E. F. DAYTON.

FILE.

APPLICATION FILED DEC. 16, 1911.

1,109,114.

Patented Sept. 1, 1914.

2 SHEETS—SHEET 1.

Fig. 1

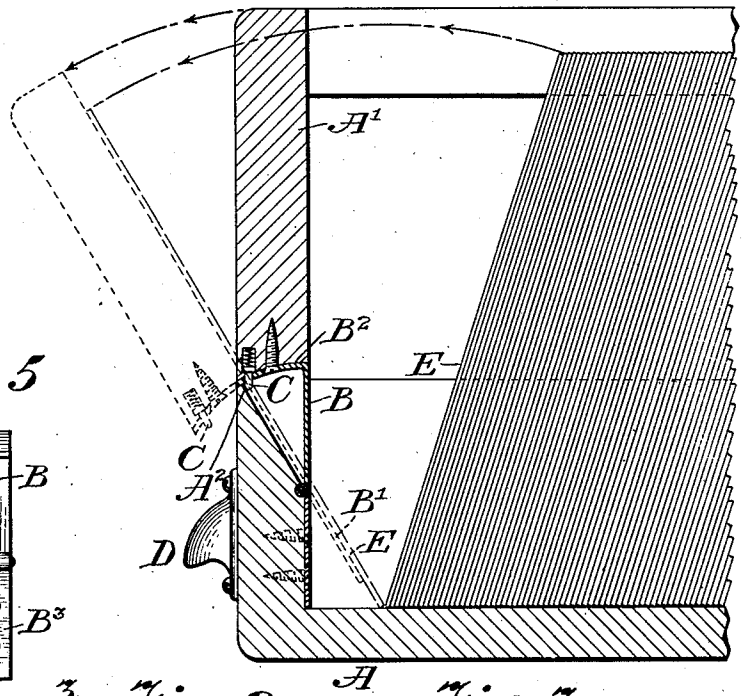


Fig. 5

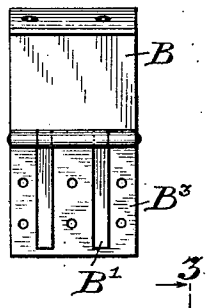


Fig. 2

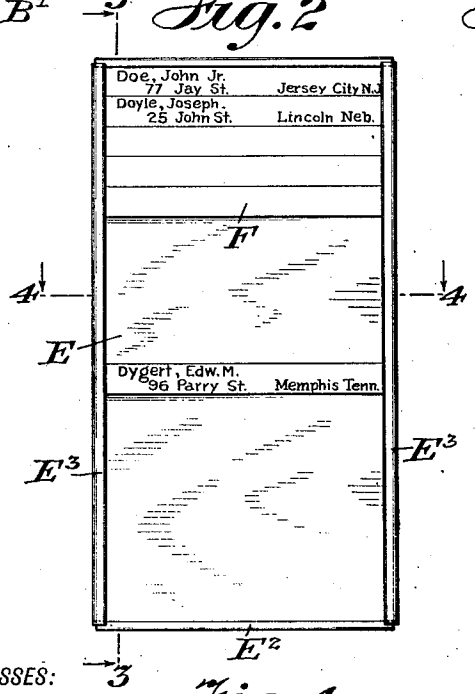


Fig. 3

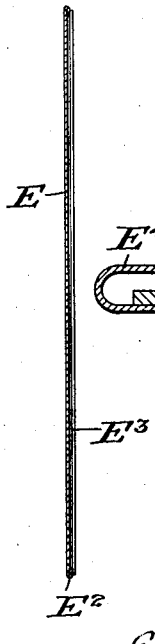
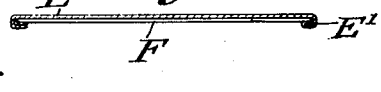


Fig. 6



Fig. 4



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2 SHEETS—SHEET 2.

