J. H. RAND, JR., AND V. F. KING.

CABINET.

APPLICATION FILED DEC. 2, 1918.

1,429,627. Patented Sept. 19, 1922.

3 SHEETS—SHEET 1.

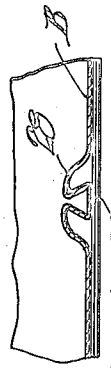


Fig. 2.

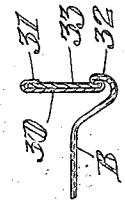


Fig. 3.

Fig. 1.

INVENTORS
JAMES H. RAND, JR.
VERNON F. KING

BY Fetherstonhaugh & Co
ATT'YS.

J. H. RAND, JR., AND V. F. KING.

CABINET.

APPLICATION FILED DEC. 2, 1918.

1,429,627.

Patented Sept. 19, 1922.

3 SHEETS—SHEET 2.

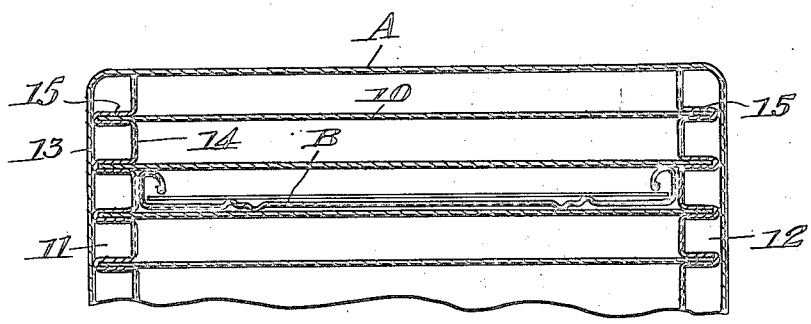


Fig. 4.

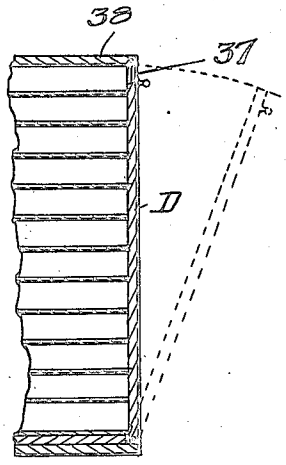


Fig. 5.

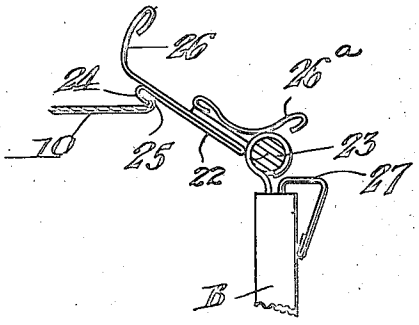


Fig. 6.

INVENTORS
JAMES H. RAND JR.
VERNON F. KING.

BY

ATTYS.

J. H. RAND, JR., AND V. F. KING.

CABINET.

APPLICATION FILED DEC. 2, 1918.

1,429,627. Patented Sept. 19, 1922.

3 SHEETS—SHEET 3.

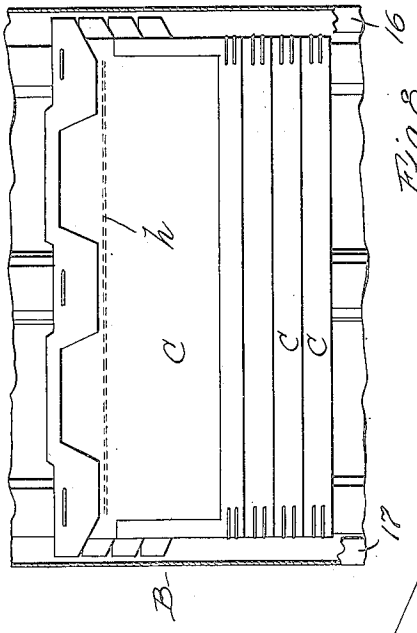


Fig. 8.

Fig. 7.

INVENTORS.
James H. Rand Jr.
and Vernon F. King,
by Wickelen & Parker.
their ATTORNEYS.

Patented Sept. 19, 1922.

1,429,627

UNITED STATES PATENT OFFICE.

