

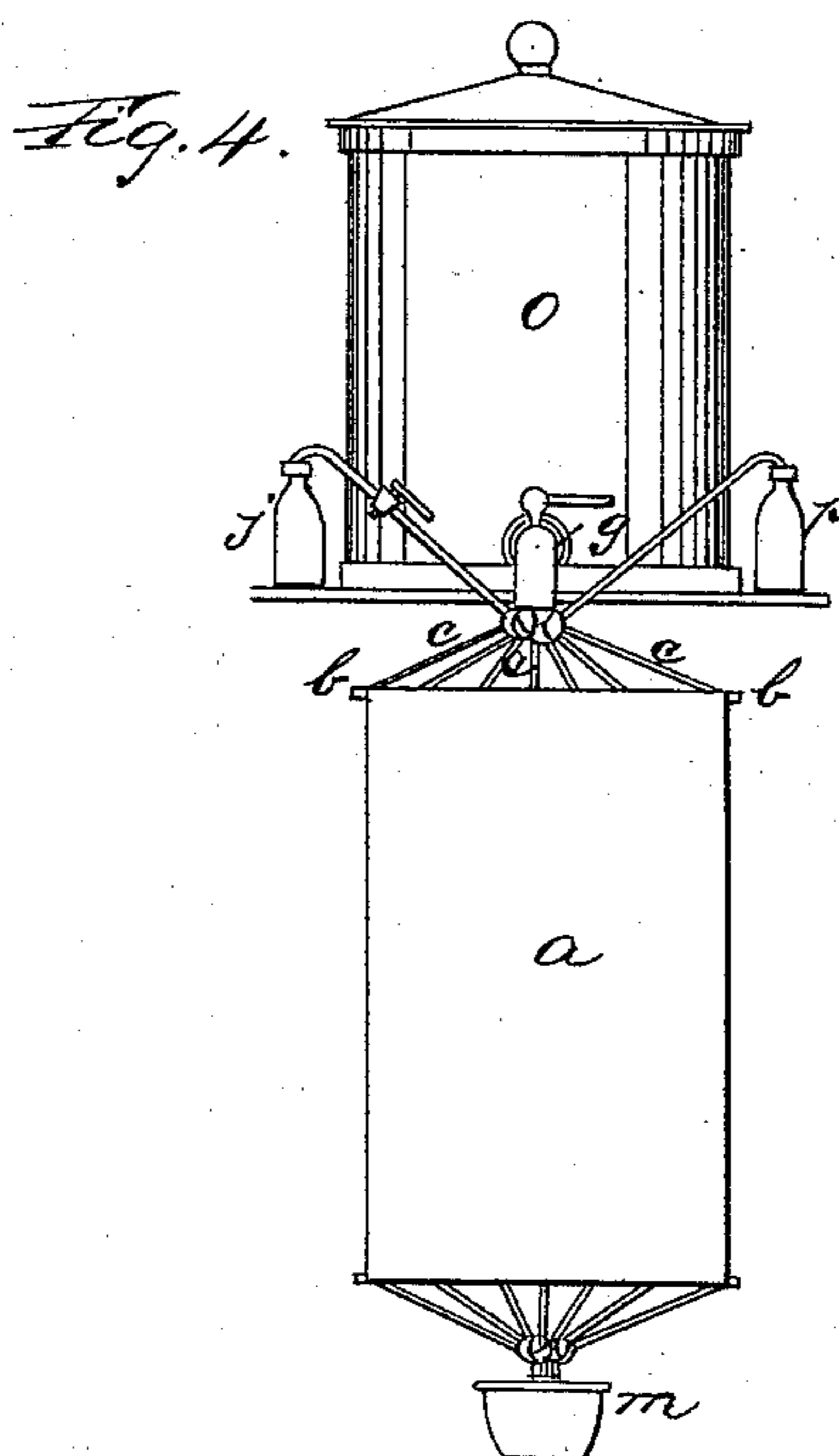
