No. 746,064. PATENTED DEC. 8, 1903.

W. G. GAGNÉ.
VENTILATOR.
APPLICATION FILED MAY 20, 1903.

NO MODEL.

Fig. 1.

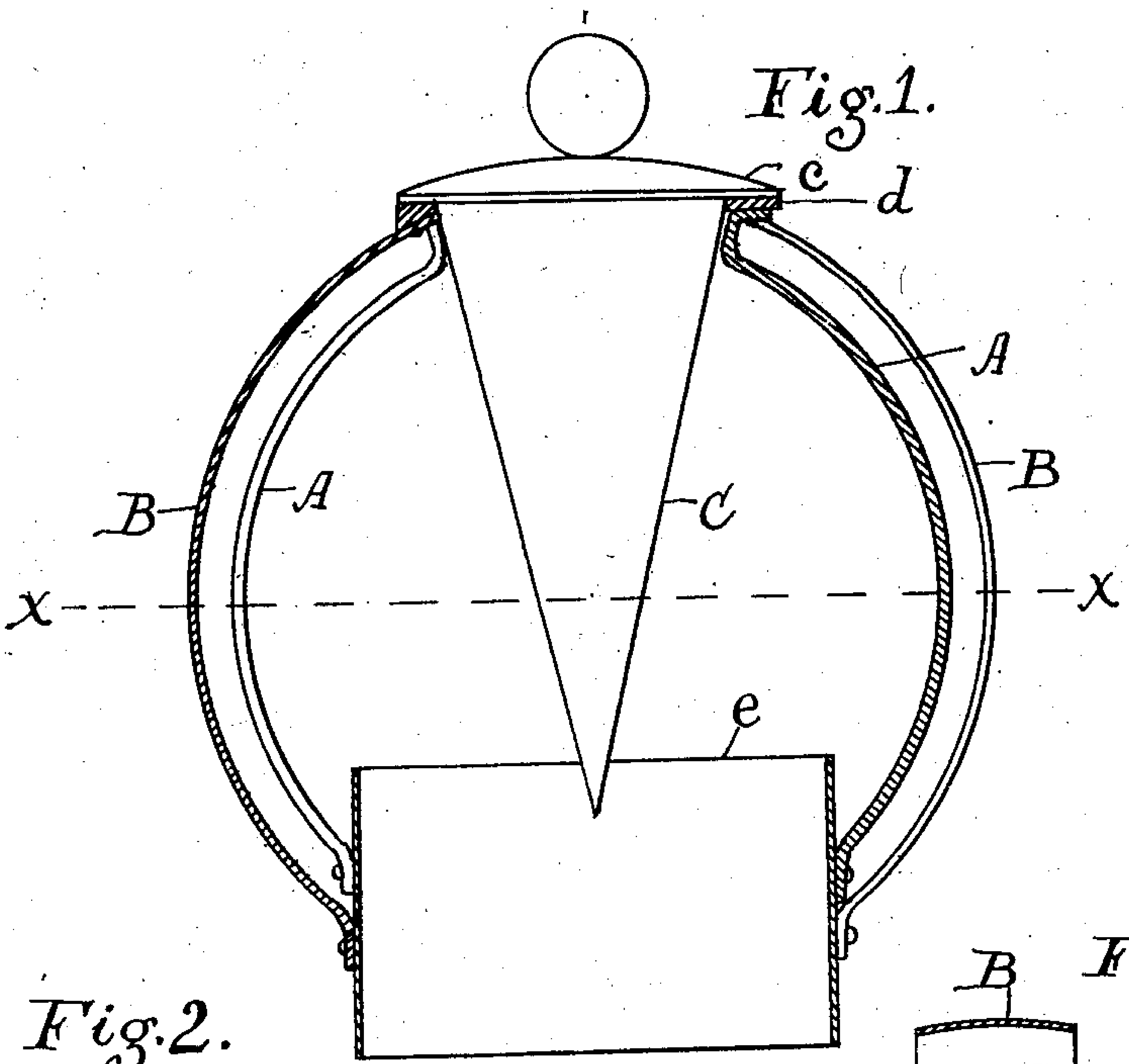


Fig. 2.

