

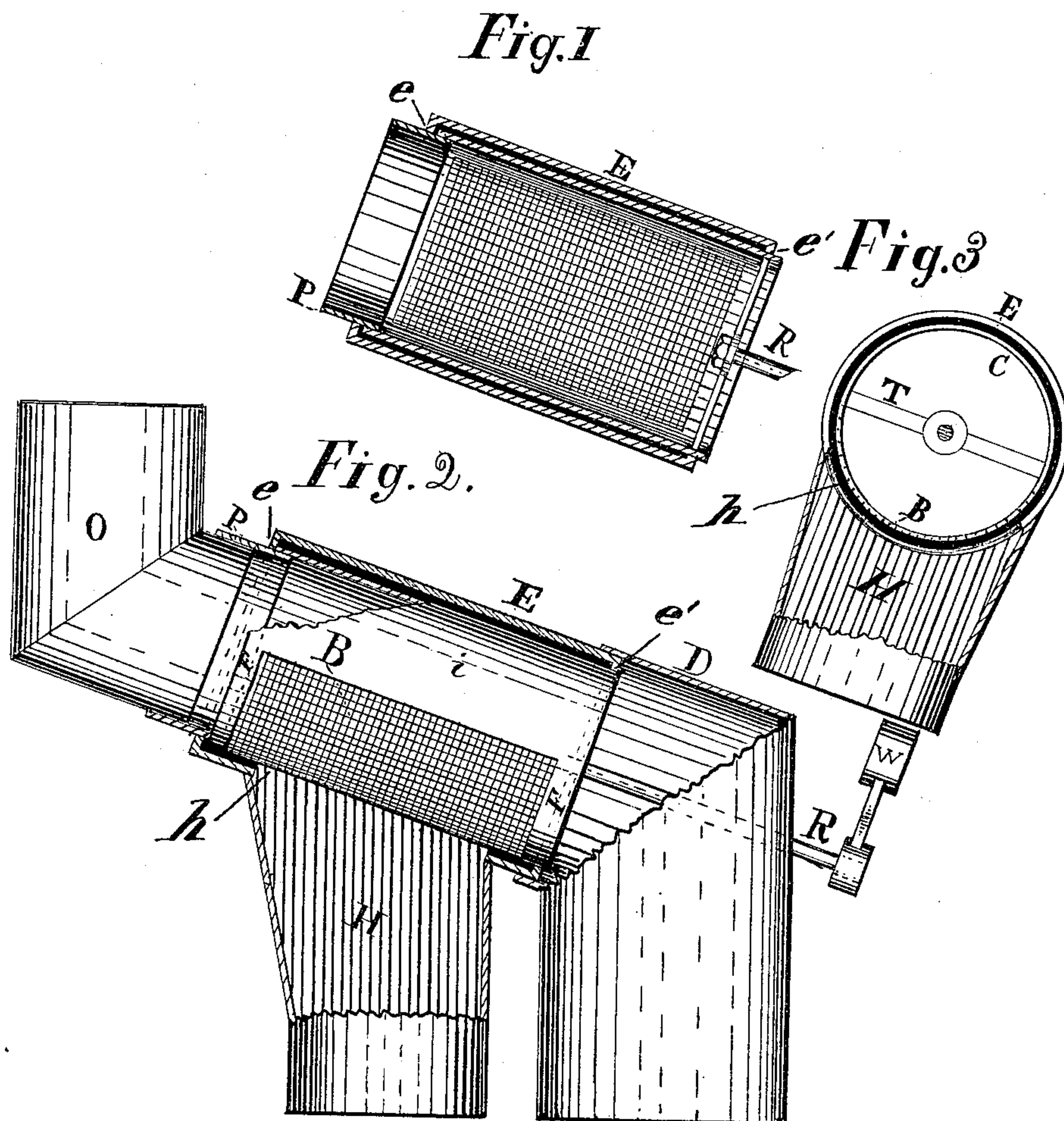
(No Model.)

J. E. BURDGE.

FILTERING CUT-OFF RAIN WATER SPOUT FOR CISTERNS.

No. 326,945.

Patented Sept. 29, 1885.



WITNESSES:

Joseph Littell.
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INVENTOR

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FILTERING CUT-OFF RAIN-WATER SPOUT FOR CISTERNS.

SPECIFICATION forming part of Letters Patent No. 326,945, dated September 29, 1885.

Application filed April 1, 1885. (No model.)

