Jan. 1, 1929. 1,697,349

W. H. DAY ET AL

INDEX OR FILE

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Fig. 1.

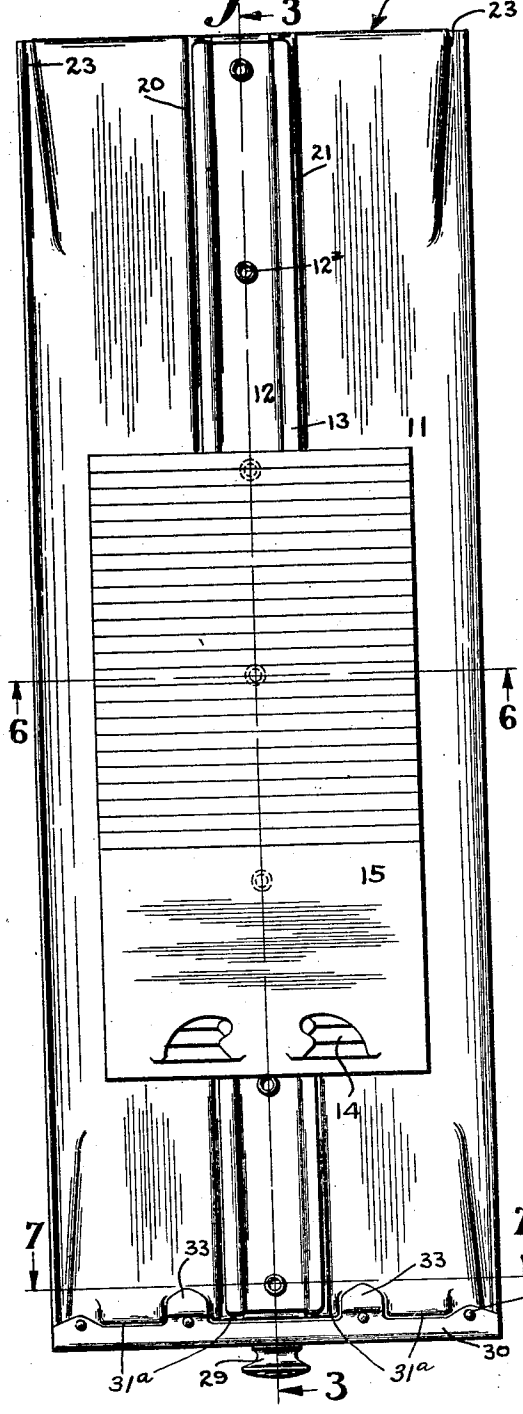
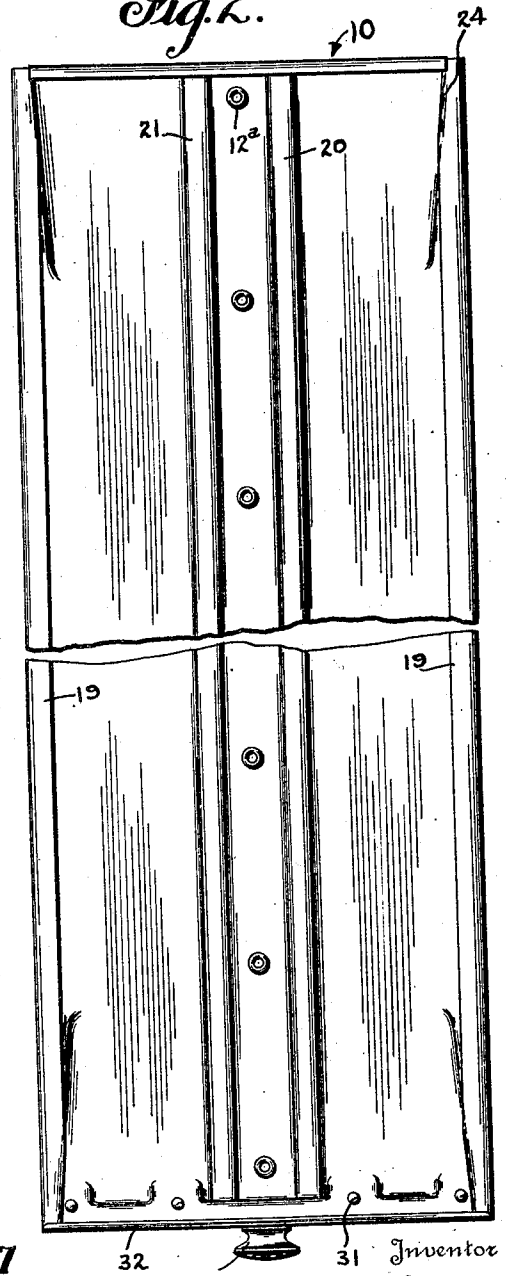