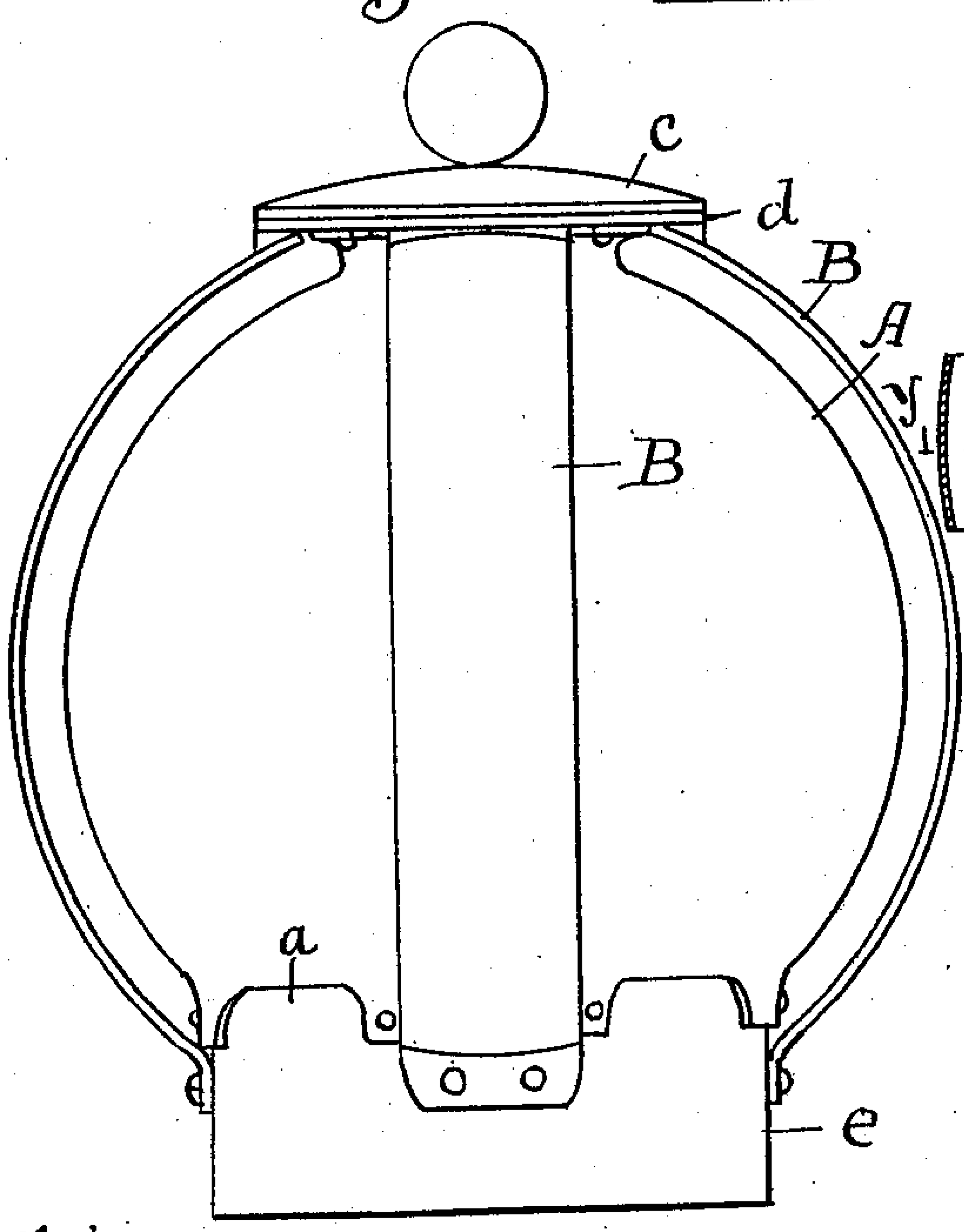
