

No. 855,130.

PATENTED MAY 28, 1907.

A. H. PORTER.
CLOCK.

APPLICATION FILED DEC. 31, 1906.

2 SHEETS—SHEET 1.

Fig. 1.

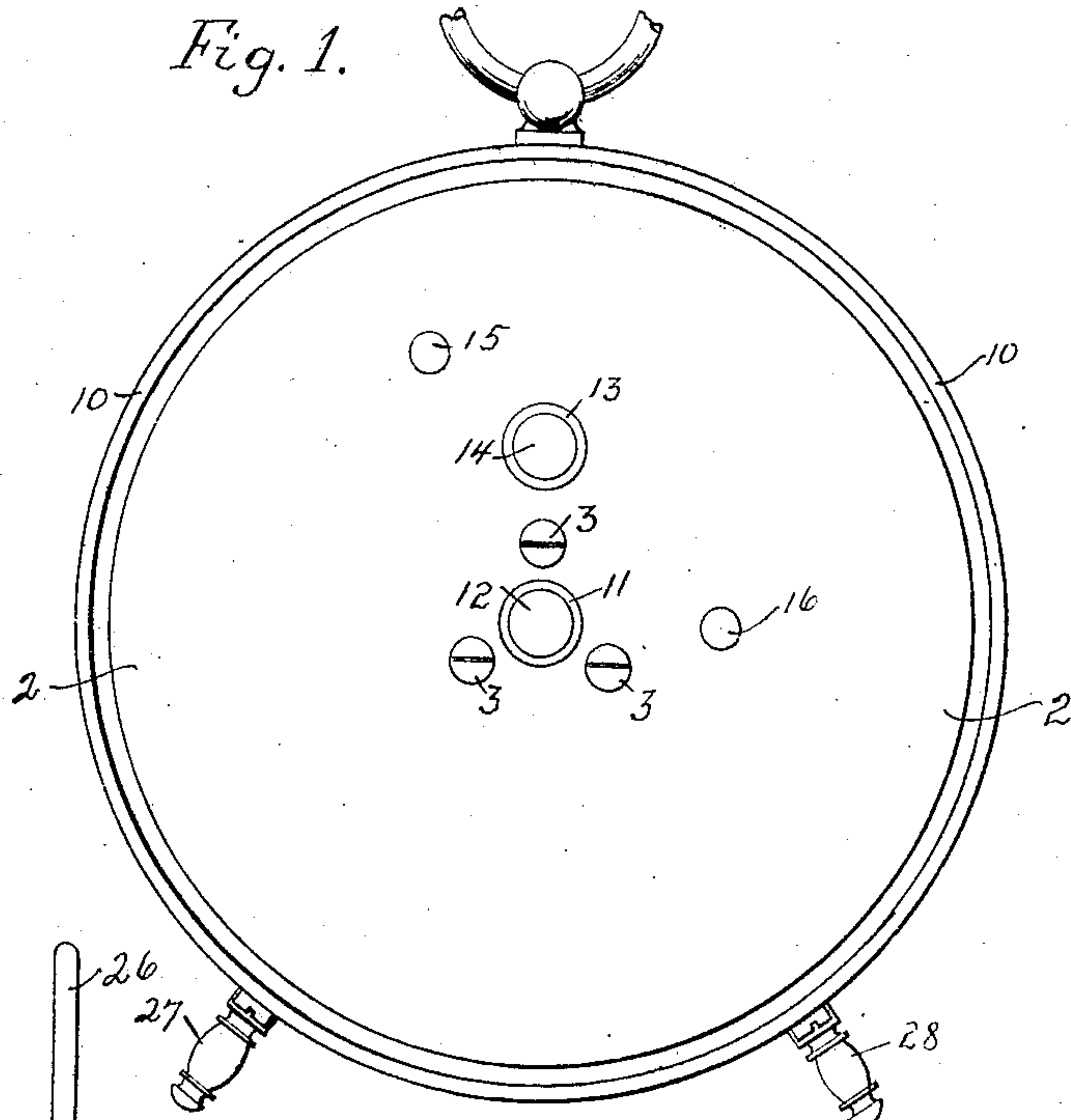


Fig. 2.

