

(No Model.)

C. SKINNER.
MEASURING FAUCET.

No. 424,691.

Patented Apr. 1, 1890.

Fig. 1.

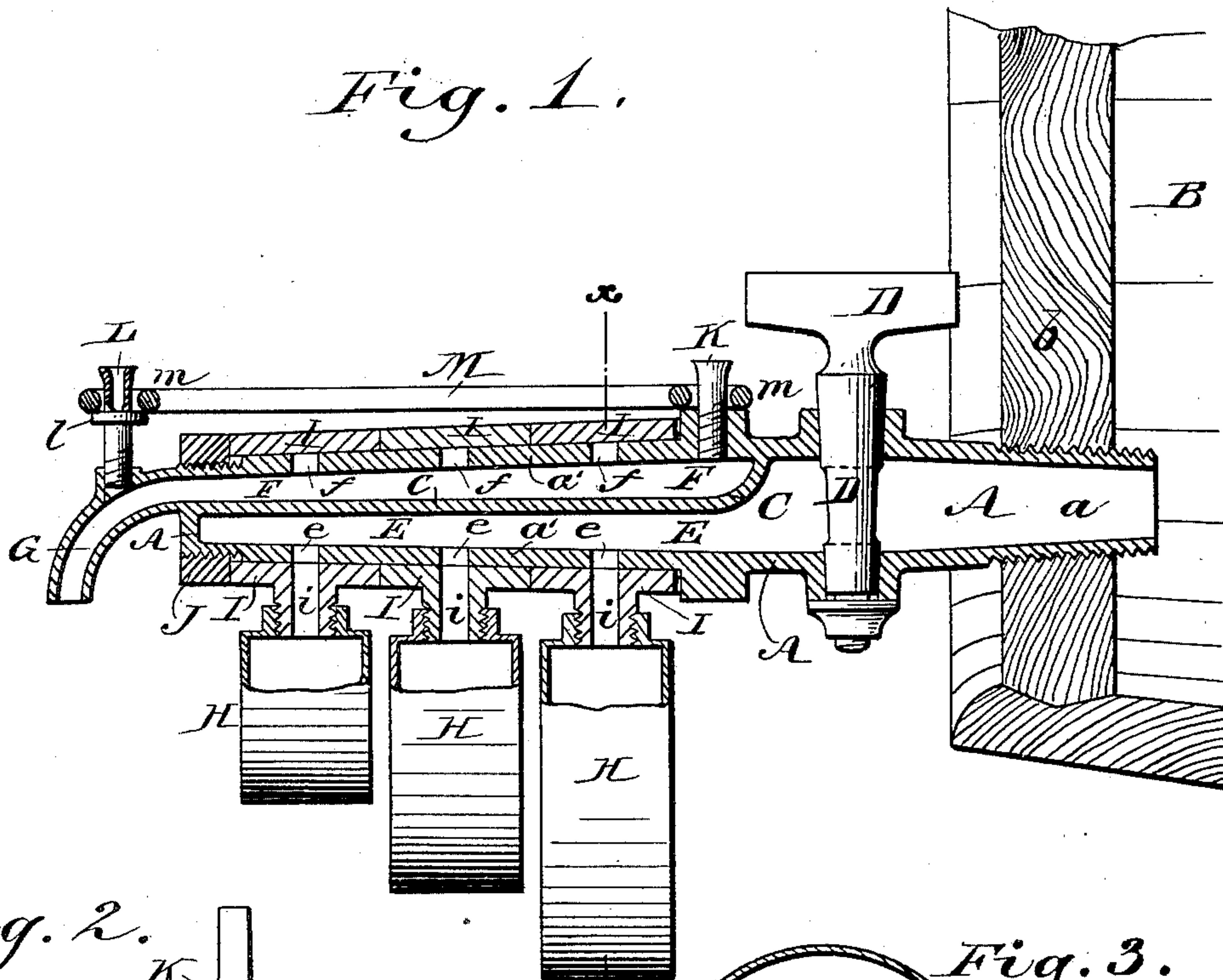


Fig. 2.

