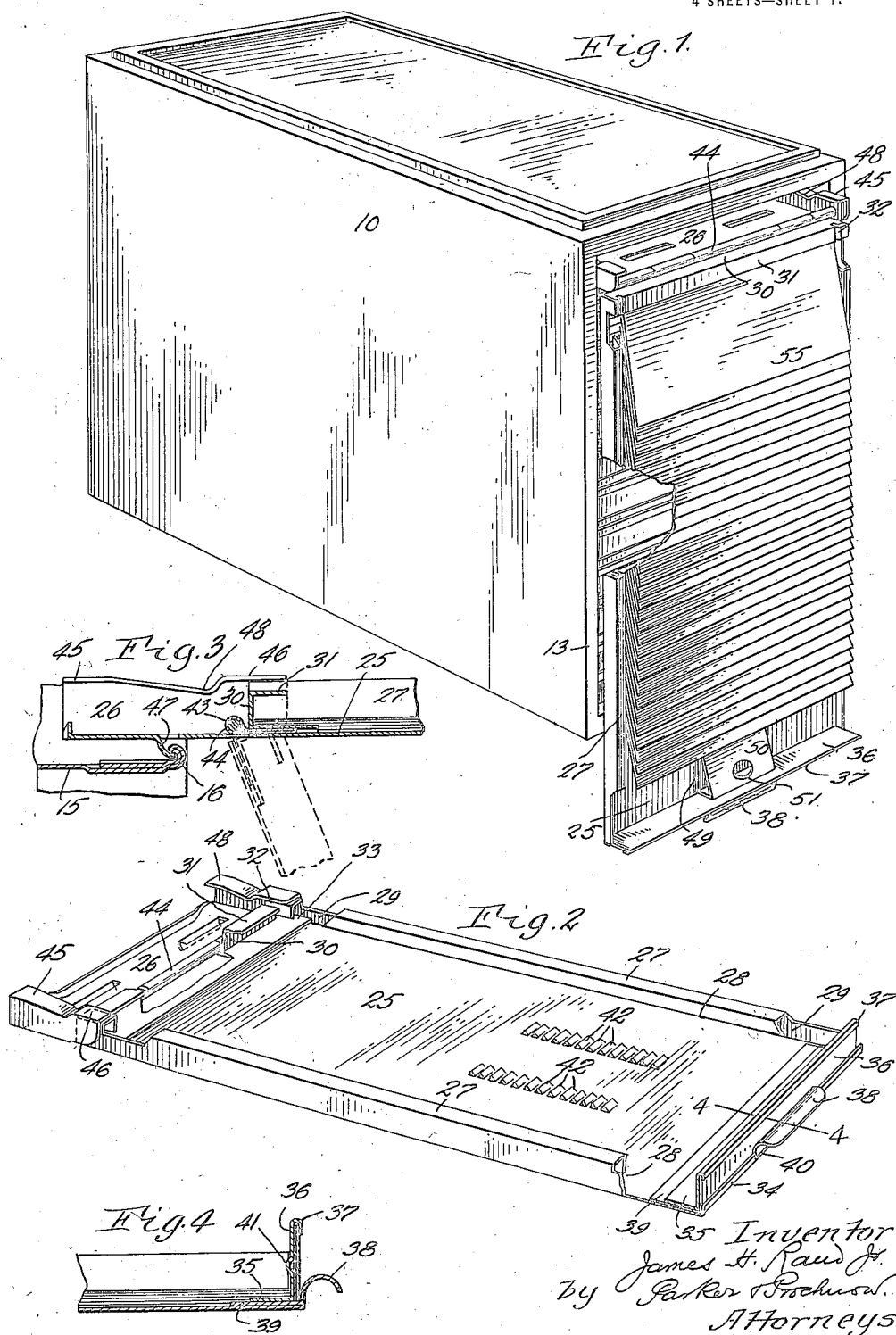


1,429,628.

Patented Sept. 19, 1922.
 4 SHEETS—SHEET 1.



