

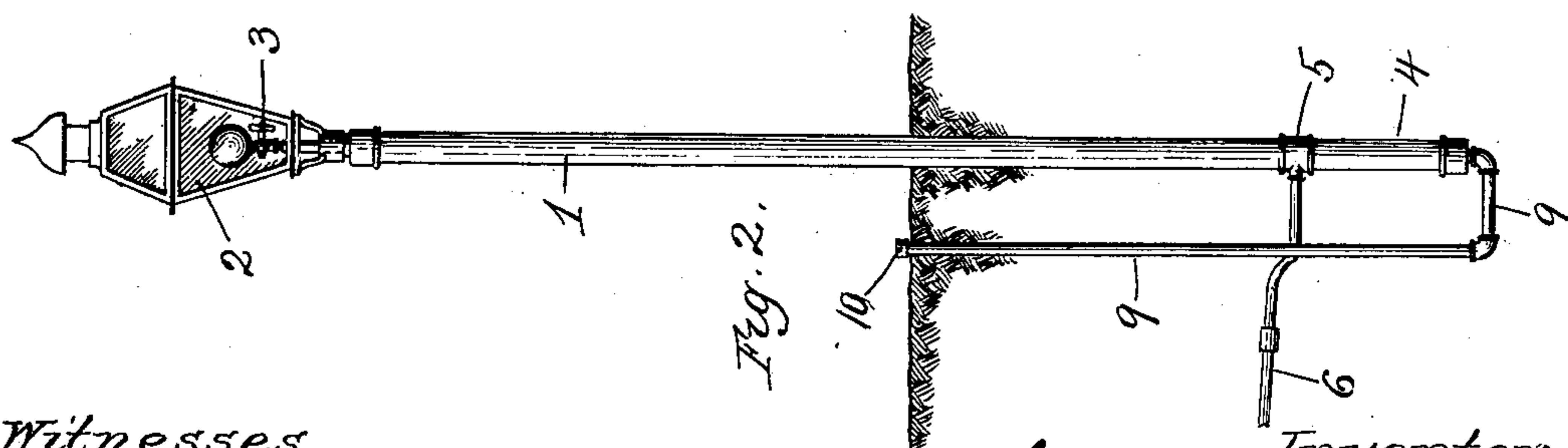
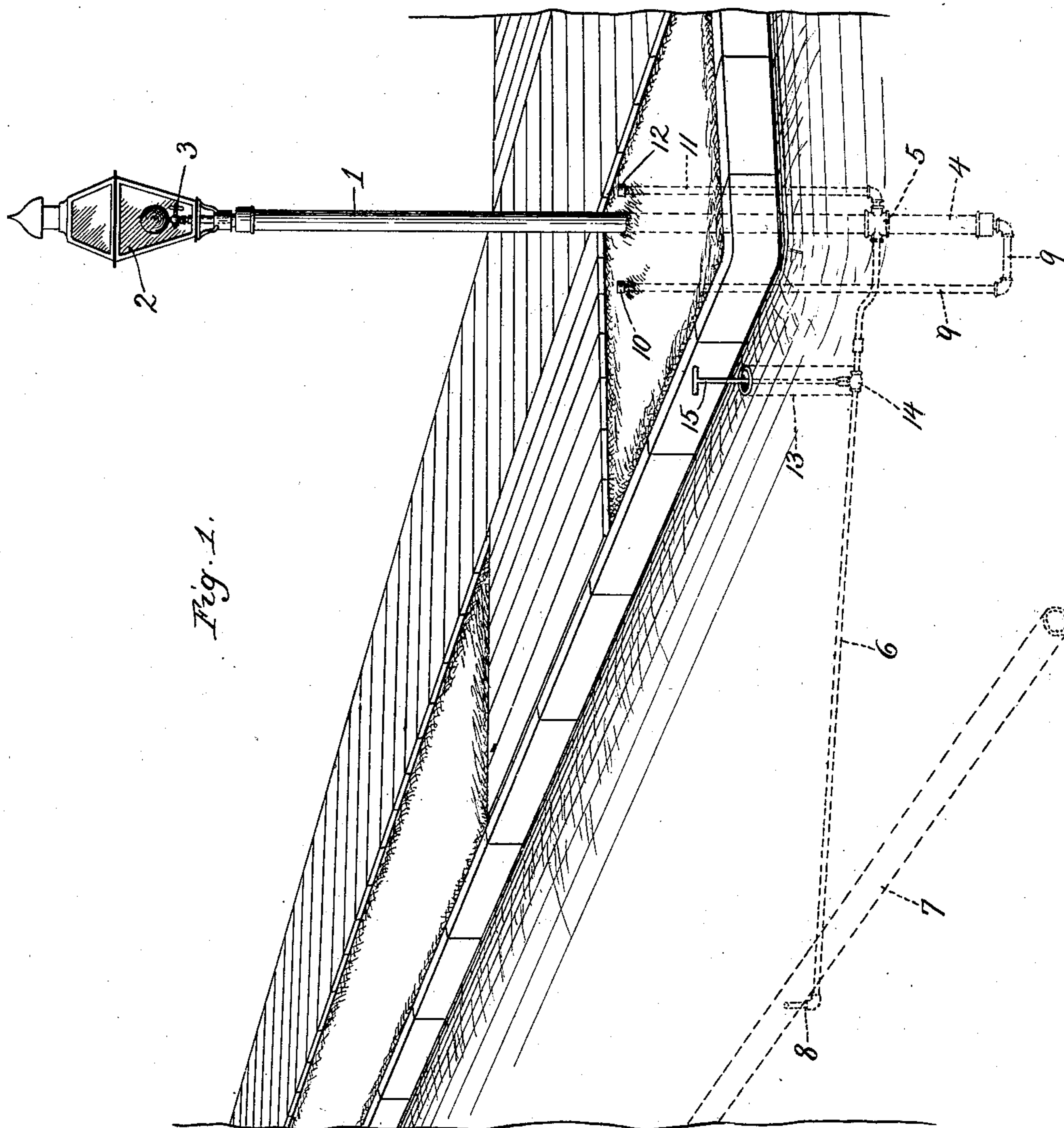
No. 734,158.