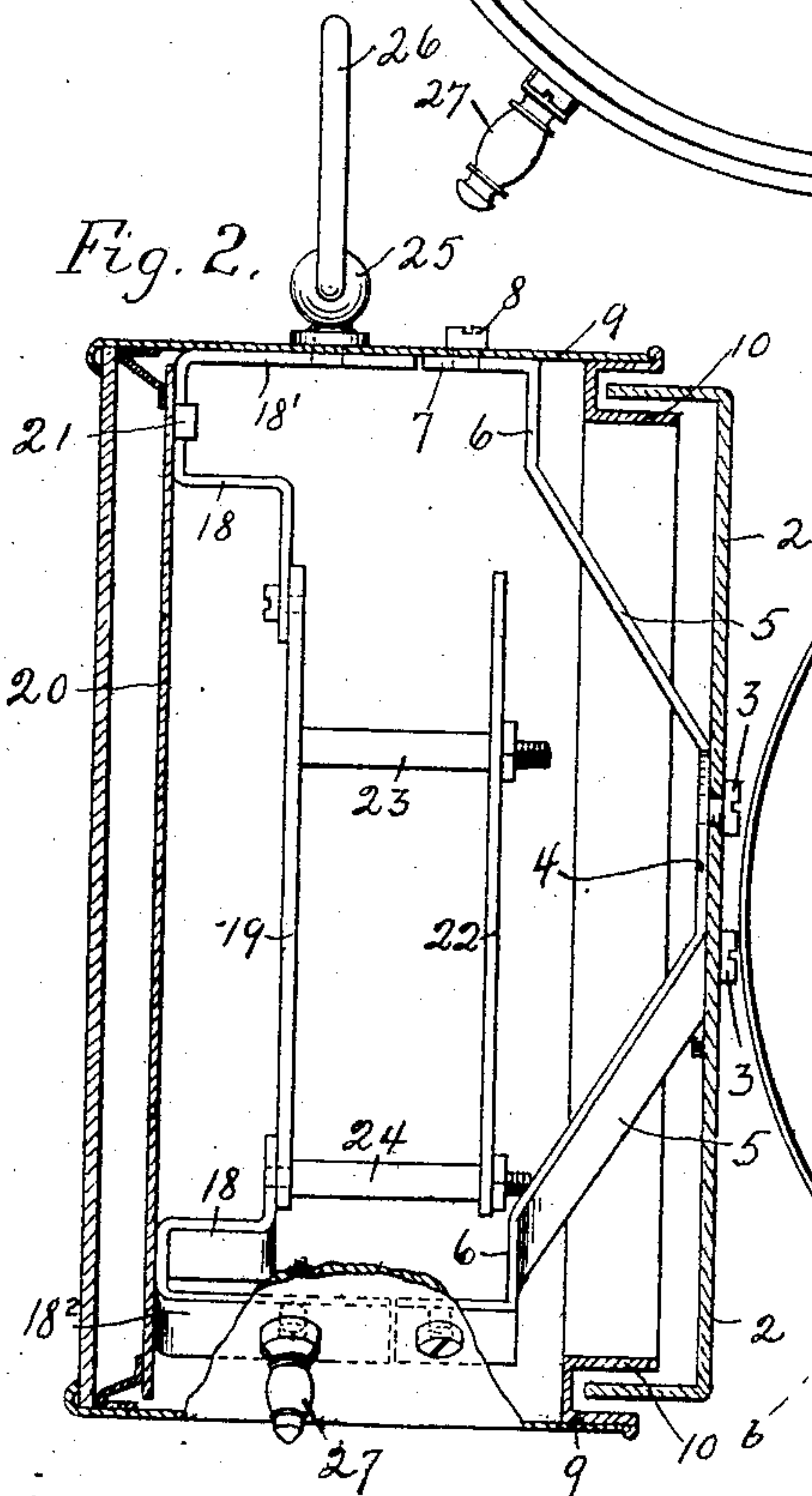
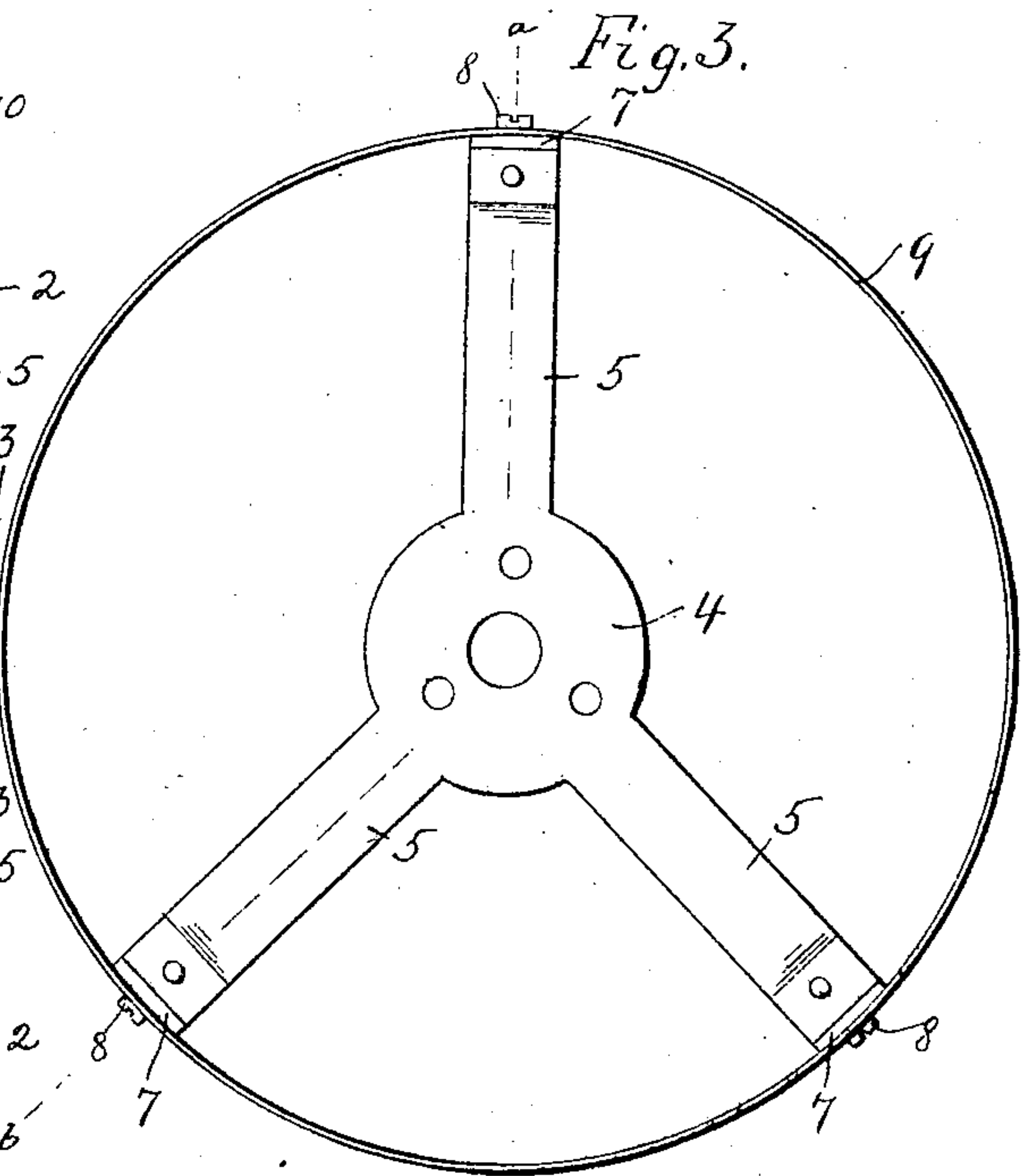