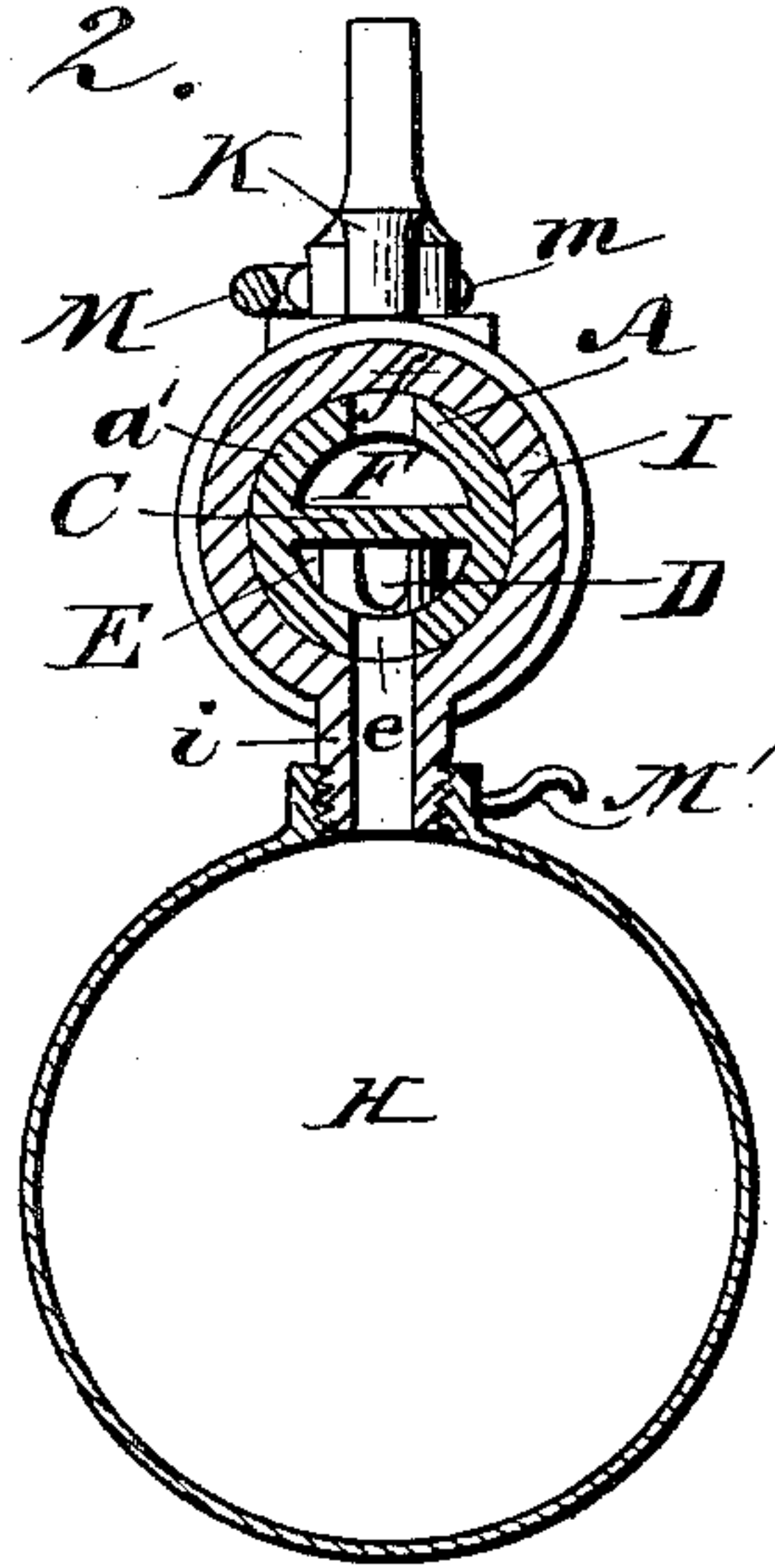


Fig. 3.