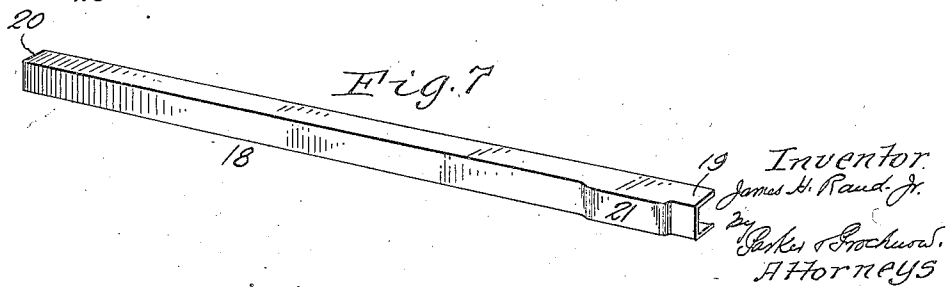
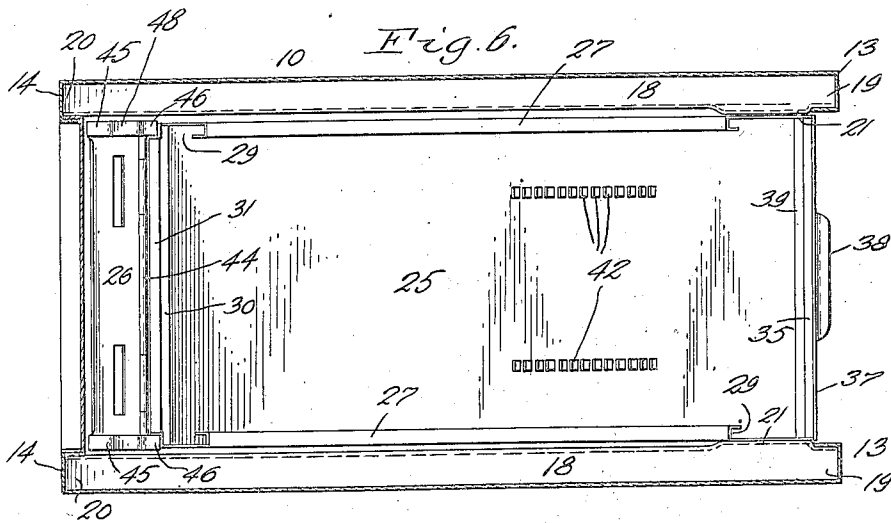
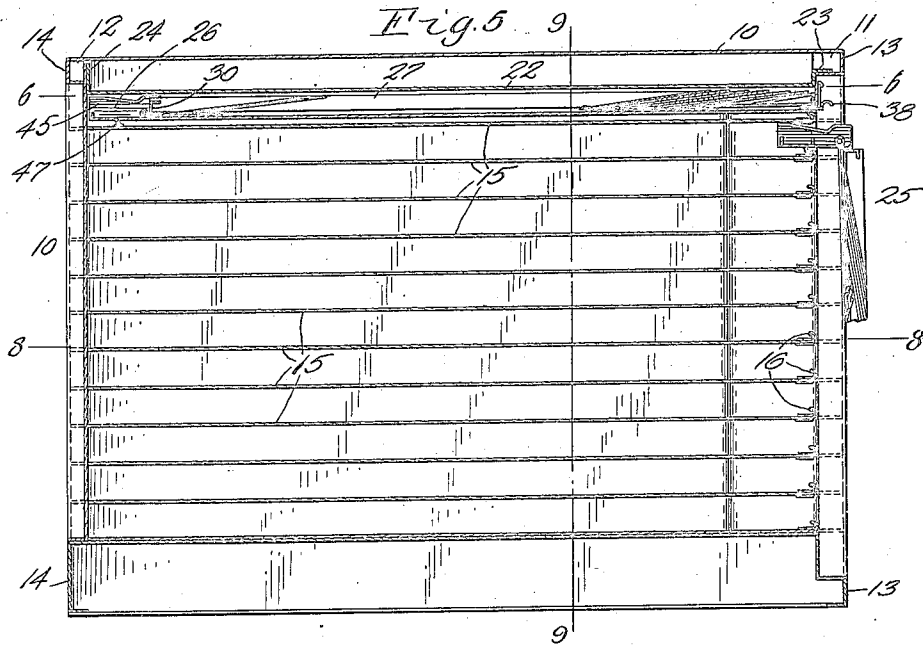
39 35 Inventor
 James H. Rand Jr.
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 Attorneys

J. H. RAND, JR.
 RECORD CABINET.
 APPLICATION FILED AUG. 9, 1920.

1,429,628.

Patented Sept. 19, 1922.

