J. L. McMILLAN.

FILING DEVICE.

APPLICATION FILED JULY 17, 1919.

1,382,523.

Patented June 21, 1921.

3 SHEETS—SHEET 1.

Fig. 1.

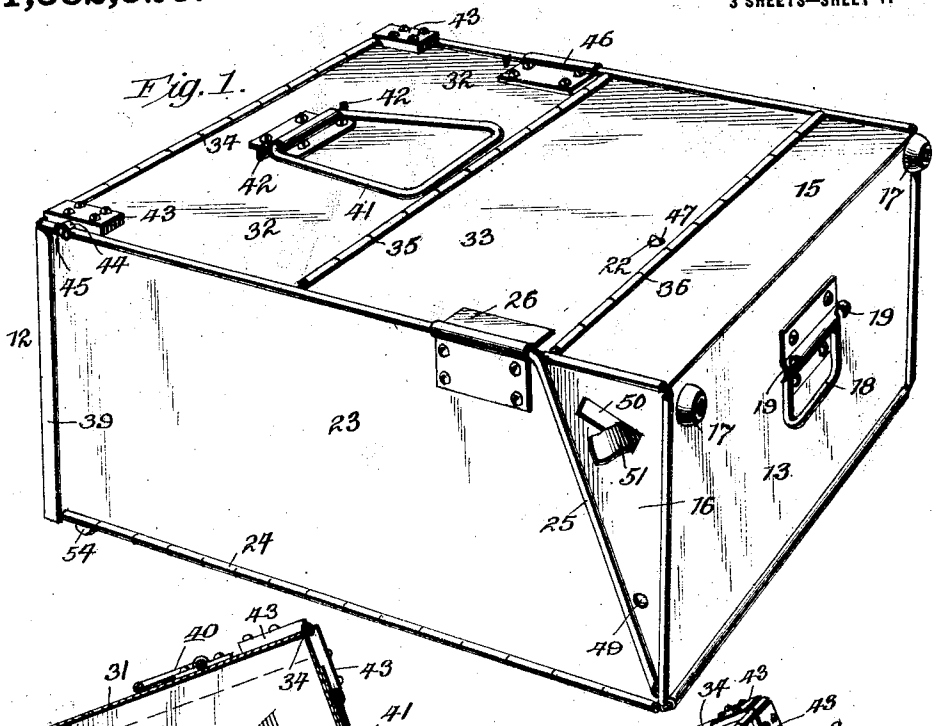


Fig. 2.

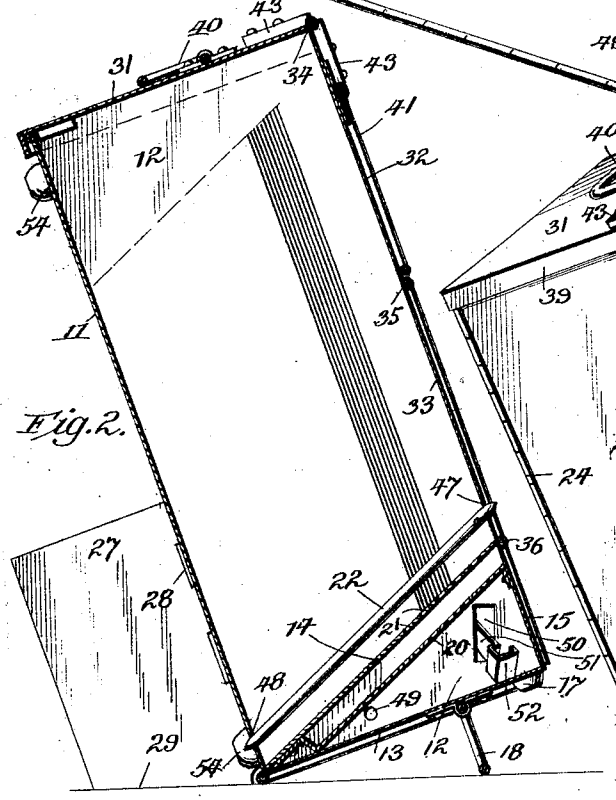
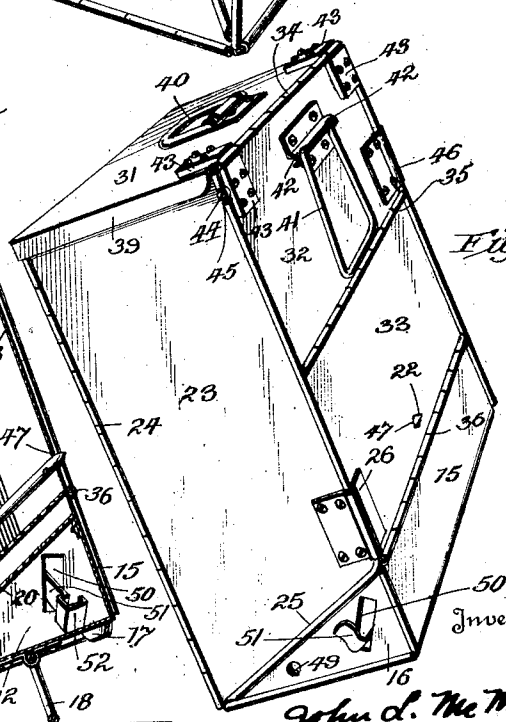


