

No. 759,990.

PATENTED MAY 17, 1904.

H. L. HALL.
LEDGER.

APPLICATION FILED DEC. 7, 1903.

NO MODEL.

2 SHEETS—SHEET 1.

[illegible]

Witnesses

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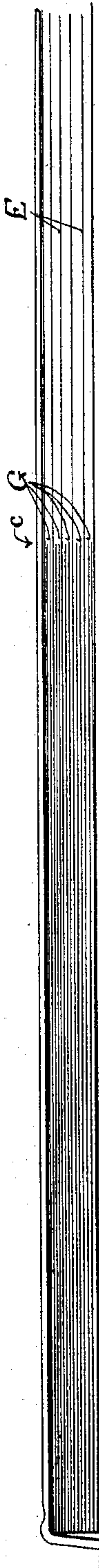
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2 SHEETS—SHEET 2.

Fig. 3



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UNITED STATES PATENT OFFICE.

HORACE L. HALL, OF TOPEKA, KANSAS.

LEDGER.

SPECIFICATION forming part of Letters Patent No. 759,990, dated May 17, 1904.

Application filed December 7, 1903. Serial No. 184,047. (No model.)

To all whom it may concern:

Be it known that I, HORACE L. HALL, a citizen of the United States of America, residing at Topeka, in the county of Shawnee and State
5 of Kansas, have invented new and useful Improvements in Ledgers, of which the following is a specification.

The invention relates to the individual ledgers such as are used in banking and in
10 which are kept the accounts of the individual depositors.

More specifically, it relates to books of this class provided with a name-column, a single changeable "daily-balances" column in which
15 the daily balances are kept and to which reference may be readily made by the teller to ascertain the state of a depositor's account, followed by a series of daily-entry columns in which are recorded the transactions of each
20 day with each depositor. In this class of ledgers the necessity of carrying forward each day the accounts in which there have been no transactions is avoided. The entries are made in the daily-balances column in pencil,
25 and only those accounts are changed each day in which there have been transactions, estimated at about twenty per cent.

It is to be understood that wherever in this specification and the appended claims the term
30 "daily-balances" column is used reference is intended to such a column in which the daily balances are to be entered in pencil and in which such daily balances are to be changed each day in those accounts wherein transactions have taken place, such changeable daily-balances column being the principal feature of the class of ledgers to which this invention relates. As illustrative of this class of books, reference is hereby made to Patent No.
40 704,420, granted July 8, 1902, to Joseph B. Winn for improvements in ledgers, books conforming to the description therein being quite extensively in use at the present time. This reference is made in order that this
45 specification and the appended claims may be more readily and clearly understood. In such ledgers the daily balances are not preserved; but provision is made for the preservation of the monthly balances by so constructing the
50 ledger as to expose daily-entry columns for

one month's business at one opening of the book and providing a "monthly-balance" column at the beginning of each short leaf, so that if it subsequently becomes desirable to learn the depositor's balance on a day other
55 than the last of the month such balance must again be computed. Furthermore, a special form of ruling is required in making up the short leaves. The number and relative arrangement of the long and short leaves must
60 be determined before the book is made up and cannot afterward be altered without destroying the convenience and efficiency of the book. Again, there is only one daily-balances column for the entire three months or other
65 period for which the book is originally adapted, and although it has been demonstrated that one such column may be sufficient, yet from various causes, real and fancied, it has been deemed best to so construct the book
70 that additional daily-balances columns may be used before the end of the three months. In the present state of the art, however, no provision is made for more than the one of
75 such columns for each three months or other period for which the book is originally constructed.

The objects of the invention are generally to improve upon ledgers of this nature both in matter of economy of manufacture and in
80 the convenience of the arrangement of the rulings and columns.

