

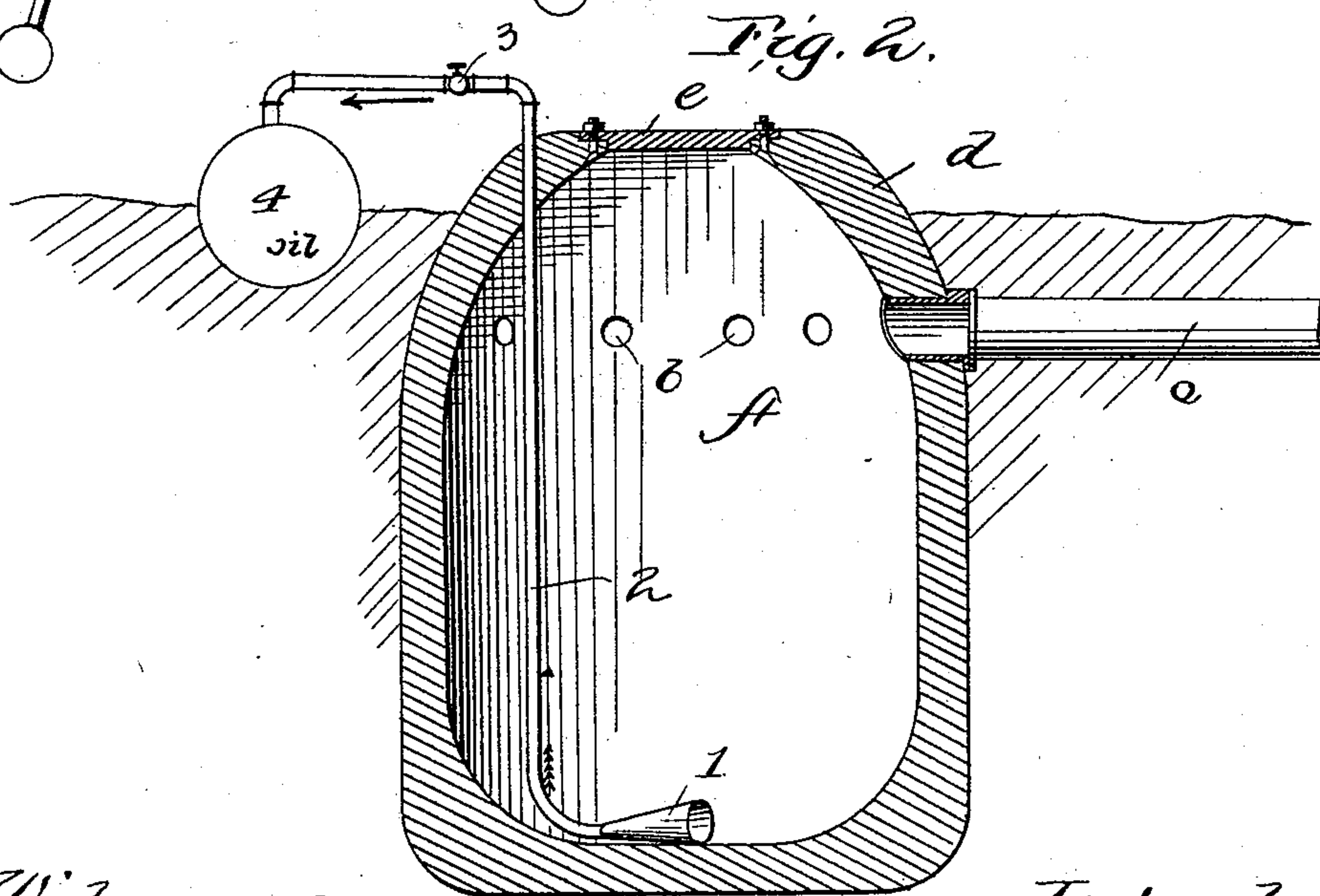
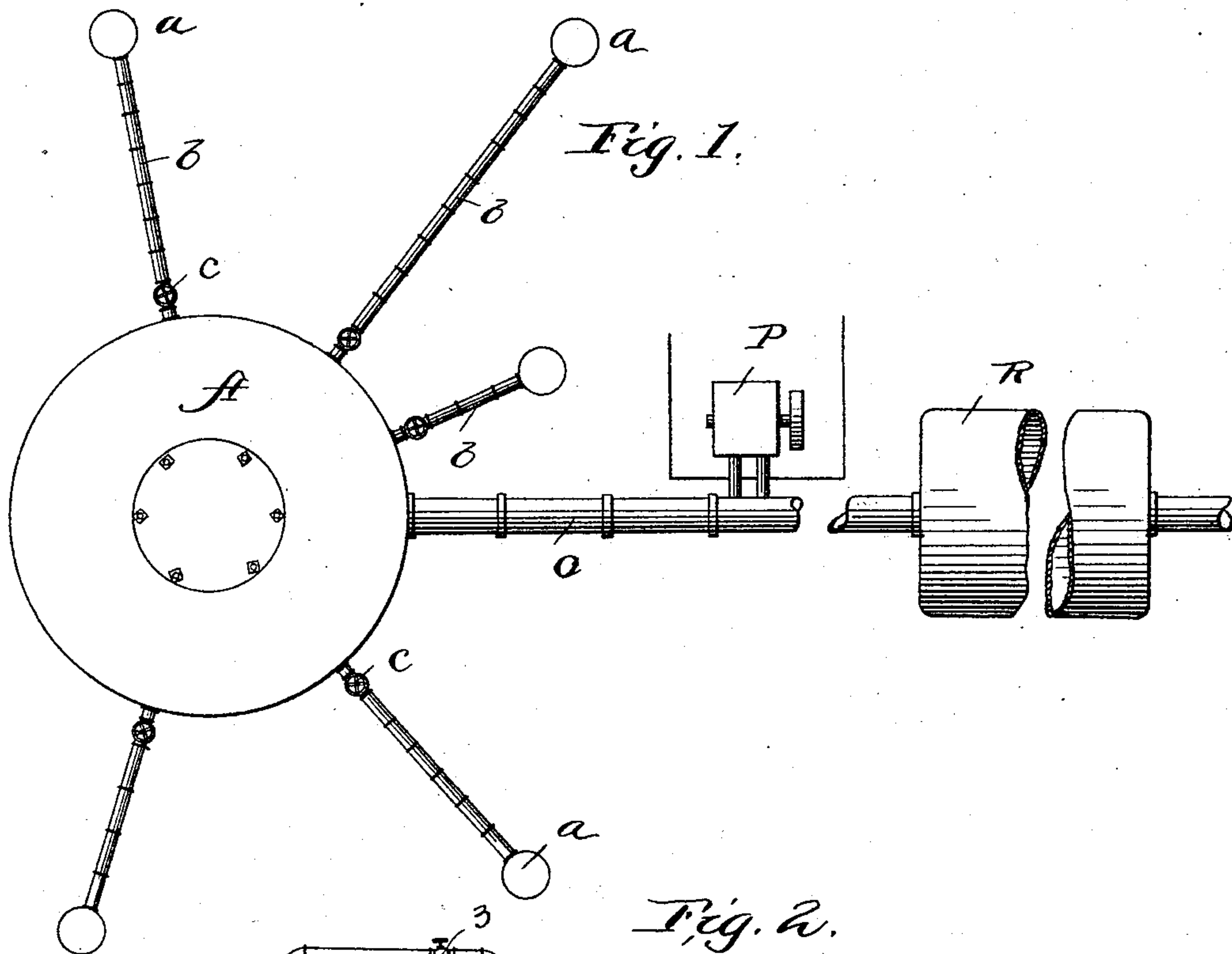
(No Model.)