Fig. 2.



Inventor

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and Clifford P. Thomas

By Henry E. Rockwell

Attorney

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Fig. 3.

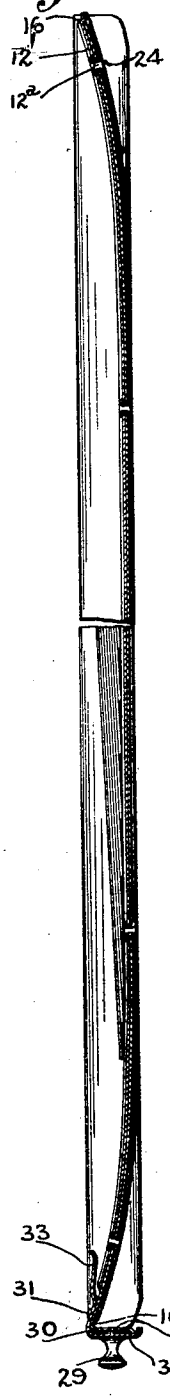


Fig. 4.

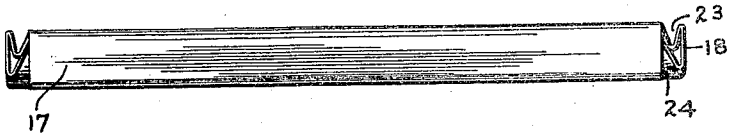


Fig. 5.

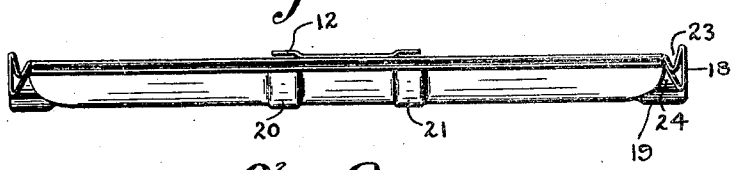


Fig. 6.

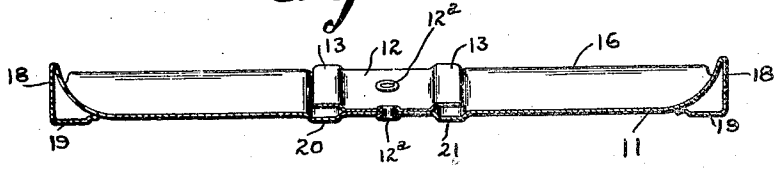


Fig. 7.

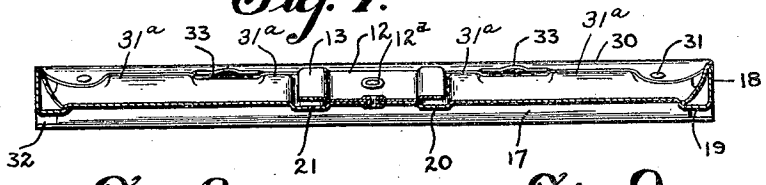


Fig. 8.

