

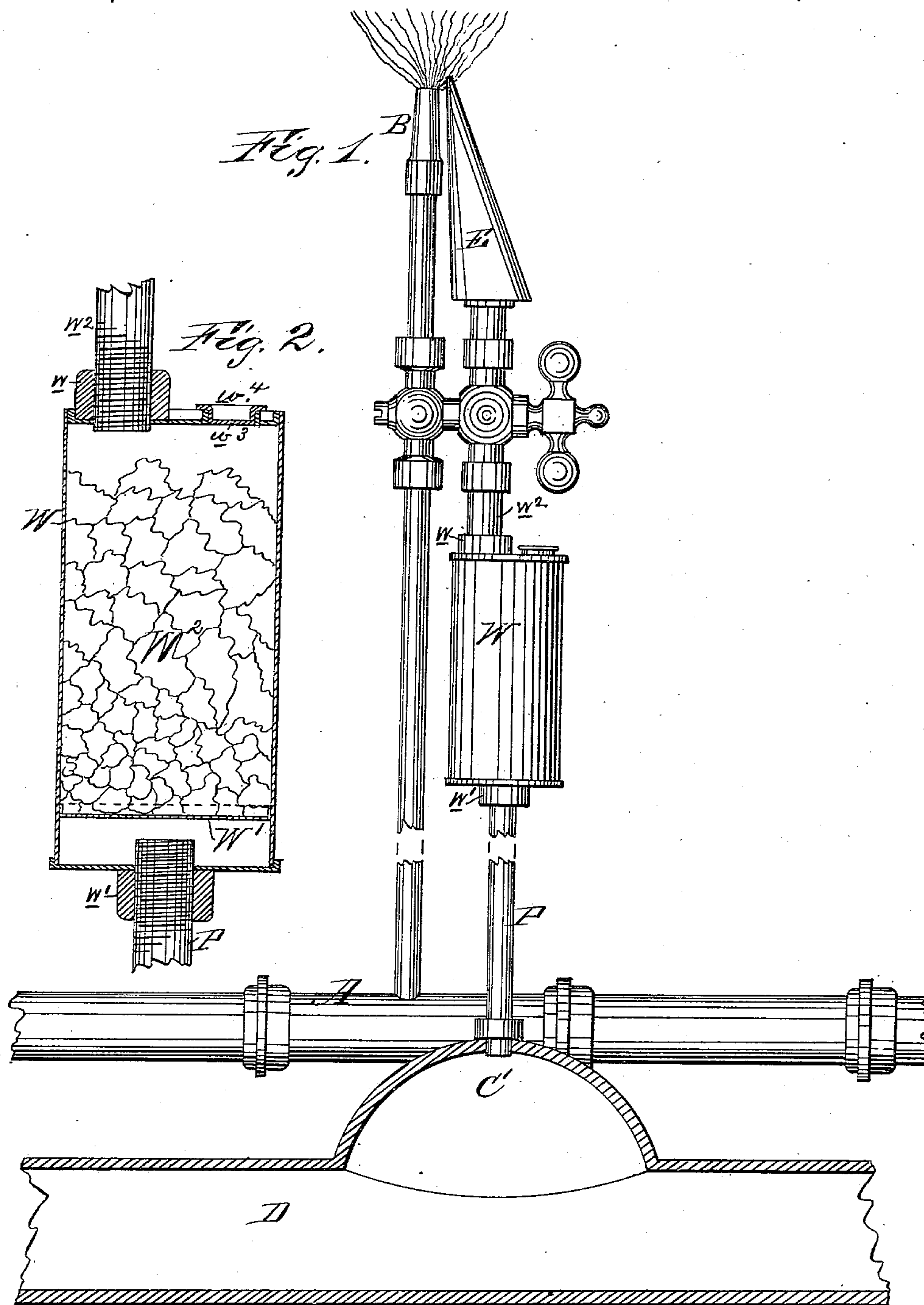
(No Model.)

W. H. OGILVIE & W. S. BENNEM.

APPARATUS FOR CONSUMING SEWER GAS.

No. 259,420.

Patented June 13, 1882.



WITNESSES:

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INVENTOR

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WILLIAM H. OGILVIE AND WILLIAM L. BENNEM, OF BROOKLYN, N. Y.

