Jerome W. Wetmore and Cyrus Avery.

Impd. Rain Water Cut-off.

117493. PATENTED JUL 25 1871

Fig. 1.

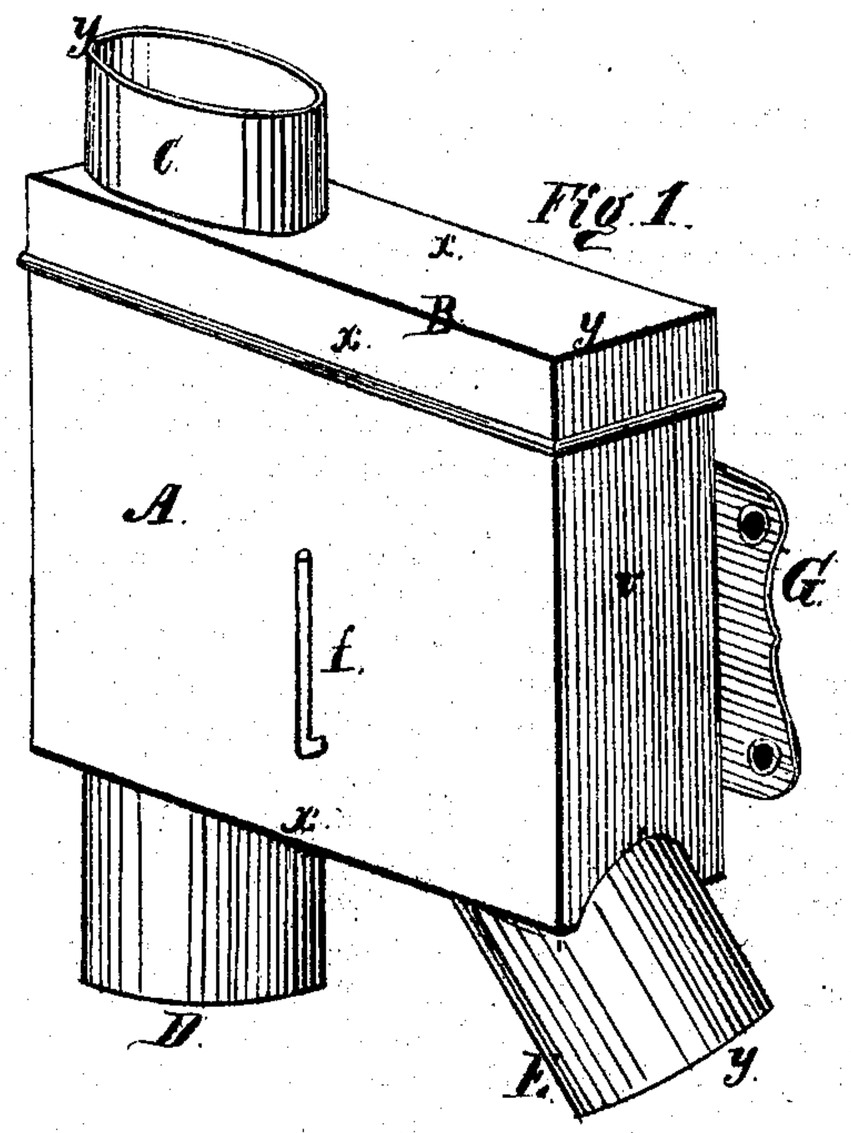


Fig. 2.