More specifically speaking, the objects are so to arrange the rulings and columns that all the sheets in the book may be ruled from the
85 same form, the corresponding columns in all the pages registering with each other; the shorter leaves being made by simply cutting the extra columns from the longer leaves; to arrange for the preservation of the daily bal-
90 ances of each depositor in convenient form without reverting to the old method of carrying forward the inactive as well as the active accounts; to avoid the necessity of the monthly-balances columns and the consequent special
95 ruling of the shorter pages; also, to arrange the rulings, columns, and leaves so that the accounts may be extended for an indefinite number of pages without rewriting the names of the depositors; to provide for a new daily- 100

balances column at the beginning of each or some of the shorter leaves, and to provide such a book which after having been manufactured may be readily altered to suit the various needs of the trade as respects the arrangement of the longer and shorter leaves by simply cutting the longer leaves.

The invention consists of the novel combination, arrangement, and disposition of the leaves, rulings, columns, and parts, the preferred form of which is illustrated and described herein and in the accompanying drawings, forming part of this specification, and as specifically claimed hereinafter.

Figure 1 represents the ledger-sheet arranged, ruled, and divided into columns and spaces in accordance with the invention, the ledger being open to expose to view opposite pages, central longitudinal and vertical sections being broken away. Fig. 2 is a partial end elevation of the book, showing the relative arrangements of the longer and shorter leaves. Figs. 3 and 4 represent a modified form of ledger constructed in accordance with the invention, the intermediate leaves being eliminated, Fig. 3 being a view showing such a book lying open with vertical sections broken away from each side, and Fig. 4 being a partial end elevation showing the relative lengths and arrangements of the long and short leaves. Fig. 5 represents a further modification, the shortest leaves being eliminated, this figure being a partial end elevation showing the relative lengths and arrangements of the leaves.

Like letters refer to like or corresponding parts, columns, &c., throughout the views.

The book may be constructed in the ordinary manner of ledgers, the arrangement of the rulings and columns on both sides of the sheets being illustrated in Fig. 1, the fold being at *xx*. The reverse side of the right-hand sheet corresponds to the exposed side of the left-hand sheet, and the reverse side of the left-hand sheet corresponds to the exposed side of the right-hand sheet. At the left is the name-column A, in which are to be entered the names of the depositors. Next to the right is the "transfer-balances" column B, to which the balances from the old ledger are to be transferred. Next follows the single daily-balances column C, preferably divided into debit and credit columns, as shown, in which are to be entered the daily balances computed as hereinafter explained. Next follow the series of single daily-entry columns D D, in which are to be entered not only the daily transactions of the depositors—*i. e.*, the amounts of deposits and checks—but also the daily balances. The sheets are ruled transversely in the usual manner, except that the daily-entry-column spaces instead of providing only for the debits and credits also provide for the daily balances, and this provision is made by dividing the space for each day for each depositor longitudinally into

three spaces, the middle space being preferably tinted, (as light yellow,) as indicated in the drawings. The upper space *d* is for the amount of deposits. The lower space *s* is for the amount of checks, and the middle tinted space *y* is for the balance. The top of each daily-entry column is reserved for the date, to be inserted as the book is used, and between the date-space and the first longitudinal column for the first depositor are printed appropriate designations for the three divisions into which each such longitudinal column is divided. Thus the terms "deposits," "balances," and "checks," grouped together in the order named, as shown in the drawings, indicate that the upper division *d* of the space opposite each depositor's name is for the amount of deposits made during the day, that the middle division *y* (shown as tinted in Fig. 1) is for the balance to be entered at the close of business and to be computed as hereinafter explained, and that the lowest division *s* is for the amount of the checks paid during the day. In the form shown it is contemplated that only the total amount of the checks shall be entered, although each check may be entered by enlarging the space without departing from the spirit of the invention. At suitable intervals are the numeral-columns *o o* to indicate the several depositors' accounts, respectively.

