Aug. 20, 1935. B. BORSON ET AL 2,012,217

AUTOMATIC BUCKET TALLY

Filed June 7, 1932

Fig. 1.

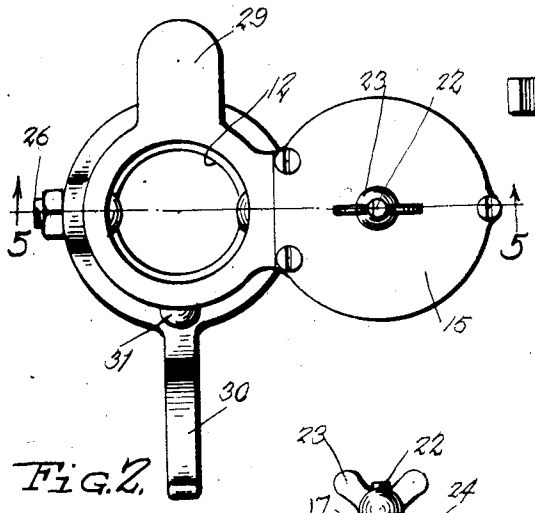


Fig. 3.

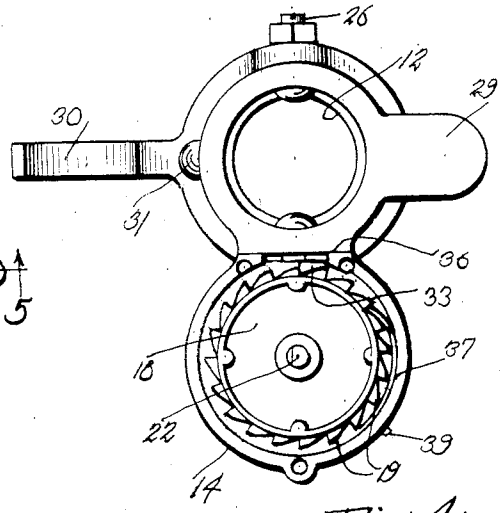


Fig. 2.

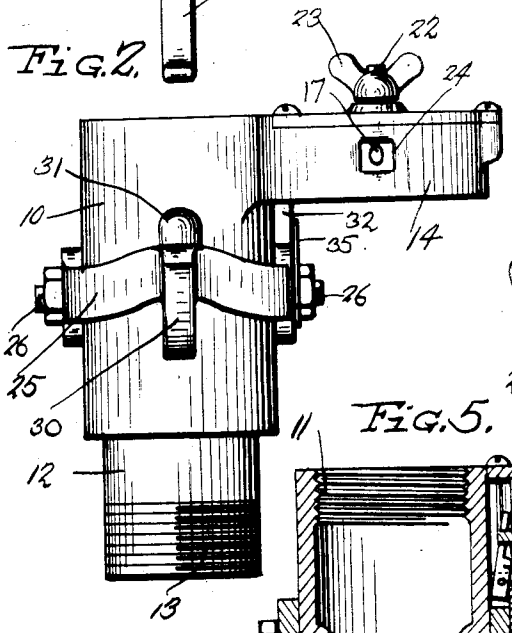


Fig. 4.

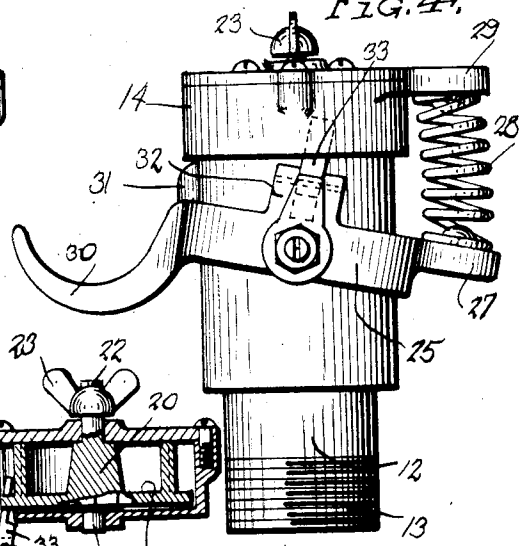


Fig. 5.

