

(No Model.)

3 Sheets—Sheet 1.

J. A. LANGSTROTH.
COMBINED CARD LEDGER AND INDEX.

No. 475,043.

Patented May 17, 1892.

Fig. 1.

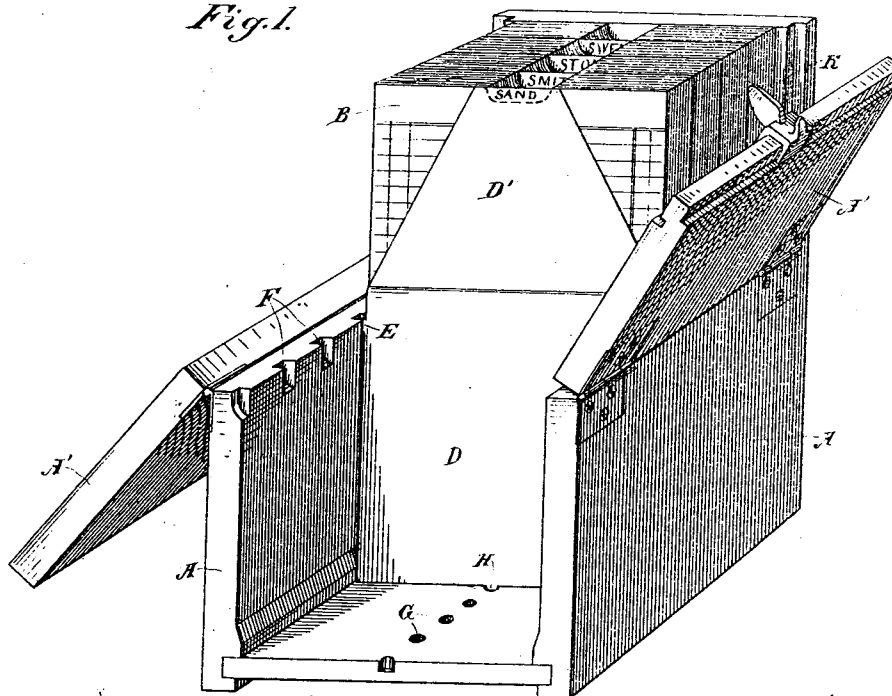
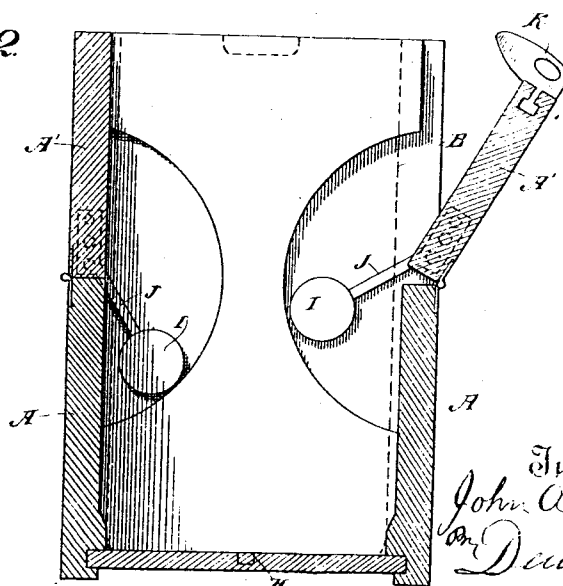


Fig. 2.



Witnesses,
A Nurse
H. F. Aschbeck

Inventor
John A. Langestratt
By Davenport & Co.
attys

(No Model.)

