No. 880,754. PATENTED MAR. 3, 1908.

J. B. PERRINE.

SELF INDEXING LEDGER.

APPLICATION FILED OCT. 21, 1907.

4 SHEETS—SHEET 1.

Fig. 1.

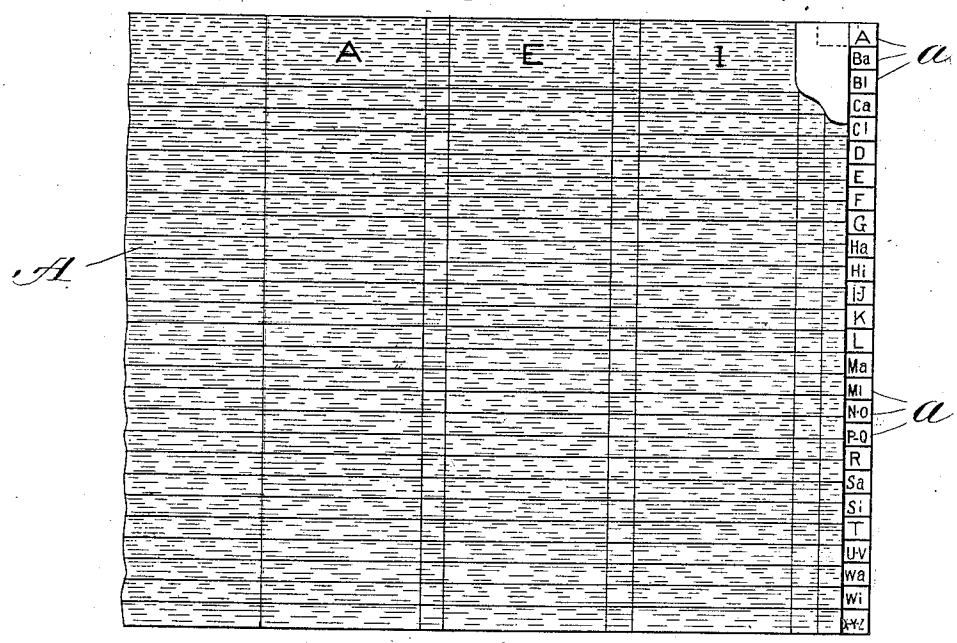
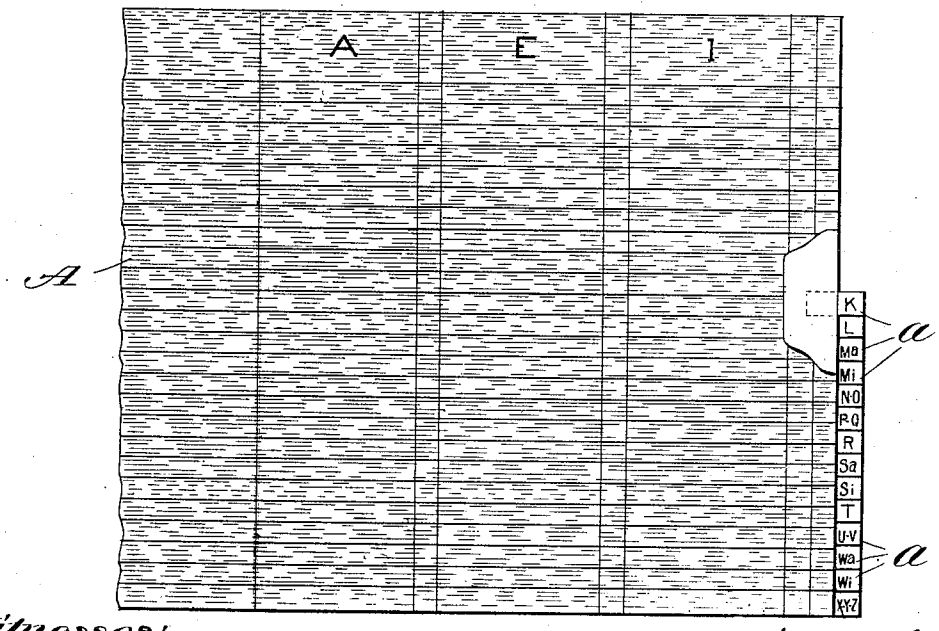


Fig. 2.



Witnesses:
Harry L. Gaither
Ruby V. Nash.

Inventor:
John B. Perrine
by Walter A. Rambelin
his atty

No. 880,754. PATENTED MAR. 3, 1908.

J. B. PERRINE.

SELF INDEXING LEDGER.

APPLICATION FILED OCT. 21, 1907.

