

(No Model.)

2 Sheets—Sheet 1.

D. O'LEARY.

VENTILATOR AND CENTER PIECE FOR CEILINGS.

No. 420,542.

Patented Feb. 4, 1890.

Fig 1

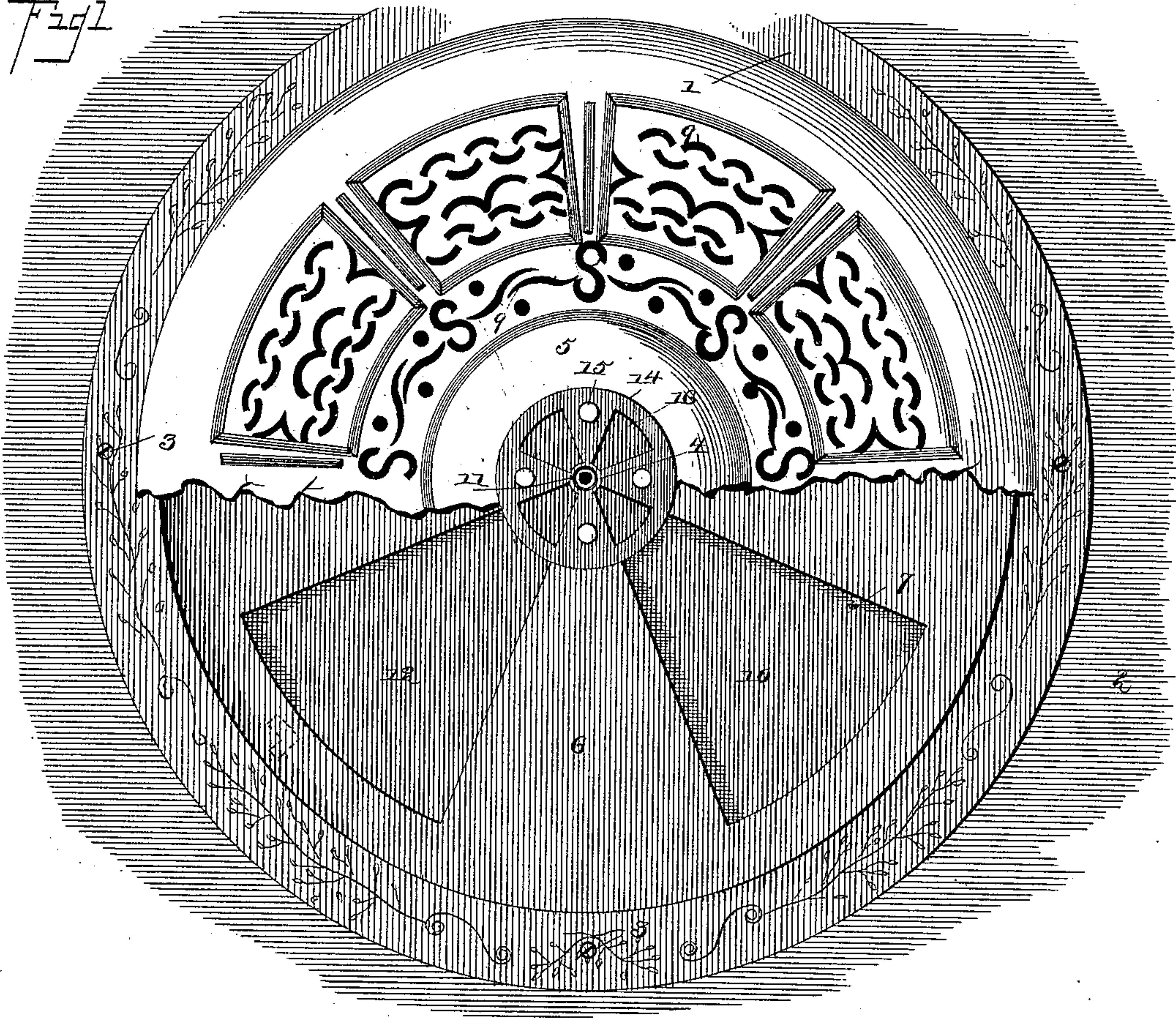
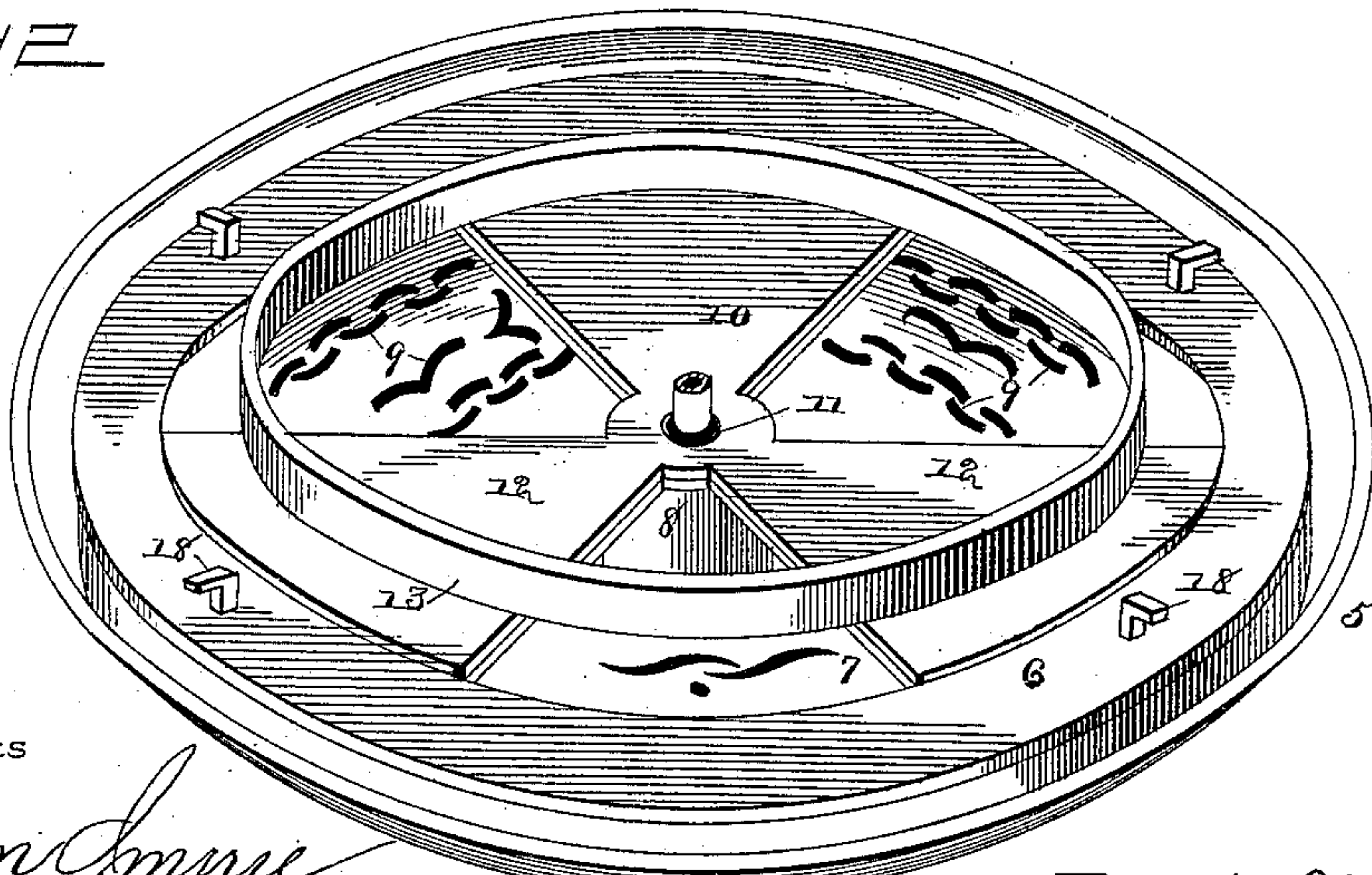


