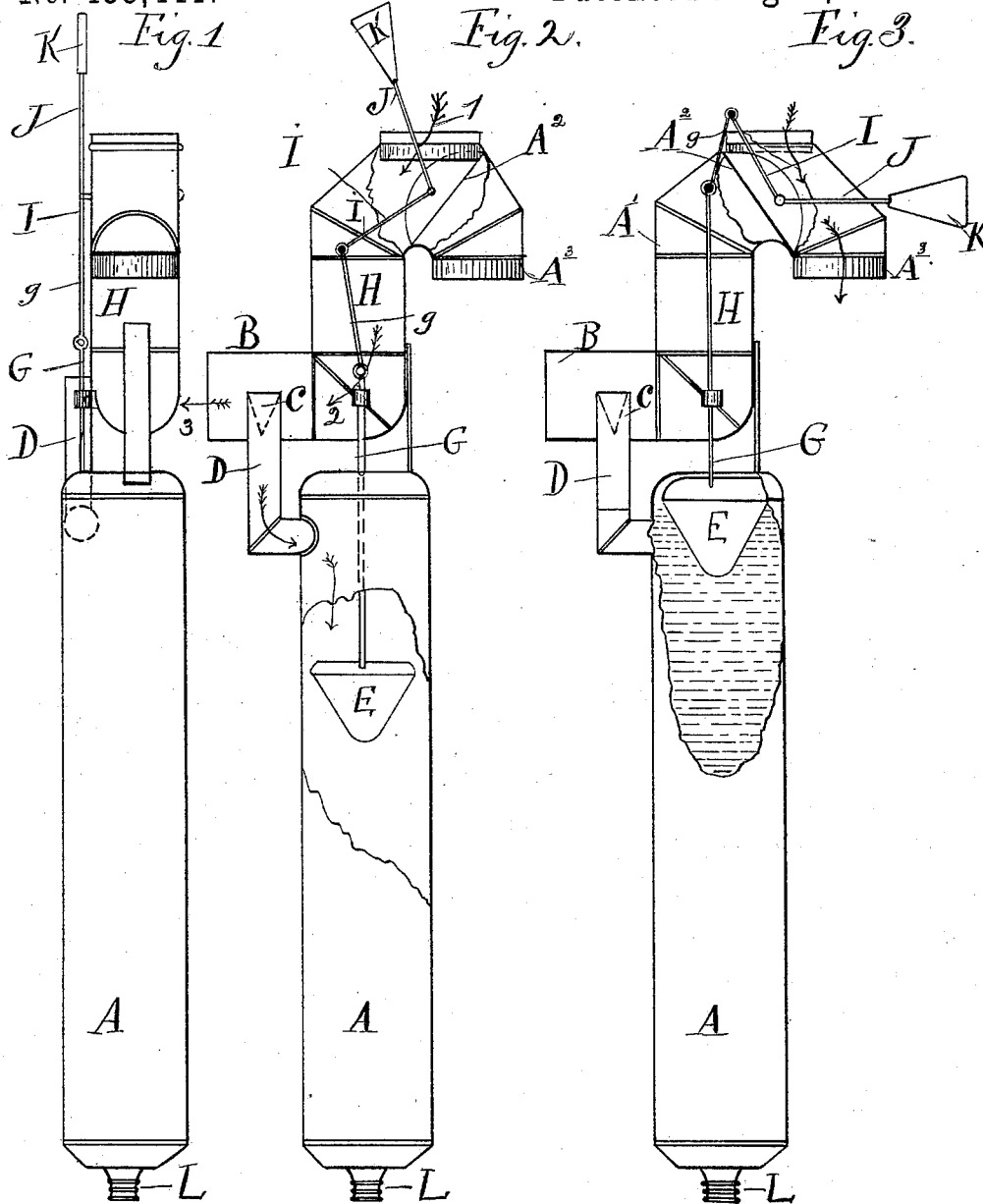


(No Model.)

T. L. BISSELL & W. P. PRESCOTT.
AUTOMATIC WATER CUT-OFF.

No. 433,441.

Patented Aug. 5, 1890.



Witnesses
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UNITED STATES PATENT OFFICE.

TITUS L. BISSELL AND WILLIAM P. PRESCOTT, OF CHARLESTON, SOUTH CAROLINA.

AUTOMATIC WATER CUT-OFF.

SPECIFICATION forming part of Letters Patent No. 433,441, dated August 5, 1890.

Application filed April 2, 1890. Serial No. 346,363. (No model.)

