J. SAUER, Sr.

AUTOMATIC WATER CONTROLLER FOR WATER PIPES.

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1,167,317.

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Fig. 1.

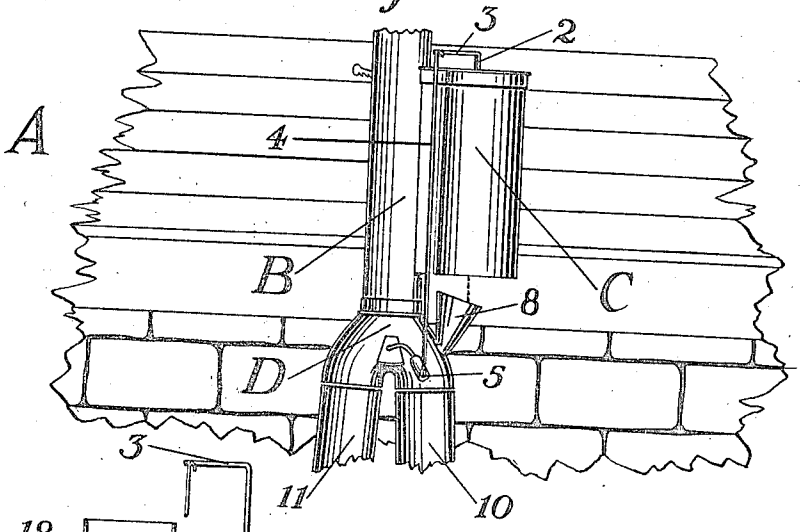


Fig. 2.

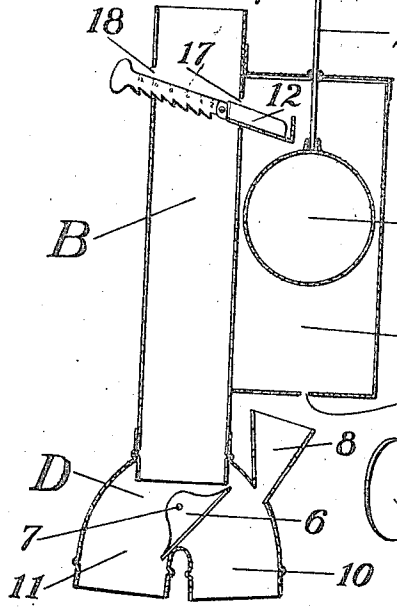
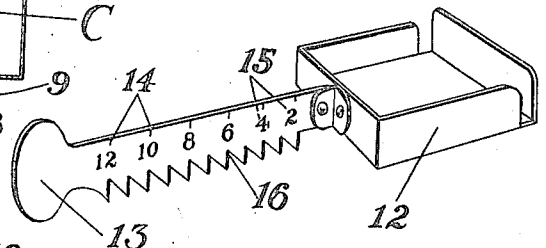


Fig. 3.



WITNESSES:
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AUTOMATIC WATER-CONTROLLER FOR WATER-PIPES.

1,167,317. Specification of Letters Patent. Patented Jan. 4, 1916.

Application filed February 4, 1915. Serial No. 6,034.

To all whom it may concern:

Be it known that I, JOHN SAUER, Sr., a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented new and useful Improvements in Automatic Water-Controllers for Water-Pipes, of which the following is a specification.

My invention relates to the water pipes of buildings having cisterns in connection therewith.

The object of my invention is to afford a means by which the water may be automatically turned away from the cistern long enough to permit the roof to became thoroughly cleansed of such impurities as naturally accumulate thereon during a period in which there has been no rain fall, and then, that having been accomplished, to turn the water automatically into the cistern.

A further object of my invention is to afford a means of controlling the time allowed for the roof-cleansing process, which, of course, would be determined by the condition of the roof, a longer time being necessary to cleanse the roof after a long dry spell than after a short one.