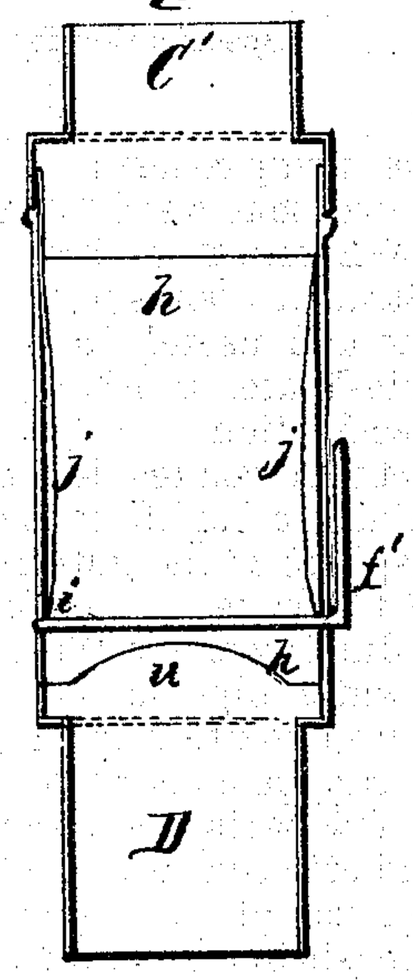
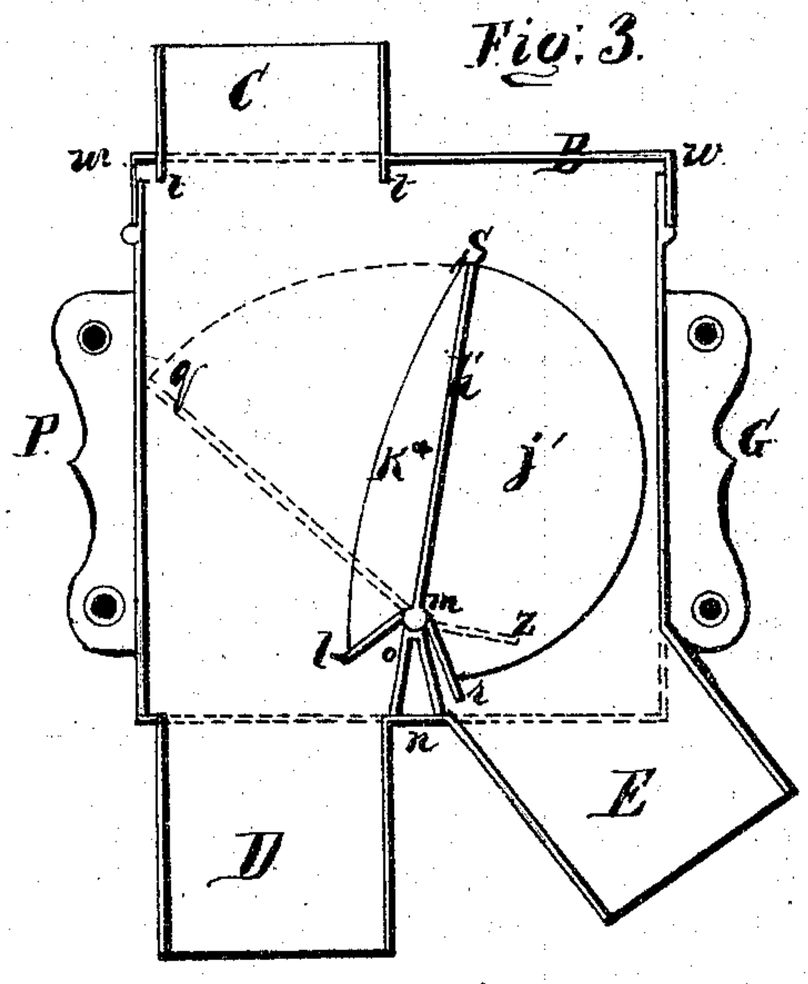


Fig. 3.



Witnesses.

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UNITED STATES PATENT OFFICE.

CYRUS AVERY AND JEROME W. WETMORE, OF ERIE, PENNSYLVANIA.

IMPROVEMENT IN CUT-OFFS FOR RAIN-WATER PIPES.

Specification forming part of Letters Patent No. 117,493, dated July 25, 1871.

