(No Model.)

J. M. CASTAING & J. B. DOHIN.

RAIN WATER CUT-OFF.

No. 529,596. Patented Nov. 20, 1894.

Fig. 1.

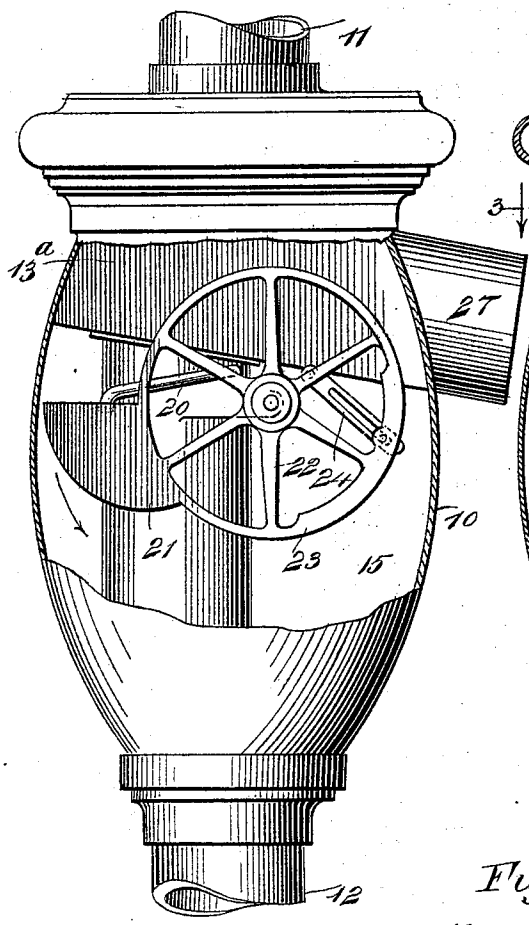


Fig. 2.

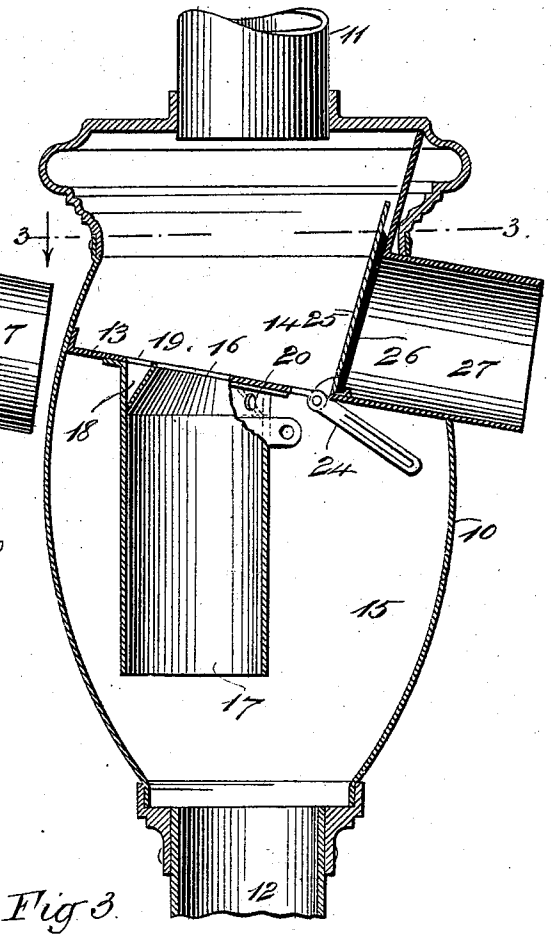
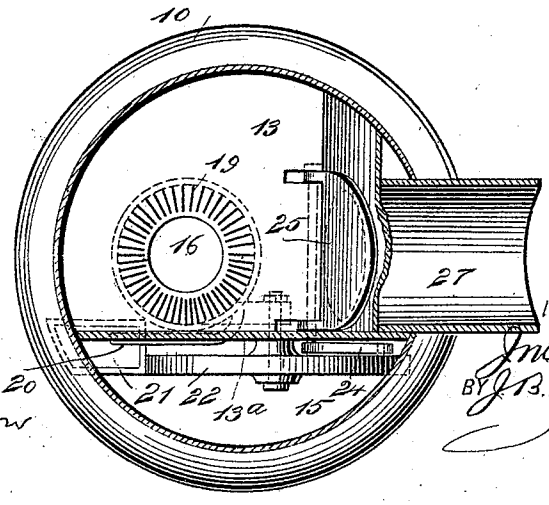


Fig. 3.



WITNESSES:

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JEAN MARIE CASTAING AND JEAN BAPTISTE DOHIN, OF NEW ORLEANS, LOUISIANA.

