No. 637,672.

Patented Nov. 21, 1899.

L. A. SCHOLZ.

MEASURING FAUCET.

(Application filed Dec. 31, 1898.)

(No Model.)

2 Sheets—Sheet 1.

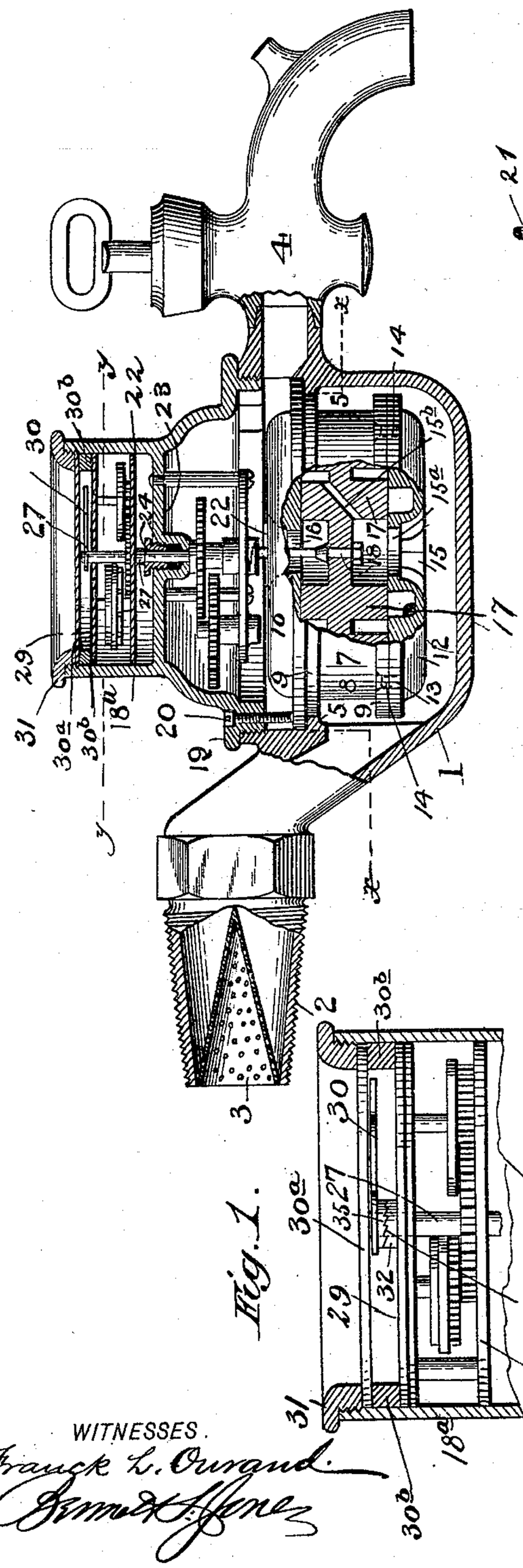

Fig. 1.

