

De W. C. TAYLOR.

WATER METER DIAL.

No. 175,523.

Patented March 28, 1876.

Fig: 1

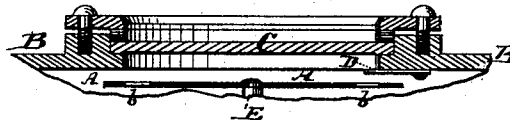


Fig: 2

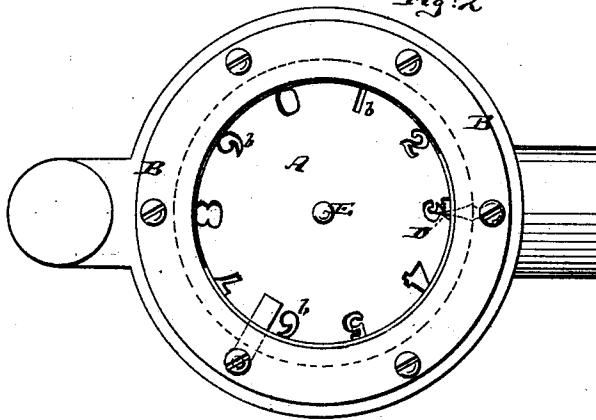


Fig: 3



Witnesses:
A. Moraga.
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Inventor:
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UNITED STATES PATENT OFFICE.

DE WITT C. TAYLOR, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN WATER-METER DIALS.

Specification forming part of Letters Patent No. **175,523**, dated March 28, 1876; application filed January 17, 1876.

To all whom it may concern:

Be it known that I, DE WITT C. TAYLOR, of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Water-Meters, of which the following is a specification:

Figure 1 is a vertical central section of that part of a water-meter which contains my invention. Fig. 2 is a top view of the same; and Fig. 3 a vertical section of a modification.

Similar letters of reference indicate corresponding parts in all the figures.

This invention has for its object to prevent the accumulation of impurities on the dial of a water-meter.

The invention has reference to those water-meter dials that are contained within the meter-shells, and therefore, during operation, immersed in the water that passes through the meters. They have heretofore been held stationary, and used in connection with rotating pointers or fingers, which connect with mechanism that is moved by the water that passes through the meters. All water carries more or less impurities, and deposits the same on its way, and the stationary water-meter dials have, therefore, frequently been obliterated by such settlements, so that the figures or marks upon them could not be readily discerned.

My invention consists, first, in mounting the submerged dial of a water-meter upon the revolving mechanism and combining it with a stationary pointer, so that the dial, by rotating, will prevent the accumulation of sediments; secondly, in perforating said submerged dial to produce miniature currents that will wash the dial, and to prevent the obliteration of the figures on the dial; and, thirdly, in providing the pointer of the water-meter with a wiper, which will wipe the figured part of the dial and keep it clean.

In the drawing, the letter A represents the dial-plate of a water-meter, the same being made of sheet metal or other proper material of circular or equivalent form. It is located within the body of the meter-shell B beneath a glass pane, C, which is inserted and fastened in an opening of the meter-shell. D is the pointer or finger, which I secure rigidly to the shell of the meter, or to an arm projecting therefrom.

The dial-plate A is connected with, and

mounted upon, the spindle E, to which rotary motion is imparted by the water that passes through the meter, the water striking suitable wings or devices, which, in turning, cause the spindle E to turn, and with it the dial. By thus moving the dial A beneath the stationary pointer the accumulation of impurities on the dial will be prevented, as the motion of the dial prevents their settling.

The numerals *b b*, instead of being marked upon the dial by paint or in relief, I propose to form by perforations through the dial, as shown, and the impurities, even if they should be allowed to settle on the dial, can thus never obliterate the numerals, but pass through them.

The dial may, however, also be perforated at other places. In fact, the perforated dial has the additional advantage of causing small currents which will wash its surface.

The improved perforated dial will also be useful when stationary under a revolving pointer.

When desired, and for greater certainty of cleanliness, I propose to attach a wiper, *a*, in form of a sponge or pad to the under side of the pointer or index-hand, as shown in Fig. 3, said wiper to come in contact with that part of the surface of the dial which it is necessary to keep clean.

This wiper may be used on all meters, those having stationary dials under rotary pointers as well as those having stationary pointers above rotary dials.

I claim as my invention—

1. In a water-meter, the combination of the submerged revolving dial A with the rotating spindle E and submerged operating mechanism, and with the stationary index or pointer D, all arranged so that the dial will be washed and cleaned by the current of water produced by the revolving motion of the dial.

2. In a water-meter, the submerged dial A, perforated to prevent the accumulation of impurities, substantially as specified.

3. The combination of the index-hand or pointer D, and of the wiper *a*, with the submerged dial A of a water-meter, substantially as specified.

DE WITT C. TAYLOR.

Witnesses:

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