Fig. 3.



Witness
J. H. Summary
C. L. Reed

Arthur H. Porter
Inventor
By Atty. Seymour Teare

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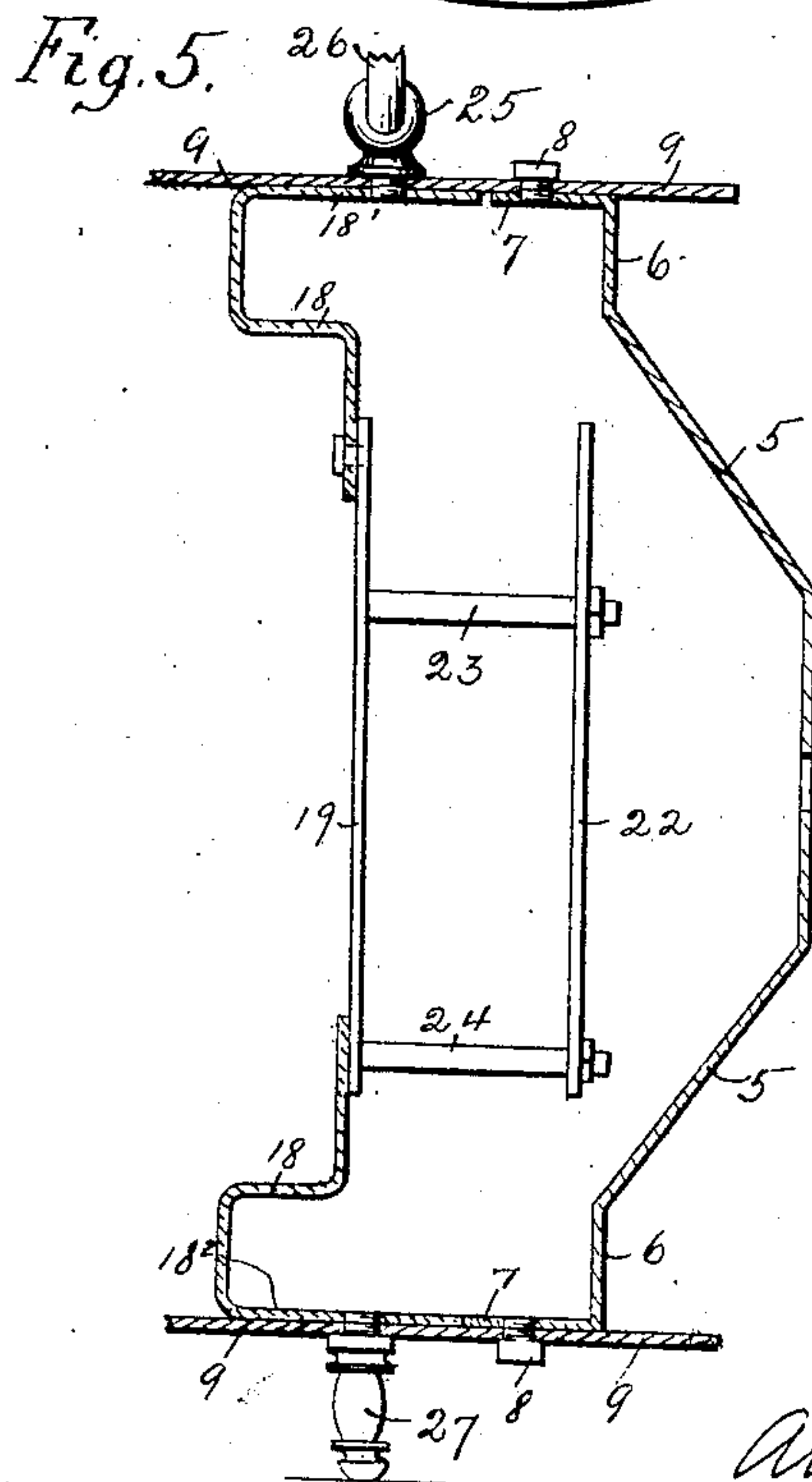
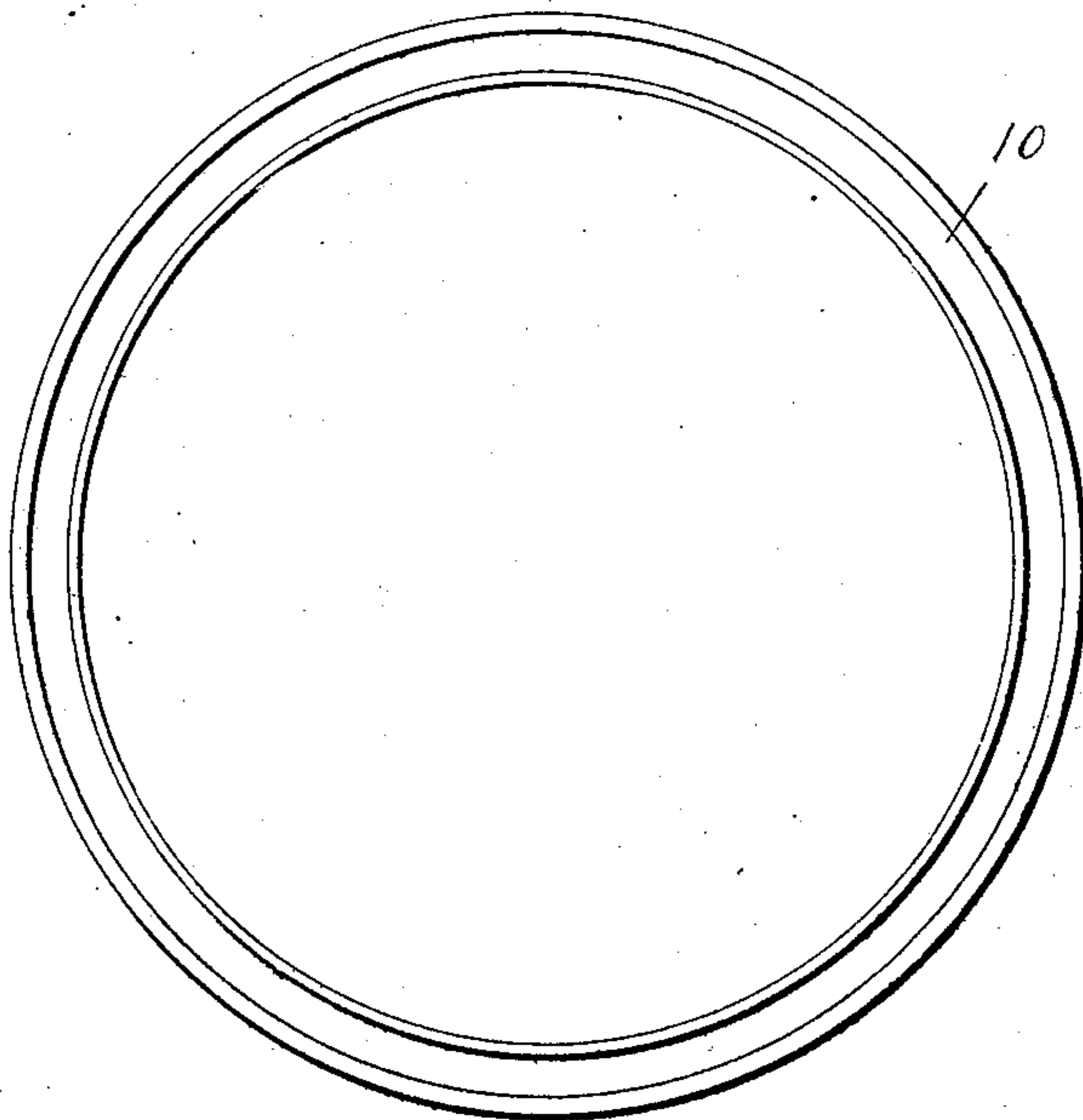
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2 SHEETS—SHEET 2.

