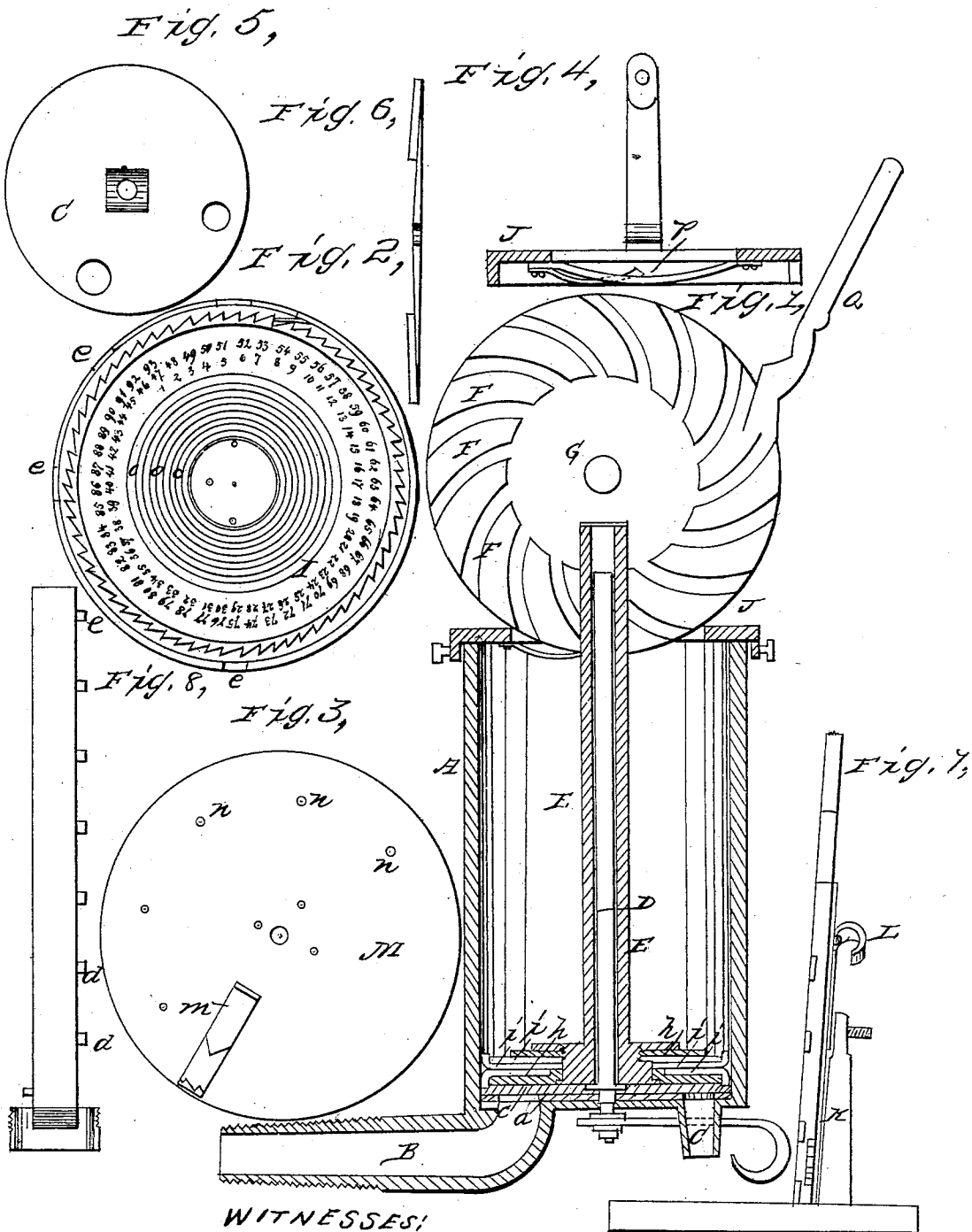


SMITH & GRIFFIN.
Measuring Faucet.

No. 24,498.

Patented June 21, 1859.



WITNESSES:

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G. B. GRIFFIN, OF MADISON, WISCONSIN, AND JOS. SMITH, OF CINCINNATI, OHIO.

MEASURING-FAUCET.

Specification of Letters Patent No. 24,498, dated June 21, 1859.

To all whom it may concern:

Be it known that we, G. B. GRIFFIN, of Madison, in the State of Wisconsin, and JOSEPH SMITH, of Cincinnati, Ohio, have invented certain new and useful Improvements in Measuring-Faucets; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings and to the letters of reference marked thereon.

The nature of our invention consists in employing and arranging the several parts of faucet in the manner hereinafter described.

