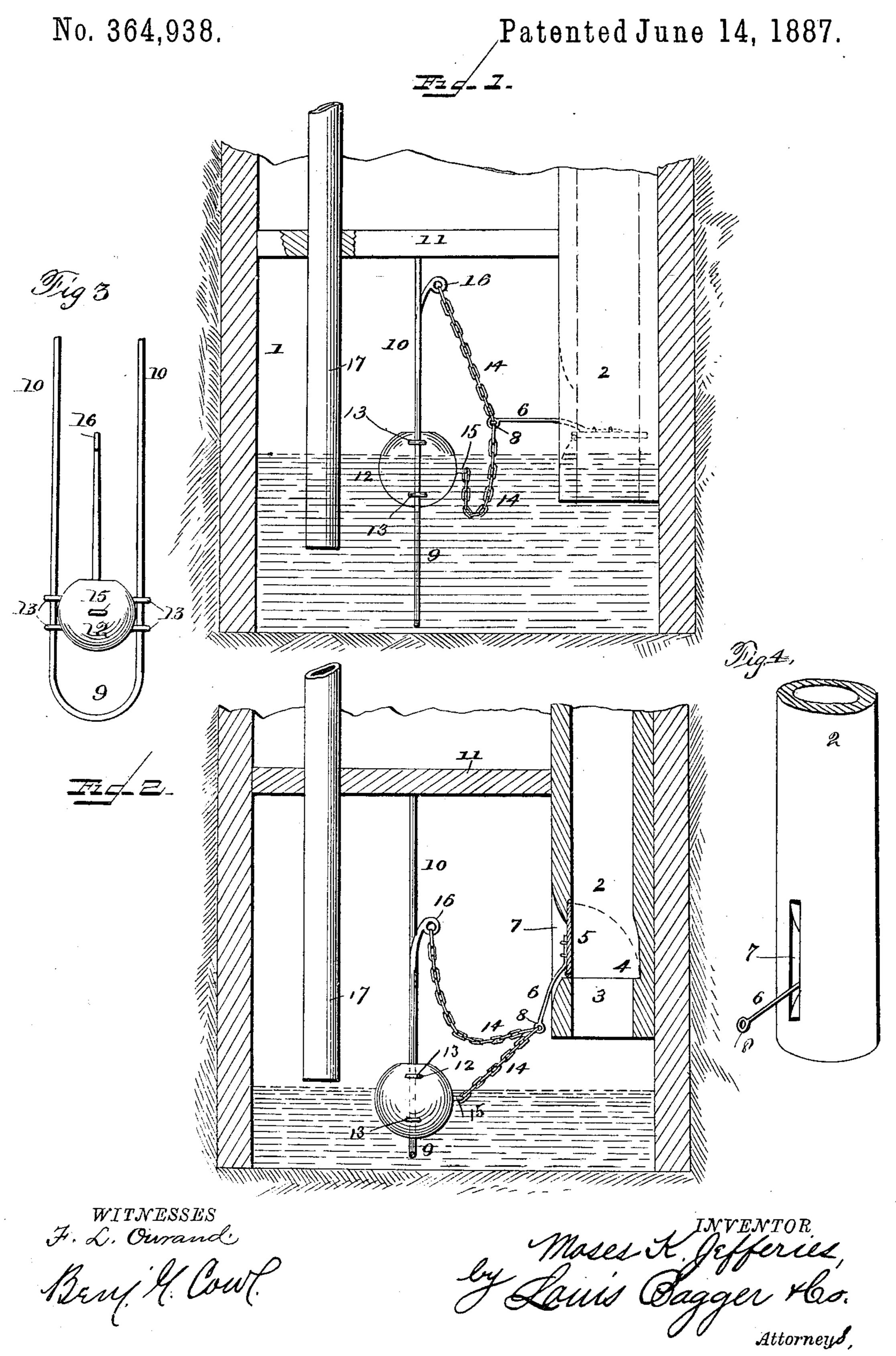
M. K. JEFFERIES.

DEVICE FOR REGULATING THE WATER SUPPLY IN CISTERNS.



United States Patent Office.

MOSES KIMBALL JEFFERIES, OF HILLSBOROUGH, WISCONSIN.