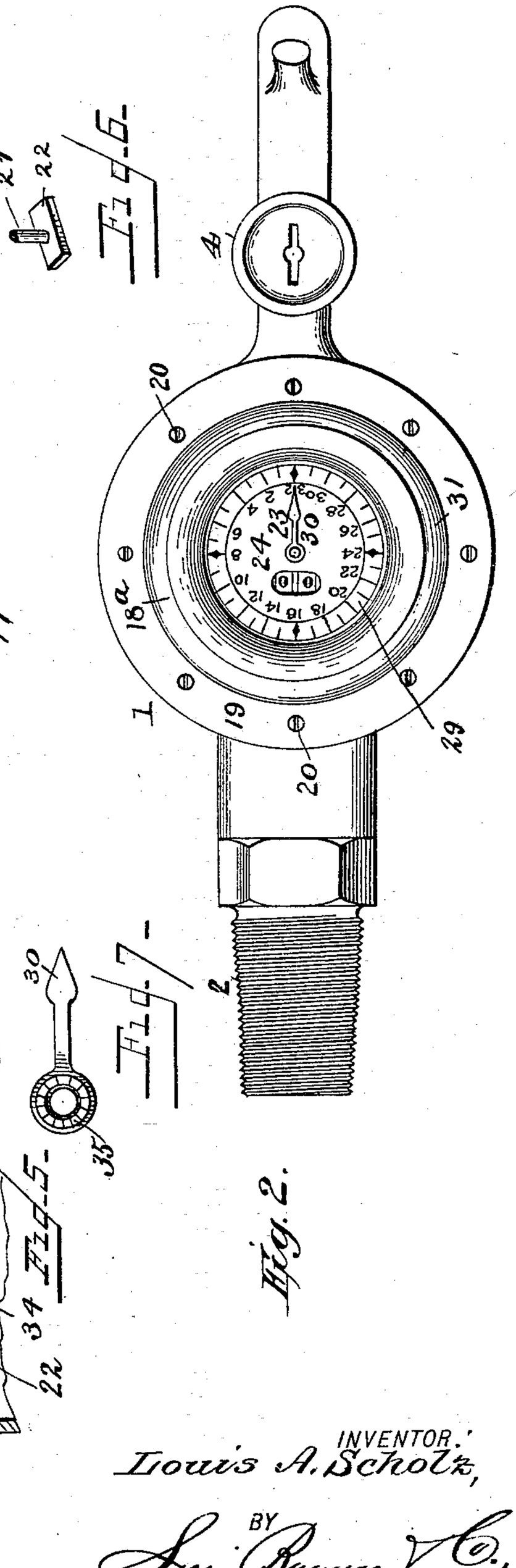

Fig. 2.

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Fig. 4.

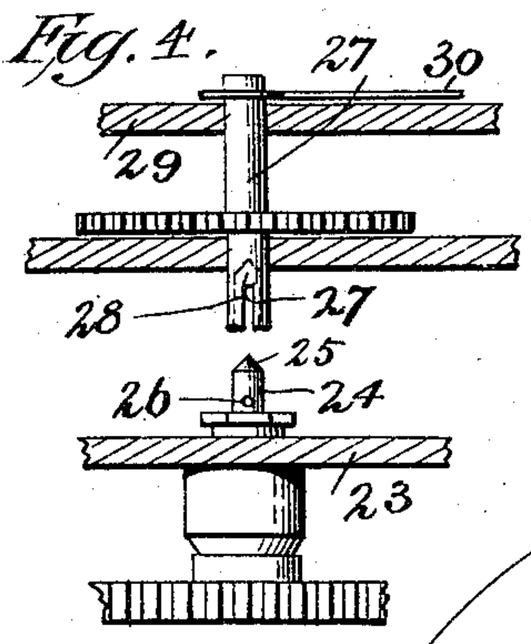
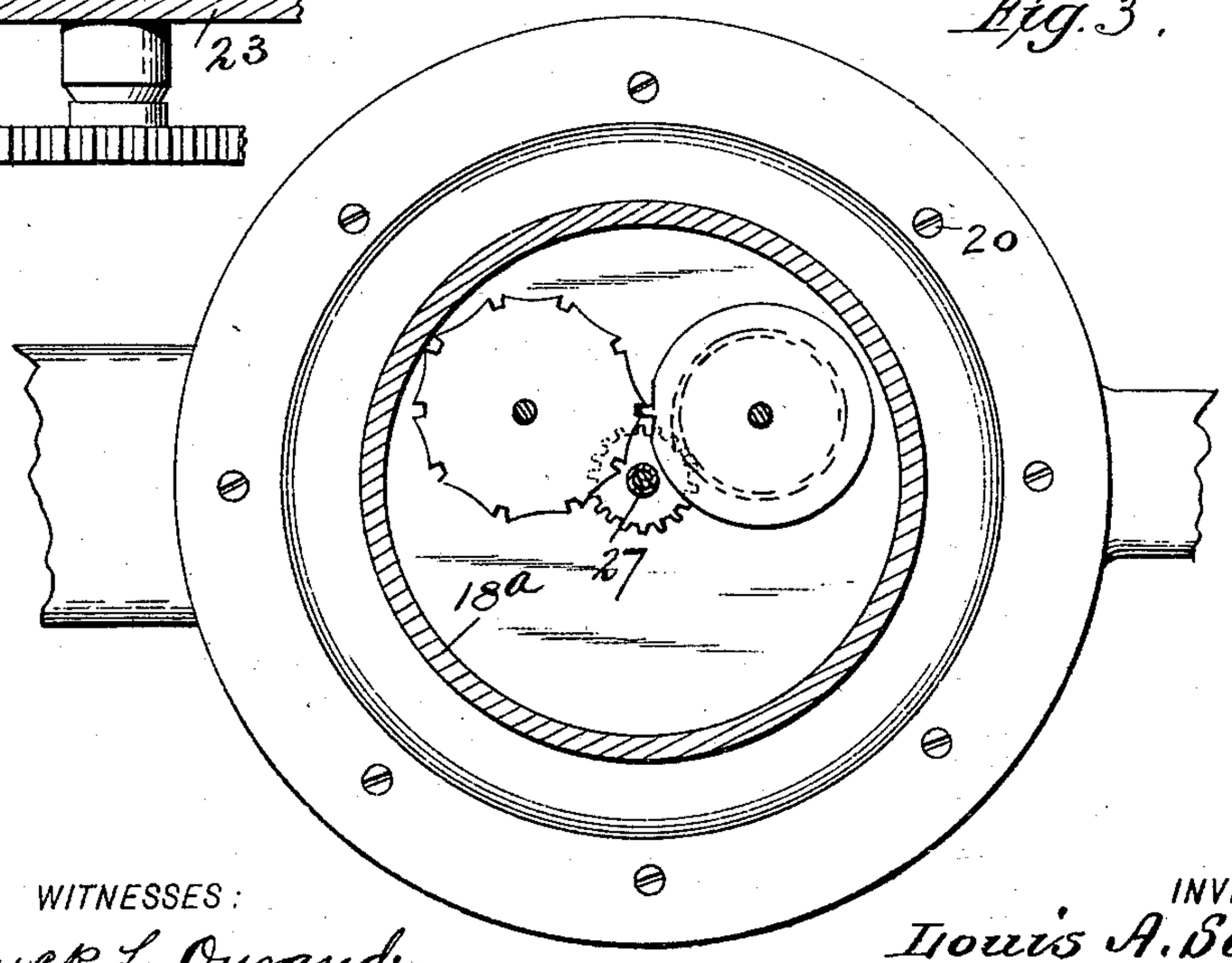