Fig. 3.



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3 SHEETS—SHEET 2.

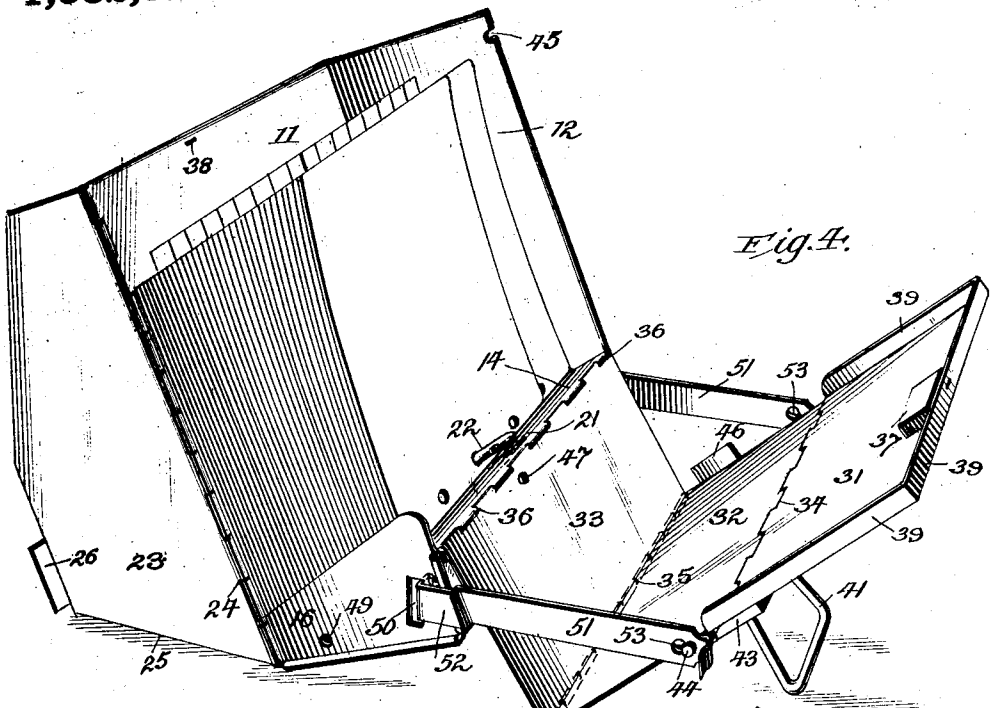


Fig. 4.