4 SHEETS—SHEET 2.



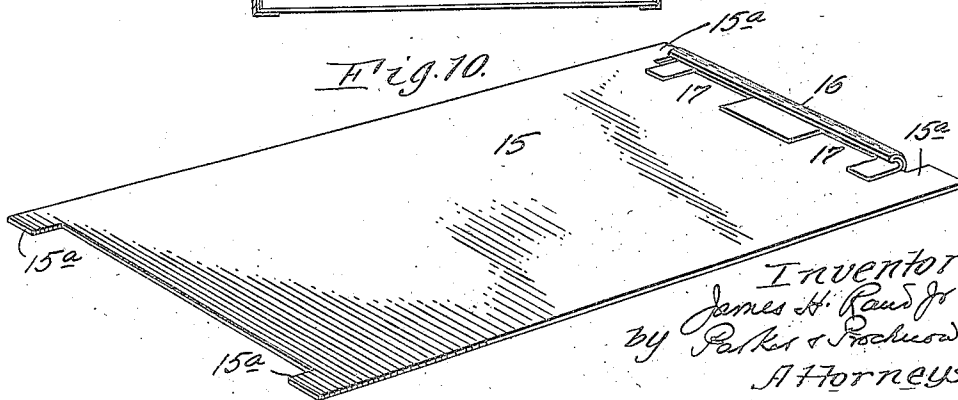
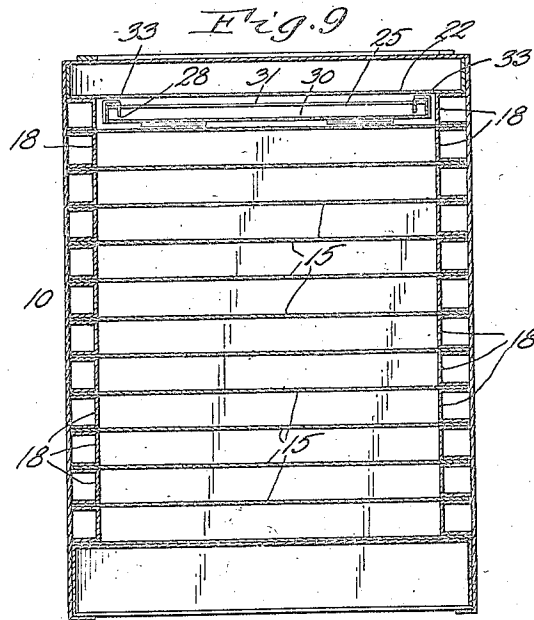
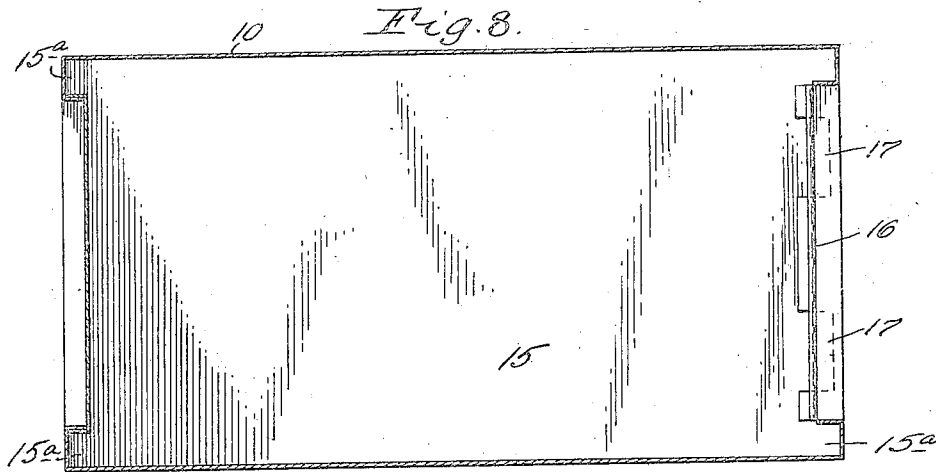
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APPLICATION FILED AUG. 9, 1920.

Patented Sept. 19, 1922.

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1,429,628.

Patented Sept. 19, 1922.

4 SHEETS—SHEET 4.

Fig. 11.

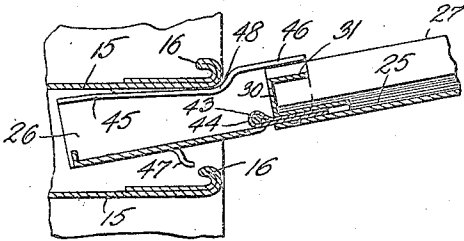


Fig. 12.

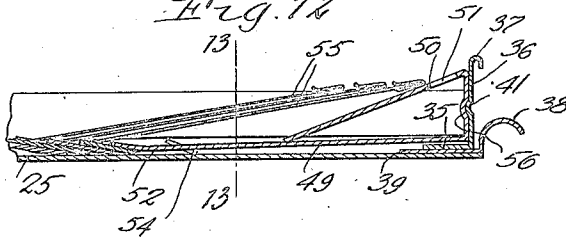


Fig. 13.

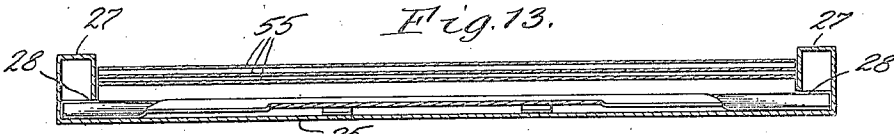


Fig. 15.

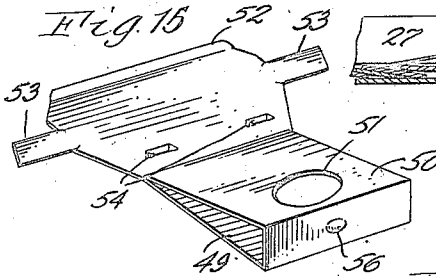


Fig. 14.