4 SHEETS—SHEET 2.

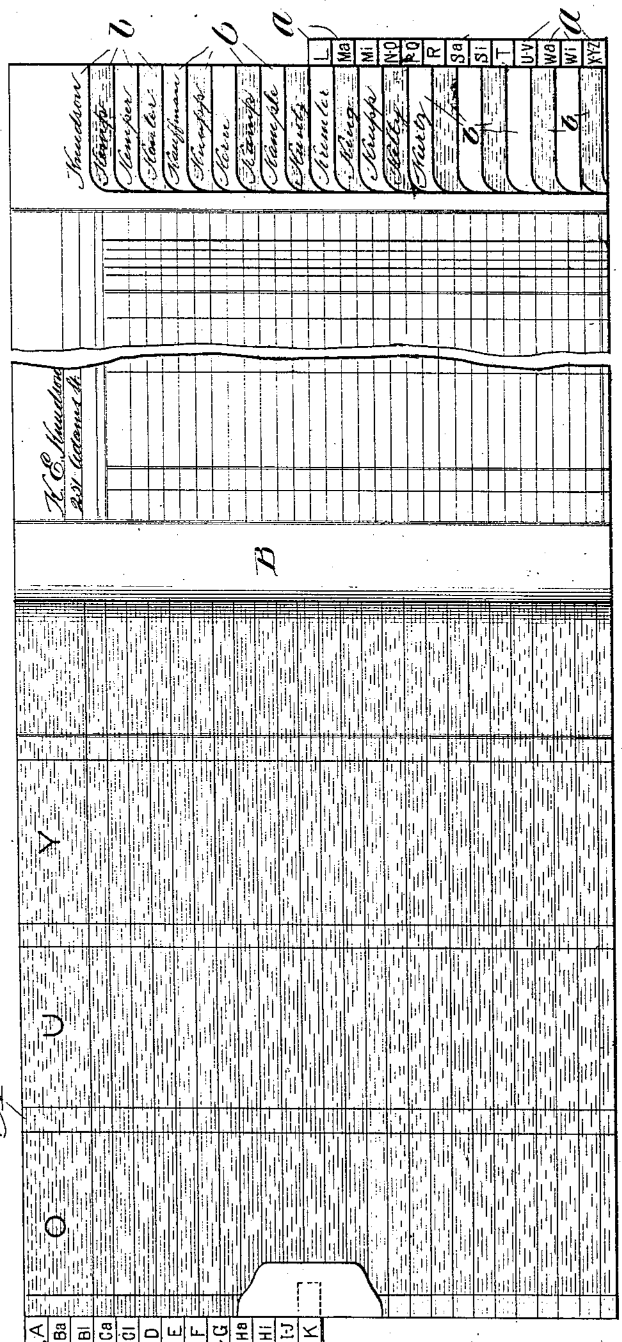


Fig. 3.

Witnesses:

Harry S. Gaither

Ruby V. Nash.

Inventor:

John B. Perrine

by Walter H. Chamberlin

his att'y

No. 880,754. PATENTED MAR. 3, 1908.

J. B. PERRINE.

SELF INDEXING LEDGER.

APPLICATION FILED OCT. 21, 1907.

4 SHEETS—SHEET 3.

Fig. 4.

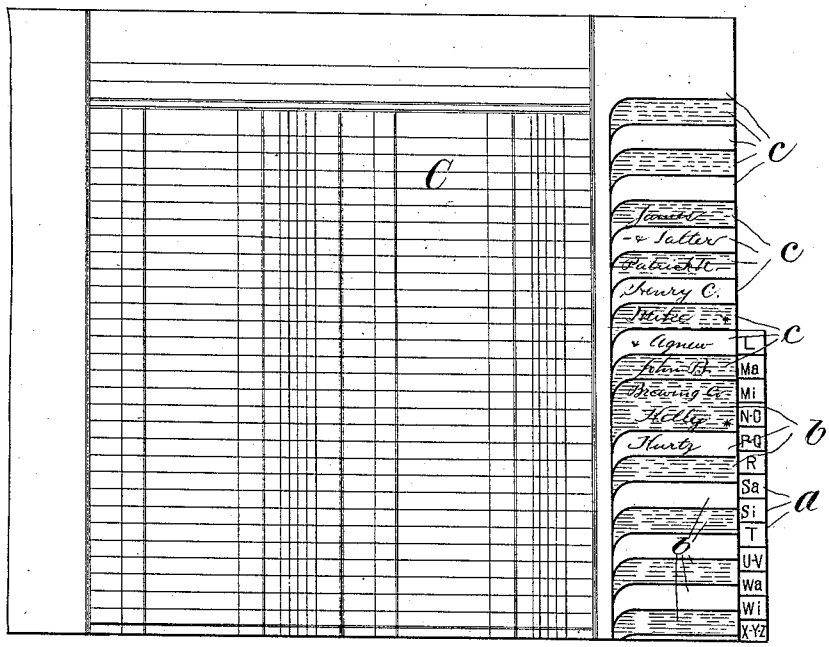
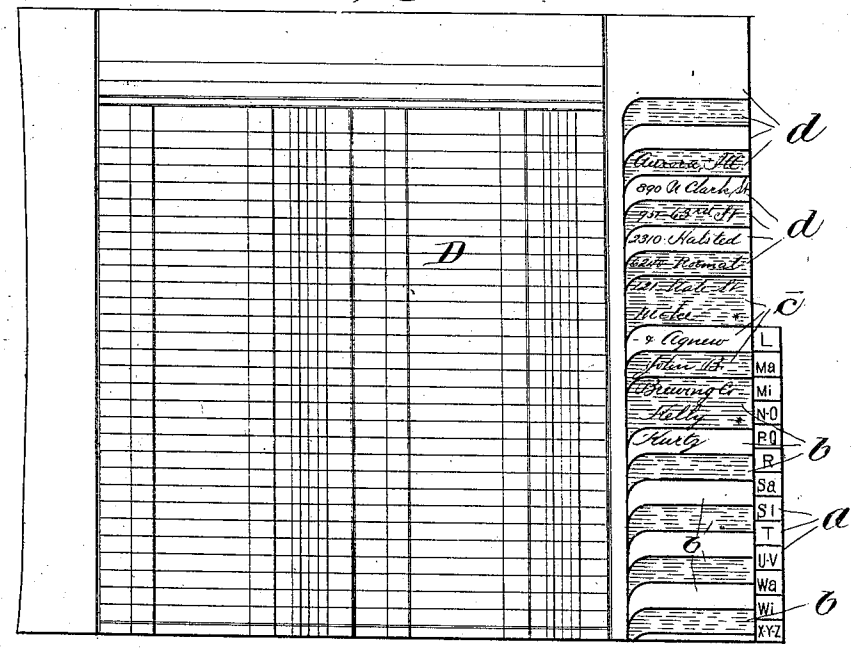


