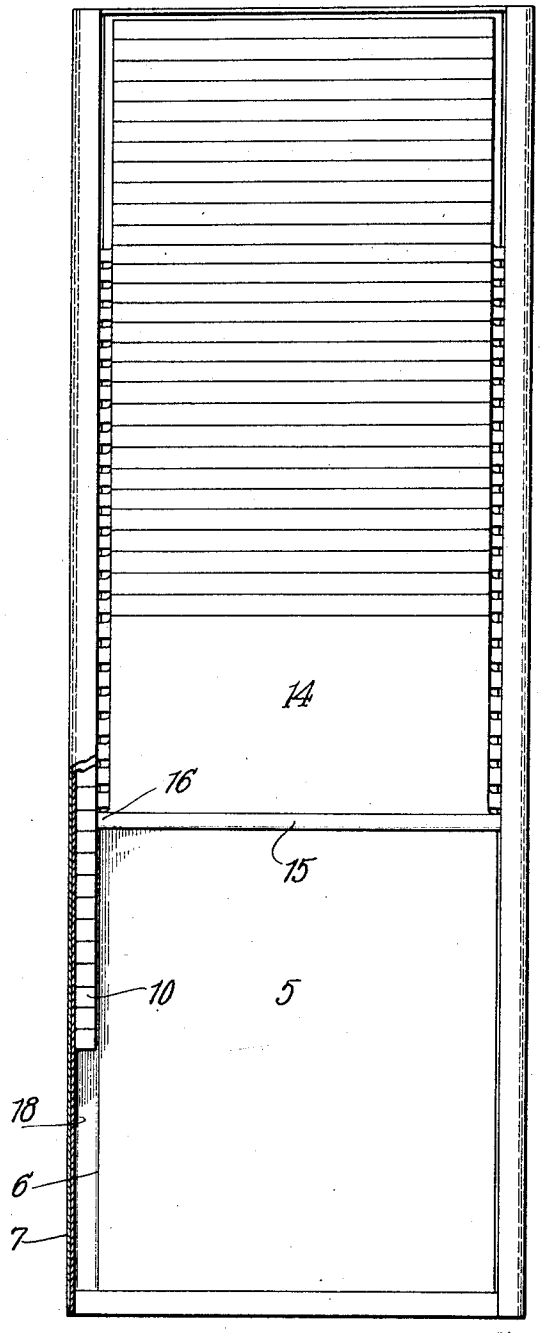


Fig. 2.

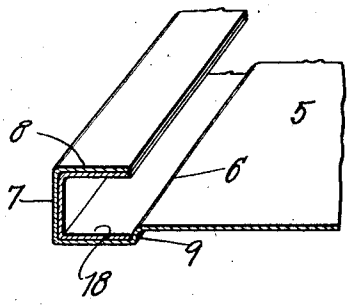


Fig. 3.

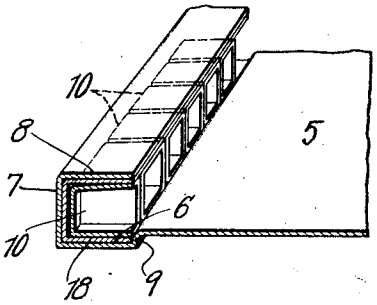
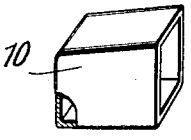


Fig. 4.



Inventors
JOHN W. DONALDSON.
ALBION N. DOE.
LELAND S. BRIGGS.
BERNARD L. POLKOSNIK.

By Their Attorney
Frank V. Donegan

Sept. 17, 1929. A. N. DOE ET AL 1,728,672

VISIBLE CARD RECORD

Filed Nov. 17, 1925 2 Sheets-Sheet 2

Fig. 5.

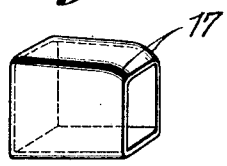


Fig. 6.

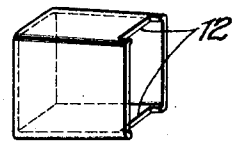


Fig. 7.

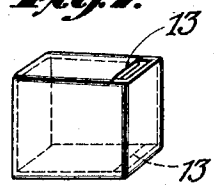


Fig. 8.

