

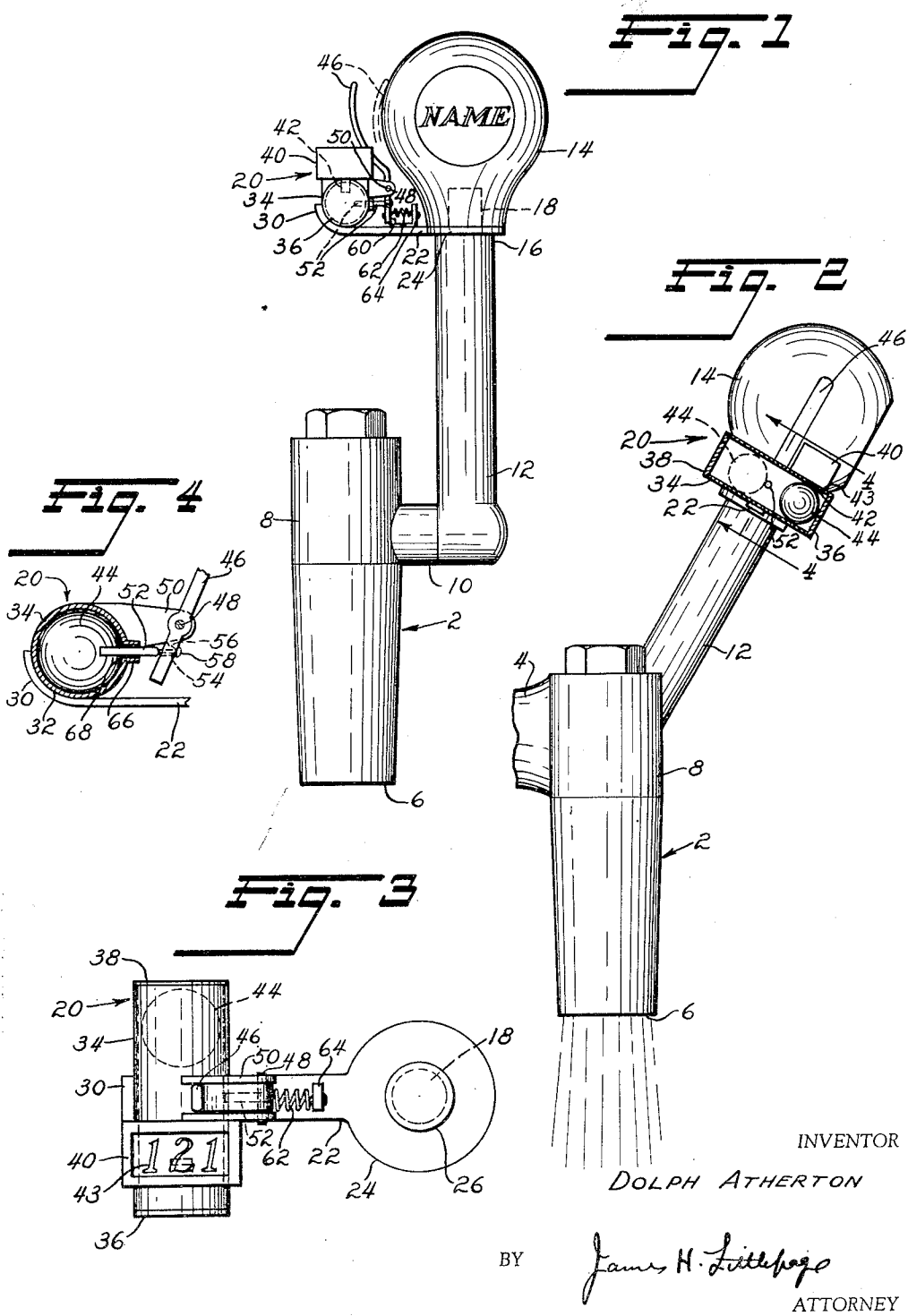
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D. W. ATHERTON

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GRAVITY-OPERATED REGISTER FOR TILTABLE HANDLES

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GRAVITY-OPERATED REGISTER FOR
TILTABLE HANDLES

Dolph W. Atherton, Kingsley, Pa.

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3 Claims. (Cl. 235-94)

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This invention relates to registers and, more particularly, to a gravity-operated register having special adaption for use in connection with the dispensing of beverages.

