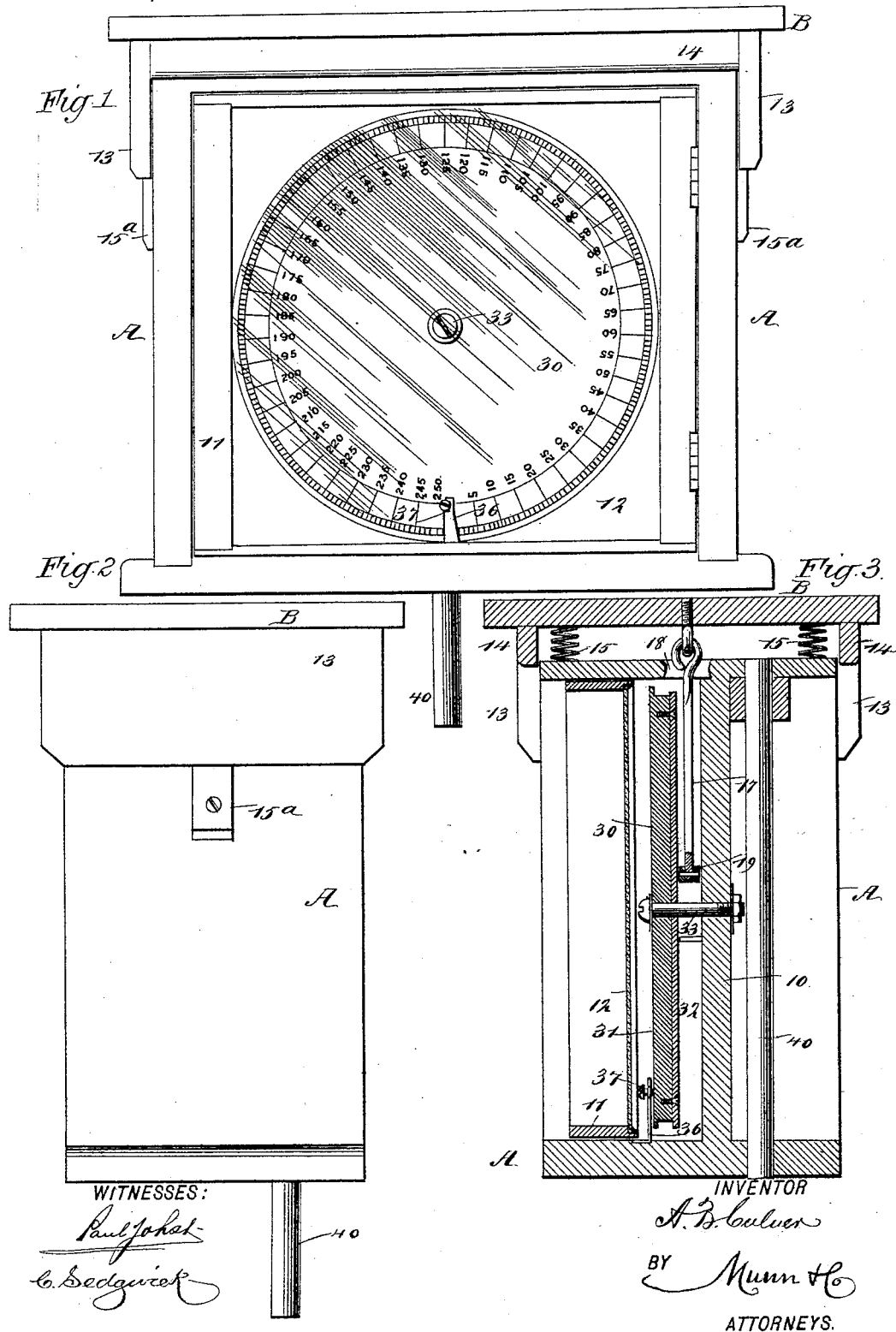


A. B. CULVER.  
REGISTER FOR BASKETS, &c.

No. 522,455.

Patented July 3, 1894.



