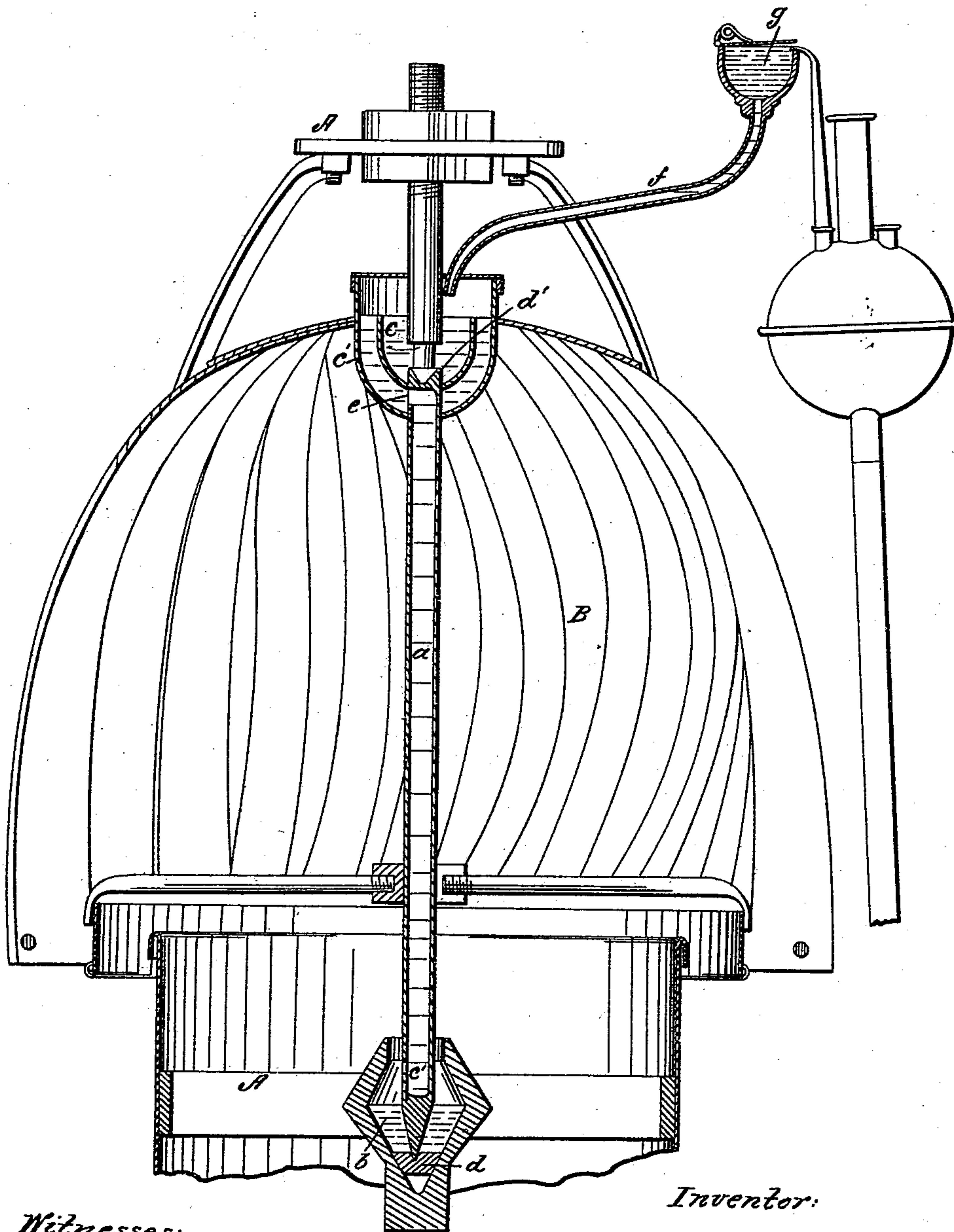


H. THOMAS.
Lubricator Ventilator

No. 94,254.

Patented Aug. 31, 1869.