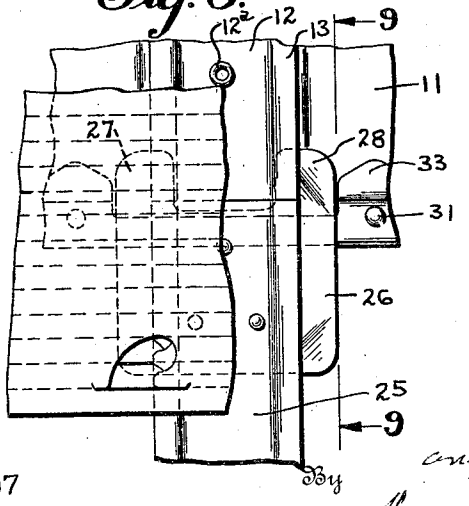
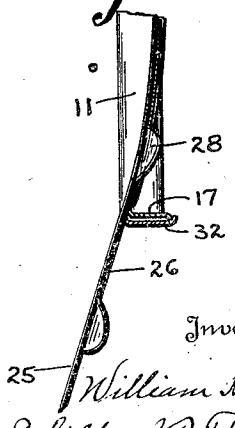


Fig. 9.



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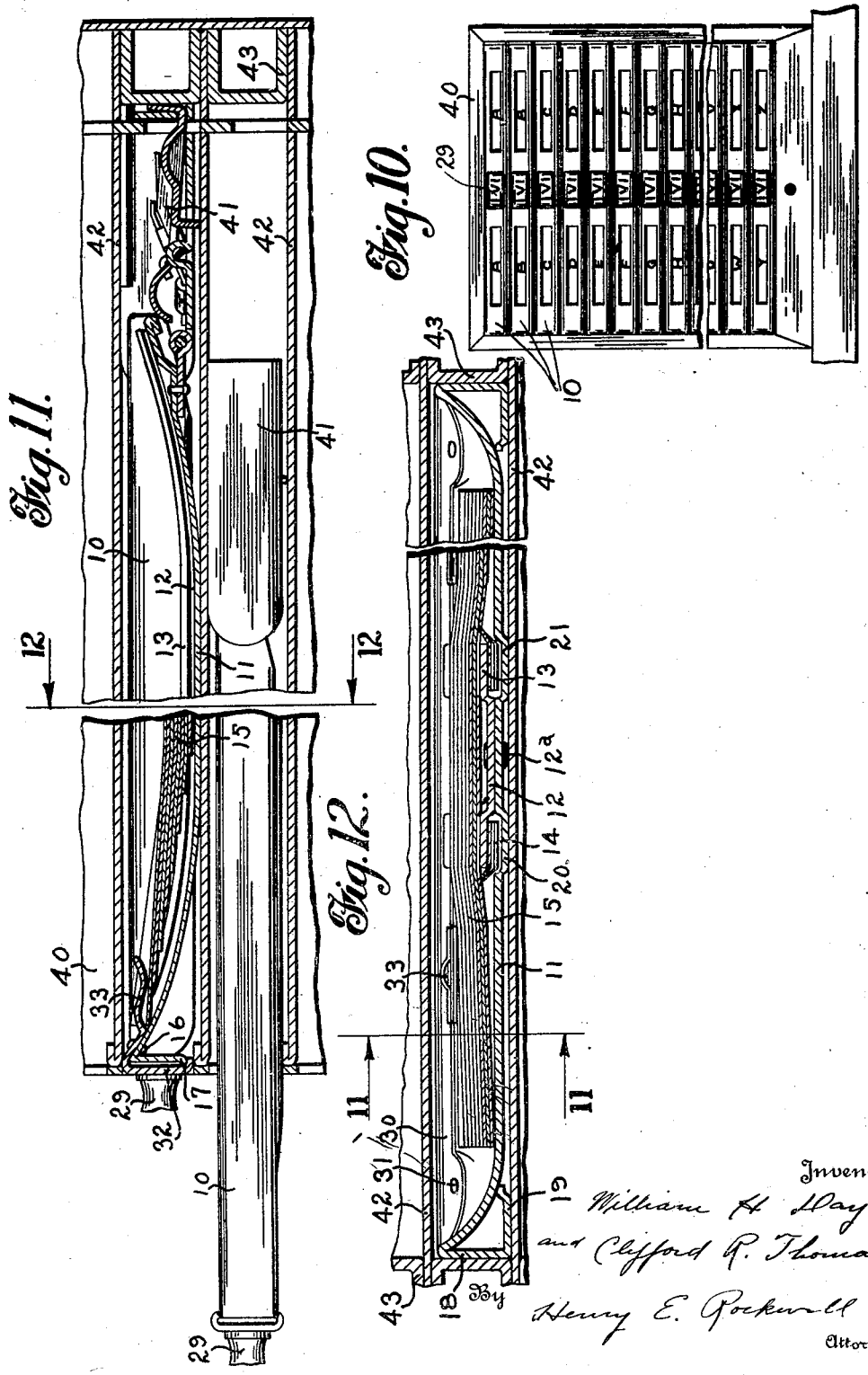
Attorney

