June 17, 1930. J. D. DICKINSON 1,764,612

LEDGER DESK

Filed March 31, 1927 5 Sheets-Sheet 1

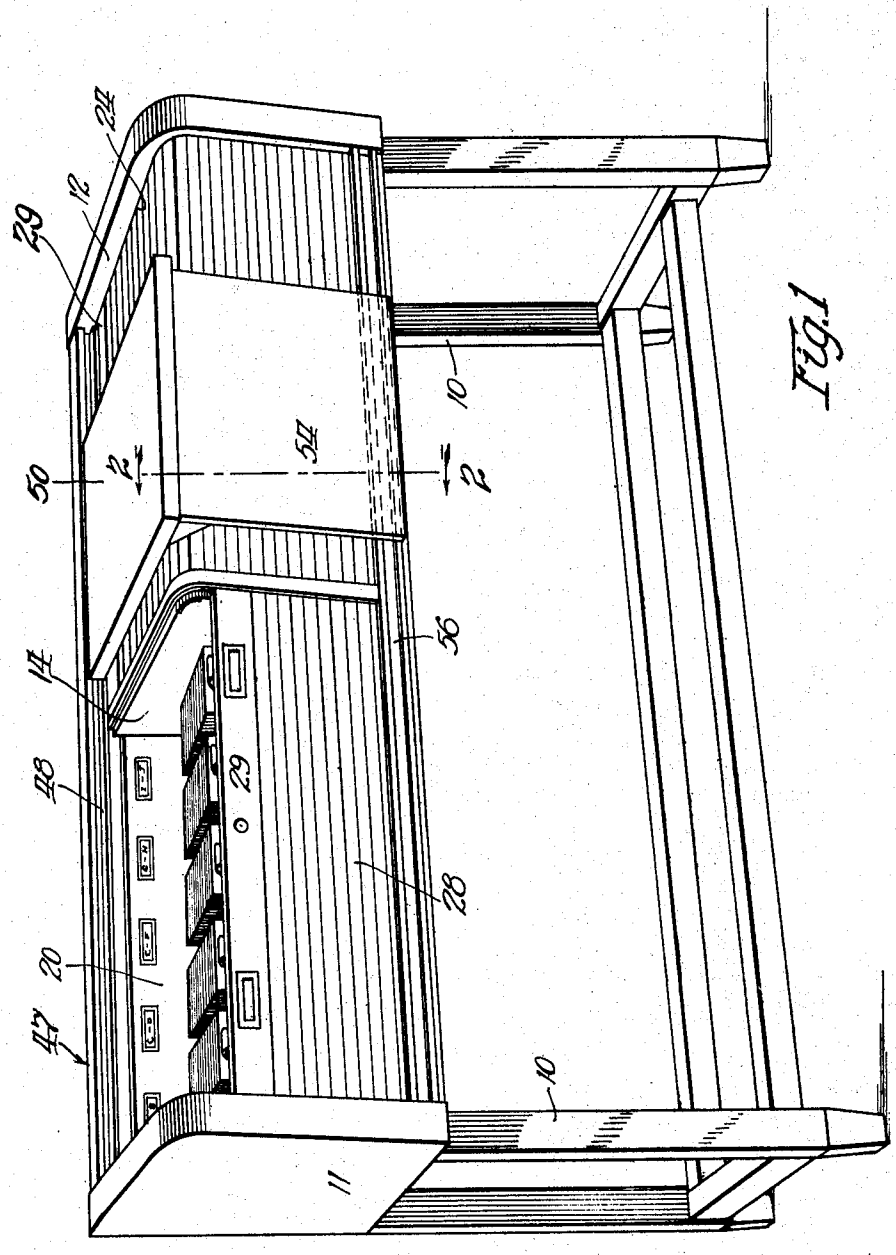


Fig. 1

