

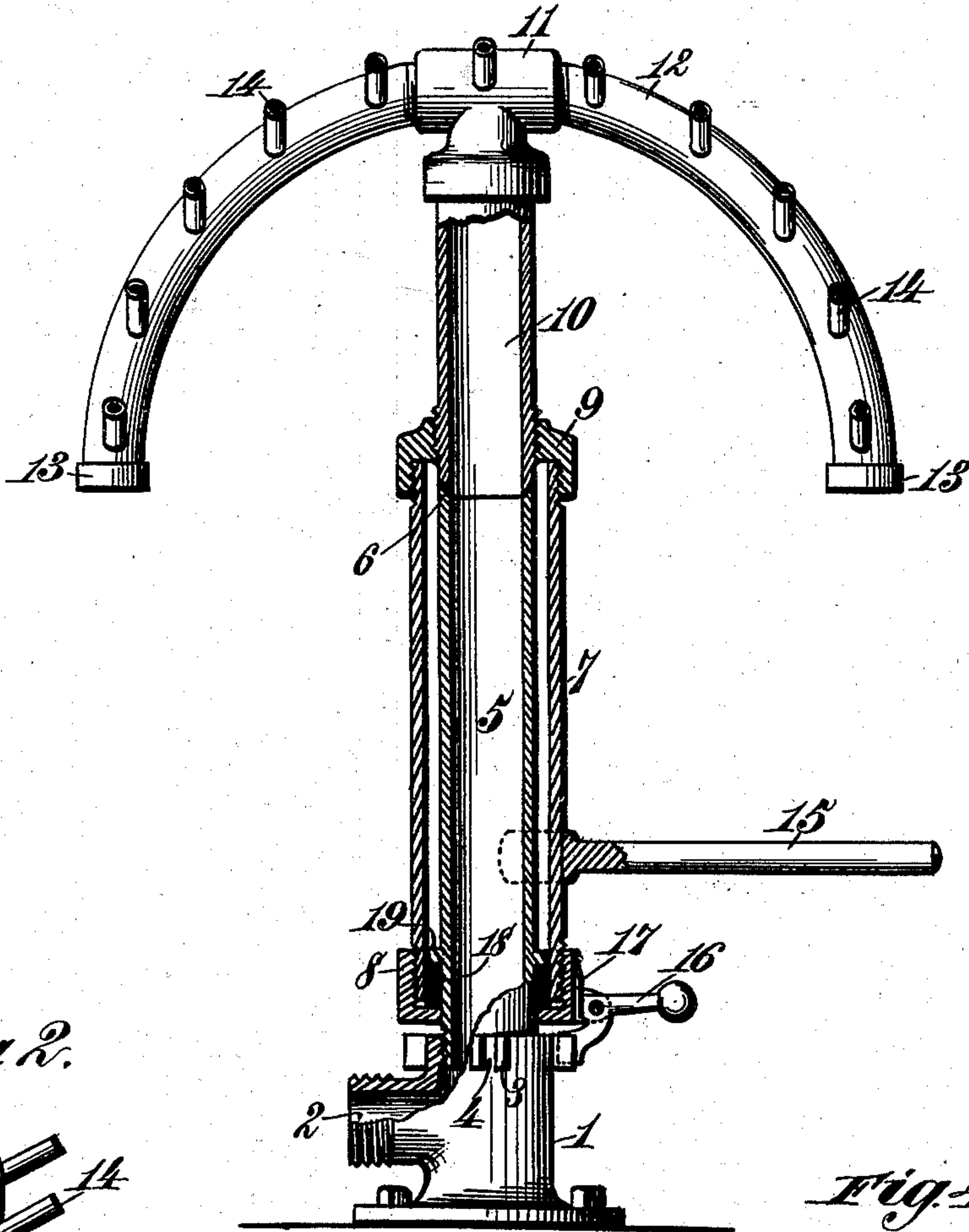
(No Model.)