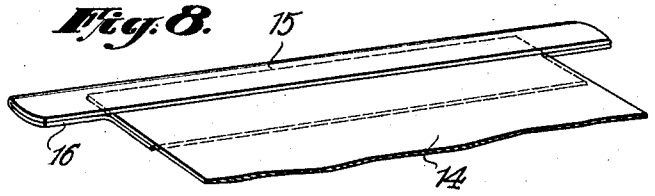


Fig. 9.

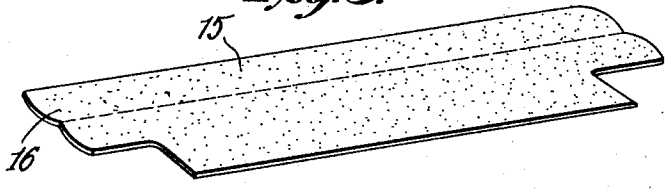
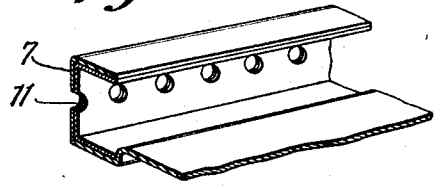


Fig. 10.



Inventors
JOHN W. DONALDSON.
ALBION N. DOE
By their Attorney LELAND S. BRIGGS.
Frank V. Donegan BERNARD L. PALKOSNIA

Patented Sept. 17, 1929 1,728,672

UNITED STATES PATENT OFFICE

ALBION N. DOE, OF JACKSON HEIGHTS, LELAND S. BRIGGS, OF DOUGLASTON, AND JOHN W. DONALDSON, OF IRVINGTON-ON-HUDSON, NEW YORK, AND BERNARD L. POLKOSNIK, OF GREENWICH, CONNECTICUT

VISIBLE CARD RECORD

Application filed November 17, 1925. Serial No. 69,670.

This invention relates to improvements in that type of visible card records which permit of the record cards being freely and easily pivoted for exposing either face thereof and which includes a tray equipped with removable bearings for the cards.

The general object of the invention is to so construct the tray and the bearings so that the latter can be placed in operative position in the tray or removed therefrom expeditiously.

Another object of the invention is to so construct the bearings that the record card can have free and unobstructed pivotal movement therein.

Another object of the invention is to so simplify the construction of the tray and bearings so that they can be manufactured at a minimum cost.

Other objects will appear and be better understood as the specification proceeds, reference being made to the accompanying drawings forming a part thereof, in which:

Fig. 1 is a plan of the visible card record showing the construction of tray and the bearings associated therewith.

Fig. 2 is a fragmentary perspective view of the tray showing the depression in one side for receiving the bearings together with a liner therein.

Fig. 3 is a similar view to that of Fig. 2, with the bearings mounted in operative position.

Fig. 4 is a perspective view of the preferred type of bearing showing the same tapering toward the closed end.

Fig. 5 is a perspective view of another type of bearing showing the inner corners rounded.

Fig. 6 is a perspective view of another modified type of bearing but with the end wall eliminated and showing the top and bottom walls provided with cutout portions adjacent their ends.

Fig. 7 is a perspective view of still another modified form of bearing and similar to that shown in Fig. 6, but showing the bearing equipped with an end wall.

Fig. 8, is a perspective view of one of the cards showing the same provided with a strip which forms the journals for the card.

Fig. 9 is a plan view of the strip before same is folded on the card and showing the adhesive surface for attaching the strip to the card.

Fig. 10 is another modified form of tray showing openings at one side to receive a tool to facilitate removal of the bearings.

Referring to the drawings in detail, the number 5 designates a support or tray, which is preferably rectangular in configuration and formed of any suitable material.

The tray is provided, adjacent the opposite edges, with channels or depressions 6, which are formed in any suitable manner, preferably by striking downwardly portions of the body of the tray. The longitudinal edges of the tray are then bent upwardly as at 7, and then terminally directed inwardly to provide the ledges 8, which overlie the recesses or depressions 6. The lower walls of the depressions or channels 6, lie below the horizontal plane of the body of the tray 5, in order to define longitudinally extending abutments 9 on the tray.

Removably associated with the tray 5 is a plurality of bearings 10. These bearings, as will be seen, are fitted within the recesses or depressions 6, and beneath the ledges 8, and have their outer ends engaging the abutments 9. The upwardly directed portions or extensions 7, and the abutments 9, cooperate to hold the bearing 10 against lateral movement on the body of the tray.

