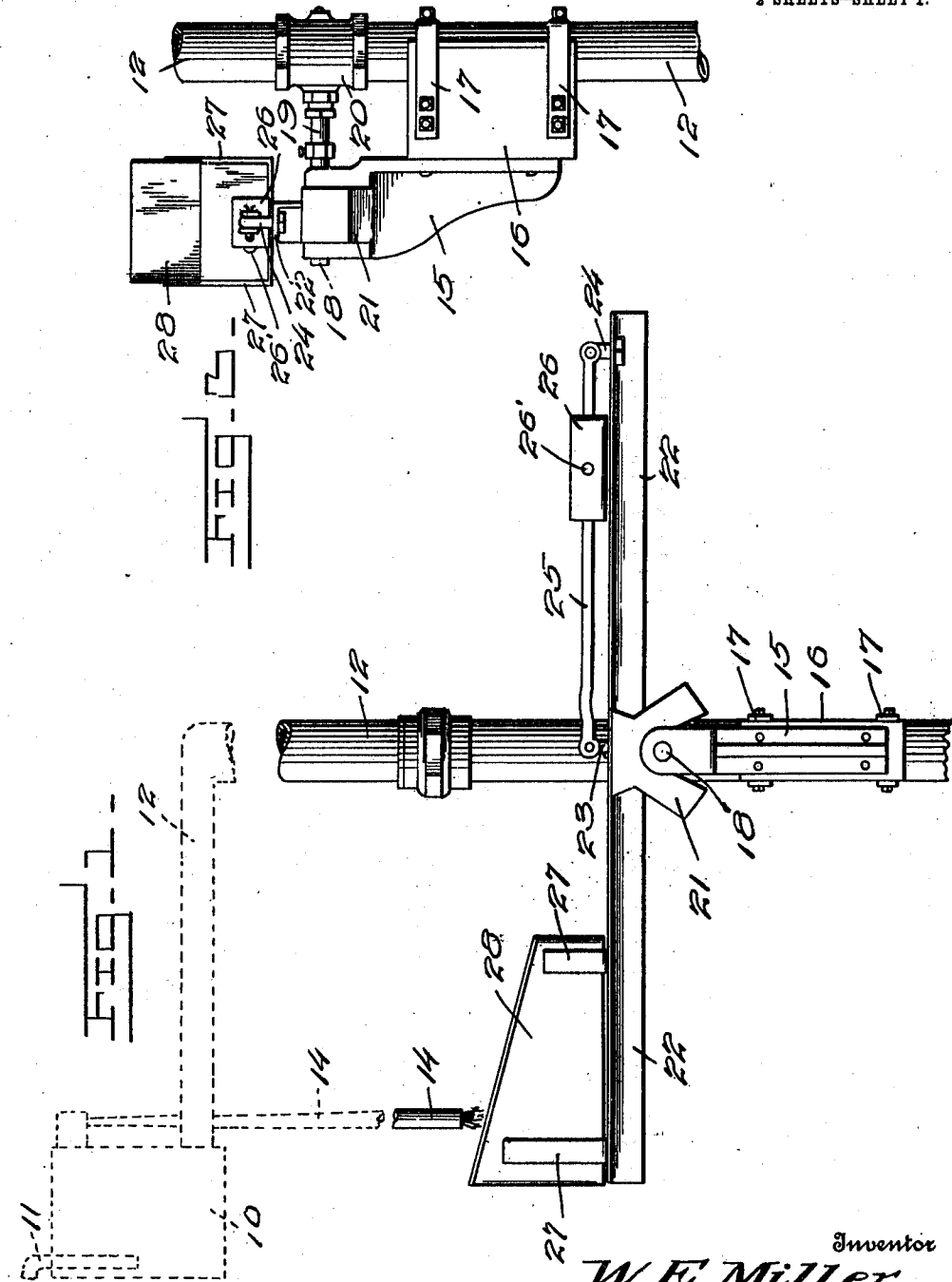


W. E. MILLER.
AUTOMATIC WATER CONTROLLER.
APPLICATION FILED AUG. 25, 1910.

990,153.

Patented Apr. 18, 1911.

