

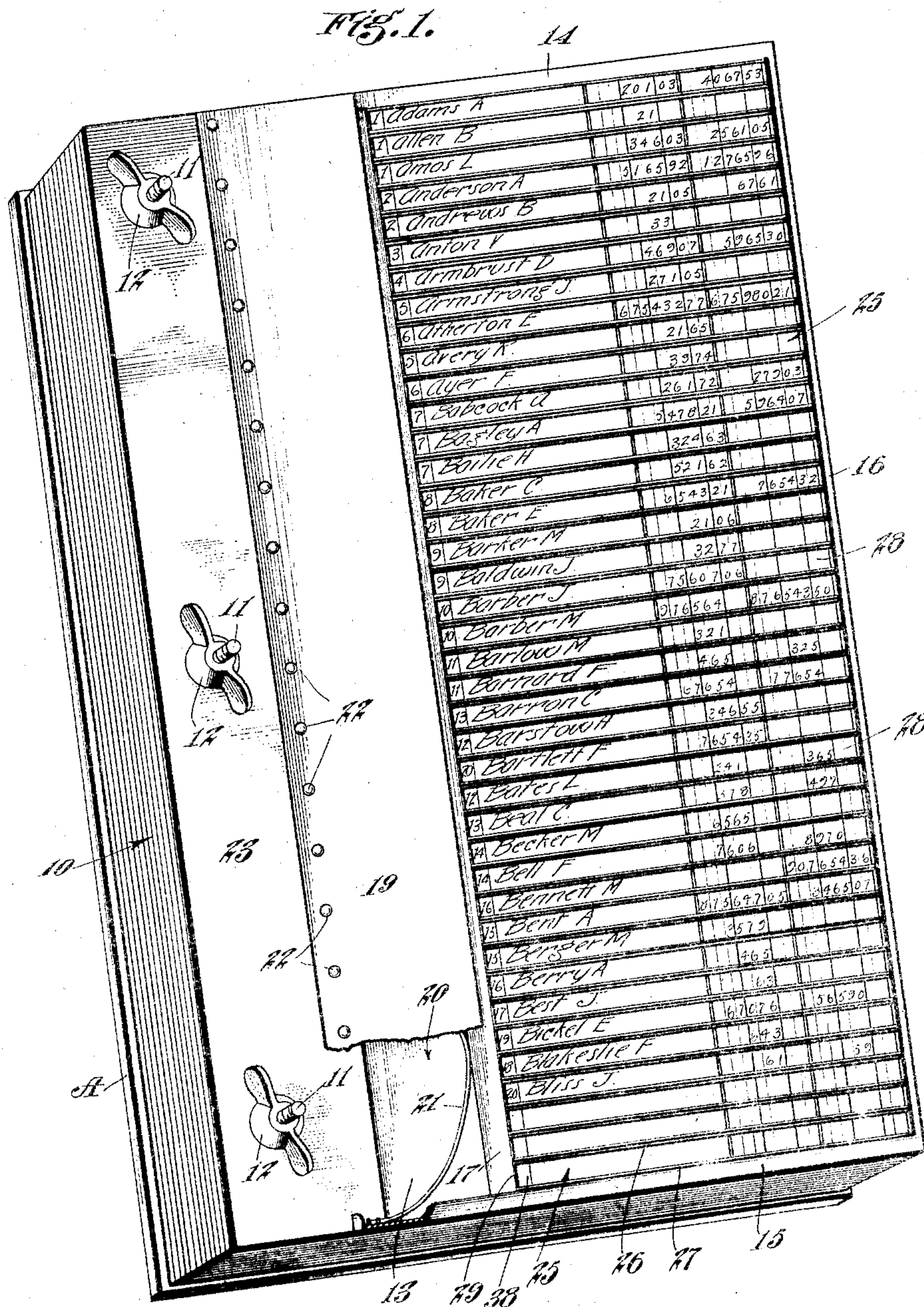
No. 864,718.

PATENTED AUG. 27, 1907.

R. L. ANGELL.  
INDEX AND BALANCE INDICATOR.

APPLICATION FILED APR. 2, 1907.