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LEDGER DESK

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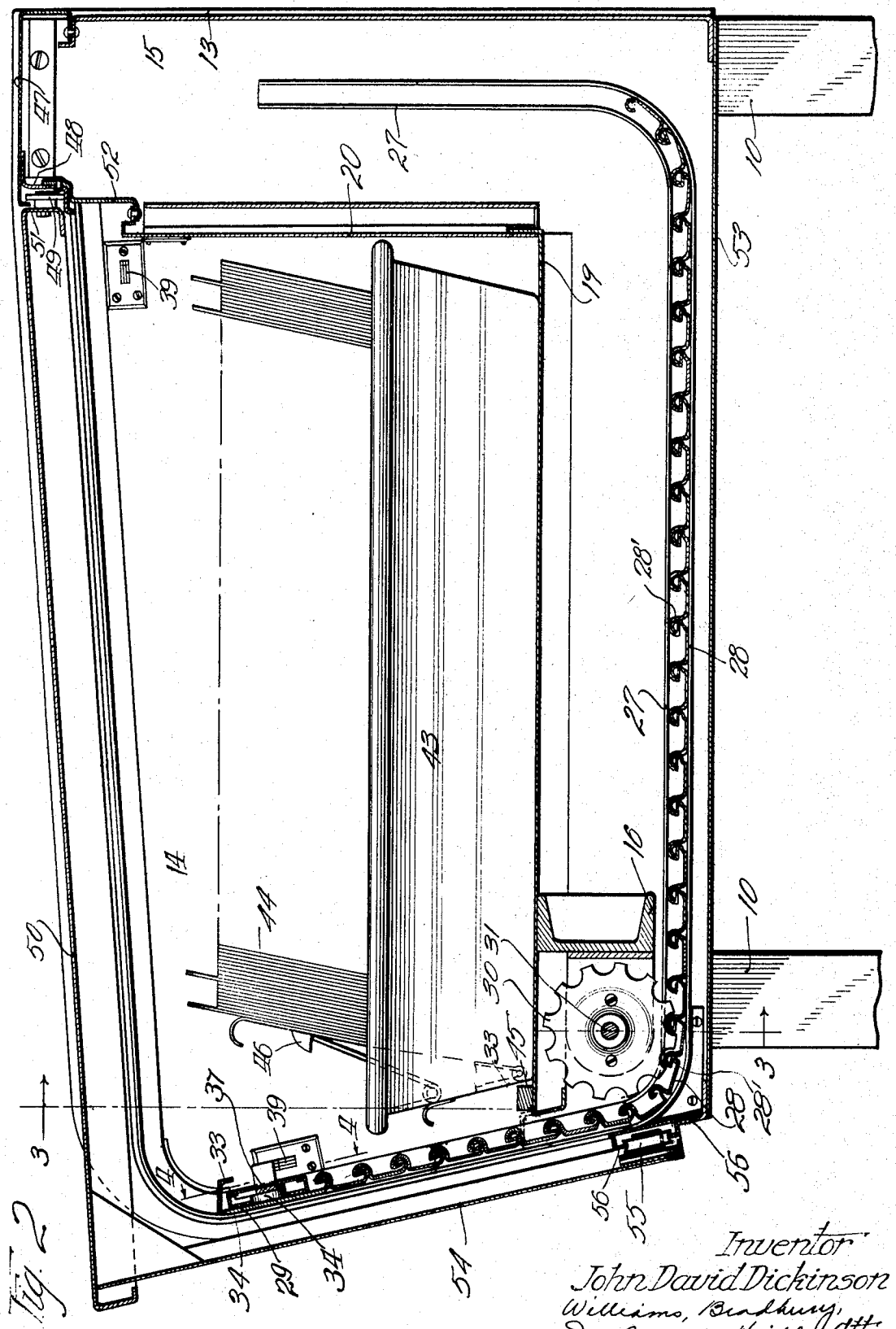


