No. 684,567. Patented Oct. 15, 1901.

H. H. ELMER, J. L. CLOUGH & A. M. GLOSSBRENNER.

CARD LEDGER.

(Application filed Mar. 30, 1901.)

(No Model.) 2 Sheets—Sheet 1.

Fig. 1.

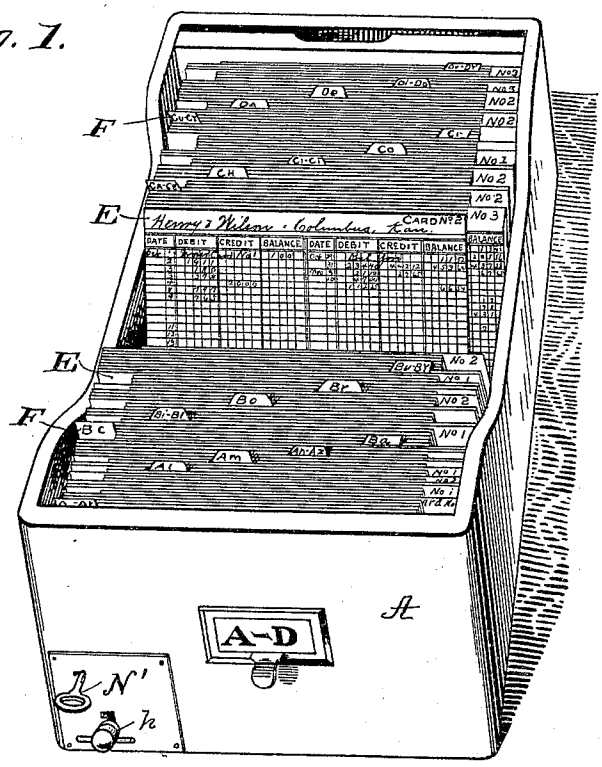
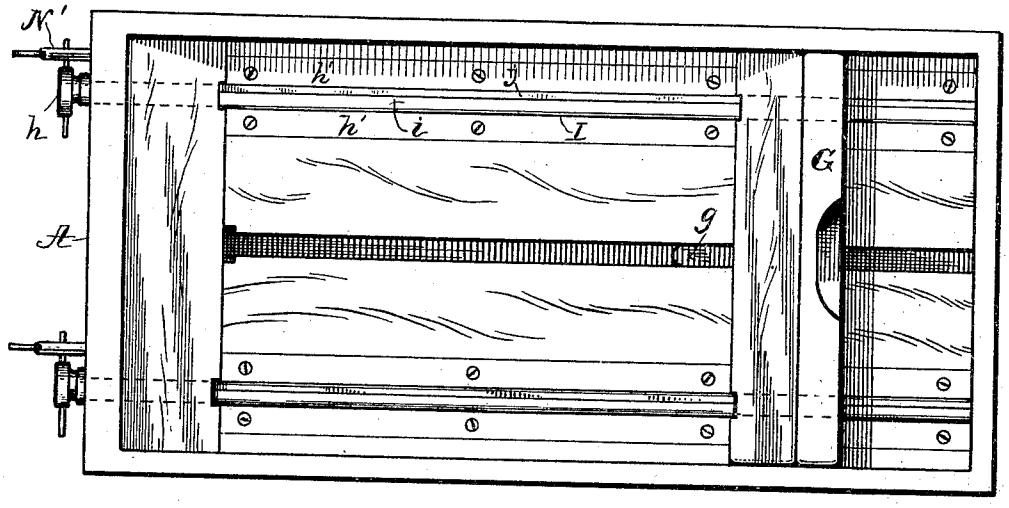


Fig. 2.



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Fig. 3.

