

(No Model.)

4 Sheets—Sheet 1.

A. M. LANE.
CLOCK CASE.

No. 511,899.

Patented Jan. 2, 1894.

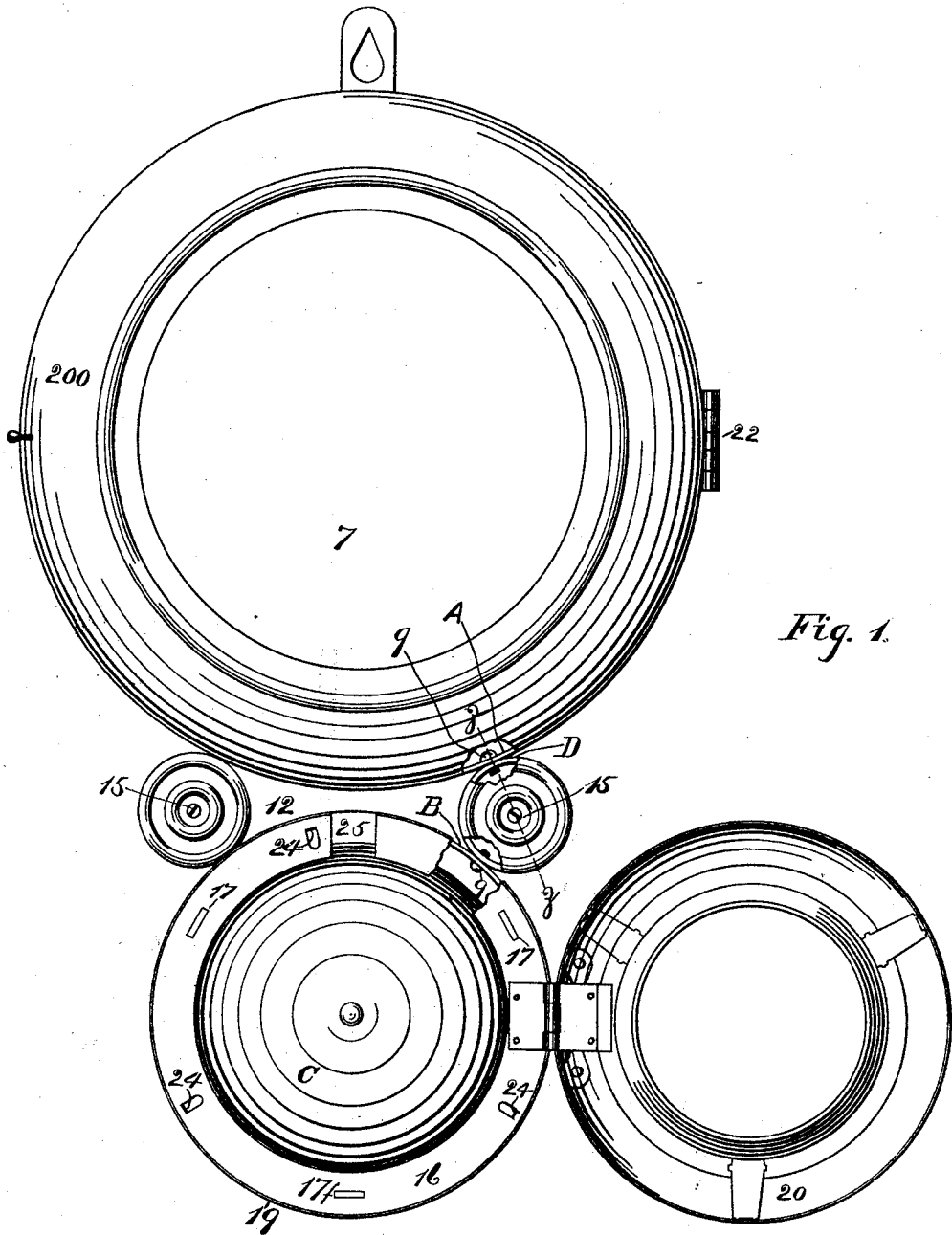


Fig. 1.

Witnesses.

Edward D. Bush,

J. B. Morgan

Fig. 2.



Inventor.