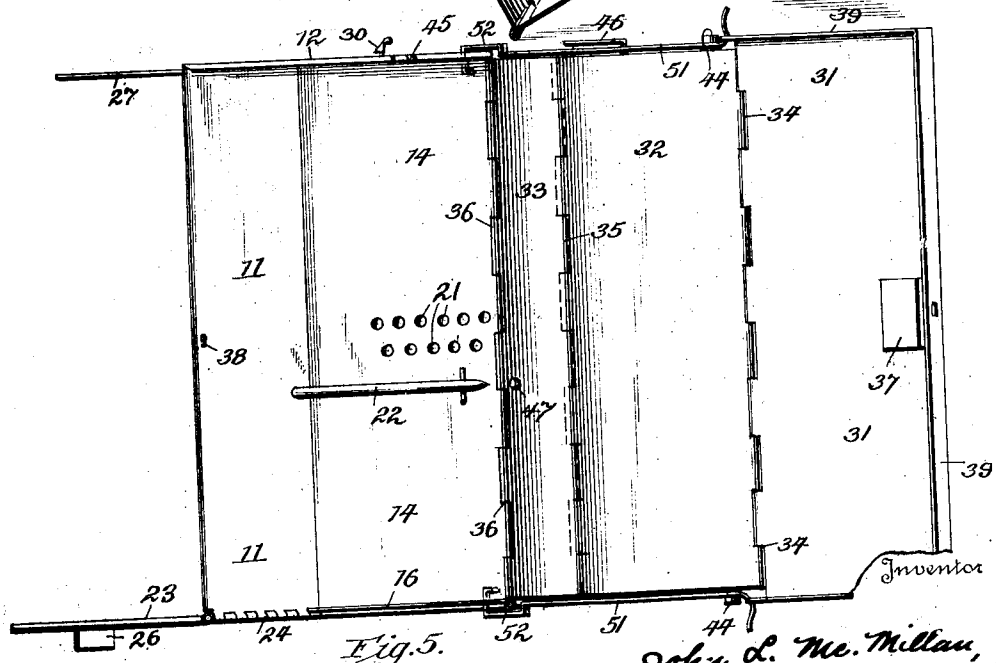


Fig. 5.

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3 SHEETS—SHEET 3.

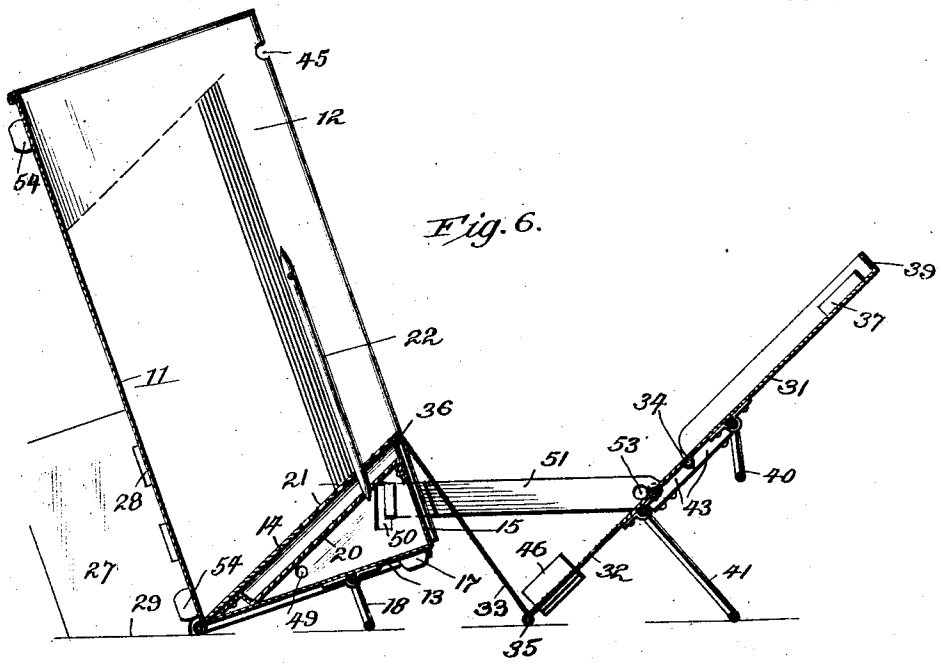


Fig. 6.

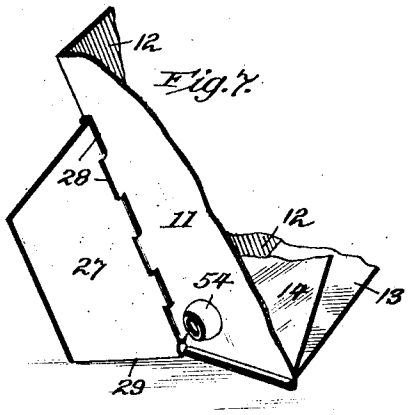


Fig. 7.

