

L. BALTZ.

Improvement in Rain-Water Cut-Offs.

No. 130,352.

Patented Aug. 13, 1872.

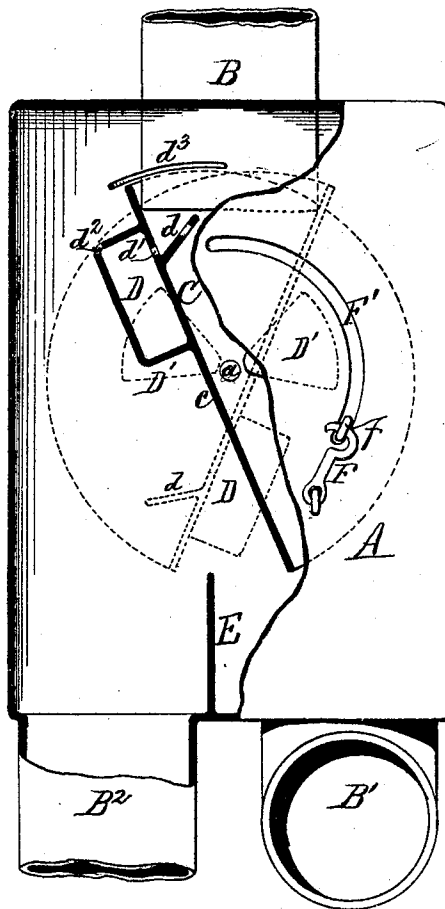


Figure 1.

WITNESSES:

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UNITED STATES PATENT OFFICE.

LOUIS BALTZ, OF ST. LOUIS, MISSOURI, ASSIGNOR TO HIMSELF AND NIMROD H. LONGLEY, OF SAME PLACE.

IMPROVEMENT IN RAIN-WATER CUT-OFFS.

Specification forming part of Letters Patent No. 130,352, dated August 13, 1872.

To all whom it may concern:

Be it known that I, LOUIS BALTZ, of St. Louis, in the county of St. Louis and State of Missouri, have made a certain new and useful Improved Automatic Rain-Water Cut-Off; and I do hereby declare that the following is a full and true description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon.

It is well known that rain-water from the water-spouts of buildings is collected in cisterns, reservoirs and the like, for household purposes; also, that the first supply or fall of water is impure, contaminated, and unfit for use owing to the deposit of dust, dirt, sand, and other matter remaining in the troughs or water-spouts.

This invention, therefore, consists in such a peculiar construction of the water cut-off proper that the same is rendered self-acting, so that the first supply of rain-water (which is contaminated and impure as aforesaid) is allowed free escape out of the waste-pipe, but this being accomplished the current of water by its own power reverses the communication from waste-pipe to pipe leading to cistern or receptacle which is filled with pure water.

To enable those herein skilled to make and use my said improvement I will now more fully describe the same, referring to the drawing, which is a side elevation, with parts removed, showing the cut-off in different positions before and after rain.

A is the ordinary housing. B is the top spout which partly projects in housing A. B¹ at bottom of housing is the waste-spout, while B² is the discharge-spout that leads to cistern and the like. Said top and bottom spouts or pipes are made to form part of the housing as usual. Pivoted at *a*, both sides of housing, so as to turn freely in same, is the water cut-off C proper. The water cut-off C, simply consists of a diaphragm, *c*, and forming part of which are semicircular-shaped sides, as shown in dotted lines in the figure.

The cut-off is rendered automatic as follows: I provide the cut-off C with a water-chamber, D, which is soldered or otherwise properly attached to diaphragm part *c*. Further, forming part of the cut-off C, and secured to one of its sides, is a suitable weight, D¹. In order to partly

catch the fall of water and fill the water-chamber D, the interior of the cut-off is provided with a projecting flange, *d*, having holes *d*¹, which communicate with said water-chamber, as shown. The water-chamber has also one or more holes, *d*², to allow for the escape of its water when the cut-off is reversed in position. The position of the cut-off before rain is therefore as indicated in full lines in the figure, communicating with waste-pipe B¹. In this position it will be noticed the first fall of rain is allowed free waste at the same time the flange *d*¹; catching partly the water, causes the chamber D to be gradually filled. When filled, the water-chamber, by its weight, overbalances the weight D¹; thus turning the cut-off C to assume the position indicated in dotted lines in the figure and communicate with spout B², that leads to cistern or other receptacle to collect pure water. Thus the gradual filling of the water-chamber allows free waste of impure water, after which the current of water, by its own weight and power, reverses the cut-off, so as to discharge pure water into its proper receptacle for future use. The projecting flange *d*², soldered to top spout B, prevents the water rushing or splashing over top of cut-off. The partition E at the bottom of housing divides the two lower spouts; also, said partition, as well as top spout B, limits properly the turning movement of the cut-off C. When sufficient water for household purposes has been collected, the operator can readily re-adjust the cut-off C and securely fasten same in position, so as to allow the waste to escape out of waste-pipe. For this purpose the housing A is provided with a proper hook, F, fitted to engage the eye-pin *f*, which is secured to cut-off; also the housing has a curved slot, F', to allow for movement of eye-pin, as shown.

My said improved cut-off possesses advantages of cheapness, simplicity, and durability in construction, ease of operation, and in use, practically adapted for the purposes applied.

Having thus fully described my said invention, what I claim is—

1. An improved water cut-off provided with water-chamber and weight by which the cut-off proper is rendered self-operating, substantially as and for the purpose set forth.

2. A pivoted cut-off, B, constructed as described and provided with water-chamber D, weight D¹, flange *d*, arranged to operate in a housing, A, having top and lower spouts B B¹ B², substantially as and for the purpose set forth.

3. The hook F, eye-pin *f*, slot F¹, when arranged in combination with housing A and cut-off C, constructed to operate as and for the purpose set forth.

4. The hook F, eye-pin *f*, slot F¹, housing A

having top and lower spouts B B¹ B², top-flange *d*³, cut-off C, with water-chamber D, weight D¹, and partition E, all constructed to operate as and for the purpose set forth.

In testimony of said invention, I have hereunto set my hand.

LOUIS BALTZ.

Witnesses:

WILLIAM W. HERTHEL,
ROBERT BURNS.