E. H. METCALF.

FILING CABINET.

APPLICATION FILED FEB. 24, 1920.

1,433,836. Patented Oct. 31, 1922.

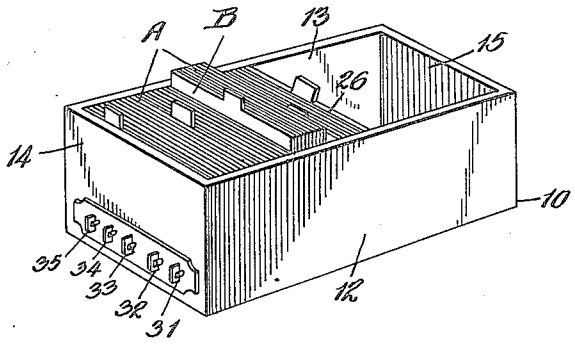


Fig. 1.

Fig. 2.

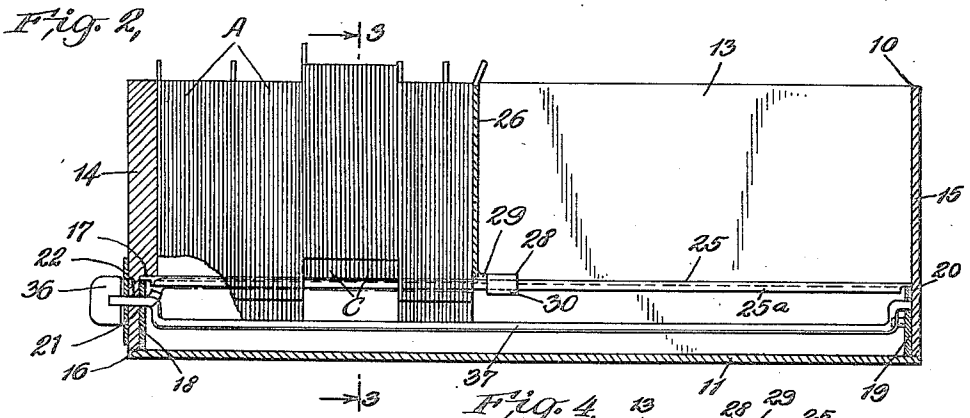


Fig. 4.

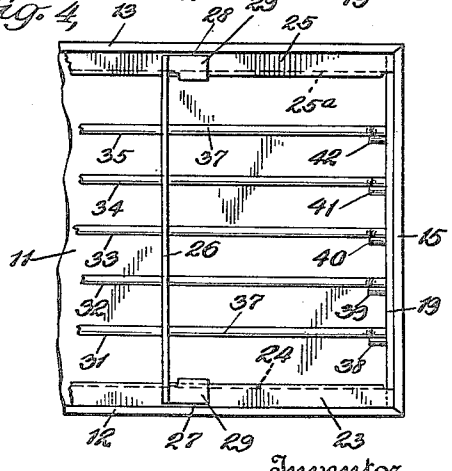
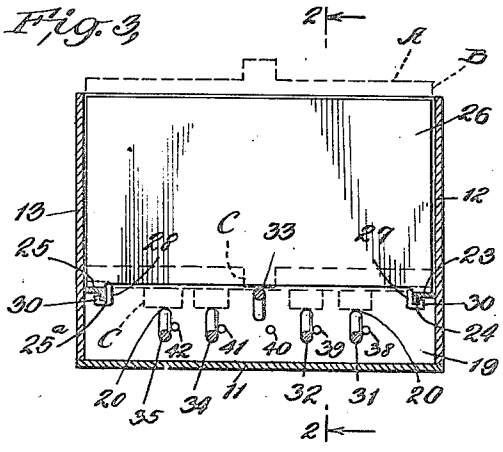


Fig. 3.



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UNITED STATES PATENT OFFICE.

EARL H. METCALF, OF NEW YORK, N. Y.

FILING CABINET.

Application filed February 24, 1920. Serial No. 361,054.

To all whom it may concern:

Be it known that I, EARL H. METCALF, a citizen of the United States, and a resident of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in a Filing Cabinet, of which the following is a full, clear and exact specification.