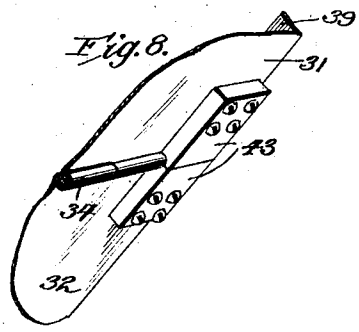


Fig. 8.

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UNITED STATES PATENT OFFICE.

JOHN L. McMILLAN, OF SYRACUSE, NEW YORK.

FILING DEVICE.

1,382,523. Specification of Letters Patent. Patented June 21, 1921.

Application filed July 17, 1919. Serial No. 311,394.

To all whom it may concern:

Be it known that I, JOHN L. McMILLAN, a citizen of the United States, residing at Syracuse, in the county of Onondaga and State of New York, have invented certain new and useful Improvements in Filing Devices, of which the following is a specification.

This invention relates to file boxes, and particularly to a device combining the essential features of ledgers and posting boxes intended more especially for use with book-keeping machines.

Briefly stated, the device consists of a tight-closing file box equipped with leaf-retaining means and capable of being locked closed, the box being so designed as to open into two inclined trays, one of which is formed by the box itself and the other by the cover. An important though optional feature is an arrangement of the parts which permits chosen leaves to be offset from the rest, and to be retained in such offset position while the box is closed and locked.

Incidental features of the invention are details of construction contributing to strength and simplicity, and to ready accessibility of the contents of the file.

A preferred embodiment of the invention is illustrated in the accompanying drawings, in which:

Figure 1 is a perspective view of the complete device, lying on its back;

Fig. 2 is a vertical section through the device showing it set up in position to be unlocked;

Fig. 3 is a perspective view of the box in the position of Fig. 2;

Fig. 4 is a perspective view of the device completely opened out and with leaves in position;

Fig. 5 is a plan view of the device of the position of Fig. 4, but with the leaves removed;

Fig. 6 is a vertical section through the device in the condition illustrated in Fig. 4;

Fig. 7 is a perspective view showing an auxiliary supporting bracket; and

Fig. 8 is a perspective view showing the stop lugs on the cover hinge.

The box proper consists of a back 11, a right side 12, a bottom 13, and a false bottom 14 sloping downward toward the back. The angle of inclination of the false bottom 14 is such as will assist the user in grasping leaves at the top, and may be varied within reasonable limits. The false bottom is supported by the front 15 and triangular side plate 16, this side plate projecting above false bottom 14 to form a leaf-retaining flange. The bottom 13 is provided with rubber feet 17, and with a folding handle 18 having stops 19. The stops 19 arrest the handle in its extended position to cause it to serve as a bracket support. (See Figs. 2 and 6). The space beneath the false bottom 14 is used to house certain parts of the device when not in use. A plate 20 is also mounted in this space and extends parallel to the false bottom 14. The plate 20 and the false bottom 14 each have two staggered rows of holes 21 to receive and retain upright the alining or retaining pin 22. This pin may be inserted to hold the sheets in place (as best shown in Fig. 6), and is so used when the ledger sheets are not punched.

The left side 23 of the box is hinged to the back 11 at 24, and its lower edge 25 is formed at such an angle as will enable it to serve as a support when the device is open and side 23 turned to the rear. (See Figs. 4 and 5). The side 23 carries a cover-retaining lug 26 which serves to hold closed the front cover, hereinafter described. A wing bracket 27 is hinged to the box along the right rear edge at 28 and, like the side 23, has its lower edge 29 cut at an angle so that it may serve as a support when swung back. (See Figs. 2, 5, 6 and 7). When not in use it is swung into contact with the right side 12 and is there held by a spring detent 30. (Fig. 5).

The cover is formed of a top section 31 and two front sections 32 and 33, hinged together at 34 and 35, and hinged to the member 15 at 36. (Figs. 3, 4 and 6). The top section 31 has a lock 37 which engages a keeper 38 cut in the back 11, and has a flange 39 extending around its free edges. This flange, in the closed condition of the box, holds the left side 23 closed and the lug 26 on side 23 holds front section 33 closed.