Each bearing is substantially rectangular in configuration, in cross section, and tapers toward one end. In placing the bearing in operative position, the smaller end thereof is inserted beneath the ledge 8, and the bearing forced toward the extension 7. During the travel of the bearing, the ledge 8 will be directed upwardly until the outer end of the bearing engages the adjacent abutment 9. In the preferred construction of the bearing, it is formed with a top, bottom, sides and an end wall, said end wall lying adjacent one of a series of openings 11 formed in the adjacent extension 7.

When it is desired to remove one of the

bearings, a suitable tool is inserted through the adjacent opening 11 and against the end wall of the bearing, and under the pressure exerted on the tool the ledge 8 will be flexed upwardly and the bearing forced out of the channel or depression 6.

If desired, the openings 11, in the extensions 7, can be eliminated and the top and bottom walls of each bearing provided with a recess or cutaway portions 12, as shown in Fig. 6, adapted to receive a suitable tool inserted through the bearing to permit of the extraction of the latter from position in the depression or channel 6. With the construction of bearing just described, the end wall of the bearing can be eliminated, as shown in Fig. 6 thereof, resulting in saving of material in the construction of the bearing so as to permit of the same being manufactured more cheaply However, if desired, instead of eliminating the end wall, as shown in Fig. 6, slits 13 can be formed in the top and bottom walls of the bearing adjacent the end wall as shown in Fig. 7 to receive the bearing-extracting tool.

As shown in the drawings, a multiplicity of cards 14 are mounted on the tray, or support 5. Each of these cards is adapted to have records written on each side thereof and each is of substantially rectangular in cross section and has the lower edge thereof equipped with a strip 15 which is folded over said edge and secured thereto in any suitable manner, preferably by means of an adhesive. The opposite ends of the strip 15, project beyond the body of the card 14 and form journals 16 for reception by opposed bearings 10.

When the bearings are mounted in the channels or depressions 6, their lower walls will lie in a plane below the main body portion of the tray, and when the cards are mounted in position on the tray, the journals will be disposed in spaced relation with the lower walls of the bearings. It will, therefore, be seen that at no time during the turning of a card will the journals come in contact with the lower wall or lower longitudinal edges of the bearings. However, in view of the fact that the journals are preferably flat, the longitudinal edges of the same may engage in the upper longitudinal edges of the bearings and prevent a free turning of the card. If this contingency should happen, it is contemplated rounding the upper inner longitudinal edges of the bearing as indicated at 17 in Fig. 5, so as to admit of the journals 16 having free and unobstructed movement in the bearings when the card 14 is pivoted on the tray or support 5. The inner end of the top wall of the bearing is also curved downwardly in order to facilitate its insertion into position. That construction will be more advantageous when the journals of a plurality of cards, as is very often necessary, are mounted in one pair of alined bearings. If, during the use of the card record, the ledge 8 should spread, thereby resulting in the bearings becoming loose, inserts 18 may be placed within the recesses and employed to hold the bearings in position. These inserts coincide in length with that of the recesses and are substantially of rectangular configuration with the inner sides open to permit of the insertion of the journals in the bearings.

It is to be understood that the forms of this invention herewith shown and described, are to be taken as preferred examples of the same, and that various changes in shape, size and arrangement of parts may be resorted to without departing from the spirit of the invention and the scope of the appended claims.

What is claimed as new is:

1. A visible card record including, a support having opposed depressions formed therein, a plurality of record cards having journals thereon, and means removably mounted in the depressions for receiving the journals on the cards to permit pivoting of the cards on the support.

2. A visible card record including a support having depressions formed therein, a plurality of record cards having journals thereon, and means mounted in the depressions for receiving the journals of the cards to permit pivoting of the cards on the support.

3. A visible card record, including a support having depressions therein and having the edges thereof bent to provide ledges overlying the depressions, a plurality of record cards having journals thereon, and means underlying the ledges and mounted within the depressions for receiving the journals of the cards to permit pivoting of the cards on the support.

4. A visible card record including a support having opposed channels therein, the lower walls of the channels lying below the plane of the support, a plurality of record cards having journals thereon, and means located in the channels to permit pivoting of the cards on the support.