Fig. 2

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LEDGER DESK

Filed March 31, 1927 5 Sheets-Sheet 3

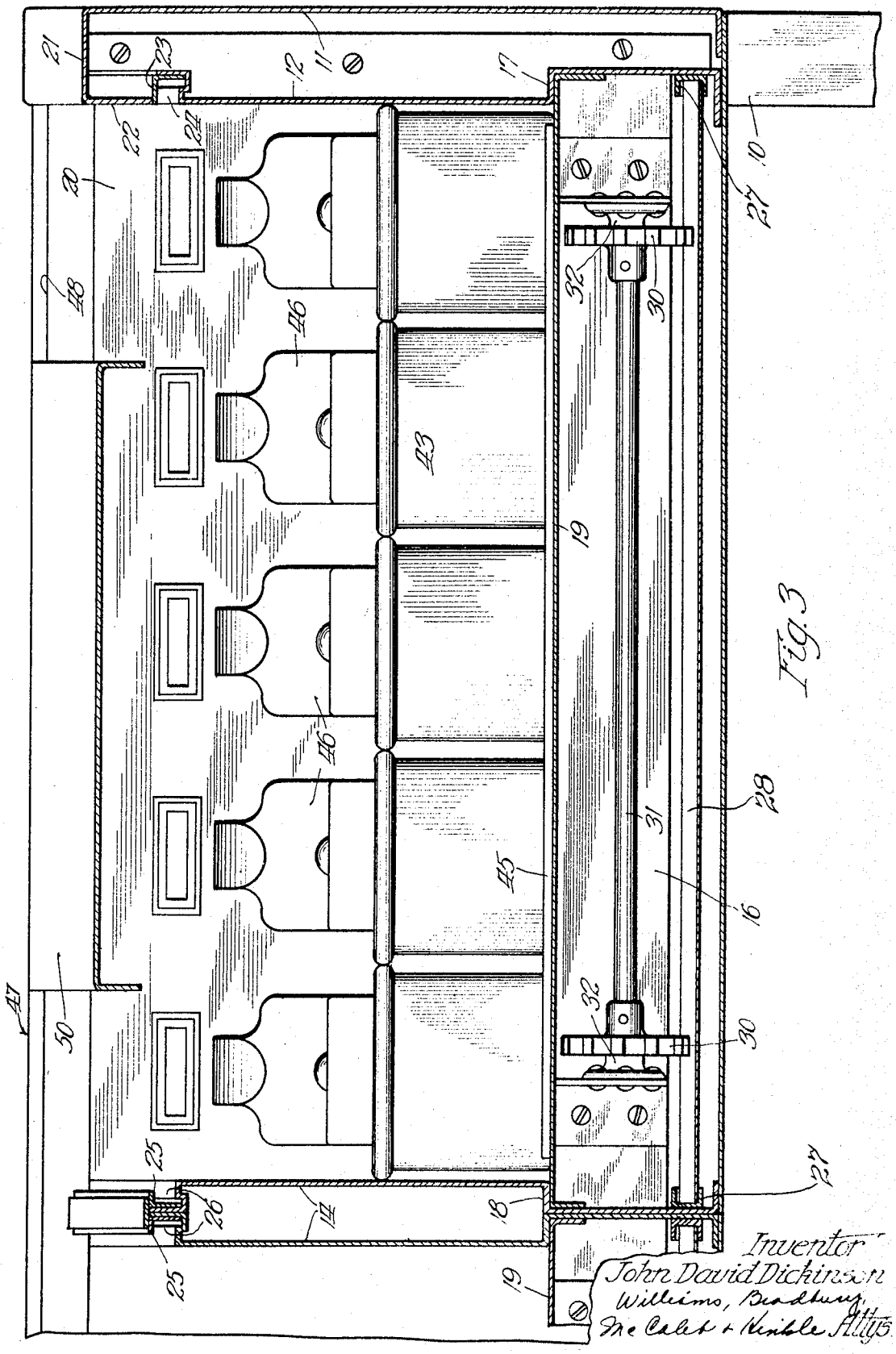


Fig. 3

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LEDGER DESK

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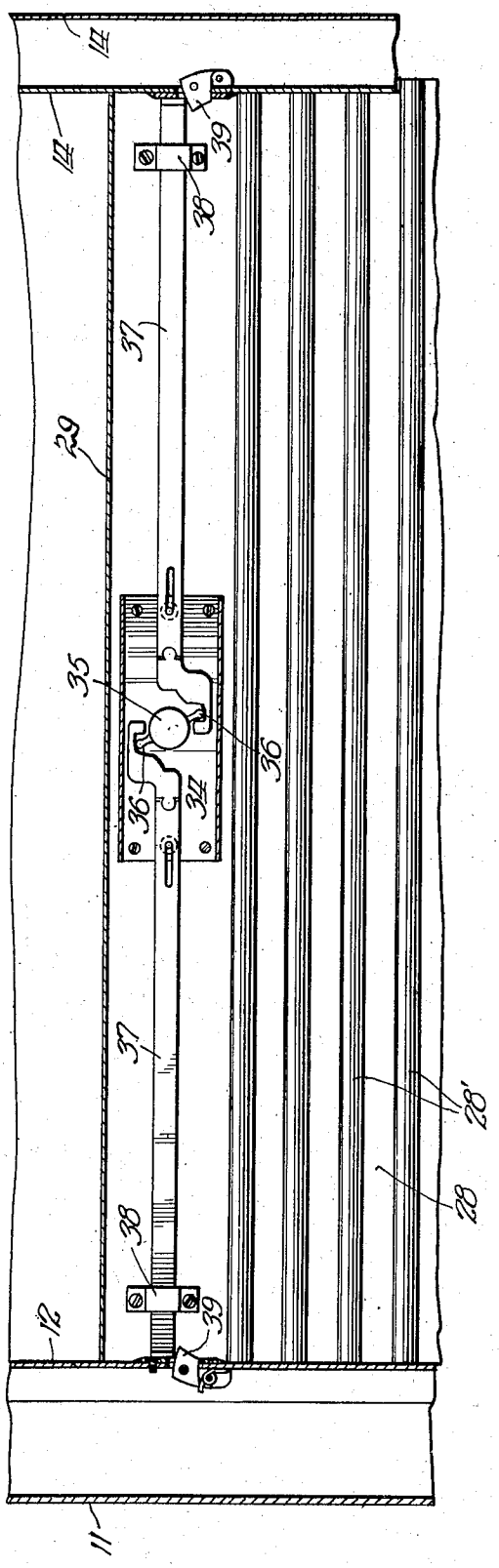