Fig. 7

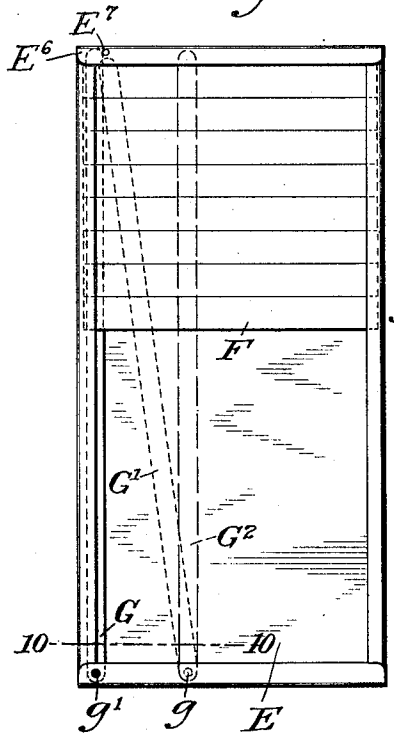


Fig. 8

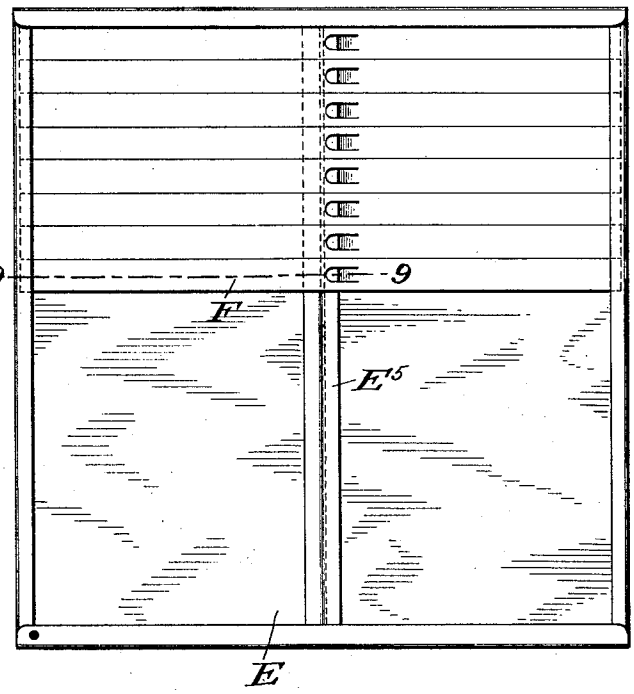


Fig. 9

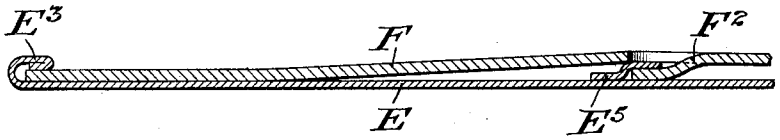
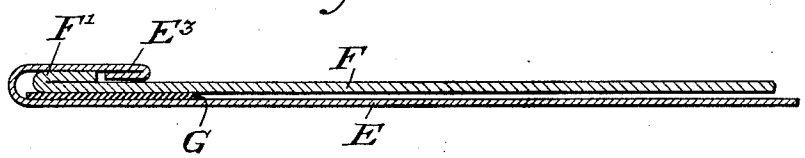


Fig. 10



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UNITED STATES PATENT OFFICE.

ESTEY F. DAYTON, OF NEW YORK, N. Y.

FILE.

1,109,114. Specification of Letters Patent. Patented Sept. 1, 1914.

Application filed December 16, 1911. Serial No. 666,181.

To all whom it may concern:

Be it known that I, ESTEY F. DAYTON, a citizen of the United States, and resident of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Files, of which the following is a specification.

My present invention relates to files, of the character of card cabinets.

It has particular reference to a convenient arrangement of such files for ready reference in tilting the front of the file-case so that the inclosed cards may readily be handled, and also in a new method of assembling the cards so as either to form a convenient index to other cards which may be contained in the case, or in those instances to which it is adaptable to group the cards, so that they may be conveniently handled with more facility and at greater speed than has heretofore been possible.

In this respect my invention relates to an improved article of manufacture, which I have herein called a "card-container," and the particular uses of which I will hereinafter more fully point out.

The case in which the cards are contained has a fall-front, and the particular arrangement thereof, while furnishing a firm front for the file when it is to be put in place, permits the pulling forward of the front to furnish a support for the cards as they are tipped forward in the usual handling, and this without manual release of detents or catches of any kind, being entirely automatic in this respect. The arrangement is such also as to dispense with the usual miter-block contained in the front end of most card-file cases; and the particular form of hinge which I employ for this purpose (it is of course old to hinge the front) is also novel in itself, as will be pointed out, in that it embraces one or more arms which project from the pivot parallel to the blade of the hinge when the front of the file is in its closed position, but which move in line with the rear face of the front so that as that springs out the arms swing back to take the place of the miter-block commonly employed. Also, by suitable cutting away upon the inside the hinge does not show upon the front of the case, thus greatly improving its appearance and making a close fitting sliding joint which excludes dust.

