(No Model.)

J. P. CONLON.

Overflow Indicator.

No. 238,653. **Patented March 8, 1881.**

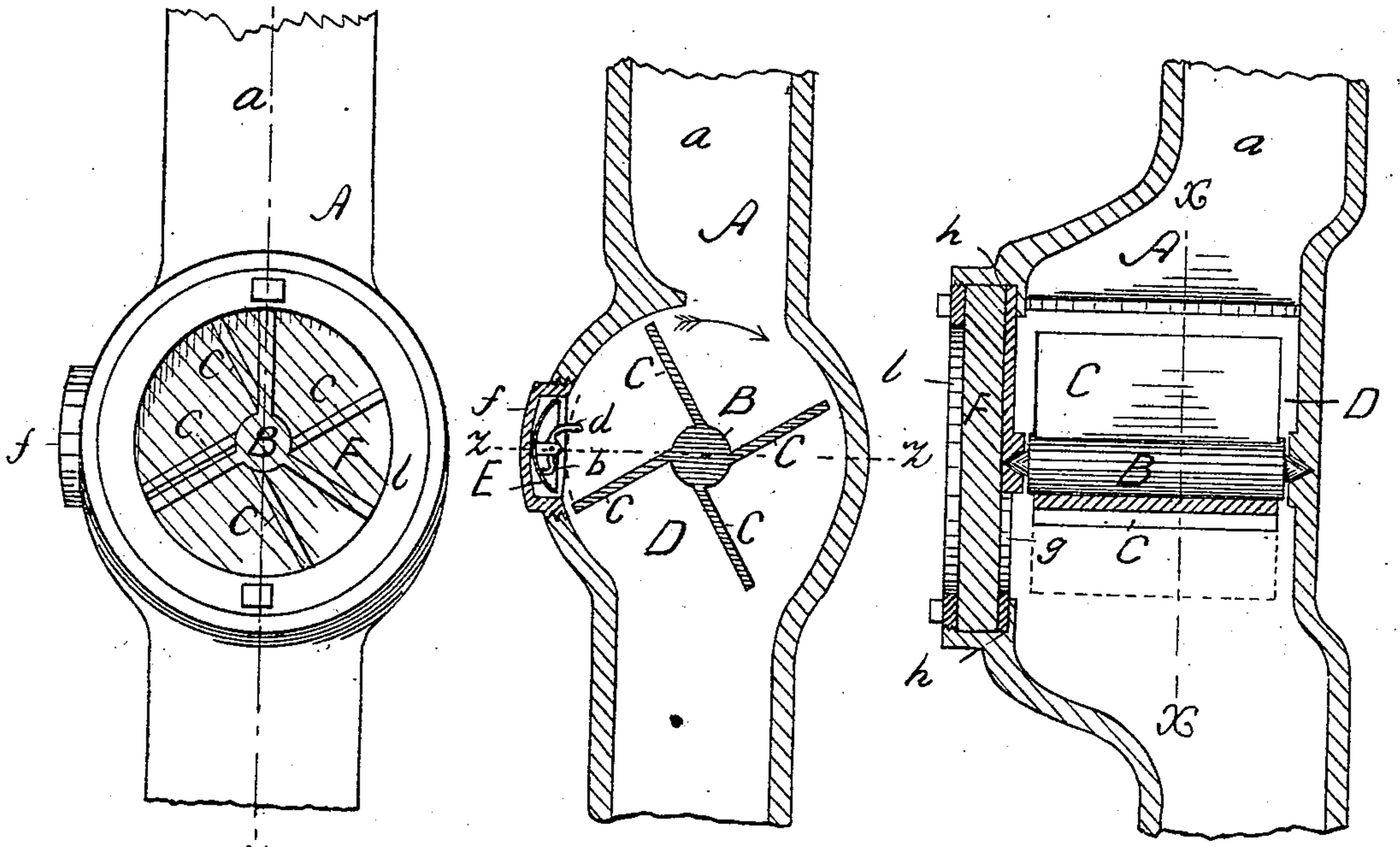

Fig: 1. Fig: 2. Fig: 3.

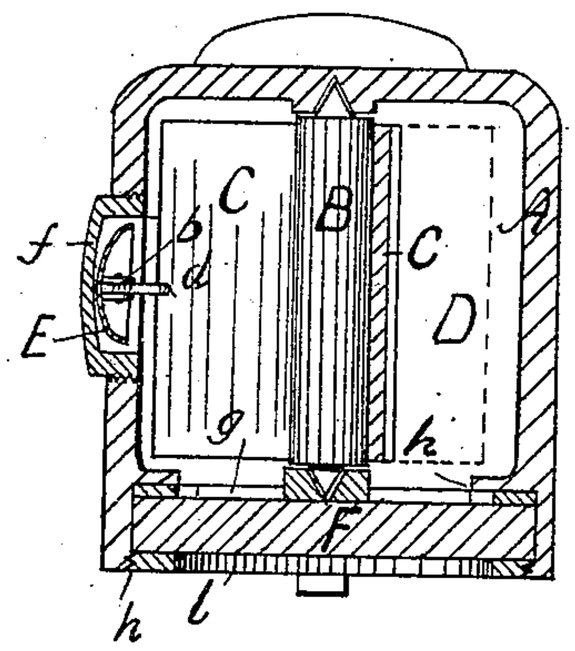

Fig: 4.

