

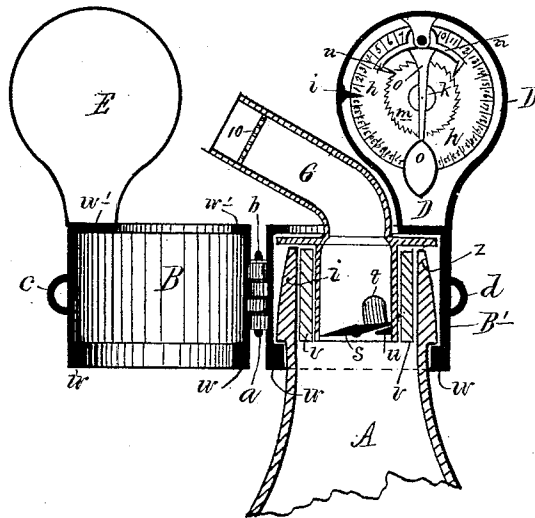
(No Model.)

E. H. ROGERS, Jr.

BOTTLE REGISTER.

No. 293,089.

Patented Feb. 5, 1884.



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UNITED STATES PATENT OFFICE.

EBENEZER H. ROGERS, JR., OF NEW YORK, N. Y.

BOTTLE-REGISTER.

SPECIFICATION forming part of Letters Patent No. 293,689, dated February 5, 1884.

Application filed December 27, 1883. (No model.)

To all whom it may concern:

Be it known that I, EBENEZER H. ROGERS, Jr., a citizen of the United States, residing in the city of New York, in the county and State of New York, have invented certain new and useful Improvements in Bottle-Registers, as is fully set forth and represented in the following specification and the accompanying drawing, forming a part of the same.

10 This invention relates to that class of registering and indicating apparatus designed for attachment to the mouths and necks of bottles containing fluids to be dispensed therefrom in small quantities, such devices being
15 arranged to indicate upon a dial the exact number of times that liquid is drawn from the bottle without regard to the exact quantity drawn.

In the present instance the invention consists in certain improvements in the method of securing and locking such an apparatus upon the mouth and neck of a bottle, in the method of actuating the registering and indicating mechanism, and in a means for preventing any fluid being poured into the bottle after the apparatus is locked thereto, all of which
25 will be hereinafter fully pointed out and described.

The drawing, which forms an essential part
30 of this specification, illustrates a bottle with a bottle-register attached, which fully embodies my invention.

The object of this invention is the provision of a simple and accurate means of registering and indicating upon a dial the exact number
35 of times liquid is poured from a bottle or other similar vessel, thereby furnishing a check upon the employes dispensing the fluid, and thus regulating to a certain extent the manipulation of bottled liquids that are sold in small quantities. Its main adaptation lies in its use in regulating the sale of bottled liquors in public places where a full bottle of liquor is gradually emptied in small quantities averaging usually from one and a half to two fluid
40 ounces at each pouring. In general use it is expected that a full bottle will produce an average number of quantities, and it is to control the correctness of such average production and to prevent the adulteration or replacing of the contents of the bottle with inferior

liquors that my invention has been devised. I at present make no attempt to control the exactness of the quantities poured out, but simply and accurately register the exact number of times a quantity of liquid is withdrawn
55 from the bottle. After the bottle is filled, the indicating-dial set and recorded, the apparatus is clasped about the mouth and neck of the bottle and locked thereupon, so that it cannot be tampered with or removed by its temporary custodian. Neither can he introduce any fluid into the bottle while the register is locked thereupon.

A is a section of a bottle showing the method
65 of securing the register thereto. B and B' form the body of the register, the two parts being hinged centrally, as at *a b*. Each portion of the body is provided with locking-rings *c d*, through which the bolt of a padlock may be passed to lock them together when
70 closed upon the bottle-neck. The two sections B and B' are so formed internally as to snugly fit the contour of the top of the bottle, as is plainly shown in the drawing.

D is the box or chamber which carries the indicating-dials and the mechanism for actuating the same. It is securely mounted upon the half of the body-clasp, (marked B'.)

E is the cover for closing the face of the
80 chamber D. It is mounted upon the outer half of the body-clasp B, and when the two are swung together securely closes the chamber D.

h is the registering-dial and *i* the indicating-finger. The dial *h* moves freely upon its pivot
85 or shaft *k*, and has attached to its face an escapement-wheel, *m*, of the form substantially as in common use in clocks.

n is the escapement having the usual pallets, which play in the teeth of the escapement-wheel. A pendulum, *o*, is secured to the
90 escapement *n*, and swings upon the same bearing, which is mounted in the top of the chamber D. It is obvious that the tipping forward of the bottle causes the pendulum to swing forward to move the escapement, and through the escapement-wheel to move the indicating-dial one step. Other systems of actuating mechanism by means of a pendulum may be applied.

G is the spout, from which the liquid is
100 poured. It is preferably a separate part from the frame B and B', though it may be securely

attached thereto. Its base is provided with a valve, *s*, which closes the bottom of the spout when the bottle is upright. On the rear it is provided with a counter-weight, *t*, and a stop-pin, *u*, is arranged to limit the play of the valve *s*. The base may be surrounded with a cork packing, *v*, so that there will be no leakage when it is inserted in the bottle-neck.

The operation of the apparatus is substantially as follows: The bottle being filled, the spout *G* is inserted in the neck. The body *B* and *B'* of the register is then clasped about the bottle-neck, the projecting lips *ww* clasping under the projections *zz* on the neck of the bottle. Similar projecting lips, *w w'*, on the top of the body *B* and *B'*, rest upon and secure the spout *G* in its place. The lock being secured in staples or rings *c d*, the apparatus is ready for use. The bottle being now thrown forward, as soon as the center of gravity is passed the valve *s* opens by the action of counterpoise *t* and permits the liquid to flow from the spout *G*. At the same time the pendulum *o* moves forward, and acting upon the escapement-ratchet, forces it and the dial forward one step, counting one upon the indicator. The placing of the bottle upright at once causes the valve *s* to close and the pendulum *o* to resume its normal position. A foraminous diaphragm or filter, *10*, is secured in the spout *G*, to prevent any tampering with the valve *s*, and should any liquid be forced into the spout *G* it cannot pass the valve *s*.

I claim as my invention—

1. The combination of a bottle, a hinged

frame shaped to clasp the neck of the bottle, a registering and indicating device mounted upon the hinged frame, suitable mechanism for operating the same, and a device for locking the entire apparatus upon the bottle-neck, all substantially as and for the purposes as herein shown and set forth.

2. The combination in a registering and indicating apparatus arranged for attachment to a bottle-shaped vessel, of a hinged frame shaped to be clasped and locked upon the neck and mouth of the vessel, a registering and indicating dial, with mechanism for operating the same, and a spout having an automatic valve for opening and closing the same, all arranged, applied, and operating substantially as and for the purposes as herein shown and set forth.

3. The combination of the chambered case *D*, the cover *E*, the swinging frames *B* and *B'*, locking device *c d*, registering and indicating dial *h*, pendulum *o*, escapement-wheel *m*, and escapement *n*, all arranged, applied, and operating substantially as and for the purposes as herein shown and set forth.

4. The combination of the vessel *A*, the swinging clasping-frames *B B'*, the chambered case *D*, provided with registering mechanism, locking device *c d*, pouring-spout *G*, having automatic valve *s*, and filter *10*, all arranged, applied, and operating substantially as and for the purposes as herein shown and set forth.

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Witnesses:

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