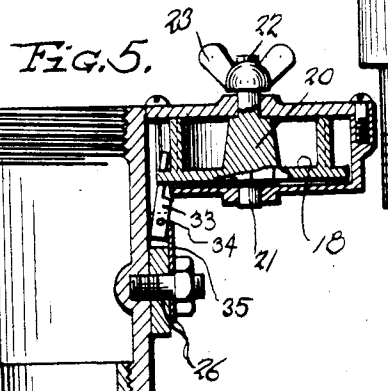
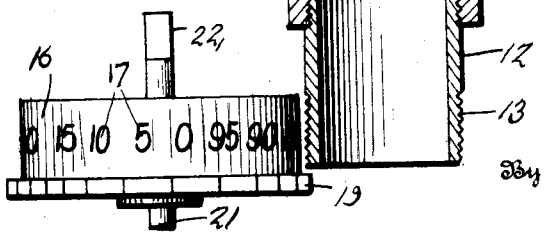


Fig. 6.



Inventors
Ben Borson &
Jules Van Hee.

By

A. L. Bryant,
Attorney.

Patented Aug. 20, 1935

2,012,217

UNITED STATES PATENT OFFICE

2,012,217

AUTOMATIC BUCKET TALLY

Ben Borson and Jules Van Hee, Minneota, Minn.

Application June 7, 1932, Serial No. 615,911

1 Claim. (Cl. 235—94)

This invention relates to certain new and useful improvements in automatic bucket tally.

The primary object of the invention is to provide a weight operated register of a character adapted for association with the delivery faucet of a gasoline tank truck for registering the delivery of gasoline in multiple gallon lots, five gallon cans being usually employed in the dispensing and delivery of gasoline from tank trucks.

A further object of the invention is to provide a register of the foregoing character that is attached to a delivery faucet of a gasoline tank truck and embodying a tensioned arm for the support of a gasoline can which moves the arm for the operation of a register or counter when the can has been completely filled with gasoline for the keeping of an accurate record of the quantity of gasoline dispensed in five gallon lots.

With the above and other objects in view that will become apparent as the nature of the invention is better understood, the same consists in the novel form, combination and arrangement of parts hereinafter more fully described, shown in the accompanying drawing and claimed.

In the drawing:—

Figure 1 is a top plan view of a weight operated register constructed in accordance with the present invention, showing the laterally positioned arm for the support of the gasoline can;

Figure 2 is a side elevational view showing the laterally offset register;

Figure 3 is a top plan view with the cover wall of the register removed to illustrate the ratchet wheel of the register disk;

Figure 4 is another side elevational view of the device showing the tensioned gasoline can supporting arm and the ratchet fingers carried thereby for operating the ratchet wheel of the register;

Figure 5 is a vertical longitudinal sectional view taken on line 5—5 of Figure 1; and

Figure 6 is a side elevational view of the ratchet wheel and register disk removed from the register casing.

Referring more in detail to the accompanying drawing, there is illustrated a weight operated register adapted for attachment to the delivery faucet of a gasoline tank wagon or truck, the register including a fitting or pipe section 10 internally threaded at its upper end as at 11 for attachment to the delivery faucet of the gasoline tank truck while the lower end of the pipe section 10 is internally threaded for the reception of the extension pipe 12 that is externally threaded as at 13 to receive a coupling for a hose that is generally employed for the delivery of gasoline or oil to an under-ground tank, the object of this invention residing in the provision of a register device for counting in five gallon lots the delivery of gasoline to the discharge faucet with the register device operated by the weight of the gasoline delivered into a can supported on the register device.