A. WILBUR.

RESERVOIR FOR GAS DISTRIBUTING SYSTEMS.

No. 455,081.

Patented June 30, 1891.



Witnesses
W. P. Keene.
J. L. Middleton

Inventor
Alfred Wilbur
by Ellis Spear Atty.

UNITED STATES PATENT OFFICE.

ALFRED WILBUR, OF PITTSBURG, PENNSYLVANIA, ASSIGNOR TO B. H. LIGHTFOOT, OF SAME PLACE.

RESERVOIR FOR GAS-DISTRIBUTING SYSTEMS.

SPECIFICATION forming part of Letters Patent No. 455,081, dated June 30, 1891.

Application filed May 29, 1890. Serial No. 353,624. (No model.)

To all whom it may concern:

Be it known that I, ALFRED WILBUR, a citizen of the United States of America, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Reservoirs for Gas-Distributing Systems, of which the following is a specification.

My invention relates to the distribution of gas, and particularly to the reservoir to which the outlying wells are connected.

In the accompanying drawings, Figure 1 represents the main reservoir with the outlying lines, the supplemental reservoir, and the line of pipe between. Fig. 2 is a vertical section through the main reservoir.

It will be understood that these views are largely diagrammatical, and it is not deemed necessary to show other supplemental reservoirs of greater or less size or the improved couplings which it is intended to use to prevent the escape of the gas and to allow for the passage of the distributing-pipe over elevations and depressions without injury thereto.

In the drawings, *a* represents outlying natural-gas wells, which are piped by connections *b* to a main reservoir *A*, in which the gas is stored. The output from each well is controlled by a valve *c*, so that the flow therefrom may be cut off whenever the supply is exhausted or diminished. From the reservoir *A*, which may be located at any distance from the point of consumption, the gas is piped to the point where it is to be used. This distributing-line of pipe *O* is of comparatively small diameter, thus materially lessening the expense, and in proximity to the point of consumption—as, for instance, a town or city—I provide a supplemental reservoir *R* in the shape of an enlarged pipe, which provides for an increased supply at this point. From this point the pipe-line extends to the next point of consumption, where a second reser-

voir may be provided of a size adapted to the needs of the place. If the pressure is not sufficient, I may use a pump *P*, of any well-known construction, to force the gas to the point of consumption.

I prefer to make the reservoir of peculiar shape, in order to stand the great pressure put upon it by the gas which it contains, and this peculiar shape is shown in Fig. 2. It is approximately oval in vertical section, with a contracted upper portion having thickened walls *d d*, with a covering-plate *e*, adapted to be bolted in place.

It often happens that the gas from the natural-gas wells is laden with oil, and therefore I provide for the entrance of the gas into the reservoir above the bottom thereof, so that the oil can settle to the bottom, and in order to utilize the pressure of the gas to discharge this oil automatically I provide on the bottom of the reservoir a funnel *1*, which is connected to the outside oil-tank *4* through a pipe *2*, a suitable valve *3* controlling the connection. When the valve is open, the pressure of the gas in the upper part of the reservoir will be sufficient to discharge the oil in the lower part. The tank *4*, as shown, is closed, and should the valve *3* be left open too long no loss of gas would result, as would be the case were a mere blow-off pipe used.

I claim as my invention—

In a gas-distributing system, a reservoir having gas inlet and outlet pipes connected to the upper portion thereof, a closed oil-tank, and a valved discharge-pipe extending from the bottom of the reservoir upwardly through the same and connecting with said closed tank, combined substantially as described.

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

ALFRED WILBUR.

Witnesses:

GEORGE KING,
GUSTAV KRAUSE.