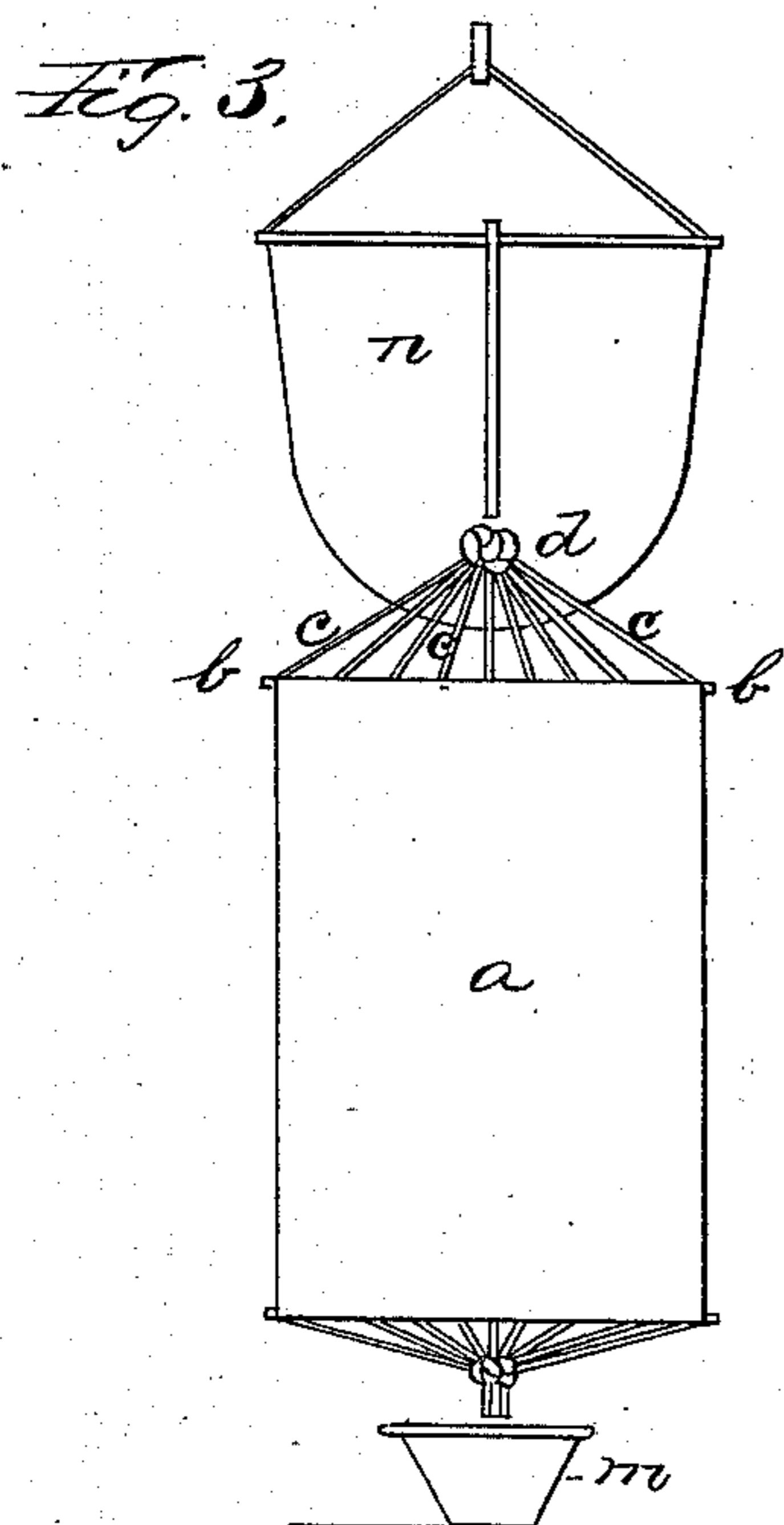