F. FREY.  
APPARATUS FOR DISPERSING FOGS.

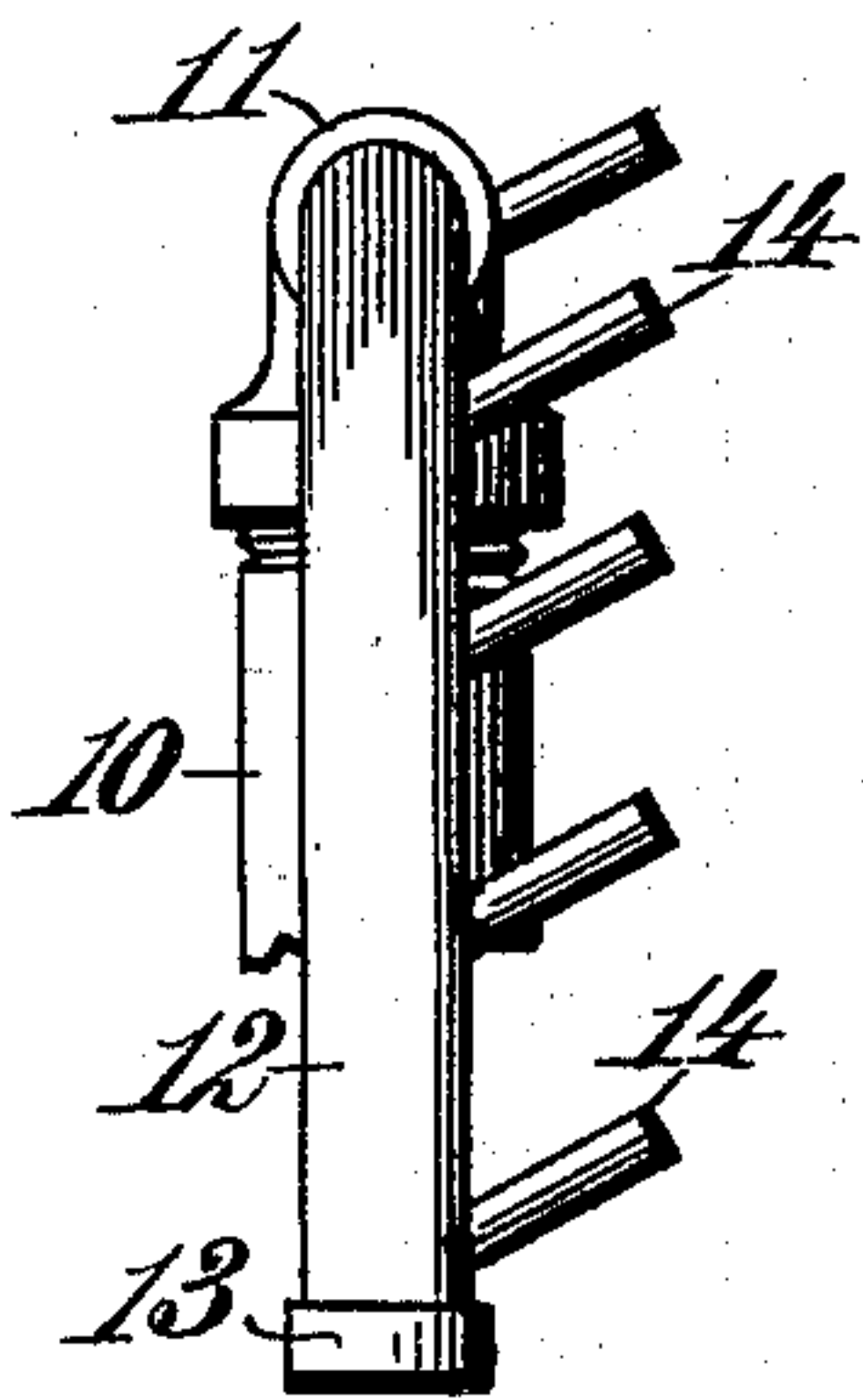
No. 558,940.

Patented Apr. 28, 1896.

