F. L. MANNY.

ACCOUNT TRAY.

APPLICATION FILED MAR. 7, 1918.

1,325,525.

Patented Dec. 23, 1919.

3 SHEETS—SHEET 1.

Fig. 1.

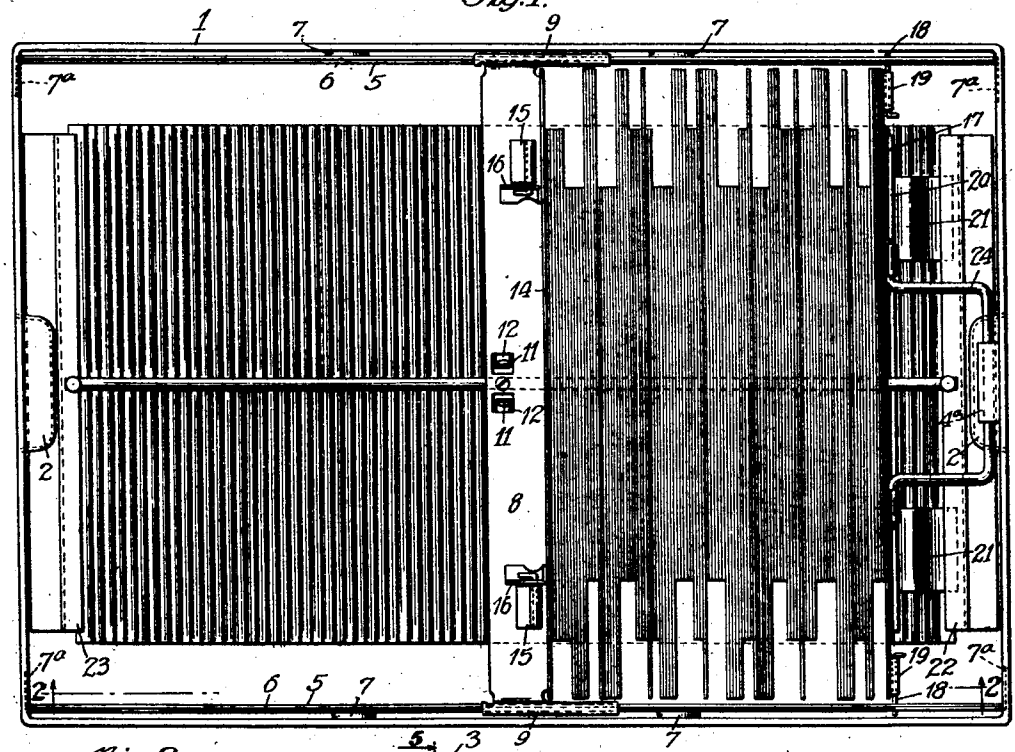
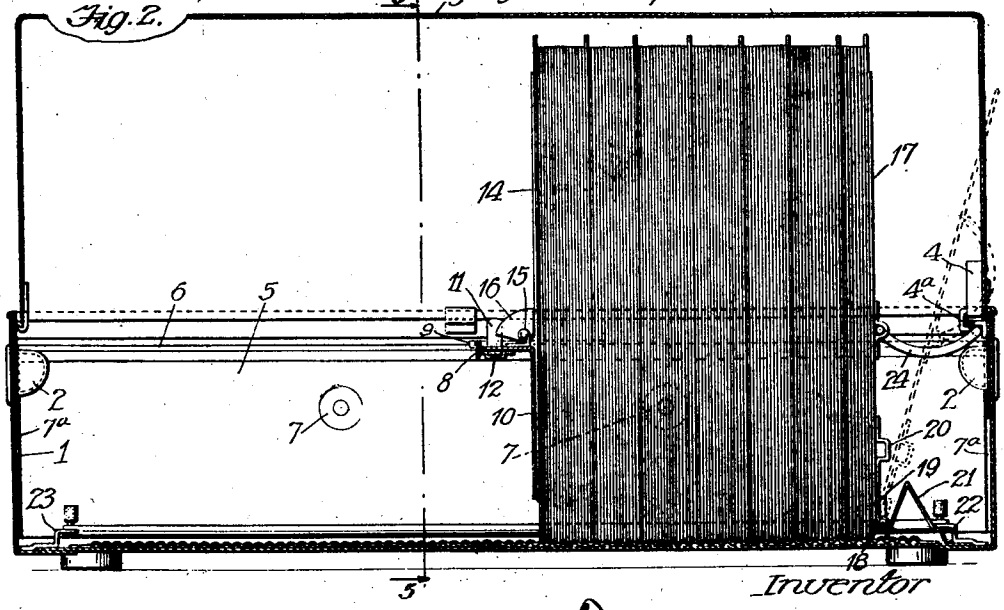