Fig. 5.



Witnesses:
Harry S. Gaither
Ruby V. Nash.

Inventor:
John B. Perrine
by Walter H. Chamberlin
his atty

No. 880,754. PATENTED MAR. 3, 1908.

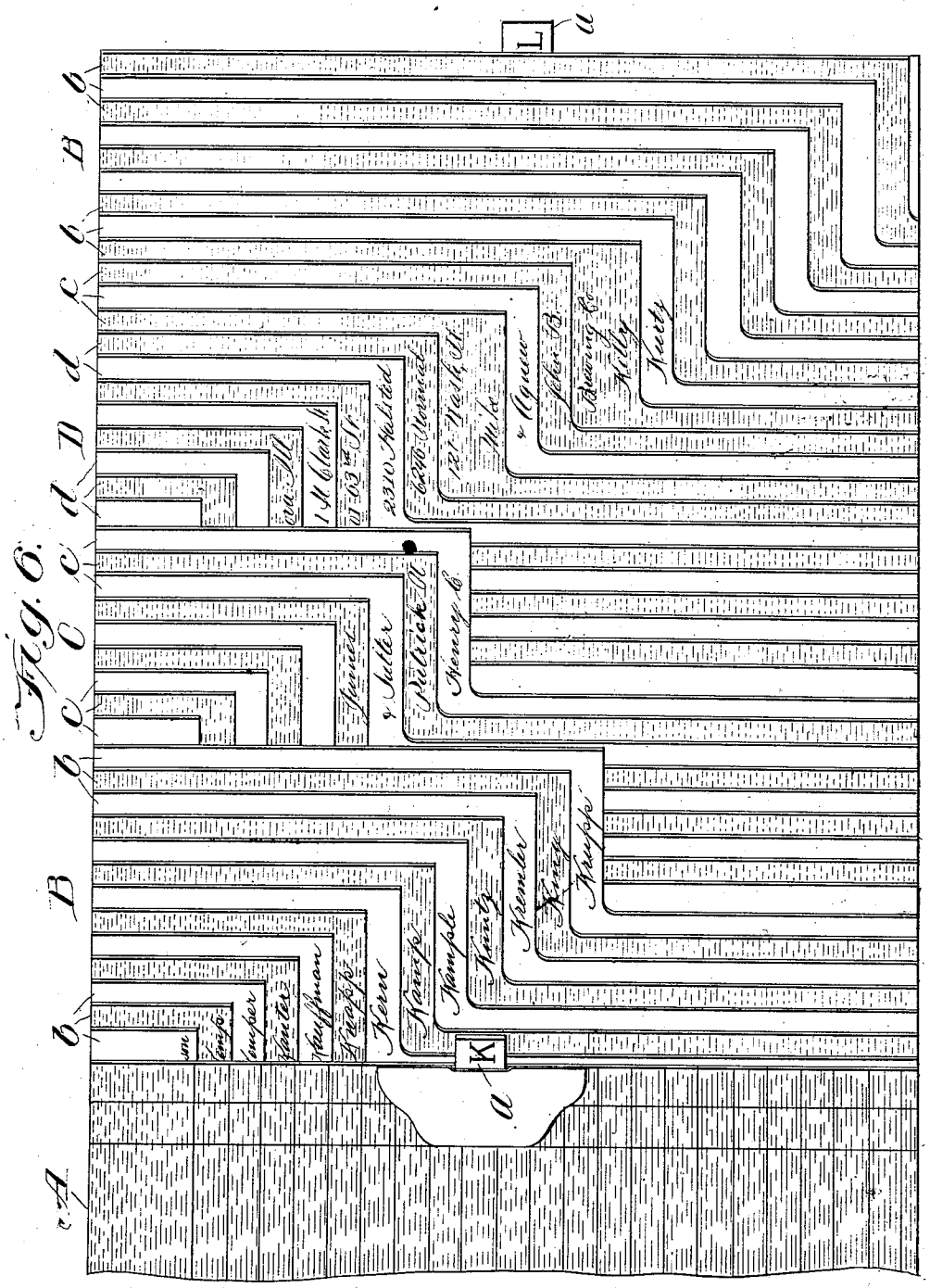
J. B. PERRINE.

