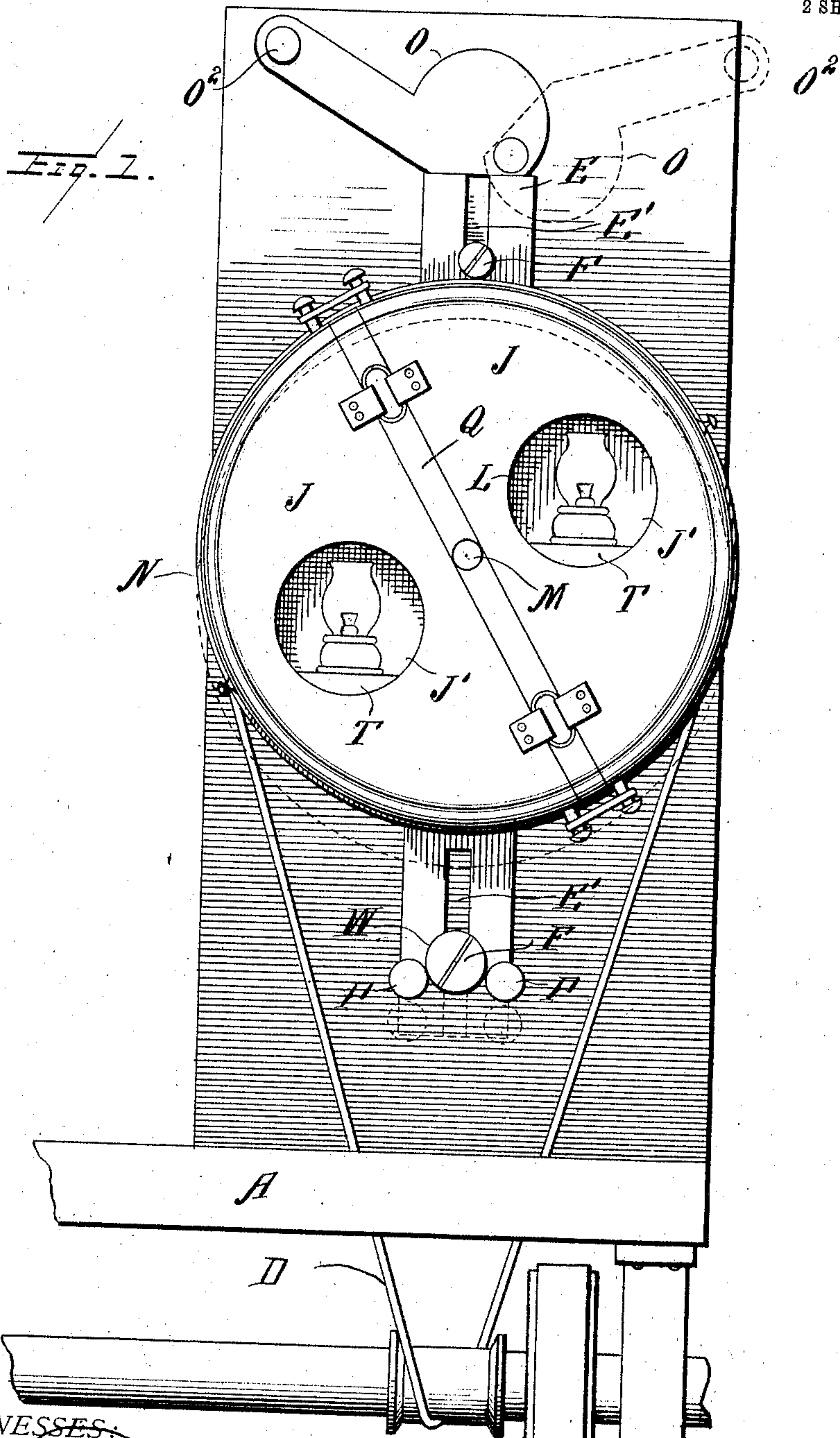


No. 874,228.