The improved card-container permits the cards to be moved about therein, as it engages them by the ends entirely, and thus additional names may be inserted with facility in their correct positions.

In some particular uses of the card-file, such as in banks or in other places where the removal of cards should only be by authority, it is desirable to lock the cards in their places so that they cannot be improperly removed without destruction; I arrange my improved card container so that this can be readily accomplished by simple means.

The accompanying drawings show my invention in one of its embodiments, Figure 1 being a vertical section of the improved file-case, Fig. 5 being a detail of the hinge employed. Figs. 2, 3 and 4 are respectively a front elevation and sections upon the lines 3—3 and 4—4 of Fig. 2, of my improved card-container. Fig. 6 is a section upon an enlarged scale showing the detail of the edge of the card-container. Fig. 7 is a front elevation showing means for locking the cards, Fig. 10 being a partial section upon the line 10—10, Fig. 7 showing upon an enlarged scale the detail of the locking device. Fig. 8 is a front elevation of an improved arrangement for wide cards, and Fig. 9 is a partial section upon line 9—9 of Fig. 8, upon an enlarged scale.

I will first describe the improvement in the case with which my card-container is used, as set out in Figs. 1 and 5. In those figures, A is the case, of which A^1 is the fall front; B is the hinge connecting the front to the case. B^1B^1 are the arms to which I refer, which are shown as filling cutaway openings in the leaf or blade B^3 of the hinge. In practice it is of course not important whether the parts of the hinge form an unbroken surface, as illustrated in Fig. 1, in full lines; as the arms may be parallel to the blade or leaf. The part B^2 of the hinge which is attached by screws in the usual way to the movable part A^1 of the front is formed upon a curve having its center at the pin of the hinge, thus fitting closely and excluding dust. A ball-catch C is provided, and the end A^2 of the lower fixed part of the case is reinforced with a brass plate so as to take the wear of this catch. D is the usual handle provided for such structures.

Referring now to Figs. 2, 3 and 4, I show the improved card-container E, which is folded over at top and bottom at E^2, and at the sides at E^3; in the latter case the fold

being double, as shown at E^1 so as to present a smooth surface not likely to mar the cards or cut the finger, and which strengthens the edge and stiffens the container. As shown on an enlarged scale in Fig. 6, the part E^3 is closer to the body E of the container than the edge E^4 of the latter, so that there is a little spring to it, enabling it to be pushed up by the thrust of the card F as that is put in place, yet pinching the card slightly after it is adjusted and holding it firmly in any position in which it may be placed.

The card-container is by preference composed of thin sheet-metal, though it might be made of cardboard having sheet-metal edges. I prefer to make it of thin aluminum, since that is practically non-oxidizible and does not soil the hands or the cards so much as other metals; while its lightness and bright gray color make it peculiarly suitable for the purpose.

In Fig. 7, I show the method which I have devised for locking the cards in place. Reading this figure in connection with Fig. 10, it will be seen that the cards F are folded over at F^1, so as to be of double thickness, and that they slide under the folded edge E^3 of the container. When in the illustrated position their removal is impracticable without destroying the card, while when they are pressed close against the bottom of the tray it will be possible to slip them out. Underneath the cards is a strip G, provided with a perforation g through which the rod g^1 (shown only in section in Fig. 7), which is commonly provided with card-cabinets and requires no further description, may be slipped to fasten the strip in its place. At the upper edge of the container the fold E^6 is of a width which permits the accommodation of the strip and the card above it; while passing through the fold E^6 is a rivet or punch-mark E^7, behind which the strip G may rest. In the illustrated position of the strip it is held firmly by the rod g^1, for which any convenient form of lock such as is common in the art may be provided upon the file case. When it is desired to remove a card F from the container the rod g^1 is removed, whereupon the strip G may be slipped to one side in the position shown in dotted lines at G^1, which enables its top to clear the rivet E^7; the top of the strip may then be moved until it lies in the position shown at G^2, when the card F may be depressed upon the end until the folded portion F^1 is below the retaining portion E^3 of the container, whereupon the card may be removed with facility. Of course other methods of forming the retaining portion F^1 of the card may be employed, but in general the fold is sufficient and cheap. If a card be torn off, the stub will remain in the channel under E^3 and the vacant space at once invites investigation.

