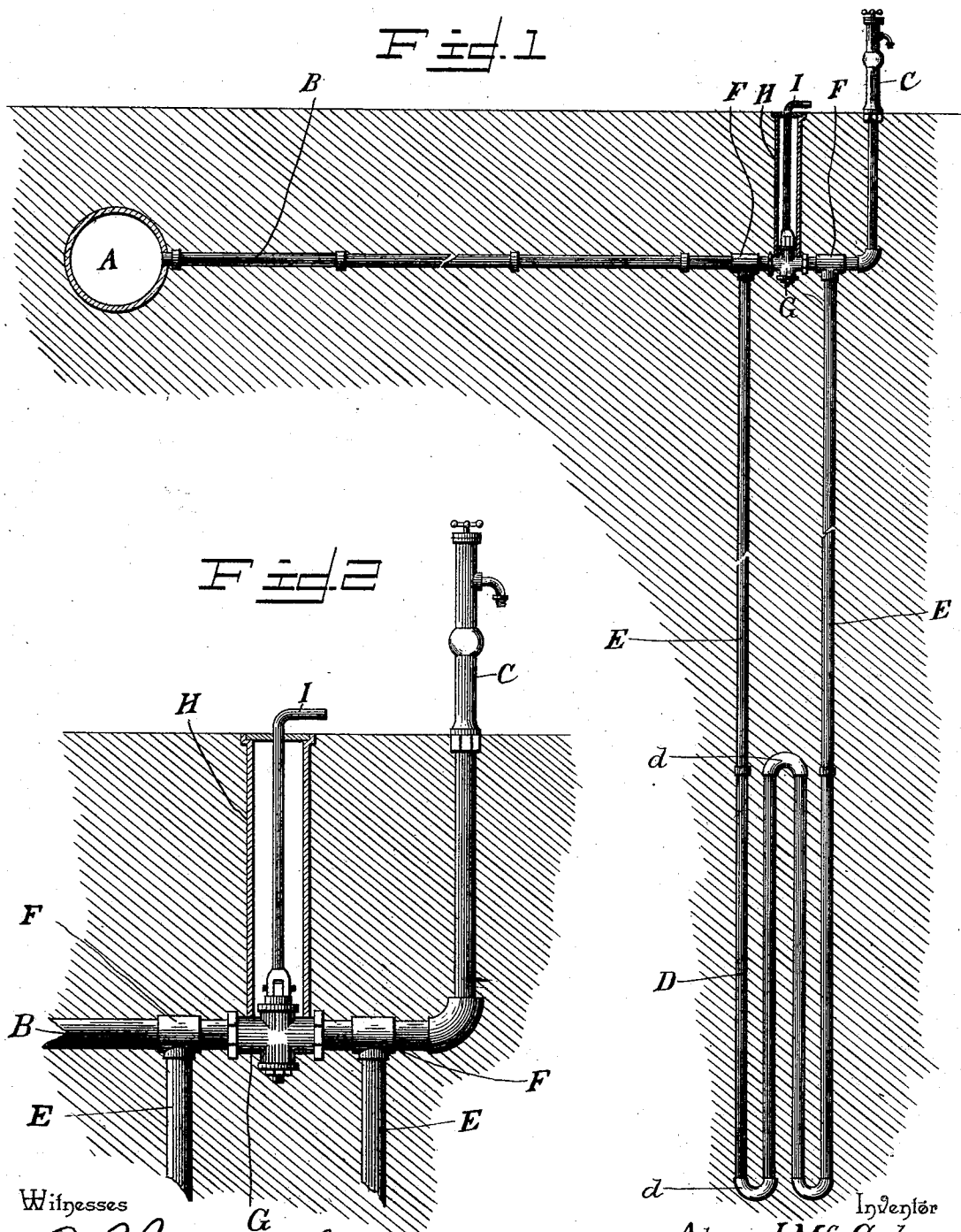


(No Model.)

A. J. McGEHEE.
WATER COOLER.

No. 506,529.

Patented Oct. 10, 1893.



Witnesses

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UNITED STATES PATENT OFFICE.