2 SHEETS—SHEET 1.



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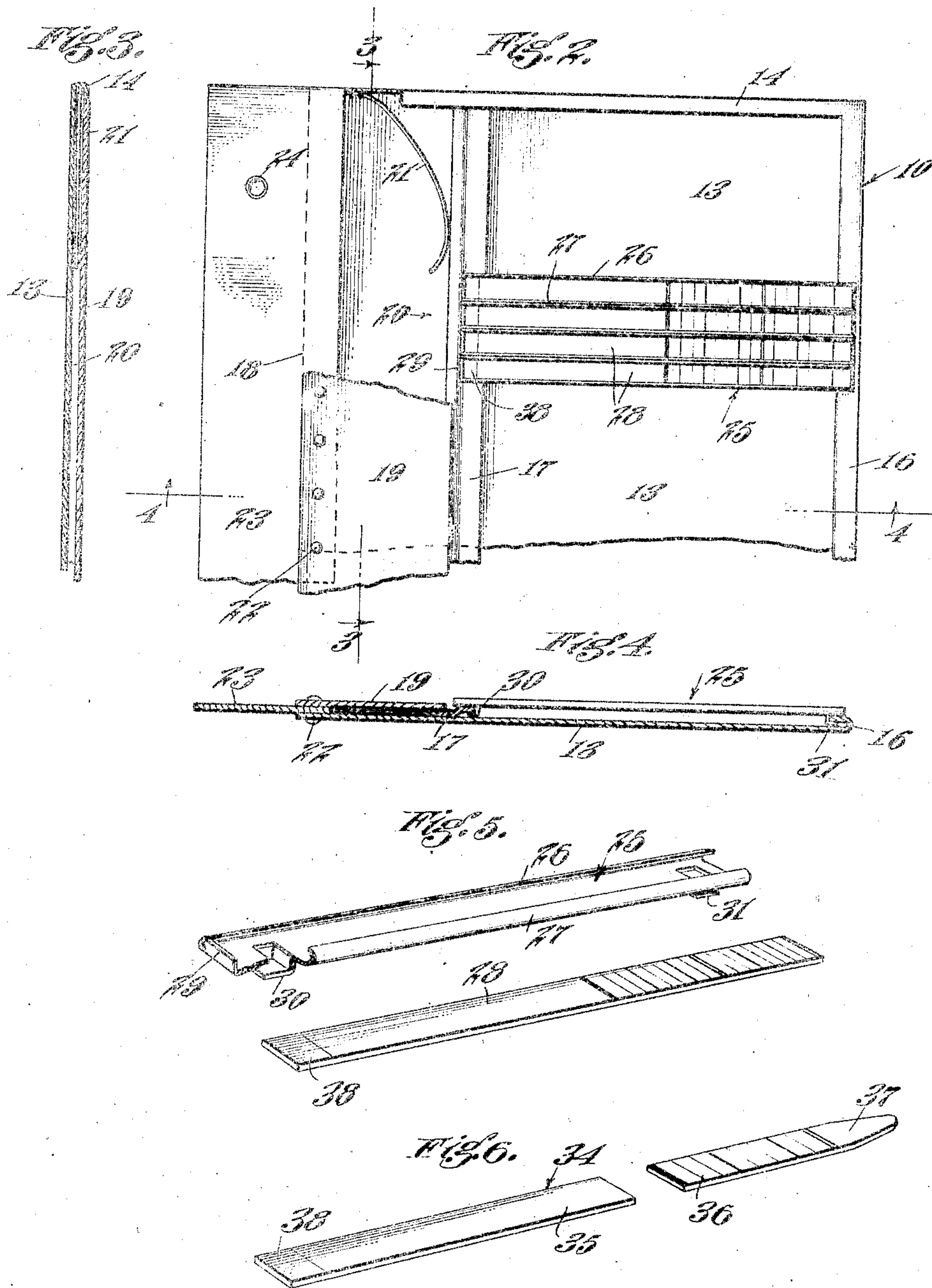
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# UNITED STATES PATENT OFFICE.

ROMAINE LEE ANGELL, OF SAN PEDRO, CALIFORNIA.

## INDEX AND BALANCE INDICATOR.

No. 864,718.

Specification of Letters Patent.

Patented Aug. 27, 1907.

Application filed April 2, 1907. Serial No. 366,001.