Witnesses:
McCombs
Fred. Haynes

Inventor:
Hugh Thomas.

United States Patent Office.

HUGH THOMAS, OF NEW YORK, N. Y.

Letters Patent No. 94,254, dated August 31, 1869; antedated August 18, 1869.

IMPROVED LUBRICATOR FOR VENTILATORS.

The Schedule referred to in these Letters Patent and making part of the same

To all whom it may concern:

Be it known that I, HUGH THOMAS, of the city, county, and State of New York, have invented a new and improved Lubricator for Ventilators; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and in which is represented a vertical section of a ventilator provided with a lubricator constructed according to my invention.

This invention is more especially designed for chimney-cap ventilators, but is also applicable to other kinds of upright revolving ventilators.

Its object is to provide for the more convenient lubricating of such ventilators, by obviating the necessity of the removal or taking down of the same for said purpose.

The invention consists in a novel arrangement, in combination with the journals and bearings of such ventilators, of oil-cups, and connecting-tubes, whereby the same may be effectually and conveniently lubricated without requiring the removal of the ventilator from its place.

In order that others may understand the construction and operation of my invention, I will proceed to describe it with reference to the drawings.

A is the frame, and B the rotating fan of an ordinary chimney-cap ventilator, the fan being carried in the usual manner upon a vertical shaft, *a*, which is supported between bearings *d* *d'* at the bottom and top of the frame.

Said shaft is or may be of similar construction to that generally employed for that purpose, except that it must be made hollow, thereby forming a tube for the purpose of conducting the oil to a cup, *b*, arranged at the bottom of the frame A, and in the bottom of which is arranged the lower bearing *d*.

Upon the shaft *a*, near its upper end, and around the upper journal, is provided an oil-cup, *c*, so that oil, when supplied thereto, will lubricate the upper journal and bearing.

Upon the shaft *a*, and around the cup *c*, is arranged a larger cup, *c'*, so that when the oil is made to overflow said smaller cup, it will be caught within the larger one, for the purpose hereinafter explained.

Within the hollow shaft or tube *a*, at a point between the said larger and smaller cups *c* and *c'* is made an opening, *e*, and near the lower bearing is

also made a similar opening, *e'*, both communicating with the central cavity thereof, so that the oil caught in the larger cup, *c'*, from the overflowing of the smaller one, is conducted through the said tube or hollow shaft to the lower cup *b*.

h is a fixed cap or cover for the cups *c* *c'*, rigidly attached to the upper bearing, and designed for the exclusion of dust and other foreign matter.

f is a tube, having its lower end passed through and secured within the cap or cover of the cups *c* *c'*, and its upper end outwardly and upwardly extended in a manner as represented in the drawings.

Upon the upper end of this tube *f* is secured a spring-capped oil-cup, *g*, which communicates through an opening in its bottom with the hollow in the tube *f*, so that oil, when supplied to said cup, will be conducted into the smaller cup *c*, through said tube.

The oil is supplied to the spring-capped oil-cup *g*, by any suitable means, and an appropriate oiler for the purpose, and the manner of applying the same is illustrated by red outlines in the drawings.

The oil thus supplied finds its way through the tube *f* into the smaller cup *c*, and lubricates the upper bearing.

The supplying of a sufficient quantity of oil to the cup *g* will cause the overflowing of the cup *c*, and the surplus oil, being caught by the larger cup *c'*, finds its way through the opening *e* into the interior of the hollow shaft *a*, and out at the lower opening *e'*, into the lower cup *b*, thereby lubricating the lower bearing.

By this means, the bearings of this and other kinds of upright revolving ventilators may be conveniently lubricated, and a sufficient quantity of oil thereto supplied and retained for lubricating-purposes, to last a long time, and without necessitating the taking down of the ventilator.

What I claim as my invention, and desire to have secured by Letters Patent, is—

The cups *c*, *c'*, and *b*, in combination with the hollow spindle *a*, arranged for lubricating the upper and lower bearings of said spindle, substantially as shown and described.

HUGH THOMAS.

Witnesses:

FRED. HAYNES,

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