Witnesses:

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UNITED STATES PATENT OFFICE.

JOHN P. CONLON, OF BOSTON, MASSACHUSETTS.

OVERFLOW-INDICATOR.

SPECIFICATION forming part of Letters Patent No. 238,653, dated March 8, 1881.

Application filed December 23, 1880. (No model.)

To all whom it may concern:

Be it known that I, JOHN P. CONLON, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in an Overflow-Indicator for Water-Tanks, of which the following is a full, clear, and exact description.

In the water systems of buildings, as well known, in some cases water-tanks are used in which the height and inward flow of water is regulated by and through a ball-cock, and the overflow—that is, the flow of the water above the given and desired height from a leakage of a ball-cock, as often occurs, or otherwise—passes off through a pipe suitably arranged and located therefor, called the "overflow-pipe." And again, in other cases, these water-tanks are filled with water to given heights by a force or lifting pump, and a "tell-tale" pipe, so called, is employed to indicate when the desired height of water is reached by the flow of the water through the tell-tale pipe to the place where the pumping or lifting is taking place.

The object of this invention is to secure an indication of an overflow of water in the tank, if there be any, and in a manner dispensing with a personal examination of the tank for its discovery; and to that end this invention consists of the combination with and arrangement relative to the water-passage of the overflow-pipe to a water-tank, of mechanism composed of a winged shaft and a gong or other suitable alarm, each constructed and arranged together for the former to be rotated from the flow of water through the overflow-pipe, and as it so rotates to sound the latter or gong from time to time, substantially as hereinafter described.

In the accompanying plate of drawings, Figure 1 is an elevation of a pipe constructed in accordance with this invention; Fig. 2, a vertical section on line *x x*, Fig. 3; Fig. 3, a vertical section on line *y y*, Fig. 1; and Fig. 4, a horizontal cross-section on line *z z*, Fig. 2.

In the drawings, A represents a pipe, which pipe, in the practice of this invention, is to be arranged to take at its upper end, *a*, the overflow of water from a water-tank in the water systems of buildings, and at its other end to discharge such water into any suitable outlet or escape for it.

B is a transverse horizontal shaft arranged within the pipe to turn in suitable bearings thereof. This shaft is provided with a series of wings, C, which travel around with the shaft and move through a chamber, D, of the pipe, suitably shaped therefor, and in a manner for water passing downward through the pipe by striking the wings C to rotate the shaft B.

E is a gong-bell secured within the pipe A, and *b* the hammer to the bell. This hammer is at the end of a lever-handle, *d*, which projects into the plane of rotation of the radial wings, and so that the rotation of such wings will, in turn, impinge against the said lever-handle, and thus, tripping the same from time to time, sound the alarm gong or bell. This alarm or gong E is carried by a screw cap or plate, *f*, which screws into the pipe at one side of it, and thus the gong can be put into and out of position at pleasure.

One bearing of the winged shaft B is in a skeleton-ring plate, *g*, which fits within an opening, *h*, in one side of the pipe, and is there secured by a male screw-ring, *l*, which screws into the female screw-socket of such opening *h*, and confines between it and the skeleton-plate a plate, F, of glass, through which the inside of the pipe may be readily observed at any time.

From the above description it is plain that the flow of water from a water-tank is indicated by the sounding of the gong, and, again, that it may be observed through the glass or transparent plate with which the pipe is provided. Obviously the working of the alarm is in no manner dependent upon the construction of the overflow with a glass or transparent plate for observing its interior, and vice versa; but it is preferable to combine both constructions.

In lieu of placing the alarm within the pipe it may be placed outside of the pipe, in which case the horizontal shaft would be projected to the outside of the pipe, and there provided with an arm or arms by which to trip the hammer of the gong, and thus to sound it as the said shaft is rotated by the flow of water through the pipe.

The construction of the pipe and the application of the alarm and the glass thereto, as herein described, obviously enables them to be removed and attached, and they are free to be repaired and adjusted, if so desired.

In the use of my improved indicator it is intended in all cases to apply it so that its purpose of indicating an overflow in a water-tank may be accomplished without requiring a personal inspection of the tank.

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

The combination, with an overflow-pipe, A, leading from a water tank or reservoir in the water systems of buildings, of a winged shaft, B, located to intersect and to cross the water-passage of said pipe and to turn within the same, and of a gong-bell, E, or other suitable alarm, located in relation to said turning of said winged shaft, and constructed and arranged of itself, together with said winged shaft, to be sounded by the turning of said shaft, all substantially as and for the purpose described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

JOHN P. CONLON.

Witnesses:
ALBERT W. BROWN,
EDWIN W. BROWN.