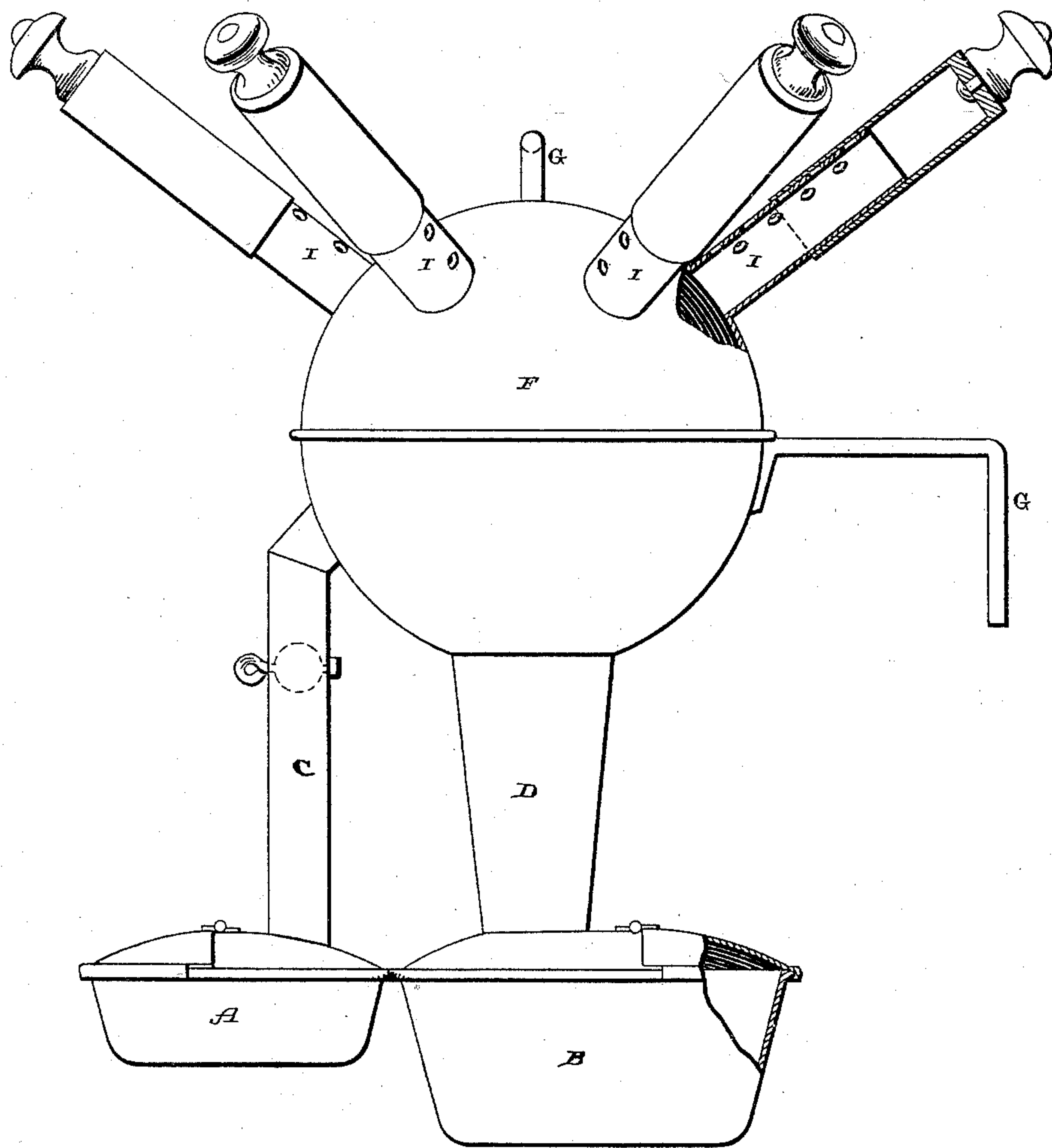


(No Model.)

W. T. YANDOW.  
FRUIT TREE PROTECTOR.

No. 448,738.

Patented Mar. 24, 1891.