Fig. 2.



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3 SHEETS—SHEET 2.

Fig. 3.

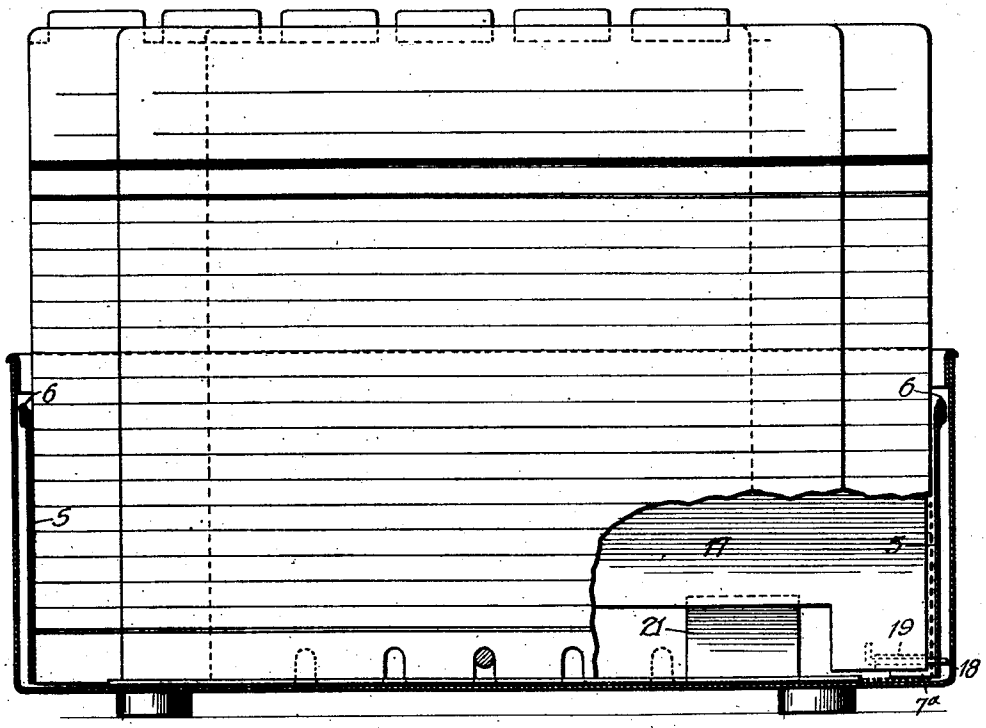
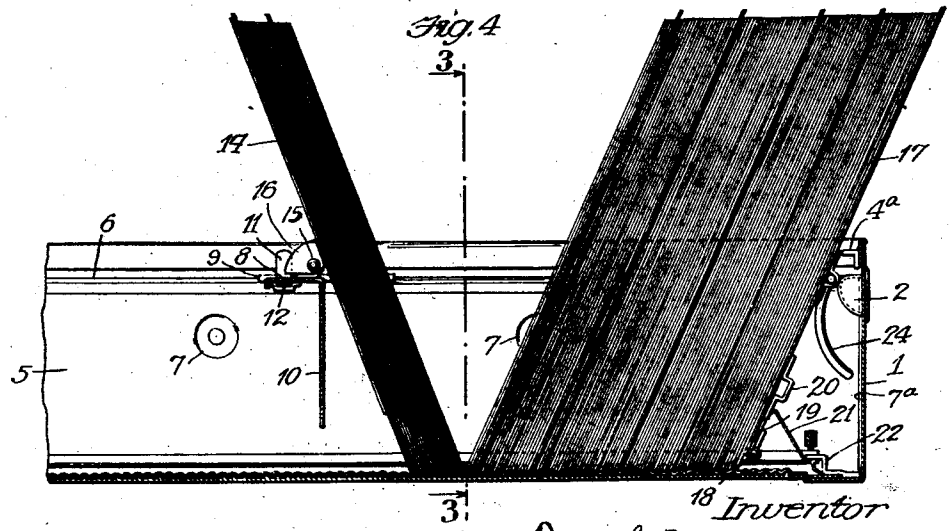


