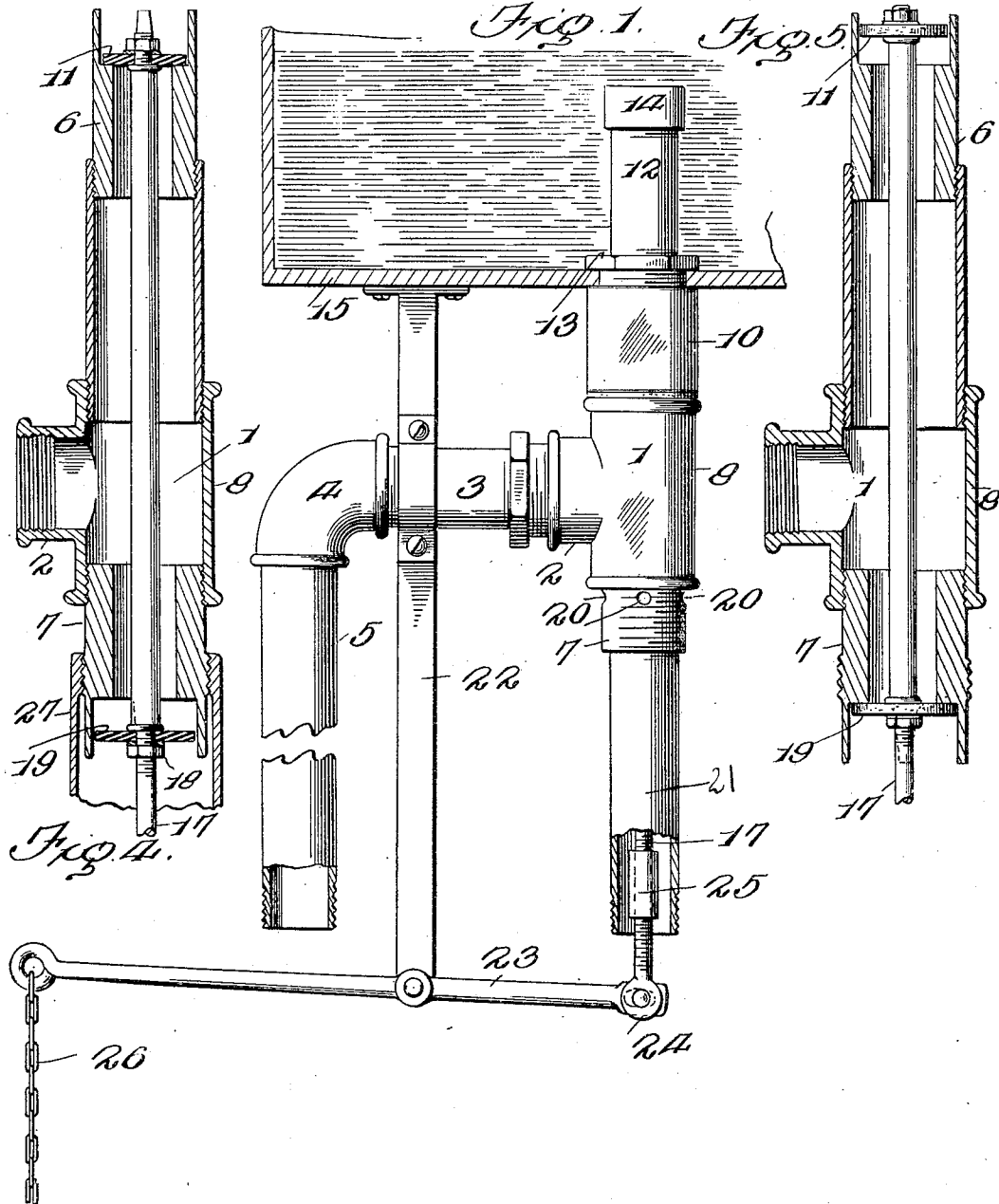


WATER VALVE.

Patented Apr. 12, 1910.

2 SHEETS—SHEET 1.

955,036.