Fig. 4.



Witnesses
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UNITED STATES PATENT OFFICE.

ARTHUR H. PORTER, OF BRISTOL, CONNECTICUT, ASSIGNOR TO THE E. INGRAHAM CO., OF BRISTOL, CONNECTICUT, A CORPORATION.

CLOCK.

No. 855,130.

Specification of Letters Patent.

Patented May 28, 1907.

Application filed December 31, 1906. Serial No. 350,123.

To all whom it may concern:

Be it known that I, ARTHUR H. PORTER, a citizen of the United States, residing at Bristol, in the county of Hartford and State of Connecticut, have invented a new and useful Improvement in Clocks; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1 a view in rear elevation of a clock constructed in accordance with my invention. Fig. 2 a broken view thereof in vertical section. Fig. 3 a detail view showing the location of the bell-carrier within the circular sheet-metal case-body. Fig. 4 a detached view of the annular dust guard. Fig. 5 a detail view on the broken line *a—b* of Fig. 3 showing how the case is reinforced by the bell-carrier and by the heavy sheet-metal fastening straps which connect the movement with the case-body.

My invention relates to an improvement in that class of portable clocks having cylindrical sheet-metal cases and furnished with concentrically arranged bells located at the back, the object of my present invention being to produce a simple, compact and convenient clock constructed with particular reference to improving the means employed for supporting the bell and excluding dust from the movement.