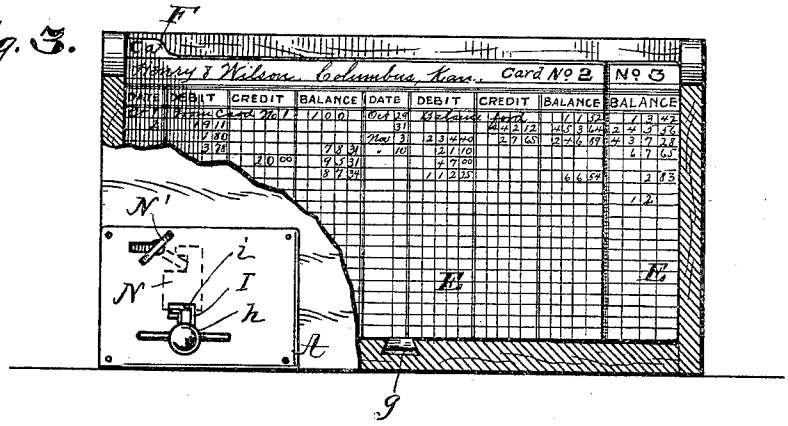


Fig. 4.

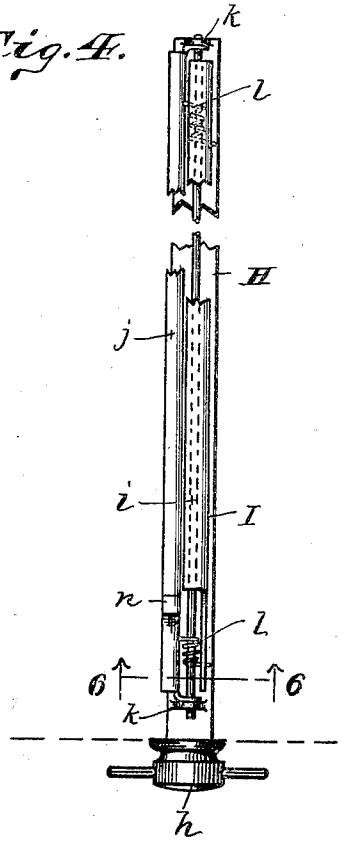


Fig. 5.

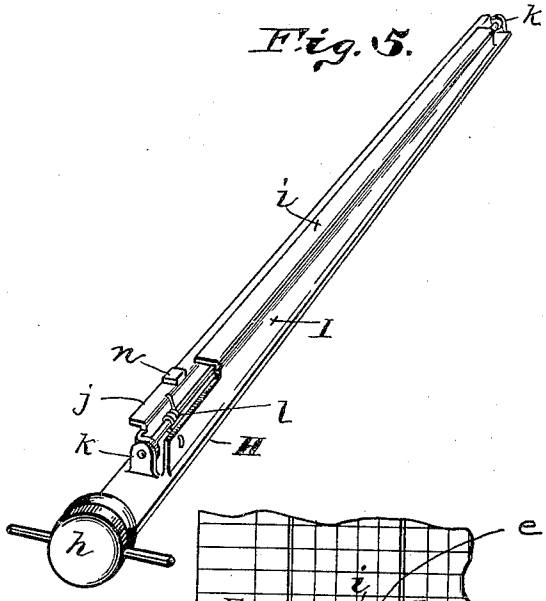
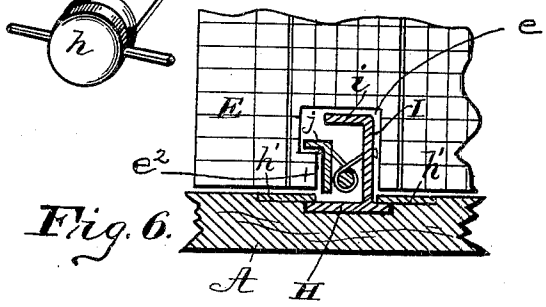


Fig. 6.



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UNITED STATES PATENT OFFICE.

HARRY H. ELMER, JOHN L. CLOUGH, AND ALFRED M. GLOSSBRENNER, OF INDIANAPOLIS, INDIANA, ASSIGNORS TO LEVEY BROTHERS AND COMPANY, OF INDIANAPOLIS, INDIANA, A CORPORATION OF INDIANA.

