RICHARDS & THAYER.

Register.

No. 24,757. Patented July 12, 1859.

Fig. 5.

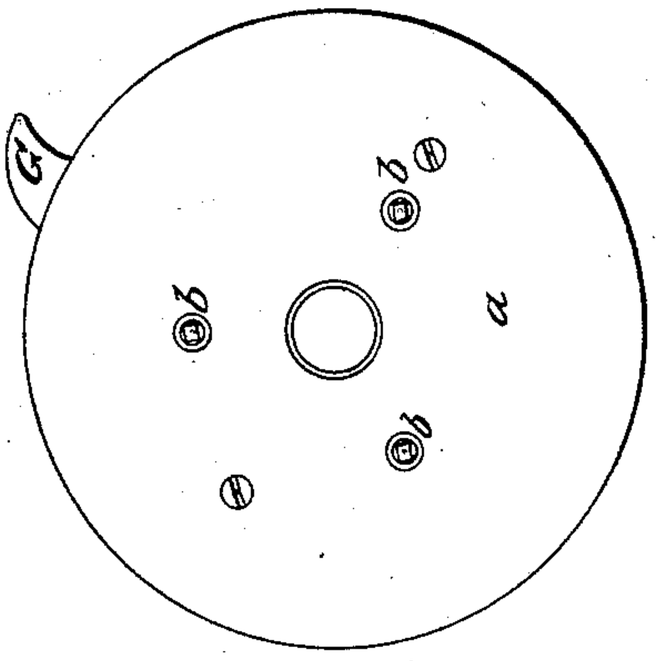



Fig. 3.

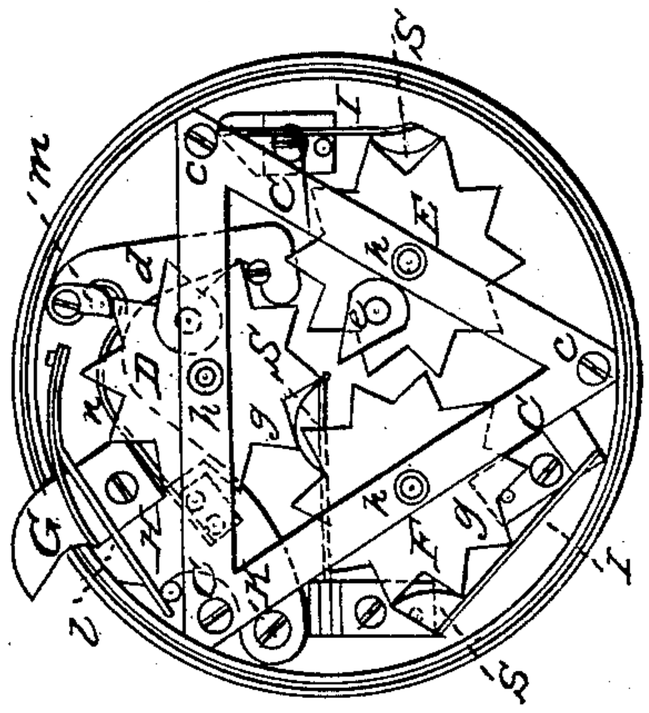



Fig. 4.

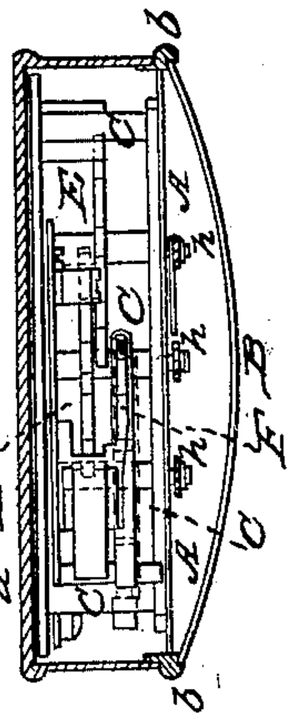



Fig. 1.