In ruling the sheets, as indicated in the drawings, provision is made for the accounts of thirty depositors, and each page has seven daily-entry columns, (omitting Sundays,) so that the accounts of thirty depositors for fourteen days or two weeks are exposed at one opening of the book. It is usually desirable, however, to carry the accounts for at least three months without transferring them or rewriting the names. This desire has heretofore been partially satisfied by providing shorter leaves having at the right a monthly-balance column whose left-hand line is in register with the right-hand line of the daily-balances column and to which the daily balances for the last day of the month are copied and preserved in ink, followed by the series of daily-entry columns similar to the daily-entry columns on the long leaves. In the present invention as the daily balances of the several depositors are preserved the monthly-balance column is unnecessary. The short leaves are made by simply cutting the long leaves, as indicated at *c c*, so that the left-hand line of the first daily-entry column on the short leaf is in register with the right-hand line of the daily-balances column on the long leaf, yet the names, the transfer balances, and the daily balances in the daily-balances column on the long leaf remain exposed when the short leaf is laid over on it. If the long leaf is followed by five short leaves, (that number is necessary to carry the accounts for three months,) the sheets being printed so as to expose fourteen daily-entry

columns at one opening of the book, the accounts of the thirty depositors for three months may be kept with only one entry of the names and with only one daily-balances column.

Although it has been found in practice that the one daily-balances column will stand the erasures during the entire three months with a proper quality of paper, pencil, and eraser, as well as with a proper degree of care and skill on the part of the bookkeeper, yet it has also been found that to meet the various demands of the trade one or more additional daily-balances columns are desirable. To provide a new such column, the third of the shorter pages may be cut at *a a*, as illustrated in Fig. 1 and in the lower portion of Fig. 2, instead of at *c c*, so as to include the daily-balances column. The transfer from the daily-balances column on the long page to the same column on the intermediate page may be effected by pressing the intermediate page to the right, so that the two daily-balances columns adjoin, and copying the balances in the new column in pencil. The daily-balances column on the long leaf would be used for the first half of the three months, and the similar column on the intermediate leaf would be used for the last half; but it will be noted that in both cases the relative arrangements of the several columns are the same.

To explain the use of the invention, the names of the depositors are entered in ink in the name column, the balances are transferred from the old book to the transfer-balances column, the debits being entered in red ink and the credits in black ink. At the close of the first day's business the amount of the deposits of each depositor is entered in the proper space in the first daily-entry column in black ink and the amount of checks in the proper space in red ink. The balance of each depositor having transactions that day is then computed in the ordinary manner by crediting his account with the amount of deposits and deducting the amount of checks. This balance—the individual daily balance—is then entered in the tinted space of the first daily-entry column in black or red ink, according to whether it is a credit or a debit, and also in the daily-balances column, in pencil, on the proper side. In those accounts in which there have been no transactions during the first day the balances are transferred, if a footing is desired, from the transfer-balances column to the daily-balances column. The totals may then be computed and entered in pencil at the bottom of the daily-balances column and thence entered in ink, if it is desired to preserve them, at the foot of the first daily-entry column. At the end of the second day's business the amount of deposits, checks, and balances are again computed and entered in the second daily-entry column in ink, as before, and in the accounts in which there have

been transactions during the second day the penciled balances in the daily-balances column are erased and the new balances entered again in pencil. The old footings are also erased and the new footings entered in pencil and thence transferred, if desired, to the foot of said second daily-entry column. In like manner the account is computed, erased, and entered on each of the succeeding days. When the spaces on the long sheet and the following short page are filled, the short leaf is turned over, its first daily-entry column being thus brought next the daily-balances column on the long leaf, and the accounts may be continued as before, and so, also, with the second short leaf. The third of the shorter leaves, however, being what is herein termed an "intermediate" leaf, the transfer is made at the end of the third opening of the daily balances to the new daily-balances column on said intermediate leaf in the manner hereinbefore explained, and thence forward on the fourth, fifth, and sixth openings the daily balances are erased and entered in pencil in this new column. At the end of the three months the accounts may be transferred to a new book or to a new place in the same book, although it would be possible if the next long leaf were not already in use to continue the accounts without rewriting the names by simply cutting the next long leaf at *a a* or at *c c*, as the bookkeeper may desire.