Fig. 4

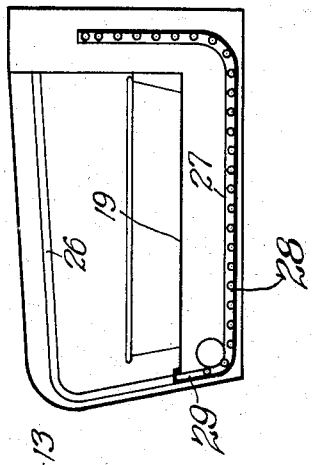


Fig. 7

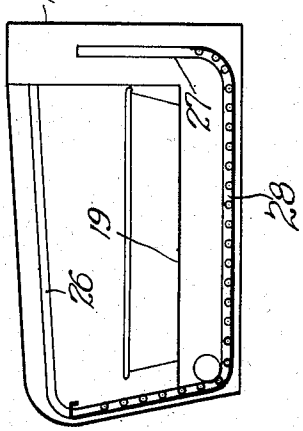


Fig. 6

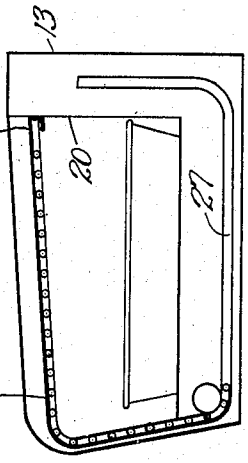


Fig. 5

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LEDGER DESK

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Fig. 8

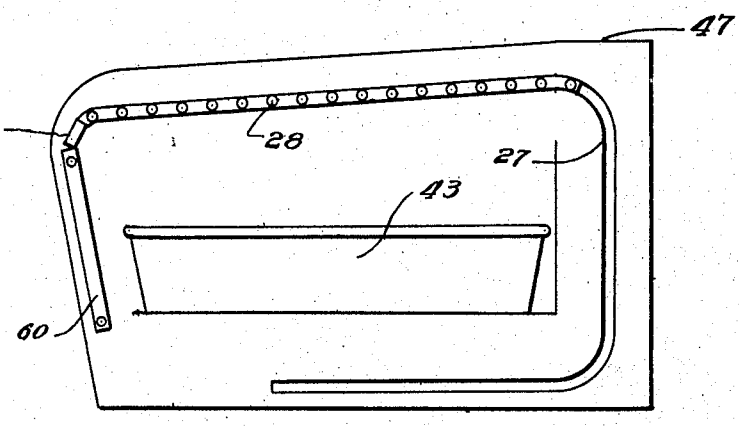


Fig. 9

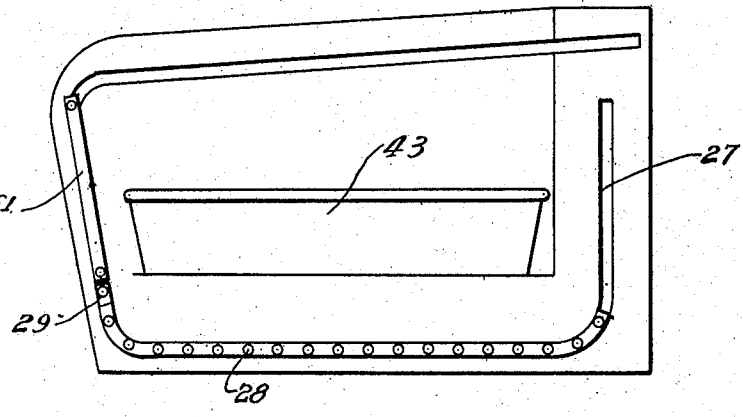
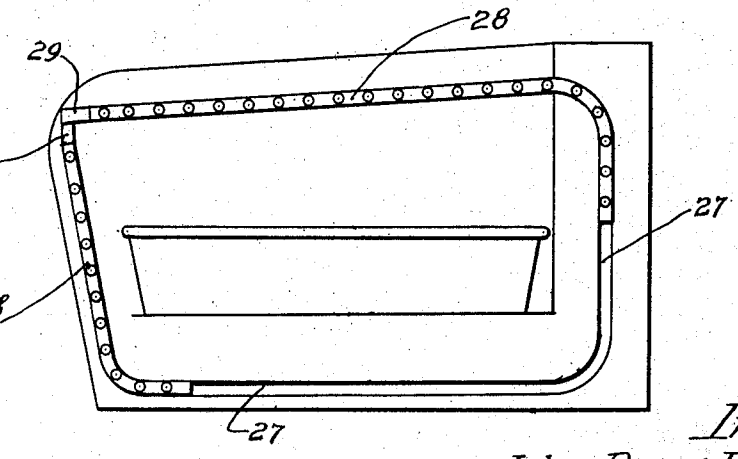


Fig. 10



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Patented June 17, 1930 1,764,612

UNITED STATES PATENT OFFICE

JOHN DAVID DICKINSON, OF CHICAGO, ILLINOIS, ASSIGNOR TO YAWMAN & ERBE MANUFACTURING CO., OF ROCHESTER, NEW YORK, A CORPORATION OF NEW YORK

LEDGER DESK

Application filed March 31, 1927. Serial No. 179,760.

My invention relates to that type of desks or cabinets commonly known as card ledger desks, which are designed to contain trays of ledger cards or the like and to facilitate ready inspection or removal of the cards for posting or other entries. Such desks are customarily arranged so that they can be opened at the top to permit access to the cards, and when an entire tray is to be removed to be stored in a vault, for example, the front can also be opened to enable the operator to pull the drawer out upwardly and forwardly in an easy motion rather than to lift it vertically. It is also customary to provide a work table traversable over the top of the desk to form a convenient posting table.