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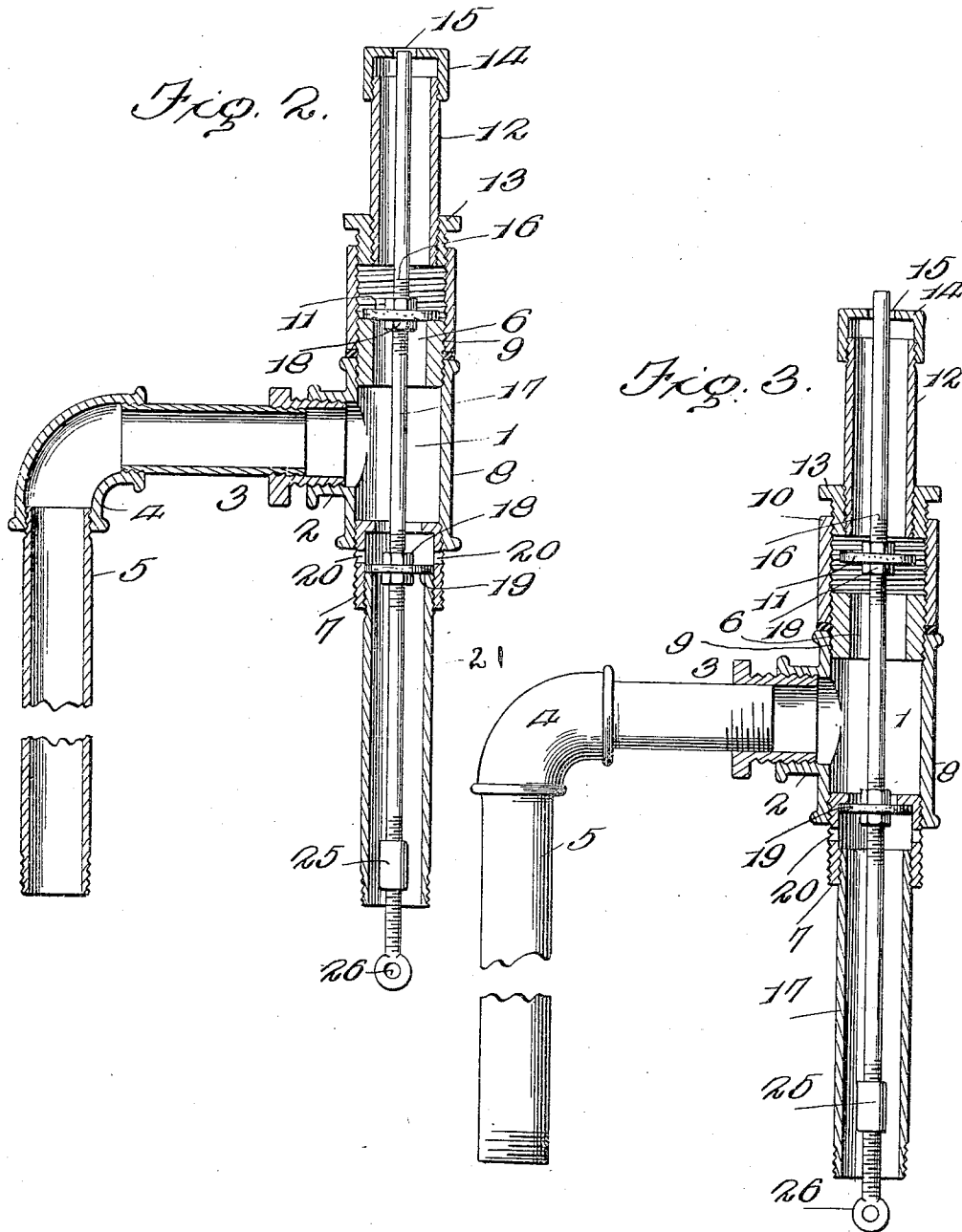
J. B. ANTHONY & R. M. MORRIS.
WATER VALVE.

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2 SHEETS—SHEET 2.



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UNITED STATES PATENT OFFICE.

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WATER-VALVE.

955,036.

Specification of Letters Patent. Patented Apr. 12, 1910.

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To all whom it may concern:

Be it known that we, JOSEPH B. ANTHONY and ROBERT M. MORRIS, citizens of the United States, residing at Clarendon, in the county of Donley and State of Texas, have invented certain new and useful Improvements in Water-Valves, of which the following is a specification.

This invention relates to valves and is especially designed as a valve for water supply systems.

The principal object of our invention is to provide a valve construction which is simple and economical in construction and which will not freeze up in cold weather by drip or waste water congealing therein.

With this and other objects in view, the invention consists of certain novel features of construction, combination and arrangement of parts as will be more fully described and particularly pointed out in the appended claims.

In the accompanying drawings, Figure 1 is a side elevation of a water valve embodying our improvements; Fig. 2 is a vertical longitudinal section of the valve with the upper valve seated; Fig. 3 is a similar view showing the upper valve raised and the lower valve seated; Fig. 4 is a vertical longitudinal section of a slightly modified form of the invention showing one position of the valve; and Fig. 5 is a similar view showing the other position of the valve.

