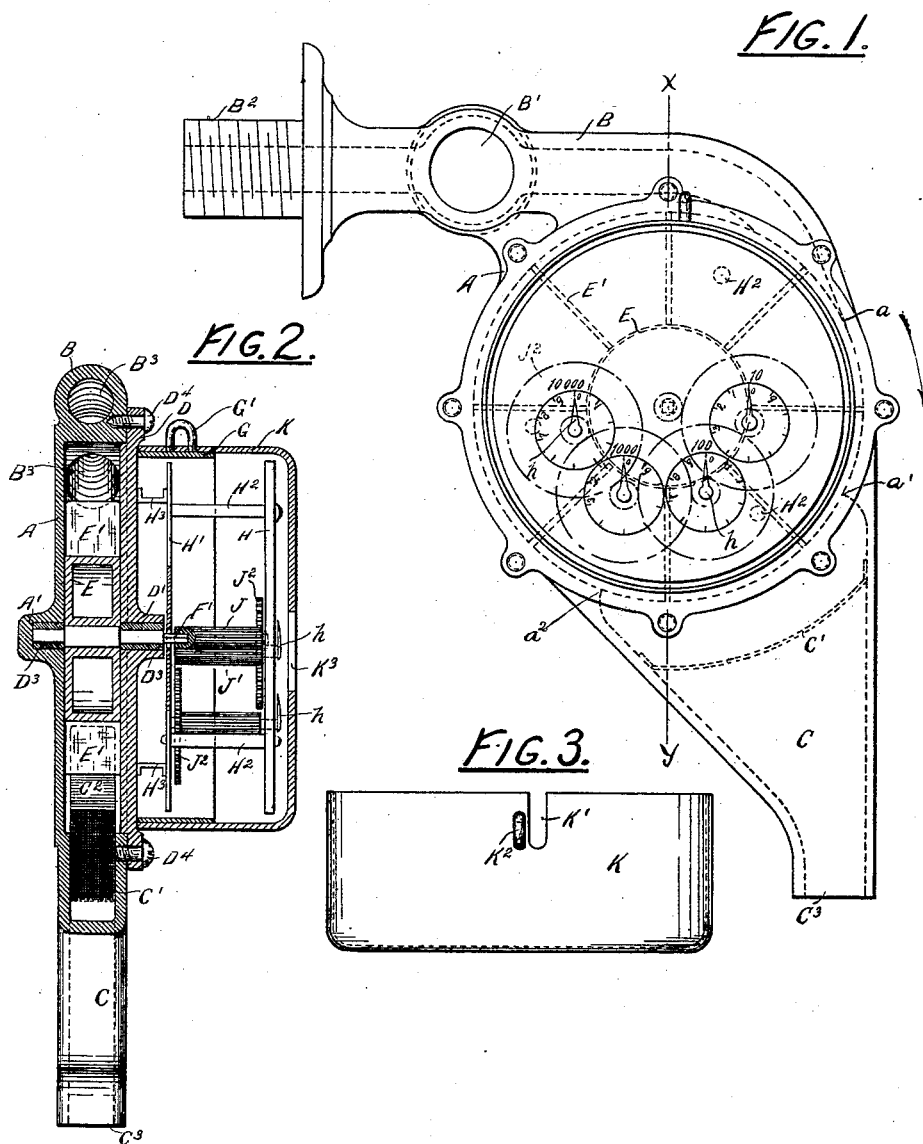


(No Model.)

F. KEISER.
MEASURING FAUCET.

No. 422,530.

Patented Mar. 4, 1890.



WITNESSES
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FLORENZ KEISER, OF POTTSTOWN, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO REUBEN RIEGNER, OF SAME PLACE.

MEASURING-FAUCET.

SPECIFICATION forming part of Letters Patent No. 422,530, dated March 4, 1890.

Application filed October 25, 1889. Serial No. 328,168. (No model.)

To all whom it may concern:

Be it known that I, FLORENZ KEISER, a citizen of the United States, residing at Pottstown, in the county of Montgomery and State of Pennsylvania, have invented certain new and useful Improvements in Measuring-Faucets; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to a form of measuring-faucet in which the passing liquid is caused to turn a wheel located in a cylindrical chamber, each revolution of which wheel permits the passage of a known quantity of the liquid and is automatically registered.

The invention consists in certain improvements in the construction and combination of the parts, as herein fully set forth, and specified in the claims.

Figure 1 is a full-face view of the complete faucet with the register-cap removed. Fig. 2 is a section through X Y of Fig. 1. Fig. 3 is a separate view of the register-cap.