PATENTED JULY 21, 1903.

J. A. BOWER.
STREET LAMP POST AND CONNECTIONS.

APPLICATION FILED JAN. 8, 1902.

NO MODEL.



Witnesses,
Edward T. Wray.
Homer L. Hargr.

Inventor.
John A. Bower
by Parker Carter
Attorneys.

UNITED STATES PATENT OFFICE.

JOHN A. BOWER, OF CHICAGO, ILLINOIS, ASSIGNOR, BY MESNE ASSIGNMENTS, TO PRACTICAL GAS CONSTRUCTION COMPANY, OF NORTH CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

STREET LAMP-POST AND CONNECTIONS.

SPECIFICATION forming part of Letters Patent No. 734,158, dated July 21, 1903.

Application filed January 8, 1902. Serial No. 88,888. (No model.)

To all whom it may concern:

Be it known that I, JOHN A. BOWER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Street Lamp-Posts and Connections, of which the following is a specification.

My invention relates to lamp-posts for use in connection with gas, and particularly to means and apparatus for collecting the liquid which may be produced in such gas-lamps and the mains connected therewith and withdrawing it.

My invention is illustrated in the accompanying drawings, wherein—

Figure 1 is a perspective view of my improvement applied, and Fig. 2 is a modification of the same.

Like parts are indicated by the same numeral in all the figures.

1 is a lamp-post carrying the lamp 2, with the valve 3. The lamp-post 1 extends down below the surface and terminates in a portion 4 below the point 5, where the gas-supply pipe connects with the post. This gas-supply pipe is indicated by 6. It is connected with the gas-main 7 at the point 8. The main or some portion of it may be set so as to slightly incline toward the lamp-post and the gas-supply pipe set so as to incline from the bottom of the main to the point where it connects with the post.