CARD-LEDGER.

SPECIFICATION forming part of Letters Patent No. 684,567, dated October 15, 1901.

Application filed March 30, 1901. Serial No. 53,683. (No model.)

To all whom it may concern:

Be it known that we, HARRY H. ELMER, JOHN L. CLOUGH, and ALFRED M. GLOSSBRENNER, citizens of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Card-Ledgers, of which the following is a specification.

This invention relates to bookkeeping and to the system of bookkeeping in which each account is kept on a separate card which is removable from among other cards containing other accounts.

The object of the invention is to provide means for retaining the cards in a normal or primary position, but not held in such a manner as to prevent their removal singly, and, further, to provide means whereby the card which is lifted from its place when an entry is to be made cannot be replaced in its former position, but to one side instead, in order by its location to enable it to be instantly distinguished from those which have remained undisturbed, although allowing it to maintain the same relative order in the box that it previously did.

The object, further, is to provide an efficient, convenient, durable, and inexpensive construction, such as will hereinafter be fully described and claimed.

The objects of the invention are accomplished by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of the invention; Fig. 2, a top or plan view of the case or box with the cards removed and modified in construction to show two locking-bars; Fig. 3, a front end view of the case with a major portion of the end broken away to show the cards and mechanism inside of the case; Fig. 4, a detail in top or plan view of the slide which carries the mechanism for locking the cards in the case; Fig. 5, a perspective view of same; and Fig. 6, a transverse section on the line 6 6 of Fig. 4, showing a portion of one of the cards.

Like letters of reference indicate like parts throughout the several views of the drawings.

A represents the drawer or filing-box to contain the cards on which the accounts are entered. The number of boxes used will depend on the number of accounts to be carried. In practice the boxes sufficient in number to represent the whole alphabet are kept in a filing case or cabinet (not shown) of well-known construction. Fig. 1 of the drawings represents a box to contain accounts which are indexed from "A" to "D," as indicated by the plate on the front of the box.

E represents the cards to contain the accounts. They will have a line at the top for the name of the person or firm whose account is to be entered, place of business, &c., and below will be the usual horizontal lines and lines transverse thereto, dividing the card into columns for dollars and cents and into larger subdivisions, as date, debit, credit, and balance columns and the like. The cards may be ruled on one or both sides. They will be considerably less in length—say a half inch or more—than the inside width of the box. The cards are first placed in the left of the box, which leaves an unoccupied space at the ends of the cards at the right side of the box. When a new entry is made, the card is lifted from its place, after which it is replaced, but to the right, projecting into the unoccupied space at the right of the box, thereby by its location enabling it to be distinguished from those on which the record has not been changed. The cards E are grouped alphabetically with relation to the first letter in the name of the firm, or, as in the drawings, with relation to the initial letter of the town where the firm is domiciled, and these groups are kept separate and are conspicuously indicated by means of index-cards F, which, as no entries are to be made on them, will not need to be changed in position and may be made to extend from wall to wall of the box. These cards have extensions from their top edges, upon which are index-letters, as "Am," "Bc," "Ca," "Da," &c. The cards E and F are provided with notches *e* (see Fig. 6) along their lower edges to receive a locking-bar, hereinafter to be described. Inasmuch as the number of cards in the drawer or box will vary as new accounts are opened or old ones are closed, a sliding partition G, having movement longitudinally of the box, is provided.

This partition has a foot g, which takes into the dovetailed groove a in the bottom of the box. The locking-bar for holding the cards in place and previously referred to will now be described.