The body of the faucet is a shallow cylinder A, in which is located a paddle-wheel, the paddles E' of which project from a center E toward the periphery of the cylinder-bore, while its shaft is supported and inclosed at one end in a bearing A' in the closed end of the cylinder, and the other end passes through a bearing D' in a cylinder-cover D, both of which bearings are lined with anti-friction metal D², in order to reduce the friction to a minimum. The cover is secured by screws D⁴ to the body of the faucet and when in position permits the wheel E to be freely rotated, though without unnecessary looseness. An inlet B³ opens tangentially into the cylinder vertically above an outlet C², located to one side of the center, which outlet terminates in a nozzle C³. The inlet-tube B is carried at a tangent over the top of the cylinder, and is provided with a spigot at B' to regulate the inlet-opening and terminates in a screw-thread B². The unbroken wall of cylinder between a, the edge of inlet B³, and a', the be-

ginning of outlet C², is somewhat greater than the peripheral distance between the wheel-paddles E'. The mouth of outlet C² extends slightly beyond the vertical center line of the cylinder, in order to prevent any portion of the liquid from being carried back.

The registering mechanism may be substantially the same as is used with gas-meters, consisting of a dial-plate H, connected by posts H² to a plate H' and carrying a system of pinions J J' and wheels J² on suitable shafts provided with pointers h, which will indicate the number of pints of liquid drawn up to any desired amount. This mechanism is secured to the cover D of the faucet by means of feet H³ in such a manner that the squared end F' of the projecting paddle-wheel shaft engages the center pinion J of the registering mechanism, which is thus operated by each turn of the wheel.

In order to prevent any interference with the registering medium by unauthorized parties, and yet permit ready access when necessary, a cylindrical casing G is secured to the face of the cover D and is provided with a staple G', and a cap-piece K is adapted to fit over the casing G, the slot K' permitting the staple K² on the cap to be brought on line with the staple G', when the cap may be secured by any suitable lock. If more convenient inspection of the pint-dial is desired, an opening K³ may be provided in the cap at the proper place.

In the funnel-shaped outlet C a strainer C' is placed and removed for cleaning, sufficient room being readily left between it and the bore of the cylinder for accumulation of solid matter without interfering with the proper working of the faucet.

In operating the faucet it will be noticed that the liquid-inlet being tangent to the paddles and directly above the outlet (from which communication is always cut off, however, by at least one paddle) the liquid is retained in the cylinder the shortest possible time, and its action upon the wheel is thereby made more effective and satisfactory than is otherwise possible. It is evidently not essential that the inlet-tube should be carried over the top of the cylinder, as shown.

It will be observed that I employ an inlet

which enters the cylindrical chamber vertically above a broad upwardly-flaring outlet located at the base of said chamber or casing, and that I leave an unbroken wall between
5 said inlet and outlet, which is slightly greater than the peripheral space between any two buckets. It will also be observed that I employ, in combination with the bucket-casing, a permanently-fixed annular collar G, and
10 that in combination with this collar I employ a removable cap K, which is centrally perforated to expose to view the central indicating-hand *h*. This cap being provided with a slot K' and a staple K², the staple K² and a
15 staple G' being brought in alignment when the cap K is in place on the collar G, both staples are adapted to receive through them the hasp of a padlock, by means of which the cap K can be locked to the instrument and
20 improper tampering therewith prevented.

I do not limit my invention to the form of wheel described, or in other respects to the exact construction shown; but

What I claim is—

25 1. The combination, with the removable cap and center shaft bearing plate D, of the casing of a measuring-faucet, the annular

collar G, concentric to the axis of the journal-shaft D³ and rigid with said cap-plate, the removable cap K, forming with the said collar
30 a receptacle for registering-gear, and the two bearing-disks H H', rigidly secured to the said removable plate D and provided with the stays H³, all adapted to operate substantially in the manner and for the purposes described. 35

2. The combination, with the removable cap and center shaft bearing plate D, of the casing of a measuring-faucet, the annular collar G, concentric to the axis of the journal-shaft D³ and rigid with said cap-plate, the removable cap K, forming with the said collar
40 a receptacle for registering-gear, and the two bearing-disks H H', rigidly secured to the said removable plate D and provided with the stays H³, and a bucketed wheel, all adapted to
45 operate substantially in the manner and for the purposes described.

In testimony whereof I affix my signature in presence of two witnesses.

FLORENZ KEISER.

Witnesses:

ED. A. KELLY,
F. M. BANKS.