RAIN-WATER CUT-OFF.

SPECIFICATION forming part of Letters Patent No. 529,596, dated November 20, 1894.

Application filed April 30, 1894. Serial No. 509,536. (No model.)

To all whom it may concern:

Be it known that we, JEAN MARIE CASTAING and JEAN BAPTISTE DOHIN, both of New Orleans, in the parish of Orleans and State of Louisiana, have invented a new and Improved Rain-Water Cut-Off, of which the following is a full, clear, and exact description.

Our invention relates to improvements in rain water cut-offs such as are arranged between the conductor on a building and the cistern which is supplied with water from the conductor.

The object of our invention is to produce an extremely simple apparatus of this kind which may be applied to any ordinary conductor and cistern, and which is constructed in such a manner that the first water running from the roof, which is dirty necessarily, will be discharged without running into the cistern, and also to arrange the apparatus so that after the dirty water is discharged, a valve will be automatically shifted so that the clean water will run to the cistern.

To these ends our invention consists of certain features of construction and combinations of parts, which will be hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in all the views.

Figure 1 is a broken side elevation, partly in section, of the apparatus embodying our invention. Fig. 2 is a central vertical section of the same, with the apparatus in its normal position adapted to discharge the dirty water; and Fig. 3 is a sectional plan on the line 3—3 of Fig. 2.

The apparatus is provided with a suitable case 10, which is preferably oval and elongated vertically, the case connecting at the top with a pipe 11 leading to the roof, and at the bottom with a pipe 12 adapted to discharge the dirty water. The case is divided by an inclined partition 13 and vertical partition 13^a, into two compartments 14 and 15, arranged one above the other and these communicate by means of a hole 16 in the partition with a pipe 17 which is secured to the partition and surrounds the hole. The pipe is larger than the hole 16 and it is provided, near the top, with a circumferential cup 18 which communicates with the compartment 14 by means of holes 19 forming a sort of strainer, and thus the main volume of dirty water, together with the refuse which it carries, will rush down through the hole 16 while a portion of the water will accumulate in the cup 18 and run from this through the pipe 20, which is connected therewith, to a bucket 21 on the periphery of a wheel 22 which is journaled on a suitable support in the chamber or compartment 15, as shown clearly in Figs. 1 and 3. The wheel 22 is provided on one side with a weight 23 which returns it to position after it has been oscillated by the water in the bucket 21. The wheel connects by means of a crank and rod 24 with a flap valve 25, which is provided with a suitable packing 26 and is normally held so as to tightly close the pipe 27 which leads from the upper chamber or compartment 14 and is adapted to carry clean water to the cistern.

The operation of the apparatus is as follows: The first water which runs from the pipe 11 into the compartment 14 runs down through the hole 16 and pipe 17 and is discharged through the pipe 12, taking with it the dirt which it carries, but a portion of the water passes through the holes 19 to the cup 18 and from this through the pipe 20 to the bucket 21. The bucket is thus filled and, by the time it is filled, the water entering the case 10 will have become clean and at this time the bucket oscillates the wheel 22 so that the valve 25 closes down over the hole 16 and is held there by the inflowing water which passes out through the pipe 17 to the cistern.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

1. A rain water cut-off, comprising a case having an inlet pipe at the top and a discharge pipe at the bottom, an inclined partition extending across the case and provided with a central hole, a second discharge pipe leading from the upper compartment of the case, a valve adapted to alternately close the hole in the partition and the second discharge pipe, a wheel in the case, a bucket on the wheel, the wheel and its bucket both lying out of the

path of the water through the casing, a small pipe leading from the partition to the bucket, and means for operating the valve by the movement of the wheel, substantially as described.

2. A rain water cut-off, comprising a case having an inlet pipe at the top and a discharge pipe at the bottom, an inclined partition with a hole in it, extending across the case, a second discharge pipe opening from the case at the foot of the inclined partition, a valve to close the hole in the partition and the second discharge pipe, a cup encircling the hole in the partition and having perforations in the top, a wheel journaled in the case and provided with a peripheral bucket, a pipe leading from the cup to the bucket, and means for operating the valve by the movement of the wheel, substantially as described.

3. A rain water cut-off, comprising a case having an inlet at the top and a discharge at the bottom, a transverse partition in the case provided with a hole in it, a second discharge pipe opening from the case above the partition, a valve having a slotted arm and arranged to close alternately the second discharge pipe and the hole in the partition, a wheel journaled in the case and provided with a wrist pin engaging the slot in the arm and having a bucket out of the path of the water through the casing, and a small pipe leading from above the partition and discharging slowly into the bucket, substantially as described.

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Witnesses:
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