Fig 2



Witnesses

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(No Model.)

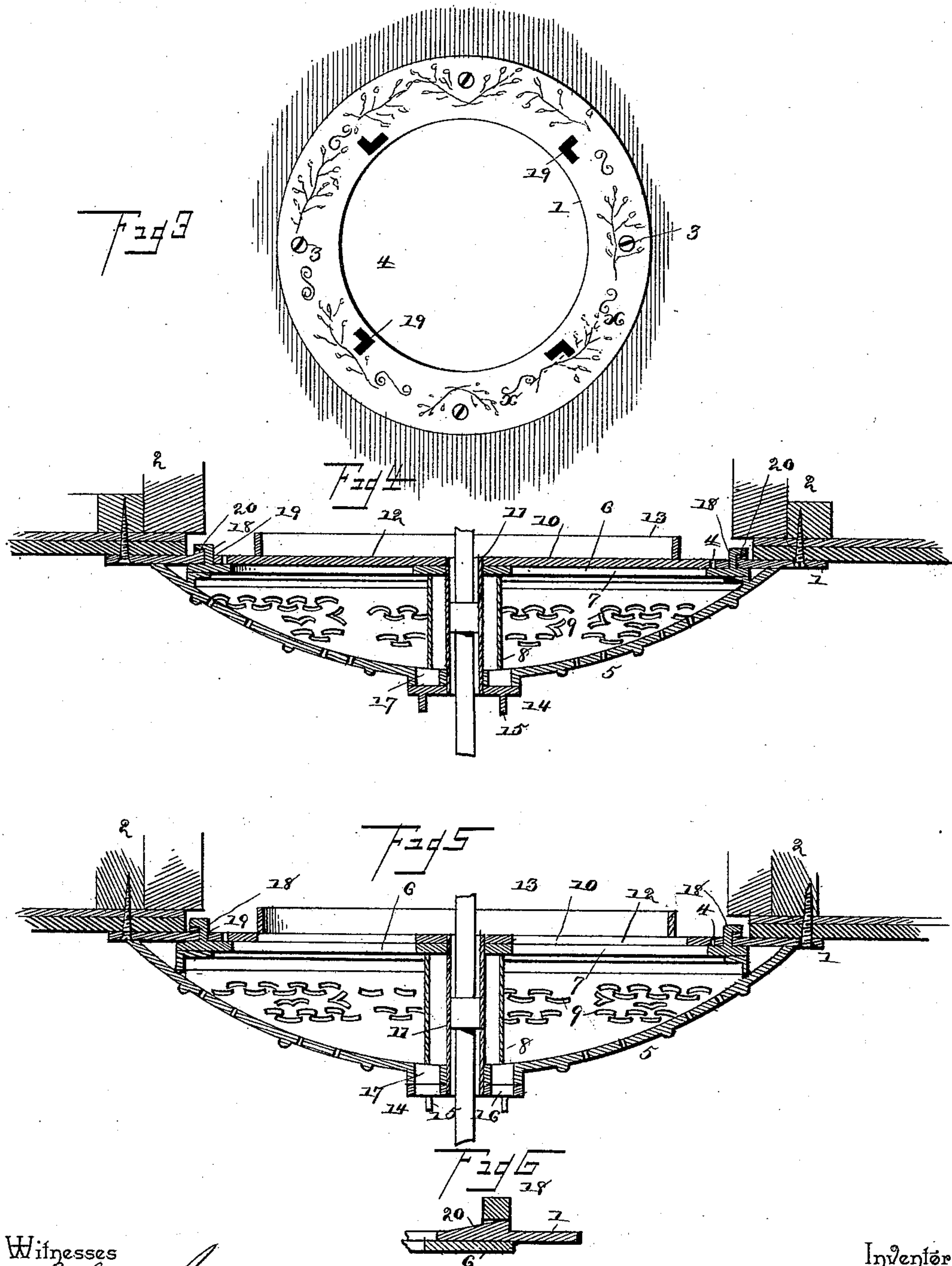
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UNITED STATES PATENT OFFICE.

DENNIS O'LEARY, OF SAN BERNARDINO, CALIFORNIA.

VENTILATOR AND CENTER-PIECE FOR CEILINGS.

SPECIFICATION forming part of Letters Patent No. 420,542, dated February 4, 1890.

Application filed July 18, 1889. Serial No. 317,921. (No model.)

To all whom it may concern:

Be it known that I, DENNIS O'LEARY, a citizen of the United States, residing at San Bernardino, in the county of San Bernardino and State of California, have invented a new and useful Combined Ventilator and Center-Piece for Ceilings, of which the following is a specification.

This invention relates to an improved combined ventilator and center-piece for ceilings, which shall be mounted detachably, so that it may be removed when desired in order to serve as a trap-door; and it has for its object to construct a device which shall be simple and efficient as a ventilator and at the same time ornamental and neat in appearance.

The invention consists in the improved construction and arrangement of parts, which will be hereinafter fully described, and pointed out in the claims.

In the drawings hereto annexed, Figure 1 is a plan view of my improved combined center-piece and ventilator. Fig. 2 is a perspective view of the ventilator detached. Fig. 3 is a plan view of the ceiling with the ring for the attachment of the ventilator. Fig. 4 is a transverse sectional view showing the device in position for operation and showing the ventilator closed. Fig. 5 is a similar view showing the ventilator open. Fig. 6 is a detail sectional view.

Like numerals of reference indicate like parts in all the figures.