DEVICE FOR REGULATING THE WATER-SUPPLY IN CISTERNS.

SPECIFICATION forming part of Letters Patent No. 364,938, dated June 14, 1887.

Application filed Mar. h 19, 1887. Serial No. 231,507. (No model.)

To all whom it may concern:

Be it known that I, Moses Kimball Jef-FERIES, a citizen of the United States, and a resident of Hillsborough, in the county of 5 Vernon and State of Wisconsin, have invented certain new and useful Improvements in Devices for Regulating the Water-Supply in Cisterns; and I do hereby declare that the following is a full, clear, and exact description of to the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a sectional view of a cistern provided with my improved device for regulating the supply of water to the same, showing the device in side view. Fig. 2 is a sectional view of the device. Fig. 4 is a per-20 spective view of the lower end of the inletpipe, and Fig. 3 is a side view of the weight or float and its attachment.

Similar numerals of reference indicate corre-

sponding parts in all the figures.

My invention has relation to that class of devices for regulating the supply of water into cisterns in which a ball is connected to a valve in the supply-pipe, closing the valve as it is raised by the water rising in the cistern, 30 and opening the valve as it sinks with the sinking water; and it consists in the improved construction and combination of parts of such a device, as hereinafter more fully described and claimed.

In the accompanying drawings, the numeral 1 indicates the wall of the cistern, which may be of any desired construction, and into which the supply-pipe 2 enters from above, reaching to near the bottom of the same. 40 This pipe is formed with an upwardly-facing seat, 3, having its sides recessed, as shown at 4, for the free play of the valve 5, which fits to the wall of the pipe, opening upward. 45 An arm, 6, projects from the hinge end of the valve through a narrow slot, 7, in the supplypipe, and is formed with an eye, 8, at its outer end.

A long narrow bail, 9, is secured with the 50 upper ends of its vertical arms 10 to a crosspiece, 11, secured in the cistern, and a ball, l

12, of wood or any suitable buoyant material, slides upon the vertical arms of the bail, with eyes 13 projecting from the sides of the ball, and a chain, 14, is secured at its middle 55 to the eye of the arm upon the valve, and with one end to an eye, 15, upon the side of the ball, and at its other end to the upper eyed end of a rod, 16, projecting upward from the upper side of the ball.

A suitable discharge-pipe, 17, extends into the cistern, for drawing off the water from the same.

It will now be seen that when the water is low in the eistern the ball will sink, pulling 65 the arm of the valve downward and swinging the valve upward into the recess in the side of the pipe, allowing the water supply to run freely into the cistern through the supply-pipe, and as the water rises in the cistern 70 the ball will rise with it and draw upward upon the arm of the valve by the upper portion of the chain, tilting the valve downward and gradually closing the valve, the weight of the descending water in the pipe assisting in 75 closing the valve, and the ball will hold the valve closed by its buoyancy until the water has fallen in the cistern, preventing any more water from entering the same until the water has fallen sufficiently to allow the ball to sink 85 and the valve to be opened, when a new supply may pass into the cistern, the device thus preventing overflowing of the cistern.

The chain is sufficiently loose to allow a certain amount of play for the ball, so that 85 it will not close or open the valve immediately after the water either rises or sinks, but will allow the water to either rise or sink some distance before operating the valve.

Having thus described my invention, I claim 90 and desire to secure by Letters Patent of the United States—

In a device for regulating the water supply upon the valve-seat, and is hinged at one side | in cisterns, the combination of a vertical supply-pipe having an upwardly-facing valve 95 seat near its lower end, and having its sides recessed for the purpose of giving the valve play within the pipe, a valve upon the seat, hinged at one side, and having an arm projecting out through a slot in the pipe from 100 the hinge end, a long bail having the upper ends of its vertical arms secured to a crossbar in the cistern, a ball sliding with laterallyprojecting eyes upon the said arms of the bail,
and having an upwardly-projecting rod, and
a chain secured at its middle to the arm of the
valve and at its ends to the rod of the ball
and to the side of the ball, as and for the purpose shown and set forth.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

MOSES KIMBALL JEFFERIES.

Witnesses:

O. A. MITSCHER, Amos Thompson.