Fig. 4



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3 SHEETS—SHEET 3.

Fig. 5.

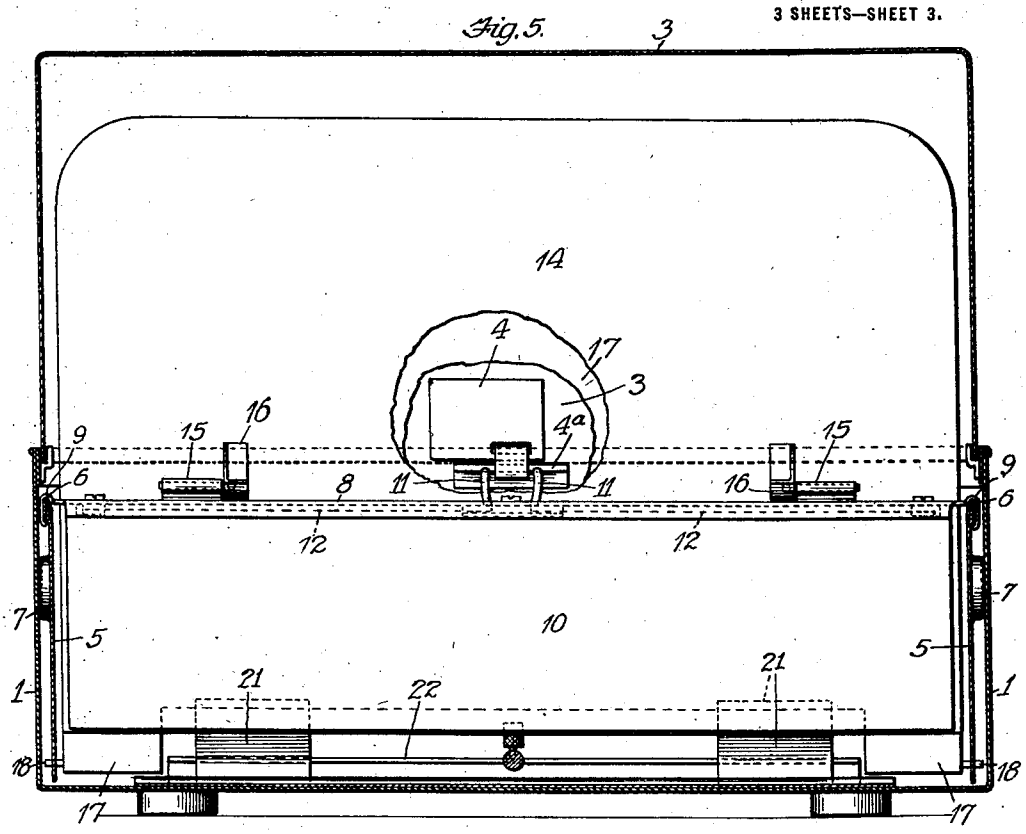


Fig. 6.