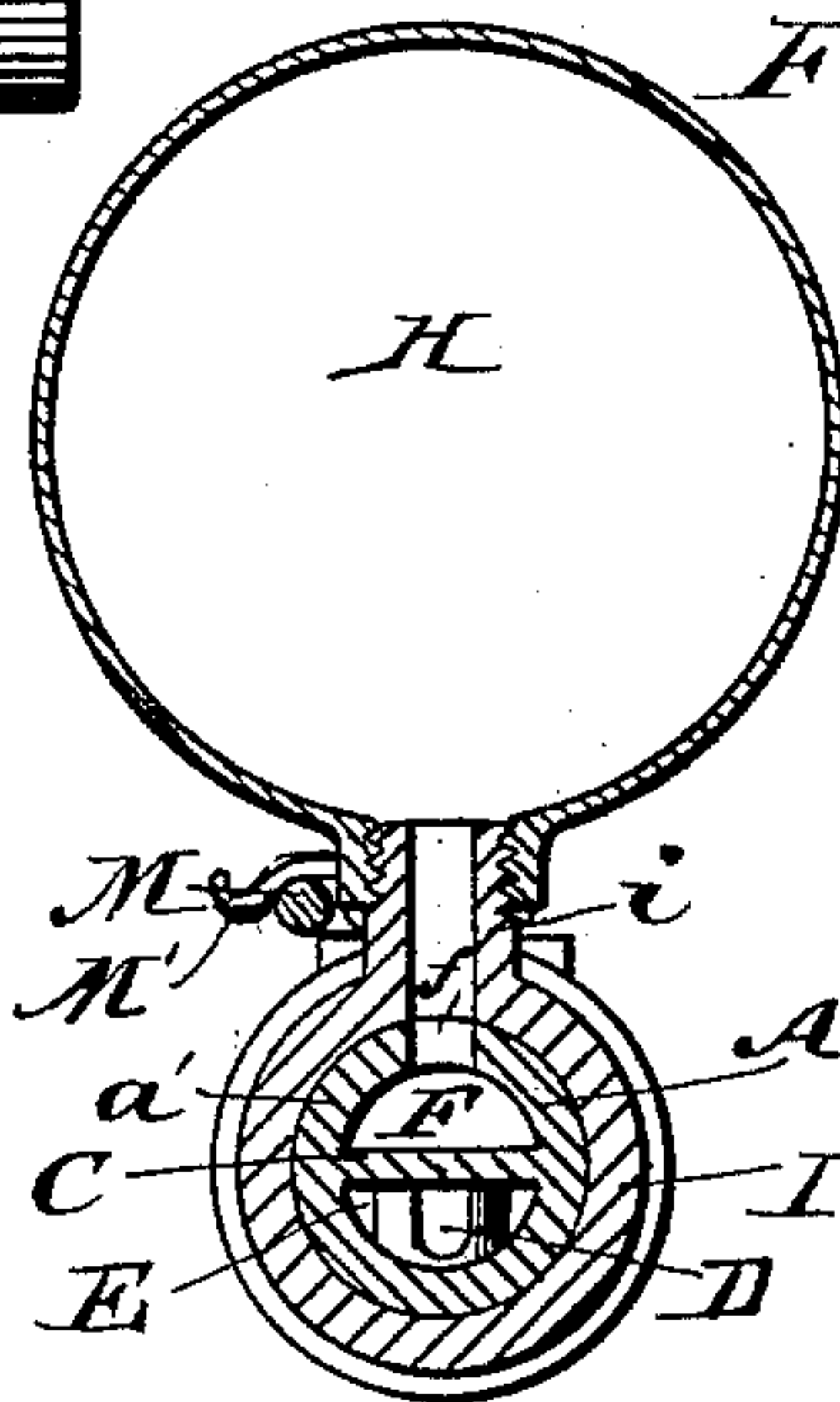
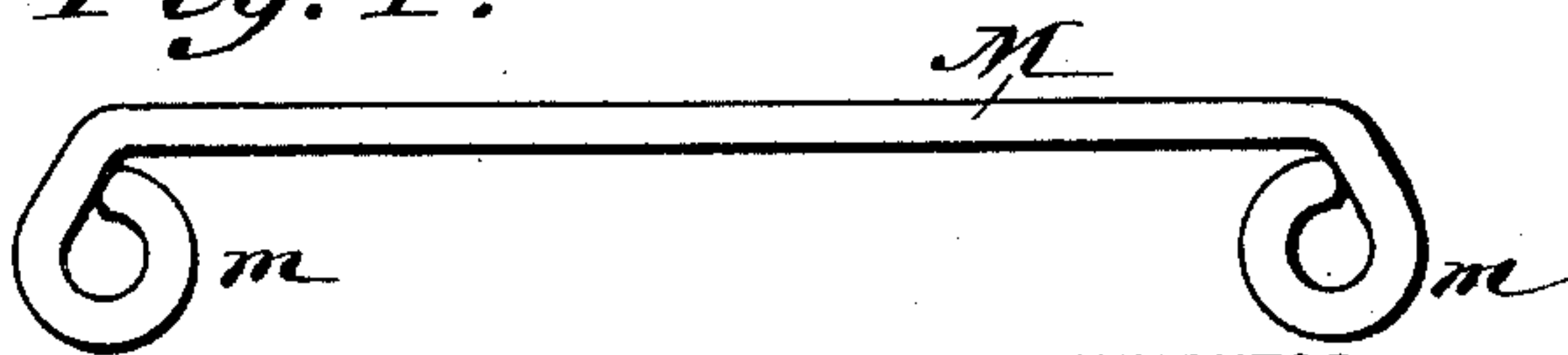