SELF INDEXING LEDGER.

APPLICATION FILED OCT. 21, 1907.

4 SHEETS—SHEET 4.

FIG. 6.



Witnesses:
Harry L. Gaither
Ruby V. Nash.

Inventor:
John B. Perrine
by Walter H. Chamberlin
his attorney.

UNITED STATES PATENT OFFICE.

JOHN B. PERRINE, OF VALPARAISO, INDIANA, ASSIGNOR TO JAMES E. PLEW, OF CHICAGO, ILLINOIS.

SELF-INDEXING LEDGER.

No. 880,754. Specification of Letters Patent. Patented March 3, 1908.

Application filed October 21, 1907. Serial No. 398,377.

To all whom it may concern:

Be it known that I, JOHN B. PERRINE, a citizen of the United States, residing at Valparaiso, county of Porter, State of Indiana, have invented a certain new and useful Improvement in Self-Indexing Ledgers, and declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to ledgers, particularly of the loose leaf type, and has for its object to provide means whereby a ledger may be made entirely self-indexing regardless of the number and diversity of names or items which may be contained therein.

A further object of my invention is to so arrange a loose leaf ledger that a mis-placed leaf or the absence of a leaf can be detected at a glance.

Further objects of my invention will be made apparent in the following detailed description, while the distinguishing features whereby my invention is characterized will be understood from the definitions of my invention which are comprised in the appended claims.

A preferred form of my invention is illustrated in the accompanying drawings, wherein:

Figure 1 is a view showing a ledger opened at the first page; Fig. 2 shows the ledger opened at the page which separates the items which are classified under the letter "J" from the items which are classified under the letter "K"; Fig. 3 is a view of the ledger showing it opened at the page following that exposed in Fig. 2; Fig. 4 shows the ledger opened at the page which follows that bearing the name "Krupp"; Fig. 5 shows a ledger opened at the page which follows that bearing the name "Henry C," which appears in Fig. 4; and Fig. 6 is an exaggerated view showing the edge of a partially opened portion of the ledger, representing a main set of leaves, a supplementary set of leaves interposed between two of the main leaves and a sub-supplementary set interposed between two leaves of the supplementary set.

The leaves of the main or primary sets are preferably made in two colors, the colors alternating so that a mere glance at the exposed edges of the leaves of a set will cause an omission of a leaf or mis-placed leaf to be detected. This same color scheme may be carried to the supplementary sets if desired.

Referring to the drawings, the leaves which have been marked A represent complete leaves which are intended to serve as transfer records and of which there are at least as many as there are primary sets of leaves, there being one of the transfer record leaves between each two consecutive main or primary sets. Each of the leaves A, or one such leaf between each two main sets (if more than one such leaf be employed between two sets), is provided with a tab *a* which projects beyond the edge thereof so as to be exposed at the end of the ledger. These tabs are so arranged that when the ledger is opened at the first page the tabs lie one below the other in a row extending across the length of the ledger.

B represents a main or primary set of leaves. Each of these leaves has removed therefrom at the edge of the ledger at which the tabs are located a section thereof; these sections decreasing progressively in length from the first to the last. In the particular ledger shown there are twenty two leaves in a main set and the sections which are removed therefrom are therefore preferably proportioned so that a portion *b* of each leaf equal in length approximately to one twenty-second of the length of the ledger is exposed at the edge of the ledger when all of the leaves are super-posed upon each other.

The exposed portion *b* of each of the leaves is intended to bear a main or primary designating character, as for example, the sheets arranged between the transfer record sheets which bear the tabs having the designating characters "K" and "L" are intended to bear the names of all items or persons beginning with the letter "K". These designating characters may be placed upon the leaves in chronological order or in any other order that may be desired, since, on account of the few characters which are exposed at any one time, it is unnecessary to maintain any particular sequence. In the example illustrated in the drawing, the ledger contains items or accounts relating to persons, and the exposed portion *b* of the leaves are therefore marked with the surnames of such persons. Thus if the first account under the letter "K" be that of "K. E. Knudson" the name "Knudson" may be written upon the portion *b* of the first sheet of the set. If the next account be that of

"W. E. Kemp" the name "Kemp" may be written on the exposed portion of the second sheet; this order, or any other order which may be desired, being thereafter continued.

