

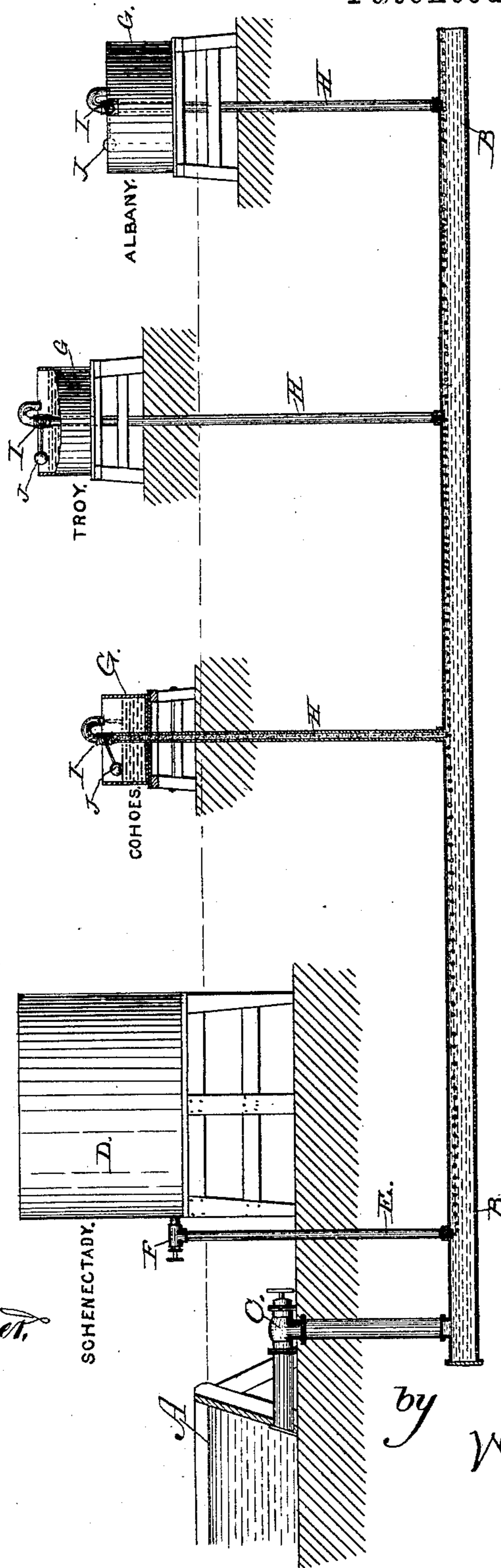
(No Model.)

J. BURNS.

MEANS FOR CONVEYING OIL FROM A SUPPLY RESERVOIR TO TANKS.

No. 424,596.

Patented Apr. 1, 1890.



Witnesses:

D. B. Brewster,
Thos. H. Gibbon

Inventor:

JOHN BURNS,

by

William H. Low,

Attorney.

UNITED STATES PATENT OFFICE.

JOHN BURNS, OF ROCHESTER, ASSIGNOR OF ONE-HALF TO JOHN H. REYNOLDS, OF TROY, NEW YORK.

MEANS FOR CONVEYING OIL FROM A SUPPLY-RESERVOIR TO TANKS.

SPECIFICATION forming part of Letters Patent No. 424,596, dated April 1, 1890.

Application filed December 2, 1889. Serial No. 332,272. (No model.)

To all whom it may concern:

Be it known that I, JOHN BURNS, of Rochester, in the county of Monroe and State of New York, have invented new and useful Improvements in Means for Conveying Oil from a Supply-Reservoir to Receiving-Tanks, of which the following is a specification.

My invention relates to a means for conveying oil from a main or supply reservoir to 10 distantly-located receiving-tanks, which may all be placed on the same level or at different altitudes, according to circumstances, but at a lower level than the surface of the oil in the supply-reservoir.

15 The object of my invention is to provide means for conveying oil between distant points with safety and to deliver the same at such heights below the fountain-head as may be required. I attain this object by the 20 means illustrated in the accompanying drawing, which is herein referred to and forms part of this specification, and which shows a combined side elevation and longitudinal section of my invention.

25 In said drawing, A designates a water-supply, which may be a reservoir or other suitable means for keeping the mains B fully supplied with water, and it should be understood that when the oil-distribution is to be ex- 30 tended over considerable territory supplemental water-reservoirs can be connected at required intervals to the water-mains B, so as to maintain a full supply of water therein. Said mains are connected with the water- 35 supply, and are preferably provided with suitable stop-valves C, by which the flow of water from the water-supply into said mains can be properly regulated or entirely cut off, as occasion may require.

40 D is the oil-reservoir from which the oil is to be distributed through the water-mains B, and said reservoir is connected to the water-mains by an oil-pipe E, which is preferably provided with a stop-valve F, by which the 45 flow of oil from the reservoir D into the water-mains B can either be regulated or prevented, as occasion may require. It should be understood that said oil-reservoir must be located at such a height above the level or head

of the water in the water-supply that a col- 50 umn of said oil will overbalance a column of water of equal diameter and of a height due to the level of the water in the water-supply.

G designates the receiving-tanks into which the oil will be conveyed through the water- 55 mains B, and said receiving-tanks may be located as far apart as the nature of the work requires. Said receiving-tanks may also be located at different altitudes, so long as they are not fixed at such a height that the oil 60 from the fountain-head will have an insufficient gravity to flow into said receiving-tanks. Each of said receiving-tanks is connected by an oil-pipe H to the water-mains B for the purpose of conveying the oil from said mains 65 into said tanks, and each of said oil-pipes is provided with an automatic stop-cock I, having a lever to which a float J is attached, so that when the oil in the receiving-tank to which it is assigned has reached a prescribed 70 height said float will cause said stop-cock to close automatically, and thereby the flow of oil into said tank will be prevented.

The operation of this system of distribu- 75 tion is as follows: Premising that the water-mains B have been filled with water from the water-supply A and the stop-valve C is closed to prevent the oil from rising into the water-reservoir and the oil in any of the receiving-tanks G has been drawn below the 80 prescribed level for the oil in said tanks, so that the stop-cocks belonging thereto will stand open, the pressure of the oil in the oil-reservoir D will cause the current of oil in the water-mains B, in which the oil will float 85 upon the surface of the water, to run in the direction of the open oil-pipes H, and the oil will continue to run through said oil-pipes while said stop-cocks remain open, which will be until the oil in the receiving-tanks 90 has attained the required level. Then the stop-cocks will be automatically closed in the manner hereinbefore described.

What I claim as my invention, and desire to secure by Letters Patent, is— 95

The means herein described for conveying oil through pipes from an oil supply or reservoir to distant points, the same consisting

of a system of pipes or mains containing water, an oil-supply elevated above the highest point of delivery of said oil, and oil-receiving tanks connected to said water-mains by
5 oil-pipes, each of the latter being provided with an automatic stop-cock whose closure is effected by the oil when the latter reaches

the prescribed level in the tank to which said stop-cock belongs, as herein specified.

JOHN BURNS.

Witnesses:

WM. H. LOW,
S. B. BREWER.