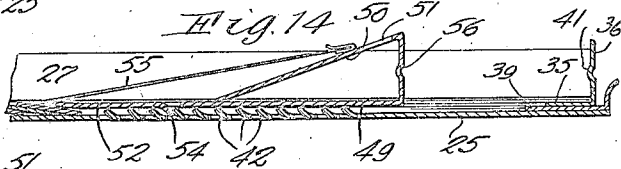
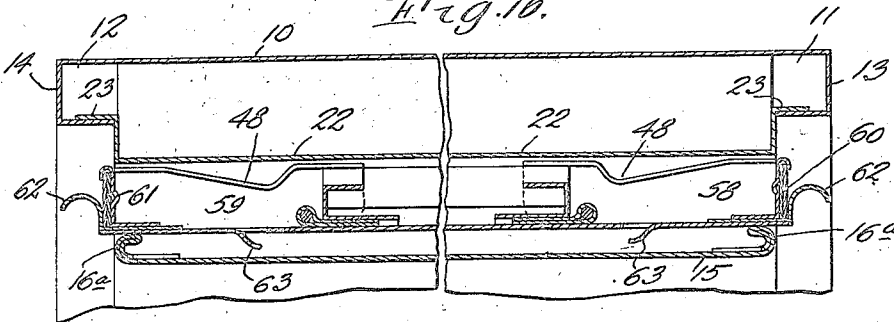


Fig. 16.



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UNITED STATES PATENT OFFICE.

JAMES H. RAND, JR., OF TONAWANDA, NEW YORK.

RECORD CABINET.

Application filed August 9, 1920. Serial No. 402,089.

To all whom it may concern:

Be it known that I, JAMES H. RAND, JR., a citizen of the United States, residing at Tonawanda, in the county of Erie and State of New York, have invented a new and useful Improvement in Record Cabinets, of which the following is a specification.

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

Heretofore great difficulty has been experienced in constructing cabinets of this type to produce a light but sturdy structure, the essential qualifications being that the boxes shall not be distorted while in use thereby interfering with free and ready access to the various card units, and further that while the individual slides or drawers of the cabinet shall be readily removable from the case, accidental or unintentional removal or displacement during examination of the cards or data shall not occur. Also with certain types of cabinets, and particularly with inexperienced or careless operatives, the slides or drawers of the cabinets, as well as the cabinets themselves, have been damaged or distorted due to a construction whereby sharp edges or corners of the slides contact with parts of the slide-ways or casing. Also, in cabinets heretofore in use, considerable difficulty has attended the insertion of the designation cards or slips at the front of the drawers or slides. Further, in the use of card index cabinets considerable time has been lost by the fact that while an operative is examining the records in one drawer of a stack access to adjacent boxes or slides by another operative is precluded.

One of the objects of this invention is to provide a card cabinet and slides or drawers of relatively light weight and of sturdy construction which are not liable to distortion.

A further object is to improve the construction of the cabinet and slides so that the slides may be readily removed when desired but shall not be liable to accidental displacement in the ordinary use of the cabinet.

Further objects are to construct the slides or drawers with means whereby the slides are guided to positions within the cabinet and any danger of injuring or marring the cabinet by unskillful handling is obviated.

Still further objects are to improve the

construction of the follower for holding the cards in position in the drawers and to improve the construction of the label or designation card holders.

With the above and other objects in view, the invention consists of certain features of structure and combinations which will be more fully set forth hereinafter.

One embodiment of the invention is set forth in the accompanying drawings, where- in:

Fig. 1 is a perspective view of the improved cabinet with one of the slides in open position.

Fig. 2 is a perspective of one of the slide members.

Fig. 3 is a sectional detail of a portion of one of the slide members showing the catch for retaining the slide in the cabinet.

Fig. 4 is a vertical section taken on line 4—4 of Fig. 2.

Fig. 5 is a vertical longitudinal section through a cabinet embodying the invention.

Fig. 6 is a horizontal section taken on line 6—6 of Fig. 5.

Fig. 7 is a detail of one of the side channel spacing members.

Fig. 8 is a horizontal section taken on line 8—8 of Fig. 5, showing one of the partition members.

Fig. 9 is a transverse vertical section taken on line 9—9 of Fig. 5.

Fig. 10 is a perspective view of one of the partition members.

Fig. 11 is an enlarged section of a portion of the cabinet, showing how the slide is removed.

Fig. 12 is a longitudinal vertical section through a portion of a slide, showing the card block or follower.

Fig. 13 is a cross section through one of the slide members as taken on line 13—13 of Fig. 12.

Fig. 14 is a longitudinal vertical section through a portion of one of the slide members showing the card follower in advanced position.