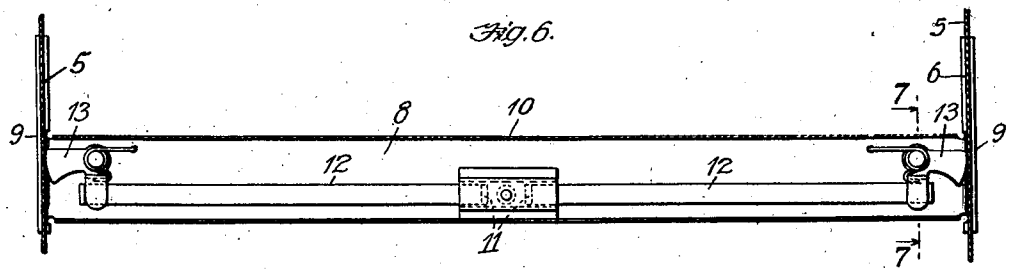
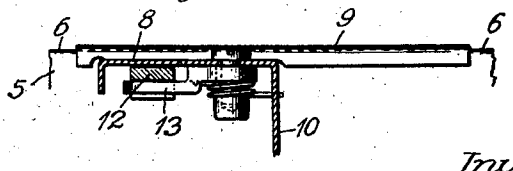


Fig. 7.



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UNITED STATES PATENT OFFICE.

FRED L. MANNY, OF BENTON HARBOR, MICHIGAN, ASSIGNOR TO BAKER-VAWTER COMPANY, OF BENTON HARBOR, MICHIGAN, A CORPORATION OF MICHIGAN.

ACCOUNT-TRAY.

1,325,525. Specification of Letters Patent. Patented Dec. 23, 1919.

Application filed March 7, 1918. Serial No. 220,974.

To all whom it may concern:

Be it known that I, FRED L. MANNY, a citizen of the United States, residing at Benton Harbor, in the county of Berrien and State of Michigan, have invented certain new and useful Improvements in Account-Trays, of which the following is a specification.

My present invention has for its object the improvement and perfecting of an account tray which constitutes the subject matter of a pending application for patent of Walter H. Hanna filed March 6, 1916, Serial No. 82,297, and which is designed to be used as a permanent holder for a group of account sheets such as are used in accounting and bookkeeping systems to form a ledger or other account record, the account tray being designed to serve in itself as a substitute for the ordinary loose leaf binder, and a posting tray commonly used to hold sheets removed from the binder and placed thereon in convenient position for use in connection with an adding and listing machine such as is commonly used for posting items on the sheets.

To the end in view I have designed and invented the new and improved account tray hereinafter more fully described and illustrated in the accompanying drawings forming part of this application, and which embodies various features of novelty and utility.

One feature of my present invention relates to a bail or handle adjustable to different positions to support the front plate of the tray in different angular positions; another feature relates to the hinging of the back plate to the follower; and other features relate to mechanical changes in design and arrangement facilitating assemblage of parts, means for preventing leaves from accidentally sliding under the forward plate, and a coloring of the sides of the tray designed to lighten it at the bottom so that matter on the lower part of the sheets can be easily read. The essential features of novelty of my invention will be more particularly pointed out in the appended claims.

In the drawings, Figure 1 is a plan view of my new account tray; Fig. 2 is a longitudinal vertical section on the line 2—2 of Fig. 1; Fig. 3 is a transverse vertical section on the line 3—3 of Fig. 4, partly broken away to show certain details of construction; Fig. 4 is a partial longitudinal vertical section, viewed in the same direction as in Fig. 2 but with the supporting plates spread apart to support the entry sheets in working position; Fig. 5 is a vertical section on the line 5—5 of Fig. 2, certain parts being broken away to show other parts beyond; Fig. 6 is a bottom plan view of the follower gripping mechanism and Fig. 7 is a vertical cross section on the line 7—7 of Fig. 6, showing in detail certain parts of the follower gripping mechanism and the carriage slides.

The same letters of reference indicate the same parts in all the figures of the drawing.