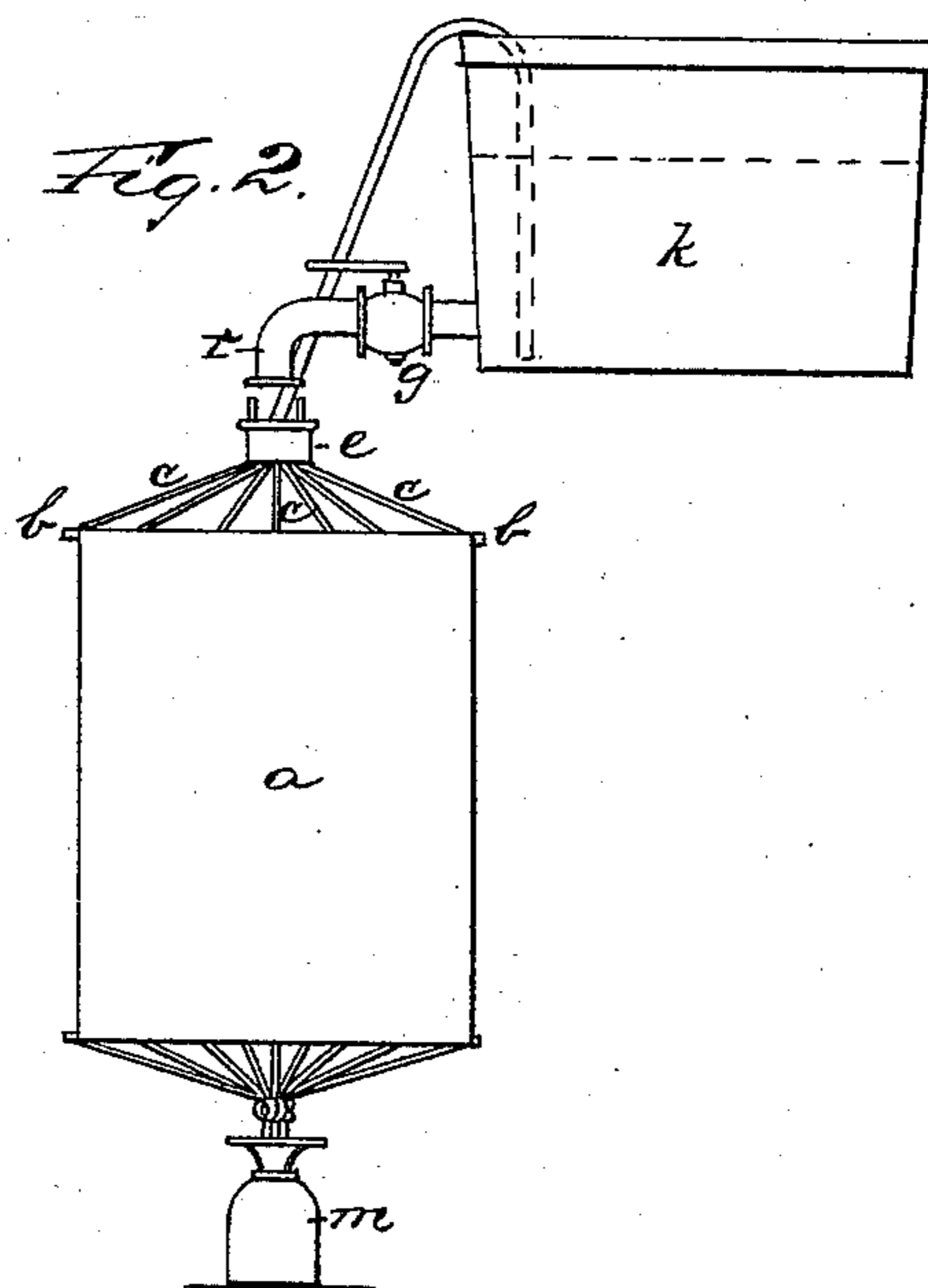