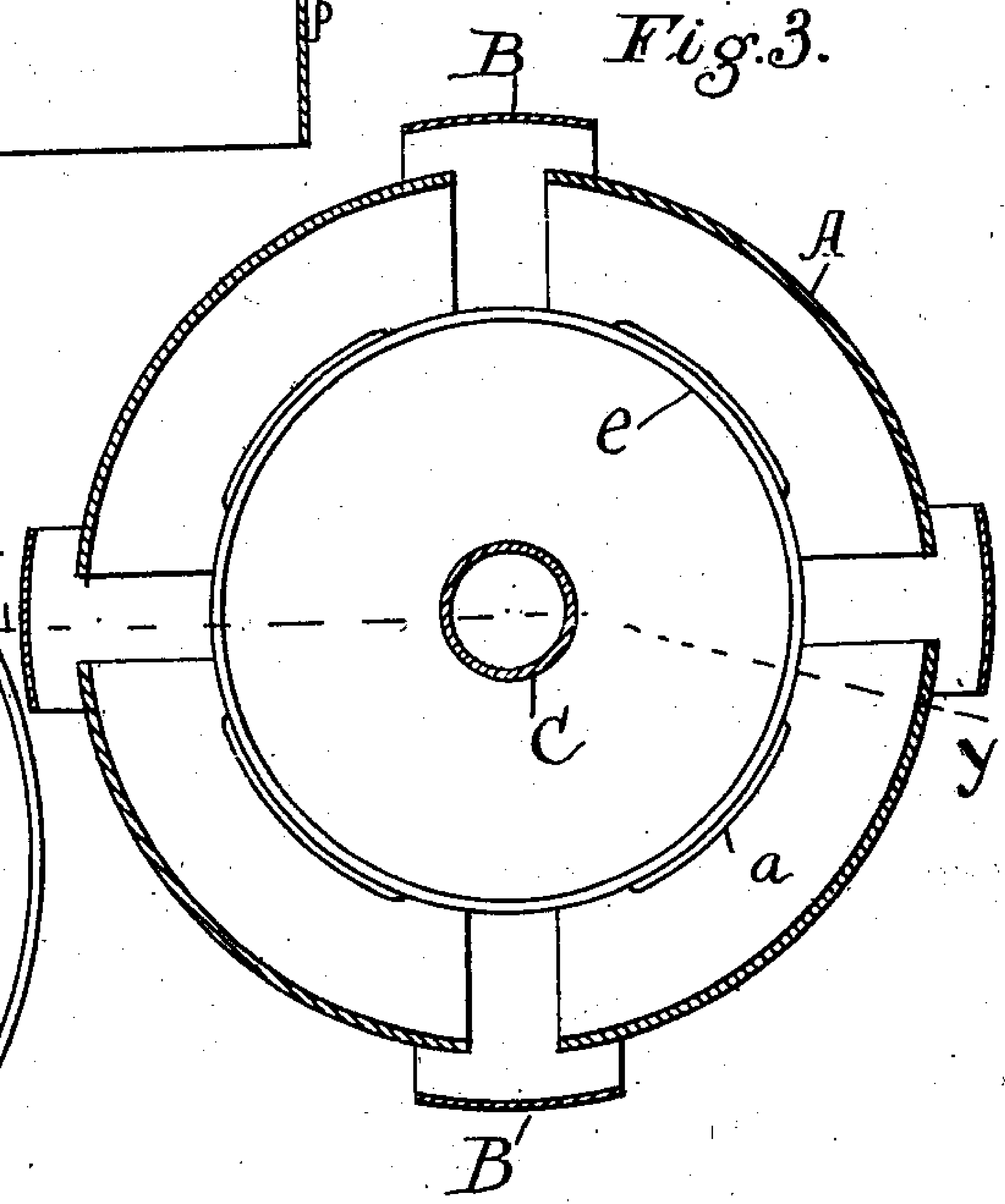