In the accompanying drawings which are for illustrative purposes only and are not drawn to scale, the valve comprises a T-coupling or casing, 1, the portion, 2, of which provides a water outlet to which is connected by means of the nipple, 3, the elbow, 4, of the downwardly extending supply pipe, 5, which may lead to the house or any other desired point. Upper and lower nipples or pipe sections, 6 and 7, respectively, screw into the opposite ends of the vertical portion, 8, of the T-coupling or casing. The outer end of the upper nipple or pipe section, 6, is externally threaded as at 9, to which is screwed a collar, 10, which provides a valve casing for the valve, 11, and is connected to the pipe section, 12, by a nipple, 13. The upper end of the pipe section, 12, is closed by the cap, 14, provided with the central vertical aperture, 15, which provides for the passage of the water in the tank, 15, into the pipe section, 12. The valve, 11, which may be of leather or other suitable like ma-

terial, is secured to the threaded portion, 16, of the valve stem, 17, by the clamping nuts, 18, and normally seats on the upper end of the nipple, 6. The valve stem is also provided with a lower valve, 19, which normally positions somewhat below an annular series of outlet ports, 20, formed in the nipple, 7. A waste pipe, 21, is screwed to the lower end of the nipple, 7, through which extends the lower end of the valve stem. A hanger rod, 22, depends from the tank and has pivoted to its lower end a horizontal operating lever, 23, the inner end of which is connected with the hooked end, 24, of a sleeve, 25, screwing on the lower end of the valve stem and the opposite end of which is provided with an operating chain or cord, 26, which may lead to any suitable point within the convenient reach of the operator.

In practice, the upper valve, 11, normally seats upon the upper end of the nipple or upper pipe section, 6, and seals it against the passage of the water in the tank thereinto, while the lower valve positions somewhat below the outlet ports, 20, of the lower nipple or pipe section, 7.

To operate the valve the operator pulls upon the cord or chain, 26, which raises the upper valve, 11, from its seat and permits the water to pass into the upper nipple or pipe section, 6, through the outlet portion, 2, of the T-coupling 1, to the discharge pipe, 5, and at the same time causes the lower valve, 19, to close the outlet ports, 20. After the desired quantity of water has been secured from the tank, which for example, might be the tank or reservoir of a windmill, the operating cord or chain, 26, is released, thus permitting the upper valve, 11, to again close or seal the upper end of the nipple or pipe section, 6, while the lower valve, 19, again drops below the outlet ports, 20, and permits any waste or drip water to pass therethrough and thus obviates any liability of the valve freezing up by reason of drip water congealing in the lower nipple or pipe section in cold weather.

In the modified form of the invention illustrated in Figs. 4 and 5, the lower valve, 19, seats against the lower end of the lower nipple or pipe section when the upper valve is raised, and the outlet ports, 20, are dispensed with. In this form of the invention when the operating cord or chain is released and the valve, 11, reseated, the drip water passes through the lower end of the nipple,

7, into the casing, 27, through which it passes to a drain barrel or other suitable receptacle arranged to catch the drip water. It is to be understood of course, that while we have
5 described our valve as designed primarily for use in connection with water supply systems it may be used in any connection where a valve of this type would be desired.

From the foregoing description, taken in
10 connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion
15 and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

Having thus described our invention, what
20 we claim is:—

1. A valve of the class described, comprising an intermediate two way outlet section, a supply pipe connected to the outer portion of the outlet section, upper and lower sections connected with the opposite ends of the vertical portion of the outlet section, the
25 lower section having an annular series of outlet ports, a valve stem extending through the valve sections, a valve arranged at the upper end of the stem to normally close the
30 upper end of the upper valve section, a second lower valve arranged on the stem to position below the outlet ports of the lower valve section when the upper valve is seated
35 and to close said ports when the upper valve

is raised or unseated, and manually operable means connected to the lower end of the valve stem to operate the valve.

2. A valve of the class described comprising an intermediate outlet section, upper and
40 lower valve sections connected to opposite ends of the outlet section, a supply pipe connected with the upper valve section by means of a nipple, a waste pipe connected to the
45 lower valve section, a valve stem extending through the center of the valve sections, the intermediate outlet section, the supply pipe and the waste pipe, a valve arranged to normally seat on the upper valve section and a
50 second valve arranged to close the lower valve section against the passage of water therethrough when the upper valve is raised or unseated, but to permit the passage of
55 drip or waste water through the lower section when the upper valve is seated, said valve stem terminating at its lower end in an eye whereto manually operated means are connected for the operation of the valve, the
60 upper end of the valve stem passing through a perforation in a cap screwed to the upper end of the supply pipe for the purpose of the guidance thereof.

In testimony whereof we affix our signatures, in presence of two witnesses.

JOSEPH B. ANTHONY.
ROBERT M. MORRIS.

Witnesses:

J. L. DAVIS,
JOHN M. BROOKS.