*To all whom it may concern:*

Be it known that I, ROMAINE LEE ANGELL, a citizen of the United States, residing at San Pedro, in the county of Los Angeles and State of California, have invented new and useful Improvements in Index and Balance Indicators, of which the following is a specification.

My invention relates to that class of books commonly known as "loose leaf", in which the leaves are detachably secured together, and the prime object of my invention is to provide means, whereby the several holders containing the names and balances of the various accounts may be instantly adjusted to their desired positions on the several pages, or removed therefrom without disarranging the relative position of the remaining holders.

A further and special object is to provide an indicator that is more particularly designed to be used in banks in which the balances of the accounts at the end of a day's business may be compared with the balances of the preceding day, by means of which the postings and calculations may be proved.

A further object is to provide an indicator that permits of an alphabetical or other desired arrangement of the various accounts.

I accomplish these objects by means of the device described herein and illustrated in the accompanying drawings, in which:—

Figure 1— is a perspective view of my complete index and balance indicator. Fig. 2— is a partial side elevation of one of the leaves with parts broken away to show its interior construction. Fig. 3— is a longitudinal section through one of the leaves taken on line 3—3 of Fig. 2 looking in the direction indicated by the arrows. Fig. 4— is a cross section taken on the line 4—4 of Fig. 2 looking in the direction indicated by the arrows. Fig. 5— is a perspective view of one of the adjustable card holders, showing one of the cards in perspective detached therefrom. Fig. 6— is a perspective view of a modified form of card.

Referring to the drawings 10 designates the several loose leaves which form the indicator detachably secured together in any suitable manner, preferably by means of threaded studs 11 secured to the back leaf A, and wing thumb nuts 12. As the construction of the several leaves are identical, I will for convenience and brevity describe only one.

The body 13 of the leaf is formed of a sheet of light rigid material, preferably aluminium as that material combines the requisite strength and lightness. The upper, lower and outer edges 14, 15 and 16 respectively of the body 13 are turned over the face of the sheet, the upper and lower edges 14 and 15 of the sheet forming guide ways for a longitudinally disposed holder retaining bar 17, the functions of which will be more particularly described herein after.

Near the inner edge 18 of the body 13 of the indicator leaf is a plate 19, preferably formed of aluminium which is rigidly secured to the edges 14 and 15 of the body 13. This plate forms a pocket 20 for the reception of holder retaining bar springs 21, the inner ends of springs 21 being rigidly secured to the under face of edges 14 and 15 of the body 13. These springs are here shown as being formed of a resilient wire, but may be of other forms such as flat or coiled springs. Holder retaining bar 17 is preferably offset on its outer edge, so as to provide room for engagement of the tongues of the card holders, a more extended description of which will be given later on.

Interposed between body 13 of the leaf and plate 19, and rigidly secured thereto by means of rivets 22 or other securing means, is a strip of flexible material 23, preferably leather provided with apertures 24 which are designed to register with studs 11 rigidly secured to back leaf A. The back leaf A is preferably greater than the other leaves, the purpose being to furnish a securing plate for the studs 11. This back leaf is preferably formed of cardboard or other similar material, so as to form a rigid back and prevent noise when handling the indicator.

The adjustable card holders 25 are formed of a single sheet of metal, the top and bottom edges 26 and 27 being turned over, so as to form guide ways for the adjustable indicator cards 28, the inner edge 29 being turned upwardly, so as to form a stop to limit the further inward movement of the card. In the inner and outer ends of the body of the holder are formed downwardly projecting tongues 30 and 31, tongue 30 engaging the holder retaining bar 17, and tongue 31 engaging the outer turned over edge 16 of the body member 13. It will be observed by the construction of the leaf and holders that the spring pressed holder retaining bar being forced outwardly, will retain the card holders in place and prevent them from accidental removal.

In Figs. 1, 2 and 5 I have illustrated the cards as being suitably spaced for the name of the account, and also for two balances, one of the columns indicating the balance of accounts which have changed during a day's business and the other indicating the preceding day's balance. The faces of these cards may be silicated, so that one of the balances which are indicated in pencil may be erased at the end of each day's business.

In Fig. 6 I have illustrated a card 34 which consists preferably of two divisions 35 and 36, division 35 being intended for the name of the account and division 36 being for the balance at the end of the day's business. The outer end of division 36 is cut, so as to form a tab 37 by means of which it may be withdrawn from day to day as the balances change.