Fig. 3.



Witnesses:
[signature]
Edna A. Sewall

Inventor:
William G. Gagné
by S. W. Bates
his atty.

No. 746,064. Patented December 8, 1903.

UNITED STATES PATENT OFFICE.

WILLIAM G. GAGNÉ, OF PORTLAND, MAINE.

VENTILATOR.

SPECIFICATION forming part of Letters Patent No. 746,064, dated December 8, 1903.

Application filed May 20, 1903. Serial No. 157,903. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM G. GAGNÉ, a citizen of the United States of America, and a resident of Portland, Cumberland county, State of Maine, have invented certain new and useful Improvements in Ventilators, of which the following is a specification.

My invention relates to a ventilator or ventilating-cowl of that class which is applied to chimneys and the like and in which is used a hollow sphere with vertical slots covered by external bands set off far enough to form ventilating-spaces, through which the wind draws to create a vacuum within the sphere.

The object of my invention is to increase the efficiency of these devices by doing away with the dead space which is formed at the top where the radiating slots come together.

A further object of my invention is to cheapen and simplify the construction of these ventilators and get rid of the water, snow, &c., which gets in through the slots.

I accomplish these objects by means of the hereinafter described ventilator.

I illustrate my invention by means of the accompanying drawings, in which—

Figure 1 is a vertical section on the line *y y* of Fig. 3. Fig. 2 is a side elevation, and Fig. 3 is a section on the line *x x* of Fig. 1.

A represents the spherical sections so arranged that they will form vertical slots in the sphere between their adjacent edges. They are bolted or otherwise secured to the vertical cylinder *e*, which extends up into the interior of the sphere. The lower ends of the sections A are formed with narrow openings *a* next to the cylinder *e*, through which the water may drip which is blown in through the slots. The upper ends of the sections A are bolted to the under side of a ring *d*, which forms an opening in the top of the sphere.

Outside of each of the slotted openings and separated from them by a suitable ventilating-space are a series of bands B, secured to the ring *d* above and to the cylinder *e* below in the same manner as the sections A. These bands are somewhat wider than the slots and are parallel with them, and they form deflecting-plates which direct the wind by the slotted openings, creating a vacuum within and so forming a draft.

For the purpose of doing away with the dead space which has hitherto existed in these ventilators at the apex I insert into the ring *d* a cone-shaped deflector C, the upper end of which is provided with a flange *c*. The cone extends downward into the sphere and tends to split the ascending current and carry it directly out through the lateral slots. The cones may be removed from the ring and a cleaning device may be introduced through the opening thus left—an important matter where the ventilator is used on chimneys.

It will be seen that the ventilator thus made can be cheaply and strongly constructed, an opening is provided for cleaning, a drip for getting rid of the water, and the efficiency is increased by the conical deflector, which carries the gases directly out instead of allowing them to circulate around in the sphere.

I claim—

1. The herein-described ventilator consisting of a hollow sphere having a series of vertical slotted openings, curved bands outside of said sphere covering said openings and separated therefrom by ventilating-spaces, a cylinder extending into the lower portion of said sphere and a cone-shaped deflector within said sphere extending from the top downward.

2. The herein-described ventilator consisting of a hollow sphere composed of a plurality of separate sections, separated to form vertical slotted openings, a cylinder to which the lower edge of each section is secured, a ring to which the upper ends of said sections are secured, curved bands outside of said sphere having their ends secured to said cylinder and a ring and arranged to cover said openings and separated from them by a ventilating-space and a conical deflector fitting in said ring and extending downward into said sphere.

3. The herein-described ventilator consisting of a hollow sphere composed of a plurality of separate sections separated to form vertical slotted openings, a cylinder to which the lower ends of said sections are secured, the upper end of said cylinder extending up into

said sphere, dripping openings being left between the lower ends of said sections and said cylinder, a ring to which the upper ends of said sections are secured, curved bands outside of said sphere having their ends secured to said ring and said cylinder and arranged to cover said openings and separated therefrom by a ventilating-space and a conical deflector fitting in said ring and extending downward into said sphere.

Signed at Portland, Maine, this 14th day of May, 1903.

WILLIAM G. GAGNÉ.

Witnesses:

BENJ. G. WARD,

S. W. BATES.