In Figs. 8 and 9 I illustrate how a wide card may be held in place, not only at the end, but at one or more points intermediate thereof. In this case a strip E^5 is secured in any suitable way to the container E. This is of the shape shown in cross-section in Fig. 9, and the card F is provided with a tongue F^2. The card is inserted by depressing the tongue F^2 and passing it under the strip E^5, then buckling the card so that its ends may pass under the folded edges E^3E^3 in the usual manner. Of course the locking arrangement shown in Fig. 7 may be employed with the construction shown in Fig. 8 if desired, as will be manifest without further illustration or description.

Having thus described my invention, what I claim and desire to protect by Letters Patent of the United States, is:—

1. A file-case provided with a front having a hinge invisible from the front of the file and dividing it into fixed and movable parts, and an automatic detent holding the movable part of the front erect, or permitting its tilting as desired.

2. A file-case having a body, a front divided on a substantially horizontal plane into fixed and movable parts and having a hinge on the inner edge, the fixed portion of the front being cut away to permit the movable part to tilt, the movable part being shaped upon a curve substantially concentric with the hinge; whereby a close sliding fit is secured for excluding dust.

3. A file-case having a body, a front divided on a substantially horizontal plane into fixed and movable parts and having a hinge on the inner edge, the fixed portion of the front being cut away to permit the movable part to tilt, and one of the parts carrying an automatic catch holding the movable part of the front erect, or permitting its tilting.

4. A file-case having a body, a front divided on a substantially horizontal plane into fixed and movable parts, and a hinge upon the inner edge joining the two parts, the hinge provided with arms in substantially the plane of the movable part and moving therewith; whereby when the movable part is erect the arms are practically vertical, and when the movable part is tilted forward, the arms project into the case to form a substitute for the ordinary miter block.

5. A file-case having a body, and a front divided on a horizontal plane into fixed and movable parts hinged together, the hinge being provided with arms in substantially the plane of the movable part and an automatic catch permitting the movable part to stand erect or to tilt, as desired; whereby the arms upon the hinge when the movable part of the front is erect are substantially vertical, and when it is tilted project into

the file-case, to form a substitute for the miter block.

6. A card-container composed of thin sheet-metal having folded edges under which the ends of the cards may be slipped to hold them in place, and provided with means for locking the cards in their desired places, so that when such locking means is in use the card cannot be removed without destruction.

7. A card-container composed of thin sheet-metal having folded edges and provided with locking means for holding the cards in place; such locking means consisting of a space in the rear of the folded portion of the edge into which a folded part of the card is inserted, and means for holding the folded part of the card therein, or for permitting its withdrawal at will.

8. A card-container of thin sheet-metal provided with locking means for retaining the cards in place; such means consisting of edges folded and then doubled over so as to leave a space in the rear of the folded portion, cards having thickened ends of such shape and size as to permit their disposition in such space, a locking strip behind the cards pressing them into position to prevent their withdrawal, and means for locking the strip in place, or disengaging it, as desired.

9. The combination of a card-container composed of thin sheet-metal having folded edges and provided with a central strip having a space thereunder, of cards, the edges of which are disposable under the folded edges of the container, and means for engaging the middle of the card to hold it in place, such means coöperating with the central strip.

10. A card-container for wide cards composed of thin sheet-metal having folded edges for engaging the ends of the cards, and means for engaging the middle of the cards to prevent their buckling.

11. A card-container for wide cards composed of thin sheet-metal having folded edges under which the ends of the cards are disposed, a central strip upon the container having a space thereunder, and tongues upon the cards engaging with the central strip.

12. A card-container for wide cards composed of thin sheet-metal having folded edges under which the ends of the cards may be disposed, and a central strip, and a card or cards having tongues formed from the body thereof and engaging the central strip.

In witness whereof, I have hereunto set my name in the presence of two witnesses.

ESTEY F. DAYTON.

Witnesses:
T. J. JOHNSTON,
IRVING M. OBRIEGHT.