One object of my invention is the provision of a ledger desk having improved closure means which may be manipulated entirely to close the front and top of the desk or to leave the top of the desk open for posting and still maintain the front closed to conceal the unattractive front ends of the cards upporting trays and to present an elbow rest for the clerk.

A further object of the invention is the provision of a ledger desk of the character described having a ledger supporting table which traverses the desk longitudinally and which does not interfere with the opening or closing of the closure means.

These and further objects and features of my invention, including those referring to structural details incident to carrying out the foregoing objects, are set forth in the following description of a particular embodiment of my invention which is illustrated in the accompanying drawings, wherein

Figure 1 is a perspective view of my desk which is here shown of an all-steel construction and embodying two sections;

Figure 2 is a transverse vertical section through the desk which may be considered as being taken along the line 2—2 of Figure 1;

Figure 3 is a longitudinal vertical section taken along the line 3—3 of Figure 2 and looking rearwardly;

Figure 4 is a fragmentary plan and vertical section taken along the lines 4—4 of Figure 2 and showing how the roll top is locked in its closed and in its partly open positions;

Figures 5, 6 and 7 are diagrammatic sections somewhat similar to Figure 2 showing the three positions assumed by the roll top; and

Figures 8, 9 and 10 are diagrammatic views showing three modifications of the invention.