ABNER JUDSON McGEHEE, OF JACKSON, TENNESSEE.

WATER-COOLER.

SPECIFICATION forming part of Letters Patent No. 506,529, dated October 10, 1893.

Application filed February 18, 1893. Serial No. 462,844. (No model.)

To all whom it may concern:

Be it known that I, ABNER JUDSON McGEHEE, a citizen of the United States, residing at Jackson, in the county of Madison and State of Tennessee, have invented a new and useful Water-Cooler, of which the following is a specification.

This invention relates to water coolers; and it has for its object to provide certain improvements in that class of water coolers in which the water is cooled in its passage between the water mains and the point of use, such as hydrants, house faucets, and the like.

To this end the main and primary object of the invention is to provide an improved apparatus of this character whereby the water used will be constantly kept at the temperature of the earth at the depth in which the cooling devices are placed, so that a constant cool temperature of water can be secured, while at the same time preventing the freezing of the water in the service pipe on account of having the greater portion of the flow disposed below the frost line.

With these and many other objects in view which will readily appear as the nature of the invention is better understood, the same consists in the novel construction, combination and arrangement of parts, hereinafter more fully described, illustrated and claimed.

In the accompanying drawings:—Figure 1 is a sectional view of the ground showing my improved water cooling device arranged therein. Fig. 2 is an enlarged detail elevation of the upper portion of the cooling apparatus showing the coupling of the cooling coil to the service pipe, and the controlling cock or valve.

Referring to the accompanying drawings, A represents an ordinary water main from which leads the service pipe B, designed to carry water to the hydrant C, above the surface of the ground, or to a house-faucet, &c. At a suitable convenient point intermediate of the main A, and the hydrant C, and below the service pipe I place a vertical coil of water cooling pipes D, which coil comprises a series of parallel pipes connected by return bends *d*, and has at the opposite valveless side extended circulating pipes E, which extend above the body of the cooling coil and are coupled by the T-connections F, onto the ser-

vice pipe B, and to the hydrant or discharge pipe, while an intermediate bridge pipe or nipple, in a direct line with the service pipe, serves to connect the T-connections or couplings between the upper ends of the pipes E.

The water cooling coil D, is placed in the ground about fifty feet below the surface thereof, so that the cool temperature of the earth at that depth will be communicated to the water passing through the coil and in warm weather cool water for drinking and other purposes may be thus readily obtained from the ordinary service pipe, while on the other hand, the disposition of the cooling coil at a point below the frost line, also assists to prevent freezing of the pipes in winter.

Intermediate of the T-connections F, a stop-cock or valve G, is arranged in the connecting bridge pipe, and has extended therefrom to the surface of the ground the stop-cock or valve box H, which is designed to accommodate the turning rod I, adapted to be connected with the valve to turn the same on and off.

Now it will be readily seen that when the valve G, is closed, the water from the main A, necessarily passes through the water cooling coil before reaching the point of use so that cool water may be obtained. On the other hand, when it may be desired to use the water directly from the main for washing and other purposes, the valve G is opened so that the body of the water will not flow through the lower cooling coil but flows directly through the service pipe to the point of use without disturbing the standing water in such cooling coil which is always filled.

The construction, operation and advantages of the herein described water cooling apparatus will be apparent to those skilled in the art.

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

In a water cooling apparatus, the combination with the approximately horizontal service pipe; of a water cooling coil adapted to be placed in the ground considerably below the service pipe and having at opposite sides upwardly extended valveless circulating pipes E, T-couplings F connected to the upper extremities of the pipes E, and one of which is

coupled onto the service pipe, a hydrant or discharge pipe connected at its lower end to one side of the other T-coupling, an intermediate bridge pipe or nipple connecting the
5 two couplings between the upper ends of the pipes E, and arranged in a direct line with the service pipe, and a single one-way stop cock or valve arranged in said intermediate bridge
10 cooling coil or to permit of a free passage for

the water skirting the upper ends of the pipes E, substantially as set forth.

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

ABNER JUDSON McGEHEE.

Witnesses:

MONROE D. ANDERSON,
H. HAWKINS.