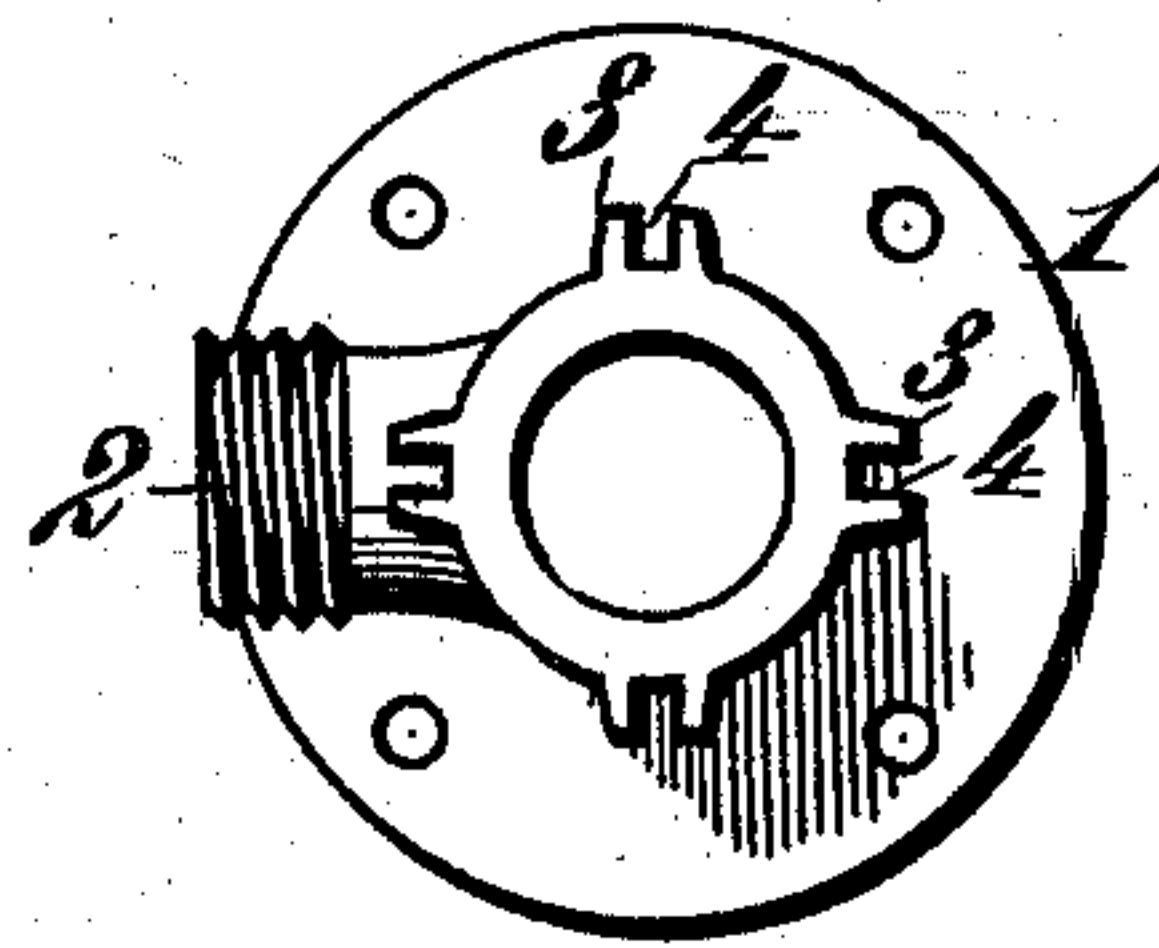
*Fig. 1.*



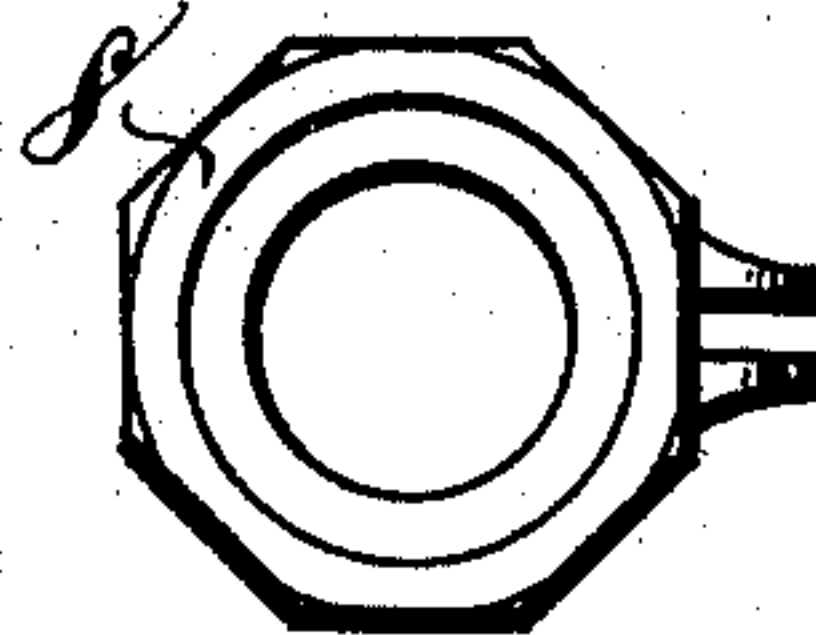
*Fig. 2.*



*Fig. 4.*



*Fig. 3.*



*Witnesses.*  
*Robert Smith.*

*Dennie Sumbly.*

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# UNITED STATES PATENT OFFICE.

FRANK FREY, OF ROCHESTER, NEW YORK.

## APPARATUS FOR DISPERSING FOGS.

SPECIFICATION forming part of Letters Patent No. 558,940, dated April 28, 1896.

Application filed July 9, 1895. Serial No. 555,427. (No model.)

*To all whom it may concern:*

Be it known that I, FRANK FREY, a citizen of the United States, residing at Rochester, in the county of Monroe and State of New York, have invented new and useful Improvements in Apparatus for Dispersing or Causing the Precipitation of Fogs, of which the following is a specification.

My invention relates to apparatus for dispersing or causing the precipitation of fogs, and has for its object to provide novel, simple, and convenient means whereby a series of jet-throwing tubes, connected with a supply-conduit, may be turned or presented in various directions to distribute the fog-dispersing material to different points as may be required, my present invention being an improvement upon a fog-dispersing apparatus shown, described, and claimed in an application for Letters Patent filed by me October 28, 1892, Serial No. 450,202.