H represents the body of the bar, which is flat and straight and to which its associated parts are secured. It has the knob h at one end, which serves as a handle by which the bar will be introduced into the box through a suitable slot in the end of the box provided for that purpose. A channel formed in the bottom of the box will receive the bar and plates h', fastened to the box-bottom, and, overlapping the edges of bar H, will guide the latter into place and securely hold it. Extending up from the bar H is the straight flange I, having the right-angled upper edge i, which forms a ledge or cap to cover a hinged and rocking angle-bar j in certain positions of the said rocking bar. The bar j is hinged at its ends to posts k and is pressed normally outward at its upper edge by the spring l. The horizontal or upper flange of the angle-bar j when pressed out by the spring engages the shoulder e^2 of the notch e of card E; but when the angle-bar j is forced back with its flanges under the flange of the bar H the card is released and can be removed. To the top of the bar j is secured the lug n, (see Figs. 4 and 5,) and it will be noted that the cap i of flange I is removed from the end and past said lug. This is to permit the bolt N (shown in dotted lines in Fig. 3) of a lock fastened to the end of the box to be lowered into contact with the top of the bar j in front of said lug n. When in this lowered position, the bolt prevents the rocking of the bar j, thereby preventing the withdrawal of the cards, and the bolt also prevents the withdrawal of the locking-bar from the case. The bolt N is thrown by the key N'. When the bar j is unlocked, the cards can be freely removed by an upward pull thereon, but the cards cannot be replaced over the flanges of the bar j unless the latter is first pressed out of the way, which can be done by inserting a penholder or pencil down between the cards and pressing the bar over with it. Because the card once removed cannot be returned to its original position without great difficulty it will be convenient for the bookkeeper to place it to the right of its original position or against the straight edge, which will cause the end of the card to project into the space at the right of the box.

The invention is utilized in the following manner: In opening the card-ledger every account is given a separate card, and the balances of all of the accounts are added together to ascertain the total balance for that day or certain period of time, which is noted on the balance-pad (a separate sheet kept for that purpose and not a part of this invention) in the space provided for that purpose. All cards are then placed on the left side of the drawer over the rod by first withdrawing the rod, pushing the cards to the left side of the drawer, and then inserting the rod. When an entry is to be made, the card is lifted from its place, the rod offering no impediment, the entry made, and the card then replaced; but as the rod will not permit it to resume its former position it is placed to the right beyond the straight edge of the rod, as shown in Figs. 1 and 3. In this way every account which had an entry on the day in question is by its location instantly distinguished from those which have remained undisturbed, although it maintains the same relative order in the box that it did previously. To take off a trial-balance and prove the day's work, old balances of the accounts changed are listed on the balance-pad under the head of "Old balances." The deposits for the day are listed in deposits' column and the checks in checks' column. Then the new balances for all the changed accounts are listed under "New balances." To prove the day's work, the new balances are added together and their sum is then added to the total balance of the preceding day. From this amount deduct the sum of the old balances and the result should be the total balance for that day. The result thus obtained should be the same as the remainder left after adding the sum of the daily deposits and the total deposits of the preceding day and subtracting the daily checks therefrom. If these remainders do not correspond, then the ledger is out of balance; but to locate the error it is only necessary to check back over the cards that indicate by their positions that they have been changed during the day. After proving is completed the rod is withdrawn and all accounts are moved to the left, the rod replaced, and the ledger is again ready for posting.

Having thus fully described our invention, what we claim as new, and wish to secure by Letters Patent, is—

1. In a card-ledger, a drawer or box having an inside upward projection longitudinally of its bottom, a plurality of cards on which the accounts are entered placed on their side edges transversely of the box, said cards being shorter than the width of the box and placed primarily with ends against one side of the box and having notches to receive the said box-bottom projections whereby, when their ends are against said side of the box the top edges of the cards will be even and a well-defined unoccupied space will be presented on the opposite side, substantially as described and shown.

2. In a card-ledger, a drawer or box having a longitudinal inside projection from its bottom, a plurality of cards with bottom notches to receive the box projections placed on their side edges transversely of said box, said cards being shorter than the width of the box and being primarily assembled on one side thereof providing an open space on the other side of said box and removable means for tempora-

rily preventing the return of a card to its former position after removal in the course of business, substantially as described and shown.