JAMES HENRY RAND, JR., AND VERNON FRANKLIN KING, OF TONAWANDA, NEW YORK, ASSIGNORS TO AMERICAN CARDEX CO. INC., OF TONAWANDA, NEW YORK, A CORPORATION OF NEW YORK.

CABINET.

Application filed December 2, 1918. Serial No. 265,007.

To all whom it may concern:

Be it known that we, JAMES H. RAND, Jr., and VERNON FRANKLIN KING, citizens of the United States, and residents of the city of Tonawanda, in the State of New York, United States, have invented certain new and useful Improvements in Cabinets, of which the following is a specification.

This invention relates to cabinets and more particularly to card index or record cabinets.

The objects of the invention are to provide a cabinet of relatively light weight and of strong and sturdy construction; also to improve the construction of cabinets and drawers or slides therefor so that the drawers or slides may be readily removed from the cabinet when desired but are not liable to accidental displacement in ordinary use of the cabinet; and also to improve the construction of cabinets and slides so that the record holding portions of the slides may be releasably suspended vertically at the front of the cabinet when desired to facilitate examination of the contents thereof. Further objects are to provide improvements in cabinets and drawers or slides therefor in the other respects hereinafter described and claimed.

In the accompanying drawings:

Fig. 1 is a perspective view of a cabinet constructed in accordance with this invention.

Fig. 2 is a section thereof through the knob or handle of the drawer or slide.

Fig. 3 is a section thereof through the outer end of a drawer showing the label holder.

Fig. 4 is a transverse vertical section through the top of the cabinet.

Fig. 5 is a vertical section through the front of the cabinet.

Fig. 6 is a sectional elevation thereof showing the releasable connection between a slide and the front end of the cabinet.

Fig. 7 is a side elevation partly in section.

Fig. 8 is a plan view of a portion of one of the card holding trays showing the cards in position therein.

A represents a cabinet preferably constructed of sheet metal and provided with a plurality of horizontal partitions 10 between which drawers or sliding trays B are supported.

As best illustrated in Fig. 4, the cabinet is provided with side walls 11 and 12 preferably constructed as follows:

Each wall is formed with an outer wall member 13 and an inner wall member 14, the latter being preferably formed of sheet metal and having a plurality of spaced U-shaped bends 15 adapted to receive and bind against side edges of the partitions 10. This construction provides a plurality of air cells in the side walls which, as is obvious, increase the fire proof character of the cabinet. The drawers B are provided with side flanges 16 and 17 adapted to receive and engage end projections or tongues of cards C. These side flanges 16 and 17 are preferably of substantially hook shape in cross section and terminate a distance short of the ends of the drawers or slides, providing recesses 18 19, 20 and 21 which enable the cards to be withdrawn without bending the projecting tongues of the card that take under the flanges 16 and 17.

The drawers or body sections B of the sliding trays are provided with pivoted or hinged rear sections 22 connected to the body sections by suitable means as for example hinges 23. The slides and the cabinet are provided with means for releasably maintaining the slides connected to the cabinet while permitting a partial withdrawal of the slides in order that the contents of the drawers may be examined or removed. The preferred means for accomplishing this purpose, as shown, comprise for each slide, a hook shaped member 24 on the under side of the rear section 22 and an upturned edge or hook 25 adjacent the front edge of the partition member 10 on which the slide moves. As illustrated in Fig. 6 of the drawings, when a slide has been pulled out to permit an examination of the contents of the drawer B, the hook 24 on the under side of rear section 22 of the slide engages hook 25 on the partition and maintains the slide connected with the cabinet with the hinge connection between the body and rear section of the slide projecting forwardly in front of the cabinet so that the body of the slide can overhang vertically in front of the cabinet. The slide may be disconnected by lifting up or tilting the rear section when that section has been drawn to a position in which it projects forwardly from the cab-

inet as shown in Fig. 6 in order to release the hooks from engagement with one another. The rear sections 22 are preferably provided with cushioning means such for example as springs 26 shown in the drawings, which contact with the rear wall of the cabinet when the slides are moved to their innermost positions and prevent any injury or damage to the slides or cabinet when the slides are forcibly shoved into the cabinet. The springs 26 serve the further purpose of preventing tilting of the rear sections 22 of the slides by reason of the fact that they preferably contact resiliently with the partitions next above, thus insuring that the hooks on the rear sections and on the partitions will effectively engage as the rear sections are pulled forward to positions in which they project from the front of the cabinet.

