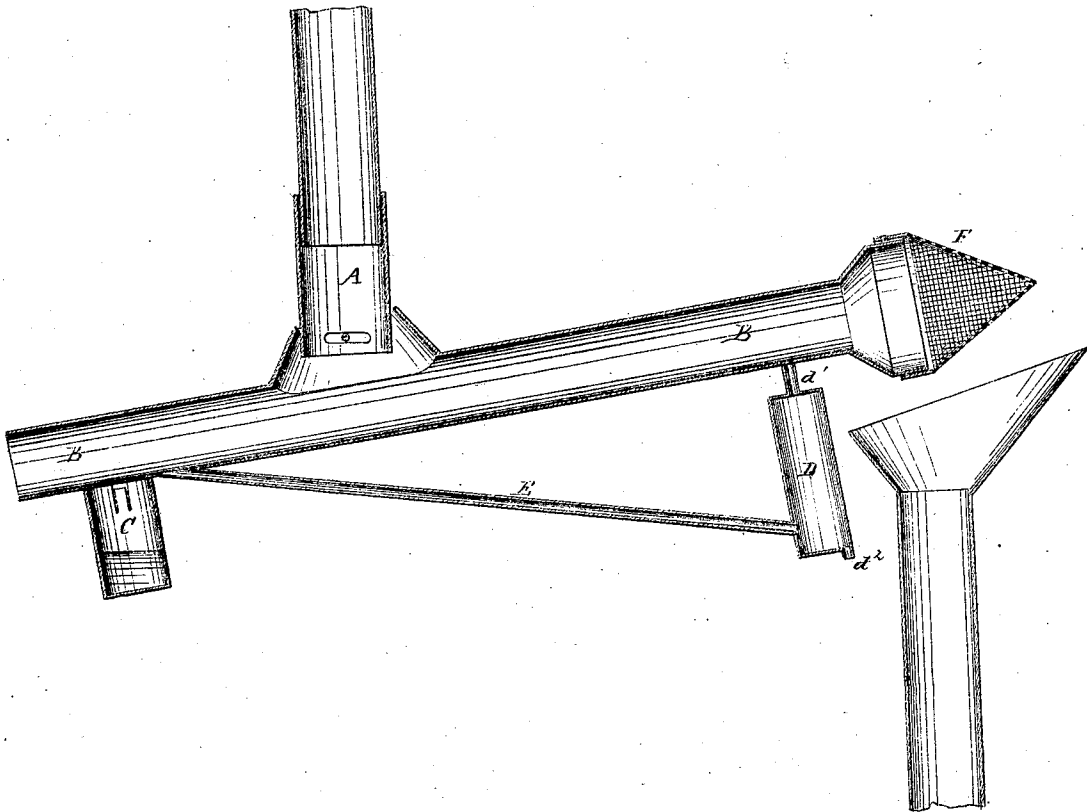


No. 124,033.

Patented Feb. 27, 1872.



Witnesses:

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UNITED STATES PATENT OFFICE.

JOHN W. BURKHOLDER, OF RUSHFORD, MINNESOTA.

IMPROVEMENT IN WATER CUT-OFFS.

Specification forming part of Letters Patent No. 124,033, dated February 27, 1872.

Specification describing certain Improvements in Self-Adjusting Rain-Water Filters, invented by JOHN W. BURKHOLDER, of Rushford, in the county of Fillmore and State of Minnesota.

The figure is a detail sectional view of my improved filter.

My invention has for its object to furnish an improved filter for attachment to rain-water leaders or conductor-pipes, which shall be so constructed as to allow the first water from the roof to run off into a waste-pipe, and then adjust itself to receive the rest of the water and conduct it into the cistern or other receiver; and it consists in the construction and combination of the various parts, as hereinafter more fully described.

A is a short pipe, which should be fitted closely upon the lower end of a vertical conductor-pipe or leader. The lower end of the pipe A enters a socket in the side of the pipe B, which pipe B is pivoted to the said pipe A, as shown in the figure, so that either end may be inclined downward. To the lower side of the pipe B, near one end, is attached a case, C, to receive weight sufficient to depress the end of the pipe B, near which it is placed, when the other end is free from water. With the lower side of the pipe B, near its other end, is connected a case or receiver, D. E is a small pipe, one end of which is connected with and opens into the receiver D near its lower end. The other end of the small pipe E is connected with and opens into the pipe B near the weight case C. The upper end of the case D is provided with a small hole or pipe, d^1 , opening into the pipe B or into the air, to allow the air to escape from the case D as the water flows in. The lower end of the case D is provided with a small hole or pipe, d^2 , of such a size as to allow the water to escape from the case D in twenty-four hours, more or less, as may be desired. To the end of the pipe B near the water-case D is attached, detachably, a fine wire-gauze filter, F, through which the

water must pass that flows into the cistern or other receiver. The end of the pipe B to which the filter or screen F is attached may be enlarged if desired. Beneath the filter-end of the pipe B should be placed the ends of the pipe that lead to the cistern or water-receiver, which end should be made hopper or funnel-shaped to adapt it to more readily receive the water. The other end of the pipe B may have a waste-pipe placed beneath it to receive and conduct away the waste water, or the waste water may be allowed to flow from the waste end of the pipe B to the ground. By this construction, when attached to the leader, the waste end of the pipe B will be held down by the weight in the case C, so that the first water which flows from and which washes the roof, will flow off as waste water. As the waste water is flowing off water flows through the small pipe E into the case D, and gradually fills it. When the water in the case B overbalances the weight in the case C the filter-end of the pipe B will descend, and the water will flow through the filter F into the cistern or other receiver. As the the water ceases to flow from the roof, the water in the case D gradually flows out until the filter end of the pipe D is overbalanced by the weight in case C, when the apparatus again takes its first position, ready for the next shower.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The combination of the short pipe A, pivoted oscillating pipe B, weight-case C, water-case D d^1 d^2 , small pipe E, and wire-gauze filter F, with each other, said parts being constructed and operating in connection with each other in substantially the manner and for the purpose herein set forth and described.

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Witnesses:

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