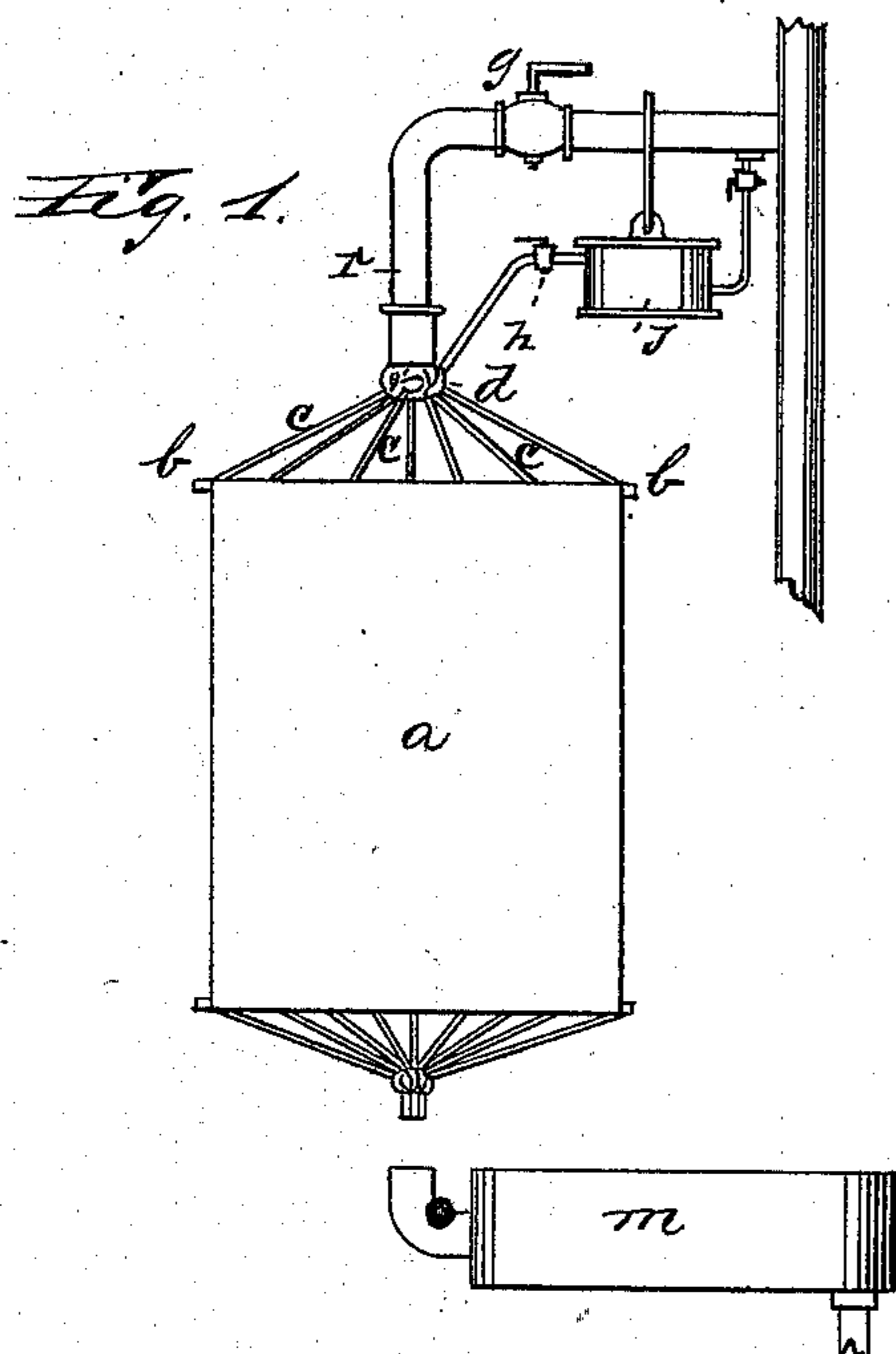
(No Model.)