Fig. 4.



WITNESSES:

John H. Deemer
C. Sedgwick

INVENTOR:

C. Skinner

BY

Munn & Co.
ATTORNEYS

UNITED STATES PATENT OFFICE.

CHARLES SKINNER, OF PEARSALL'S, NEW YORK.

MEASURING-FAUCET.

SPECIFICATION forming part of Letters Patent No. 424,691, dated April 1, 1890.

Application filed January 8, 1890. Serial No. 336,237. (No model.)

To all whom it may concern:

Be it known that I, CHARLES SKINNER, of Pearsall's, in the county of Queens and State of New York, have invented a new and Improved Self-Measuring Faucet, of which the following is a full, clear, and exact description.

My invention relates to a self-measuring faucet device adapted to automatically draw and measure different quantities of fluid from a barrel or other reservoir, and has for its object to provide a simple, inexpensive, and efficient faucet of this character.

The invention consists in certain novel features of construction and combinations of parts of the self-measuring faucet, all as hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a longitudinal vertical sectional elevation of my improved self-measuring faucet and a portion of a barrel or other reservoir to which it is attached for drawing off its contents. Fig. 2 is a transverse vertical sectional view taken on the line *xx* in Fig. 1, and shows the measuring-vessel in normal pendent position for being filled from the spigot of the faucet. Fig. 3 is a like view, but with the measuring-vessel raised for emptying it from the faucet; and Fig. 4 is a detail plan view of the rod or wire stop to the raised measuring-vessels.

The faucet is made with a main body or spigot portion A, which has a tapered screw-threaded inner end *a*, adapted to enter and sustain the whole faucet structure from the head *b* of a barrel B or other reservoir from which a fluid—such as oil, molasses, or paints—is to be drawn off as required for sale or use.

Within the hollow spigot A is a longitudinal and preferably horizontal partition C, which divides the outer part of the spigot in front of its plug-valve D into lower and upper chambers E F, respectively. The lower chamber E is closed at the outer end of the spigot and communicates with the interior of the barrel or reservoir when the valve D is open, and the upper chamber F, which is cut off by the partition C from the chamber E