The top section 31 is provided with a handle 40 (Figs. 2, 3 and 6), which has no secondary function. The section 32 has a

handle 41 which is arrested by stop lugs 42, and serves as a support for sections 31 and 32 when the device is opened. (See Fig. 6). Abutting stops 43 are placed at the hinge 34 and hold sections 31 and 32 in alinement when the device is open. (See Figs. 6 and 8). On or near the lugs 43 are placed headed studs 44, which enter the notches 45 when the box is closed. A lug 46 on section 32 overhangs the right side 12 of the box to stiffen the structure when closed, and to serve as a paper stop when open.

The section 33 is provided with a hole 47 and the back 11 is provided with a similar hole 48 to receive the tapered ends of the alining pin 22 when the box is closed. This arrangement is illustrated in Fig. 2 and is used with punched sheets, while the arrangement shown in Fig. 6 is used with unpunched sheets. I prefer to provide both means for holding the pin in all boxes, as this increases their range of utility, but either arrangement may be used alone. A hole 49 through side plate 16 is provided to receive the pin 22 when not in use.

In the side plate 16, and at a similar position in side 12, are slots 50 through each of which a corresponding brace rod 51 may be drawn out. The brace rods 51 are housed in the space under false bottom 14 when the box is closed. The inner ends of the brace rods are formed with offset hooks 52 and the outer ends with key-hole slots 53. When the rods are drawn out the hooks 52 engage in the slots 50, and the key-hole slots 53 serve as means to engage the rods with studs 44. Rubber feet 54 are provided on the back 11 to permit stacking the boxes without their marring each other.

Assume the box is closed and locked, with the ledger or other sheets held by pin 22 in either of the ways described. The first steps are to turn out handle 18 and brace 27, and stand the device in the position of Fig. 2. Next raise handle 41, unlock the box and raise lid 31, swing side 23 back to bracing position, swing sections 31, 32 and 33 to the position of Fig. 6, draw out rods 51, and engage them with studs 44. Remove pin 22 and insert it in hole 49. There are now provided two inclined trays for holding the sheets which may be taken from the box, used in the bookkeeping machine, and returned to the box.

As best shown in Fig. 4 the box is wider than the sheets to permit certain sheets to be offset to indicate that they have been used for entries. In the example illustrated the sheets have three holes. The extra space at the right is sufficient to enable sheets to be offset an amount equal to the distance between holes, and then to be held by the alinement pin 22.

The device is adapted to take the place of ledgers and trays used in machine bookkeeping, provides means for locking up the ledger sheets, and by making definite provisions for holding leaves in offset positions offers definite convenience in taking trial balances and similar operations.

In case the ability to offset leaves is not desired the box may be made only wide enough to receive the sheets.

Having thus described my invention what I claim is:—

1. In a filing device, the combination of a box; leaf-engaging means mounted in said box; a lid for said box hinged thereto and including a plurality of sections hinged together, and adapted through such hinging to be adjusted to form an inclined tray when the lid is open; a brace serving to maintain a section of the lid in a fixed angular relation to said box, when the lid is open; hinged supporting brackets mounted on said box and lid; and means for fastening said lid closed.

2. In a filing device, the combination of a box; leaf-engaging means mounted in said box; an inclined false bottom in said box; a lid for said box hinged thereto and including a plurality of sections hinged together, and adapted by said hinging to be adjusted to form an inclined tray when said lid is open; a brace serving to maintain a section of the lid in a fixed angular relation to said box, when the lid is open; hinged supporting brackets mounted on said box and lid; and means for fastening said lid closed.

3. In a filing device, the combination of a box; a lid for said box hinged thereto and including a plurality of sections hinged together, and adapted by said hinging to be adjusted to form an inclined tray when said lid is open; a brace serving to maintain a section of the lid in a fixed angular relation to said box, when the lid is open; hinged supporting brackets mounted on said box and lid; a sheet-impaling pin; means on the box and lid for engaging the ends of said pin in the closed condition of the box; and means for fastening said lid closed.