3 Sheets—Sheet 2.

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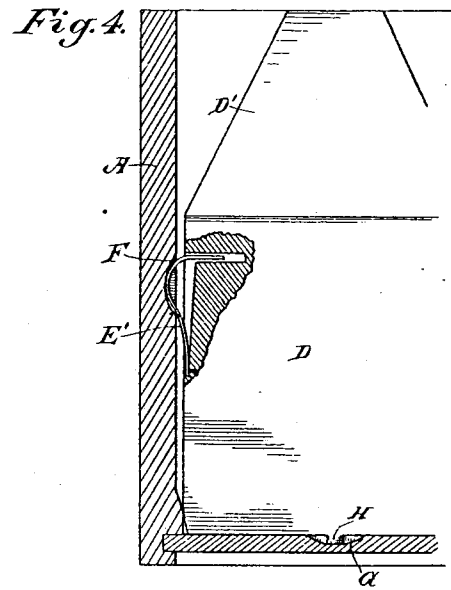
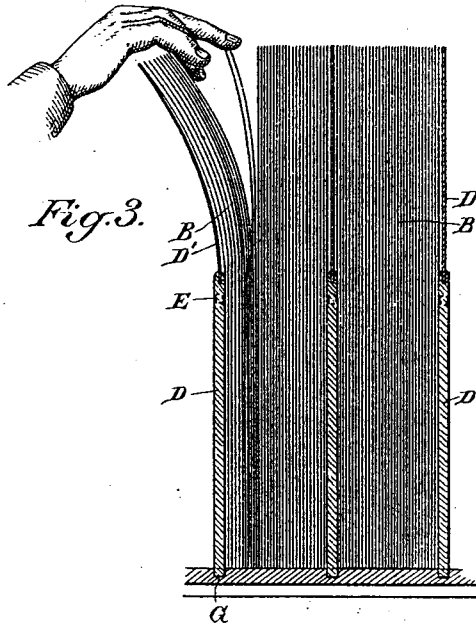
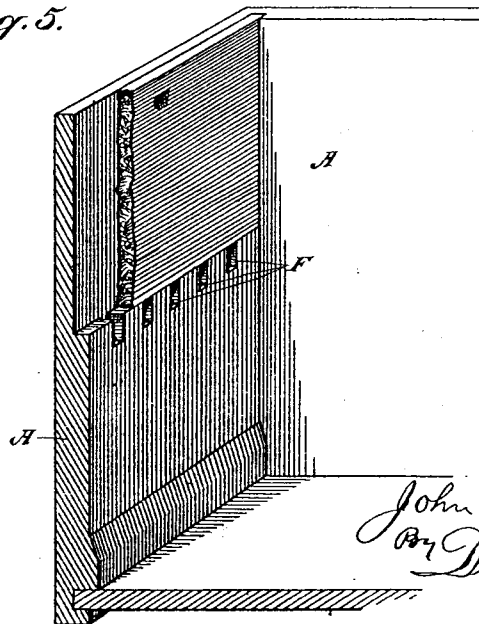


Fig. 5.



Witnesses,
J. F. C. C. C.
H. F. C. C. C.

Inventor,
John A. Langstroth
By Duway & Co.
attys

(No Model.)

3 Sheets—Sheet 3.

J. A. LANGSTROTH.
COMBINED CARD LEDGER AND INDEX.

No. 475,043.

Patented May 17, 1892.

Fig. 6.

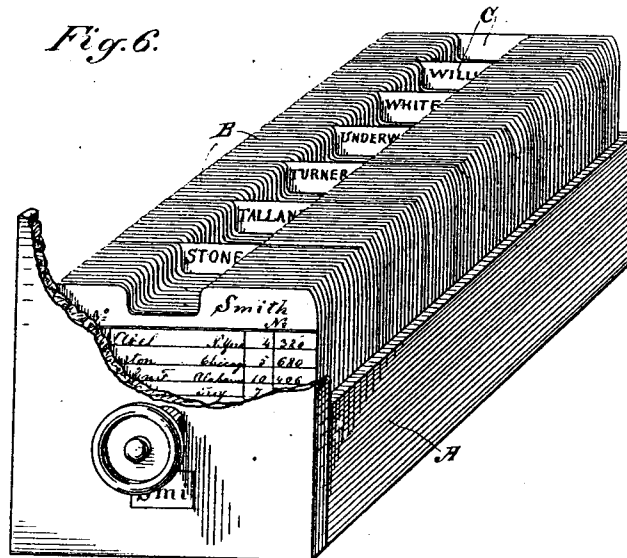
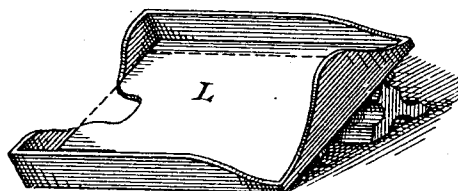


Fig. 7.



