

Chas. W. Atkeson.

75109

PATENTED
MAR 3 1868

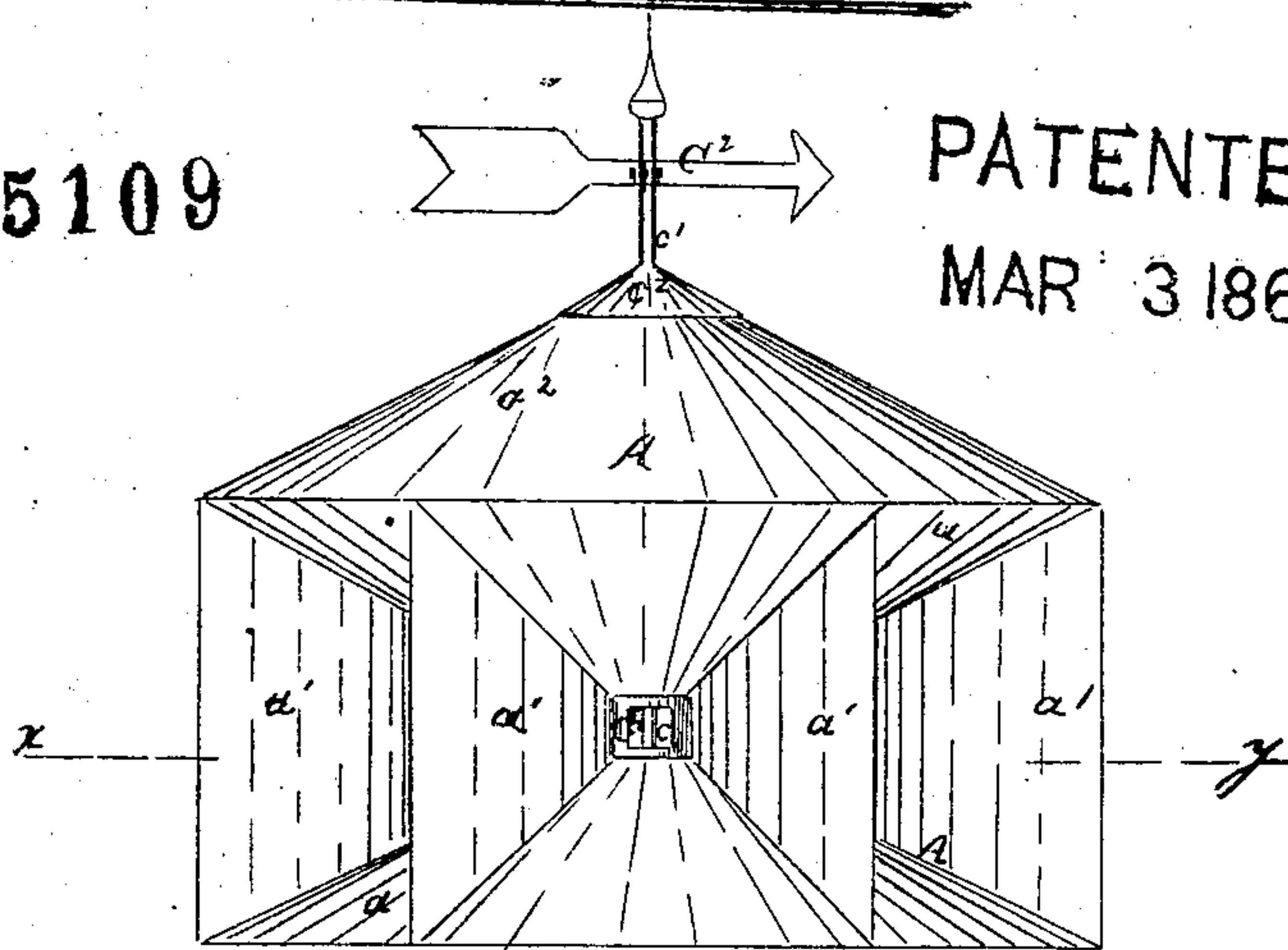


Figure 1.

