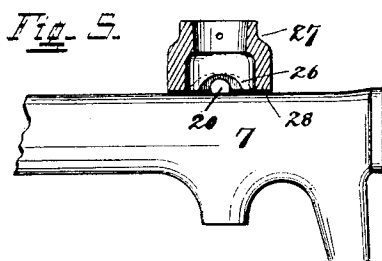
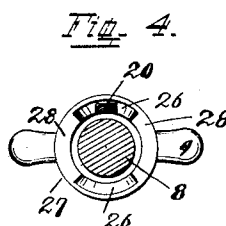
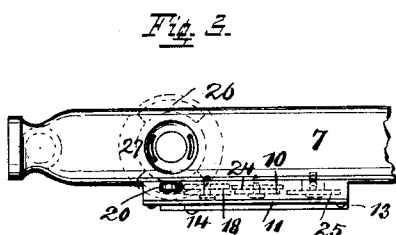
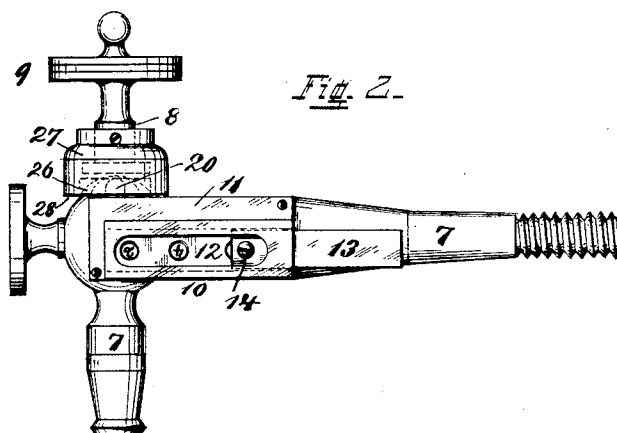
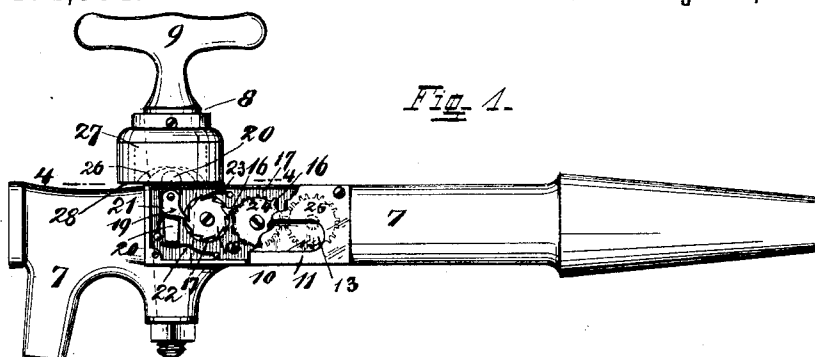


(No Model.)

A. LE G. PEIRCE & C. E. KING.
REGISTERING FAUCET.

No. 474,564.

Patented May 10, 1892.



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UNITED STATES PATENT OFFICE.

ALMY LE GRAND PEIRCE, OF GRAND RAPIDS, MICHIGAN, AND CHARLES E. KING, OF CINCINNATI, OHIO.

REGISTERING-FAUCET.

SPECIFICATION forming part of Letters Patent No. 474,564, dated May 10, 1892.

Application filed July 20, 1891. Serial No. 400,126. (No model.)

To all whom it may concern:

Be it known that we, ALMY LE GRAND PEIRCE, of Grand Rapids, Kent county, Michigan, and CHARLES E. KING, of Cincinnati, Hamilton county, Ohio, both citizens of the United States, have invented certain new and useful Improvements in Registering-Faucets; and we 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 figures of reference marked thereon, which form a part of this specification.

This invention relates to improvements in faucets and cocks which are provided with a registering attachment whereby every operation of the spigot or valve-stem is automatically registered and added.