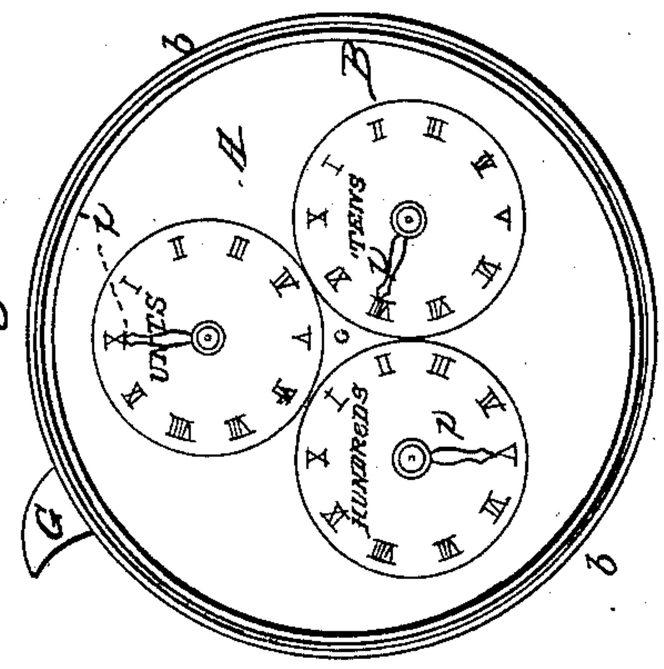
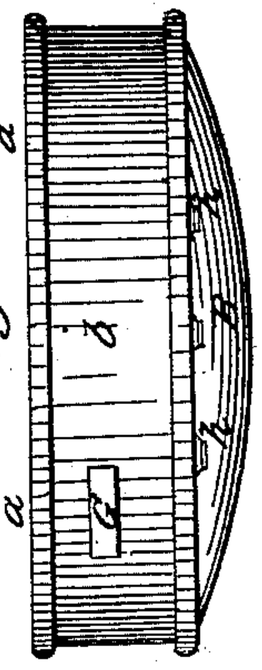



Fig. 2.




Witnesses:
F. Dieterich
Alfred Hinsdale

Inventor
by A. Pollok their attys
P. D. Richards
F. M. Thayer

# UNITED STATES PATENT OFFICE.

P. D. RICHARDS AND F. N. THAYER, OF NEW ORLEANS, LOUISIANA.

## POCKET-REGISTER OF COUNT.

Specification of Letters Patent No. 24,757, dated July 12, 1859.

*To all whom it may concern:*

Be it known that we, P. D. RICHARDS and FREDERIC N. THAYER, of New Orleans, in the State of Louisiana, have invented a new and useful Tally for Facilitating Count in the Entry and Delivery of Goods and for other Purposes; and we hereby declare the following to be a full and exact description thereof, reference being had to the accompanying drawing, which forms part of this specification, and in which—

Figure 1, represents a face view of said instrument; Fig. 2 a side or edge view thereof; Fig. 3, a face view of the interior; Fig. 4, a transverse section; and Fig. 5, a back view of the instrument.

In the transfer and entry or delivery of goods, such as cotton in bales, it frequently happens that great inconvenience is experienced by the levee clerk or tally counter, in noting on his book or paper each bale or package with the necessary rapidity and precision to secure an accurate count on his reckoning up at the close of the work the several tallies or marks made. More particularly is this inconvenience experienced in the performance of such work at dusk or of a dark night and in stormy or wet weather and so confused and irregular or indistinct are the tallies or marks made under such circumstances as to make it a matter of difficulty to afterward decipher many of the marks and to sum up a correct aggregate.

To avoid these inconveniences and to facilitate the performance of such work in an automatic and positively accurate manner is the main object of our invention, the nature of which consists in a portable or pocket tally or counter of watch form or build and peculiar construction for operation by the hands substantially as hereinafter described.

The case of the instrument which consists of a back (*a*) and rim (*b*), may be of a size diameter and shape corresponding to the case of a large sized watch. This case has a face or dial plate (A) and a glass or transparent cover (B) over the face or outside of the dial plate. Thus formed the instrument, when not in use, may be worn as an ordinary watch in the pocket, and when in use its size and shape readily admits of its being firmly held in the hollow of the hand and so as to be operated, if desired, by a finger of the hand holding it.

