No. 763,188. PATENTED JUNE 21, 1904.

J. H. KOCHENDERFER.

AUTOMATIC VALVE FOR RAIN SPOUTS.

APPLICATION FILED OCT. 7, 1903.

NO MODEL.

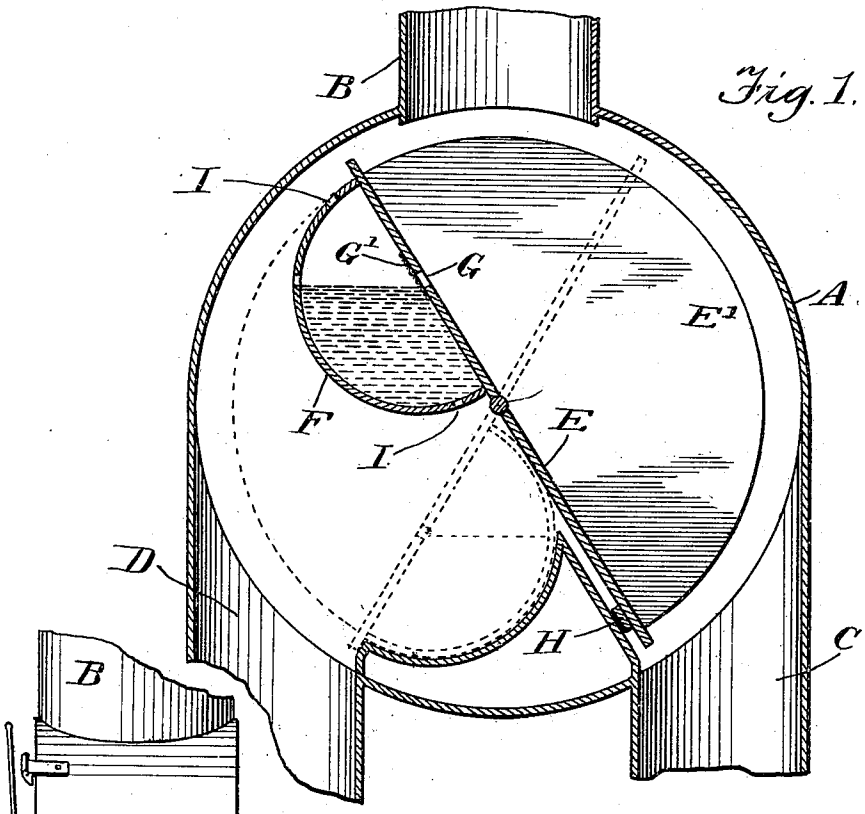


Fig. 1.

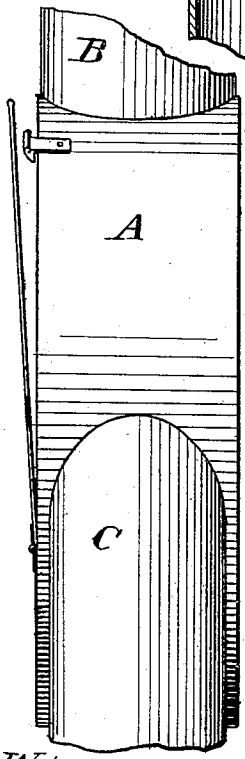


Fig. 2.

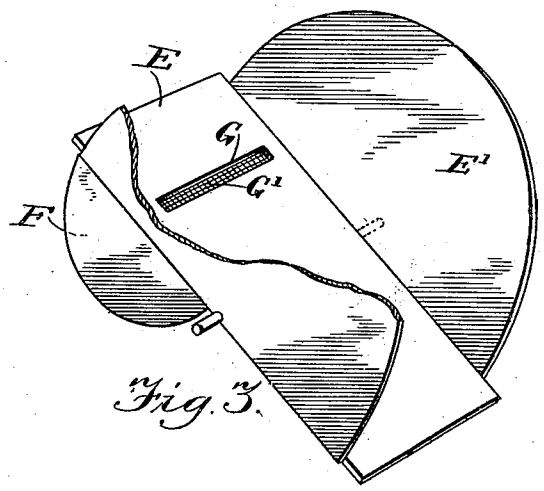


Fig. 3.

Witnesses:
H. B. Hallock.
L. A. Morrison

Inventor:
John H. Kochenderfer
By W. Tudor Williamson Atty.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

No. 763,188. Patented June 21, 1904.