Fig. 15 is a perspective view of the card follower.

Fig. 16 shows, in longitudinal vertical section, a double-ended case and slide member.

Referring to the drawings, wherein similar numerals denote like parts throughout the several views:—

The cabinet or box is generally designated

as 10. It is considered preferable at this time to construct the body of the cabinet of three pieces of material, one piece serving as the top and sides, a second for the bottom, and the third for the rear wall of the structure, but it is apparent that the invention is not limited to any number of parts. The front and rear ends of the top and side walls are formed to provide inwardly-opening channels 11 and 12, thus providing marginal edges or flanges 13 and 14 which project outwardly from the front and rear faces of the cabinet producing inset panel effects for the front and rear ends. Within the cabinet are positioned a plurality of partition members 15, provided with tongues 15^a adapted to take into the channels 11 and 12 of the front and rear walls and to serve to brace the cabinet against strain or distortion. Each partition member is provided at its front end with a curved stop flange or keeper 16. As illustrated in Fig. 10 of the drawings, it is considered preferable to form this flange by folding the front edge of the partition back upon itself and then bending this double or folded edge into the form of a hook. The edge of the folded portion projects inwardly beyond the edge of the hook so that it can be conveniently welded or otherwise secured to the body of the partition and this projecting part may be notched or cut away as at 17 to a point beneath the hook, for a purpose to be hereinafter described.

The partition members are held in spaced relation by means of the spacing channels 18 associated in pairs and the ends 19 and 20 of which fit within the front and rear channels 11 and 12 of the cabinet and are provided adjacent one end with offset or inwardly bulging face portions 21, Figs. 6 and 7.

A false ceiling 22 is provided between the upper pair of spacing channels and the top of the cabinet. The front end of this ceiling is preferably formed with an upwardly and outwardly bent front edge or flange 23 which projects into the horizontal top channel at the front of the cabinet to hold the ceiling in place, and with an upwardly projecting rear edge as at 24 which may be welded or otherwise secured to the rear wall of the box.

The cabinet accommodates a plurality of drawers or card holding slides each slide comprising a container portion or body 25 and a pivoted end or tail portion 26. The body portion 25 of each slide is formed with hollow raised edges or side walls 27, the lower edges of the walls being slightly spaced apart from the bottom of the body whereby a slot 28 is provided for the reception of the retaining tongues of the cards or card holders. The side walls are cut away or recessed at each end as at 29 whereby the

cards may be readily removed. It is considered desirable to construct the slides of thin metal and, in such construction, to form the side walls by bending the edges of the sheet upwardly, inwardly and downwardly, thereby forming integral channeled side walls which impart greater rigidity and strength to the slide. The rear wall of the slide body is preferably formed of an angle piece 30 suitably secured to the inner face of the body and having its upper edge bent inwardly so as to provide an overhanging flange as at 31. The flange 31 is slotted as at 32, Fig. 1, thereby providing tongues 33 which fit within the channeled sides of the body and serve to brace the walls. The lower front edge of the slide body is turned outwardly and upwardly as at 34, thus providing a lower label retaining flange. The front wall of the slide body is preferably formed by a separate piece of material having a horizontal flange or base portion 35 which extends into the slide, a front portion 36 constituting the label receiving surface, and an upper flanged portion 37 which forms the upper flange of the label pocket. A handle or hand pull member is provided at the front of each slide, having a rolled or curved finger-engaging portion 38 and an attaching portion 39 which is preferably of width coextensive with the front of the slide. The finger-engaging portion 38 extends through a slot 40 in the lower label flange 34 and the attaching portion rests between the bottom of the slide and the horizontal flange 35 of the front member. In practice these parts are welded or otherwise secured together in their positions whereby a most rigid and strong structure is obtained. It is considered desirable that the attaching portion 39 project a slight distance forwardly of the front wall 36 whereby a smooth and unbroken slideway is provided for the lower edge of the label. In this construction, wherein the label-retaining flanges extend the full width of the slide and the attaching portion presents an unbroken slideway for the lower edge of the label, labels may be inserted and placed in position most quickly and without any danger of breaking or tearing the label as there are no corners or ends of the handle or lower flange projecting into the lower slideway and against which the end of a label being slid might contact. The inner front face of the slide may be provided with a lug or embossment 41 for a purpose hereinafter set forth. The slides may be provided with a plurality of teeth, spurs or projections 42 assuming the form of racks on their inner bottom faces.