Almiron M. Lane

By James Shepard.

Atty.

(No Model.)

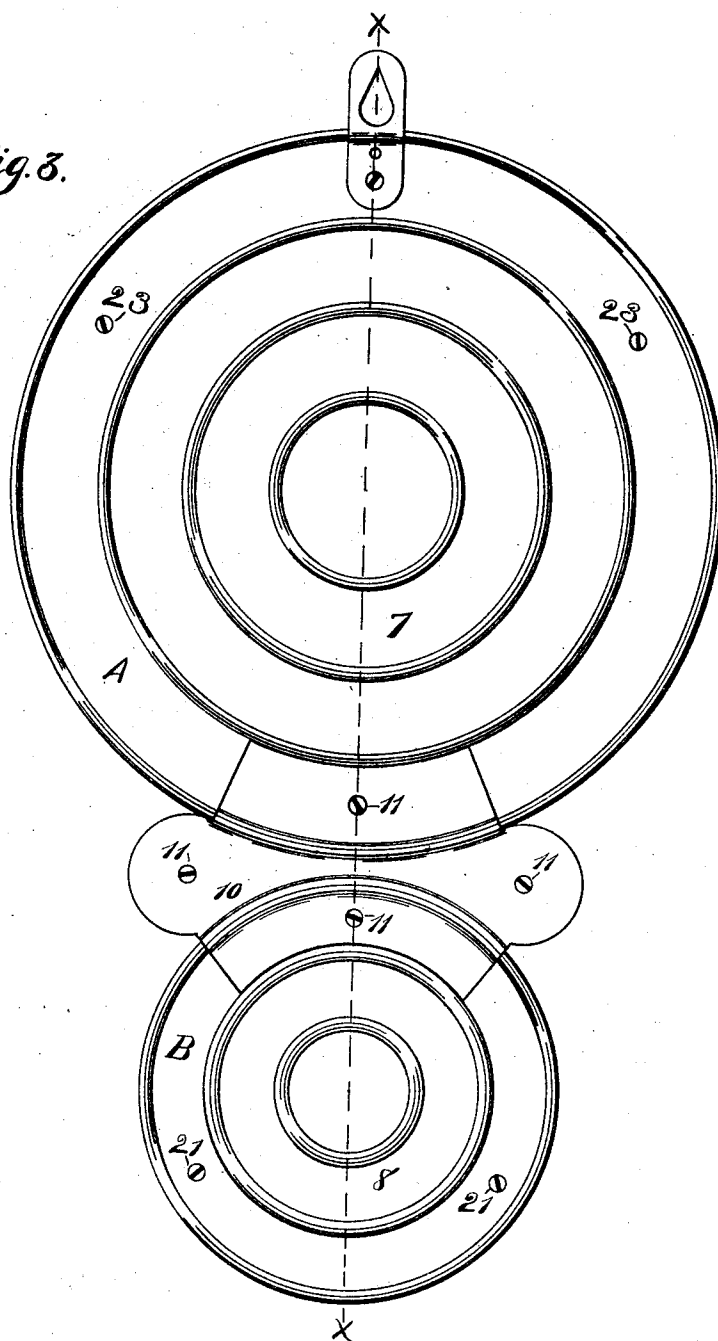
A. M. LANE.
CLOCK CASE.

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Fig. 3.