This invention relates more particularly to a class of filing devices.

My invention has for its object primarily to provide a cabinet designed to be employed for permitting cards and the like having records and data inscribed thereon to be filed for ready reference in a manner whereby a number may be included in classification so that when it is desired to refer to the cards of a single classification all the cards of the class may be easily selected. The invention consists essentially of a casing having on its interior two fixed spaced parallel guides or bars provided on similar relative planes above the bottom of the casing for removably supporting reference cards especially when arranged in the cabinet in classified groups. On the guides may be a slidable plate, and in the casing are a number of elements each of which is separately operable for elevating in unison the cards of a single group whereby these cards may be conveniently referred to and removed if desired without disturbing the cards of other classifications.

A further object of the invention is to provide a filing cabinet of a simple, efficient and durable construction which may be made of any suitable material in different sizes and shapes.

With these and other objects in view the invention will be hereinafter more fully described with reference to the accompanying drawing forming a part of this specification in which similar characters of reference indicate corresponding parts in all the views, and will then be pointed out in the claims at the end of the description.

In the drawing, Figure 1 is a perspective view of one form of filing cabinet embodying my invention, and which shows a number of groups of cards arranged therein.

Fig. 2 is an enlarged detail sectional view taken lengthwise through the cabinet on the line 2—2 of Fig. 3 and in which is shown a side elevation of the groups of cards, part of the latter being broken away.

Fig. 3 is an enlarged detail sectional view taken on the line 3—3 of Fig. 2, but with the cards indicated by dotted lines and

Fig. 4 is an enlarged fragmentary view looking into the rear part of the open top of the cabinet.

The filing cabinet has an open top casing 10 which may be of any shape and size, though the casing illustrated is substantially rectangular to provide a bottom 11, side walls 12, 13, front wall 14 and rear wall 15. The part of the inner face of the front wall 14 adjacent to the bottom 11 is cut out transversely, as at 16, to provide an overhanging shoulder 17 which serves as a stop, as will be hereinafter more fully explained.

In the cut-out 16 is a flat strip or bar 18 which is arranged in a substantially vertical plane and this strip is of a width so that its upper edge is spaced from the shoulder 17. Across the lower part of the rear wall 15 of the casing is another flat strip or bar 19 also disposed in a substantially vertical plane, and this strip is of similar width to the width of the strip 18. In spaced parts of the strip 18 are a number of holes 21, and in spaced parts of the strip 19 are a similar number of holes 20 which are in register with the holes 20, while through the front wall of the casing are a number of holes 22 which communicate with the holes 20 of the strip 18. On one of the ends of the strips 18 and 19 is a fixed flat guide or bar 23 which is arranged alongside of the side wall 12 of the casing, and on the lengthwise edge of this guide removed from the side wall of the casing is a depending flange 24. On the second ends of the strips 18 and 19 is a similar fixed flat guide or bar 25 which is disposed alongside of the side wall 13 of the casing, and on the lengthwise edge of this guide removed from the guide 23 is a depending flange 25^a. The flanged guides 23 and 25 are thereby spaced above the bottom of the casing, and on top of these guides may be a plate 26 which is substantially rectangular as well as being disposed on one of its edges so that it extends upright across the interior of the casing.

The plate 26 is slidably adjustable on the guides back and forth between the front wall 14 and rear wall 15 of the casing, and serving to accomplish this, on the lower edge of the plate are provided two retainers, as 27 and 28. Both of the retainers

may be similarly formed, and each retainer has an extension or flat lug 29 protruding right-angularly from spaced parts of the lower edge of the plate so that the extensions of both retainers slidably rest upon the tops of the guides 23 and 25. Projecting downwardly from one of the side edges of the extension 29 of each of the retainers is a hook, as 30, and the hooks of both extensions are movably disposed around the depending flanges 24 and 25[a] of the guides 23 and 25 in the manner shown. Thus the plate 26 may be adjustable to various positions on the guides 23 and 25 between the front and rear walls of the casing of the cabinet.