Fig. 3.



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UNITED STATES PATENT OFFICE.

LOUIS A. SCHOLZ, OF ROANOKE, VIRGINIA, ASSIGNOR OF ONE-HALF TO HENRY SCHOLZ, OF SAME PLACE.

MEASURING-FAUCET.

SPECIFICATION forming part of Letters Patent No. 637,672, dated November 21, 1899.

Application filed December 31, 1898. Serial No. 700,830. (No model.)

To all whom it may concern:

Be it known that I, LOUIS A. SCHOLZ, a citizen of the United States, residing at Roanoke, in the county of Roanoke and State of Virginia, have invented new and useful Improvements in Measuring-Faucets, of which the following is a specification.

My invention relates to measuring-faucets adapted more especially for the use of retail liquor dealers and by which the contents of a barrel or cask are automatically and accurately measured and registered as they are withdrawn, thereby not only serving as a check upon dishonest employees, but also enabling the proprietor to quickly ascertain at any time how much liquor remains in the barrel or cask.

The object of the invention is to provide an improved construction of such faucet which shall present superior advantages with respect to efficiency in use.

The invention consists in the novel construction and combination of parts hereinafter fully described and claimed.

In the accompanying drawings, Figure 1 is a central longitudinal section of a measuring-faucet constructed in accordance with my invention. Fig. 2 is a plan view thereof. Fig. 3 is a horizontal section on the line *y y* of Fig. 1. Fig. 4 is a detail view of the shaft and seat. Fig. 5 is a sectional view of a modification of the meter. Fig. 6 is a detail perspective view of a shaft, with its lug, of the lower gear of the registering-train, more fully described hereinafter. Fig. 7 is an inverted view of the pointer or hand of the register.

In the said drawings the reference-numeral 1 designates the cylindrical body of the faucet provided with a tapering screw-threaded tube or pipe 2, adapted to be engaged with a hole in a cask or barrel. This pipe communicates with the body 1, at the lower end of the latter, and is provided with a conical filter 3. Diametrically opposite this tube or pipe is a stop-cock 4 of any ordinary or suitable construction. The upper end of the body is formed with interior screw-threads to receive the correspondingly-formed end of a registering-mechanism case, hereinafter described. Formed in the inner surface of said body is a circular flange 5, upon which rests the upper head-flange of the casing of a rotary water-wheel 7, so as to make a tight joint. This casing comprises the rim 8, provided with flanges 9 at the upper and lower ends and with a top or head 10 and a bottom 12, provided with flanges 13, which are secured to the flanges 9 by screws 14. Formed centrally in the head 10 and bottom 12 are holes 15 and 16, respectively, for the passage of the liquor from the cask or barrel.