3. In a card-ledger, a plurality of cards on which the accounts are entered, a drawer or box in which the cards are kept, wider than the length of the cards, and means consisting of notches in the cards and a locking-bar elevated above the bottom of the box and entering the notches for locking the cards on their side edges transversely of the box and against one side of the latter leaving an unoccupied space on the opposite side, said means temporarily preventing a card removed in the course of business from being returned to its former position, substantially as described and shown.

4. In a card-ledger, a box to contain the cards, cards on which the accounts are entered, said cards being notched on one side to receive a locking device and said cards being placed primarily against one side of the box and being considerably shorter than the width of the box whereby a well-defined vacant space is provided between one side of the box and the ends of the cards, and a locking device projecting up from the bottom of the box into the notches of the cards whereby the cards are removably secured, said locking device forming a guide between which and the side of the box the cards are retained in said vacant space after removal with their ends projecting into said vacant space.

5. In a card-ledger, a plurality of cards on which the accounts are entered, a drawer or box in which the cards are kept, wider than the lengths of the cards whereby when the cards are assembled in a primary position against one side of the box a well-defined vacant space will be provided between the cards and the other side of the box, means for removably securing the cards in said primary position against one side of the box and removable means for temporarily preventing the return of the card to its former position when removed in the course of business, substantially as described and shown.

6. In a card-ledger, a box, a plurality of cards to receive the accounts, each card having a notch with a shoulder on its lower edge all of said notches being an equal distance from the end of the card, and a rocking bar entering the notches and engaging the shoulders therein, and a spring to press the bar into engagement with said shoulders, substantially as described and shown.

7. In a card-ledger, a box, a plurality of cards to receive the accounts thereon, said cards each having a notch with a shoulder the said notches of the several cards being an equal distance from the end of the card and on the lower edge thereof, a bar with a straight edge, inserted from the outside into the box and entering the notches in the cards and a rocking bar hinged to said straight-edge bar having a spring to press it into engagement with the shoulders of the cards, substantially as described and shown.

8. In a card-ledger, the combination of a box, notched cards having a shoulder in the notches, a bar having a vertical longitudinal extension or flange, said extension having its upper edge bent laterally to form a cap, an angle-bar mounted under said cap and having a lateral rocking movement whereby it can be forced out from under the cap into engagement with the shoulders of the notched cards, and a spring to press the rocking bar outwardly into said engagement, substantially as described and shown.

9. In a card-ledger, a box or drawer, a plurality of cards shorter in length than the width of the box and notched in their under sides in the same relative positions, said notches having a shoulder as described and shown, a locking-bar to hold the cards in position, said bar being removable and being inserted through an opening in the box, said bar comprising a horizontal flat bar with a vertical flange or extension therefrom the said extension having its upper edge bent approximately at right angles to the body portion to form a cap, an angle-bar pivoted at its ends so as to rock back under the cap of said bar extension, a spring to press the angle-bar out from under the cap into engagement with the shoulders of the notches in the cards and strips on the bottom of the box to overlap the edges of said horizontal flat bar, substantially as described and shown.

10. In a card-ledger, a box or drawer, a plurality of cards notched on their under sides in the same relative positions, said notches having shoulders as described and shown, a locking-bar to hold the cards in position, said bar being removable and being inserted through an opening in the box, said bar comprising a horizontal flat bar with a longitudinal vertical flange or extension forming a straight edge, said straight edge having its top edge bent over to form a cap, an angle-bar pivoted to rock back under the cap, a spring to press the angle-bar out from under the cap into engagement with the shoulders of the notches in the cards, a lug on said rocking bar, a lock, a bolt in said lock, and a key to throw the bolt, said bolt being adapted to contact with the rocking bar in front of the lug thereon, to prevent the rocking of the bar and to prevent the withdrawal of the bar by contact with the lug, substantially as described and shown.

In witness whereof we have hereunto set our hands and seals, at Indianapolis, Indiana, this 25th day of March, A. D. 1901.

HARRY H. ELMER. [L. S.]
JOHN L. CLOUGH. [L. S.]
ALFRED M. GLOSSBRENNER. [L. S.]

Witnesses:
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