D. H. JEFFERSON.

GAGING MEANS.

APPLICATION FILED SEPT. 18, 1919.

1,352,270. Patented Sept. 7, 1920.

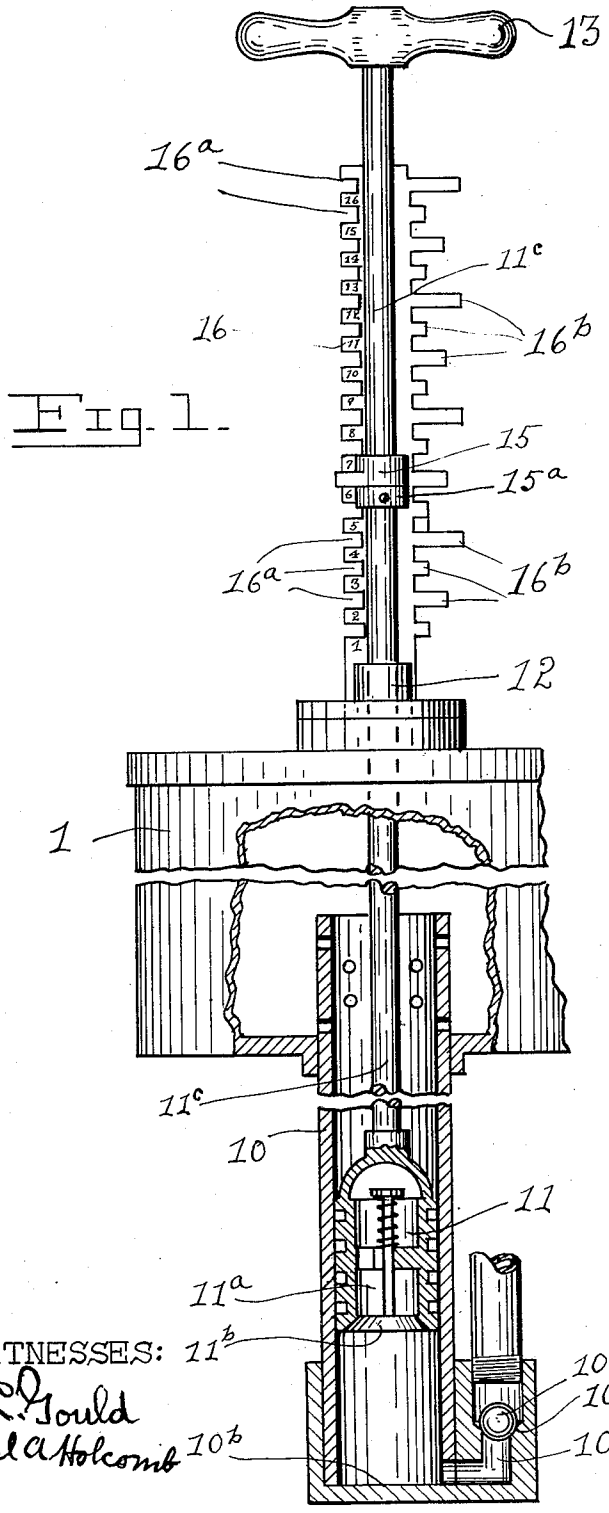


Fig. 1.

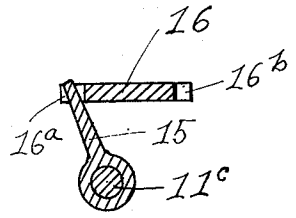


Fig. 2.

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GAGING MEANS.

1,352,270. Specification of Letters Patent. Patented Sept. 7, 1920.

Application filed September 18, 1919. Serial No. 324,287.

To all whom it may concern:

Be it known that I, DANIEL H. JEFFERSON, a subject of the King of Great Britain, residing at Los Angeles, in the county of Los Angeles and State of California, have invented new and useful Improvements in Gaging Means, of which the following is a specification.

This invention relates to gaging means and more particularly to gaging means whereby definite volumes, as of fluids, may be accurately and expeditiously gaged as for withdrawal for use from a larger volume or body of the fluid, and it has for its object to provide improved means of the character stated which will be relatively simple and inexpensive in construction and organization when facility of adjustment, positiveness and reliability and general superiority in service are considered.

One field of use for the improved gaging means is in the transfer of liquefied hydrocyanic acid or like liquids during the handling of the same in the fumigating art where the volume of the liquid (which is afterward expanded into a poisonous gas) required is proportionate to the space into which it is to be expanded; as for instance in the fumigation of fruit trees and the like, a tent is placed over the tree to be fumigated, and after estimation of the cubical space within the tent, the required volume of liquid to be introduced thereunder is measured by means of the gaging means.