Witnesses,
J. H. Morse
H. F. Aschick

Inventor,
John A. Langstroth
By Dewey & Co.
attys

UNITED STATES PATENT OFFICE.

JOHN A. LANGSTROTH, OF SAN FRANCISCO, CALIFORNIA.

COMBINED CARD LEDGER AND INDEX.

SPECIFICATION forming part of Letters Patent No. 475,043, dated May 17, 1892.

Application filed February 20, 1891. Serial No. 382,248. (No model.)

To all whom it may concern:

Be it known that I, JOHN A. LANGSTROTH, a citizen of the United States, residing in the city and county of San Francisco, State of California, have invented an Improvement in a Combined Card Ledger and Index; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to a device which I term a "combined card ledger and index." Its object is to permit the keeping of accounts on a series of separate and independent cards in perfect alphabetical order with guide-cards of the same size interposed between them in such a manner that they serve as index-cards, and also adjustable supporting-partitions.

It consists in certain details of construction which will be more fully explained by reference to the accompanying drawings, in which—

Figure 1 is a perspective view showing the account-cards supported in a containing-box, means for adjusting the supporting-partitions, &c. Fig. 2 is a transverse section taken through the box, showing the sides spread, the movable indicator, and its operative mechanism. Fig. 3 is an edge view showing the construction of the supporting-partitions with the flexible top. Figs. 4 and 5 are modifications of the manner of securing and adjusting the partitions at different points within the box. Fig. 6 shows the arrangement of the account and guide cards and index. Fig. 7 is a tray used in conjunction with the independent accounts.

My invention is designed to provide a simple and expeditious means for keeping accounts and indexing them, so that they can be rapidly found and examined, and closed accounts may be removed and new accounts continually inserted, at the same time retaining the proper alphabetical arrangement of these accounts, while saving all the time and labor usually expended upon the keeping of an index. Where the ordinary ledger is employed with a large number of accounts, these accounts are written into the ledger from time to time, as they occur and an alphabetical index (upon which all account-names, as well as ledger and folio, have to be entered) is necessary in connection with said ledger. Much

time is lost in examining the index to find the accounts and in turning over pages of the ledgers for any work that is necessary to be done upon the open accounts by reason of the ever-increasing number of closed accounts.

My invention is designed to save the labor of indexing, the time and labor of handling or inspecting closed accounts, much of the time and labor spent in opening new or transfer ledgers for old accounts, and the time usually spent in referring to an index by the ordinary methods.

A is a box, which may be made of any suitable and convenient size and length to contain as many cards as are required for the different accounts to be kept; or, if the business is large, a number of these boxes may be employed.

The cards B, upon which the accounts are kept, can be made of heavy paper or bristol-board, or any material possessing the essential features of these, together with the qualities of durability, flexibility, and thinness. At the top of each of the cards are written the surname and christian name of the person whose account is kept upon that card.

For convenience in handling the cards and exposing what I term the "guide-cards" C, all the cards, except the guide-cards, have a corresponding portion cut away at some suitable point, so that the guide-cards, which are not cut away, will be exposed within these spaces, where the means or other indicative marks which are employed upon the guide-cards can be readily seen at a glance from the front of the box. The upper sides of the cards B may be cut away in various styles, either at the corners or at some one or more points along the top, or preferably at or near a single point in the center, as shown in Fig. 1. If cut away at any other point than the center, it will be manifest that the card must be cut equidistant from the center upon each side to allow the card to be reversed in the box and both sides used. For this reason I consider that the central cut, as I have shown it, is best for all practical purposes. The guide-cards C are of the same size as the cards B, so that they do not protrude beyond them, and they are only exposed at the point where the cut-away portion of the cards B leaves them projecting across the space thus made.