It may happen, and it commonly does happen, that there will be a number of entirely distinct accounts which will be identified upon one of the main sets by the same designating character. When this occurs I make use of a supplementary set of leaves which is placed between the leaf having the designating character common to a plurality of accounts and the leaf immediately preceding it. In the ledger shown there are a number of accounts under the name "Kelly." Therefore, between the leaf containing the name "Kelly" and the leaf immediately preceding, (which in the example shown bears the name Krupp) I insert a supplementary set of leaves indicated by the reference character C. The leaves of the supplementary set C are cut away at their edges in the same manner as the leaves of the main set in order that a portion *c* of each of the leaves of the supplementary set will be exposed at the same edge of the ledger as the leaves of the other sets. In order that the exposed portions of the two sets of leaves may not interfere with each other, the shortest section which is removed from any one of the leaves of the supplementary set should be at least as long as the section which is removed from the edge of the main leaf immediately preceding. In fact, the shortest section which is removed from any of the supplementary leaves should preferably be longer than the section which is removed from the preceding main leaf, as this will permit the thumb or finger to be inserted beneath the exposed portion of one of the main leaves so that the ledger may be quickly and conveniently opened so as to expose all of the indices on the supplementary leaves. Furthermore, in order to reduce the number of differently shaped leaves to a minimum, the leaves of the supplementary set are preferably formed exactly the same as the preceding portion of the main set of leaves beginning with the leaf immediately preceding the main leaf which is followed by the supplementary set. Thus in the example shown, the leaves of the set C have their edges cut away in exactly the same manner as that portion of the main set beginning with the leaf bearing the name "Knudson" and ending with the leaf bearing the name "King"

Each of the exposed portions *c* of the supplementary leaves is intended to bear a designating character which is subsidiary to the designating character on the exposed portion of the main leaf immediately succeeding. Thus the sections *c* may be marked with the given names of different "Kellys" or with firm or company names including the name "Kelly." In the arrangement shown the first "Kelly" who has been entered in the ledger is the "Kelly Brewing Company" and therefore the words "Brewing Co." are written upon the same leaf as the word "Kelly," but at such a point that normally the leaf bearing the name "Krupp" covers the words "Brewing Co." The main leaf bearing the name "Kelly" therefore contains the account of the Kelly Brewing Company.

The second Kelly account to be entered in the ledger was that of "John B. Kelly," and therefore the lowest exposed portion *c* in the series is marked "John B." The first supplemental leaf preceding the main leaf bearing the name "Kelly" therefore contains the account of John B. Kelly. In the same way the succeeding leaves of the supplementary set may contain the accounts of Kelly & Agnew, Mike Kelly, Henry C. Kelly, Patrick N. Kelly, etc.

It may be that still further refinement of indexing is necessary; in which case a second set of supplementary leaves may be placed between one or more pairs of the leaves of the first supplementary set, these second supplementary sets bearing the same relation to the first supplementary sets that the first supplementary sets bear to the main sets. There may be a number of different Mike Kellys, who have accounts, in which case there will be placed between the leaf bearing the name "Mike" and the leaf bearing the name "Henry C." a set of supplementary leaves designated by the letter D. The leaves of this last set have sections removed from their edges just as in the case of the other leaves so that a series of exposed portions *d* are presented at the edge of the ledger when the ledger is opened at the page following that which bears the designation "Henry C." The leaves of the second supplementary set are arranged so that the shortest section which is removed from any leaf is at least as long as, and probably longer than, the section which is removed from the edge of the leaf which bears the designation "Henry C." In order to make the leaves of the second supplementary set interchangeable with the leaves of the other sets they are preferably formed so as to correspond exactly to that portion of the series of the supplementary set down to the leaf which on the drawing bears the designation "Patrick N.," of the first supplementary set, and the series of the main set down to that leaf of the main set which on the drawing bears the name "Kamp."

The first account which has been opened by a Mike Kelly is that of the Kelly who lives in 121 State St. The legend "121 State St." is therefore placed upon the leaf of the first supplementary set which bears the name "Mike," preferably at such a point that the legend "121 State St." is covered by the leaf of the first supplementary set which

bears the name "Henry C." The second "Mike Kelly" to have an account is one living in 6240 Normal Ave. The legend "6240 Normal Ave.," is therefore placed on the exposed portion of the first leaf of the supplementary set immediately preceding the leaf bearing the name "Mike." In the same way other leaves of the second supplementary set may be made to contain the accounts of other Mike Kellys who live in 2310 Halsted St., 951 63d St., etc. This same sub-division of the index may be carried out to any desired extent by simply inserting supplementary sets wherever necessary; and this may be accomplished without it being necessary to keep in stock any considerable variety of leaves, since the leaves of each set are entirely interchangeable with the leaves of every other set.