9 is a return-pipe leading from the bottom of the part or reservoir 4 up to the surface, where it is covered by a cap 10, and another pipe 11 leads from the lamp-post, preferably at the point where connection is made with the gas-supply pipe to the surface, and is covered by a cap 12.

13 is a tube let down into the ground, 14 a valve in the supply-pipe, and 15 a long-stemmed key which can be inserted through the pipe 13 and used to control the valve 14. In Fig. 2 certain of these parts are omitted, and there may be other modifications in the arrangement of the several parts or by the omission of some without departing from the spirit of my invention. I do not, therefore, wish to be limited to the precise form, pro-

portion, and arrangement of the parts illustrated.

The use and operation of my invention are as follows: A reservoir for the collection of liquid is formed in the bottom of the post, as indicated at 4. All the liquid formed on the inside of the post 1 above or below the surface and all liquid formed in the gas-supply pipe 6 and such liquid as this pipe is permitted to drain from the main is drained off into the reservoir 4 and the parts of the pipe 9 associated therewith. The next object of my invention after providing means for thus accumulating such moisture or liquid is to remove the same from the reservoir when the latter is filled or partially filled and before the presence of such liquid has interfered with the action of the gas apparatus. It will be understood, of course, that my invention is particularly applicable to use in connection with such illuminating fluids as are likely to give out or cause the production of moisture or liquid in the pipes through which they pass. By unscrewing the cap 10 and applying a pump this liquid can be pumped out, for it will be noticed that the gas-chamber, in this case being the post 1 and pipe 6, above the point 5 is not opened to the outer air to permit the gas to escape at the point 10 until such liquid is removed, and when the liquid has been wholly removed the pumping can be discontinued and the pipe 9 be recapped, whereupon the parts are in position to continue operation as before the liquid was formed or deposited. This, however, is not always efficient, because sometimes the conditions may be such that the suction-pump will not effectively operate, and the devices indicated in Fig. 1 may therefore be inserted. To apply these devices, the cap 10 is removed, the cap 12 is removed, and the force-pump applied thereto. The valve 14 is closed by means of the key 15, and the valve 3 is closed. By now operating the force-pump air is forced down through the pipe 11, and the air or gas chamber, in this case consisting of the pipe 11, the post 1, and a portion of the pipe 9, is put under pressure, and this pressure is increased until the liquid in the reservoir 4 and pipe 9 is forced out through

the opening at 10, whereupon the parts having been cleared from liquid the pump may be removed and the caps 10 and 12 restored to their position and the valve 14 be opened.

5 In this position the parts will be ready again for use.

I claim—

1. The combination of a street lamp-post and gas-supply pipe leading thereto and forming therewith a gas-chamber, with a liquid-reservoir below such gas-chamber, a discharge-pipe leading from the reservoir to the surface, a pressure-pipe leading from the surface to the reservoir, and a controlling-valve
10 in the gas-supply pipe.

2. The combination of a street lamp-post and gas-supply pipe leading thereto and forming therewith a gas-chamber, with a liquid-reservoir below such gas-chamber, a discharge-pipe leading from the reservoir to the
20 charge-pipe leading from the reservoir to the

surface, a pressure-pipe leading from the surface to the reservoir, and a controlling-valve in the gas-supply pipe, said gas-supply pipe downwardly inclined toward the lamp-post.

3. The combination of a street lamp-post 25 and gas-supply pipe leading thereto and forming therewith a gas-chamber, with a liquid-reservoir below such gas-chamber, a discharge-pipe leading from the reservoir to the surface, a pressure-pipe leading from the surface to the reservoir, and a controlling-valve 30 in the gas-supply pipe, said reservoir consisting in part of a downward projection of the lamp-post beyond the point of its connection with the gas-pipe.

JOHN A. BOWER.

Witnesses:

HOMER L. KRAFT,
FANNY B. FAY.