The body 1 of my new and improved account tray is formed as a rectangular box of sheet metal, and at the front and rear ends the metal is sharply cupped inwardly as shown in the drawings to form handles 2—2. A rectangular cover 3 is provided, formed to interlock along the rear meeting edges, with the body 1, and this cover is equipped with a lock 4, the bolt of which coöperates with a keeper 4^a arranged just above the handle 2 at the front of the box, in order to enable the account sheets to be locked up when not in use. Disks of felt are secured to the bottom of the tray to serve as feet and prevent injury to any surface upon which it may be placed. Rigidly secured within the tray are false inner side walls 5 of slightly less height than the outer walls of the tray body. In the present instance, and preferably, the inner walls are formed of sheet metal coated with a white enamel paint on the inside, and the opposite walls carry at their tops rails 6—6 together constituting carrier track arranged to support a follow mechanism. The inner walls are formed with shallow cups or depressions 7 which contact the outer walls of the tray and serve to space the inner walls a proper distance therefrom, and the walls are secured in place in the tray by end flanges 7^a which may be integral with the sides, or separate pieces brazed thereto, as desired.

The follower devices in my improved account tray include a sliding carriage having a downwardly flanged top cross-plate 8 to the ends of which are secured the slides 9—9 and to the front of which is secured a depending stop plate 10. Underneath the top

plate 8 between its flange and the plate 10 is housed a gripping mechanism which automatically yields to permit the follower carriage to shift forwardly, but resists backward pressure until released by manipulation of a pair of finger pieces 11. While the specific gripping mechanism forms no part of my present invention it may be here stated that the finger pieces 11 consist of the upturned ends of a pair of sliding bars 12 having their outer ends hooked over the spring-pressed bell crank levers 13 formed with curved surfaces arranged to wedge against the rails 6 when attempt is made to slide the follower rearwardly without shifting them out of contact with such rails by means of the finger pieces.

The back plate 14 which constitutes the rear support for the body of sheets is in my new account tray hinged to the top of the cross plate 8 of the follower,—in the present instance by means of a pair of bearing brackets 15 secured to the top plate which support pintles engaging bearing orifices in triangular flanged brackets 16 secured to the back plate. The flanged lower edges of these brackets 16 form stops limiting the angular movement of the back plate beyond a given inclination. Obviously, when the follower is drawn forward from the position of greatest inclination shown in Fig. 4 to the vertical position shown in Fig. 2, or vice versa, the back plate will rock on its hinges with the weight of the body of sheets against it and may be set for the convenience of the operator to any inclination desired within the limits of its movement determined by the stop plate 10 and the lower edges of the brackets 16.

Near the front of the tray a front plate 17 is provided to support the forwardly inclined portion of the body of sheets, this plate being hinged by means of pivot pins 18 engaging sockets formed in brackets 19 attached to the lower edge of the plate and extending into orifices forming bearings therefor in the lower portion of the inner side walls 5. The pins 18 may be slid lengthwise in their sockets in the brackets 19 to permit disengagement and removal of the front plate, if desired. In the present instance the front plate inside the hinges is cut away upwardly from the bottom a short distance to clear an alining rod hereinafter described, and the plate is stiffened by a ribbed reinforcing strip 20 above the cut. In order to prevent sheets of paper from slipping under the front plate V-shaped spring metal clips 21 are provided which resiliently engage the horizontal rearwardly-extending top flange of a supporting strip 22 extending across and secured to the bottom of the tray adjacent the front thereof. A similar supporting strip 23, the top flange of which extends forward, is secured to the bottom of the box near its rear end, and the alining rod above mentioned, slit at both ends to slidably engage the flanges of the strips 22 and 23 and equipped with set screws for adjustably securing the rod to the strips, is mounted longitudinally of the tray between said strips. The bottom edges of account sheets adapted to be used in the tray are formed with open slots, as shown, and the above-described adjustment of the rod adapts it to be used with any spacing of the slots which the sheets may have, the stop clips 21 being shifted laterally in the cutout portion of the front plate as may be necessary. Preferably a strip of sheet metal corrugated crosswise, is secured to the bottom of the box between the strips 22 and 23, to afford resistance to slipping of the lower edges of the sheets on the bottom of the tray.