Assuming that it is desired to find the account of Mike Kelly living at 951 63d St.; it is only necessary to open the ledger at the point following the transfer record sheet bearing the "K" tab exposing to view the sur-name "Kelly" in the column of names carried by the main set of leaves. The thumb may then be inserted beneath the lower outer corner of the indexed portion of the leaf bearing the name "Krupp," thereby exposing all of the given names or firm names of the Kellys appearing in the first supplementary set. The thumb or finger may then be shifted underneath the lower outer corner of the indexed portion of that leaf of the supplementary set bearing the name "Henry C." thereby exposing to view all of the indices of the second supplementary set relating to the different Mike Kellys. The index of the particular person who is sought is now in plain view and it is only necessary to open the book at the page which is marked "951—63d St."

Fig. 6 shows on the exaggerated scale all of the sheets or leaves exposed portions of which appear in Figs. 3, 4, and 5, said sheets or leaves being shown opened so as to form progressively increasing angles with the back of the ledger.

Specifically considered my invention may be said to comprise a plurality of main or primary sets of leaves, the leaves of each set having progressively increasing sections removed from corresponding edges so as to expose a portion of each leaf at one edge of the ledger; a transfer record leaf arranged between each two consecutive sets and having a suitable tab which projects from the aforesaid edge of the ledger and bears a designating character or characters for one of the sets of leaves; supplementary or secondary sets of leaves arranged between as many pairs of consecutive leaves in the main or primary sets as may be desired, and each set of supplementary leaves being exactly similar in size and shape to a portion of that series of leaves of the main set beginning with the leaf of the main set lying above the adjacent leaf of the main set having the longer section removed from its edge; further supplementary sets arranged between as many pairs of consecutive leaves of the first supplementary set as may be desired and bearing to the leaves of the first supplementary set the same relation that the leaves of the first supplementary set bear to the leaves of the main sets; this interposition of sub-supplementary sets being carried as far as may be necessary to give the desired degree of sensitiveness to the index. The exposed portions of the leaves of the main sets are intended to be marked with primary designating characters, as for example, the sur-names of persons. The exposed portions of the first sets of supplementary leaves are intended to be each marked with a designating character which is subsidiary to the designating character on the following leaf belonging to one of the main sets, as for example each of the leaves of the first supplementary sets may bear the given name of a person. Similarly the exposed portions of each leaf of the third sets is intended to bear a designating character which is subsidiary to the designating character of the following leaf belonging to one of the second sets; as for example the names of towns or street numbers. It will be seen that by varying the extent to which the introduction of supplementary sets is carried any desired number of items may be indexed in such a manner that any item may be found by a simple manipulation of the leaves of a ledger until the desired designating character is exposed to view and without requiring a tedious examination of a large number of indices.

It will be seen that the extent to which perfect self-indexing may be carried is not limited by the number of accounts but only by the size of book beyond which it is impracticable to go. Furthermore a book arranged in accordance with the present invention is thoroughly elastic so that leaves or sets of leaves need only be inserted when and where needed, it being therefore unnecessary to fill the book with a large amount of dead leaves on the assumption that such leaves may possibly be required in the future.

Whenever a leaf becomes filled or an account covered by a leaf is closed, such leaf may be extracted from the book and placed in a suitable transfer file, a record being made on the proper transfer record sheet. In this way a record may be kept not only of the live accounts, but also of those which have been closed or transferred.

The leaves of each main set, and if desired of the supplemental sets, also are preferably of two different colors, leaves of one color alternating with those of another color. In this way an omission of a leaf will be quickly

detected, since there will appear in the index a broad band of one color where there should be three narrow bands, two of one color and one of the other color.

Having now fully described my invention, what I claim as new and desire to secure by Letters Patent is:

1. In a self-indexing ledger, a set of leaves which have progressively-increasing sections removed from corresponding edges so as to expose a portion of each leaf at one edge of the set, and a second set of leaves interposed between two of the leaves of the first set, the leaves of the second set also having progressively-increasing sections removed from corresponding edges so that a portion of each leaf of the second set is exposed at the edge at which the sheets of the first set are exposed, the shortest section which is removed from the leaves of the second set being longer than the shorter of the two sections removed from the two adjacent leaves of the first set and the sections which are cut away from the remaining leaves of the second set being longer than the longer of the two sections removed from the two adjacent leaves of the first set.

2. In a self-indexing ledger, a set of leaves which have progressively-increasing sections removed from corresponding edges so as to expose a portion of each leaf at one edge of the set, and a second set of leaves interposed between two of the leaves of the first set, the leaves of the second set also having progressively-increasing sections removed from corresponding edges so that a portion of each leaf of the second set is exposed at the edge at which the sheets of the first set are exposed, the shortest section which is removed from the leaves of the second set being longer than the shorter and at least as long as the longer of the sections removed from the two adjacent leaves of the first set.