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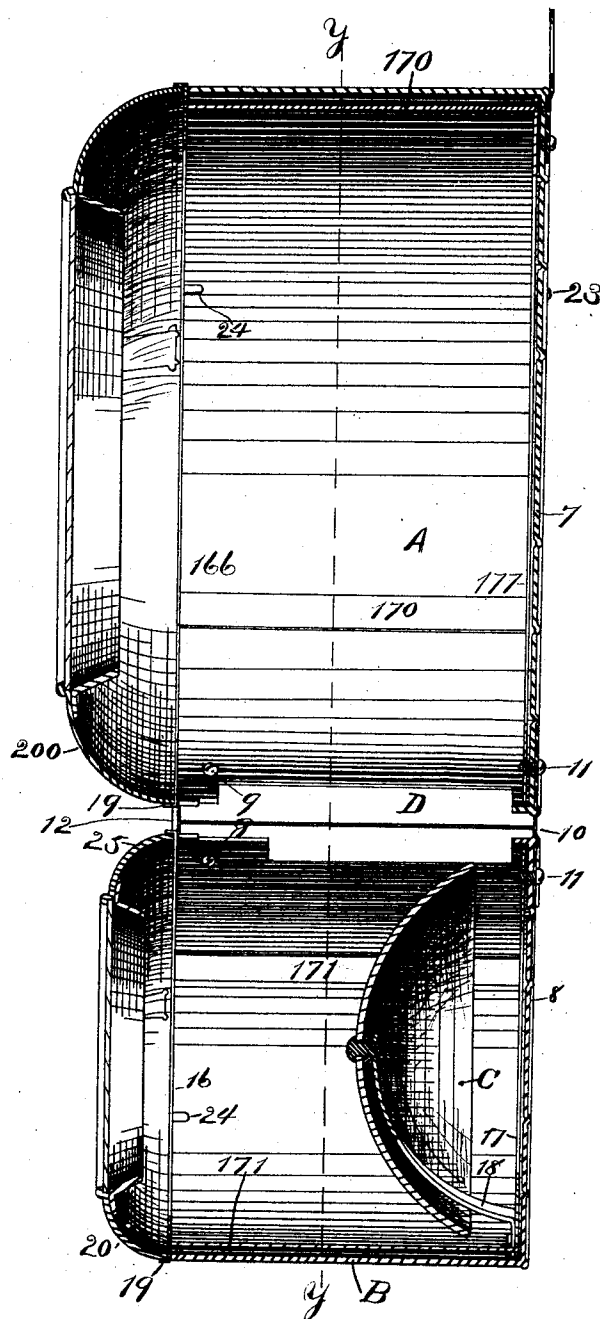
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Fig. 4.



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4 Sheets—Sheet 4.

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Fig. 5.

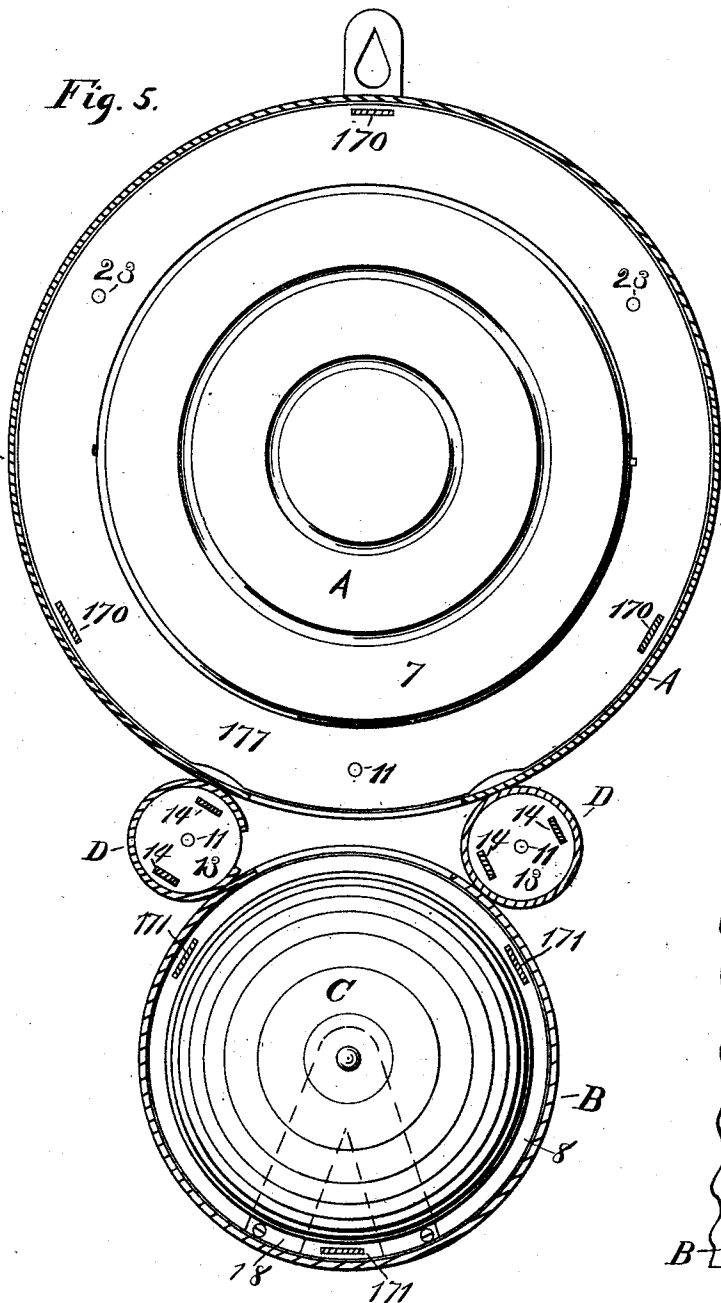
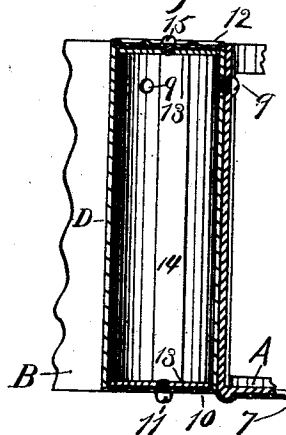