The invention also includes means for preventing any play between the bodies B and the rear sections 22 of the slides as they are moved in the cabinet. The preferred means for accomplishing this purpose comprise a spring or other resilient member 26^a on the rear section 22 and suitable abutment members 27 or the like on the rear ends of the drawers B. These parts are so arranged that when the drawers are alined with their rear sections 22, they will be under slight spring pressure owing to the spring members 26^a pressing against the abutment members 27, which pressure prevents any noise as the slides are moved in and out of the cabinet.

The members 26^a also serve to engage the partitions next above to assist springs 26 in maintaining the rear sections against tilting until they are partially withdrawn from the cabinet.

The front end of each slide is preferably provided in its face with recessed portions 28 forming integral handles 29.

As illustrated in Fig. 3, the front ends of the drawers B are preferably formed by bending the metal forming the bottom of the drawer inwardly, upwardly and over to provide a face 30, an upper flange 31 and a lower flange 32, which form an integral holder for a suitable label 33.

The drawers are preferably provided on their inner sides with longitudinal ribs or tracks which are adapted to support the cards. These ribs are preferably formed by bending the metal bottoms of the drawers B to provide longitudinal card supporting ribs 34. A similar operation may provide ribs 35 on the under side of the drawers B, which ribs contact with the partitions in the sliding movements of the drawers or slides in and out of the cabinet.

Each compartment or cabinet A may be provided with a slide rest D which is adapted to support the front ends of the slides when they are pulled out, as shown in Fig. 1. Each slide rest D is preferably provided intermediate of its length with a rade joint 36 which permits the forward end of the rest D to swing upwardly only, whereby when the rest is partially pulled out, the forward end may be swung upwardly over the front ends of the drawers in the cabinet to constitute a cover, as shown in Fig. 5. If desired, a lock 37 may be provided in the end of the slide rest, adapted to engage the top 38 of the cabinet, and by this means the cover may be locked in place.

The index cards or card supporting elements C are provided with bends or hinges *h* adjacent their rear edges which have the projections or tongues extending under the side flanges 16 and 17 of the drawer, so that the main or body portions of the cards or card supports in each drawer are adapted to swing upwardly and rearwardly relatively to the drawer whereby one or more of the cards can thus be swung up to expose or afford access to the underlying card. Therefore, when the drawers are pulled out and the hinged rear sections 22 thereof project forwardly beyond the case A so as to allow the drawers to swing downwardly in front of the case A, there is sufficient space between the front of the case or the front ends of the drawers above the drawer which is pulled out and the rear end of the pulled out drawer to permit the cards or card supports C to be swung upwardly to a position inclining rearwardly beyond the vertical, so that the cards will be retained in this position by gravity, or their tendency to fall rearwardly. Owing to this arrangement, when using the cabinet as illustrated in Fig. 7, if one or more cards of the drawer are swung upwardly to this rearwardly inclined position, it is not necessary to hold them in this position, and the user can readily examine or make entries on the cards without holding the cards which have been turned up.

What we claim as our invention is:

1. In a cabinet, the combination of a series of slide members arranged one above another and adapted to be moved outwardly, and means for preventing the complete withdrawal of the slides, said means permitting said slides to swing downwardly when so moved out, with a slide rest comprising front and rear sections pivotally connected, said sections being adapted to occupy an inoperative position in said cabinet below said series of slide members and in which they are in alinement, and adapted to be moved to an operative position to support the front end of any one of said slides when said slide is moved out and swung down, the front section of said slide rest being also adapted to be swung upwardly to a position in front of said series of slide members.

2. A cabinet having a series of slides ar-

ranged one above another and horizontal partitions for said slides, each of said slides comprising a front section adapted to support record units, a rear section pivotally connected thereto to permit said front section to swing downwardly when pulled out, a part on said rear section adapted to engage a retaining part at the front of said cabinet to prevent the complete withdrawal of said slide member, a resilient flange at the rear end of said rear section to yieldingly engage the rear wall of the cabinet, and a resilient flange at the front end of said rear section adapted, when said slide member is in said cabinet to engage a resilient member on the rear end of said front section.