3. In a self-indexing ledger, a set of leaves which have progressively-increasing sections removed from corresponding edges so as to expose a portion of each leaf at one edge of the set, and a second set of leaves interposed between two of the leaves of the first set, the leaves of the second set also having progressively-increasing sections removed from corresponding edges so that a portion of each leaf of the second set is exposed at the edge at which the sheets of the first set are exposed, the shortest section which is removed from the leaves of the second set being longer than either of the sections removed from the two adjacent leaves of the first set.

4. In a self-indexing ledger, a set of leaves which have progressively-increasing sections removed from corresponding edges so as to expose a portion of each leaf at one edge of the set, a second set of leaves interposed between two of the leaves of the first set, the leaves of the second set also having progressively-increasing sections removed from corresponding edges so that a portion of each leaf of the second set is exposed at the edge at which the sheets of the first set are exposed, the shortest section which is removed from the leaves of the second set being longer than the shorter of the two sections removed from the two adjacent leaves of the first set, and a third set of leaves interposed between two leaves of the second set, the leaves of the third set also having progressively-increasing sections removed from corresponding edges so that a portion of each leaf of the third set is exposed at the same edge as the leaves of the other sets, the shortest section which is removed from the leaves of the third set being longer than the shorter of the sections removed from the two adjacent leaves of the second set.

5. In a self-indexing ledger, a set of leaves which have progressively-increasing sections removed from corresponding edges so as to expose a portion of each leaf at one edge of the set, a second set of leaves interposed between two of the leaves of the first set, the leaves of the second set also having progressively-increasing sections removed from corresponding edges so that a portion of each leaf of the second set is exposed at the edge at which the sheets of the first set are exposed, the shortest section which is removed from the leaves of the second set being longer than the shorter and at least as long as the longer of the sections removed from the two adjacent leaves of the first set, and a third set of leaves interposed between two leaves of the second set, the leaves of the third set also having progressively-increasing sections removed from corresponding edges so that a portion of each leaf of the third set is exposed at the same edge as the leaves of the other sets, the shortest section which is removed from the leaves of the third set being longer than the shorter of the sections removed from the two adjacent leaves of the second set.

6. In a self-indexing ledger, a set of leaves which have progressively-increasing sections removed from corresponding edges so as to expose a portion of each leaf at one edge of the set, a second set of leaves interposed between two of the leaves of the first set, the leaves of the second set also having progressively-increasing sections removed from corresponding edges so that a portion of each leaf of the second set is exposed at the edge at which the sheets of the first set are exposed, the shortest section which is removed from the leaves of the second set being longer than either of the sections removed from the two adjacent leaves of the first set, and a third set of leaves interposed between two leaves of the second set, the leaves of the third set also having progressively-increasing

sections removed from corresponding edges so that a portion of each leaf of the third set is exposed at the same edge as the leaves of the other sets, the shortest section which is removed from the leaves of the third set being longer than the shorter of the sections removed from the two adjacent leaves of the second set.

7. In a self-indexing ledger, a set of leaves which have progressively-increasing sections removed from corresponding edges so as to expose a portion of each leaf at one edge of the set, a second set of leaves interposed between two of the leaves of the first set, the leaves of the second set also having progressively-increasing sections removed from corresponding edges so that a portion of each leaf of the second set is exposed at the edge at which the sheets of the first set are exposed, the shortest section which is removed from the leaves of the second set being longer than the shorter and at least as long as the longer of the sections removed from the two adjacent leaves of the first set, and a third set of leaves interposed between two leaves of the second set, the leaves of the third set also having progressively-increasing sections removed from corresponding edges so that a portion of each leaf of the third set is exposed at the same edge as the leaves of the other sets, the shortest section which is removed from the leaves of the third set being longer than the shorter and at least as long as the longer of the sections removed from the two adjacent leaves of the second set.

8. In a self-indexing ledger, a set of leaves which have progressively-increasing sections removed from corresponding edges so as to expose a portion of each leaf at one edge of the leaves of the first set, the leaves of the second set also having progressively-increasing sections removed from corresponding edges so that a portion of each leaf of the second set is exposed at the edge at which the sheets of the first set are exposed, the shortest section which is removed from the leaves of the second set being longer than either of the sections removed from the two adjacent leaves of the first set, and a third set of leaves interposed between two leaves of the second set, the leaves of the third set also having progressively-increasing sections removed from corresponding edges so that a portion of each leaf of the third set is exposed at the same edge as the leaves of the other sets, the shortest section which is removed from the leaves of the third set being longer than either of the sections removed from the two adjacent leaves of the second set.