The foregoing explanation gives the preferred method of using the invention; but each user may make such variations in the use as may suit his own convenience, fancy, or requirement. Thus in some cases it would be desirable to enter the amounts of deposits in the daily-entry columns in green ink instead of in black, or other colors of ink may be used to as good advantage, the colors named, however, being now almost universally in use.

The teller or any one else may readily ascertain the state of any depositor's account by referring to the daily-balances column opposite the depositor's name either on the long or on the intermediate sheet, according to which is presently used. The daily balance of any depositor on any past day may be ascertained by referring to the tinted space of the daily-entry column for that day opposite his name, or if there were no transactions that day then by looking to the left to the last record. In like manner the monthly, bi-weekly, weekly, or other periodic balance may be learned by referring to the daily balance on the last day of such month, two weeks, week, or other period, as the case may be, and the totals may be found by referring to the totals as recorded at the foot of the proper daily-entry column. In this way a complete and compact record is preserved in the individual ledger in such form that any item may be readily and accurately ascertained.

It is contemplated that the foregoing arrangement of the rulings, columns, and leaves

may be varied without departing from the spirit of the claims to meet all conditions and requirements and that I do not intend to limit myself to the particular arrangements herein-
 5 before described and illustrated. Thus a book may be constructed in accordance with the invention which will accommodate a greater or less number of accounts than thirty on each sheet, and the book may be increased or
 10 diminished in length accordingly, or the daily-entry columns may be further subdivided to accommodate additional data, or the sheets may be ruled for more or less than seven daily-entry columns to a page and the width of the
 15 book increased or diminished accordingly. Another convenient arrangement is to have fourteen daily-entry columns on each page, so as to expose twenty-eight such columns (enough to contain a month's business) at one
 20 opening of the book. Again, the short leaves or the intermediate leaves, or both, may be omitted, as where it is desired to carry the accounts only for one month in a book having twenty-eight daily-entry columns exposed at
 25 one opening, or if it is desired to carry such accounts in such a book for two months and have a new daily-balances column for the latter month then the book would be arranged with alternating long and intermediate leaves, or if it be-
 30 came unnecessary to have such a new daily-balances column for the second month then the short leaf would be substituted for the intermediate leaf by simply cutting the extra daily-balances column from the intermediate leaf,
 35 and this could be done either during the manufacture of the book or afterward by the bookkeeper himself. Furthermore, the book with the new rulings and arrangement of columns may be manufactured and placed in
 40 stock with only the long leaves, and the leaves could thereafter be cut to suit each particular user, or he could cut it to meet his own requirements as he used the book. Again re-
 45 verting to the main illustration, suppose intermediate leaves are substituted for the five short leaves. Now in such a book if the bookkeeper found at the close of any two weeks' business that his daily-balances column would satisfactorily stand the erasures of
 50 another such period he could simply cut the daily-balances column from the next intermediate leaf, thus avoiding the necessity of transferring such daily balances, and in following this plan he would need to make such a trans-
 55 fer to a new daily-balances column only when his presently-used column had become worn out.

To further illustrate the modifications suggested in the foregoing paragraph, reference
 60 is hereby made to Figs. 3, 4, and 5. In Figs. 3 and 4 is illustrated a ledger having the long and short leaves, the intermediate leaves being eliminated. Each leaf is ruled for fourteen of the single daily-entry columns for ten
 65 depositors, whereby as the book lies opened