PATENTED DEC. 17, 1907.

W. L. McWHORTER.
SIGNALLING APPARATUS.
APPLICATION FILED MAY 18, 1907.

2 SHEETS—SHEET 1.



WITNESSES:

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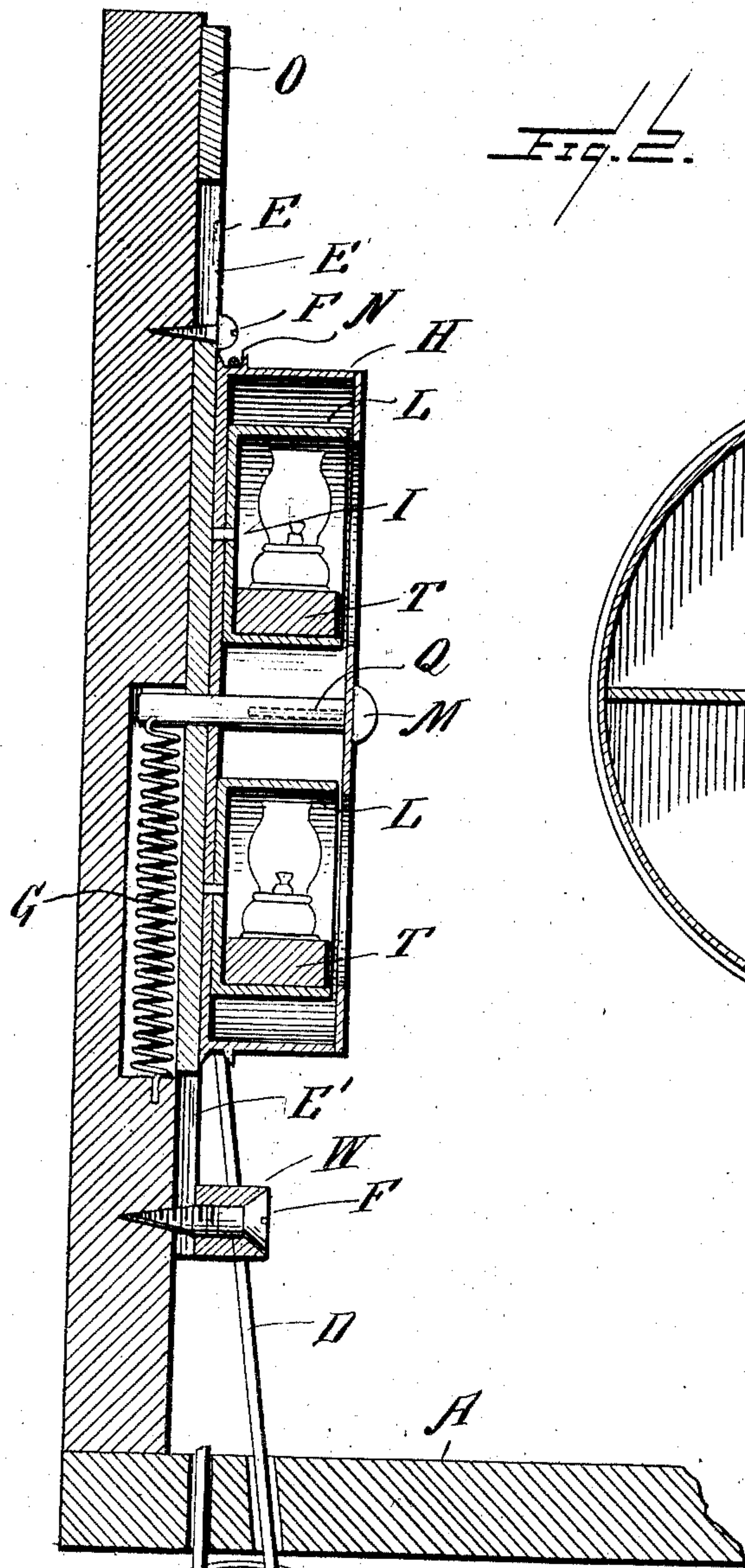


Fig. 2.

