

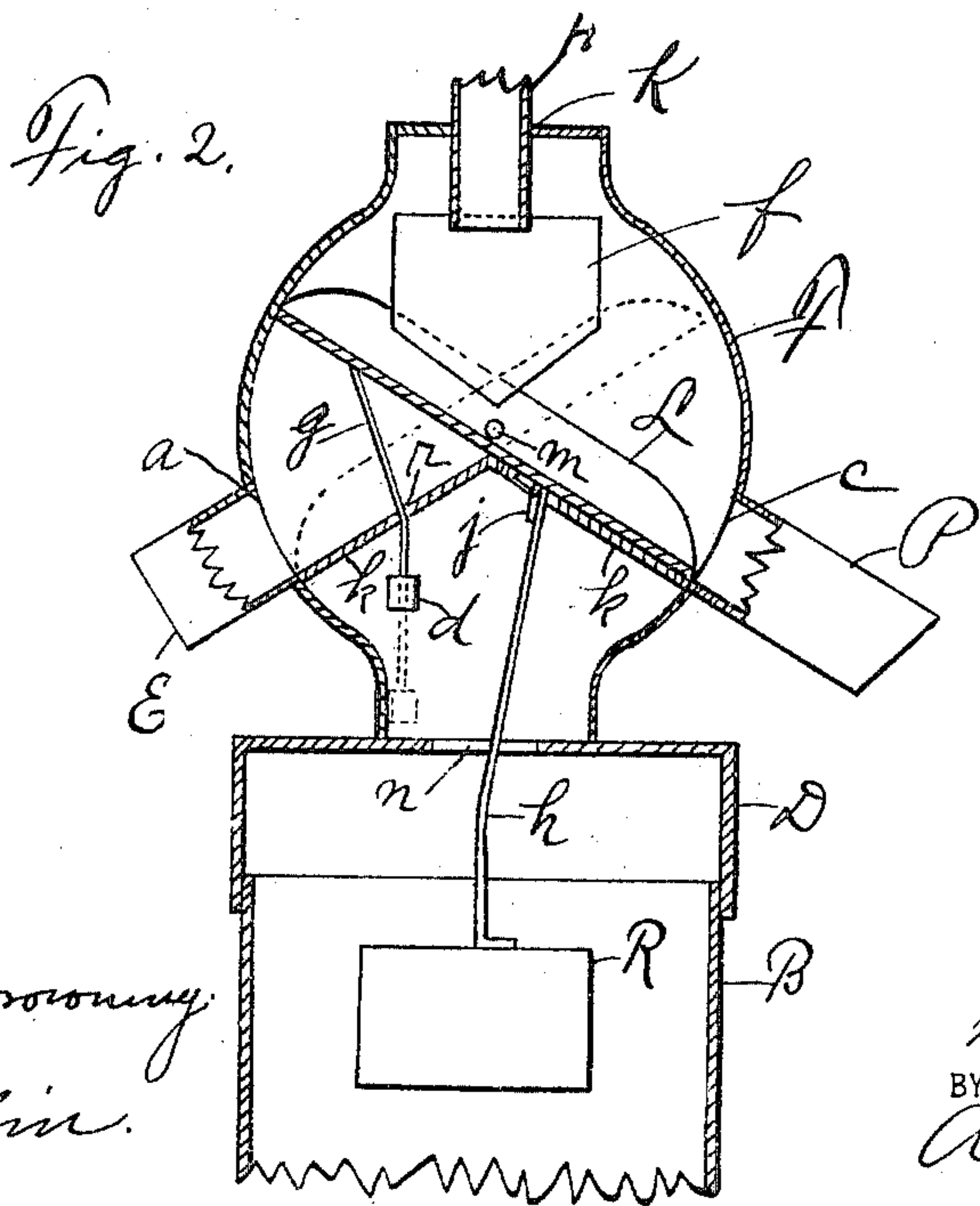
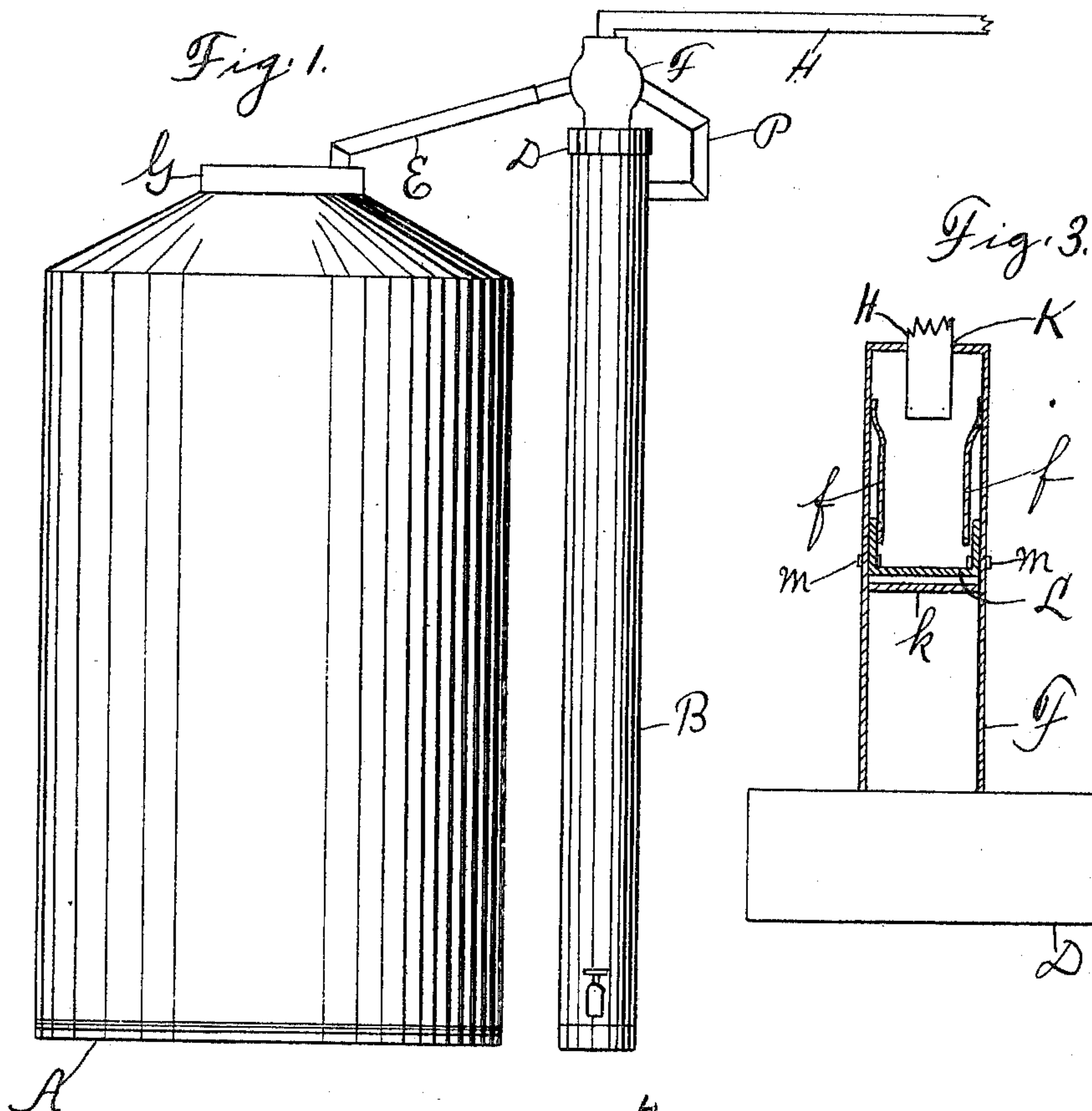
No. 649,838.