3. A cabinet comprising a casing with a plurality of drawer guides spaced therein, a plurality of drawers slidably supported one above another on said guides to permit the drawers to be pulled forwardly out of the casing, a tail piece on each of said drawers, interengaging parts on said drawer guides and on said tail pieces for releasably retaining said drawers in pulled out positions in front of said casing, said tail pieces having parts cooperating with said drawer guides to ensure engagement of said interengaging parts when said drawers are pulled out and arranged to permit movement of the tail pieces to disengage said interengaging parts when the tail pieces project forwardly of the casing.

4. A cabinet comprising a casing with a plurality of drawer guides spaced therein, a plurality of drawers slidably supported one above another on said guides to permit the drawers to be pulled forwardly out of the casing, a tail piece on each of said drawers, interengaging parts on said drawer guides and on said tail pieces for releasably retaining said drawers in pulled out positions in front of said casing, said tail pieces having upwardly projecting parts at their front and rear portions to prevent tilting of said tail pieces while said drawers are being withdrawn and formed to permit upward movement of said tail pieces to disengage said interengaging parts when the tail pieces are moved to positions in which they project forwardly from the front of the cabinet.

5. A cabinet comprising a casing, drawer-supporting members movable in the casing to positions projecting forwardly in front of the casing and which are adapted to be pulled out by the drawers when the drawers are pulled out and to provide forwardly projecting pivotal supports for the drawers, guides for the drawers in said casing, interengaging parts in said casing and on said drawer-supporting members for normally preventing movement of said drawer-supporting members beyond said forwardly projecting positions, and means on said drawer-supporting members cooperating with the drawer guides to direct said parts into engagement when the drawers are pulled out and constructed to permit the disengagement of said drawer-supporting members when they project forwardly in front of the casing.

6. In a cabinet, the combination of a plurality of spaced horizontal partitions, a plurality of slides movably supported between said partitions, hooks at the front end of said cabinet between said partitions, a hinged tail piece on each of said slides, a hook projecting from the underside of each of said tail pieces and adapted to engage one of said first-named hooks to releasably maintain the slides connected with the cabinet when the slides have been drawn to positions in front of said cabinet, each of said tail pieces having parts bearing on the partitions between which it slides to prevent said tail piece from being tilted while in said cabinet and to ensure engagement of the hook on said tail piece with the corresponding hook between said partitions, and formed to permit said tail piece to be tilted when said hooks are in engagement to permit intentional removal of said tail piece from the cabinet.

7. In a cabinet, the combination of a casing, a plurality of spaced horizontal sheet metal partitions in said casing having flanges at their front portions forming stops projecting above the horizontal planes of the partitions and stiffening the front portions of the partitions, a plurality of shallow sheet metal trays arranged to slide in and out in said casing between said partitions, sheet metal tail pieces having bottoms hinged at their front edges to the rear ends of said trays and having upwardly extending flanges which cooperate with the partitions above to guide the tail pieces in sliding movements of the trays, stops projecting downwardly below the bottoms of said tail pieces, said tail piece stops cooperating with the stops at the front portions of said partitions to arrest outward movement of said trays and to releasably retain said trays pivotally supported in front of said casing when they are pulled out.

8. In a cabinet, the combination of a casing, a plurality of spaced sheet metal partitions in said casing having flanges at their front portions forming stops and stiffening the front portions of the partitions, a plurality of shallow trays arranged to slide in and out in said casing between said partitions, each of said trays having a bottom and a pair of side walls formed of a portion of substantially flat sheet metal bent angularly at its side edges to provide integral side walls and to stiffen the bottom portions, sheet metal tail pieces having

bottoms hinged at their front edges to the rear ends of said trays and having upwardly extending flanges which cooperate with the partitions above to guide the tail pieces in sliding movements of the trays, stops projecting downwardly below the bottoms of said tail pieces, said tail piece stops cooperating with the stops at the front portions of said partitions to arrest outward movement of said trays and to releasably retain said trays pivotally supported in front of said casing when they are pulled out.

In witness whereof we have hereunto set our hands in the presence of two witnesses.

JAMES HENRY RAND, JR.
VERNON FRANKLIN KING.

Witnesses:
C. BEYER,
E. P. GRAY.