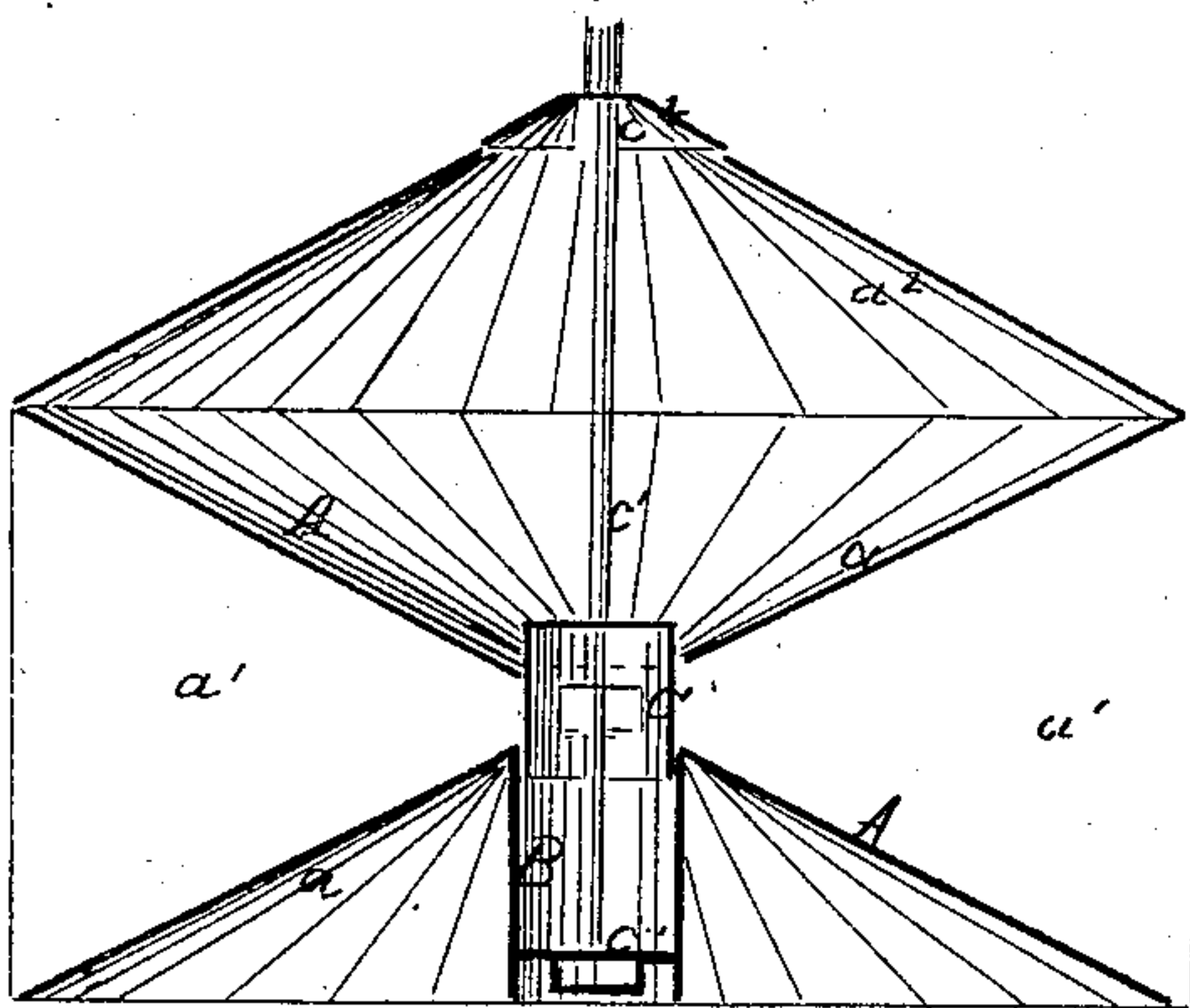


Figure 2.