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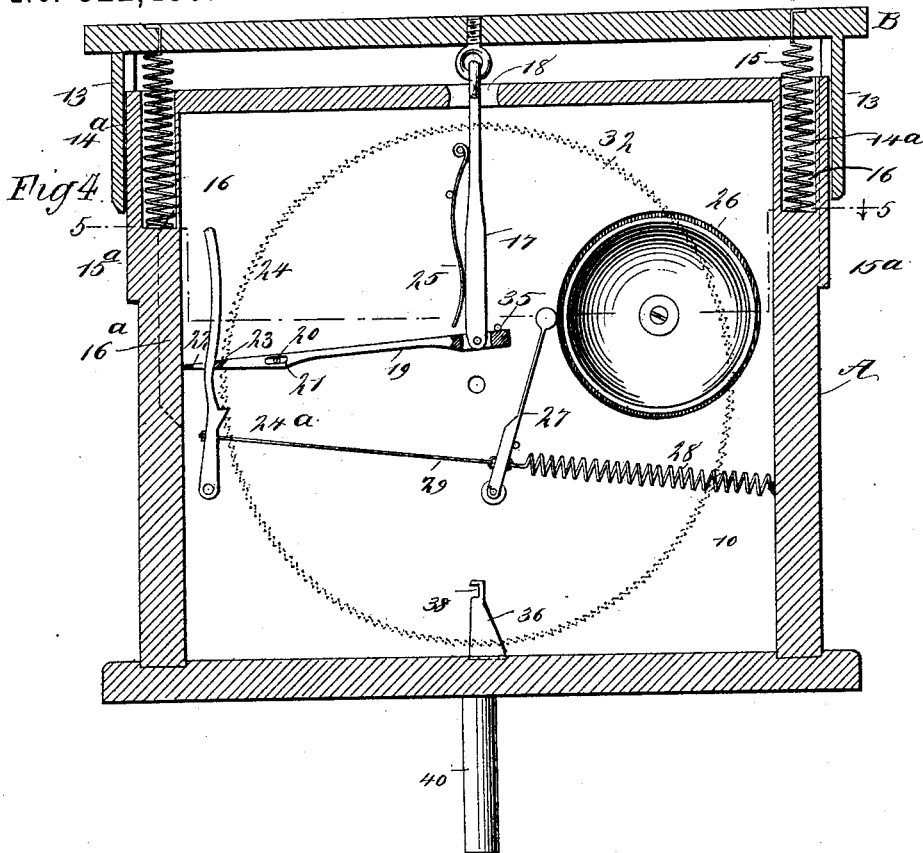
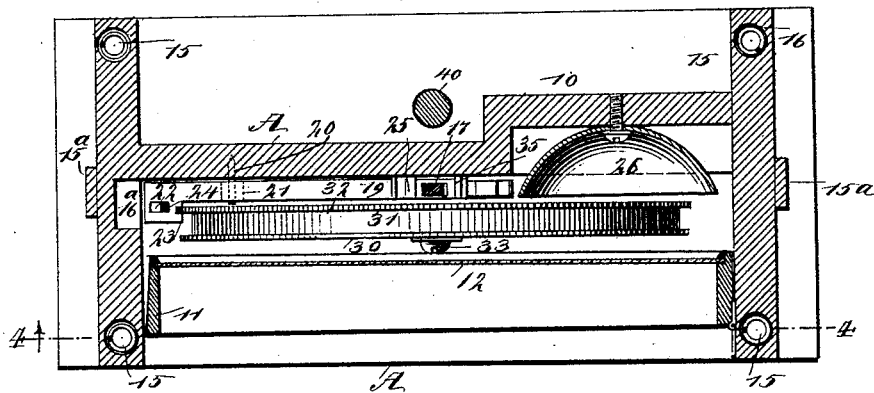


Fig. 5.



WITNESSES:

*Paul J. Hot-*  
*to Sedgwick*

INVENTOR

*A. B. Culver*

BY

*Munn & Co*

ATTORNEYS.

# UNITED STATES PATENT OFFICE.

AUSTIN B. CULVER, OF WESTFIELD, NEW YORK.

## REGISTER FOR BASKETS, &c.

SPECIFICATION forming part of Letters Patent No. 522,455, dated July 3, 1894.

Application filed June 26, 1893. Serial No. 478,914. (No model.)

*To all whom it may concern:*

Be it known that I, AUSTIN B. CULVER, of Westfield, in the county of Chautauqua and State of New York, have invented a new and Improved Register, of which the following is a full, clear, and exact description.

My invention relates to a register and it has for its object to provide a register especially adapted for registering the number of baskets of grapes delivered by the grower to the shipper, for example, or to a vehicle in which the fruit is to be transported, but is equally applicable for registering, for example, the number of baskets or packages of various articles or the number of bunches to be packed and delivered to a predetermined place or locality, thus dispensing with the services of a car clerk.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully described and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures and letters of reference indicate corresponding parts in all the views.

Figure 1 is a front elevation of the register. Fig. 2 is a side elevation thereof. Fig. 3 is a vertical transverse section taken through the center. Fig. 4 is a longitudinal vertical section taken preferably on the line 4—4 of Fig. 5; and Fig. 5 is a horizontal section taken essentially on the line 5—5 of Fig. 4.