The novel features of our invention reside in the special form of the means whereby the spigot affects the recording mechanism, said means also being so constructed as to form a protector to the otherwise exposed portion of this mechanism, this latter, and especially its push-rod, so located as to attain the greatest compactness. This construction is explained in the following specification and illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of a faucet with the front of the case of the attachment partly broken away to show interior. Fig. 2 shows in a side elevation our improvement as applied to a different form of faucet or cock, dial-face of the attachment partly open. Fig. 3 is a top view of the faucet-spigot and parts attached to it removed. Fig. 4 is a section on line 4 4 of Fig. 1, looking upwardly. Fig. 5 is a vertical elevation of the rear side of the faucet shown in Fig. 1, the spigot being removed and the cone attached to it shown in vertical central section.

7 is a faucet or cock of customary pattern; 8, the spigot or, in case of a cock, the valve-stem, and 9 the handle or knob of the latter.

10 is the registering and adding attachment, incased within a suitable housing, which may be attached to the faucet, or this housing may form part of the main casting and be closed in front by a suitable plate 11. This

latter also contains the dial-face 12, which is ordinarily closed or covered by a sliding cover 13, provided with a button 14, by which it is operated and which also serves to confine its movements to certain limits.

The registering attachment consists of a series of wheels having fingers 16, which are successively advanced by their engagement with teeth 17, provided on each wheel, but located thereon in a different plan from fingers 16. The teeth on the first wheel 18 are shaped somewhat different, so as to adapt them to the proper engagement with a trigger 19, pivotally connected to a push-rod 20. A spring 21 keeps the trigger in proper contact with the teeth on wheel 18, while another spring 22 returns the push-rod to its normal position. A third spring 23 holds wheel 18 in its advanced position and prevents it from being turned back by the friction of the trigger on its return stroke. Every action of the trigger advances wheel 18 one number, while the adjacent wheel 24 revolves one number only to every revolution of wheel 18. Wheel 25 in like manner adds and indicates the revolutions of wheel 24. By adding more wheels the adding capacity may be increased; but three wheels are deemed to suffice for most purposes. The construction of this registering and adding attachment is, however, not considered to be new and may be varied as to details.

Push-rod 20 is actuated by a cam 26, located in a hollow cone 27, which latter is rigidly connected to the spigot or valve-stem. In case of a spigot which operates either way it is necessary to provide two cams, while in a cock where the spigot or valve-stem operates with a screw one cam is sufficient. In the normal position and when the faucet is closed the upper end of the push-rod 20 stands inside of the cone and in the empty space cut out of the sides therein, the outlines of which cut-out form, also, the cam. The moment that the spigot commences to rotate, caused by an operation of its handle, cone 27, connected to it, carries one of the cams thereon against the upper end of the push-rod and depresses it. The parts are so proportioned that the depression of the push-rod has progressed far enough to effect and complete a registration before the faucet is open. While so open the

upper end of the push-rod rests against the lower straight edge 28 of the cone and moves up again within the space between the cam as soon as the spigot is turned for the purpose of closing the faucet. It will be noticed that the cone at all times covers the upper end of the push-rod and prevents the same from being tampered with.

This improvement may be used on all faucets and cocks constructed and operating on a similar plan and without regard to whether they are used in connection with liquid, gaseous, or vaporous fluids. It may also be attached to wooden faucets.

Faucets and cocks being mostly in a low position, it is preferable to have the numbers on the dial-face inverted in order to facilitate their convenient reading.

The cone might be attached to the lower part of the spigot and the operation of the push-rod reversed, which, however, would not constitute a departure from our invention.

Having described our invention, we claim as new—

1. In a registering-faucet, the combination, with the faucet, of a registering mechanism secured thereto in such a position as to bring its actuating push-rod in line with the spigot,

a cone secured to the latter and with its base always completely covering the end of the push-rod as far as it projects out of the case of the mechanism, the base of the cone cut out interiorly, as illustrated, all for the purposes shown and described.

2. In a registering-faucet having the registering mechanism located against the body of the faucet, its actuating push-rod parallel with the spigot and part of the inclosing housing of the mechanism formed by the body of the faucet, the combination, with these parts, of a cone rigidly secured to the spigot and interiorly cut out, as shown, for the purpose of actuating the push-rod, the base of the cone also forming a means to completely hide the protruding end of the push-rod and close the opening in the housing through which the same passes to prevent tampering with the parts, all substantially as shown and described.

In testimony whereof we affix our signatures in presence of two witnesses.

ALMY LE GRAND PEIRCE.

CHARLES E. KING.

Witnesses:

C. E. PRIOR,

CARL SPENGEL.