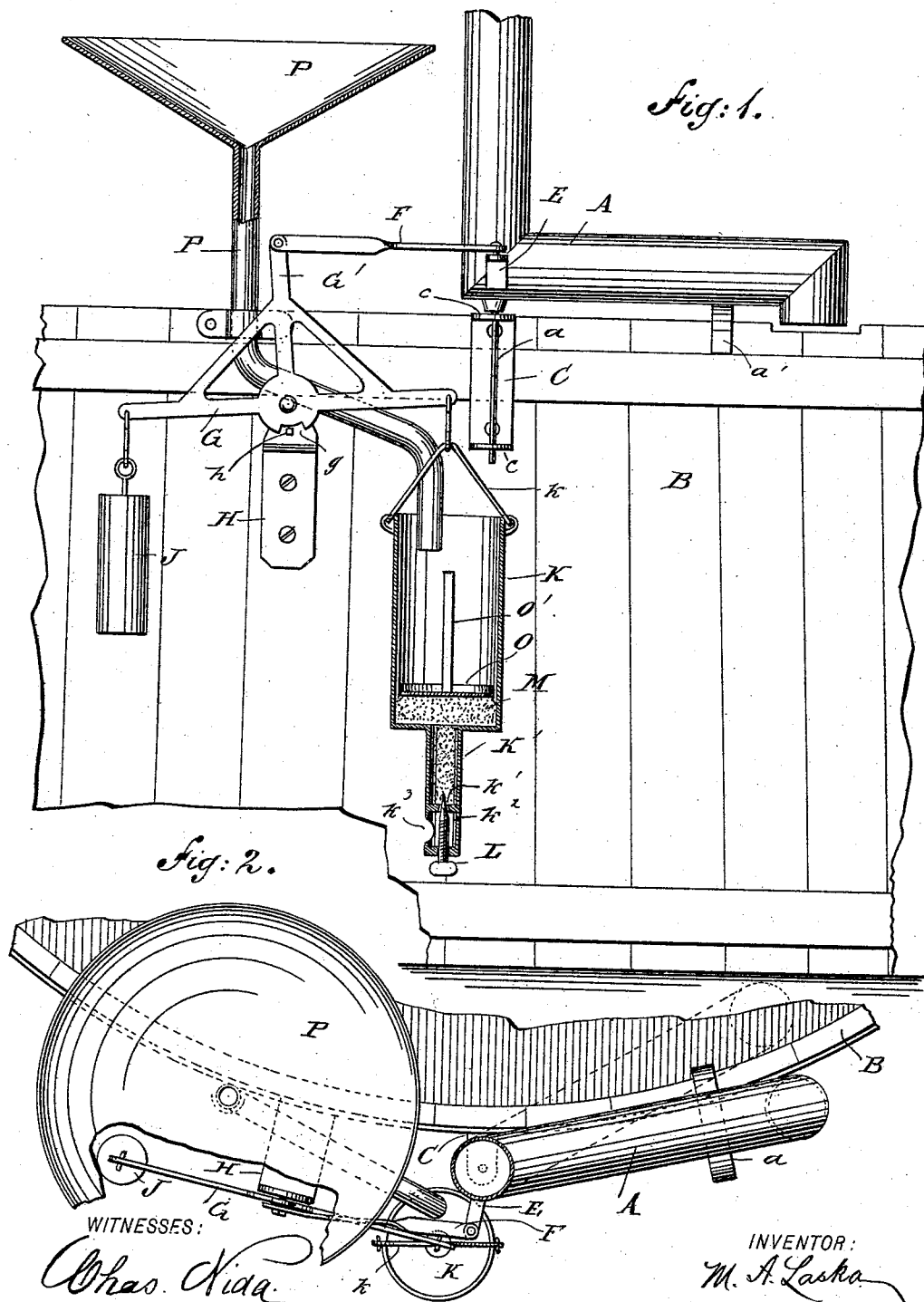


(No Model.)

M. A. LASKA.
RAIN WATER CUT-OFF.

No. 498,663.

Patented May 30, 1893.



UNITED STATES PATENT OFFICE.

MATHIAS A. LASKA, OF NEW ORLEANS, LOUISIANA.

RAIN-WATER CUT-OFF.

SPECIFICATION forming part of Letters Patent No. 498,663, dated May 30, 1893.

Application filed February 10, 1891. Serial No. 380,898. (No model.)

To all whom it may concern:

Be it known that I, MATHIAS A. LASKA, of the city 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.

My invention relates to improvements in that class of devices which are adapted to automatically control the flow of rain water into a cistern, and the object of my invention is to produce a simple, durable and easily regulated device, which will operate in such a manner that the water with the dust and dirt which is washed off from the roof of a building at the beginning of a rain, will be directed away from the cistern, and which, when the water has become clean, will direct the flow into the cistern.

To this end my invention consists in 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 letters of reference indicate corresponding parts in both the figures.

Figure 1 is a side elevation partly in section, of the entire device, as applied to a cistern; and Fig. 2 is a broken plan view of the same.