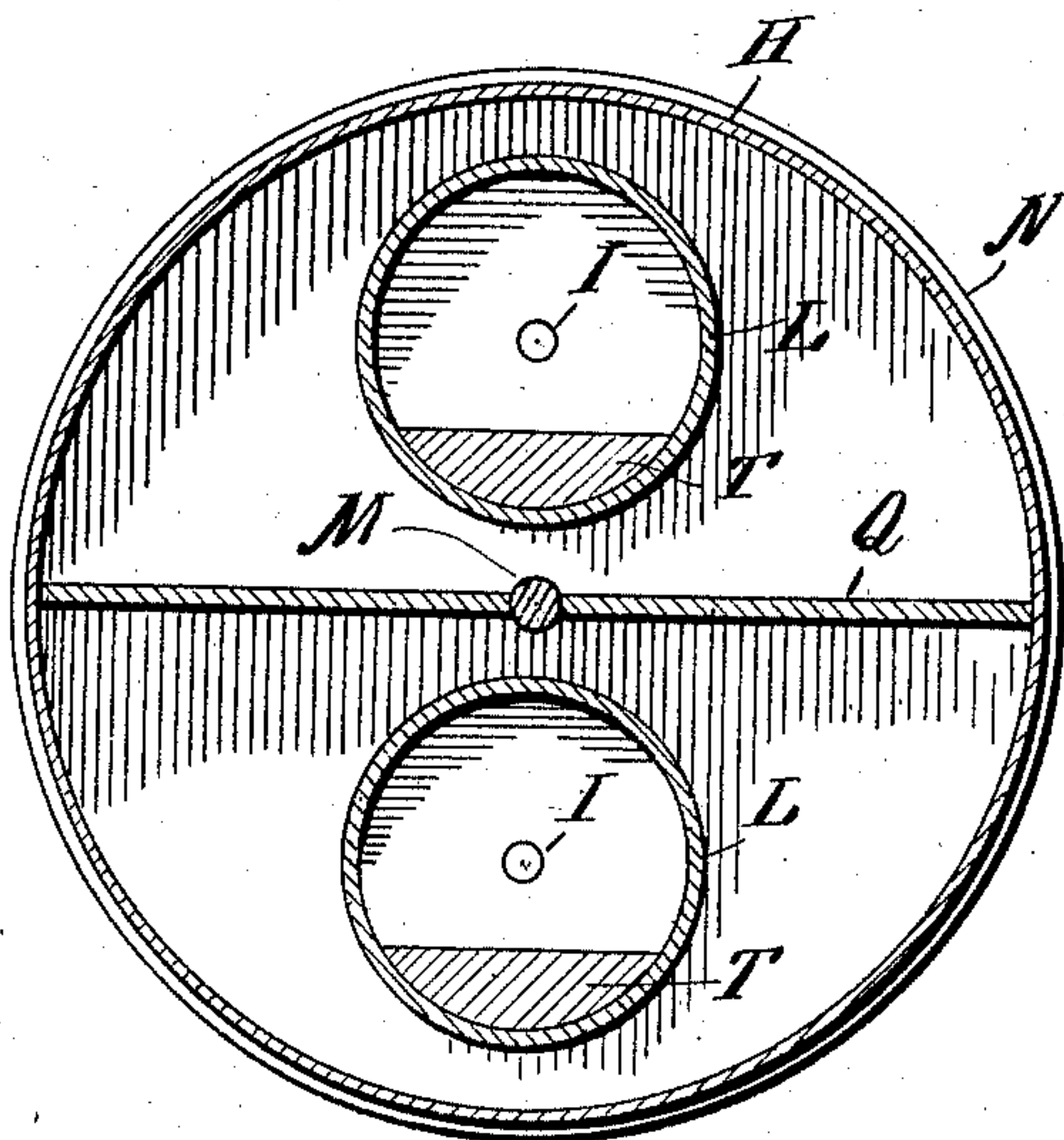


Fig. 3.