This invention consists in the novel construction, arrangement, and combination of the parts of a fog-dispersing apparatus, as hereinafter described and claimed.

In the annexed drawings, illustrating the invention, Figure 1 is a partly-sectional elevation of my improved fog-dispersing apparatus; Fig. 2, a side view of the distributing-pipe and attached nozzles. Fig. 3 is a plan of one of the connections. Fig. 4 is a plan of the hollow base or standard.

In the drawings, the reference-numeral 1 designates a hollow standard or base having an inlet-opening 2 and communicating with a supply-pipe, (not shown,) and provided at its rim or top with a series of seats 3, having recesses 4 therein. Into the open top of the hollow standard 1 is tightly screwed a vertical conduit 5, having its upper end provided with an inwardly-beveled seat 6, for a purpose that will hereinafter appear. Surrounding the conduit 5 is a sleeve or jacket 7, having a lower screw-threaded end, on which a nut 8 is secured. To the upper end of the sleeve or jacket 7 is attached a nut 9, connecting the sleeve with an upper conduit 10, the lower end of which is beveled to seat upon the upper beveled end 6 of the stationary conduit-section. The upper end of the movable conduit-section 10 is provided with a socket 11, in which is secured an arched pipe

12, having its ends closed, preferably, by caps 13, as shown.

The arched distributing-pipe 12 is provided at suitable intervals with a series of attached jet-tubes 14, which extend therefrom in an upward and outward direction. Secured to the sleeve or jacket 7 is a handle 15, by which said sleeve, the connected upper conduit-section 10, and attached distributing-pipe 12 may be turned or rotated to present the attached tubes 14 in any required direction to throw the fog-dispersing material in various directions as may be desired.

To the nut 8, attached to the lower end of sleeve 7, is pivoted a gravity-latch 16, adapted to engage in one of the recesses 4 in the seats 3 that are provided in the base of the apparatus, as before mentioned. A spring 17 may be arranged to hold the latch 16 to its engagement with any one of the recessed seats.

Between the lower end of the conduit-section 5 and jacket 7 is arranged a packing 18, that may have a bearing at its upper end against a ring or shoulder 19 on the conduit-section 5 when the nut 8 is tightened up.

The catch 16 is normally engaged with one of the recessed seats 4 and will thus firmly hold the rotatable sleeve 7 and attached upper conduit-section 10 at any position to which they may have been turned. By lifting this catch 16 against the pressure of its spring 17 the sleeve 7 will be released and may then be rotated by means of the handle 15, so as to carry the upper conduit-section 10 and attached distributor-pipe 12 to any desired position.

The fog-dispersing material may consist of any liquid or gaseous body of greater specific gravity than the aqueous vapor of the fog and which will be adapted to mingle with and disperse or precipitate the fog, as described in my former above-named application, Serial No. 450,202.

By means of the apparatus herein described the distributing-pipe 12 and jet-tubes 14 are capable of being readily turned to permit the throwing of the fog-dispersing material to any required direction—such, for instance, as in advance of and somewhat above the path of a vessel or other moving body.

In practice the hollow standard or base 1 may be securely bolted to the deck or other



part of a vessel or other moving body, and by means of a suitable pipe or hose the inlet 2 may be connected with a tank or reservoir (not shown) or other source of fog-dispersing material.

Having thus described my invention, what I claim is—

1. In a fog-dispersing apparatus, the combination of a hollow standard provided with an inlet, a rotatable conduit communicating with said standard, a distributing-pipe communicating with and carried by said rotatable conduit and provided with a series of outwardly and upwardly projecting jet-tubes, and means for adjustably connecting said conduit and standard to permit the conduit and attached distributing pipe and nozzles to be turned to any required direction, substantially as described.

2. In a fog-dispersing apparatus, the combination of a hollow standard having an inlet, a stationary conduit-section rigidly connected with said hollow standard, a rotatable conduit-section supported upon and communicating with the stationary conduit-section, a distributing-pipe carried by the rotatable conduit-

section and provided with a series of jet-tubes, and means for adjusting and locking the rotatable conduit in any required position, substantially as described.

3. In a fog-dispersing apparatus, the combination of a hollow standard having an inlet, a lower stationary conduit-section rigidly connected to and communicating with said standard, a rotatable jacket or sleeve surrounding the said lower conduit-section, an upper rotatable conduit-section connected to and carried by said sleeve and seated upon the upper end of the lower conduit-section, a distributing-pipe carried by the upper rotatable conduit-section and provided with a series of jet-tubes, and means for locking the conduit and sleeve in an adjusted position, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

FRANK FREY.

Witnesses:

JAMES COCHRANE,  
G. H. GRISWOLD.