5. A visible card record including a support having channels formed therein, ledges formed on the support and overlying the channels, a plurality of record cards having journals thereon, and means underlying the ledges and fitted within the channels for receiving the journals of the cards to permit pivoting of the cards on the support.

6. A visible card record including a support having depressions therein, the lower walls of the depressions lying below the horizontal plane of the support, ledges formed on the support and overlying the depressions, a plurality of record cards having journals thereon, and means fitted within the depressions and underlying the ledges for receiving

the journals of the cards to permit pivoting of the cards on the support.

7. A visible card record including a support having portions struck downwardly therefrom to provide abutments, the edges of the support being bent upwardly and inwardly and overlying the downwardly struck portions, said downwardly struck portions and the upwardly and inwardly bent edges defining receses having inner open sides, a plurality of record cards having journals thereon, and means inserted in the recesses and engaging the abutments for receiving the journals of the cards to permit pivoting of the cards on the support.

8. A visible card record including a support having recesses therein each having an open side and an abutment located at said side, a plurality of record cards having journals thereon, and means removably located within the recesses and engaging the abutments for receiving the journals of the cards to permit of their pivoting on the support.

9. A visible card record including a support having recesses therein each having an open side, a plurality of record cards having journals thereon, and means removably located in the recesses in the support for receiving the journals of the cards to permit pivoting of the cards on the support.

10. A visible card record including a support having recesses therein, a plurality of record cards having journals thereon, and opposed tapered bearings located within the recesses and receiving the journals of the cards to permit of their pivoting on the support.

11. A visible card record including a support having recesses therein, a plurality of record cards having journals thereon, and opposed bearings removably located in the recesses for receiving the journals of the cards to permit pivoting of the cards on the support.

12. A visible card record including a support having the edges thereof bent upwardly and inwardly, the upwardly directed portions having openings therein, a plurality of record cards having journals thereon, and means underlying the inwardly directed portion of the edge located adjacent the openings in the upwardly directed portion to receive the journals of the cards to permit their pivoting on the support.

13. A visible card record including a support, a card, a strip folded over one edge of the card and formed of flexible material, and having the opposite ends thereof extending beyond the body of the card to provide journals, and means associated with the support for receiving the journals to permit pivoting of the cards on the support.

14. A visible card record including a support having channels therein, bearings removably mounted within the channels and each having a cutaway portion at one end thereof adapted to receive a tool for removing the bearing from the channel, and a record card having journals thereon received by the bearings for pivotal movement of the card on the support.

15. A visible card record including a support, bearings removably associated with the support and each having a top, bottom and end wall, said top wall having an opening therein adjacent the end wall, and a record card having journals thereon received by the bearings for pivotal movement of the card on the support.

16. A visible card record including a support, bearings removably associated at the support at its opposite edges and each having a top, bottom and side walls and having the top walls rounded downward at their inner end edges, and a record card having journals thereon received by the bearings for pivotal movement of the card on the support.

17. A visible card record including a support having vertical extensions thereon, provided with openings, bearings removably associated with the support located adjacent the extensions and each having a rear wall lying adjacent one of the openings in the extension, and a record card having journals thereon received by the bearings to permit pivotal movement of the card on the support.

18. A visible card record including a support, extensions formed in the support and having openings therein, bearings removably mounted on the support and lying adjacent to the openings in the extensions; and a record card having journals thereon received by the bearings to permit pivotal movement of the card on the support.

19. A visible card record including a support having channels therein, a plurality of record cards having journals thereon, means mounted within the channels to receive the journals on the cards, and inserts detachably interposed between the first-mentioned means and the walls of the channels.

20. A visible card record including a support having channels formed therein, ledges formed on the support and overlying the channels, a plurality of record cards having journals thereon, means underlying the ledges and fitted within the channels to receive the journals of the cards, and inserts detachably interposed between the first-mentioned means, the walls of the channels and the ledges.

21. A visible card record including a support having depressions therein, ledges formed on the support and overlying the depressions, a plurality of record cards having journals thereon, means underlying the ledges and fitted within the depressions to receive the journals on the cards, and in-

serts detachably interposed between the first-mentioned means, the walls of the depressions and the ledges.

JOHN W. DONALDSON.
ALBION N. DOE.
LELAND S. BRIGGS.
BERNARD L. POLKOSNIK.