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INDEX OR FILE

Filed Oct. 5, 1921 3 Sheets-Sheet 3



Patented Jan. 1, 1929. 1,697,349

UNITED STATES PATENT OFFICE.

WILLIAM H. DAY, OF EAST HAVEN, AND CLIFFORD R. THOMAS, OF WEST HAVEN, CONNECTICUT, ASSIGNORS, BY MESNE ASSIGNMENTS, TO REMINGTON RAND INC., OF NEW YORK, N. Y., A CORPORATION OF DELAWARE.

INDEX OR FILE.

Application filed October 5, 1921. Serial No. 505,655.

Our invention relates to indexes or files and more particularly to a device of this character in which a base member or carrier is employed to carry or support a plurality of reference members such as cards or the like containing reference material. In the embodiment shown, the supporting member is in the form of a drawer designed to be used in a file cabinet, but it is understood that in some of its aspects the invention will not be limited to a drawer or to the use of the same in a cabinet. The drawer is shown as provided with means to mount a plurality of index cards such as are shown in the patent to Irving Fisher, No. 1,048,056, granted December 24, 1912.

One object of our invention is to provide a supporting member of this character which shall be formed from a single sheet of material.

Another object of our invention is to provide a supporting member or carrier in the form of a drawer formed from a single sheet of material so shaped that the sheet is turned downwardly at the edges thereof to form the ends and sides of the drawer.

Another object of our invention is to provide a supporting member or drawer of the character described having its base portion so shaped that the plurality of reference members or cards may be easily and simultaneously filed therein or withdrawn therefrom.

A still further object of our invention is to provide a drawer of this character, the bottom of which shall be inverted arch-shaped in section, both longitudinally and transversely.

A still further object of our invention is to provide a drawer of this character formed from a single sheet of material, the bottom of which shall be arched toward the edges thereof, so that the material may then be turned downwardly to form the ends and sides.

Generally speaking, it is an object of our invention to provide a drawer of this character which may be formed economically and with facility from a single sheet of metal and which as a finished product will be of accurate dimensions and of suitable shape to contain a plurality of index or refernce members.

In the accompanying drawings:

Fig. 1 is a top plan view of a supporting member in the form of a drawer embodying our invention;

Fig. 2 is a bottom plan view of the same;

Fig. 3 is a sectional view on line 3—3 of Fig. 1;

Fig. 4 is a front elevational view of the drawer, the knob portion having been removed;

Fig. 5 is a rear end elevational view of the same;

Fig. 6 is a sectional view on line 6—6 of Fig. 1;

Fig. 7 is a sectional view on line 7—7 of Fig. 1;

Fig. 8 is a detail plan view of the forward portion of the drawer, showing the use of the "finishing" strip thereof;

Fig. 9 is a sectional view on line 9—9 of Fig. 8.

Fig. 10 is a front view of a cabinet adapted to receive drawers of the type under consideration;

Fig. 11 is a longitudinal section through a portion of the cabinet, on line 11—11 of Fig. 12, showing one drawer in place and one drawer partially removed, and,

Fig. 12 is a transverse section through one compartment of the cabinet on line 12—12 of Fig. 11.

