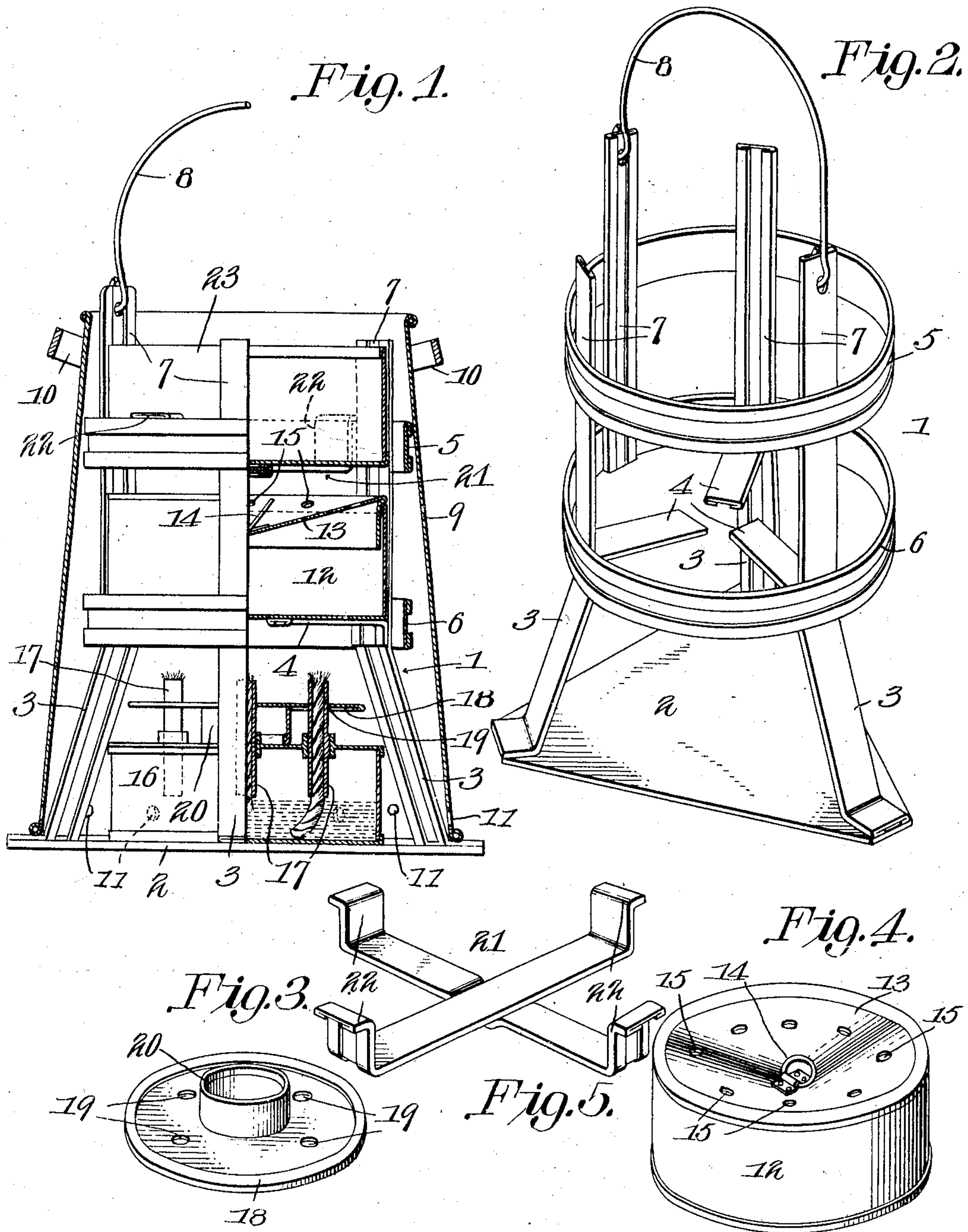


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F. O. HAWLEY.  
FUMIGATING APPARATUS.  
APPLICATION FILED MAR. 4, 1904.

NO MODEL.



Witnesses  
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# UNITED STATES PATENT OFFICE.

FRANCIS OSCAR HAWLEY, OF CHARLOTTE, NORTH CAROLINA.

## FUMIGATING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 769,079, dated August 30, 1904.

Application filed March 4, 1904. Serial No. 196,593. (No model.)

*To all whom it may concern:*

Be it known that I, FRANCIS OSCAR HAWLEY, a citizen of the United States, residing at Charlotte, in county of Mecklenburg and State of North Carolina, have invented a new and useful Fumigating Apparatus, of which the following is a specification.

This invention relates to fumigating apparatus; and it has among its objects to provide a device of this class which shall possess superior advantages in point of simplicity, durability, and general efficiency.

Other objects of my invention are to provide a simple and inexpensively-constructed apparatus in which a liquid disinfectant, such as formalin, may be vaporized while at the same time a solid disinfectant, such as sulfur, is being burned for the purpose of destroying various forms of germ life, some of which are susceptible to the effects of one while others are more susceptible to the other of said disinfectants.

Still another object of the invention is to provide an apparatus in which the vapors and fumes of the several disinfectants shall be thoroughly commingled before being permitted to escape into the premises that are to be disinfected.