In the annexed drawings, A, represents a cylinder which is cast open at one end and with a head at the other, two pipes being cast in said bottom and represented by B, and C.

a represents a piece of leather packing which is secured in the bottom of the cylinder and is provided with two holes, to correspond with the holes in the two pipes B, and C. *c*, represents a metallic disk which also fits snugly in the bottom of the cylinder upon the leather packing; it is also provided with two holes to correspond with the two pipes, said disk being clearly shown in the drawings. This disk *c*, is secured firmly to a square shaft D, which stands in the center of the cylinder. Shaft D, runs through the bottom of the cylinder, fit closely in it, and is provided with a lever at its lower end for the purpose of operating said shaft.

E, represents a sleeve which passes over the square shaft D, from one end to the other. To the lower end of the sleeve E, is a plate *h*, which is made annular and somewhat smaller than the cylinder. Upon this plate are two pieces of packing, and above the packing is a plate and a nut and screw to confine the plates and packing in proper position. Thus a piston head is formed which plays up and down in the cylinder A. The sleeve E, is provided on one side, as will be seen, with a row of pins marked *d*, *d*. These pins may be placed from half an inch to an inch apart.

G, represents a wheel one face of which is provided with a series of curved grooves, said grooves being about as far apart at the periphery of the wheel as the pins are distant from each other, but they approach each other some as they run toward the center. Said grooves are made in a flange

on the face of the wheel, the width of which is about one-fourth of the radius of the said wheel. When the wheel G turns the pins on the sleeve enter the grooves F, F, one after another and being urged toward the center by the cam sides of the grooves the sleeve E, is raised and with it the head formed by the several parts which have been described. On the opposite face of wheel G, is secured a plate H in such a manner that it will revolve when desired. On the periphery of this plate wheel is formed a ratchet wheel, as will be seen in Fig. 2. On one face of said wheel H, an index I, is made and also a spiral groove marked *o*, *o*, *o*. A plate M, covers the wheel H, and the two wheels G, and H, and the plate M, are all secured by means of a screw to a standard K secured to the top J.

m, represents a pointer which slides in a dovetail groove in the plate M, said pointer being provided with a small pin on its inner side, which plays in the spiral groove *o*, *o*, *o*, and when the the wheels turn around the groove works the pointer outward and it points to the figures on the index and keeps a register of the quantity measured by the faucet. The plate M, is provided, as will be seen with pins *n*, *n*, *n*, on its outward face. These pins are for the purpose of stopping the hand L, which is also secured on the same screw which attaches the wheels to the standard. When the wheels are secured on the top J, they are let down about the quarter of an inch into a groove in said top.

p, represents a ratchet which is secured to the under side of the top J, and which catches into the ratchet wheel and turns it when necessary. There are slots in the periphery of the wheel G, at stated distances apart, and as the said wheel revolves the ratchet slips in through these slots to the ratchet wheel and turns it just as far as the slot is long.

The pins *n*, *n*, *n*, designate, in measuring, half pints. By turning the wheels the distance from one pin to the other one half pint is measured; by turning them the distance of two pins a pint is measured, and so any particular amount or quantity may be measured, according to the capacity of the cylinder A.

In the operation of this faucet, the parts being all properly adjusted and secured together, the pipe B, is driven or secured

into the hole in the barrel or cask. The hand L, is then set at that pin which designates the quantity which it is desired to draw. Then by bearing upon the handle Q so as to turn the wheel G, the sleeve and consequently the head attached to its lower end are raised in the cylinder A, and the packing on the head fitting air tight in the cylinder the liquid from the barrel or cask is drawn into the cylinder. When the hand stops the wheel the cylinder contains the quantity which it has been set to draw. We then turn the wheel and sleeve and square shaft D and consequently the disk *c*, which is firmly attached to it, around, so that the said disk will shut the hole in the vessel and open the one leading out of the faucet into pipe C. Then by turning the wheel in an opposite direction the liquid is forced from the cylinder into the vessel which is intended to contain it.

The ratchet drives the ratchet wheel always in the same direction and there is a small pawl so placed as to catch into the teeth of the ratchet wheel and prevent its moving backward. The figures placed on

the index plate are so arranged that they always keep a correct register of the amount of liquid drawn from the barrel

Having thus fully described our invention what we claim as new and desire to secure by Letters Patent is—

1. Operating the plunger by means of the cam grooves on the face of wheel G, in connection with the pins on the sleeve when both are constructed and operated in the manner and for the purpose set forth.

2. The serrated circular register plate H, in connection with the ratchet *p*, and pointer *m*, the same being arranged and operated substantially in the manner and for the purpose specified.

3. We claim the disk *c*, constructed as described, in combination with the inlet pipe B, and the outlet pipe C, the same being used substantially in the manner and for the purpose herein fully set forth.

G. B. GRIFFIN.
JOSEPH SMITH.

Witnesses:

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