In the preferred embodiment of our invention which we have selected to illustrate, we have shown the supporting member for the reference cards in the form of a drawer 10 formed from a single sheet of material, which may be preferably a light sheet-metal. The drawer 10 is provided with a bottom portion 11 of inverted arched shape in longitudinal cross-section, as clearly shown in Fig. 3. Intermediate the side edges of the drawer and extending longitudinally thereof a guide member 12 is secured flatly to the drawer bottom by rivets or suitable securing members 12^a and is provided with wings 13 slightly spaced from the adjacent portions of the drawer. These spaced edge portions or wings are adapted to be engaged by tongues 14 of the cards 15, which are designed to be used in connection with my device. It will, of course, be obvious that cards of other form and other means of retaining the cards upon the drawer may be used without departing from the principles of the invention.

The bottom 11 of the drawer is horizontal-

ly disposed for the most part, but toward the ends thereof is inclined gradually upwardly toward the upper edges 16 of the drawer ends. At the front end the material from which the drawer is formed is then turned downwardly at 17 to provide a front face, while at the rear end of the drawer the sheet metal is simply hemmed over to provide a stiff edge. Also as clearly shown in Fig. 6, at the sides of the drawer, the bottom portion is curved upwardly until it has reached a point which gives the drawer the desired depth and is then turned downwardly at 18 to form the sides of the drawer. The edges of these sides may be then turned under at 19 to avoid leaving any sharp projecting corners or edges. It will be seen that in this manner, while a drawer is provided with a flat bottom, for the most part, it is possible, by turning the bottom up at the edges, to give the drawer the desired depth and yet bend over the same piece of material to form the sides. Moreover, as the bottom of the drawer is rounded at the sides thereof and is given a gradual upward inclination at the ends, no sharp corners or angles will remain which will greatly add to the facility with which the cards may be manipulated therein. By extending the sides of the drawers beyond the side edges of the cards 15 and then turning the same upwardly to form upper side edges for the drawers, as shown in Figs. 1, 6 and 12, the cards 15 may be readily grasped at the side edges either to facilitate the removal thereof from the drawer, individually or collectively, or the moving of the same longitudinally along the guide member 12. The exposed portions of the cards upon which reference indicia are usually placed will, therefore, be relieved from the constant handling otherwise required and will not be soiled or have the indicia thereon obliterated or otherwise marred. This gradual slope at the ends is also of great importance in connection with the insertion of the cards into the drawer and withdrawal of the same therefrom, as will be hereinafter explained. This gradual slope at the front end of the drawer provides a raised portion for the drawer bottom whereby the cards at this end are raised and retained in a position substantially on the level of the sides of the drawer, thereby facilitating a ready reference to the same.

Below the guide strip 12 and adjacent the spaced wings 13 thereof, the drawer bottom is provided with two longitudinal corrugations 20 and 21. These provide for greater rigidity of the structure and also serve to increase the space between the wings 13 and the drawer bottom for the reception of the tongues 14 of the cards.

At the four corners of the drawer, due to the inclination of the bottom portion thereof, corrugations or channels 23 are formed and the edges of the sheet of material may be bent up sharply under these channels, as shown at 24. It will thus be seen that provision is made for the bending under or taking in of all of the sharp ends or corners of the sheet of material from which the drawer is formed, so that no projecting or unsightly edges will remain.

It is some times desirable simultaneously to place a plurality of reference members within the drawer or to withdraw them therefrom. For this purpose I may use what is termed a "fishing" strip. This consists of a guide strip 25 formed like the strip 12 described above. Upon the end of this guide strip is a guard member 26 slightly greater in width than the guide strip and provided with two forwardly disposed wings 27 and 28.