With these and other ends in view, which will readily appear as the nature of the invention becomes better understood, the said invention consists in the improved construction, arrangement, and combination of parts, which be hereinafter fully described, and particularly pointed out in the claims.

In the accompanying drawings has been illustrated a simple and preferred form of embodiment of the invention, it being understood that I do not necessarily limit myself to the precise structural details therein exhibited, but reserve the right to any changes, alterations, and modifications which may be resorted to within the scope of the invention and without departing from the spirit or sacrificing the advantages of the same.

In said drawings, Figure 1 is a side elevation, partly in section, of fumigating apparatus constructed in accordance with the principles of the invention. Fig. 2 is a perspective view of the stand detached. Fig. 3 is a

perspective view of the lamp-shield or deflector. Fig. 4 is a perspective detail view of the vaporizing vessel. Fig. 5 is a detail perspective view of the cross-brace constituting the support for the fumigating vessel.

Corresponding parts in the several figures are indicated by similar numerals of reference.

In carrying out the invention I provide a stand 1. (Clearly illustrated in Fig. 2 of the drawings, where said stand is illustrated as comprising a triangular base 2, provided at each corner with an upright 3, said uprights being disposed to converge in an upward direction and each being bent inwardly to form a bracket 4 at the upper end thereof.) These uprights serve to support a cage composed of two hoops or bands 5 6, which are connected by a plurality of uprights 7, two of which disposed diametrically opposite to each other are connected at their upper extremities with the ends of a bail or handle 8. The legs or uprights 3 are set back sufficiently from the corners of the base to enable the latter to support a frustum-shaped casing 9, having handles 10, by means of which it may be conveniently manipulated. Said casing is provided near its lower end with a plurality of air-inlets 11. Its upper end is open for the escape of the vapors and fumes developed by the device, as will be hereinafter set forth.

The brackets 4, formed at the upper ends of the legs or uprights 3, support a vaporizing vessel 12, having a funnel-shaped lid 13, provided with a handle 14 and with a plurality of perforations 15 for the escape of vapors generated therein by means of a lamp or heater 16, which is normally supported upon the base of the stand. In the form of embodiment of my invention illustrated in the accompanying drawings this lamp is provided with a plurality of burner-tubes 17, which may have threaded connection with the top of vessel or receptacle constituting the reservoir of the lamp, which latter is of the ordinary alcohol-burning variety. To prevent the said receptacle from becoming too intensely heated, I avail myself of a diaphragm or deflector 18, having a plurality of openings 19, disposed in alinement with the burner-tubes, thus enabling the diaphragm or deflector to be



mounted upon said tubes, it being supported a suitable distance above the top of the reservoir by means of annular flange or collar 20, formed upon the under side of the deflector 18. It will be observed that this device does not in any way interfere with the efficiency of the device, but that it simply forms a protection for the vessel or reservoir of the lamp.

21 designates a supporting device, which consists of a cross-brace the arms of which are provided at the ends thereof with up-turned hook members 22, adapted to be supported upon the upper edge of the upper hoop 5 of the cage which constitutes a portion of the stand, said cross-brace or supporting device being disposed a short distance above the vaporizing vessel. This cross-brace supports a cup or vessel 23, in which powdered sulfur or some other suitable solid disinfectant may be consumed by burning.

The operation and advantages of this invention will be readily understood from the foregoing description, taken in connection with the drawings hereto annexed. The vaporizing vessel 12 is supplied with a liquid disinfectant, such as formalin, and sulfur or some other suitable combustible disinfectant is placed in the cup 23, where it is ignited, the lamp or heater under the vaporizing vessel being likewise ignited, after which the casing is placed in position, leaving the handle or bail 8 accessible and enabling the device to be carried thereby to the premises that are to be disinfected. The vapors and fumes will obviously commingle with each other as they escape at the open top of the casing and will combine to contribute to the extermination of germ life.

It is obvious that various liquids and drugs may be substituted for those herein named, the object being to use such drugs as are most potent to effect the destruction of the special germs that are to be dealt with. Water alone may be used in the vaporizing vessel, the steam generated thereby serving to promote

combustion of the drug or drugs which are being burned in the fumigating-cup 23.

This device, as will be seen, is extremely simple in construction and operation, and it may be successfully and effectively employed for the purpose of disinfecting premises, clothes, and the like which have been infected by various contagious diseases.

The apparatus may be made of any desired size and of proportions to suit various requirements and of any material which shall be deemed suitable for the purpose.

Having thus described my invention, I claim—

1. A fumigating device including a stand, legs rising from said stand and having intumed brackets at their upper ends, a cage supported upon said legs, a vaporizing vessel supported upon the brackets at the upper ends of the legs, a cross-brace supported upon a hoop of the cage above the vaporizing vessel, a fumigating vessel supported upon said cross-brace, and a bail connected with the cage.

2. In a device of the class described, a stand comprising a base, upwardly-extending legs provided with intumed brackets at their upper ends, and a cage supported upon said brackets, a vaporizing vessel supported upon the latter within the cage, a heater supported upon the base below the vaporizing vessel, a cross-brace supported upon a hoop of the cage above the vaporizing vessel, a fumigating-cup supported upon said cross-brace, a casing supported upon the base and having air-inlets at its lower end, and a bail connected with the stand and accessible through the open end of the casing.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

FRANCIS OSCAR HAWLEY.

Witnesses:

J. W. COBB,  
W. M. MOORE.