The body of my ledger desk is shown in Figure 1 as supported2 by a set of suitably braced legs 10, although, of course, the body may rest upon any suitable support. The legs extend between the lower edges of the outer and inner end walls 11 and 12 and are secured to the latter. An outer back wall 13 extends across the back of the cabinet between the rearward edges of the inner and outer end walls 11 and 12. A section wall for dividing the body into two compartments is formed by a pair of plates 14 of substantially the same size as the end walls which are secured to the outer back wall 13, as shown at 15, and are supported at their forward ends upon a channel beam 16 which extends along the front of the body between the inner end walls 12. Intermediate their upper and lower edges the inner end walls 12 and the section walls 14 are depressed inwardly toward their respective compartments, leaving inverted shoulders 17 and 18 beneath which are secured inner bottom plates 19 for the tray compartments. For each compartment there is an inner back wall 20 which extends between the inner end wall 12 and the partition plate 14 and upwardly from the bottom plate 19. It will be seen from the description thus far that each of the two sections or tray compartments of the desk has an inner wall and a bottom, but no fixed top or front wall.

The outer end walls 11 are bent inwardly for a distance along their upper and forward edges, as indicated at 21, and then doubled back as shown at 22. Strips 23 of L-shaped cross section are disposed along the inner edges of the inturned flanges 22. These strips lie in overlapping position with the flanged upper and forward edges of the in-

ner walls 12. An inwardly opening channel groove 24 is thus formed along the upper and forward edge of the inner end wall 12, as indicated in Figures 1 and 3. These channel grooves, at the intersections of their horizontal and vertical portions, are swung about a generous arc.

In a somewhat similar manner a finishing strip 25 of T-shaped cross section is provided along the juxtaposed upper and forward edges of the section plates 14, to form channel grooves 26 directly opposite the channel grooves 24 on the inner end walls.

The channel grooves 24 and 26 in both sections or compartments of the body extend below the inner bottom plate 19 and are there swung inwardly to extend into alignment with channel guide members 27 which are secured to the inner end walls and the section walls and which extend horizontally at a spaced distance below the inner bottom plates 19 to positions rearwardly of the inner back walls 20 where they curve upwardly and extend between the inner and outer back walls. For each compartment or section there is therefore formed a pair of opposed guides which would form endless grooves except for the upper rearward corners.

A roll top generally resembling that used in the usual roll top steel desks is carried by the guideways in each section. The roll tops comprise a number of transverse strips 28 provided at their juxtaposed edges with cylindrically rolled flanges 28′, whereby the successive strips are pivoted together. The upper or rear ends of the roll tops are provided with hollow bars 29 of greater width than the strips which act as the usual manually engageable end strips for sliding the roll tops. At the lower forward corners of the guideways I provide the aligned sprockets 30 and sprocket shafts 31 on which the sprockets are fixed. The sprocket shafts for the two sections of the desk are, of course, independent so that one of the roll tops may be moved without disturbing the other. The shafts 31 are journaled in bearings 32 secured to the inner end walls 12 and the section wall plates 14, as shown in Figure 3. The roll tops are of such lengths that when they are drawn upwardly and forwardly across the fronts and tops of the sections with the bars 29 overlying the inner back walls 20, the last strip will be engaged by the aligned sprockets 30. The channels 27 which extend beneath and at the back of the compartments are of sufficient length to contain the entire roll tops when they are drawn forwardly and downwardly to their openmost position where the projecting lateral flanges 33 of the bars 29 rest along the forward edges of the inner bottom plates 19.