This "fishing" strip is adapted to be placed in a position wherein the front end of the guide 25 will abut against the rear end of the guide 12, the wings 27 and 28 passing below the guide 12 and assisting in retaining the fishing strip in its proper position. If it is desired to remove a plurality of cards from the drawer they may now be removed by simply sliding them from the strip 12 directly on to the strip 25, which may be done with facility. If it is desired to place a plurality of cards within the drawer they are mounted upon the strip 25 and then they may be easily slipped upon the strip 12 in a body when the members 25 and 26 are in the positions shown in Fig. 8.

It will be obvious that the inclined forward portion of the drawer greatly facilitates the removal and insertion of the cards or reference members in this manner. Such an operation would practically be impossible if the front side of the drawer made a sharp angle with the drawer bottom.

We have shown the drawer provided with a knob 29 by which it may be manipulated. The knob is secured to a plate which consists of a portion 30 disposed along the top of the drawer and riveted thereto by the rivets or securing members 31 and a forward edge portion 32, which lies parallel to the front portion 17 of the drawer proper, but slightly spaced therefrom, as shown in Fig. 3 to allow the insertion of an index card or drawer label to indicate the character of the contents of the drawer. In order that the knob plate will be properly located upon the forward end of the drawer, a bead 31^a, which in this instance is interrupted at intervals, is struck up from the material forming the drawer. The inner edge of the plate portion 30 abuts the bead 31^a and by it is aligned with the drawer front in proper position so that the forward edge portion 32 thereof will be sufficiently spaced from the drawer front portion 17 to allow the insertion of a drawer label or the like.

We do not claim in this application, however, the above described knob structure in

combination with a similar drawer structure, which forms the subject matter of our co-pending application, Serial No. 505,658, filed October 5, 1921.

Retaining members 33 are provided near the front edge of the drawer under which the edge of the reference members may be inserted to retain them against accidental displacement and to assist the guide member 12 to retain the cards flatwise in the drawer by urging the side portions of the cards downwardly toward the drawer bottom, as shown in Fig. 12. While we have found it desirable to form these retaining members integral with the knob plate, it will, of course, be understood that other arrangements may be made, if desired, in this regard.

A cabinet 40 suitable for the reception of a plurality of drawers, as above described, is illustrated in Fig. 10, and enlarged longitudinal and transverse sections of portions of the same are shown in Figs. 11 and 12, respectively. The drawers in this instance are provided with releasable stop means 41 for the purpose of preventing the accidental complete removal of the same from the cabinet. This stop means is more fully described in our co-pending application No. 505,656, filed October 5, 1921. While the cabinet 40 may be constructed in various ways, the one illustrated comprises a series of supporting plates 42 upon which the drawers 10 are slidable. The supporting plates 42 extend entirely across the cabinet both longitudinally and transversely and are spaced apart at the side edges and at the rear by suitable means, such as spacing members 43.

It will be noted by reference to Figs. 6 and 12 that the drawer will rest upon the edges 19, 19, and the corrugations 20 and 21, and will slide upon these members in its movement in and out of the cabinet 40 or the like with which it may be used. By this arrangement friction on the drawer bottom is greatly reduced and the rivets 12^a are held above the drawer support 42 and are thus protected from wear.

While we have shown and described a preferred embodiment of our invention, it will be understood that the same is not to be limited to the exact details shown, but is capable of many modifications and variations which lie within the spirit of the invention and within the scope of the appended claims.

What we claim is:

1. In a file, a drawer comprising a single sheet of material, inverted arch shaped in longitudinal section, one end being folded at an angle to the plane of the remainder to form a flange.

2. In a file, a drawer comprising a single sheet of material, inverted arch shaped in transverse section, the side edges being folded at an angle to the plane of the remainder to form flanges.

3. In a file, a drawer of generally rectangular form and inverted arch shaped in both longitudinal and transverse sections.

4. In a file, a drawer stamped from a sheet of metal, said sheet being flat throughout the greater part of the length of the drawer and rising upwardly adjacent the front and rear edges.

5. In a file, a drawer stamped from a sheet of metal, said sheet being flat for the greater part of the width of the drawer but rising upwardly adjacent the side edges thereof and then turned downwardly to form side face members thereon.