In conjunction with the cabinet I prefer to employ types of cards, as indicated at A, each having a body part or writing surface, as B, to allow records or data to be inscribed thereon for ready reference, as is common with the use of this class of devices. The body part of each card is substantially rectangular as well as being of a size for resting edgewise upon and being freely movable on the tops of the guides 23 and 25 between the plate 26 and one of the walls of the cabinet, and protruding downwardly from each card into the space between the guides is a lug or tab C. Since reference cards of this kind are usually employed in classes each including a number of the cards, the tabs of the cards of each classified group are provided so that they protrude from similar portions of the body parts of all the cards of a single class, and the tabs of the cards of the other groups of cards are provided so that all the series are spaced apart, for example, there may be arranged in each cabinet five groups of the cards, or a greater or less number of groups.

In order to permit all of the cards of a single group to be easily selected and if desired to be removed from the cabinet collectively, the cards of each group are adapted to be elevated in unison with respect to the cards of the other groups by separately operable elements or eccentrics, as 31, 32, 33, 34, 35. These elements may be of any appropriate types, though I prefer to make them of like formations, each consisting of a rod of a length as well as being of a size so that its ends are rotatably disposed in the registered holes 20, 21, 22 of the strips 18, 19 and the front wall 14 of the casing 10. The rods 31, 32, 33, 34, 35 are of lengths so that one of their ends extend beyond the outer face of the front wall of the casing, and on the protruding end of each rod is a flat wing-shaped head or handle, as 36, to allow the rod to be manually rotated from the exterior of the casing. The portion of each rod interiorly of the casing between the strips 18 and 19 is bent laterally in somewhat the fashion of an elongated U to provide an eccentric portion 37. These U-shaped or eccentric portions of the rods are provided so that they are normally disposed downwardly toward the bottom of the casing as well as being of sizes so that when each of the rods is swung half a revolution, its eccentric portion will move upwardly to a plane corresponding with the plane of the guides 23 and 25.

The tabs C of each group of the cards A are so arranged that the free ends of all of the tabs of the group will rest in the eccentric portion 37 of one of the rods 31, 32, 33, 34, 35 when the cards are in their normal positions within the cabinet, as shown in Fig. 2. When it is desired to obtain access to the cards of a particular group for reference or removal from the cabinet the element or rod upon which the tabs of the cards of the group are disposed is rotated half a revolution by turning the handle 36 of the rod for swinging the eccentric portion 37 upwardly, and the group of cards will then be raised above the other groups of cards in the cabinet. For the purpose of preventing the rods 31, 32, 33, 34, 35 from being rotated in one direction, on the strip 19 may be provided stops, as 38, 39, 40, 41, 42, each of which is preferably in the form of a pin or lug protruding toward the center of the casing 10 from part of the strip alongside of one of the rods so that when the eccentric portion of each rod is in a depending position one end of the eccentric portion will lie against the adjacent pin. Each of the rods may thereby be swung only in one direction, and by making the shoulder 17 of the front wall 14 of the casing 10 so that it overhangs the second ends of the eccentric portions of the rods the upward movement of each rod will be limited to making half a revolution when rotated by the second end of its eccentric portion engaging the shoulder.

In the foregoing description, I have embodied the preferred form of my invention, but I do not wish to be understood as limiting myself thereto, as I am aware that modifications may be made therein without departing from the principle or sacrificing any of the advantages of this invention, therefore, I reserve to myself the right to make such changes as fairly fall within the scope thereof.

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

1. In combination with a suitable casing or receptacle, a series of information cards having straight lower edges with tabs depending from said edges of the cards in different vertical planes, a series of rotatable eccentric lifter elements extending longi-

tudinally within said receptacle in said different vertical planes and transversely to said cards so that each lifter element is arranged to engage the tabs of different cards, means for selectively rotating any one of said lifter elements, parallel bars fixed to the opposite sides of said receptacle with said straight lower edges of the cards resting thereon whereby the cards are supported with their tabs normally in spaced relation to the eccentric lifter elements, and a stop pin rigid with and projecting inwardly from an end wall of the receptacle adjacent each of the lifter elements whereby the same are stopped in a vertical position spaced from the tabs and prevented from rotation in one direction.