The register as heretofore stated, is especially designed for registering the count of baskets of grapes as they are passed into a car for example. The person delivering the baskets to the attendant at the car will place them two at a time upon the register, as the baskets are usually handed into the car in pairs, and by so placing them a register of the baskets is made, and the person passing the baskets to the car need not wait to meet the person loading the car, and thus a saving of time is obtained. Ordinarily it is necessary for the person delivering the baskets to hold them until the receiver is at hand to take them, in order that a proper tally may be obtained. In this way the deliverer of the goods becomes very weary, but when the register is used such an additional weariness

may be avoided, as the baskets may remain upon the register until removed by the proper person.

In carrying out the invention a box-like casing A constitutes the body of the machine, the said casing being provided with a back 10, preferably located between the center and an outer edge of the top, bottom and sides, as shown in Fig. 3. The casing is furthermore provided with a door 11 of any approved pattern, located a predetermined distance from the back, which door is ordinarily provided with a transparent pane or panel 12.

A table B is located over the casing. The table is of greater width and length than the casing, and is provided at its ends with downwardly extended flanges 13, said flanges being adapted to slide over the sides of the casing; and the table is guided in its movement to and from the casing by producing in the end flanges 13 vertical grooves 14<sup>a</sup> which receive ribs 15<sup>a</sup> located upon the outer side faces of the casing. The table is further provided with front and rear flanges 14 which are ordinarily of less length than the end flanges, and when the table is pressed downward near to the top of the casing the front and rear flanges and the end flanges of the table will slide over corresponding portions of the casing. The table is cushioned, being spring supported, and preferably four coiled springs 15 are employed, which springs as shown in Fig. 4, are located partially in wells 16 produced in the upper edges of the side boards of the casing and at the corners thereof. The springs normally extend some distance above the top of the casing and the wells in which they are located. The upper ends of the springs are secured to the top of the table in any suitable or approved manner. The springs may be of any desired strength, as for example, when the machine is used to register the number of baskets of grapes, the strength of the springs will be such that the weight of two ordinary baskets of grapes will be necessary to carry the table down to its lower limit. A pitman 17 is pivotally connected with the central under surface of the table; the pitman extends down in the interior of the casing through an opening 18 made in the top of the latter. The lower end of the pitman is pivotally connected

with a lever 19, the said lever being fulcrumed between its center and head by passing a pin 20 through a slot 21 produced in the lever, the pin being secured in the back of the casing. The head of the lever is located near one side of the casing, and usually in this side of the casing opposite the head of the lever a pocket 16<sup>a</sup> is formed. The lever head is a pallet head and is provided with an opening 22 extending through it. The pallet portion of the head or that which extends beyond one side of the body of the lever is provided with a beveled surface producing a sharp upper edge 23, as shown in Figs. 4 and 5. The upper end of a pawl 24, which may be termed a handle for the pawl, extends through the opening 22 in the lever head, but the lever 19 works independently of the ratchet. The pawl is pivoted at its lower end a suitable distance below the lever to the back of the casing, and is provided with a spur 24<sup>a</sup> upon its inner edge. A spring 25 secured to the back of the casing bears against the side of the pitman facing the handle of the pawl. Thus, when the pitman is carried over in direction of the pawl the spring will be put under tension and will act to restore the pitman to its normal position when the pitman is released from lateral pressure.

A gong 26, or other form of bell, is located within the casing adapted to be engaged by a hammer 27. The hammer is normally held against the gong through the medium of a spring 28; and the hammer is connected by a link 29, or its equivalent, with the pawl below the spur 24<sup>a</sup> thereof as shown in Fig. 4, and it will thus be observed that the spring serves to keep the pawl normally in engagement with the ratchet wheel.

In connection with the above named mechanism a dial 30 is employed, which may show figures in connection with the scale, reading from 0 to, for example 250; or any predetermined number. The dial has usually attached to its back a disk 31 of slightly less diameter than the dial; and a ratchet wheel 32 is secured to the rear surface of the disk, the ratchet wheel extending beyond the edge of the disk, but if in practice it is found desirable the ratchet wheel may constitute an integral portion of the dial. The ratchet wheel, dial and disk are held to revolve within the casing by providing them with a suitable opening at their center and passing through the opening a spindle 33 or its equivalent, the spindle being secured in any suitable or approved manner to the back of the casing. When the table is pressed downward the pitman is carried downward with it, and the lever 19, is so rocked upon its fulcrum as to elevate its pallet end, and the pallet head is normally held in engagement with the ratchet teeth of the ratchet wheel through the medium of the spring 25 bearing against the pitman; and the spring 28 serves in like manner to keep the spur of the pawl in engagement with the ratchet teeth below the pallet

of the lever. It may here be remarked that the upward movement of the table is limited by causing the inner end of the lever to strike against a stud 35, located upon the back of the casing, as shown in Fig. 4. The dial is not provided with a hand, but is adapted to rotate; consequently a point must be determined upon at which the rotating of the dial is to take place. To that end a post or bracket 36, is located in front of the central lower portion of the dial, and the dial is provided at its zero mark with a pin 37, and the said pin, when the dial is at zero, is preferably made to enter a recess 38 in the head of the bracket 36.