In carrying out my invention as herein shown, I attach the concentric bell 2 by means of three screws 3 directly to the central body-portion 4 of a skeleton or spider-like bell-carrier also comprising three radial arms 5 bent inwardly at an obtuse angle to the plane of the body-portion 4 and terminating at their outer ends in fingers 6 arranged parallel with each other and standing at a right angle to the plane of the said body-portion. These fingers are formed with perforations 7 for the reception of screws 8 passing through the cylindrical sheet-metal case-body 9 with the sides of which the said fingers are parallel. The bell 2 is thus carried solely by the bell-carrier which in turn is carried solely by the case-body 9 which at the back opens directly into the bell. In order to provide clearance room for the carrier which projects rearwardly out of the case-body 9, I dispense

with the usual disk-like case back and employ an annular sheet-metal dust guard 10 U-shaped in cross-section and adapted in diameter to be fitted into the back of the case-body 9 and to receive the edge of the bell 2 which on account of dispensing with the ordinary case-back is opened into at the back by the open case-body. The bell 2 and dust-guard 10 together close the case-body at the back and take the place of the ordinary sheet-metal disk-like case back. The amount of dust that can work between the edge of the bell 2 and the bottom of the guard 10 and through the perforations in the bell is negligible. As shown the bell is formed with a central perforation 11 for the hand-set 12, with a perforation 13 for the alarm-set 14, and with perforations 15 and 16 for the rearward passage respectively of the stems employed for winding the time and alarm springs, these stems not being shown. As herein shown the ends of the fingers 6 are arranged in line with the feet 17 of the three heavy sheet-metal fastening straps 18, 18' and 18² employed for securing the clock-movement to the case-body 9, the inner ends of these straps being secured to the front movement plate 19 and the dial 20 being secured to the straps by fingers or clips 21. The movement is not shown beyond the said plate 19, the rear plate 22 and the pillars 23 and 24; it may be of any approved construction.

If desired the fingers 7 may be abutted against the ends of the feet 9 but this is not essential, though their arrangement in line is desirable as when thus arranged the said fingers and feet greatly assist in stiffening the sheet-metal case. By dispensing with the ordinary disk-like case back and employing an annular dust-guard, I secure ample space for the outward extension and vibration of the bell hammer which is not shown. The strap 18 is secured to the case by a post 25 to which a ring or handle 26 is attached, while the strap 18' and 18² are secured to the case-body 9 by the peg-like clock feet 27 and 28 which are of ordinary construction.

I claim:—

1. In a clock, the combination with a cylindrical case-body open at the back, of a bell-carrier extended forward into the case-body parallel with the sides thereof and directly attached thereto, and a bell arranged

concentrically with the case-body and attached to the projecting rear portion of the bell-carrier, the said case-body opening at the back directly into the said bell.

5 2. In a clock, the combination with a cylindrical case-body open at the back, of a bell-carrier extended forward into the case-body parallel with the sides thereof and directly fastened thereto, a bell arranged concentrically with the case-body at the back
10 thereof and secured to the projecting rear portion of the bell-carrier, and a dust-guard applied to the rear edge of the case-body and coacting with the bell in excluding the dust
15 from the case-body which opens at the back directly into the said bell.

3. In a clock, the combination with a cylindrical case-body open at the back, of a skeleton bell-carrier having radial arms terminating in fingers extending forward parallel with the sides of the said case-body and secured directly to the inner face thereof, and
20 a concentrically arranged bell fastened to the said carrier which projects rearwardly out of the case-body which opens at the back directly into the said bell.

4. In a clock, the combination with a cylindrical case-body open at the back, of a bell-

carrier itself carried by the said case-body a bell arranged concentrically with the case- 30 body at the back thereof and fastened to the said carrier, and an annular dust-guard of U-shaped cross-section applied to the case-body and receiving the edge of the bell into which the case-body opens at the back. 35

5. In a clock case, the combination with a cylindrical case-body open at the back, of a clock-movement located therein, straps for securing the movement to the case-body, the said straps being formed with feet, a bell- 40 carrier located within the case-body and formed with fingers arranged in line with the said feet and secured directly to the case-body, a bell arranged concentrically with the said case-body at the back thereof and at- 45 tached to the said bell-carrier, and an annular dust-guard applied to the rear edge of the case-body and receiving the edge of the bell into which the case-body opens at the back.

In testimony whereof, I have signed this 50 specification in the presence of two subscribing witnesses.

ARTHUR H. PORTER.

Witnesses:

W. S. INGRAHAM,
S. W. HOWE.