6. In a file, a rectangular drawer stamped from a sheet of metal and inverted arch shaped in both longitudinal and transverse sections.

7. A rectangular drawer stamped from a sheet of material, having the bottom thereof curved upwardly to form the sides and ends thereof.

8. A drawer stamped from a sheet of material, having its bottom curved upwardly at the sides thereof and then turned downwardly to provide the sides of the drawer.

9. A drawer for an index or file, said drawer being relatively deep at the intermediate portion of and gradually becoming shallower toward the forward and rear portions thereof and being inverted arch shaped in transverse section.

10. A drawer for an index or file, having means for retaining a plurality of index members and having its bottom inclined downwardly from the front portion thereof, the transverse section of said drawer being approximately in the form of an inverted arch.

11. A drawer for an index or file, formed from a single sheet of material, said sheet rising upwardly at the side portions of the drawer and then turned downwardly to provide the side faces thereof.

12. A drawer for an index or file formed from a single sheet of material, said sheet rising upwardly at the forward portion thereof and then turned downwardly to provide a front face for the drawer.

13. A rectangular drawer for an index or file, having means extending longitudinally thereof intermediate its sides to retain a plurality of index cards or the like, and retaining means for said index cards at the forward portion thereof, said drawer bottom being inverted-arch shaped in longitudinal section.

14. A drawer for the purpose described having means extending longitudinally along the bottom thereof to engage and retain a plurality of index members, the bottom of said drawer being inclined gradually upwardly at the forward portion thereof to render said engaging means accessible.

15. A drawer for the purpose described, having means extending longitudinally along the bottom thereof to engage and retain a plu-

rality of reference members, the bottom of said drawer being inclined upwardly toward the forward portion thereof.

16. A drawer for the purpose described having a strip extending longitudinally of the bottom portion thereof, the edges of said strip being spaced from the bottom of the drawer to engage reference members and the bottom of said drawer being provided with channels opposite said spaced edges.

17. A drawer for the purpose described having longitudinal channels provided in the bottom portion thereof and having an index member carrying strip located between said channels.

18. A drawer for the purpose described having longitudinal channels provided in the bottom portion thereof and having an index member carrying strip located between said channels, the edges of said strip lying opposite the channels and being spaced from the bottom of the same.

19. A drawer for an index or file having a bottom generally flat and horizontally disposed, but being turned upwardly at the sides of the drawer toward the upper edges thereof, and then turned downwardly in a vertical direction to form the side faces.

20. A drawer for an index or file generally rectangular in form having the bottom thereof inverted arch shaped in longitudinal section, and means extending along the bottom substantially from the front to the rear of the drawer to retain index members.

21. A drawer for the purpose described generally rectangular in form provided with a bottom inverted arch shaped both in longitudinal and transverse sections, and having the bottom member turned downwardly to provide the sides and front end thereof.

22. A drawer constructed of a single piece of sheet material, generally rectangular in shape, having a bottom substantially horizontally disposed, the material forming the bottom gradually rising above the horizontal portion thereof at the ends and sides and bent vertically downward at the front end and sides of the drawer.

23. A drawer constructed of a single piece of sheet material having a bottom generally horizontally disposed, the material being generally curved upwardly at the sides and ends of the drawer, and said bottom being provided with a corrugation extending longitudinally thereof.

24. A drawer constructed of a single piece of sheet material generally rectangular in shape, having a bottom substantially horizontally disposed, the material forming the bottom rising above the horizontal portion thereof at the ends and sides, and then turned and extended downwardly at the front and sides of the drawer.

25. A drawer constructed of a single piece of sheet material generally rectangular in shape, having a bottom substantially horizontally disposed, the material forming the bottom rising above the horizontal portion thereof at the sides, then turned and extended downwardly and then horizontally inward to form the sides of the drawer.

26. A drawer for an index or file having means for retaining a plurality of index members, and having the side and front edges of its bottom member inclined downwardly toward the horizontally disposed center thereof.