2 SHEETS-SHEET 1.



Witnesses
H. H. Cunningham
M. L. Lowe

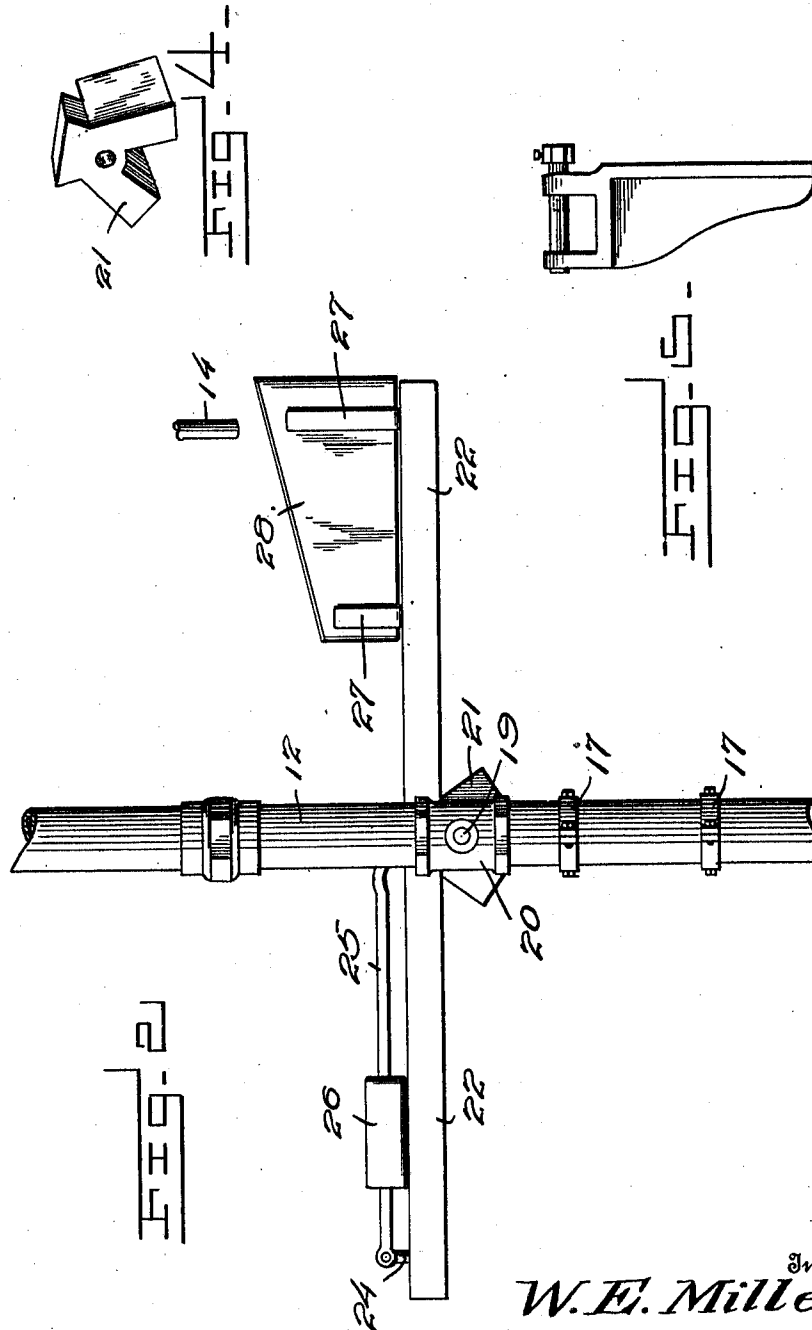
Inventor
W. E. Miller,
By *Woodward & Chandler*
Attorneys

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UNITED STATES PATENT OFFICE.

WILLIAM E. MILLER, OF JACKSON, TENNESSEE.

AUTOMATIC WATER-CONTROLLER.

990,153.

Specification of Letters Patent.

Patented Apr. 18, 1911.

Application filed August 25, 1910. Serial No. 578,971.