UNITED STATES PATENT OFFICE.

JOHN H. KOCHENDERFER, OF GALION, OHIO.

AUTOMATIC VALVE FOR RAIN-SPOUTS.

SPECIFICATION forming part of Letters Patent No. 763,188, dated June 21, 1904.

Application filed October 7, 1903. Serial No. 176,058. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. KOCHENDERFER, a citizen of the United States, residing at Galion, county of Crawford, and State of Ohio, have invented a certain new and useful Improvement in Automatic Valves for Rain-Spouts, of which the following is a specification.

My invention relates to a new and useful improvement in automatic valves for rain-spouts, and has for its object to provide a valve which will direct the water into a pipe leading to the sewer or other drain for a short time after the commencement of rain until the roof is clean and then the valve will automatically change its position so as to direct the water into a cistern or other suitable reservoir.

With these ends in view this invention consists in the details of construction and combination of elements hereinafter set forth and then specifically designated by the claim.

In order that those skilled in the art to which this invention appertains may understand how to make and use the same, the construction and operation will now be described in detail, referring to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a vertical section through my improved valve; Fig. 2, an outside edge elevation of the same; Fig. 3, a perspective view of the valve.

A represents the valve-casing.

B is the pipe leading from the gutters into the upper portion of the valve-casing.

C is a pipe leading from the valve-casing to a sewer or other drain, and D is the pipe leading to the cistern or other reservoir.

The valve-casing is cylindrical, and pivoted in the center of this casing is the valve E, which is in the form of a plate, the pivotal points of the plate extending out from each edge in the center of the plate. Upon each side of the plate are secured semicircular disks E′, which prevent the water from flowing around the edges of the plate. Upon the back of the plate and upon one side and one end of the same is secured the water-pocket F. G is a slot formed through the plate opening into the water-pocket, this slot being protected by a screen G′ to keep out the dirt, cinders, and other solid matter. The other end of the valve-plate E is weighted, as represented at H, this weight being sufficient to hold the weighted end downward and the end with the pocket on upward until the pocket has been nearly filled to its predetermined level with water. Thus when the pocket is empty the valve will stand in the position shown in Fig. 1 in full lines, and the water will be directed into the pipe C, which leads to the drain. This will be the first water that comes off the roof, and therefore will contain considerable dirt; but as this water is flowing over the plate E a certain amount will pass through the slot G into the pocket and the pocket will gradually fill with water up to the level of the slot G, and when filled to this height the water in the pocket will overbalance the valve and it will rotate to the position shown in dotted lines in Fig. 1 and then the water will be directed into the pipe D, leading to the reservoir, and the valve will be held in this position as long as the rain continues, for some of the water in flowing over the plate E will pass through the slot G and keep the pocket filled to the desired level, and thus hold the valve in position. After it has stopped raining the water in the pocket will flow out through a small opening I, formed through the wall of the pocket, and thus after the level of the water has fallen a certain distance the weight G will act to return the valve E to its normal position ready for the next rain. It will thus be seen that this valve is entirely automatic in its action and will not require any attention until worn out.

The great advantage of this device is that it may be connected to the spouting and at the beginning of every rain washes off the roof thoroughly, throwing the dirty water into the drain, and then turning automatically, throwing the pure clean water into the cistern.

Of course I do not wish to be limited to the exact construction here shown, as slight modifications could be made without departing from the spirit of my invention.

Having thus fully described my invention, what I claim as new and useful is—

In combination with a casing having an inlet-pipe and two discharge-pipes, a web inserted in the casing between the two discharge-pipes, said web having one of its sides concaved to form a seat, a valve having trunnions centrally its length projecting from its sides and bearing in the casing, a weight on one end of the valve, a receptacle comprising a curved shell secured to the under side of the valve at the opposite end and conforming in contour to the seat of the web, the said shell having an opening communicating with the shell, the said openings of the receptacle being partially sealed by the curved surface of the seat to prevent the too-ready discharge of the contents of the receptacle, wings on each side of the valve extending from the upper edges thereof.

In testimony whereof I have hereunto affixed my signature in the presence of two subscribing witnesses.

JOHN H. KOCHENDERFER.

Witnesses:

E. C. KOCHENDERFER,

JNO. A. NEFF.