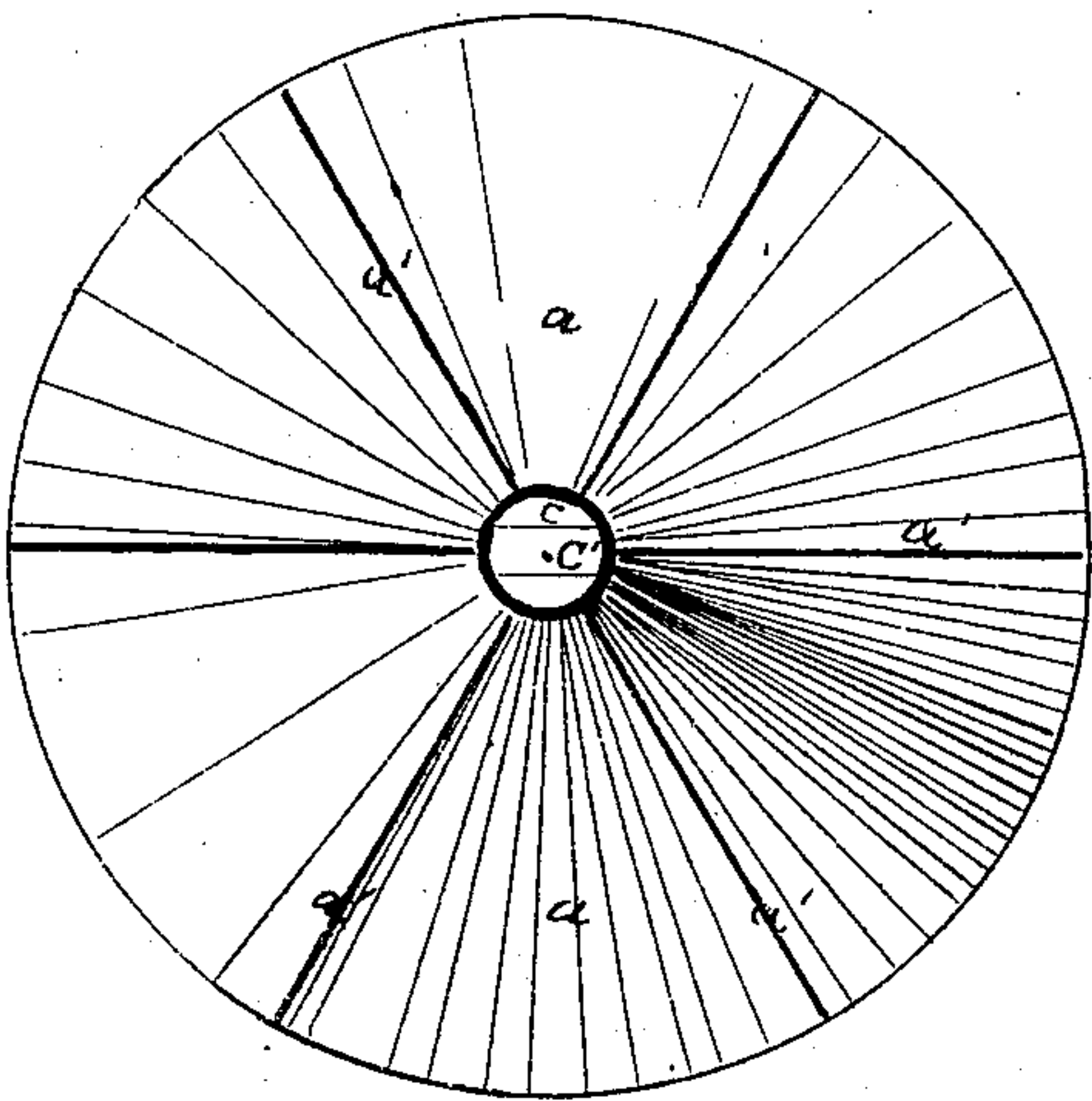


Figure 3.

Witnesses

Inventor

J. E. White

Ventilating Apparatus. Chas. W. Atkeson

by M. Randolph
att'y

J. H. Fitch

United States Patent Office.

CHARLES W. ATKESON, OF ST. LOUIS, MISSOURI.

Letters Patent No. 75,109, dated March 3, 1868.

COWL.

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, CHARLES W. ATKESON, of the city and county of St. Louis, and State of Missouri, have invented a new and useful Ventilating-Apparatus; and I do hereby declare that the following is a full and clear description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

This invention relates to an air-duct, leading down into the building or apartment to be ventilated from the roof, and to a funnelled head-piece connected with the said duct, the funnel being so constructed as to receive the passing breeze, from whatever quarter it may blow, while a guide within the duct, directed by a weather-cock on top of it, will direct the breeze received in the funnel down into the duct.

To enable those skilled in the art to make and use my improved ventilating-apparatus, I will proceed to describe its construction and operation.

Figure 1 of the drawings is a side elevation of the improved apparatus.

Figure 2 is a vertical sectional central elevation of the same.

Figure 3 is a horizontal section, taken on the line $x y$ in fig. 1.

The funnelled head-piece A is composed of two annular disks, a , connected together by the radial vertical partitions a^1 , the whole together forming a series of funnels radiating in a horizontal plane from the axis of the central duct B. A cover or roof, consisting of an annular disk, a^2 , is placed over the head-piece to prevent rain or snow from lodging in the top part of the head-piece and running down into the duct B. A cylindrical guide, C, open at its bottom, and having an orifice, c , in one of its sides, of an area equal to the area of the smaller end of the funnel, is placed within the upper end of the duct B, and made to revolve on its step, C^1 , by means of the weather-cock C^2 , which is placed on the upper end of a stem, c^1 , which is attached to and extends upward from the top end of the guide C. A cap, c^2 , attached to the stem c^1 , turns with it, and covers the central orifice in a^2 , so as to prevent storms from driving in at the said orifice. The weather-cock on top of the guide C is so arranged as to turn the said guide in such a direction as to keep the orifice c constantly toward the wind. The action of the wind, then, blowing from whatever quarter it will, will be to enter the funnel directed toward it, and thence pass into the guide C, through its orifice c , and thence down through the open bottom of the guide, (the top end of it being tightly closed,) and thence through the duct B into the apartment, where it is needed for ventilation purposes.

It is very evident that the funnel-head A may be of any size most applicable to the purpose for which it is intended, and as it is made stationary, it may be made large enough to gather in its open-mouthed funnels a large volume of wind, without the risk of its becoming inoperative by disengagement of its parts. It is equally evident that, should circumstances demand it, two or more sets of the funnels might be placed one above another; but should this be done, there will have to be a guide, C, for each set of funnels, and the upper ones will have to extend down through the central part of the lower ones far enough to prevent the current from above from impeding that received at the lower funnels. The lower ends of the upper guides might terminate just below the orifice c in the lower guide.

Having described my invention, what I claim, is—

1. The funnel-head A, when combined with the duct B, the guide C, and the weather-cock C^2 , substantially as described and shown.

2. I claim the funnel-head A, when constructed by means of the two disks a and the vertical partitions a^1 , the whole combined and arranged as described and set forth.

In testimony of which invention, I hereunto set my hand, this eighth day of June, A. D. 1867, in presence of—

C. W. ATKESON,

Witnesses:

M. RANDOLPH,

J. W. HERTHEL.