Fig. 6.



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UNITED STATES PATENT OFFICE.

ALMERON M. LANE, OF MERIDEN, CONNECTICUT.

CLOCK-CASE.

SPECIFICATION forming part of Letters Patent No. 511,899, dated January 2, 1894.

Application filed January 28, 1893. Serial No. 459,352. (No model.)

To all whom it may concern:

Be it known that I, ALMERON M. LANE, a citizen of the United States, residing at Meriden, in the county of New Haven and State of Connecticut, have invented certain new and useful improvements in Clock-Cases, of which the following is a specification.

My invention relates to improvements in clock cases, and the chief objects of my improvement are to construct a double sash case of sheet metal, to produce the same economically and to provide for a convenient and ready removal of the movement from the case.

In the accompanying drawings, Figure 1 is a front elevation of my clock case with the lower sash left open and portions broken away in order to reveal the parts behind them. Fig. 2 is a front elevation of the front covering plate for the middle portion of the case. Fig. 3 is a rear elevation of my clock case. Fig. 4 is a vertical section on the line *xx* of Fig. 3. Fig. 5 is a vertical section on the line *yy* of Fig. 4, and Fig. 6 is a detailed sectional view of parts thereof on the line *yy* of Fig. 1.

My case is of the kind which has an upper and lower sash and I form the main portions of my case of four cylinders, the upper and larger cylinder A of which constitutes the principal portion of the case for receiving the movement. The cylinder B constitutes the lower part of the case within which the pendulum swings and within which the bell C may be arranged when the case is employed for an alarm or striking clock. The cylinders A and B are held together by two smaller intermediate cylinders D and D'. The cylinders A and B I preferably strike up from sheet metal with a solid bottom that forms the back 7 in the larger cylinder and 8 in the smaller one. The cylinders A B, D D' are secured together near the front by means of screws 9 extending from the inside of the cylinders A and B into the cylinders D as shown in Figs. 1, 4 and 6. I have shown these screws near the front part of the case only, but it is evident that like screws, may if desired, be also placed in the middle or rear part of the case. I prefer, however, to fasten the respective cylinders together at the back by means of the rear covering plate 10 which is secured to the several cylinders by means of the screws 11. In order to furnish a support by which to

