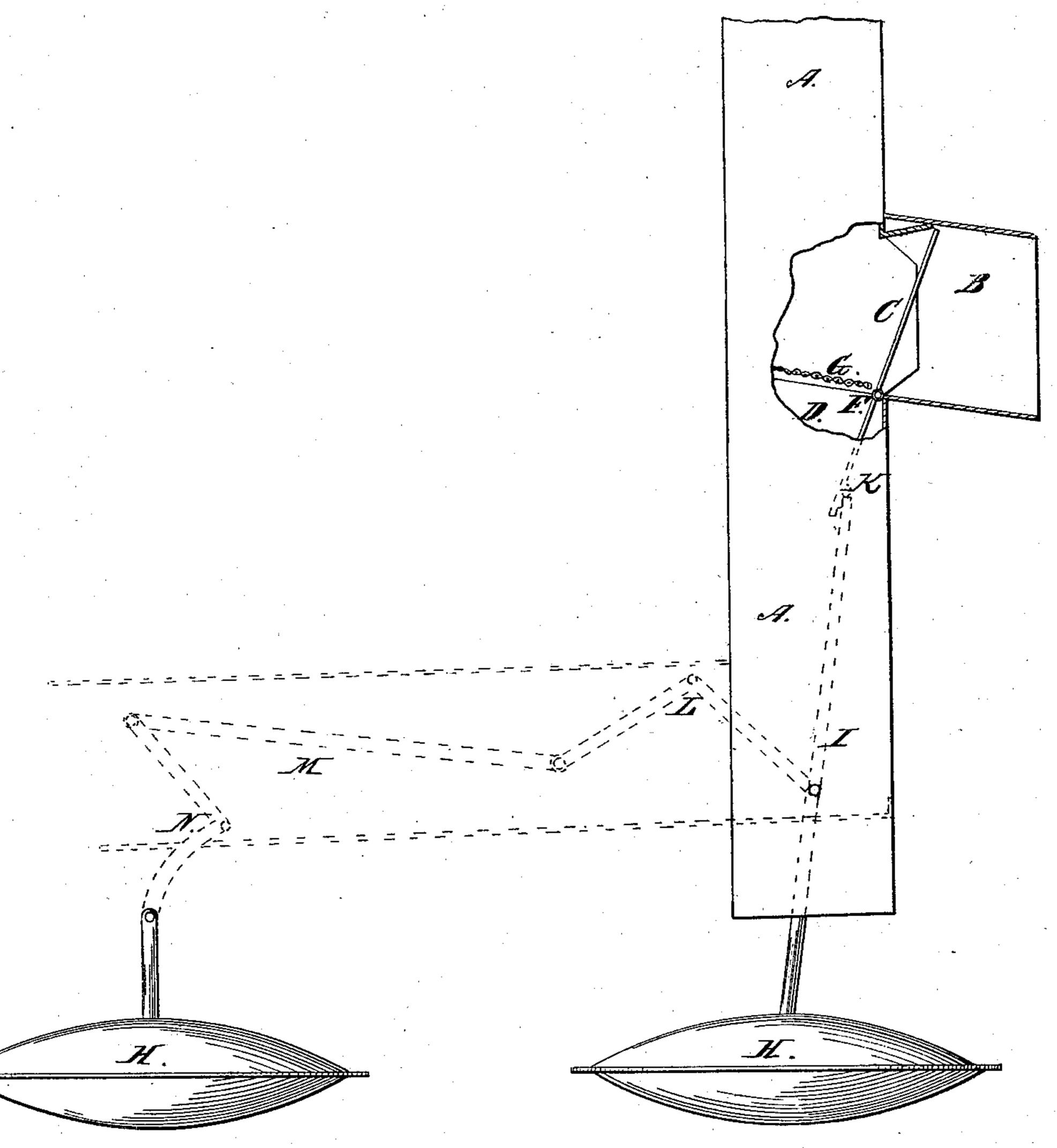
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Nº70,248.

Fatented Oct 29,1867



Witnesses DE Dennis Madennis Inventor: John Minso By his Atty J.Dennis Jos

Anited States Patent Pkfice.

JOHN MUSS, OF QUINCY, ILLINOIS.

Letters Patent No. 70,248, dated October 29, 1867.

IMPROVEMENT IN AUTOMATIC VALVED AND FILTERING WATER-LEADERS,

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, John Muss, of Quincy, Adams county, State of Illinois, have invented a certain new and useful Automatic Water-Leader and Filter; and I do hereby declare the following description and accompanying drawings are sufficient to enable any person skilled in the art or science to which it most nearly appertains to make and use my said invention or improvements without further invention or experiment.

The nature of my invention and improvements consists in the application to a water-leader, terminating in a cistern or other receptacle, of a waste pipe, strainer, float, and valves, so constructed and arranged that when the water in the cistern is below its proper greatest height, the flowing water will pass down through the strainer or filter into the cistern, but when the cistern is filled to the proper height this passage will be closed, and the flowing water will pass out through the waste pipe, at the same time washing off the strainer so as to leave it free and clean for future use.

In the drawing annexed, A A is a water-leader, (here represented as square, but may be round or of any other suitable form,) having an opening at some point above the cistern, into a waste pipe, B. C and D are two valves, seen edgewise, through the opening made in the leader and waste pipe in the drawing to show the interior, and firmly connected, so as to move together, and secured at the lower intersection of the waste pipe and leader by the pin or rod F, upon which they freely turn. G is a portion of the strainer or filter, extending entirely across the leader. H is a float, of India rubber or other suitable material, resting upon the water in the cistern, or suspended above it when the water is low, and connected with the valve D by the rod I at the joint K. In the position represented in the figure, the valve C closes the waste pipe, and the valve D being depressed, the leader is open for the water to pass down through the strainer G into the cistern. As the cistern becomes filled the float II is raised and forces up the valve D under the strainer, and finally closes the passage to the cistern when the water in it has reached the height intended. At the same time the valves C and D being connected and moving together, as D rises and closes the leader below the strainer, C falls and opens the waste pipe, the water now falling upon the strainer, so as to cleause it thoroughly, and then escaping through the waste pipe. When the water in the cistern falls, the float II descends, and the movements just described are reversed, the valve D falling to or towards its first position, so as to allow the water to pass down into the eistern, and the valve C at the same time rising to close the waste pipe. If the flow of water be greater than can readily pass through the strainer, the leader may become filled above the strainer, but the pressure thus caused will partially open the waste-pipe valve by lifting the float, and thus an excessive pressure will be prevented, and it is obvious that the limit of pressure may be varied by varying the shape of the float so that it may require a greater or less force to lift it partially out of the water. The bell-cranks L and N, connected by the link or rod M, represent a modification of the connection of the float H with the valve D, to be applied when the leader is connected with the cistern, not vertically, but through a horizo stal pipe or passage.

What I claim as my invention, and desire to secure by Letters Patent, is-

An automatic water-leader and filter, consisting of a waste pipe, strainer, valves, and float, applied to a water-leader, and so constructed and arranged that the water shall pass through the strainer into the cistern when it requires filling, but, when the cistern is filled, shall cleanse the strainer and pass out through the waste pipe, substantially as herein shown and described.

JOHN MUSS.

Witnesses:

ROBERT VOETH, FREDERICK BAEDER.