4. In a filing device, the combination of a box; an inclined false bottom in said box; a leaf-confining pin; a socket structure associated with said false bottom and adapted to retain said leaf-confining pin in contact with the face of the file of leaves in said box; a lid for said box, adapted when open to serve as a tray; means on said box and lid adapted in the closed condition of the box to engage the ends of said leaf-confining pin when inserted through perforations in the leaves contained in said box; and means for fastening said lid closed.

5. A filing device providing in a single structure the essential functions of loose leaf ledger and posting boxes, and comprising in combination, leaf-engaging means capable

of retaining a variable number of leaves; a box for housing said leaf-engaging means and the leaves held thereby, and capable of serving as a tray when inclined; a lid for said box, said lid including a plurality of hinged sections adapted through said hinging to form an inclined tray when open; hinged brackets mounted on said box and the said lid and serving to support said box and lid in oppositely inclined positions; and means for fastening said lid closed.

6. A filing device providing in a single structure the essential functions of loose leaf ledger and posting boxes, and comprising in combination, leaf-impaling means; a box for housing said leaf-impaling means and the leaves held thereby, and capable of serving as a tray when inclined; a lid for said box, said lid including a plurality of hinged sections adapted through said hinging to form an inclined tray when open; hinged brackets mounted on said box and the said lid and serving to support said box and lid in oppositely inclined positions; and means for fastening said lid closed.

7. A filing device providing in a single structure the essential functions of loose leaf ledger and posting boxes, and comprising in combination, leaf-impaling means; a box for housing said leaf-impaling means and the leaves held thereby and capable of serving as a tray when inclined; a lid for said box, said lid being adapted to serve as an inclined tray when open; and means on said lid adapted to hold said leaf-impaling means in operative position when the lid is closed and to release it when the lid is open.

8. A filing device providing in a single structure the essential functions of loose leaf ledger and posting boxes, and comprising in combination, leaf-impaling means; a box for housing said leaf-impaling means and the leaves held thereby and capable of serving as a tray when inclined; a lid for said box, said lid being adapted to serve as an inclined tray when open; means on said lid adapted to hold said leaf-impaling means in operative position when the lid is closed and to release it when the lid is open; and brackets one hinged to said box and another to said lid and serving to support said box and lid to oppositely inclined positions when opened.

9. In a filing device, the combination of a box open at the front and at one side; a leaf-engaging means mounted in said box; a side hinged to said box and having an oblique end, whereby it may be swung back to support the box in a rearwardly inclined position; a lid hinged to said box, formed of a plurality of sections hinged together, and adapted through said hinging to be adjusted to form an inclined tray; means for supporting said lid in its tray-forming position; and means for fastening said lid closed.

10. The combination of a box; a lid therefor; a leaf-retaining pin; a plurality of sockets for retaining said pin in position parallel to leaves contained in said box; and engaging means on said box and lid for retaining said pin in impaling relation to said leaves.

11. In a filing device, the combination of a box in the form of a right parallelepiped, open at the front, top and one side; a rearwardly and downwardly inclined false bottom in said box; a combined support and side hinged to said box and having an oblique end edapted to support the box in a rearwardly inclined position; a lid for the front and top of said box, comprising a lower front section hinged near the front edge of said false bottom, a second front section hinged to the first, and a top section hinged to the second front section; a stop for arresting said top section and second section when substantially alined; a brace structure normally housed beneath said false bottom and capable of being withdrawn therefrom to engage and support said lid with the top and second sections thereof alined in an inclined position to form a tray; and means for fastening said lid closed.

12. In a filing device, the combination of a box in the form of a right parallelepiped, open at the front, top and one side; a rearwardly and downwardly inclined false bottom in said box; a combined support and side hinged to said box and having an oblique lower end adapted to support the box in a rearwardly inclined position; a lid for the front and top of said box, comprising a lower front section hinged near the front edge of said false bottom, a second front section hinged to the first, and a top section hinged to the second front section; a stop for arresting said top section and second section when substantialy alined; a brace structure normally housed beneath said false bottom, and capable of being withdrawn therefrom to engage and support said lid with the top and second sections thereof alined in an inclined position to form a tray; overhanging members on the top section and side, adapted to engage the side and a front section respectively, whereby closing of the side fastens a front section and the closing of the top section fastens the side; and means for fastening said lid closed.

In testimony whereof I have signed my name to this specification.

JOHN L. McMILLAN.