The bars 29 of the roll tops are provided with locking mechanisms, as best shown in Figure 4. A lock 34 is set into each bar 29 centrally thereof with the key opening, of course, facing outwardly. The rotary member 35 of the lock is provided at the back side of the bar 29 with a pair of eccentric pins 36 on which are pivoted the goose-necked ends of opposed locking strips or bolts 37. The ends of the locking strips 37 are slidably journaled in brackets 38 at the ends of the bar 29, and, when the rotary member 35 is turned to its locked position, extend to the ends of the bars 29 and into engagement with spring-pressed latches 39 (see Figures 2 and 4). One set of these latches is disposed for engagement with the locking bolts 37 when the closure is in the position shown in Figures 2 and 6, and the remaining set is disposed so as to engage with the bolts when the closure is moved over the top of the desk (Figure 5).

The bolts will readily ride over the latches in extending the closure as in closing the front and top, but will prevent retraction of the closure when engaged therewith except by rotation of the rotary lock member 35 to withdraw the bolts 37.

It will be undertsood that a plurality of trays 43 containing ledger or other cards 44 are placed side by side in each section of the desk. Stop strips 45 are provided along the forward edges of the inner bottoms 19 to keep the trays positioned against the inner back walls 20 so that they cannot come into contact with the roll tops at the front of the desk. At their intermediate positions of Figures 2 and 6 the roll tops come approximately to the level of the cards 44 so that they hide the less sightly tray fronts and card compressors 46, but still do not shut off light from the cards. The broad flanges 33 at the upper edges of the end rails 29 form convenient arm rests for the operator in looking through the cards. When one or more of the trays are to be removed from a section, the roll top is moved down to its lowermost position, as shown in Figure 7, which permits the operator to lift the tray over the strip 45 and pull it forwardly until it can easily be grasped for carrying away. The flange 33 at such time is slightly below the top of the strip 45, so that the wear will come on the latter and not mar the enamel on the bar 29.

To describe in detail the mounting of the posting table 50, a horizontal rail 47 extends a distance forwardly from the outer back wall 13 to form a ledge between the ends of the desk. A Z-shaped sub-flange 48, attached to the forward edge of the rail 47, forms a track for the rollers 49 of the posting table 50 which traverses the desk above the roll top closure 50. The forward edge of the rail 47 is turned downwardly, as shown at 51, to hold the posting board against forward movement and thereby retain the rollers

49 on the track afforded by the sub-flange 48. Dust strips 52 bridge the space between the rail 47 and the upper ends of the inner back walls 20. This also helps to make a double wall to protect the cards against fire. Similarly, an outer bottom plate 53 is provided for an additional fire wall at the bottom as well as to exclude dust.

The posting table 50, which has a flat, slightly inclined top surface, carries at its forward end a downwardly projecting leg 54 having sheaves 55 at its lower end which engage the upper and lower rails of a trackway 56 secured to the lower front edge of the desk body. The rollers 49 and sheaves 55 permit an easy travel of the posting table along the desk so that it can be positioned adjacent the cards with which the operator is working. It is to be pointed out especially that the posting table can always be moved to any desired position regardless of the position in which either of the roll tops happens to be. This makes it very practicable for the operator to make entries on the cards or to add or remove cards from the trays when the roll top is in its lowermost position, if circumstances make it more desirable to use the desk in this manner rather than in the customary manner with the roll tops in the position of Figure 2. Another advantage of my construction is that the desk is at all times self-contained,—that is, there are no doors or other closures which, in order to be opened, have to swing out beyond the confines of the desk or get in the way of an operator who sits on a stool or chair in front of the desk with his knees projecting below the desk body.

In Figure 8, I have shown a modified form of the invention in which the roll top or flexible closure is drawn forwardly from the top rear portion of the desk.

A separate rigid closure member 60 movable in the guides 27, serves to close the front wall of the desk. The top of this member forms an abutting edge for the bar 29 at the front of the closure 28. When the trays are to be removed, the rigid panel, which is supported in the guides 27 only at its upper and lower ends, is moved upwardly and rearwardly to the rearmost portion of the upper horizontal stretch of the guides 27. It is to be understood that the drawings for this and the subsequently described modifications are very diagrammatical, but that the details of construction are identical with those of the preferred form except, of course, as they must necessarily differ.