To all whom it may concern:

Be it known that we, CYRUS AVERY and JEROME W. WETMORE, of Erie, in the county of Erie and State of Pennsylvania, have invented certain new and useful Improvements in Cut-Offs for Rain-Water Pipes, of which the following is a specification:

Our invention relates to an improved rain-water conduit or cut-off to be attached to the leaders or spouts of the gutters which catch the water from the eaves of the house for the purpose of conducting the water either into a cistern or a waste-water pipe, as may be desired. The object of our invention is to provide an apparatus that can be constructed at a small cost, having but few parts, and so arranged as to form a simple and effective device which can be easily operated for the purpose specified; and the invention consists in combining a rectangular box, having an inlet-pipe and outlet-pipes, with a vibrating chute or valve, constructed in a peculiar manner, for the purpose of deflecting the water from the inlet to either one of the outlet-pipes desired, as hereinafter more fully set forth.

In the accompanying drawing, Figure 1 represents a view in perspective of our improved apparatus; Fig. 2, a transverse vertical section of the same in the line *x x* of Figs. 1 and 3; and Fig. 3, a central longitudinal vertical section thereof in the line Y Y of Fig. 2.

A rectangular box, A, is provided with a cap or cover, B, which may be easily removed to afford access to the interior for repairs, and to which an inlet-pipe, C, is attached, which pipe connects with a spout leading from a gutter at the eaves of the roof. Directly beneath, and in line with the inlet-pipe, is an outlet-pipe, D, which is attached to the bottom of the box A, and which connects with a pipe leading to a cistern or reservoir. Another outlet-pipe, E, is attached to the bottom and at the opposite end of said box, and connects with a pipe leading to another cistern or waste-water reservoir used for receiving the first washings of the roof. The chute F is formed of a partition, *h*, with deflecting ledges *l r* secured one on each side, and at angles obtuse thereto, and connected together by curved rings or flanges *k j'*, which brace and secure the parts together. The ledges *l* and *r* have circular segments *w* cut out of them to direct the water from the sides of the box toward the center of the outlet-pipes. The wings or flanges *k j'* are concave or dished on their outer sides, so that the edges only bear against the sides of the box, by which means the friction is lessened and the chute easily operated, as hereinafter shown. A shaft, *f*, provided with an arm or lever, *f'*, on its outer end, is attached to the chute F at the intersection of plates *h l*, and *r* passes transversely through the box A and rests in suitable bearings in a double-inclined partition, *o n*, between the outlet-pipes D and E, separating them so that the ledges *l* or *r* may rest against either one or the other of the inclined sides of this partition and form a stop to limit the movement of the chute, as shown in Fig. 3. The inlet-pipe C projects slightly through the top or cover B in such manner that the water, in entering the box, will not follow the upper surface of the box, but be thrown directly toward the outlet-pipe D or upon the center of the chute C, so that its flow may not be unnecessarily obstructed. The box may be attached to the wall of the building by suitable lugs G P, and may be easily connected and disconnected with the inlet and outlet-pipes.

In operation the chute is first placed in the position shown by dotted lines in Fig. 3, so that the unclean water or first washings of the roof enters the box by pipe C and is deflected toward the center of the outlet-pipe E, from whence it is conveyed to a reservoir or allowed to escape, as may be desired. When the unclean water has passed off, or when it is desired to change the course of the water, the lever *f'* is turned to the right until the ledge *r* rests against the inclined side of the partition *o n*. The chute is then in a vertical position, as shown in Fig. 3, and the water entering through pipe C will fall directly into the outlet-pipe D without being in any way obstructed in its flow.

We are aware that oscillating chutes are old, and do not, therefore, claim every mode of combining a chute and a conduit; but

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

1. The combination of the box, the inlet-pipe, and the outlet-pipes, arranged as described, the

vibrating chute formed as described, and the partition with its sides inclined in opposite directions, forming a fulcrum as well as a stop to limit the vibration of the chute, these parts being constructed for joint operation, substantially as and for the purpose specified.

2. The combination of the partition with the vibrating chute fulcrumed thereon, and forked to embrace both sides of the partition, as set forth, so that the partition limits the movement of the chute in either direction.

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Witnesses:
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