D. S. TROY.

CUT-OFF FOR CISTERNS.

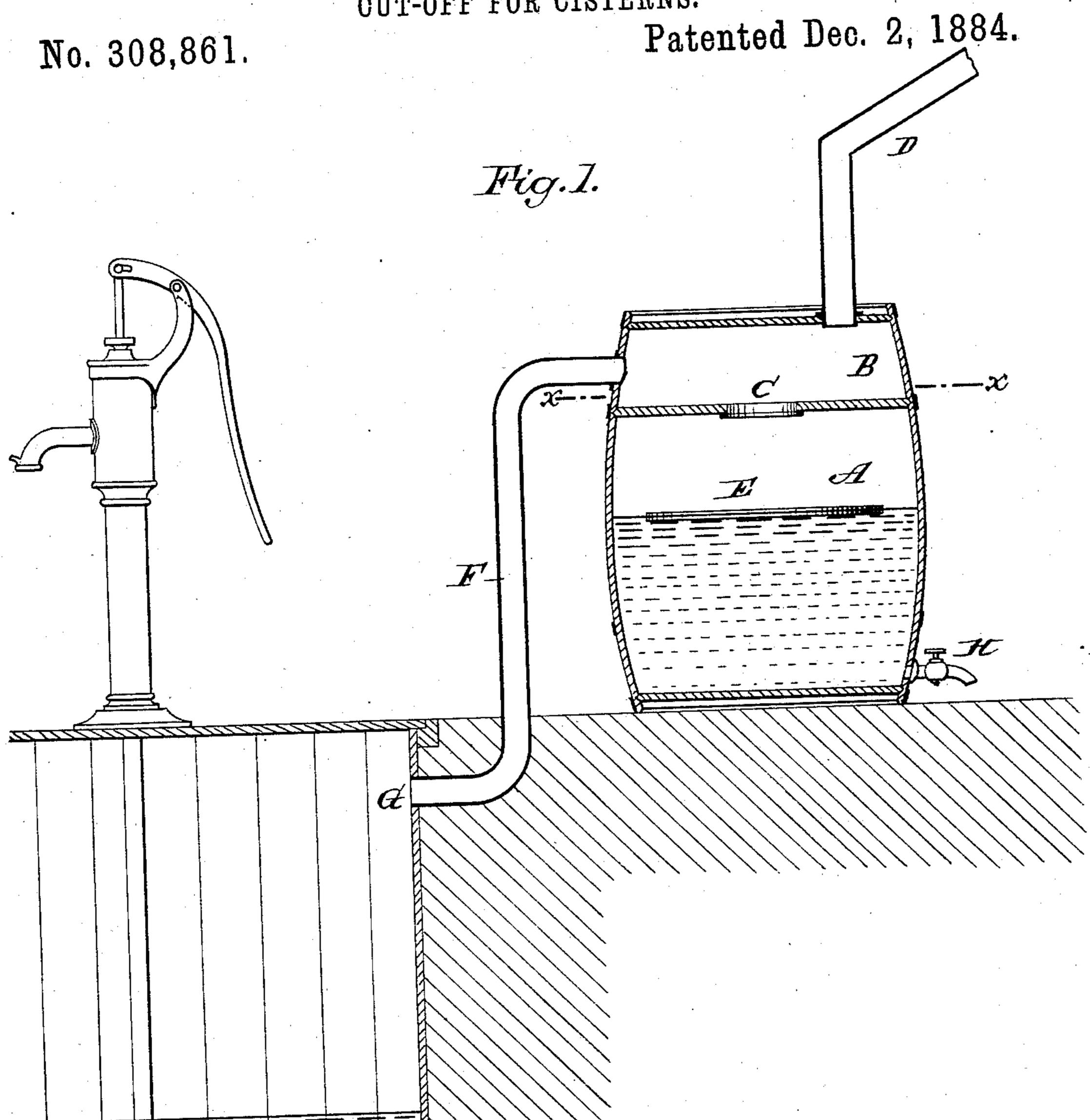
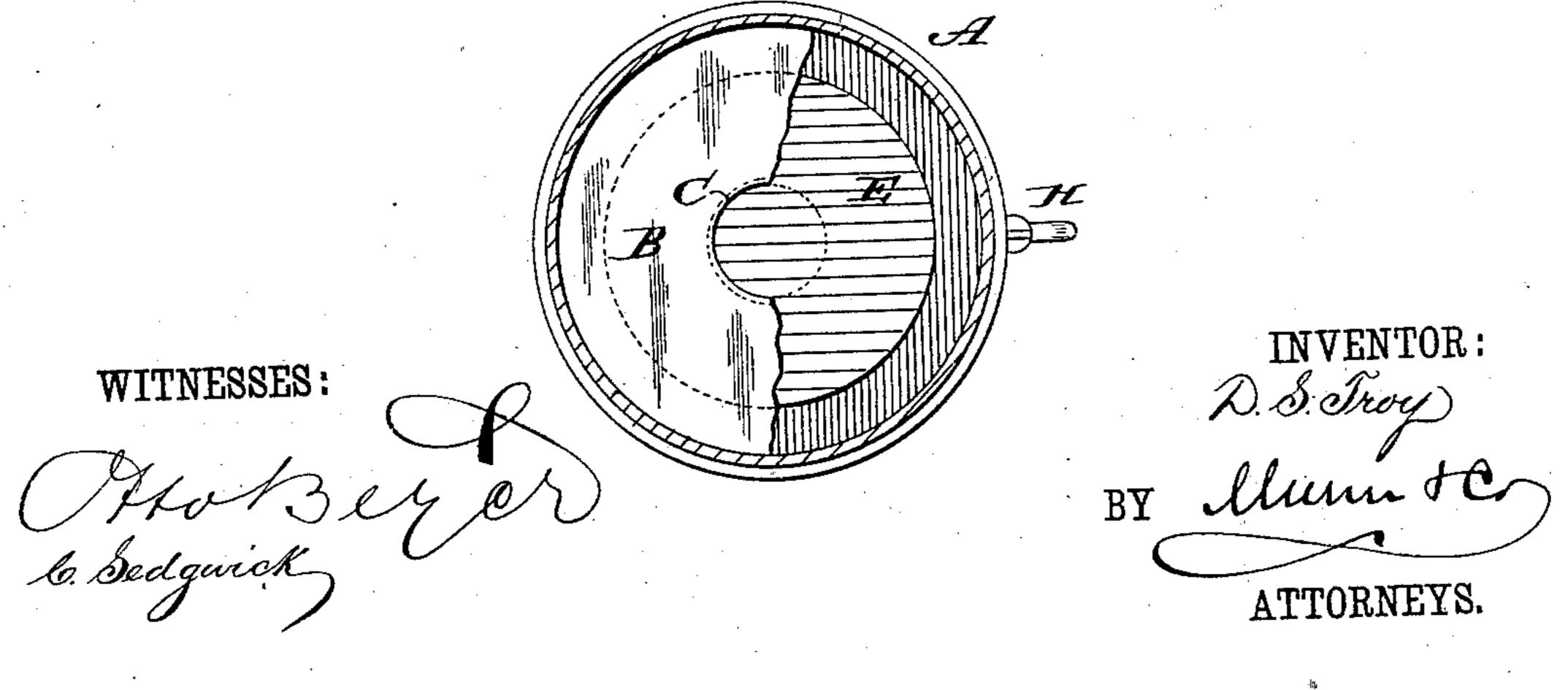