When the dial is to be shifted to bring the zero mark at the reading point, both the pallet head of the lever and the pawl must be removed from engagement with the ratchet wheel, and this is accomplished by pushing the handle end of the pawl back into the pocket 16<sup>a</sup> of the casing, at which time the dial may be freely turned. When the pawl is released, it and the pallet head will return to their normal positions.

The pallet head is adapted to serve as a dog and turn the dial the distance of one tooth of the ratchet wheel each time the table is depressed; and therefore when the table is forced upward by its springs the inner end of the lever 19 is likewise carried up, and the pallet head of the lever must slide downward over the teeth of the ratchet wheel. This movement is permitted by producing the slot 21 at the fulcrum of the lever, which admits of the lever having end play.

When the machine is placed in the doorway of a car, for example, a rod 40, is inserted in the car floor, and is passed upward through the top and bottom of the casing A, as shown in Fig. 3, at the rear of the back. It will be understood that a device of this character may be erected as a fixture in for example a warehouse, or upon a platform adjacent to cars or other vehicles to be loaded. The dial may be made to register as high as desired; the dial shown in the drawings is connected with a ten-inch wheel, and reads up to two hundred and fifty. In such a wheel two-hundred and fifty-two one-eighth inch teeth are produced, two of which teeth will be occupied by the guide pin 37, so that such a machine will register two-hundred and fifty counts; or in placing two articles at one time upon the table the dial is read double, and will therefore register five-hundred counts.

In the operation of the machine, when an article of suitable weight is placed upon the table, the pitman 17 will be forced downward and the pallet head of the lever 19 will be rocked upward a sufficient distance to turn the ratchet wheel the distance of one tooth, indicating one count upon the dial. As the pallet head of the lever is elevated the pawl is pressed outward away from the ratchet wheel, and in so doing the hammer 27 is drawn away from the bell, and will remain in that position as long as the weight is upon the

table. But as soon as the pallet head has turned the dial a tooth, the pawl is released, and engages with the ratchet wheel and the bell is struck by the hammer. When the weight is removed from the table the pallet head will be carried downward to the next tooth below as the pitman is carried upward, in position to register the next article to be placed upon the table.

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

1. In a register, the combination with a spring-supported table, of a dial carrying a ratchet wheel, a pivoted pawl engaging the ratchet wheel a second pivoted pawl engaging the ratchet wheel and loosely connected with the first named pawl and a pitman connecting the table with the first named pawl, substantially as described.

2. In a register, the combination with a sliding and spring-supported table, of a dial carrying a ratchet wheel, a lever loosely pivoted and having a pallet head engaging the ratchet wheel, and a spring pressed pitman connecting the said lever with the table, substantially as described.

3. In a register, a spring-cushioned table capable of being depressed, a dial, a ratchet wheel connected with the dial, a lift lever having end movement upon its fulcrum and provided with a slotted pallet head engaging with the ratchet wheel, a spring controlled pitman connecting the lift lever and the table, spring controlled detents normally engaging with the ratchet wheel and extending upward through the pallet head of the lever, and an alarm operated by a movement of the detents, as and for the purpose set forth.

4. In a register for the purpose described, the combination, with a casing, a table having spring cushions and guided movement upon the casing, a dial and a ratchet wheel connected therewith, the dial and ratchet wheel being held to turn together within the casing, of a lift lever fulcrumed in the casing and capable of a rocking and likewise an end movement, said lever being provided with a pallet head engaging with the teeth of the ratchet wheel, a spring controlled pitman connecting the lever with the table, and a detent also engaging with the ratchet wheel and operated upon by the lift lever, as and for the purpose set forth.

5. In a register for the purpose described, the combination, with a casing, a table having spring cushions and guided movement upon the casing, a dial, and a ratchet wheel connected therewith, the dial and ratchet wheel being held to turn together within the casing, of a lift lever fulcrumed within the casing and capable of a rocking and likewise of an end movement, said lever being provided with a pallet head engaging with the teeth of the ratchet wheel, a spring controlled pitman connecting the lever with the table, a detent likewise engaging with the ratchet wheel and operated upon by the lift lever, a bell located within the casing, a spring controlled striking mechanism adapted for engagement with the bell, a connection between the striking mechanism and the detent, and a stop limiting the movement of the dial in one direction, substantially as shown and described.

AUSTIN B. CULVER.

Witnesses:

GRANT S. FLAGLET,  
EDWARD TABER WALKER.