The invention is likewise disclosed in Letters Patent of the United States Number 1,300,170, granted to me the 8th day of April, 1919, for gasifying apparatus, in which Letters Patent the same is disclosed in connection with further apparatus.

With the above and other objects in view, the invention consists in the novel and useful provision, formation, construction, combination and relative arrangement of parts, members and features, all as hereinafter described, shown in the drawings, and finally pointed out in claims.

In the drawing:

Figure 1 is a front elevation, partly in section, of gaging means constructed, organized and applied in accordance with the invention; and

Fig. 2 is a transverse sectional view taken on the line x^2—x^2, Fig. 1.

Corresponding parts in both the figures are designated by the same reference characters.

Referring with particularity to the drawing, in the embodiment of the invention shown therein, 1 designates a tank or receiving receptacle, fragmentarily shown, for the liquid to be dispensed, 10 designates a pump or gaging cylinder having its open upper end in communication with the interior of the tank 1; 11 designates a piston in the gaging cylinder 10, 11^c designates a piston rod, and 15 and 16 designate, respectively, an adjustable gaging stop and means to receive the stop in various positions of adjustment.

The gaging cylinder 10 terminates at its lower end in a head 10^b provided with a discharge duct 10^c in which a check valve 10^d is disposed, a seat 10^e being provided for such check valve. The piston 11 is fitted into the cylinder 10 and has an inlet duct 11^a passing therethrough in which duct a check valve 11^b is provided. The piston rod 11^c is connected at its lower end to the piston 11 and extends therefrom through the tank 1, passing out through the upper head of the tank through a suitable stuffing box or packing device 12 and is provided with a handle 13 at its upper end. Below the handle 13 and above the tank 1 the piston rod 11^c is provided with the gaging stop shown as the adjustable finger 15 which is slidably mounted upon the rod 11^c. A collar 15^a is secured to the rod 11^c at a point beneath the finger and such collar is adapted to contact with the finger when the piston rod is raised. The means 16 is shown as a vertical plate secured to the top of the tank 1 and ranging parallel to the piston rod. The plate is notched at one of its edges as at 16^a and has a series of alternating long and short pins or prongs 16^b at its other edge, one of the pins 16^b being opposite each notch 16^c. These pins 16^c enable an operator to locate the desired opposite notch 16^a at night, as fumigating work in orchards is usually carried on at night. The notches are numbered as by providing suitable indicia on the plate 16, which indicia may read in terms of liquid volume or cubic contents of the tents, as the case may be.

In operation, the operator may either read the indicia, or when working in the dark, feel along the long and short pins to locate the notch desired to determine the proper

volume of piston displacement to allow a charge corresponding to the size of the tent under which the charge is to be placed to be inducted to the space in the cylinder below the piston.

It will be understood that when the proper notch has been selected the operator swings the finger 15 into such notch and the finger will limit the upward travel of the piston during induction, as the collar 15^a will strike the finger 15 when the piston is moved upwardly by means of the handle 13, so limiting the amount of the charge of liquid. Upon downward movement of the piston to the bottom of the gaging cylinder, the correct charge of the liquid will be ejected from the pump past the check valve 10^a.

Having thus disclosed my invention, I claim and desire to secure by Letters Patent:

1. Gaging means of the character disclosed comprising a plate having a series of notches, a stop adapted to be moved into any one of the notches, a movable gage member having a portion adapted to engage said stop, and a series of projecting indicating members arranged to correspond to the notches and whereby one of the notches may be selected in the dark by feeling along the projections.

2. Gaging means of the character disclosed comprising a member having a series of stop-receiving openings, a stop adapted to be received in any one of said openings, a gaging member having a portion adapted for contact with said stop and whereby the travel of said gaging member is limited, and a series of means whereby an operator may by feeling along the same locate the required stop-receiving opening.

3. Gaging means comprising a slidable rod, a stop member slidable along said rod, an indicating member having means for coaction with said stop member whereby the same may be held in a plurality of positions of adjustment, and means for indicating the position of adjustment of said stop member; said rod having a portion adapted for contact with said stop member.

4. Gaging means comprising a movable member, adjustable stop means on said member, and an indicating member adapted to receive and position said stop means in a plurality of positions of adjustment; there being means whereby said movable member is limited in its travel by said stop means.

In testimony whereof, I have signed my name to this specification in the presence of two subscribing witnesses.

DANIEL H. JEFFERSON.

Witnesses:

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