To all whom it may concern:

Be it known that we, TITUS L. BISSELL and WILLIAM P. PRESCOTT, citizens of the United States, residing at Charleston, in the county of Charleston and State of South Carolina, have invented certain new and useful Improvements in Automatic Water Cut-Offs; and we do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

Our invention relates to improvements in automatic water cut-offs; and it consists in the novel construction and arrangement of its parts hereinafter described, and pointed out in the appended claims.

In the accompanying drawings, Figure 1 is an end elevation of our invention. Fig. 2 is a front elevation of the same, set so that the water will run into the tank. Fig. 3 is a front elevation, set so that the water will run into the cistern through the pipe A³.

It is intended that this device be situated in the immediate vicinity of the cistern or tank for collecting rain-water; and its object is to divert from said cistern or tank the first water from the roof, which is usually dirty, and has mingled with it matter that should not be conducted with it into the cistern.

Referring to the accompanying drawings, A represents a tank, above which is erected a casing A', provided with a hinged valve A². In Fig. 2 said valve A² is represented as having fallen to the right, and in this position turns the water off from the spout A³, and consequently from the cistern, (the cistern and its connections are not illustrated in the drawings, as it is not deemed necessary,) and causes it to run through the spout H into the elbow-spout B. In the front side of said elbow-spout is a V-shaped perforation C, the narrowest part of said perforation being down, but not quite to the bottom of said pipe.

D is a small elbow-pipe, connected with said V-shaped perforation to the tank A. Said tank is provided with a float E, to which

is attached a rod G, which passes up through the cover of said tank. To the upper end of said rod G is pivoted a rod g, and to the upper end of said rod g is pivoted a rod I, and in the upper end of said rod I is pivoted another rod J, and to the upper end of said rod J is secured a weight K, of sufficient weight when shoved beyond a perpendicular position to overcome the weight of the valve A² and the rods just described.

When it rains, the water comes down the gutter and is conducted by a pipe through the open upper end of the casing A' into said cut-off, and the float E is down and the valve A² to the right, as shown in Fig. 2, the water flows in the direction indicated by arrows 1, 2, and 3, and during a heavy dew or very light rain, not sufficient to wash the roof, all the water which thus falls passes off through the pipe B without any of it rising up high enough to pass through the V-shaped perforation C, the bottom and narrow part of said perforation being a little above the bottom surface of said pipe. Thus the said tank A is not gradually filled by heavy dews or very light rains until the cut-off valve is made to turn the first of the next rain into the cistern; but when it rains sufficiently hard to wash off the roof, the water rises in said pipe B and a certain portion of it is carried off through said perforation into the pipe D, and through it into the tank A, the quantity being regulated by the size of the tank and of said perforation. The higher the water rises in pipe B the greater is the quantity carried off through said perforation. As the water rises in the tank A, it lifts the float-valve E, which, by means of its connecting-rods G g, shoves rod I into a horizontal position, throwing the weight K beyond a perpendicular line which overbalances said rods and float E and throws the valve A² to the left and closes the cut-off, as shown in Fig. 3, thus turning the water through the pipe A³ into the cistern or other receptacle. After the rain is over, we set the cut-off again by unscrewing the plug L at the bottom of the tank and letting the water out and by turning the lever J back into position, as shown in Fig. 2.

Having described our invention, what we

claim as new, and desire to secure by Letters Patent, is—

1. The combination of the tank A, provided with the bottom opening L, float E, adapted to move up and down in said tank, pivoted rods G, g, I, and J, and weight K, attached to said float and adapted to operate the valve A², pipe H, leading down from casing A' and connected with horizontal pipe B, said pipe B being provided with the V-shaped side opening C, its lowest point being a little above the bottom inner surface of said pipe, and pipe D, its upper end secured to said pipe B and communicating with said opening C, and its lower end passing into the upper end of said tank A, substantially as shown and described.

2. The combination, with a water cut-off,

substantially as shown and described, of the vertical pipe H, terminating in an open waste elbow-pipe B a little above the tank A, said waste-pipe B having in its side an opening C, its lowest point not coming quite down to the bottom inner surface of the said pipe, and pipe D, its upper end communicating with said opening and its lower end entering into the upper end of said tank A, substantially as shown and described.

In testimony whereof we affix our signatures in presence of two witnesses.

TITUS L. BISSELL.

WILLIAM P. PRESCOTT.

Witnesses:

EDWARD NORD,

G. H. PUCKHABER.