To all whom it may concern:

Be it known that I, JONATHAN E. BURDGE, a citizen of the United States, residing at Home City, in the county of Hamilton and State of Ohio, have invented a new and useful Filtering or Straining Cut-Off-Feed Rain-Water Spout for Cisterns, of which the following is a specification.

My invention relates to a cut-off and filtering spout for switching or turning into a cistern the rain-water running from the roof discharge-pipe of a building.

My invention consists in providing at the discharge end of a rain-water-conducting pipe an oscillating cylinder or tube, open throughout its length and having an opening cut in its circumference, intermediate its ends, which is filled with a straining wire-gauze, through which gauze-covered opening the discharge-water flowing from the roof is emptied into the cistern in a filtered condition, and may be cut off from the cistern by turning the cylinder a part of a revolution, so as to bring said gauze-covered opening out of line with the cistern-connecting pipe, all of which will be fully hereinafter described.

In the accompanying drawings, Figure 1 is a longitudinal sectional elevation of my improved filtering cut off cylinder, showing it concentrically mounted within an inwardly-flanged sleeve. Fig. 2 is a sectional elevation of my improvement, showing the straining cut-off cylinder mounted within said flanged sleeve, as in Fig. 1, being turned so as to permit the water to flow into the cistern, the discharge end of the conducting-pipe, the cistern-spout, and the discharge or waste spout being shown therein. Fig. 3 is a broken transverse sectional elevation of the cistern-spout and the filtering cut-off cylinder.

O represents an elbow, composing the lower discharge end of a down-spout for rain-water, leading from the roof of a building to the ground.

i represents a tube or cylinder fitting upon the mouth of down-spout O, but preferably with an intervening rigid sleeve or thimble, P. In Figs. 1 and 2 one end of the sleeve P is shown encompassing the mouth of spout O, with its other end fitting within cylinder i.

Cylinder i is provided with an opening, F, in its circumference, which is covered with wire-gauze B.

E represents a sleeve encircling the cylinder i. e e' are inwardly-projecting flanges at both ends of sleeve E, the flange e encircling the thimble P and the flange e' encircling the cylinder i.

D represents a waste pipe or spout, fitting upon the mouth of cylinder i.

T represents spider-arms in the discharge opening or mouth of cylinder i.

r is a central hub, which unites said arms T, and has a rod, R, projecting from it into and through the spout D.

W is a manipulating-handle attached to the outer end of rod R.

H represents a spout fitting an opening, h, cut in the bottom of sleeve E, and suitably connected with a cistern.

In the operation of my device, the water passing through the down-spout O flows into the cistern through the gauze-covered opening B F, when said opening is brought opposite the opening h in the bottom of sleeve E, as shown in Figs. 2 and 3. The presence of the fine wire-gauze in the opening F prevents insects, chips, worms, leaves, or any similar foreign matter entering with the rain-water into the cistern, and it therefore serves as a strainer or filter to cleanse and purify the water.

Instead of the said gauze-covered opening, it is obvious that the cylinder i could be provided at the same place with small holes or perforations, through which the water could pass and be strained, but not as well as by means of the gauze, because the small holes made in the metal would be more likely to become choked or closed up with the said foreign matter.

I prefer to arrange the cut-off filtering-cylinder at an inclination, as shown in the drawings, so that all foreign matter can more readily pass over the gauze-covered opening through the open waste-spout D, and also that the water cannot flow backwardly through the spout. The cylinder i is freely turned in its bearings formed by the thimble P and flange e' by moving the handle W in either direction to

bring opening F opposite the opening *h* into the cistern, or to arrange said opening out of line with said cistern-opening, to permit the water to flow into the cistern on the one hand
5 or to cause it to be cut off therefrom and discharged from waste-spout D on the other.

I claim—

1. The combination, with a rain-water down-spout, O, of a cut-off tube, *l*, which is open
10 throughout its length and provided with a gauze-covered opening, B F, intermediate its ends, whereby the water is turned into or from a cistern and the debris or filtered deposit automatically carried out of the waste-outlet
15 without obstruction, thereby maintaining a clear passage-way for the discharge of the

water through the gauze in a filtered condition into the cistern when turned to run therein, substantially as herein specified.

2. The combination, with down-spout O, of
20 a filtering cut-off cylinder, *i* B F, provided with a handle, R W, the bearing-thimble P, inwardly-flanged sleeve E *e e'*, cistern-spout H, and the waste-spout D, substantially as and for the purpose specified.

In testimony of which invention I have here-
25 unto set my hand.

JONATHAN E. BURDGE.

Witnesses:

JOHN E. JONES,
JOSEPH LITTELL.