J. O. WOODS.

EVAPORATOR FOR DISINFECTANTS, &c.

No. 413,702.

Patented Oct. 29, 1889.



Witnesses

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EVAPORATOR FOR DISINFECTANTS, &c.

SPECIFICATION forming part of Letters Patent No. 413,702, dated October 29, 1889.

Application filed March 27, 1889. Serial No. 305,044. (No model.)

To all whom it may concern:

Be it known that I, JUSTUS O. WOODS, a citizen of the United States, residing at New York, county of New York, and State of New York, have invented and made certain new and useful Improvements in Evaporators for Disinfecting and Perfuming Apparatus; and I do hereby declare that the following is a full, clear, and exact description and specification of the same, referring to the drawings making part of the same.

The object of my invention is to provide a simple and effective apparatus for distributing disinfecting, cooling, and perfuming vapors for the purpose of changing the air of dwelling-rooms, bed-rooms, closets, pantries, and any place where air is confined.

To this end my invention consists in certain parts and arrangement of parts, fully set forth in and claimed at the end of this schedule.

In order that persons skilled in the art may understand, construct, and use my invention, I will proceed to describe it, referring to the drawings, in which—

Figure 1 is a vertical view of one form and arrangement of my invention. It shows an apron or piece of toweling supported upon rods or corded at its upper edge. From points equidistant on and attached to this rod distributing-cords at the top converge toward a central point, and are knotted together or passed through a ring and bound upon it or secured by pins to said ring. It shows, also, a water-pipe *r*, provided with a regulating-valve, beneath the mouth of which pipe the ring or knot above described is suspended; also, a vessel with regulating valve and pipe for holding perfumes or disinfecting-fluids located above the said ring, while beneath the apron a receptacle is placed to receive the drip.

Fig. 2 is another form of my invention. It shows the stretched toweling, converging cords, tank for water with discharge-pipe and regulating drip-valve, and an alternative arrangement of siphon instead of pipe and valve, a vessel with disinfectant, and its drip pipe and valve, all located above and arranged to drip upon the ring or knot. At the bottom is a receptacle for receiving the drip.

Fig. 3 shows a water-bag arranged above the receiving-knot, from which bag the fluids drip upon the knot from a faucet or by siphonic action. There is a receiving-receptacle shown below.

Fig. 4 shows the same apparatus connected with a water-cooler, with both disinfecting and perfuming vessels. The apron-evaporator I will letter *a*, the supporting-bars *b*, the converging distributing-cords *c*, the knot for receiving the drip *d*, the ring to which the distributing-cords are attached *e*. The pins which hold the siphon upon the central ring I mark *f*. The regulating water-valve is *g*. The valve for regulating supply of disinfecting-fluid is marked *h*. The vessel for holding disinfectant is marked *j*. The water-supply tank is *k*, the water-supply pipe *l*. The receiving-vessel below the apron is marked *m*, the water-bag *n*, the water-cooler *o*, the perfume-vessel *p*, and the water-pipe *r*.

The principal feature of my invention consists in the evaporating-apron, made of woven material—such as toweling—stretched upon rods and provided with cords which converge to a central point into a knot or ring arranged to receive the ends of the cords and support them. At the bottom the apron is shirred or gathered together to concentrate the drip into the receiving-vessel. This evaporating-apron and the converging and supporting cords in the different arrangements shown in the several figures are hung so that the drip, regulated by valves from the sources which supply, respectively, water, disinfectant, perfumery, and cooling-fluids, falls upon the central ring or knot, and from this point diverges along the separate cords to the stretched apron and gives off vapor to the air which circulates about the device, and the air in turn condenses its vapors upon said apron, which condensation discharges into a receiving-vessel below.

The method of diffusing disinfectants, perfumes, &c., diluted at will with water by the within-described apparatus, constitutes the most simple and effective arrangement devised. By it a single drop of water, mixed or unmixed with other fluids, is readily diffused from a central point to an enlarged area of surface, so that the air readily absorbs it, and

is thereby disinfected, perfumed, or cooled, as the case may be. I propose sometimes to use two or more of these diffusing-aprons, separated from each other by an air-circulating space and suspended in a similar manner beneath drip-pipes, the flow of fluids from which is regulated by valves. I propose, also, to use solid material in the reservoir which is provided for the disinfectant, and charge a current of water with said solid material, which water so charged passes in the manner described through the regulating-cock and its pipe to the knot or ring above the evaporating-apron.

15 In water-tank *k*, Fig. 2, the water is charged with the disinfecting material to the strength required, so that the water and disinfectant mixed together drips upon the ring *e*.

Having now fully described my invention

and the manner in which I have embodied it, what I claim as new, and desire to secure by Letters Patent, is—

The within-described apparatus for charging the air of apartments with vapors, consisting, essentially, of the absorbent apron, the cords attached thereto and converging to a central point in a knot or ring, and one or more reservoirs provided with pipes and regulating-valves arranged, substantially as shown and described, to discharge drops of fluid upon said central knot or ring, all combined and arranged to operate substantially as shown and described.

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Witnesses:

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