The pivoted inner end portion 26 of the slide is preferably pivotally secured as by a pin 43 to suitable loops 44 formed on or suitably attached to the rear of the slide

body. The pivoted end portion is provided with upwardly and inwardly extending side flanges 45 which extend beyond the front end of the hinge portion as indicated at 46, whereby they are adapted, when in horizontal position, to overlie and partially enclose the rear ends of the side walls of the slide body, thus ensuring that no part of the slide member presents any sharp edges or ends when being inserted in the cabinet, and also serving to provide a rule joint whereby angular movement of the slide in an upward direction relative to the pivoted end is limited, thereby permitting quick closing of the slides and effectively tending to prevent jamming or catching when the slides are hurriedly thrown to closed position. The pivoted end is further provided on its under side with one or more hook members 47 which are adapted to engage the flanged edge 16 of the underlying partition member when the slide has been withdrawn to a certain point, the pivoted end of the slide will be retained in the cabinet, as illustrated in Fig. 3. The side flanges 45 serve as guide parts for sliding movement of the hinged ends in the cabinet and to cause the hooks 47 to engage the flanged edges 16. It is considered preferable that the hook members 47 be so positioned on the under sides of the ends that, when the slide is being withdrawn, the hooks will pass through the notched portions 17 of the flange 16, whereby there is no possibility of the hooks on the slides striking the attaching portion of the flange and jumping over the curved flange 16. In order to permit of intentional removal of the slide members, the side flanges 45 are provided with notches or depressions 48 in their upper faces which permit of the slide and its pivoted end being given an upward movement when the notches register with the front edge of the partition next above, resulting in releasing the hook members from engagement with the flange of the partition next below, as indicated in Fig. 11, thus permitting the removal of the slide.

Each slide or receptacle is equipped with a card block or follower which is adapted to lock the cards and prevent shifting movement within the slide. The block is formed with a relatively flat lower face 49 and a beveled or sloping upper face 50 formed with an aperture 51 constituting a finger hole. The beveled face of the block operates to maintain the upper edges of the front cards of the stack in position where they can be easily manipulated by the operative. The follower is illustrated as being formed of sheet metal but it is within the contemplation of the invention that it may be formed of a solid block having a face so formed that ready manipulation of the cards may be effected. The block further

comprises the end portion or tongue 52 which is adapted to engage the lower retaining flaps of the cards, and the laterally projecting ears 53 which extend into the channels 28 in the side walls of the slides. 70 The block may be provided on its under face with spurs or teeth 54 which are, as illustrated in Fig. 14 of the drawing, for the purpose of cooperating with the teeth of the racks 42 on the slide body to maintain the blocks in different holding positions. 75

In some instances the follower is used with a stack of card or index holders such as 55 which completely fill a slide in which use it will rest in the position shown in Fig. 12 of the drawings and in order to lock the follower in this position and prevent it from riding out of the slide its front face is formed with a suitable depression or recess 56 which takes over the embossment 41 on the inner front face of the slide. The racks permit the follower to be shoved inwardly and retained in the positions necessary to properly hold the card when different numbers of cards less than a complete stack are used. 80 85 90

For certain types of indices and to meet certain office conditions, it is desirable to construct the cabinets so that access may be had to the records from either the front or rear sides of the cabinet. A portion of a cabinet of this type is illustrated in Fig. 16 of the drawings. In the modification therein illustrated, both end walls of the body portion 57 of the slide are formed in the same manner as the rear end wall of the single structure above described, and hinged end portions 58 and 59 are provided at opposite ends of each slide, and each end portion carries an outer end portion 60 and 61 and a handle 62 constructed as described and set forth hereinabove for the single-end slide. Each hinged end portion is also provided with one or a pair of hook members 63. In this modified form the rear end wall of the cabinet shown in Fig. 5 of the drawings is omitted and the partition members 15 are provided with two end edge flanges as at 16^a. The slide can be pulled out either forwardly or rearwardly. 95 100 105 110 115

In the use of the improved cabinet, the cards are inserted in the slide with their tongues projecting into the side channels of the slides and the followers or blocks placed in position as indicated in Figs. 12 and 14 of the drawings, the position of the follower depending upon the number of cards in the stack. Then with the slide body and hinged end in horizontal alinement, as shown in Fig. 2, the slide is inserted in the cabinet. To examine any of the cards in the stack the slide is pulled out until the hooks on the bottom of the hinged end engage with the flange of the partition member next below, whereupon the slide may be released 120 125 130

and will hang in a vertical position permitting ready access to any and all of the cards carried therein. In this position, as illustrated in Figs. 1 and 5, the pivoted end of the slide projects out of the cabinet and the slide can hang vertically from the pivoted end, thus permitting of a better view of the cards in the upper slides of a relatively high cabinet and not tending to bend or injure the handles of lower slides. To return the slide to closed position in the cabinet, it may be grasped by the handle and move upwardly then inwardly, the projecting flanges of the hinged end acting in this movement to limit the upward movement of the slide body so that the slides may be thrown upwardly and inwardly in substantially one motion with great speed. The inwardly bulging face portions 21 on the spacing members serve to guide the slides in the cabinet and to prevent the slides from contacting with the edges of the front side flanges of the cabinet, see Fig. 6.

