

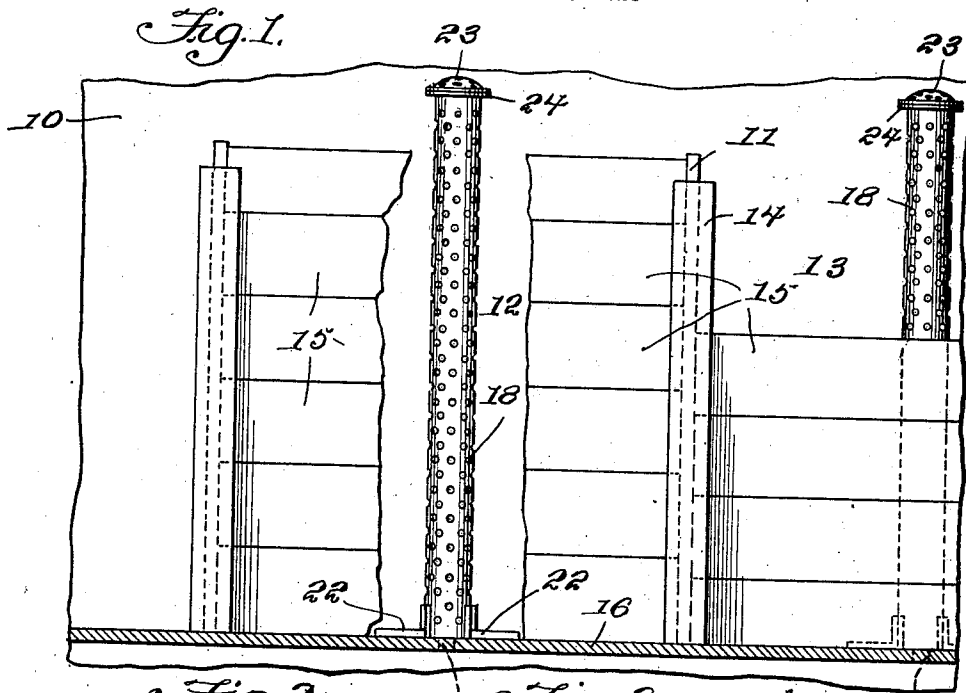
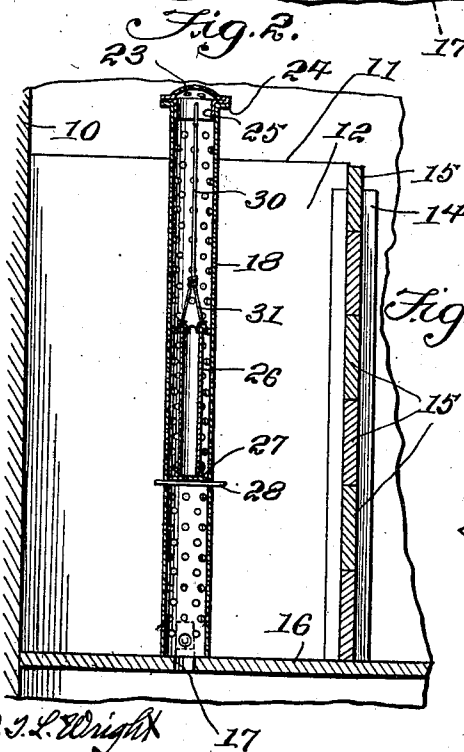
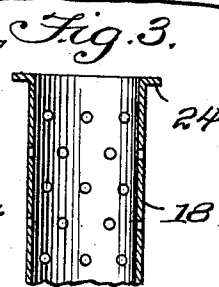
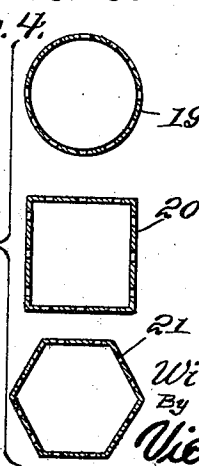
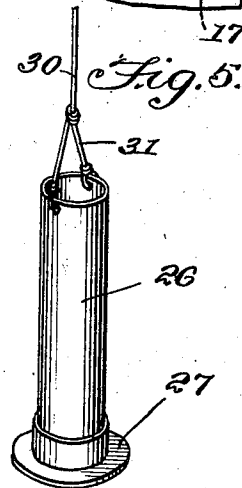
May 6, 1924.