The main elbow A connects with the ordinary rain water conductor in the usual way, and is adapted to deliver into the cistern B. The elbow is held, however, to swing horizontally, it having on the under side a depending rod *a* which is mounted in the lugs *c* of a plate C, which plate is secured to the cistern but may be secured to any convenient support. The movement of the elbow A is limited by a keeper *a'* which is secured to the under side of the elbow, and the ends of which are bent downward so as to embrace the edge of the cistern, and these depending ends prevent the elbow from moving too far in either direction. Near the main vertical portion of the elbow is an elbow lug E to which is pivoted a rod F, the opposite end of the rod being pivoted to the vertical arm G' of the three-armed lever G, so that when the lever is tilted,

the rod F will be moved, and the elbow A made to turn.

The lever G is centrally pivoted on a support H, secured to the cistern, and from one horizontal arm thereof is suspended a weight J which is heavy enough to normally swing the elbow A, so that it will not deliver into the cistern, and to the opposite arm of the lever is hooked the bail *k* of the sand box K. The lever is notched on the lower side, as shown at *g*, and thereat rests upon a stud *h* on the support H, the stud serving as a guide for the lever and also serving to relieve its central pivot of a portion of the weight of the lever and its attachments.

The sand box K has a depending tube K' opening from the bottom, which tube is closed at its lower end and is provided near the bottom with a transverse partition *k'*, thus forming a chamber *k*² which has an opening *k*³ in one side. The partition *k'* has a central conical opening therein, and extending upward through and engaging the bottom of the tube, is a screw L having a conical point which fits and enters the opening in the partition.

The sand packs snugly in the box or vessel K and by partly absorbing and partly checking the water causes the latter to drop evenly from the beginning to the end of the operation thus preventing sudden movements of the apparatus. The sand also prevents dust, leaves, &c., from interfering with the passage of water through the valved opening. Moreover since the box is wholly separate from and exterior to the pipe leading to the cistern none of the foreign matter collecting therein can be washed into the cistern as would be the case if the water in its course to the cistern had to pass into the box or vessel K and overflow into the cistern pipe.

The sand box is provided with sand M, there being sufficient to fill the tube and to partially fill the box, the sand being held in place by a cover O which rests loosely upon it, and which is provided on the top with a handle O', by means of which it may be removed. A large funnel P is secured to the cistern, and the lower end of the funnel terminates in a pipe P which is made to deliver into the sand box. As shown in the drawings, the fun-

nel P is supported on the cistern, but as the funnel must be out of doors where it will be exposed to the rain, if the cistern should be located in doors, the funnel may be secured to any other convenient support.

The operation of the device is as follows: The weight J is heavy enough to more than balance the weight of the sand box, so that by means of the lever G and connecting rod F, the elbow A is swung, so that the water from the roof will run to waste. When the rain first begins to descend, the water will wash the dust from the roof and it will run to waste through the elbow A, but after it has rained a short time, sufficient water will have fallen into the funnel P and have been delivered into the sand box K to counterbalance the weight J, and thus tilt the lever and swing the elbow A so that the water from the roof will be delivered into the cistern. The screw L in the sand box is adjusted so that water therein will drop out very slowly, and consequently after the elbow has been thrown to connect with the cistern, it will be retained in that position for a considerable length of time, so that after a rain, if it should rain again within a very short time, the water would be delivered into the cistern at once, but if a considerable time intervenes between the rains, the water will first run to waste, as described, as the water will have dripped through the openings in the bottom of the sand box. The length of time during which the water runs to waste may be governed by adjusting the weight J, and the sand box in relation to each other.

It will be noticed that the cover O in the sand box has a flange around the upper edge, so that the dust which runs into the sand box from the funnel, will be caught upon the cover so that it may be conveniently emptied.

Having thus fully described my invention,

I claim as new and desire to secure by Letters Patent—

1. The combination with the swinging pipe delivering to the cistern and receiving water from the rain spout, of a counterbalanced lever normally holding the swinging pipe out of connection with the cistern and provided with a suspended open water-receiving vessel exterior to and independent of the pipe leading to the cistern and a permanently open pipe for conducting water to the said vessel to cause it to operate the said lever and connect the swinging pipe with the cistern, substantially as set forth.

2. The combination with the swinging pipe to connect the rain spout and cistern and provided with a counterbalanced lever normally disconnecting it from the cistern, of a vessel suspended from the said lever exterior to and independent of the cistern pipes, a regulating valve in the bottom of the vessel, an exposed funnel or gatherer into which the rain may fall and having a pipe leading to the said vessel, substantially as set forth.

3. The combination with a cistern having an opening in its upper end, of a horizontally swinging elbow pipe mounted on said cistern to register with said opening, a counterbalanced lever mounted on the cistern and connected with said elbow pipe to normally disconnect it from the cistern, a vessel suspended from the lever and wholly independent of the elbow pipe and cistern, and having a valved drip opening in its bottom, an exposed rain gathering funnel above the vessel and having a pipe leading thereto; said vessel being adapted to contain a body of sand above its valve, substantially as set forth.

MATHIAS A. LASKA.

Witnesses:

EDWARD MORGAN,
S. B. SEILE.