27. In combination, a cabinet having a compartment, a shallow drawer or tray receivable in said compartment, said drawer having a part sloping upwardly from an intermediate portion of the drawer bottom toward one of the end edges thereof, overlapping cards in said drawer or tray, said cards having tongues projecting toward each other and a guide member extending longitudinally along the bottom of said drawer intermediate its sides and over said sloping-up part, said guide member being engaged by the tongues of said cards for holding the cards in place.

28. In combination, a cabinet having a compartment, a shallow drawer or tray receivable in said compartment, said drawer having a part sloping upwardly from an intermediate portion of the drawer bottom toward one of the end edges thereof, overlapping cards in said drawer or tray having their side edges spaced from the side edges of said drawer whereby the side edges of the cards are freely accessible for manipulation when the drawer is pulled out, each of said cards having a tongue or tongues projecting rearwardly therefrom formed from the body of said card, and a guide member extending lengthwise along the bottom of said drawer intermediate its sides and over said sloping-up part, said guide member being engaged by the tongue or tongues of said cards for holding the cards in place.

29. In combination, a cabinet having a compartment, a shallow drawer or tray receivable in said compartment having a part sloping upwardly from an intermediate portion of the drawer bottom toward one of the end edges thereof, overlapping cards in said drawer or tray, said cards having a tongue or tongues projecting rearwardly therefrom formed from the body of said cards, and a guide member extending lengthwise along the bottom of said drawer intermediate its sides and over said sloping-up part, said guide member being engaged by the tongue or tongues of said cards for holding the cards flatwise on the bottom of said drawer.

30. In a drawer for an index or file, an integral part of said drawer sloping upwardly from a point adjacent the bottom of said drawer toward the upper front edge thereof.

31. In a drawer for an index or file, a bottom member, a part adjacent the front edge

of said bottom member to form an end wall for said drawer, another member having a portion extending over said bottom member and being spaced from said part to form a pocket for a drawer label or the like, and a bead formed in the material of one of said members to engage the other to align the engaged member therewith.

32. In a drawer for an index or file, a bottom member having a forward end portion and another member forming a front outer wall for said drawer and being secured to said forward end portion, and a transversely extending bead formed on said bottom member to align said members in parallel arrangement when in engagement.

33. A drawer for an index or file having a bottom generally flat and horizontally disposed, but being extended upwardly at the sides of the drawer toward the upper edges thereof, portions extending downwardly to form the side faces, and inwardly extending portions from said last-named portions offset below said bottom to form support-engaging runners for said drawer.

34. A drawer for an index or file, having a bottom portion, tubular members provided at the sides of said bottom portion having runners offset below said bottom portion and forming support-engaging means for said drawer.

35. A drawer for the purpose described having means extending longitudinally along the bottom thereof to engage and retain a plurality of index members, the bottom of said drawer being inclined gradually upwardly at the forward portion thereof to render said engaging means accessible, a guide strip for slidably receiving a plurality of index members, and means on the guide strip for aligning said strip with the means on the bottom of said drawer to permit the transfer of index members from the guide strip to said first-mentioned means.

36. A holder for index members having a major portion generally flat, a supporting and guide member mounted on said major portion to engage and retain a plurality of index members, a guide strip, and means for detachably holding said guide strip in end to end relation with said supporting member to permit the transfer of index members from said strip to said member and vice versa.

In witness whereof, we have hereunto set our hands on the 17th day of September, 1921.

WILLIAM H. DAY.
CLIFFORD R. THOMAS.

CERTIFICATE OF CORRECTION.

Patent No. 1,697,349. Granted January 1, 1929, to

WILLIAM H. DAY ET AL.

It is hereby certified that error appears in the printed specification of the above numbered patent requiring correction as follows: Page 3, line 73, claim 4, after the word "edges" and before the period insert the words "and turned downwardly at one end to form a front face member for said drawer"; and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 26th day of February, A. D. 1929.

(Seal)

M. J. Moore,
Acting Commissioner of Patents.