Fig. 2.



## United States Patent Office.

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## CUT-OFF FOR CISTERNS.

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Application filed May 8, 1884. (No model.)

To all whom it may concern:

Montgomery, in the county of Montgomery and State of Alabama, have invented a new 5 and Improved Cut-Off for Cisterns, of which the following is a full, clear, and exact description.

The object of my invention is to provide a new and improved device for automatically 10 preventing the rain-water from passing into the cistern until after the roof has been washed off.

The invention consists in the combination, with a barrel or tank having an apertured 15 horizontal partition a short distance below the top, of a float held below the partition, and of an overflow-pipe connecting the upper part of the tank or barrel with the cistern.

Reference is to be had to the accompanying 20 drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 is a longitudinal sectional elevation of my improved cut-off for cisterns. Fig. 25 2 is a sectional plan view of the same on the line x x, Fig. 1.

A tank, A, such as a barrel or other suitable receptacle, is provided about six inches from its top with a transverse partition, B, 30 provided with an aperture, C. The waterinlet pipe D, or leader from the roof, is held in the head A' of the barrel or top of the tank. A float, E, adapted to close the aperture C, is held in the barrel in the part be-35 low the partition B. An overflow-pipe, F, leads from that part of the barrel or tank above the partition B to the cistern G. The barrel or tank A is provided at its bottom with an outlet-cock, H. The water flows 40 from the pipe D into the barrel or tank and collects in the bottom of the same, and as the level of the water rises the float E rises and then closes the aperture C by being pressed by the water against the under side of the 45 partition B. The water then flows through the pipe F into the cistern. The water that is first collected on the roof, and which has washed off the roof and contains the impurities, &c., that were on the roof, is collected 50 in the tank or barrel, and only the clean and pure water can pass into the cistern. When it stops raining, the water in the barrel or tank is drawn off through the cock H.

My improved cut-off prevents any impuri-Be it known that I, Daniel S. Troy, of | ties being washed from the roof into the cis- 55 tern. The impurities floating in the lower atmosphere and brought down by the rain when it begins to fall, as well as the impurities collected on the roof, are carried into the barrel or receptacle. The quantity of water 60 required to collect these impurities varies in different localities; but by using one or more barrels or receptacles connected by a pipe to the one containing the cut-off the storage room for the impure water may be indefi- 65 nitely increased, so that only pure rain-water will flow into the cistern. Snow-water is always impure, because the snow mixes with the impurities which are on the roof when the snow falls, and also absorbs impurities 70 from the atmosphere while it remains on the roof, and these impurities are in the water formed by the melting snow; consequently, when snow is melting the cock H should be left open, so that none of the water can enter 75 the cistern; but by use of the cut-off absolutely-pure rain-water can be secured at all seasons when there is not snow on the roof. The inlet-pipe D, or leader from the roof, should enter the head of the barrel or top of 80. the tank near one side, so that the impact of the falling water may not disturb the float E when the barrel or tank is full.

Having thus described my invention, what I claim as new, and desire to secure by Letters 85 Patent, is--

1. A cut-off for cisterns made substantially as herein shown and described, and consisting of a tank or vessel connected by an overflow-pipe with the cistern, and provided with 90 a valve which automatically closes an opening in the tank or vessel, to prevent the water that has collected in the tank from mixing with the water that is to pass into the cistern, as set forth.

2. In a cut-off for cisterns, the combination, with the barrel or tank A, of the horizontal partition B, having an aperture, C, the overflow-pipe F, leading from the part above the partition to the cistern, the float E, and the 100 cock H, substantially as herein shown and described.

DANIEL S. TROY.

Witnesses:

H. C. Tompkins, ALEX. TROY.