The front side of the front plate 17 is provided with a pivoted bail or curved handle 24 by means of which the plate can be set to three positions of angular adjustment. When the handle is fitted between the outside tray handle 2 and the keeper 4^a of the lock, the plate is held in vertical position, as shown in Fig. 2; when the handle is up, as shown in said figure in dotted lines, the plate is supported in one inclined position, the outer end of the handle resting against the front face of the plate and the centers of the bowed side members resting against the front wall of the tray, and when the handle is down, as shown in Fig. 4 the plate is permitted to rest against the keeper of the lock in a position still farther inclined from the vertical. Accordingly as the bail is swung to upper or to lower position, therefore, the plate is permitted to assume two different positions of angular adjustment.

I claim:

1. In an account tray or the like, a front plate pivoted near its lower edge adjacent the front of the tray, and a pivoted bail arranged to coöperate with said front plate and tray front to support the front plate in vertical position at an intermediate point of adjustment of the bail and permit such plate to assume different positions of angular adjustment for positions of said bail on opposite sides of said intermediate point.

2. In an account tray or the like, a front plate pivoted near its lower edge adjacent the front of the tray, and a bail pivoted to said front plate and arranged to coöperate with the front of the tray to support said front plate in vertical position at an intermediate point of adjustment of the bail and permit such plate to assume different positions of angular adjustment for positions of said bail on opposite sides of said intermediate point.

3. In an account tray or the like having an inwardly indented handle and an inside lock element immediately thereabove on its

front side, a front plate pivoted near its lower edge adjacent the front of the tray, and a bail pivoted on the front side of said plate and arranged to support said plate in vertical position when the bail is fitted between said handle and said lock element and permit said plate to assume two different inclined positions according as the bail is swung to upper or to lower position.

4. In an account tray or the like, a front plate pivoted near its lower edge to the sides of the tray near the front thereof, said plate being cut away along the bottom between the hinging points, a longitudinally arranged alining bar passing through said bottom cut of the front plate, and a laterally adjustable stop member extending upwardly and forwardly from a point in the bottom of the tray which is adjacent a line passing axially through the hinges of said front plate.

5. In an account tray or the like, a front plate pivoted near its lower edge to the sides of the tray near the front thereof, said plate being cut away along the bottom between the hinging points, a transverse supporting strip secured to the bottom of the tray forwardly of said front plate, a longitudinally arranged alining bar passing through said bottom cut of the front plate, and a laterally adjustable stop member extending upwardly and forwardly from a point in the bottom of the tray which is adjacent a line passing axially through the hinges of said front plate and arranged to engage said transverse supporting strip.

6. In an account tray or the like, a structure according to claim 5 in which the supporting strip provides a longitudinal recess and the stop member is a V-shaped metal clip adapted to make frictional engagement in said recess.

7. In an account tray or the like, a front supporting strip secured to the bottom of the tray and formed with a rearwardly extending horizontal flange, a rear supporting strip secured to the bottom of the tray and formed with a forwardly extending horizontal flange, and an alining rod slit at its opposite ends to adjustably engage said flanges and equipped with set screws for securing it in adjusted position.

8. In an account tray or the like, a follower bar arranged to be adjusted forwardly and rearwardly adjacent the top of the tray, said bar being formed with a depending stop plate, and a back plate hinged adjacent its middle line and adjacent the top of said stop plate.

9. In an account tray or the like, a follower bar arranged to be adjusted forwardly and rearwardly adjacent the top of the tray, said bar being formed with a depending stop plate, a back plate hinged adjacent its middle line and adjacent the top of said stop plate, and a stop limiting the rearward inclination of said back plate.

10. In an account tray or the like, a structure according to claim 9 in which the hinge member carried by the back plate is an angular bracket plate of which the lower edge forms the stop.

FRED L. MANNY.