The primary object of the invention is to provide a register applicable to the pivoting handle for the valve of a conventional manually operated beverage dispenser. In dispensing a beverage such as beer, the valve handle is pulled towards the operator to open the valve. The object now is to provide a gravity operated register applicable to the existing conventional valve handles for registering and indicating the total servings of beverage dispensed.

The particular problem with which the invention is concerned is that the number of times the dispenser valve handle is pulled to open the valve by no means corresponds to the number of beverage servings. Particularly in beer vending, the handle may be pulled twice or more for each serving. For these and other good reasons the usual gravity or mechanically operated register gives a false reading even under the normal but necessary conditions of beer dispensing. The object now is to provide a gravity-operated register which, in normal operation, functions with each tilting or pulling of the handle, but with a disabling mechanism operable to forestall counting by the register at the option of the operator.

More specifically, it is intended to provide a small, unobtrusive gravity operated register with a bracket for mounting on a beverage dispenser handle. Usually, the handles for beer dispensers include an enlarged knob or head threadably and removably attached on the free end of the valve handle. One of the present objects is to provide a bracket for the register so that the latter may be mounted by inserting one end of the bracket between the head and handle.

Another object of the invention is to provide a gravity-operated register and support for attachment under the head of a dispenser valve handle, and a disabling mechanism including a thumb-operable lever lying adjacent the handle head so that by squeezing the lever, the operator may temporarily disable the register.

These and other objects will be apparent from the following specification and drawing, in which:

Fig. 1 is a front elevation of the assembly in operative position;

Fig. 2 is a side elevation of the assembly with part of the casing of the gravity-operated regis-

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ter cut away to show the mechanism in operated condition;

Fig. 3 is a plan view of the assembly as shown in Fig. 1; and,

Fig. 4 is a fragmentary section taken along the line 4-4 of Fig. 2 looking in the direction of the arrows, illustrating the disabling mechanism in operated condition.

Referring now to the drawing in which like reference numerals denote the same or similar elements, the invention is illustrated in combination with a conventional beer tap indicated generally at 2 and including inlet and outlet pipes 4 and 6 and a valve 8 operated by an outwardly projecting shaft 10. The specific valve mechanism forms no part of the invention, it being sufficient to note that whenever the operating lever 12 is pulled forwardly as seen in Fig. 1 or to the right as seen in Fig. 2, valve 8 is opened.

On the upper end of operating lever 12 is a removable head 14 having lower end fitting against a horizontal shoulder 16 when 14 threadably engages over a threaded stub 18. Only one of many conventional head forms being illustrated, it being understood that the vendor normally places the flat palm of his hand against the upper forward portion of the head and grasps his fingers around the sides of the head so that the thumb lies at the left-hand side of the head as seen in Fig. 1.

The invention is primarily concerned with the register, indicated generally at 20, removably supported at the side of the head 14 by bracket 22. Bracket 22 is provided with an enlarged inner collar 24 and a central aperture 26 for seating, respectively, on shoulder 16 and around the lower end of threaded stub 18, after temporary removal of head 14.

The outer end of bracket 22 is bent up at 30 and suitably affixed, as by spot welds 32, to an elongate hollow tubular body 34. Hollow body 34 is closed at its front and rear ends 36 and 38, respectively, and supports on its top a register 40 having an operating finger extending through a suitable aperture in the top of tubular body 34. The mechanical details of register 40 are of no concern here except in that operating finger 42 normally extends straight downwardly into the interior of tubular body 34 and, whenever finger 42 is moved forwardly as illustrated in Fig. 2, a count of one is added on the register indicator 43. A suitable bias within register 30 is provided for normally maintaining finger 42 in its vertical position and, of course, for re-

turning it from its operated position Fig. 2 to its normally vertical position of Fig. 1. For moving finger 42 from its normal position of Fig. 1 to its operated position of Fig. 2 there is a heavy metallic ball 44 which rolls freely within hollow tubular body 34. Whenever valve operating lever 12 is pulled forwardly, ball 44 rolls from its dotted line position of Figs. 2 and 3 to the full line position of Fig. 3 whereupon the count of one is registered on indicator 43. If desired, hollow tubular body 34 may be tilted slightly backwardly so as to assure return of ball 24 to the rear of hollow tubular body 34 upon return of valve operating lever 12 to its vertical or valve closing position.