W. A. RUPPERT

1,493,391

VENTILATOR

Filed Sept. 15, 1923



J. J. L. Wright
WITNESS:

William A. Ruppert
By
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UNITED STATES PATENT OFFICE.

WILLIAM ALBERT RUPPERT, OF WESTMINSTER, MARYLAND.

VENTILATOR.

Application filed September 15, 1923. Serial No. 662,849.

To all whom it may concern:

Be it known that I, WILLIAM A. RUPPERT, a citizen of the United States, residing at Westminster, in the county of Carroll and State of Maryland, have invented new and useful Improvements in Ventilators, of which the following is a specification.

This invention relates to ventilators especially designed for grain bins, an object being to provide means for the passage of air through stored grain so as to keep the same in proper condition for use.

Another object of the invention is to provide means whereby the ventilator may be utilized to facilitate the distribution of germicidal fumes through the grain to further guard against spoiling.

With the above and other objects in view, the invention further includes the following novel features and details of construction, to be hereinafter more fully described, illustrated in the accompanying drawings and pointed out in the appended claims.

In the drawings:—

Figure 1 is an elevation partly broken away showing the invention in use.

Figure 2 is a vertical transverse section.

Figure 3 is an enlarged fragmentary section of the upper portion of the perforated tube.

Figure 4 represents a series of transverse sections showing some of the different forms in which the perforated tube may be made.

Figure 5 is a detail perspective view of the container.

Referring in detail to the drawings wherein like characters of reference denote corresponding parts, the invention is shown within a bin adapted for the storage of grain. The bin shown includes a wall 10 and in order to provide a number of bins there is extending from this wall spaced partitions 11 which provide side walls for bins 12 and 13, the said partitions having secured to their outer edges, standards 14 which extend upon opposite sides of the partition for engagement by the opposite ends of removable timbers 15, the latter forming the fronts of the bins.

The floor 16 of each of the bins is provided with an opening 17 and positioned above each of these openings is a perforated tube 18. This tube may be of any suitable shape in cross section, a few of such shapes

being shown at 19, 20 and 21 in Figure 4 of the drawings. Any suitable means may be employed for securing the tube in place, such as brackets 22.

The upper end of the tube is closed by a perforated cap 23, having a flange extending outwardly therefrom for engagement with an annular flange 24 provided upon the upper end of the perforated tube 18. The cap is also provided with a downwardly extending flange 25 which enters the top of the tube.

Air passing through the opening 17 will pass upward and through the perforations in the tube and be distributed throughout the grain within the bin.

Another novel feature of the invention resides in the provision of means for distributing a germicide through the grain and for this purpose there is provided a container 26 which is open at the top and is provided at its bottom with a base 27 whose area is slightly less than the cross sectional area of the interior of the tube 18. The base 27 of the container is adapted to rest upon a pin 28 which is removably positioned within the perforations of the tube 18 and which extends transversely through the tube. Extending upwardly from the open end of the container 26 is a rod 30 which is connected to the container by a bail 31. The container may thus be conveniently positioned within the perforated tube and as the air is distributed it will carry with it fumes from the contents of the container.

The invention is susceptible of various changes in its form, proportions and minor details of construction and the right is herein reserved to make such changes as properly fall within the scope of the appended claims.

Having described the invention what is claimed is:—

1. The combination with a bin having an opening in the bottom thereof, of a perforated tube open at each end and having one end positioned over said opening, a closure cap for the opposite end of the tube, an open container located within the tube, a base for said container, said base being of slightly less cross sectional area than the cross sectional area of the interior of the tube and means located within the tube for engagement with the base of the container for supporting the latter.

2. The combination with a bin having an

opening in the bottom thereof, a perforated tube open at each end and having one end positioned over said opening, a closure cap for the opposite end of the tube, an open
5 container located within the tube, a base for said container, said base being of slightly less cross sectional area than the cross sectional area of the interior of the tube and a pin extending through the perforations of the tube transversely of the latter for supporting the container. 10

In testimony whereof I affix my signature.

WILLIAM ALBERT RUPPERT.