and the barrel, communicates with a suitable end spout G, preferably cast with the spigot, and from which the liquid is discharged from any one of a series of measuring-vessels H in a manner presently explained. These measuring-vessels may have any desired form and the same or different capacities, and may be made of any approved material, and their number may vary as the requirements demand. The drawings show three sheet-metal vessels H, each of which is detachably secured or connected to the hollow nipple *i* of a coupling or sleeve I, which is fitted for rotation or partial rotation upon the outer part *a'* of the spigot, which is preferably made tapering to allow the entire series of sleeve-couplings I to be set or forced up to maintain perfectly fluid-tight joints between them and the spigot by means of a nut J, which is fitted upon the screw-threaded end of the spigot outside the outermost coupling. Packings of any suitable character may be slipped onto the spigot between the couplings, which, however, may abut each other, as shown in Fig. 1 of the drawings. A series of holes *e*, made through the bottom wall of the spigot, establish communication between the spigot-chamber E, through the coupling-nipples *i*, and the interior of the pendent measuring-vessels H, and a diametrically-opposite series of holes *f*, made in the upper wall of the spigot, open communication between the spigot-chamber F and any one or more of the measuring-vessels which may be turned bottom upward above the spigot.

I provide the spigot with a vent-tube K, which opens into the rear end of the upper spigot-chamber F, to assure free outflow of the contents of any one of the upturned measuring-vessels H, and especially the innermost vessel. I also prefer to employ an additional or auxiliary vent-tube L, which is fitted into the spout G and admits air thereto to assure a most free or unbroken, steady, and even discharge of the contents of the spigot-chamber F, allowing a narrow-necked bottle or vessel to be easily filled from the spout without spilling the liquid. I also provide a stop to sustain the vessels H in uppermost position for discharging their contents into the spigot-chamber F. This stop pref-

erably consists of a wire or rod M, which may be held to the spigot in any preferred way, so as to form a stop to any one or all of the upturned measuring - vessels. I prefer, however, to provide eyes or loops *m m*, at opposite ends of the stop-rod and slip these eyes onto the two vent-tubes K L of the spigot, as shown in Fig. 1 of the drawings. The tube L is preferably provided with a pin or collar *l*, which holds the stop-rod M level, or nearly so. The central portion of the stop-rod is bent or set off to one side of the eyes *m m*, to allow the necks of the measuring-vessels or their couplings to strike and stop against it when the vessels are swung up to or a little past vertical position above the spigot.

The operation of my improvement is very simple and effective, as follows: When the measuring-vessels H are pendent from the spigot, as shown in Figs. 1 and 2 of the drawings, and the plug or other valve D is open, the fluid contents of the barrel or reservoir B will enter the spigot-chamber E and the fluid will flow through the holes *e* and the coupling-nipples *i* into the measuring-vessels H and fill said vessels. The three vessels shown may be supposed to contain a quart, pint, and half-pint, respectively, the inner one being the largest, although this order may be reversed. If a quart of the fluid—say oil or molasses—is required, the innermost vessel H will simply be turned up and around as its coupling or sleeve I turns on the spigot A and until it strikes the stop M, at which time the bore of the nipple *i* will coincide with the hole *f* and allow the fluid contents of the vessel to flow into the spigot-chamber F, and thence out through the spout G of the faucet into any suitable vessel placed below to receive it. While the vessel H is emptying into the chamber F its coupling I will close the outlet *e* of the chamber E, through which this vessel had been filled; hence no leakage or waste can occur. When the emptied upturned vessel is again swung around below the spigot, it will again fill from the chamber E, as at first, ready to discharge another quart of fluid the next time it is swung around above the spigot. Any one of the vessels H may be emptied through the chamber F and spout G by turning it upward in the manner above described. The plug-valve D should be closed over night or during long intervals between use of the faucet, to take the pressure of the fluid in the barrel or reservoir off of the measuring-vessels and their sleeve-couplings which hold them to the faucet-spigot, and if there should be leakage past the closed valve it would pass into one of the vessels H, which would have been emptied and turned down after the valve D was closed; hence waste from leakage in this way is effectually obviated. Should it be desired to draw the fluid directly from the spigot without using one of the series of measuring-vessels H, this may be done by turning all but one of said vessels or their sleeve-coupling upward and leaving the other vessel

suspended or hanging downward, and on removing this vessel from its coupling the fluid will, when the plug-valve D is open, flow freely and directly from the nipple *i* of the coupling, as will be readily understood.