I accomplish these objects by means of the hereinafter described mechanism which is fully illustrated, in which illustrations like reference characters represent like parts in all figures.

Figure 1 is a side elevation of my invention and a portion of the building to which it is attached. Fig. 2 is a vertical section of my invention. Fig. 3 is a detached view in perspective of the splasher-cup of my invention, showing the graduated handle attached thereto and the notches or teeth cut therein.

A is a portion of a building to which my invention is attached.

B is a portion of the regular water pipe of a building.

C is the float-chamber.

D is the water-frog. 1 is the float. 2 is the upright stem of square-formation in cross-section attached thereto having its offset upper end 3. 4 is a rod connecting the aforesaid upper end 3 with the crank 5 of the cut-off 6. 7 is a pivotal rod extending horizontally across the internal cavity of said frog, said rod having its ends securely attached to the sides of said frog, said cut-off 6 being loosely mounted on said rod. 8 is a funnel-shaped opening leading into the arm 10 of said frog. 9 is a perforation in the bottom of chamber C in line with said funnel-shaped opening, said perforation being adapted to drain said chamber C, and said funnel-shaped opening being adapted to conduct said drainage into said arm 10 which leads into the sewer. 11 is the arm of said frog that leads into the cistern.

12 is the splasher-cup. 13 is the handle attached thereto. 14 are graduation marks placed on one or both sides of said handle. 15 are graduation figures used in connection with said graduation marks. 16 are graduation notches or teeth cut in the lower edge of said handle. 17 and 18 are perforations through the opposite sides of said water pipe B and at different distances from the top thereof, said perforations being adapted to receive said splasher-cup and said handle thereof, which cup and handle have a reciprocating movement in said perforations, the movement in one direction exposing a larger portion of said cup to the down-pouring water in pipe B, and the movement in the other direction exposing a less portion of said cup to said down-pouring water. The teeth 16 are adapted to engage the perforation 18 and hold said cup and handle in any desired position as it pertains to said pipe B and said chamber C.

Having thus described my invention in detail and by illustrations, I will now describe it as a working mechanism.

Said splasher-cup having been once set, the water will, as indicated by Fig. 1, first flow through pipe 10 into the sewer, and it will continue to do so, until the water conducted by said splasher-cup into chamber C fills said chamber, in which event float 1 will have arisen to the top of said chamber, and having done so it will have reversed said cut-off 6 and put it in the position indicated by Fig. 2, in which position the water is caused to flow into the cistern through pipe 11. This condition will be maintained as long as there is a sufficient fall of water to do so. While the water is flowing into the cistern, a portion of the water in chamber C is passing out through the perforation 9 into the funnel-shaped opening 8 and into the sewer. After the rain-fall ceases, all of the water in chamber C will pass out of said chamber and into said funnel-shaped opening as next above described. Thus it is seen that my invention is automatic in its action. It is also simple and inexpensive.

Having thus explained my invention in detail, by illustrations and as a working mechanism,

What I claim is:—

1. In an automatic water-controller for water pipes, a splasher-cup having cut-outs in the sides thereof in combination with a handle therefor, said handle having a saw-toothed lower edge and a numerically numbered graduated side.

2. In an automatic water-controller for water pipes and in combination; an ordinary water pipe; a float chamber positioned alongside said pipe; a splasher cup and a graduated handle therefor extending across the internal cavity of said pipe and into said float chamber; a water-frog attached to the lower end of said pipe, said frog having a water cut-off pivotally mounted within and at the junction of the two pipes thereof, a crank attached to said cut-off and a funnel-shaped opening leading into one of the pipes thereof; said float chamber having a float within, a stem attached to said float and a drainage perforation in the bottom of said chamber and at a point overlying said funnel-shaped opening; and a rod connecting the upper end of said stem with the free end of said crank.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

JOHN SAUER, Sr.

Witnesses:
C. M. Bechtel,
William John Schultz.