9. In a self-indexing ledger, a plurality of main sets of leaves, the leaves of each set having progressively-increasing sections removed from corresponding edges thereof so as to expose a portion of each leaf at the corresponding edge of each set, a complete leaf arranged between each two adjacent sets, a designating tab on each of said latter leaves, and a supplementary set of leaves interposed between two of the leaves of the main sets, the leaves of the supplementary set also having progressively-increasing sections removed from corresponding edges so that a portion of each of the leaves of the supplementary set is exposed at the same edge as the leaves of the other sets, the shortest section which is removed from the leaves of the second set being at least as long as the longer of the sections removed from the two adjacent leaves of the main set.

10. In a self-indexing ledger, a plurality of main sets of leaves, the leaves of each set having progressively-increasing sections removed from corresponding edges thereof so as to expose a portion of each leaf at the corresponding edge of each set, a complete leaf arranged between each two adjacent sets, a designating tab on each of said latter leaves, and a supplementary set of leaves interposed between two of the leaves of the main sets, the leaves of the supplementary set also having progressively-increasing sections removed from corresponding edges so that a portion of each of the leaves of the supplementary set is exposed at the same edge as the leaves of the other sets, the shortest section which is removed from the leaves of the second set being longer than either of the sections removed from the two adjacent leaves of the main set.

11. In a self-indexing ledger, a plurality of main sets of leaves, the leaves of each set having progressively-increasing sections removed from corresponding edges thereof so as to expose a portion of each leaf at the corresponding edge of each set, a complete leaf arranged between each two adjacent sets, a designating tab on each of said latter leaves and a supplementary set of leaves interposed between two of the leaves of the main sets, the leaves of the supplementary set also having progressively-increasing sections removed from corresponding edges so that a portion of each of the leaves of the supplementary set is exposed at the same edge as the leaves of the other sets, the shortest section which is removed from the leaves of the second set being longer than either of the sections removed from the two adjacent leaves of the main set, and a second supplementary set of leaves interposed between two leaves of the first supplementary set, the leaves of the second supplementary set also having progressively-increasing sections removed from corresponding edges so that a portion of each leaf of that set is exposed at the same edge as the leaves of the other sets, the shortest section which is removed from the leaves of the second supplementary set being longer than

either of the sections removed from the two adjacent leaves of the first supplementary set.

12. In a self-indexing ledger, a plurality of main sets of leaves, the leaves of each set having progressively-increasing sections removed from corresponding edges thereof so as to expose a portion of each leaf at the corresponding edge of each set, a complete leaf arranged between each two adjacent sets, designating tabs arranged on said latter leaves at the same edge of the ledger as the aforesaid exposed portion of the leaves, and a supplementary set of leaves interposed between two of the leaves of the main sets, the leaves of the supplementary sets also having progressively-increasing sections removed from corresponding edges so that a portion of each of the leaves of the supplementary set is exposed at the same edge as the leaves of the other sets, the shortest section which is removed from the leaves of the second set being at least as long as the longer of the sections removed from the two adjacent leaves of the main set.

13. In a self-indexing ledger, a set of leaves having progressively-increasing sections removed from corresponding edges so that a portion of each leaf is exposed at one edge of the set, and a second set of leaves interposed between two leaves of the first set, said second set of leaves being exactly similar in size and shape to a portion of that series of leaves of the first set lying in front of said second set.

14. In a self-indexing ledger, a set of leaves having progressively-increasing sections removed from corresponding edges so that a portion of each leaf is exposed at one edge of the set, and a second set of leaves interposed between two leaves of the first set, said second set of leaves being exactly similar in size and shape to a portion of that series of leaves of the first set beginning with the leaf of the first set lying above the adjacent leaf of the first set having the longer section removed from its edge.

15. In a self-indexing ledger, a set of leaves which have progressively-increasing sections removed from corresponding edges to as to expose a portion of each leaf at one edge of the set and a second set of leaves interposed between two of the leaves of the first set, the leaves of the second set also having progressively-increasing sections removed from corresponding edges so that a portion of each leaf of the second set is exposed at the edge at which the sheets of the first set are exposed, the shortest section which is removed from the leaves of the second set being at least as long as the longer of the two sections removed from the two adjacent leaves of the first set, each leaf of one set differing in color from the adjacent leaves.

16. In a self-indexing ledger, a set of leaves which have progressively-increasing sections removed from corresponding edges so as to expose a portion of each leaf at one edge of the set, and a second set of leaves interposed between two of the leaves of the first set, the leaves of the second set also having progressively-increasing sections removed from corresponding edges so that a portion of each leaf of the second set is exposed at the edge at which the sheets of the first set are exposed, the shortest section which is removed from the leaves of the second set being at least as long as the longer of the two sections removed from the two adjacent leaves of the first set, the leaves of one set being of two colors which alternate throughout the set.

In testimony whereof, I sign this specification in the presence of two witnesses.

JOHN B. PERRINE.

Witnesses:
WM. F. FRENDENREICH,
HARRY S. GAITHER.