V. M. RING.

Automatic Water Cut-Off.

No. 206,616. Patented July 30, 1878.

Fig. 1.

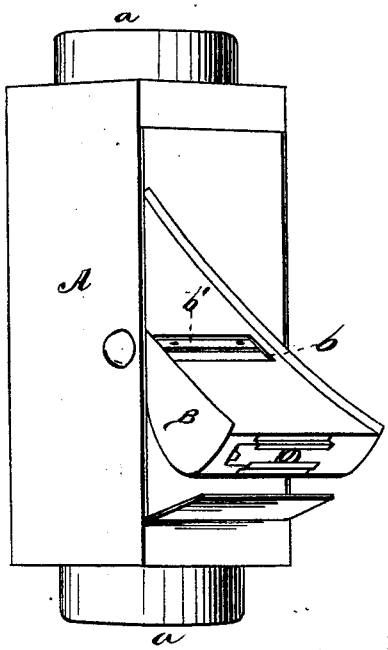


Fig. 2.

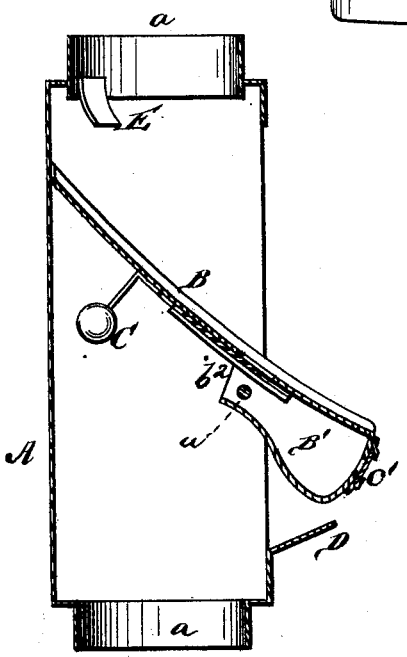
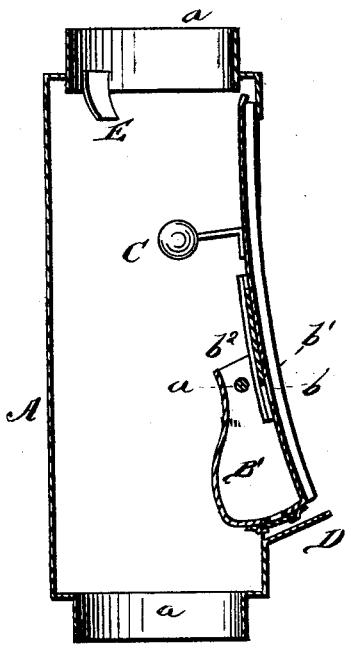


Fig. 3.



WITNESSES

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UNITED STATES PATENT OFFICE.

VIRGINIA M. RING, OF NEW ORLEANS, LOUISIANA.

IMPROVEMENT IN AUTOMATIC WATER CUT-OFFS.

Specification forming part of Letters Patent No. **206,616**, dated July 30, 1878; application filed June 22, 1878.

To all whom it may concern:

Be it known that I, VIRGINIA M. RING, of the city of New Orleans, in the State of Louisiana, have invented new and useful Improvements in Rain-Water Cut-Offs; and I hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, in which—

Figure 1 is an elevation in perspective; Fig. 2, a vertical section, showing the weight governing the tilting device; and Fig. 3, a vertical section, showing the weight overcome.

My invention relates to that class of rain-water automatic cut-offs where a tilting device within a case permits the waste-flow of dirty water until the filling of a balancing-case, through contracted orifices, changes the current of water to the cistern by tilting the cut-off device, thus automatically securing the washing of the roof and conduits before the retention of water for use.

The novelty in my invention consists in providing an opening, with an adjustable perforated cover, upon the outer surface of the tilting mechanism, which leads into the balancing-chamber; in providing said balancing-chamber with an open top upon the inner side of the tilting device; and in providing inclined deflectors, adapted to deflect the water into such open top and insure the overbalancing of the counter-weight.

A water-shed beneath the balance-chamber tends to save all water which falls from the tilting device after the cut-off has been effected, and directs the same to the cistern.

Referring to the drawings, A represents the square case of my improved device, one side being open to accommodate the tilting device B, loosely pivoted in case A at a'. The ends of this case, at a, are round, to receive the water-spout.

Opening into the balance-chamber B′ is an aperture, b, governed by an adjustable perforated slide, b^1; and an opening at the lower portion of this chamber is also controlled by a slide working in suitable guides, as at c'. The balance-chamber has an open top at b^2, and when the weight C has been overcome this open top receives water deflected from the inclined projections E, and by this means the balance-chamber is kept full of water.

A water-shed, D, secured to, or a portion of, the case A, lies under the tilting mechanism when in an overbalanced condition, and serves to catch all drippings and direct them to the cistern.

I am aware that tilting devices for this purpose have been before used; but in sections of the country where rain-water is used for drinking and cooking purposes, and none other suitable for these purposes is attainable, any improvements in such devices which serve to better eliminate impurities and prevent waste of the clean water are of vast importance.

The advantages of my invention are, first, the graduated feed-orifice to the balance-chamber; second, preventing the waste of clean water by directing the drippings to the cistern; and, third, deflecting the water into the open-topped balance-chamber to insure the overbalancing of the weight so long as the water flows.

I claim as my invention—

1. The tilting device B, provided with balance-chamber B′, open at top, as at b^2, the feed-orifice b, controlled by the perforated graduating-slide b^1, and the weight C, operating as and for the purpose set forth.

2. The shed D, secured to the case A a, constructed and adapted to allow the unclean water to waste and to catch all drippings from the overbalanced tilter and direct them to the cistern, as and for the purpose specified.

3. The deflectors E, in combination with the open-topped balance-chamber B′ b^2 and tilting mechanism B C, as specified.

4. The combination of the case A, provided with deflectors E and shed D, with the tilting device B C, having the open-topped chamber B′ b^2, fed through the graduated orifice b b^1, all constructed, arranged, and operating as set forth, for the purpose specified.

Signed at city of New Orleans and State of Louisiana this 11th day of June, 1878, in presence of undersigned witnesses.

VIRGINIA M. RING.

Witnesses:
ALFRED GOLDTHWAITE,
PHIL. S. SMITH.