The register includes an annular casing 14 carried by the pipe section 10 laterally thereof that is closed at its open upper side by a removable cover 15. As shown in Figures 3 and 6, the register device includes an annulus or ring 16 having indicia 17 upon its peripheral face representative of gasoline in five gallon lots, the register ring 16 having a disk bottom wall 18, the peripheral edge of which extends outwardly of the ring 16 and is provided with ratchet teeth 19. A center bearing 20 rises from the bottom disk 18 of the ring 16 and said disk carries a depending pin 21 that finds a bearing in the bottom wall of the register casing 14, the bearing block 20 having a keyed pin 22 rising therefrom for rotatable passage through a central opening in the casing cover 15 upon which a thumb nut or key 23 is mounted for purposes presently to appear. The register casing 16 is provided with a side window opening 24 through which the register indicia 17 is viewable as illustrated in Figure 2.

A collar 25 of greater diameter than the pipe section 10 encloses said pipe section and has opposite sides thereof moved toward each other and the pipe section for contact therewith as shown in Figure 5 with the contacting sides of the collar and pipe section pivotally connected together as at 26. A lug projection 27 is carried by the collar 25 at a point intermediate the pivot bearings 26 to form an abutment for one end of a coil spring 28, the other end of which engages the abutment lug 29 projecting laterally of the register casing 14. The side of the collar 25 diametrically opposite the lug projection 27 carries a hook 30 for the support of a gasoline bucket or receptacle, the pipe section 10 carrying a stop lug 31 to limit upward movement of the hook side of the ring 25 under influence of the spring 28.

As shown more clearly in Figures 3 to 5, the pivoted side of the ring 25 beneath the register casing 14 carries an upstanding block 32 in which a pawl 33 is pivotally mounted as at 34 and spring pressed as at 35, the upper end of the pawl extending through an opening 36 adjacent the peripheral edge of the register casing 14 for ratcheting engagement with the ratchet teeth 19. A leaf

spring 37 is secured to the inner face of the annular wall of the register casing 14 at one of its ends by means of the pin 39 with the free end thereof ratcheting over the ratchet teeth 19 to prevent retrograde movement of the register ring 16 and ratchet teeth 19.

In the operation of the device, it being understood that the pipe section 10 is attached to the delivery faucet of a gasoline delivery truck, a gasoline bucket or can is suspended upon the hook 30 of the pivoted collar 25 with the open upper end of the can disposed beneath the extension pipe 12. The delivery faucet is then opened to allow gasoline to flow through the device into the receptacle and the weight of the gasoline in the receptacle which is proportionate to five gallons of gasoline, the collar 25 is moved upon its pivotal mountings 26 against the tension of the spring 28 for causing the pawl 33 to move the ratchet disk 19 upon its bearing pin 21 within the register casing with the next succeeding registering indicia 17 upon the ring 16 moved in front of the window opening 24. The spring 37 prevents retrograde movement of the ratchet wheel and the device accurately registers the quantity of gasoline in five gallon lots being delivered. After the complete delivery of the gasoline has been accomplished, the register device may again be set at zero as illustrated in Figure 2 by operating the thumb piece 23 manually. With a device of this character, an accurate check or tally is made upon the quantity of gasoline delivered in five gallon lots and it is therefore unnecessary to make a pencil or other notation following each five gallon delivery.

From the above detailed description of the device, it is believed that the construction and operation thereof will at once be apparent, and while there is herein shown and described the preferred embodiment of the invention, it is nevertheless to be understood that minor changes may be made therein without departing from the spirit and scope of the invention as claimed.

We claim:—

In a register for attachment to the delivery faucet of a gasoline delivery truck, a vertical pipe section through which gasoline from the faucet flows, a register casing projecting laterally of the upper end of said pipe section, a horizontally rotatable ratchet member provided with an upstanding numeral bearing flange mounted in the casing, an annular collar pivotally supported on a horizontal axis on the pipe section and provided with a hook at one end for the reception of a gasoline holding vessel and a projection at the other end for the seating of a spring, a projection on the casing, an expansion spring interposed between said projections, and means carried by said collar and movable on the pivot for operating the ratchet member by the downward movement of the hook.

BEN BORSON.
JULES VAN HEE.