The works of the instrument may be held by a disk lying against the back of the case on the inside and united by screws (*c*) to an interior front triangular frame (*c*). These "works" consist firstly of (say) three toothed wheels (D, E, F) pitched or their planes of rotation so disposed as to work independently of each other, yet so arranged and the two first wheels provided with certain teeth or projections (*d*, *e*) as to admit of the occasional movement at regular intervals of the second wheel by the first wheel and, at still more distant intervals, of the third wheel by the second. The periods at which these occasional movements take place, the one wheel by the other, will depend upon the number of wheels employed or the number of ordinary teeth in the several wheels and according to the kind or limit of count required to be registered, but it will suffice for the present purpose of explanation to indicate but three wheels and each of those wheels to have but ten ordinary teeth (*g*) and the two first wheels one outside tooth or projection (*d*, *e*,) so disposed as each time the latter round, in a whole revolution of the wheel to which it belongs, it will mesh with and cause to move the next wheel in succession the distance of a tooth, and this latter wheel again in turn be caused to move, each revolution it makes, the third or last wheel the distance of a tooth. Thus, these wheels (D E F) stand in relations of units, tens and hundreds, and their operation for registering count, it will be seen from the foregoing description, resembles that in use in gas meter and steam engine indicators and many other registering contrivances mostly receiving their action from automatic sources. The dial plate (A) too, is similarly marked with circles divided into ten parts corresponding with the number of ordinary teeth (*g*) in the wheels, numbered respectively from 0 to 9, and expressing units, tens, and hundreds, the forward ends of the spindles (*h*) of the several wheels being provided with fingers (*i*) to indicate on said divided circles the movements of the several wheels and to register the same so that they can be read off on glancing at the dial. For each tally made, the first wheel (D) is caused to move the distance of one tooth, so that in a whole revolution of the first wheel ten tallies are counted, and for every ten tallies so registered, the finger of the second wheel (E) is moved one division, consequently in a whole revolution of the

second wheel one hundred tallies are registered, and as the third wheel (F) bears the same relation to the second wheel as the latter does to the first wheel, for a whole revolution of the third wheel one thousand tallies are counted.

The instrument, as before mentioned, being held in the hollow of the hand, it is or may be operated by a finger of the same hand made to press on a finger piece, button, or stud (G) which may be arranged to project through a slot in the rim of the case and which is attached to a plate (H) working on a pivot (*k*) at one end and thrown outward by a spring (*l*), also having its stroke limited and carrying at its other end a pawl (*m*) acted on by a spring (*n*) and serving on working the plate (H) inward by pressing inward the finger stud (G) to move the first wheel (D) the distance of a tooth in the direction of the count to that wheel indicated on the dial.

Such a hand instrument will enable a clerk to tally off goods in a most expeditious and positively accurate manner, and by it he avoids all those inconveniences which attach to the ordinary method of performing that work and which are so prominently experienced in the dark or bad weather as previously adverted to; and as the instrument is of ordinary pocket compass or character, he may always carry it about him and having it constantly on hand in moving from wharf to wharf. All that it is required of him to do to register a tally is to give a slight pressure with his finger on the finger stud (G).

Of course for every fresh series of tallies required to be registered, it will be necessary for the operator to note the point or figure from which he starts on the dial, and to prevent confusion and facilitate count, it may be desirable to start from 0 on the first index. To do this, he must move the wheels so as to adjust the index fingers to their places marked 0, and as to do this by working the finger stud (G) would be a tedious and time consuming operation, we make the spindles (*h*) of the several wheels square at their back ends and cause them to project into or through suitable perforations (*p*) in the back (*a*) of the case so that any one, two, or all the wheels, according to the previous use or movement of them, may be set back as described by simply inserting a key resembling a watch key into the said perforations (*p*) and turning the key in gear with the spindles (*h*) of the wheels. Thus may the instrument, without opening the front glass cover or touching the fingers, be adjusted with rapidity to its original set indicated by 0, and in order that this may be done with yet greater rapidity, the arrangement is such that it matters not whether the wheels be moved forward or backward, but they may be turned either way whichever will bring their index fingers first to 0. This latter remark brings us to describe in conclusion a stop or brake (I) with which we furnish each wheel. These brakes are each formed of a spring bar fast at their rear end and carrying at their front end a gag (*s*) which the spring bar causes to gear with each wheel between two adjacent teeth thereof and so as to produce a friction on pressure on the wheel to prevent its being accidentally or too easily turned, but which on the wheel being purposely turned readily rises or moves out of gear, by the action of the teeth of the wheels on it. This brake then serves to insure accuracy in the count and obviate slip of the wheels, and in order that it may not prevent the wheels from being turned in either direction accordingly as it is desired to move the wheels backward or forward to return the instrument to its original set as before named, the gag (*s*) of the brake is made of such curved or other contour on its inner face as that the teeth of the wheel will alike move it out of gear whichever way the wheel is turned.

Having thus described our invention, we claim, as a new article of manufacture.

We claim the construction and general arrangement of a hand operating tally specifically as described, consisting of three indexes and corresponding wheels to indicate count as specified, the whole being operated by a projecting stud (G) and spring brake (I) with its gag (*s*) for the purposes herein set forth.

In testimony whereof we have signed our names to this specification before two subscribing witnesses.

P. D. RICHARDS.
FRED. N. THAYER.

Witnesses:
EUG. IDE SABLA,
HENRY HERBST.