where the names or guide-symbols will appear, so that there are no projecting edges to become curled or mutilated, as would be the case if the guide-cards projected above the other cards. The surname may be written upon one side of this cut or opening and the christian name upon the other, and where there is a large number of the same surname the christian names may be alphabetically arranged. The cards are all sufficiently flexible to allow their tops to give readily to a forward or backward pressure of the fingers when standing vertically with their lower portions rigidly supported within the box, so that any account may be easily found, first, by its position between the guide-cards, and, secondly, by running the finger or fingers over the intermediate cards until the desired one is reached, the flexibility of the whole allowing the tops to be very easily bent sufficiently for this purpose. In order to properly support these cards, I employ rigid adjustable partitions D, which preferably extend upwardly from the bottom of the box to a point above the middle of its depth, leaving the cards projecting above the edges of these rigid partitions. These partitions are introduced at such points as to support a certain number or section of the account-cards and prevent their leaning over against the adjacent sections, and this arrangement allows any section or portion of a section to be removed without in any way interfering with any other section or allowing the remaining cards to lean over at too great an angle. It will be manifest that these rigid partitions may extend up to some point near enough to the top of the cards to allow the latter to be bent sufficiently over the upper edges of the partitions to be easily inspected at any time; but I have found that a suitable method of constructing these partitions is to make the lower half or more rigid and of sufficient thickness, so that the partition may be fixed in place wherever desired, while the upper portion is made thinner and of some flexible material, as shown in Fig. 3, and tapered toward the top, so that the upper portion will have approximately the same flexibility as the account-cards, and the upper edge of the partition being of the same height with the upper edge of the cards gives the whole a symmetrical appearance from the top. In running over the cards the tops of the partitions may be bent to one side, as shown in the drawings, in the same manner as the cards, but when released will rise to the vertical position again, their elasticity being sufficient to overcome the slight lateral pressure of the tops of the account-cards which may be caused by the latter being placed somewhat loosely between the partitions, and not all standing absolutely perpendicular. The upper portion D' of the partitions D may be made of thin flexible rubber, stencil-board, or other material suitable for the purpose. As the num-

ber of accounts in any section increases or diminishes, it will be manifestly necessary to change the position of these partitions occasionally, and for this purpose they are locked in any convenient or suitable manner within the case, so as to be readily unlocked and shifted.

As shown in Figs. 1 and 2, each partition D has a lug E at opposite sides, and these lugs fit into corresponding grooves or slots F, made in the sides of the box. In the bottom of the box are made holes or grooves G, in the same vertical plane with the grooves or channels F, and pins H, projecting from the bottom of the partitions, enter these holes, so that by means of the pins E and H the partitions are firmly held in their vertical position. The grooves or openings FG are made as near together as may be desired along the sides of the box, so that the partitions can be moved to any suitable or convenient distance from each other, as required. These partitions may be moved in various ways. If, desired, the grooves or slots F may be continued to the top of the box, and the partitions are simply slipped out or in from the top at will, or the upper portion of the box could be made wide enough to admit them; but in order to leave the upper portion of the box sides smooth and to prevent the cards from catching or being mutilated, as would be likely to be the case if these channels or grooves or any portion of them were left exposed at the upper end of the box, and to prevent accidental displacement of the partitions, I prefer to make them in the form of short curved depressions just opposite the pins E, and the partitions may be locked in place either as shown in Fig. 1 or Fig. 5.

In Fig. 1 I have shown the upper sides A' of the box A as hinged to the lower portion, so that they may open outwardly, and when these sides are thus opened outwardly the upper edges of the grooves or channels F are exposed and opened, so that the partitions D may be easily lifted out and moved along to any other point and again introduced. When the sides A' are closed up, it will be seen that the lower edges projecting above the openings F and the lugs E of the partitions serve to lock the latter in place and prevent their being accidentally removed.