Patented May 15, 1900.

H. W. HARRY.
CISTERN.

(Application filed Oct. 5, 1898. Renewed Mar. 30, 1900.)

(No Model.)



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HUGH W. HARRY, OF DALLAS, TEXAS.

CISTERN.

SPECIFICATION forming part of Letters Patent No. 649,838, dated May 15, 1900.

Application filed October 5, 1898. Renewed March 30, 1900. Serial No. 10,847. (No model.)

To all whom it may concern:

Be it known that I, HUGH W. HARRY, a citizen of the United States, residing at Dallas, in the county of Dallas and State of Texas, have invented certain new and useful Improvements in Cisterns, of which the following is a specification.

This invention relates to cisterns, and more particularly to that class of cisterns used to catch rain-water from the roofs of houses or other places, and one object is to construct cisterns by which the impure water will be separated from the pure water; and the invention consists in a small subsidiary cistern which will receive the first water that falls or flows from the roof and an automatic cut-off which will turn the water into the main cistern after any predetermined quantity of water has flowed into the subsidiary cistern, thus separating the water which has washed off the dust and dirt and dead and alive insects and other filth from the purer water which flows into the main cistern and storing the dirty and the clean water.

Other objects and advantages will be fully understood from the following description and claims when read in connection with the accompanying drawings, which form a part of this application.

Figure 1 is a side elevation of the two cisterns, showing the arrangement of pipes. Fig. 2 is a broken vertical section of the subsidiary cistern, showing the automatic cut-off in detail. Fig. 3 is a sectional view of the casing, showing arrangement of the chute.