The operation of my improved device is as follows: The cards are slipped into the holders bearing the name



of the account and are arranged in alphabetical order, the last few cards at the bottom of the leaf being blank, so that they may be instantly utilized when required. For instance if there is an account opened with a firm bearing the name of Allan & Co., one of these card holders at the bottom would be inscribed with the name and the amount of deposit, and then withdrawn and placed between the first and second holders on the sheet as illustrated in Fig. 1, all the other holders being pushed downwardly to take the place of the holder withdrawn and to provide room for its insertion at the proper place. When an account is closed the holder may be withdrawn from its place and placed at the bottom or with the other closed accounts and if the account should be reopened it could again be placed in its proper position.

It will be observed from the foregoing description that I have provided an extremely useful device, whereby the accounts will always be kept in alphabetical or any other desired order, and where an account or a number of them may be withdrawn without disturbing the relative positions of the remainder.

A further and principal advantage of this device is that it enables the accountant to instantly find an account. The indicator balance book may be used with any ledger now in use, the left hand side of the cards being provided with a space for the insertion of the ledger page number.

The double columns for the balances permits of the balance of an account being kept in the left column and the new balance as the account changes being placed in the right column. To provide the postings and calculations, it is only necessary to take the footings of the balances in the right column and the ones opposite in the left column and the difference between them should be the difference between the checks and deposits in that section. If this is found to be so it proves the postings and calculations in this section to be correct and the balances to be carried out correctly. The balance in the left column opposite the new balances may then be erased and the new balances inserted in their places, leaving the right column clear of balances for the new balances of the succeeding day.

It will be noted from the foregoing description that I have provided a device that will effect a great saving in time and labor where a large number of accounts are carried.

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

1. A balance indicator comprising a rigid base member, and a series of open faced card pockets adjustably and detachably secured to said body member.

2. A balance indicator comprising a plurality of rigid leaves interchangeably secured together, and a series of open faced card pockets adjustably and detachably secured to each of said leaves.

3. A balance indicator or the like, comprising a rigid base member provided with a plurality of removable card pockets, and spring operated means secured to said base member, whereby said holders are retained in detachable relation to the base member.

4. A balance indicator or the like, comprising a base member, of a spring pressed bar secured to said base member, and a plurality of card pockets, the outer ends of which engage the outer edge of said base member and the inner ends engaging the outer edge of the spring pressed bar, whereby the holders are removably secured to the base member.

5. A balance indicator or the like, comprising a rigid base member provided along its outer edge with a series of open faced horizontally disposed card pockets detachably and adjustably secured thereto, said pockets arranged substantially one below the other, and of a name and balance indicating card adapted to be placed in each of said holders.

6. A balance indicator or the like, comprising a base member provided along its outer edge with a series of open faced horizontally disposed card pockets detachably and adjustably secured thereto, said pockets arranged substantially one below the other, of a name card adapted to be placed in each of said pockets, and a separate balance indicating card also arranged in each pocket and adapted to be changed as the balance of the corresponding account changes.

7. A balance indicator or the like, comprising a base member having guide ways on its upper and lower edges and having its outer edge turned upwardly and inwardly, of a spring controlled bar movably mounted in the guide ways of the base member, and a plurality of card pockets having downwardly projecting engaging tongues, said tongues adapted to engage the outer edge of said base member and said spring controlled bar, whereby said holders are adjustably and detachably secured to said base member.

8. A device of the class described comprising a rigid base member, of a series of removable open faced horizontally disposed card pockets arranged substantially one below the other adjustably secured to said base member, and spring operated means secured to said base member adapted to retain said pockets in detachable relation to said base member.

9. A device of the class described comprising a rigid base member, provided along its outer edge with engaging means, of a spring pressed retaining bar movably secured to said base member, and a plurality of open faced horizontally disposed card pockets interposed between said engaging means on the base member and said spring pressed bar, whereby said pockets are retained in detachable relation to base member.

In witness that I claim the foregoing I have hereunto subscribed my name this 22nd day of March, 1907.

ROMAINE LEE ANGELL.

Witnesses:

ROBERT C. BAY,  
E. D. SEWARD.