In order to remove the slides from the cabinet, they are drawn out until the hooks of the hinged ends engage the curved flanges of the partitions whereupon, if they are lifted up, the notched portions of the side flanges of the end sections will permit of release of the hooks and the slide and attached end section. The slide can be pulled out quickly, without particular care, and the hooks will always engage to retain the hinged ends in the cabinet; nevertheless, the slides may be readily removed as explained.

From the above description and the drawings, it will be seen that when the drawers or slides 25 are pulled out until arrested by the engagement of the hooks 47 with the flanges 16 at the front ends of the partitions, the hinged tail pieces 26 will project forwardly out of the cabinet, as shown in Figs. 1 and 3, and the drawers or slides can then swing downwardly to a position hanging vertically in front of the cabinets, as indicated in Fig. 1, or to any desired inclined position. In the use of the cabinet, two or more drawers or slides can be pulled out and swung down so as to rest in inclined positions one above the other upon a lower drawer which has been previously pulled out partway, or upon any other appropriate support beneath the drawers. When two or more drawers have been thus drawn out and swung downwardly, and the user is examining or making entries on the cards of one of the drawers, he may need to refer to matter on the cards in one of the lower drawers. In such case, instead of having to lift and shove back into the cabinet the drawers above that one containing the desired information, the overlying drawer or drawers can be shifted laterally to an oblique position with reference to the underlying drawer

so as to expose the ends of the overlapping cards along the longitudinal edge of such lower drawer. Such lateral relative shifting of the drawers is made possible by the construction shown and described. As clearly shown in Figs. 6 and 7, the spacing pieces 18 at the opposite edges of the drawers are provided near the front end of the cabinet with inwardly bulging portions 21, so that in addition to the necessary sliding clearance between the drawer and these bulges, wider spaces are left between the side edges of the drawer and remaining portions of the spacing members 18. Furthermore, when the drawers are pulled out with the tail pieces projecting forwardly beyond the cabinet, the tail pieces can be moved to disengage the hooks 47 of the tail pieces from the hooked flanges 16, as shown in Fig. 11. All together the possible movements of the tail pieces in the cabinet permit the front ends of the drawers to be moved laterally to place one or more of the drawers obliquely with reference to adjacent drawers, so as to expose a considerable portion of the ends of the cards along the side edge of an underlying drawer. The drawers can be shifted to an even greater obliquity when hanging or inclining downwardly in front of the cabinet.

I claim as my invention:—

1. A cabinet comprising side walls having their front and rear ends formed to provide inwardly opening channels and outwardly projecting marginal flanges, and partition members provided with projecting end portions which extend into said channels and tie the side walls together.

2. A cabinet comprising side walls having their front and rear ends formed to provide inwardly opening channels and outwardly projecting marginal flanges, a bottom wall, partitions in said cabinet, and spacing members interposed therebetween, said partitions and said spacing members having projecting end portions extending into said channels.

3. A cabinet comprising side walls having their front and rear ends formed to provide inwardly opening channels and outwardly projecting marginal flanges, and a bottom wall, partitions having projecting ends extending into said channels, and channeled spacing members interposed between said partitions and provided with projecting ends extending into the channels of said wall ends.

4. A cabinet comprising side walls having their front and rear ends in bent form forming inwardly opening channels and outwardly projecting marginal flanges, and a bottom wall, partitions having projecting ends extending into said channels, said partitions each being formed with an intumed hooked flange at one end, and channeled spacing

members interposed between said partitions and provided with projecting ends fitted into the channels of said wall ends.

5 5. A cabinet comprising side walls providing inwardly opening channels and outwardly projecting marginal flanges, a bottom wall secured to said side walls, partitions having end projections extending into the channels of said side walls, said partitions
10 being formed with doubled inturned flanges forming hooks, the projecting ends of said flanges extending beyond the hooked portions, channeled spacing members between said partitions, and a plurality of slide members adapted to be inserted between said
15 partition members, said slide members being provided with hooked retaining means adapted to engage the hooked flanges of said partitions to prevent the slides being
20 accidentally withdrawn from the cabinet.

6. A cabinet comprising side walls providing inwardly opening channels and outwardly projecting marginal flanges, a bottom wall secured to said side walls, partitions having end projections extending into the channels of said side walls, said partitions being formed with double inturned
25 flanged ends forming hooks, the projecting ends of said flanged ends extending beyond the hooked portions of the flanges and being recessed, spacing members interposed between and supporting said partition members, and a plurality of slide members adapted
30 to be inserted between said partition members, said slide members being provided with hooked retaining means adapted to pass through the recesses of the projecting ends of the inturned flanges of the partitions and engage the hooked flanges whereby the slides
35 are maintained in connected relation with the cabinet under normal conditions of usage.