the accounts of the ten depositors for twenty-eight days (enough to carry a month's business) are exposed to view. The leaves are arranged in the following order, as shown in Fig 4: first a long leaf and then two short
 70 leaves, then a long leaf and then two short leaves, &c. At the first opening to commence the use of the book the long leaf is shown as extending from the extreme left in Fig. 3 to the fold xx , while the first of the short
 75 leaves is shown as extending from the said fold to the line cc , which is its extreme right edge. Now when the first month's business has been completed the first of the short leaves is turned over on the long leaf to the left of the
 80 fold, in which position we see its opposite side, so that it would be represented as extending from the fold xx to the line $c'c'$, and it will also be noted that its rulings, column designations, and columns are exactly the same as
 85 those on the long leaf from the line $c'c'$, or, in other words, that all the columns, rulings, and designations on the short-leaf register with the columns, rulings, and designations on the long leaf which it—the short leaf—
 90 covers, or, again, it is noted that exactly the same arrangement of the columns, rulings, and designations is presented wherever the book may be opened, whether the exposed short leaf is to the left or right of the fold.
 95 Now when the second month's business has been completed the second of the short leaves will be turned to the left of the fold in like manner as the first was turned, and then in Fig. 3 we would have exposed to view a long
 100 leaf from the extreme left to the line $c'c'$, the second short leaf from the line $c'c'$ to the fold xx , and the second long leaf from the said fold to the extreme right. In this manner it has
 105 been necessary to enter the names but once for the entire three months' business, and the daily balances have been entered, erased, and computed for the same period in the single changeable daily-balances column C, and, further-
 110 more, it is to be noted that whenever a short leaf has been turned from right to left to commence a new month's business the first single daily-entry column has been brought into exact register with the first column of
 115 like designation on the long leaf and into immediate adjoining with the said daily-balances column, so that no column intervenes between said daily-balances column and the first of the said daily-entry columns, in which
 120 respect the present invention differs from all prior ledgers, the necessity of such intervening columns being removed by the arrangements herein shown and described. Referring to Fig. 5, the arrangement herein shown is
 125 exactly the same as that illustrated in Figs. 3 and 4 except that instead of having the two shortest leaves between the long leaves we have two of the so-called "intermediate" leaves—*i. e.*, leaves having the daily-balances
 130 column. In this form at the first opening the

intermediate leaf (which may now be called the "shorter" leaf) extends from the fold xx to the line $a' a'$, Fig. 3, and when turned over to the left of the fold such leaf extends from said fold to the line $a'' a''$. The purpose of this leaf and its advantage over the shortest leaf is to provide a new daily-balances column for each month's business, or, if it shall be found at the end of the first or second month that the daily-balances column which is then being used will stand the erasures during the next month then the leaf which is then turned from right to left may be cut along the line $c' c'$, thus cutting off the daily-balances columns from said leaf and transforming said leaf into a short leaf, so that the accounts may be continued for the next month and the balances entered, erased, and computed in the same daily-balances column without transferring same to the new daily-balances column. It is to be noted also that the rulings, columns, and designations on the intermediate leaf are exactly like the rulings, columns, and designations on the long leaf from the line $a'' a''$ to the fold. In other words, the columns, rulings, and designations on the intermediate leaves are in exact register with like columns, rulings, and designations on the long leaf, so that the same arrangements of rulings, columns, and designations is presented wherever the book may be opened, and this is true whether only long leaves be used or whether long and short leaves be used or whether all three lengths of leaves be used.

The remarks contained in the foregoing paragraphs are intended principally to elucidate the various uses to which a ledger constructed in accordance with the invention may be applied. Indeed, the adaptability of the book to be altered after it has once been manufactured to suit the actual and fancied requirements of the trade constitutes an important feature of the invention and clearly enables us to differentiate between the present state of the art and the appended claims.

The book may also be applied to other uses than banking and the columns may be given other substantially similar designations without departing from the spirit of the invention.

What I claim is—

1. The ledger or the like comprising long leaves suitably ruled and divided into columns in the following order commencing at the left, first, an appropriately-designated name-column, next an appropriately-designated "transfer-balances" column, next an appropriately-designated "daily-balances" column, and next a series of appropriately-designated single daily-entry columns; short leaves suitably ruled and divided into a series of appropriately-designated single daily-entry columns; and intermediate leaves suitably ruled and divided into columns in the following order com-

mencing at the left, first, an appropriately-designated "daily-balances" column, and next a series of appropriately-designated single "daily-entry" columns; the leaves being of such relative lengths that when a short leaf is turned over on a long or intermediate leaf the first daily-entry column on the short leaf will adjoin the "daily-balances" column on the long or intermediate leaf, and when an intermediate leaf is laid over on a long leaf the two "daily-balances" columns will register with each other; the spaces for each depositor in the daily-entry columns being divided into appropriately-designated "deposits," "checks," and tinted "balances" spaces; all substantially as set forth.