secure the covering strip 10 at the rear and the ornamental piece 12 at the front of the case, I make a frame for each of the cylinders D D' which consists of a disk 13 at each end, of a size which will substantially fill the interior of said cylinders, and connecting straps or posts 14 for holding said disks at the proper distances apart. These frames are perforated and threaded at the center of each disk 13 so as to receive two of the fastening screws 11 at the back and the fastening screws 15 at the front, by which latter screws the front covering plate 12 is secured. I also employ frames in both of the cylinders A and B. The frame in the cylinder B consists of a front plate 16 in an annular form, and the rear plate 17 which is preferably of an annular form and the connecting post or straps 171. When an alarm or striking clock is desired, the bell C may be mounted on the rear plate 17 by means of a suitable arm 18. The front plate 16 of this frame is provided with a forwardly projecting flange 19 to form a suitable finish for the sash 20 to shut into. This sash 20 instead of being hinged to the case proper is hinged upon the front plate 16 of the frame for the lower cylinder B. The sash may be of any ordinary construction. This frame with attached sash and bell is held within the lower cylinder B by means of screws 21, which extend through the back 8 of the cylinder B into the rear plate 17 of said frame and by one of the screws 11, which in addition to passing through the back and rear plates 17 extends through the rear covering plate 10 so as to serve the double purpose of securing said plate and frame. I employ a like frame in the cylinder A, said frame consisting of front plate 166, rear plate 177 and connecting posts or straps 170. The front plate of this frame is also provided with a flange 19 for the sash 200 to shut into, which sash is secured directly to the front plate 166 by means of the hinge 22. As in the construction described for the lower part, this frame is held within the case by means of screws 23 and one of the screws 11 extending through the back of the case and into the rear plate of said frame.

The clock movement will be attached by means of suitable bridges to the front plate 166 of the frame for the main case, so that

the combined frame, movement and sash are all attachable to and detachable from the case.

In the frames for both the upper and lower cylinders A and B I make the rear plates of a size which will substantially fill the interior of the case, while the front plates are a little larger and rest upon the outer edge or front ends of said cylinders A and B. The frame should be no thicker or longer from front to rear than the depth of said cylinders, whereby the holding screws will draw the plates 16 and 166 firmly against the front edge of the case and form a neat finish. If desired the front of the frames may be centered by means of lugs 24 cut out from the body of the front plates and bent inwardly to project inside of the cylinders as shown in Figs. 1 and 4.

The cylinders D may be in the form of a complete tube as indicated by the right hand cylinder in Fig. 5, or they may be formed by rolling a strip of metal into substantially a cylindrical form with its edges nearly or quite meeting as shown by the left hand cylinder in Fig. 5.

The cylinders A and B are provided with suitable openings on their confronting sides to enable the pendulum and hammer to extend from the upper cylinder down into the lower one and leave room for them to operate properly therein. I also prefer to make the opening in these cylinders for a narrow portion extend to the extreme front and to slot the front plate 16 of the lower frame as at 25, Fig. 1, so that the pendulum rod may pass through said slot in attaching the frame and movement from the upper cylinder A.

By my improvements I am enabled to construct this double sash clock case wholly of metal. I also form an attachable and detachable frame upon which the sash and bell may be mounted, and the sash and movement for the upper cylinder, so that they are readily removable for access to the works. The movement may also be mounted upon the frame with the dial and hands attached thereto wholly independent of the case so that it is

not necessary to disconnect the hands and dial in order to gain access to the movement.

The case is neat in appearance and can be constructed at a small cost.

I claim as my invention—

1. The herein described metal clock case having upper and lower compartments and consisting essentially of the metal cylinders A and B with two intermediate connecting cylinders by which they are secured together, substantially as described and for the purpose specified.

2. A clock case consisting of the cylinders A, B and D, D the holding frames within the cylinders D, and the covering plates 10 and 12 at the front and rear of said cylinders D secured by means of screws extending into said frames substantially as described and for the purpose specified.

3. In a clock case the combination of a cylinder and interior frame consisting of front and rear plates and connecting straps or posts, with the rear plate fitting the interior of the cylinder and the front plate covering the front edge of the same, said frame being secured by means of screws to the cylinder back, substantially as described and for the purpose specified.

4. The combination of a cylindrical case, the attachable and detachable frame and the sash hinged to said frame the sash and front plate of said frame constituting the exterior finish at the front portion of the complete case, substantially as described and for the purpose specified.

5. The combination of a cylindrical case, the frame having a rear plate fitting an interior cylindrical portion at the rear part of said case while its front plate covers the front edge thereof and fastening devices for securing said frame within said case, substantially as described and for the purpose specified.

ALMERON M. LANE.

Witnesses:

JAMES SHEPARD,
EDWARD W. BUSH.