7. A cabinet comprising side walls formed at their front and rear ends with inwardly
45 opening channels and outwardly projecting marginal flanges, a bottom wall, partition members in spaced relation in said cabinet, and slide members each formed with channeled side flanges and having a pivoted end section provided with projecting side flanges
50 adapted when in horizontal alinement with said slide to overlie the ends of said channeled side flanges.

8. In a card index cabinet, a casing open
55 at two ends, and a plurality of slide boxes adapted to contain index cards, each of said slide boxes being provided with two oppositely disposed hinged ends adapted to maintain the slide box in connected relation with
60 the casing during normal operation of the slides.

9. In a card index cabinet, a casing open at two ends, a plurality of slide boxes adapted to be inserted in said casing and to con-

tain index cards, each of said slide boxes
65 being provided with two oppositely disposed hinged ends, and hooks projecting from the underside of each of said ends, whereby the slide box may be maintained in connected relation with the casing during normal operation of the slides.
70

10. In a card index cabinet, a casing open at opposite ends, a plurality of partitions in spaced relation in said casing, each of said partitions being formed with upwardly
75 projecting hooked flanges upon each end adjacent the open ends of said casing, a plurality of slide boxes adapted to be disposed between said partition members and to be partially withdrawn from the casing to permit examination of their contents, each of
80 said slide boxes comprising a slide body and oppositely disposed hinged ends, said slide body being provided with channeled sides, projecting flanged sides on said hinged ends,
85 adapted to overlie the ends of said channeled sides, and hooks projecting from the underside of each of said hinged ends and adapted to engage the hooked flanges of said partitions to retain the slides in connected relation with the casing when the slide boxes
90 are withdrawn for examination.

11. In a card index cabinet, a slide member having a front end wall provided at its upper edge with an outwardly and downwardly turned flange adapted to serve as a
95 label retaining flange member, a lower label retaining flange member, and a handle member projecting from said front end wall, said handle member including an attaching portion projecting outwardly of
100 said front end wall in the form of a label sildeway coextensive in width with and resting in said lower label retaining flange.

12. In a card index cabinet, a slide member comprising a bottom portion formed at one end with an upwardly turned label retaining flange, an end wall formed with a
105 flanged base portion attached to said bottom portion, and a handle member having an attaching portion secured between the base portion of said end wall and said bottom portion.
110

13. In a cabinet, a partition member provided at one end with a doubled inturned
115 stop flange forming a hook, said flange projecting inwardly beyond the hook and secured to said partition member.

14. In a cabinet, a partition member provided at one end with a doubled inturned
120 stop flange forming a hook, said flange projecting inwardly beyond the hook and secured to said partition member, the projecting part of said flange having notches extending under the hook.
125

15. In a cabinet, a slide member with a hinged end, cooperating retaining hooks on the cabinet and said hinged end for pre-

venting accidental removal of the slide member and end from the cabinet, guide parts to cause engagement of the retaining hooks, said guide parts being recessed to permit disengagement of the hooks for removing the slide member and end from the cabinet.

16. In a cabinet, a slide member having channeled side portions, a channeled end portion on said slide, said channeled end portion being notched to receive the ends of said channeled side portions.

17. In a cabinet, a slide member comprising a bottom portion formed with channeled side portions, an end portion provided with an inwardly projecting flange secured to said bottom, said inwardly projecting flange being notched thereby providing tongues projecting into and interlocking with the channeled sides.

18. In a cabinet, a slide member including a body portion having a hinged tail portion, cooperating hooks in said cabinet and on said tail portion for normally retaining the slide in the cabinet, guides for said hinged tail portion, said guides being arranged to overlap the body portion whereby swinging movement of the tail relative to the body is limited and the ends of the body are prevented from catching in the cabinet on insertion of the slide.

19. A cabinet comprising side walls having their front and rear ends formed to provide inwardly opening channels, a bottom

wall, and partitions between said side walls thereby providing drawer receiving compartments, and channeled spacing members having inwardly projecting guide bulges, adapted to hold drawers sliding in the compartments out of contact with the wall channel flanges.

20. A cabinet comprising a casing, a plurality of drawers slidably supported one above another in said casing to permit the drawers to be pulled forwardly out of the casing, a plurality of index elements arranged in each drawer in overlapping relation with corresponding edges of said elements exposed one in front of the other lengthwise of the drawer, drawer-supporting members movable in the casing to positions projecting forwardly in front of the casing and on which said drawers are pivotally supported to swing vertically when the drawers are pulled out and the drawer-supporting members are in their forwardly projecting positions, said casing and drawer-supporting members being constructed to permit said drawers to shift laterally to oblique positions relatively to each other when the drawers are pulled out, thereby to expose the ends of said index elements along the side edge of a drawer underlying another drawer or drawers.

Witness my hand this 26 day of July, 1920.

JAMES H. RAND, Jr.

Witness:

MIRIAM S. RAND.