

No. 690,866.

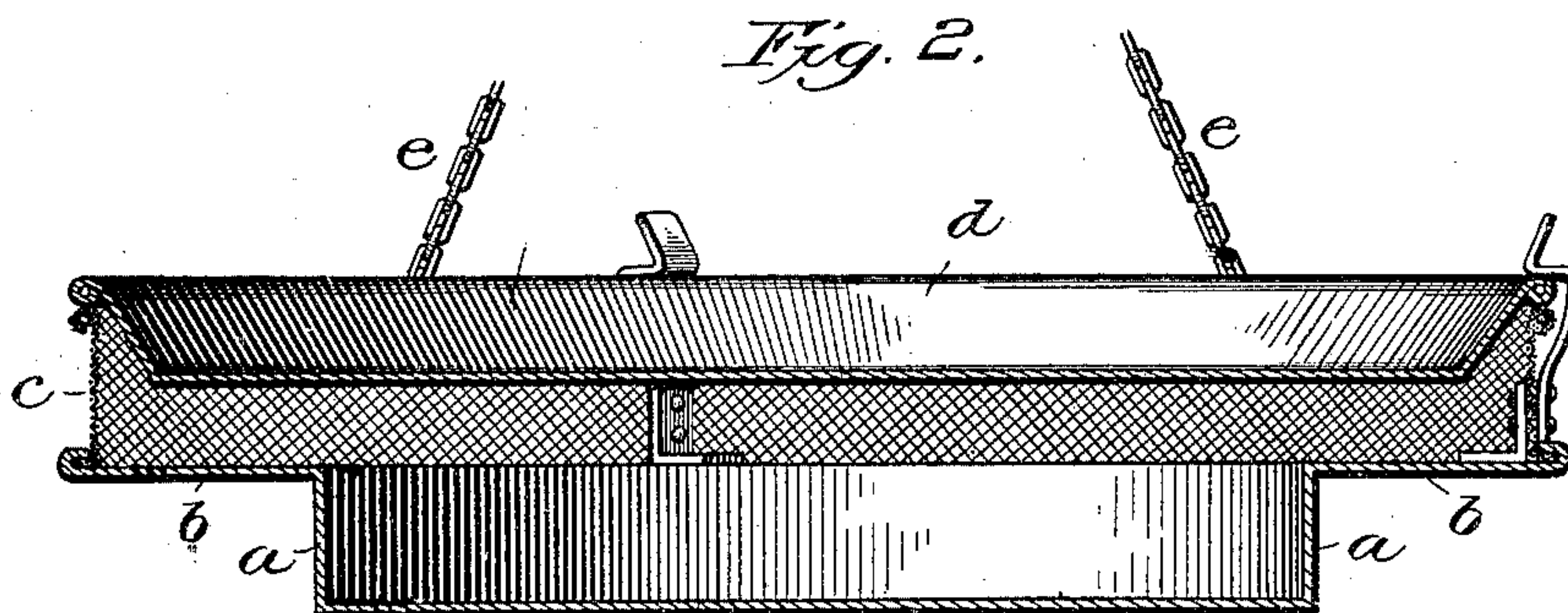
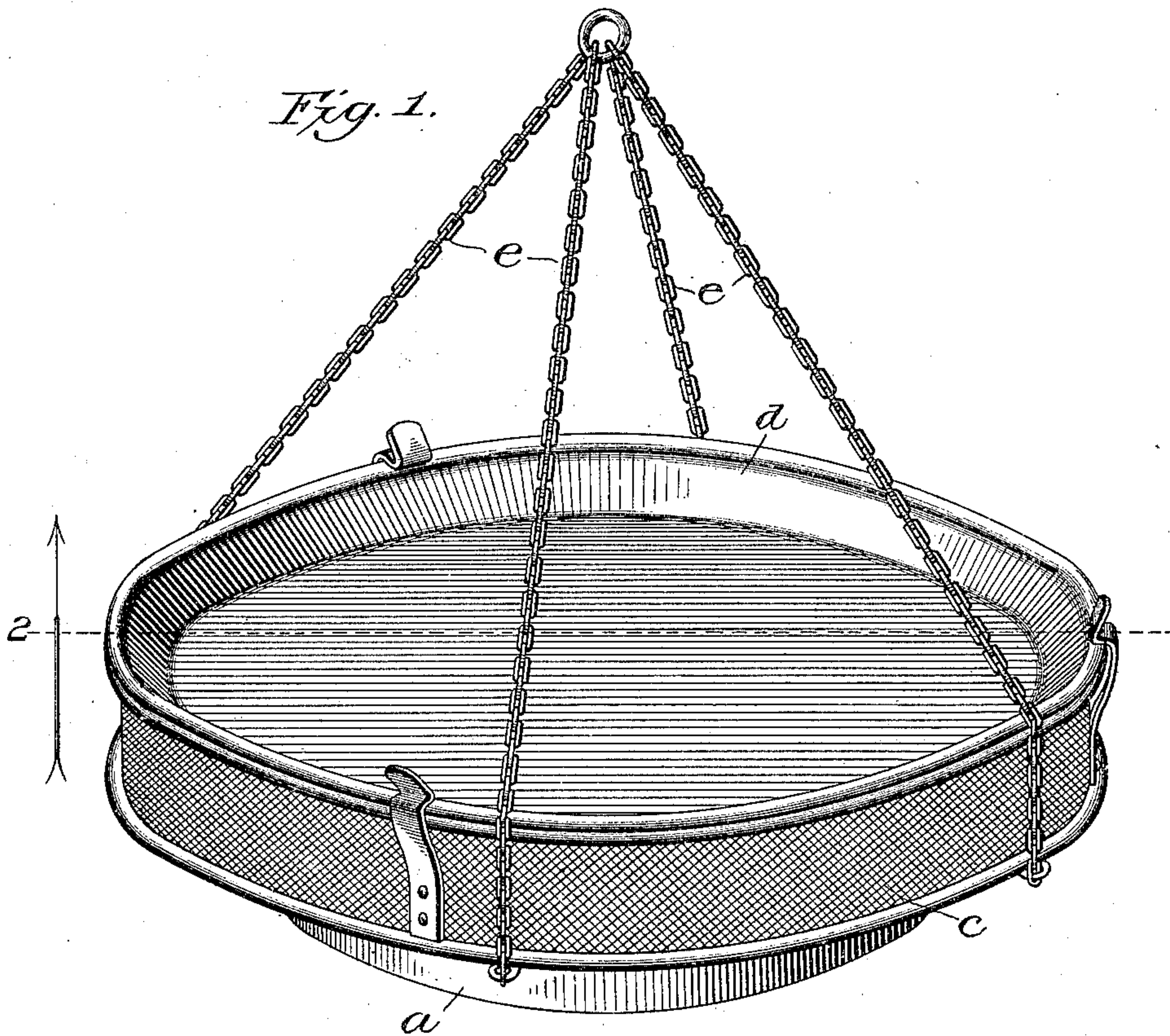
Patented Jan. 7, 1902.