1 designates a plate or ring which forms the base to which my improved ventilator and center-piece is attached. Said plate or ring, which may be of any desired size and shape, is to be attached to the joists of the ceiling 2 by means of screws 3, and it has a central circular opening 4 of suitable diameter.

The combined ventilator and center-piece comprises an outer plate 5, which is preferably dished, as shown, and within which is secured a horizontal plate 6, having the radial ventilating slots or openings 7. The plates 6 and 5 are connected by a central tube 8, to which they are both secured in any suitable manner. The outer shell or plate 5 may be ornamented, either by stamping or corrugating the same, or in any other suitable manner, according to the material of which it shall be constructed. The base-plate 1 is

likewise of suitable ornamental design. The plate or shell 5 is furthermore provided with openings or perforations 9 for ventilating purposes.

10 designates the register of the ventilator, which is mounted at the upper end of a tubular shaft 11, which is journaled in suitable bearings at the upper and lower ends of the central tube 8, through which the said tubular shaft extends, the bearings proper being formed in the shell 5 and plate 6, respectively. The said register consists of the radial wings 12, which are connected and braced by means of an annular ring 13.

Secured to the lower end of the tubular shaft 11 is an operating-disk 14, having downwardly-extending projections 15, which may serve as handles. The operating-disk may have perforations 16, adapted to register with openings 17 in the shell 5, corresponding to the openings in register 10, so that the said operating-disk by its position will indicate whether the ventilating-slot 7 is open or closed.

The horizontal plate 6 of the ventilator is provided with upwardly-extending inverted-L-shaped lugs or studs 18, adapted to engage L-shaped perforations 19 in the plate 1, adjacent to the circular opening in the said plate. The upper side of the latter is provided with wedge-shaped projections 20 on its upper side adjacent to the shanks or longitudinal portions of the said slots.

It will be seen that the combined ventilator and center-piece may be attached to the plate 1 by causing the lugs 18 to enter the slots 19 and slightly turning the said center-piece or ventilator in a forward direction. The L-heads 18 will then be forced in an upward direction by the wedge-shaped projections 20, thus causing the ventilator and center-piece to be very firmly and tightly attached. The ring or brace 13 of the ventilator-register will fit easily within the circular opening 4 in the base-plate.

The operation and advantages of this invention will be readily understood from the foregoing description, taken in connection with the drawings hereto annexed. The combined ventilator and center-piece may be easily placed in position in old as well as in new buildings, and it may be readily removed when it has been desired to use the opening

in the ceiling as a trap-door. A gas-pipe may be extended through the central tubular shaft when it shall be desired to use gas-fixtures.

5 The device may be so constructed as to form an efficient ventilator and at the same time present an ornamental appearance.

10 Sheet metal will probably be the material of which my improved combined ventilator and center-piece will be preferably constructed; but any other material or materials may be substituted which shall be found convenient for the purpose.

15 I have herein described the construction of my improved combined ventilator and center-piece which I deem preferable; but I wish it to be understood that I reserve the privilege of making any alterations and modifications which may be resorted to without departing from the spirit of my invention.

20 Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination, with a base-plate having a central circular perforation and L-shaped slots adjacent to the same, of a detachable center-piece comprising an outer shell, an inner plate having radial slots or ventilating-openings, and a register adapted to close the said openings, substantially as set forth.

2. The combination, with a base-plate secured to the ceiling of a room and having a central circular opening, of the combined center-piece and ventilator secured detachably to the same and consisting of an outer dished shell, an inner plate having radial slots, a

central tube connecting the said shells and plate, a tubular shaft extending through the said central tube and carrying a register at its upper end, and an operating-disk at the lower end of the said tubular shaft, the said outer shell and inner plate being provided with ventilating-openings and radial slots, respectively substantially as set forth.

3. The combination of the outer dished shell, the inner horizontal plate, the central tube connecting the same, the central tubular shaft, the register at the upper end of the latter, and the operating-disk mounted at the lower end of said tubular shaft and provided with operating-handles and with perforations corresponding to the openings in the register, substantially as and for the purpose set forth.

4. The combination, with the base-plate having a central circular opening, L-shaped slots adjacent to said opening, and wedge-shaped projections extending upwardly adjacent to the shanks or longitudinal portions of said slots, of the detachable combined ventilator and center-piece having upwardly-extending inverted-L-shaped projections, substantially as herein described, and for the purpose set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

DENNIS O'LEARY.

Witnesses:

JOHN GRATTAN,
F. E. TOMLINSON.