2. A ledger or the like comprising long and shorter leaves suitably ruled and divided into columns; the long leaves having suitably-designated name-columns, suitably-designated "daily-balances" columns, and the series of suitably-designated daily-entry columns; the shorter leaves having suitably-designated "daily-balances" columns, and the series of suitably-designated daily-entry columns; the spaces for each depositor in the daily-entry columns being divided into suitably-designated upper "deposits," lower "checks," and middle tinted "balances" spaces, the tinted spaces for each account being in alinement; substantially as set forth.

3. A ledger or the like comprising long and shorter leaves suitably ruled and divided into columns; each of the long leaves containing in order first an appropriately-designated name-column, an appropriately-designated "daily-balances" column following the name-column, and next a series of appropriately-designated daily-entry columns; and each of the shorter leaves containing in order first, an appropriately-designated "daily-balances" column and next a series of appropriately-designated daily-entry columns, and being of such length that when a shorter leaf is laid over on a long leaf the name-columns on the long leaf and the "daily-balances" column on the shorter leaf will be exposed to view; substantially as set forth.

4. A ledger or the like comprising long, intermediate, and short leaves suitably divided into columns and ruled; each of the long leaves containing in order first an appropriately-designated name-column, an appropriately-designated "daily-balances" column following the name-column, and next a series of appropriately-designated daily-entry columns; each of the intermediate leaves containing in order first an appropriately-designated "daily-balances" column, and next a series of appropriately-designated daily-entry columns; and the short leaves each commencing with and containing a series of appropriately-designated daily-entry columns; the name-columns on the long leaves, the "daily-balances" columns on the

long and intermediate leaves, and the first of the series of daily-entry columns on all the leaves, registering with each other, respectively; so that at any opening of the book, the name-column on a long leaf, a "daily-balances" column on the long or intermediate leaf, and the series of daily-entry columns on a long, intermediate, or short leaf will be exposed to view; substantially as and for the purposes set forth.

5. A ledger or the like comprising long and short leaves suitably ruled and divided into columns, the long leaves each having in order, commencing at the left, first an appropriately-designated name-column, an appropriately-designated "daily-balances" column following the name-column, and next a series of appropriately-designated daily-entry columns; and the short leaves each having and commencing with the series of appropriately-designated daily-entry columns, and being of such length that when a short leaf is turned over on a long leaf the first daily-entry column on the short leaf will immediately adjoin the "daily-balances" column on the long leaf; the daily-entry spaces for each account being divided longitudinally into appropriately-designated "deposits," "balances," and "checks" spaces, one of said divisions for each account being tinted, and all such divisions for each account being each in alignment; substantially as and for the purposes set forth.

ment; substantially as and for the purposes set forth.

6. A ledger or the like comprising long and short leaves suitably ruled and divided into columns, the long leaves each having in order, commencing at the left, first an appropriately-designated name-column, an appropriately-designated "daily-balances" column following the name-column, and next a series of appropriately-designated daily-entry columns; and the short leaves each having and commencing with the series of appropriately-designated daily-entry columns, and being of such length that when a short leaf is turned over on a long leaf the first daily-entry column on the short leaf will immediately adjoin the "daily-balances" column on the long leaf; the daily-entry spaces for each account being divided longitudinally into appropriately-designated "deposits," "balances," and "checks" spaces, and all such divisions for each account being each in alignment; substantially as and for the purposes set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HORACE L. HALL.

Witnesses:

GUY A. MORSE,
J. P. LACEY.