To all whom it may concern:

Be it known that I, WILLIAM E. MILLER, a citizen of the United States, residing at Jackson, in the county of Madison and State of Tennessee, have invented certain new and useful Improvements in Automatic Water-Controllers, of which the following is a specification.

This invention relates to an improvement in valve operating mechanism.

The primary object of the invention is to provide means for automatically opening a valve when the water within an adjacent tank reaches a certain height, the opening of the valve permitting the water contained within said tank to escape.

Another object of the invention is to provide a mechanism for regulating the opening and closing of said valve.

In the drawings: Figure 1 is a front elevation of the device, the tank and connections being shown in dotted lines. Fig. 2 a rear elevation. Fig. 3 an end view. Fig. 4 a detailed view of the pivoted member, and, Fig. 5 a detailed view of the bracket member.

In the drawings: 10 designates a tank adapted to contain water, the water being supplied by an inlet pipe 11, the tank being drained by an outlet pipe 12. In order to receive the water which rises to the top of the tank, a suitable escape pipe 14 is arranged at a point adjacent the top of said tank.

A bracket 15 is supported by a block 16 which is secured to the pipe 12 by means of straps 17. Arranged on the bracket is a substantially U-shaped supporting member, the end portions of which are provided with openings adapted to receive a valve operating shaft 18, said shaft having one end hollowed out in order to receive the end portion of a valve stem 19 which is adapted when rotated to operate a valve 20 arranged in the pipe 12. A yoke 21 is rigidly connected to the shaft 18, the forks of said yoke being beveled in order to be out of contact with the U-shaped supporting member when the yoke is in a horizontal position. A beam 22 is secured to said yoke, said beam being provided with projections 23 and 24 which support a rod 25 which supports the adjustable weight 26, said weight being held at different points along said rod by a set screw 26'. Arranged trans-

versely of said beam are U-shaped members 27 which support a pan 28 the end portions of said U-shaped members being resilient to engage the sides of said pan, said pan lying at a point directly beneath the escape pipe 14.

It will be seen that as the water in the tank rises to a point near the top, a quantity of the water will enter the escape pipe 14 and be carried down into the pan 28. When said pan receives a sufficient quantity of water to overbalance the weight arranged on the other end of the beam, the end of said beam upon which the pan rests will descend thereby rotating the shaft 18, and opening valve 20 which will allow the water in the tank 10 to drain off through the outlet pipe 12. A small aperture is formed in the pan 28 at a point adjacent its base in order to permit the escape of the water therefrom, thereby allowing the supporting beam to assume its normally horizontal position which is maintained by the weight which counterbalances the pan supporting end.

From the foregoing it will be seen that the water which rises to the top of the tank 10 will be periodically removed, thus removing any oil or foreign matter from the water and allowing the pure water to be drained off by the pipe 12, the aperture in the pan being of such dimensions as to allow the water in the pan to run out by the time the water level in the tank 10 is lowered but a short distance.

The structure is especially adapted for use in ice plants where it is desired to remove or skim the grease from the water during the reboiling process and it will be seen that any foreign matter which enters through the supply pipe will be removed before the same reaches the outlet pipe.

What is claimed is:

1. A valve operating mechanism comprising, a bracket member, a U-shaped member supported by said bracket member, a shaft supported by said U-shaped member, one end of said shaft being adapted to engage a valve stem, a yoke rigidly connected to said shaft, the forks of said yoke being arranged at an angle, a beam secured to said yoke, an adjustable weight arranged upon one end of said beam, a plurality of resilient U-shaped members arranged adjacent the other end of said beam, said members being adapted to support a pan.

2. A valve operating mechanism comprising a bracket, a U-shaped member supported by said bracket, a valve operating shaft supported by said U-shaped member, a yoke secured to said shaft, the forks of said yoke being arranged at an angle, a beam supported by said yoke, a bar arranged upon said beam, a weight adjustably secured to said bar, and a plurality of resilient U-shaped

members secured to said beam, said members 10 being adapted to support a pan.

In testimony whereof I affix my signature, in the presence of two witnesses.

WILLIAM E. MILLER.

Witnesses:

LUTHER G. MILLER,
MARK R. COCKRILL.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