Witnesses:

E. P. Ellis,  
B. Brockett.

Inventor:

W. T. Yandow  
per  
C. E. Allen, atty.

# UNITED STATES PATENT OFFICE.

WILLIAM T. YANDOW, OF WINOOSKI, VERMONT.

## FRUIT-TREE PROTECTOR.

SPECIFICATION forming part of Letters Patent No. 448,738, dated March 24, 1891.

Application filed June 13, 1890. Serial No. 355,342. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM T. YANDOW, a citizen of the United States, residing at Winooski, in the county of Chittenden and State of Vermont, have invented certain new and useful Improvements in Fruit-Tree Protectors, of which the following is a specification, reference being had therein to the accompanying drawing.

My invention relates to an improvement in fruit-tree protectors; and it consists in the combination of two reservoirs or chambers in which the mixtures are placed, vertical pipes extending therefrom, a receiving-chamber, a series of perforated pipes extending therefrom, and sleeves which are passed over the pipes, and by means of which the amount of vapor, smoke, or gas which escapes through the pipes is regulated, as will be more fully described hereinafter.

The object of my invention is to provide an apparatus which is to be placed in or hung upon a fruit-tree, by means of which odors, vapors, or smoke can be distributed throughout the tree for the purpose of driving away all insects, flies, or borers which are injurious to the tree, and thus protect it from their ravages.

The accompanying drawing represents a side elevation, partly in section, of an apparatus which embodies my invention.

A B represent two reservoirs or chambers of different sizes, in one of which is placed the composition or mixture which creates an unpleasant odor, and in the other that which causes the smoke. These two chambers are here shown of unequal size, but they may both be made of the same size, if so desired, and both are provided with covers to prevent any escape of the odors or smoke except through the perforated pipes. In one of the chambers the composition, consisting of any suitable material which will cause a smoke or vapor, is to be set on fire and slowly burned, while in the other chamber may be placed any substance or compound which will emit such an odor as to assist in driving away the

insects which prey upon the tree. Rising from the top of each of these chambers or reservoirs are the two pipes C D, of unequal size, and which connect at their upper end with the spherical chamber F, which is provided with suitable means for attachment G, for suspending it from or fastening it to the tree. Extending from the top of this spherical chamber at any desired angle are a number of perforated pipes I, which may be of any suitable length and diameter, and over which the sleeves, collars, or covers may be passed. Through the perforation in the tops of these pipes the mingled smoke and odors escape when the collars or covers are removed from over the openings, and these mingled odors and smoke, escaping into the trees, drive away the insects. If it is desired to have only a small portion of the odors and smoke escape, the collars may be adjusted so as to close nearly all of the openings and leave only those which are near the inner ends of the pipes uncovered. By this means any of the odors and smoke is prevented from escaping outside of the blossoms and being wasted. In the pipe which leads from the small chamber or reservoir, and in which the material is placed for producing an unpleasant odor, a valve is placed, so as to regulate the amount of odor which shall be mingled with the smoke.

I do not limit my invention to any particular means of suspending my device from or attaching it to a tree, because these may be varied at will without departing from the spirit of my invention.

Having thus described my invention, I claim—

1. The combination of a reservoir or chamber in which a smoke or odor is produced, a pipe extending therefrom, a chamber connected to the upper end of the pipe, and distributing-pipes projecting from the upper portion of this chamber, substantially as described.

2. The combination of two reservoirs or chambers, pipes extending therefrom, a cham-



ber connected to the upper ends of the pipes,  
and perforated pipes projecting from the  
chamber, substantially as set forth.

3. The combination of a reservoir or cham-  
5 ber, the pipe projecting therefrom, a cham-  
ber connected to the upper end of the pipe,  
a series of perforated pipes extending from  
the chamber, and sleeves, collars, or covers  
placed upon the pipes, substantially as speci-  
10 fied.

In testimony whereof I do affix my signa-  
ture in presence of two witnesses.

WILLIAM T. <sup>his</sup> × YANDOW.  
mark

Witnesses:

JUDSON E. CUSHMAN,  
WILLIAM E. WELLER.