It will be manifest that various other methods may be adopted without essentially altering the character and effect of the partitions.

In Fig. 5 the upper portion of the box sides are thinner than the lower part, and the locking lugs fit into depressions in this lower portion. They are held in place by false pieces sliding within the upper part of the sides and just completing the thickness to correspond with the lower part and make a smooth inner surface.

In Fig. 4 I have shown a light compressible spring E', fixed within the edges of the partitions D, the upper part of the spring

curving outwardly, so that it will drop into the grooves or channels F in the sides of the box.

If it is desired to take the partition out, it may be lifted and the spring will be forced into the depression in the side of the partition, so as to allow it to slip up along the upper sides of the box. When the partition is removed and when it is replaced in either of the openings, the spring will remain compressed while the partition is being pushed down into place, but will fly out as soon as it arrives opposite one of the openings or spaces F.

The first-described method is the simplest, because the channels can all be easily seen when the upper sides of the box are bent outwardly and the partitions can be put in perfectly straight.

If desired, the channels or openings F and G may be correspondingly numbered, so that no mistake will occur in setting the partitions.

The upper sides of the box may be closed automatically in various ways, either by springs or by weights. In Fig. 2 I have shown a weight I, fixed upon the end of an arm J, which is secured to one of the sides A'. The weight projects into a chamber made in the end of a box, so that it in no wise interferes with the cards which are in the box, the chamber being of sufficient size to allow the weight to swing within it. When the side A' is turned outward, the weight I will be thrown correspondingly upward within the chamber, and when the side is released the weight, falling down toward the vertical position, will draw the side up into its place again.

When an account is to be removed, I employ a simple marker or finger K, to indicate the place from which the account was removed. This marker may be fitted to slide upon a rod; but I have found it convenient to fit it upon the upper edge of one of the sides A', with a tongue or other means for keeping it in place, while allowing it to slide readily from end to end of the box. If it be desired to remove an account-card for any purpose, this marker is moved along the edge of the box, the latter being drawn outward from the edge of the cards, as shown in Fig. 1, and when the marker is opposite the space from which the card is removed the side is allowed to close up, thus forcing the point of the marker between the cards, where it will remain until the account is ready to be replaced. By this arrangement I am enabled to keep any number of accounts, whether large or small, constantly in their alphabetical order, and the accounts themselves, in connection with the guide-cards, serve as their own index. It will be manifest that in certain contingencies where a separate index is of value smaller cards may be placed in a series of drawers in a cabinet and used as an index alone, guide-cards C being used as previously described; but no partitions will be necessary, the small cards here required being sufficiently supported without

the partitions. These cards are so arranged that while each card will have the surname written in the top, the body of the card, or a successive number of them, will contain all the christian names of the individuals of that surname. These cards do not need to be reversible, and in that case the cut need not be located in the center. In a case of this kind the cards can be placed somewhat loosely in the drawer, so that they are easily opened for inspection. The corners of the cards are preferably rounded to prevent their curling at these points.

In connection with the account-cards I use a tray L. This tray is made with sides tapered down near one end, and this end is also tapered down from the center to the sides, so that at the corners this end of the tray is very shallow, and when a parcel of cards or accounts are placed one by one in the tray they can be easily made even by drawing each against the side and end of the box while placing it there. The opposite end of the tray is cut away or tapered down from the sides toward the center, and the bottom is cut away at this point to facilitate the lifting of the cards out of the tray. The tray is preferably supported at an angle, resting upon a block which supports it from beneath. Strips extend along the bottom of the tray to prevent it slipping off the block. In place of using a block arms might be hinged to the bottom of the tray for its support upon one side or the other which arms might be folded when the tray is not in use. When it is desired to run through the accounts, they are taken from the containing-box in convenient parcels, placed upon the table by the side of the tray, and beveled so as to be easily removed, and the operator can then write upon or examine each card, afterward turning it over, face down, into the tray, care being taken to retain the hold upon the corner of the card until its edges are brought in contact with the lower end and side of the tray. When all the cards are thus turned into the tray, the whole parcel will be found perfectly symmetrical without any projecting edges.