APPARATUS FOR CONSUMING SEWER-GAS.

SPECIFICATION forming part of Letters Patent No. 259,420, dated June 13, 1882.

Application filed March 18, 1882. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM HENRY OGILVIE and WILLIAM L. BENNEM, citizens of the United States, both residing at Brooklyn, in the county of Kings and State of New York, have invented new and useful Improvements in Apparatus for Consuming Sewer-Gas; and we do hereby declare that the following is a full, clear, and exact description and specification of the same, reference being had to the accompanying drawings, which form a part thereof.

Our invention relates to improvements in apparatus such as described in the specification annexed to Letters Patent granted to William Henry Ogilvie, dated May 24, 1881, and numbered 241,819; and our present invention consists in combining with the pipe P and dome C' therein described an impregnating or carbonizing chamber adapted to receive and hold a certain amount or quantity of hydrocarbon or other suitable liquid adapted to render the sewer-gases passing up the pipe P more readily consumable, the said hydrocarbon or fluid being suspended in said chamber or receptacle, by preference, by means of sponge or equivalent absorbent material.

That our invention may be fully understood, we will proceed to describe the same in detail by the aid of the accompanying drawings, which form part of this specification.

In the drawings, Figure 1 represents our invention, shown partly in section and partly in elevation. Fig. 2 is a sectional view of parts on a larger scale.

In each of the views similar letters of reference indicate like parts wherever they occur.

A represents a gas-main and the supply-pipe, by means of which the burner B is fed.

E is the vacuum-head, which is mounted on the head of a short pipe leading from the impregnating-chamber W, the lower end of which is by means of the pipe P in communication with the dome C' of the sewer or the drain pipe D, leading from the main sewer.

The various parts, with the exception of the impregnating-chamber W, are similar in construction and operation to those described in the specification of the aforesaid Letters Patent No. 241,819, and will therefore require but

slight description in order to fully explain our present invention.

The impregnating-chamber W is formed at w and w' with short supplies for the connection of the pipes w^2 and P. These supplies are shown tapped with female screws. It will, however, be readily seen that male screws may be employed and the joint made by means of a union-joint or otherwise, if desired.

W is a perforated diaphragm, formed either of wire-gauze or other suitable material, adapted, first, to spread the gases being drawn up from the sewer and facilitate their impregnation with the vapor of the hydrocarbon or other fluid which is held in suspension by means of the sponge or other material, W^2 , with which the chamber W is filled. The diaphragm W' also serves as a support for the said material.

The operation of our device is as follows: The flame from the gas-jet B being ignited, the gas or air, or both, in the chamber E will be rarefied, thereby creating a vacuum and drawing up the foul gases from the dome C' by means of the pipe P through the chamber W. The gases, while thus passing through the chamber W, becoming impregnated with the vapors of the hydrocarbon fluid, will readily mix with the flame from the jet B and burn with great avidity, thereby not only improving the light of the jet B, but also greatly increasing the suction through the pipe P, and consequently drawing off and consuming a much larger quantity of the foul gases from the sewer D.

The hydrocarbon or other fluid or liquid is supplied to the impregnating or carbonizing chamber W by means of an opening, w^3 , which we prefer to close by a screw-cap, w^4 , although other means may be employed.

Although we have described and shown the invention applied to a "gas-jet," (as so commonly known,) we can with equal facility apply our device to a burner the flame from which is obtained from gases produced by the decomposition of oils or other materials held in position by a wick or other equivalent means.

We claim as our invention—

1. The combination, with a burner, B, vacuum-head E, and supply-pipe of a sewer-gas-consuming device, of an impregnating or car-

bonizing chamber, W, substantially as and for the purposes as shown and described.

2. The combination, with a burner and a vacuum-head, E, of a sewer-gas-consuming device, of a chamber, W, provided with a diaphragm, W', filled with sponge or other analogous material impregnated with hydrocarbon or other suitable liquid, substantially as and for the purpose described.
- 10 3. The combination, substantially as de-

scribed, of the sewer or drain pipe D, dome C', pipe P, impregnating or carbonizing chamber W, and a gas-consuming device, substantially as and for the purposes described.

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Witnesses:

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