W. MARTIN.

APPARATUS FOR DISINFECTING SEWER VAULTS.

(Application filed Mar. 25, 1901.)

(No Model.)



Witnesses:

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UNITED STATES PATENT OFFICE.

WILLIAM MARTIN, OF CHICAGO, ILLINOIS.

APPARATUS FOR DISINFECTING SEWER-VAULTS.

SPECIFICATION forming part of Letters Patent No. 690,866, dated January 7, 1902.

Application filed March 25, 1901. Serial No. 52,761. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM MARTIN, a citizen of the United States, residing at Chicago, Illinois, have invented certain new and useful Improvements in Apparatus for Disinfecting Sewer-Vaults, of which the following is a specification.

The object of my invention is to provide a simple, economical, and efficient apparatus for burning chemicals to disinfect sewer-vaults and such places by which the germ life in noxious gases may be effectually destroyed; and my invention consists in the features, combinations, and details of construction hereinafter described and claimed.

In the drawings, Figure 1 is a perspective view of my improved apparatus, and Fig. 2 a vertical section taken on line 2 of Fig. 1.

In constructing my apparatus I take a main pan, which is provided with a depending bottom portion *a*, having an upper outwardly-extending horizontal flange portion *b*, to which is secured a circular reticulated side portion or wall *c*, preferably formed of wire-gauze. This main pan is provided to hold and burn a disinfecting compound—such, for instance, as a mixture of black oxid of manganese and sulfur—which is heated therein and evolves certain gases destructive to germ life.

To provide a better apparatus for more thoroughly disinfecting sewer-vaults and like places, it is better to provide an apparatus in which other compounds than the burning compounds may be heated and used. To accomplish this result, I make a second pan *d*, which rests upon the main pan, but extends down inwardly therein, and is provided with an imperforate bottom portion and side walls. This pan is also open and entirely free at the top, so that chlorid of lime or other similar chemical liquid may be heated therein and the gases evolved therefrom allowed to freely enter the vault.

In using my apparatus I provide a certain amount of compound or mixture of sulfur and black oxid of manganese and set it in the lower pan, placing a desired quantity of chlorid of lime in the upper. I next set fire to the sulfur in the lower pan and set it in a sewer-vault, where it is suspended by the metallic pan *e* a short distance from the open-

ing. The gases evolved from the burning of the compound and the heating of the chlorid of lime are allowed to mix and escape into the sewer-vault. The reticulated sides of the main pan prevent any large body of inflammable gases which might be in the vault from coming in contact with the flame or burning compound, and thus minimize the danger of explosion. The gases evolved from the burning of the compound and the heating of the chlorid of lime mingle together, as above suggested, escape from the apparatus, and mix with the noxious sewer-gases, effectually destroying any germ life contained therein. These gases also have a greater specific gravity than the sewer-gases, so that the larger portion thereof falls to the surface of the sewage and destroys any germ therein, while some of the disinfected gases are carried even as far as the noxious gases prevail.

Matters shown and described herein, but not claimed, are described and claimed in an application for Letters Patent for an improvement in compounds for disinfecting purposes, Serial No. 52,762, filed of even date herewith in my name.

I claim—

1. In an apparatus of the class described, the combination of a main pan having an imperforate bottom portion, an upper outward-extending flange and side wall of reticulated material, a supplementary imperforate pan supported in and above the main pan and having a free unobstructed open upper portion, and means for sustaining the main pan, substantially as described.

2. In an apparatus of the class described, the combination of a main pan having a depending imperforate bottom portion and an upper radially-extending annular flange portion, a circular wall thereon formed of reticulated material, a supplementary imperforate circular pan supported in and above the main pan and having an unobstructed opening at the top, and means for supporting the main pan, substantially as described.

WILLIAM MARTIN.

Witnesses:

THOMAS F. SHERIDAN,
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