2. In combination with a suitable casing or receptacle, a series of information cards having straight lower edges with tabs depending from said edges of the cards in different vertical planes, a series of rotatable eccentric lifter elements extending longitudinally within said receptacle in said different vertical planes and transversely to said cards so that each lifter element is arranged to engage the tabs of different cards, means for selectively rotating any one of said lifter elements, parallel bars fixed to the opposite sides of said receptacle with said straight lower edges of the cards resting thereon whereby the cards are supported with their tabs normally in spaced relation to the eccentric lifter elements, a stop pin rigid with and projecting inwardly from an end wall of the receptacle adjacent each of the lifter elements whereby the same are stopped in a vertical position spaced from the tabs and prevented from rotation in one direction and means to prevent rotation of said lifter elements in the other direction more than half revolution.

3. In combination with a suitable casing or receptacle, a series of information cards having straight lower edges with tabs depending from said edges of the cards in different vertical planes, a series of rotatable eccentric lifter elements extending longitudinally within said receptacle in said different vertical planes and transversely to said cards so that each lifter element is arranged to engage the tabs of different cards, means for selectively rotating any one of said lifter elements, parallel bars fixed to the opposite sides of said receptacle with said straight lower edges of the cards resting thereon whereby the cards are supported with their tabs normally in spaced relation to the eccentric lifter elements, a stop pin rigid with and projecting inwardly from an end wall of the receptacle adjacent each of the lifter elements whereby the same are stopped in a vertical position spaced from the tabs and prevented from rotation in one direction, one end of each lifter element being journaled through the front end of said receptacle, said front end of the receptacle being provided with a transverse recess in its inner face defining a shoulder forming a stop means for limiting the rotation of the lifter elements to substantially one-half revolution in the other direction, and a metallic plate countersunk in said recess and through which the forward ends of said lifter elements are journaled.

4. In combination with a suitable casing or receptacle, a series of information cards having straight lower edges with tabs depending from said edges of the cards in different vertical planes, a series of rotatable eccentric lifter elements extending longitudinally within said receptacle in said different vertical planes and transversely to said cards so that each lifter element is arranged to engage the tabs of different cards, means for selectively rotating any one of said lifter elements, parallel bars fixed to the opposite sides of said receptacle with said straight lower edges of the cards resting thereon whereby the cards are supported with their tabs normally in spaced relation to the eccentric lifter elements, a stop pin rigid with and projecting inwardly from an end wall of the receptacle adjacent each of the lifter elements whereby the same are stopped in a vertical position spaced from the tabs and prevented from rotation in one direction, one end of each lifter element being journaled through the front end of said receptacle, said front end of the receptacle being provided with a transverse recess in its inner face defining a shoulder forming a stop means for limiting the rotation of the lifter elements to substantially one-half revolution in the other direction, a metallic plate countersunk in said recess and through which the forward ends of said lifter elements are journaled, and a second plate alined with the first named plate and fastened against the inner face of the other end wall of the receptacle with the opposite ends of said lifter elements journaled therein, said second named plate having said stop pins fixed thereto.

5. In combination with a suitable casing or receptacle, a series of information cards having straight lower edges with tabs depending from said edges of the cards in different vertical planes, a series of rotatable eccentric lifter elements extending longitudinally within said receptacle in said different vertical planes and transversely to said cards so that each lifter element is arranged to engage the tabs of different cards, means for selectively rotating any one of said lifter elements, parallel bars fixed to the opposite sides of said receptacles with said straight lower edges of the cards resting thereon whereby the cards are supported with their tabs normally in spaced relation

to the eccentric lifter elements, said parallel bars being of angle formation in cross section with one flange horizontally disposed and the other flange vertically disposed in spaced relation to and parallel with the sides of the receptacle, and a follower plate for said cards having integral hooked members at their lower corners engaging around the vertical flanges of said bars with the lower edge of the follower plate resting upon the horizontal flanges of said bars.

This specification signed and witnessed this 21 day of February, A. D. 1920.

EARL H. METCALF.

Witnesses:
FREDERICK CRYER.
A. SCUTT.