In order to prevent any possibility of accidental displacement of the measuring-vessels when upturned, I preferably attach to each vessel a catch M', of spring-wire, (shown in Figs. 2 and 3,) which as the vessel is turned up against the stop M will snap thereover and serve to lock the vessel in place.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. In a self-measuring faucet, the combination, with a spigot formed with two independent chambers having lateral outlets, one chamber communicating with the spigot-inlet and the other with its outlet, of a series of apertured couplings revoluble on the spigot and adapted to communicate with either chamber of the spigot, and a series of measuring-vessels connected to the couplings, substantially as herein set forth.

2. In a self-measuring faucet, the combination, with a spigot formed with two independent chambers having lateral outlets, one chamber communicating with the spigot-inlet and the other with its outlet, of a series of apertured couplings revoluble on the spigot and adapted to communicate with either chamber of the spigot, a series of measuring-vessels connected to the couplings, and a valve or cut-off in the spigot between its main inlet and its outlets to the measuring-vessels, substantially as herein set forth.

3. In a self-measuring faucet, the combination, with a spigot formed with two independent chambers having lateral outlets, one chamber communicating with the spigot-inlet and the other with its outlet, of a series of apertured couplings revoluble on a tapering part of the spigot and adapted to communicate with either chamber of the spigot, means for holding the couplings on the spigot and taking up wear of joints, and a series of measuring-vessels connected to the couplings, substantially as herein set forth.

4. In a self-measuring faucet, the combination, with a spigot formed with two independent chambers having lateral outlets, one chamber communicating with the spigot-inlet and the other with its outlet, of a series of apertured couplings revoluble on the spigot and adapted to communicate with either chamber thereof, a series of measuring-vessels connected to the couplings, and a vent communicating with the inner part of the spigot-outlet chamber behind the inlet thereto of the innermost measuring-vessel, substantially as herein set forth.

5. In a self-measuring faucet, the combination, with a spigot formed with two independent chambers having lateral outlets, one chamber communicating with the spigot-inlet and the other with its outlet, of a series of aper-

5 tured couplings revoluble on the spigot and adapted to communicate with either chamber thereof, a series of measuring-vessels connected to the couplings, a vent communicating with the inner part of the spigot-outlet chamber behind the inlet thereto of the innermost measuring-vessel, and a vent communicating with the outlet or spout of the faucet, substantially as herein set forth.

10 6. In a self-measuring faucet, the combination, with a spigot formed with two independent chambers having lateral outlets, one chamber communicating with the spigot-inlet and the other with its outlet, of a series of apertured couplings revoluble on the spigot and adapted to communicate with either chamber thereof, a series of measuring-vessels connected to the couplings, a vent communicating with the inner part of the spigot-outlet chamber behind the inlet thereto of the innermost measuring-vessel, a vent communicating with the outlet or spout of the faucet, and a stop-rod for the upturned measuring-vessels, having eyes or loops adapted to the vents, substantially as herein set forth.

25 7. In a self-measuring faucet, the combination, with a spigot formed with two independent chambers having lateral outlets, one chamber communicating with the inlet of the faucet and the other communicating with its outlet, of a series of apertured couplings revoluble on the spigot and adapted to communicate

with either chamber of the faucet and a series of measuring-vessels connected to the couplings, one or more of said vessels being removable, substantially as described, whereby when all but one of said vessels are turned upward and the pendent vessel is removed a liquid may flow directly through its coupling, as herein set forth.

40 8. In a self-measuring faucet, the combination, with a spigot A, having a partition C, forming interior chambers E F, having outlets *e f*, and also provided with a valve D, of a series of couplings I, having openings and fitted revolubly on the spigot, a retaining-nut J on the spigot, and a series of measuring-vessels H, connected to the couplings, substantially as herein set forth.

50 9. In a self-measuring faucet, the combination, with a spigot A, having a partition C, forming interior chambers E F, having outlets *e f*, and also provided with a valve D, a spout G, and two vents K L, of a series of couplings I, fitted revolubly on the spigot, a retainer for the couplings, a series of measuring-vessels H, connected to the couplings, and a stop-rod M, having eyes *m m*, fitting the vents K L, substantially as herein set forth.

CHARLES SKINNER.

Witnesses:

THOMAS B. SEAMAN,
A. H. OSBORN.