The numeral 17 designates a rotary wheel of any ordinary or suitable construction provided with a shaft 18, which revolves in a circle concentric with the center of the head 10. The opening 15 in the bottom of said wheel communicates with a passage 15^a, which in turn communicates with a passage 15^b, leading to the periphery of the wheel. This water-wheel, however, may be of any of the ordinary constructions in common use and forms no part of the present invention.

The numeral 18^a designates the registering-mechanism casing, which is screw-threaded and engages with the body and is provided with a flange 19. Passing through this flange are a number of screws 20, the inner ends of which bear upon the head-flange of the rotary wheel and hold it securely down on the flange 5, so as to make a liquid-tight joint.

The numeral 21 designates a central shaft connected with the lower gear of the registering-train and at its lower end is provided with a rectangular bar or lug 22, which is struck by the shaft 18 of the rotary wheel when the latter is rotated so as to rotate the registering-train.

The numeral 24 designates a shaft connected with the upper gear of the registering-train, passing through a partition 23, and having its upper end made conical, as seen at 25. This shaft is provided with a pin 26, passing therethrough. The conical end of the shaft engages with a corresponding recess in the lower end of a shaft 27, formed with opposite slots 28, with which the said pin engages. This shaft drives the registering-gear, which may be of any ordinary or suitable construction and is carried by a casing located above said partition. This shaft 27 passes through a dial 29, located on said casing, divided in the present instance into thirty-two points by means

of radial lines and at the upper end is provided with a hand or pointer 30. A glass plate 30[a] bears upon the upper end of said shaft and is held in place by a screw-ring 31. A ring 30[b] is interposed between the glass 30[a] and the dial 29.

For the purpose of preventing backward movement of the registering mechanism by parties turning the hand or pointer backward I provide the shaft 27 (see Fig. 6) with a collar 32, having a number of ratchet-teeth 34 on its upper face. The hub of the pointer is formed with corresponding teeth 35 on its under side, so that as the shaft is turned through the medium of the rotary wheel and connections the hand will also be turned; but if the ring and glass plate be removed and the pointer turned backward its teeth will ride over the teeth of the collar, and consequently will not rotate the shaft 27. The casing of the registering mechanism is provided with an opening through which the registering-wheel denoting the amount of liquid withdrawn can be viewed.

By means of the connections between shafts 24 and 27, constructed as described, the stuffing-box through which the former shaft passes can be dispensed with, as the pressure of the liquid will force the hub of the upper gear of the registering-train tightly against the partition 23, so as to make a liquid-tight joint.

The operation is as follows: The faucet is connected with a cask or barrel and the liquor therefrom will pass into the wheel through the hole 15 in the bottom and from thence through the passages 15[a] and 15[b] to the periphery of the wheel, causing the latter to be rotated in a manner well understood by those skilled in the art to which the invention pertains. The liquor will now escape through an opening (not shown) in the upper part of the casing to the outlet.

I prefer to so proportion the registering mechanism that for each revolution of the rotary wheel the hand or pointer will be moved the one thirty-second part around the dial, the turbine being arranged to measure one-half pint at each revolution. Each time the pointer has traveled once around the dial a gallon will have been withdrawn from the cask or barrel and registered by the registering mechanism.

Having thus fully described my invention, what I claim is—

1. In a measuring-faucet, the combination with the body formed with screw-threads at the upper end and with a circular interior flange and with inlet and outlet passages, of the water-wheel located in said body having a flange at the upper end and the registering-mechanism casing formed with a peripheral flange and the set-screws passing therethrough and abutting against the flange of the water-wheel casing, substantially as described.

2. In a measuring-faucet, the combination with the body formed with screw-threads at the upper end and with a circular interior flange and with inlet and outlet passages, of the water-wheel casing located in said body having a flange at the upper end, the water-wheel located in said casing, the shaft thereof, and the registering mechanism, the shaft of which is provided with an arm with which the driving-shaft of the water-wheel is adapted to engage, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

LOUIS A. SCHOLZ.

Witnesses:
AUGUST PETERSON,
BENNETT S. JONES.