Similar characters of reference are used to indicate corresponding parts throughout the several views.

The main cistern A is connected to the subsidiary cistern B by the pipe E, which is connected to the casing F for the automatic cut-off and enters the main cistern through the cap G. Water comes from the roof or other place through the pipe H, which enters casing F through the opening K. A chute L is pivoted at its middle point or near that point by means of trunnions *m* on the inside of casing F. The chute consists of a bottom and two sides. The chute is adapted to direct water either to the opening *a* or to opening *c* in the sides of the casing F. The pipe P connects the casing F and the subsidiary

cistern B. When the chute is in the position shown in Fig. 2, water will flow into the cistern B through pipe P. When the chute is in the position shown in dotted outline in Fig. 2, water will flow into the cistern A through pipe E. The chute is operated by the float R, which is connected to the chute by means of the stem *h*, which may be hinged to the bottom of the chute by a hinge *j* and attached to the top of the float. The float may be constructed of sheet metal and weighted, if necessary. The stem is rigid, so that it will shove the chute when the water raises the float. A weight *d* is attached to the other end of the chute by means of a flexible cord *g*, which works through a hole *r* in the bottom *k* of the casing. This weight is attached to the chute so that it will give a positive motion to that end of the chute, but it may not always be necessary. The stem *h* is passed through the bottom of the casing *k* and through an opening *n* in the cap D of cistern B. The chute stands normally in the position shown in Fig. 2. When water flows into cistern B long enough to rise in the cistern B, the water will raise float R. Float R, by means of the stem *h*, will change the chute to the position shown by dotted lines in Fig. 2, and water will then flow into the cistern A through opening *a* and pipe E. Two sheets of metal *f* are attached to the sides of the casing F and extend down in the chute as guides for directing the water in the chute and preventing the water from falling to one side of the chute and running out both openings at once. The bottom *k* is high in the central part and slopes toward the openings *a* and *c*. The bottom, besides preventing the water from going directly into cistern B, serves as a rest for the chute.

The various parts may be made of any suitable material; but it is preferable to make the entire mechanism of sheet metal.

The cistern B is designated as subsidiary, because it is used to aid in securing or accomplishing the desired result.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A main cistern provided with a subsidiary cistern and means for cutting water off from said subsidiary cistern and directing

the same to the main cistern; said means consisting of a casing mounted on said subsidiary cistern and having a bottom inclined downwardly in opposite directions and leading to outflow-openings, a chute pivoted in said casing above the bottom, a float and a counterpoise-weight attached to the chute on reverse sides of its pivotal point, depending plates secured to the interior of the casing and having their lower ends overlapping the opposite sides of the chute, a supply-pipe leading into the top of the casing, and connecting-pipes between the casing and subsidiary and main cisterns.

2. A main cistern, a subsidiary cistern and means for controlling the flow of water into said cisterns, said means comprising a casing on the subsidiary cistern having a feed-pipe entering the upper portion thereof, and lower opposite openings, a chute pivotally mounted in said casing, a float and a counterpoise-weight attached to the chute on reverse sides of its pivotal point, depending plates secured within the casing and having converging lower ends bearing against opposite sides of the chute, and pipes connecting the casing and cisterns.

3. A main cistern, a subsidiary cistern and means for cutting water off from the subsidiary cistern and directing the same to the main cistern, said means comprising a casing on the subsidiary cistern having an inflow or feed conduit leading to the top thereof and a bottom deflected downwardly at opposite

sides from a central ridge or apex and leading to outflow-openings, a chute centrally pivoted above the ridge or apex of the bottom at such a distance as to cause the same to bear flat on the bottom when tilted in opposite directions, means for automatically tilting the chute, and conduit connections between the casing and cisterns.

4. A main cistern, a subsidiary cistern and means for cutting off water from the subsidiary cistern and directing the same to the main cistern, said means comprising a casing on the subsidiary cistern having an inflow or feed conduit leading to the top thereof and a bottom deflected downwardly at opposite sides from a central edge or apex and leading to outflow-openings, a chute centrally pivoted above the ridge or apex of the bottom at such a distance as to cause the same to bear flat on the bottom when tilted in opposite directions, a float located in the subsidiary cistern and having a connection with the chute to one side of its pivotal connection, and a counterpoise-weight attached to the chute on the opposite side of its pivotal connection, substantially as described.

In testimony whereof I set my hand, in the presence of two witnesses, this 30th day of September, 1898.

HUGH W. HARRY.

Witnesses:

A. L. JACKSON,
JAMES GILFORD BROWNING.