The pivot 48 of operating lever 46 is supported by a pair of ears 50 extending from hollow tubular body 34, the lower end of disabling lever 46 being coupled by a lost motion connection to the outer end of a slidable stop pin 52, the latter having a reduced neck 54 near its outer end fitting through the tapered hole 56 in lever 46 and held on by an enlarged outer end 58. The lower end of disabling lever 46 is normally biased to the right as seen in Figs. 1, 3 and 4 against a stop 60 by a tension spring 62 anchored at 64. Stop pin 52 slides through a hollow bearing 65 and an aperture 68, best seen in Fig. 4 on and in the side wall of hollow tubular body 34. Normally, the inner end of stop pin 52 does not enter the interior of hollow tubular body 34, the pin being maintained inoperative by tension spring 62. Whenever the upper end of disabling lever 46 is pressed inwardly towards head 14, the inner end of stop pin 52 is driven inwardly to the position shown in full lines in Fig. 4 and in dotted lines in Fig. 1 so as to intercept ball 44 and prevent the latter from engaging operating fingers 42.

In a typical operation of the above device during the vending of a glass of beer, the vendor places his hand over head 14 and lever 12 is pulled forwardly, the vendor's thumb during this phase resting but loosely against disabling lever 46. When valve operating lever 12 is pulled forwardly, ball 44 rolls from its dotted line position to its full line position as seen in Fig. 2 thereby trapping operating finger 42 forwardly, whereupon register 40 counts and indicates the operation. If, for instance, it is desired to put a head on a glass of beer, valve operating lever 12 is returned on its vertical position as seen in Fig. 1 and the vendor squeezes disabled lever 46, thereby projecting the inner end of stop pin 52 inwardly to intercept ball 44 and withhold the latter from engagement with operating finger 42 of register 40 so that, when now the valve operating lever 12 is again pulled forwardly, an additional count is not imposed on the register.

It is apparent that the specific form of the elements detailed above may partake of various embodiments and that the elements shown may be incorporated with other pivoting operating members without departing from the scope and sphere of the following claims.

I claim:

1. A device for registering the operations of a tiltable handle comprising a register, a bracket for supporting said register on said handle, a

gravity-operated actuating mechanism for said register whereby the latter is normally actuated by each tilting of the handle, a stop movably supported on said bracket, said stop being movable from a retracted position in which it is inoperative to an extended position in which it disables said gravity-operated mechanism, a bias connected between said stop and said bracket and arranged normally to retract said stop, and a finger-piece connected to said stop for extending the latter, said finger-piece having a manually-engageable portion lying adjacent said handle whereby to be readily accessible to the hand of a person grasping said handle.

2. A device for registering the operations of a manually tiltable handle having a removable head comprising a hollow tube having an opening in a side wall thereof, a register mounted on said tube, said register having a movable actuating finger extending into said tube whereby, upon movement of said finger, a count is imposed on said register, a weight freely movable in said tube, support means for said device comprising a bracket having a collar for attachment on said handle beneath said removable head whereby, when said handle is tilted, said weight moves said finger, a stop pin having an inner end slidably extensible through said opening in the wall of said tube for blocking said weight so as to prevent movement of said finger thereby, a tension spring connected between said bracket and said stop pin for normally retracting the latter, and an operating lever operatively connected to said stop pin, said operating lever having a free end extending above said collar and adjacent one side of said head whereby to be readily engaged when the handle is manually grasped by the head.

3. A device for registering the operations of a tiltable handle comprising a register, a bracket for supporting said register on said handle, a gravity-operated actuating mechanism for said register whereby the latter is normally actuated by each tilting of the handle, a stop movably supported on said bracket, said stop being movable from a retracted position in which it is inoperative to an extended position in which it disables said gravity-operated mechanism, a bias connected between said stop and said bracket and arranged normally to retract said stop, and a finger-piece comprising a lever pivoted to said bracket and having one portion thereof engaging said stop for extending the latter, another portion of said finger-piece extending away from the pivot thereof and being adapted to be closely spaced from said handle whereby to be readily accessible to the hand of a person grasping said handle.

DOLPH W. ATHERTON.

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