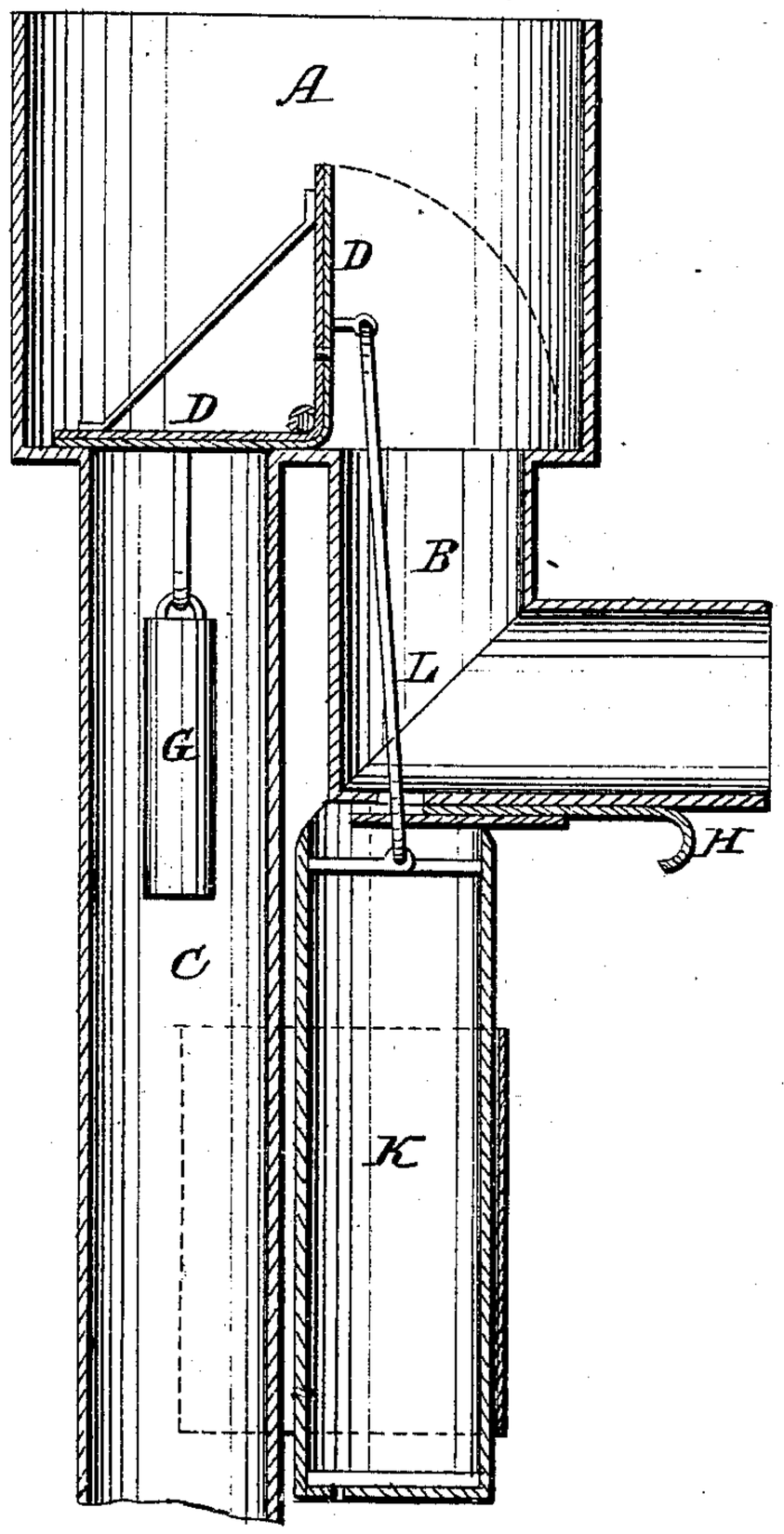
D. F. Sweet.

Water Cut-Off.

No. 99,727. Patented Feb. 8, 1870.



Witnesses
A. Hyatman.
A. Lehmann

Inventor.
D. F. Sweet
per
Alexander Macomber.
Attys.

United States Patent Office.

D. F. SWEET, OF OTSEGO, MICHIGAN, ASSIGNOR TO HIMSELF AND L. A. LEIGHTON, OF SAME PLACE.

Letters Patent No. 99,727, *dated February* 8, 1870.

IMPROVEMENT IN AUTOMATIC WATER CUT-OFFS.

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, D. F. SWEET, of Otsego, in the county of Allegan, and in the State of Michigan, have invented certain new and useful Improvements in Automatic Water-Conductors; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the construction of an automatic water-conductor, which is to be attached to the water-spouts, so as to prevent the first washings from the roof from running into the cistern.

The accompanying drawing represents a section view of my invention.

Letter A represents the receiver into which the water flows as it comes from the eaves-trough.

From the bottom of this receiver there are two pipes running off, one, B, carrying off the waste or dirty water, and the other, C, conducting the clean water to the cistern. The mouths of both of these pipes are closed, one at a time, by the double valve D, which has a strip of leather attached to its lower sides, so as to make it water-tight.

To the valve, inside of the pipe C, there is secured a weight, G, which keeps it closed for a short time after it begins raining, while the pipe B is open, and receives the first water, containing the soot and dirt, from the roof.

In the bottom of the pipe B, there is a hole or opening, which is regulated by the valve H, so that the water can leak into the cup K, placed underneath.

This cup is also attached to the valve by means of the rod or cord L, and serves as a counterpoise to the weight G.

As the water flows through the pipe B, it runs slowly into the cup, until it is full, when it overcomes the resistance of the weight, and closes the pipe B, when all the water at once flows into the cistern.

In the bottom of the cup there is a small opening made for the water to leak through, and a piece of cloth, or some suitable material, placed over it, so as to prevent the dirt from closing it.

Through that part of the valve which closes the pipe B there is a small aperture made, so that the water can continue to leak into the cup in sufficient quantity to keep the cup full during the whole time that it is raining. If it were not for this opening, the cup would soon be empty, and then the water would cease to flow into the cistern, as the weight G would cause the valve to close the pipe C; but, as the cup is kept full until after the rain has stopped falling, only the very first water is lost.

After the rain is over, the cup soon becomes empty, when the pipe C is at once closed, and remains so until the next rain.

By means of the cut-off valve, the time for the closing of the pipe B can be readily regulated.

Having thus described my invention,

What I claim, and desire to secure by Letters Patent, is—

The combination of the receiver A with its valve-seats and valve D, the weight G within the pipe C, and the cup K, connected to one part of said valve, under the cut-off H and pipe B, the several parts constructed and operating substantially as herein set forth.

In testimony that I claim the foregoing, I have hereunto set my hand and seal, this 8th day of June, 1869.

D. F. SWEET. [L. S.]

Witnesses:
N. W. MILLS,
O. E. ALLEN.