Some device of this nature is absolutely necessary to the convenient and safe handling of the cards when out of the box, since, if turned rapidly one by one upon an open table or desk, they would be continually sliding off one another or even off the desk upon the floor.

By reason of the cut-away space in the bottom of the tray at the opposite end it will be easy for the operator to seize the parcel of cards by the top and return it to the box.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. An account-card-holding case consisting of a box having channels in the bottom and in the central lower portion of the sides, transverse partitions with projecting lugs to fit these channels, and movable continuations

of the sides of the box above the side channels, whereby the partitions may be locked in place in either set of channels, substantially as herein described.

5 2. An account-card-holding case consisting of a rectangular box having channels in transverse planes in the bottom and the lower portion of the sides and movable continuations of the side channels, transverse partitions with a lower rigid section and an upper flexible continuation, and lugs upon the rigid portion to fit the channels in the lower part of the case and hold that part of the partition firm while the upper part is free and movable, substantially as herein described.

15 3. A combined ledger and index consisting of the account and guide cards and fixed partitions interspersed between them, a box, and means whereby said partitions are locked at any point within the lower part of the box, hinged sides extending upwardly from this point, and a means for closing said sides automatically against the edges of the cards or allowing them to be opened outwardly therefrom, substantially as herein described.

20 4. A ledger and index consisting of the account and guide cards arranged with relation to each other, as shown, partitions interspersed between the cards having the lower portion adapted to be fixed within the lower portion of a containing box or case, and the upper portion made flexible to correspond with the cards, a containing box or case having the upper portion of the sides hinged, a finger or blade fitted to travel upon the upper edge of the box from end to end, so that it may be introduced between the cards at any point, and a weight or spring whereby the sides may be automatically closed, so as to hold the finger in position, substantially as herein described.

35 5. In conjunction with an account-card-holding case, the vertically-disposed adjustable partitions with rigid lower part and flexible extensions at the top, combined ledger and index cards fitting the case, with their upper edges flush with the flexible tops of the partitions and movable from side to side therewith, substantially as herein described.

50 6. In conjunction with an account-card-holding case, the vertically-disposed adjustable partitions with rigid lower part and flexi-

ble extensions at the top, ledger and index cards fitting the case, with their upper edges flush with the flexible tops of the partitions and movable therewith, central segmental slots made in the tops of the cards, intermediate guide-cards having their tops continuous and flush with the tops of the ledger-cards, and distinguishing guiding-marks upon that portion which is exposed by the segmental slots of the ledger-cards, substantially as herein described.

7. In conjunction with an account-card-holding case having adjustable flexible partitions and intermediate cards with flush upper edges and centrally-disposed guiding-marks, a series of reversible combined ledger and index cards, each having an individual name and account upon it, and segmental slots made in the center of the tops of these cards within which the marks upon the interspersed guide-cards are exposed, substantially as herein described.

8. A series of ledger and index cards having centrally-located segmental slots made in one of their edges, forming a continuous channel when the cards are supported on edge in the containing-case, transverse guide-cards interspersed among the account-cards, having their upper edges continuous and crossing the channel, with distinguishing-marks upon the portion exposed within the channel, whereby the account-cards may be reversed without obscuring the marks upon the guide-cards, substantially as herein described.

9. A combined ledger and index consisting of a series of cards, each of which serves the double purpose of account and index card, and has a central segmental slot in the exposed margin, guide-cards interspersed between them, in conjunction with a containing-box, with transverse adjustable partitions having the lower end rigid and the upper end flexible, and means whereby said partitions can be readily locked in any desired position in the box, substantially as herein described.

In witness whereof I have hereunto set my hand.

JOHN A. LANGSTROTH.

Witnesses:

ROBERT M. WELCH,
CHARLES S. MELVIN.