In Figure 9, I have shown another modified form of the invention which is identical to the preferred form with the one exception that a separate, relatively wide, rigid member 61 similar to the member 60 is provided to close the front of the desk. Thus when the top of the desk alone is open the flexible part of the closure is invisible and the desk presents an exceptionally neat appearance. The member 61, as well as the member 60, is constructed so that its upper and lower portions alone engage with the guide member 27 so that no difficulty arises in moving the member through the curved portions of the guides 27. Ample clearance is allowed between the trays 43.

In Figure 10, I have shown still further a modified form of the invention in which I provide two separate, flexible closures 28 and 28^b, one to be drawn from the upper rear portion of the desk and the other from the lower bottom portion. Each of the closures terminates at its forward edge in a bar 29 with locks similarly to the lock 34 shown in the preferred form, and are intended to meet substantially the position shown in Figure 10 when the closures are fully extended. This modification possesses the advantage of separate manipulation of the top or front closure with the movement of a relatively light closure. In the preferred forms the entire top and front closure must be moved with every change of position of either the front or top closure portions.

While I have shown this specific embodiment of my invention, I contemplate that changes may be made therein without departing from the spirit or scope of my invention.

I claim:

1. In a ledger desk provided with an open front and top, end walls provided with channels near their top, front, and bottom edges, a flexible closure slidable in said channels, means in said channels adjacent the top of the front and the back of the top, respectively, for permitting the closure to move in one direction but for preventing movement in the other direction, and means carried by said closure for disengaging said first-mentioned means.

2. A ledger desk having side and rear walls forming a compartment for the reception of trays of cards, the compartment having an open front and top and a slidably supported flexible closure therefor movable upwardly to close the front and further movable rearwardly to close the front and the top.

3. A ledger desk having side and rear walls forming a compartment for the reception of trays of cards, the compartment having an open front and top, a slidably supported flexible closure therefor movable upwardly to close the front and further movable rearwardly to close the front and top, and means for retaining the closure in an intermediate position to close the front while leaving the top open.

4. A ledger desk having side and rear walls forming a compartment for the reception of trays of cards, a compartment having an open front and top, a slidably supported

flexible closure therefor movable upwardly to close the front and further movable rearwardly to close the front and the top, said closure being stored along the bottom and rear of the compartment when not in operative position.

5. The combination with a ledger desk having a compartment formed by a bottom, a rear and side walls with a continuous opening at the front and top, and a posting board mounted over the opening for lateral reciprocation,—of closure means for the front, and front and top, respectively, operable irrespective of the position of the board and comprising a flexible closure mounted to slide upwardly and rearwardly across the front and top to close them, and means for retaining the closure in an intermediate position closing the front while leaving the top open.

6. The combination with a desk having a compartment closed at the bottom, rear and side but a continuous opening at its front and top, of a flexible roll top means for closing the front, and both the front and top, respectively, said means including a portion movable upwardly from the bottom across the front to close the front, and means for retaining it in that position with the top open, said roll top means being further movable to a top closing position.

7. A ledger desk having side and rear walls forming a compartment for the reception of trays of cards, the compartment having an open front and top, a slidably supported flexible closure therefor movable upwardly to close the front and further movable rearwardly to close the front and the top, means for retaining the closure in an intermediate position to close the front while leaving the top open, and means wherein the closure is stored along the bottom and rear wall when not in operative position.

8. The combination with a ledger desk having a compartment formed by a bottom, a rear and side walls with a continuous opening at the front and top, and a posting board mounted over the opening for lateral reciprocation,—of closure means for the front, and front and top, respectively, operable irrespective of the position of the board and comprising a flexible closure mounted to slide upwardly and rearwardly across the front and top to close them, means for retaining the closure in an intermediate position closing the front while leaving the top open, and guideways along the bottom and rear wall wherein the closure is stored when not in operative position.

9. The combination with a desk having a compartment closed at the bottom, rear and side but with a continuous opening at its front and top, of a flexible roll top means for closing the front, and both the front and top, respectively, said means including a portion movable upwardly from the bottom across the front to close the front and further movable to close the front and top, means for retaining it in that position with the top open, and guideways along the bottom and rear wall wherein the roll top means is stored when not in operative position.

In witness whereof, I hereunto subscribe my name this 28th day of March, 1927.

JOHN DAVID DICKINSON.