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UNITED STATES PATENT OFFICE.

WILLIAM L. McWHORTER, OF STERLING, ILLINOIS.

SIGNALING APPARATUS.

No. 874,228.

Specification of Letters Patent.

Patented Dec. 17, 1907.

Application filed May 18, 1907. Serial No. 374,345.

To all whom it may concern:

Be it known that I, WILLIAM L. McWHORTER, a citizen of the United States, residing at Sterling, in the county of Whiteside and State of Illinois, have invented certain new and useful Improvements in Signaling Apparatus; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in signaling apparatus for use upon cars, automobiles, boats, etc., the purpose of the invention being to indicate at a distance the speed at which the car or other movable object to which the device is attached is running, and also to determine in which direction the movable object is traveling.

The invention comprises various details of construction and combinations and arrangements of parts which will be hereinafter fully described and then specifically defined in the appended claims.

I illustrate my invention in the accompanying drawings, in which:—

Figure 1 is a vertical sectional view through a car, showing my invention as applied thereto. Fig. 2 is a vertical section through the rotatable signal casing, and Fig. 3 is a sectional view taken in a plane at right angles to the plane in which Fig. 2 is illustrated.

Reference now being had to the details of the drawings by letter, A designates the platform of a car having a shaft B mounted in suitable bearings thereon and which shaft is adapted to be driven by a car axle not shown. A pulley B' is fixed to said shaft and a belt B² passes about the latter and is designed to be driven by an axle. Mounted at any suitable location upon the upright portion of the car is a longitudinally movable plate E having slots E' at the ends thereof, and F designates screws which are fastened to the upright portion of the frame and pass through said slots and are adapted to guide the plate in its vertical movements. G designates a spring, one end of which is fixed to said plate and its other end fastened to the frame of the car, the purpose of said spring being nor-

mally to hold the plate at its upper limit of movement.

H designates a cylindrical casing having a grooved way N about the circumference thereof, forming a pulley about which a belt D passes, and whereby as the shaft is rotated, the casing may be revolved. O designates a cam lever pivotally connected at O' to the frame of the car and provided with a handle O², whereby said lever may be swung down so that its cam will contact with the top of the plate to throw the same to its lowest limit, whereby the belt D will be slack and not be driven by said shaft. Said casing is mounted to rotate upon a central axis M carried by said plate and is provided with a central partition Q and two spring-actuated hinged lid sections J, each of which is provided with an opening J'. Pivotally mounted upon pins I carried by the bottom of said casing are the open-ended cup-shaped shells L, in each of which is mounted an approximately semi-cylindrical weight member T adapted to hold said cup-shaped members from rotation as the casing rotates. Upon each of said weight members is adapted to be positioned a lantern, the light of which is adapted to be disclosed opposite the adjacent opening in the lid section. Mounted upon the screw at the lower end of the plate is a buffer W adapted to prevent the casing jarring in the event of the plate carrying the same being thrown to its lowest limit, and pins P project from the lower end of said plate and are adapted to contact with said buffer as the plate returns to its normal position, thus serving to prevent unnecessary jar to the casing and its contents.

In operation, for instance if the device is attached to a train which is traveling at the rate of sixty miles an hour, the casing would be given one rotation every two seconds, and if going at different rates of speed, for instance, thirty miles an hour, the casing would be given one turn for every four seconds, and so on according to the speed at which the train is traveling. When the signals are equipped with white lights, they are positioned upon the train so that they may be visible in advance of the train and when the device rotates to the left, it will indicate that the train is moving forward and, when the apparatus rotates to the right, it will indicate to the person in advance of the train that the train is backing up. When the apparatus is equipped with colored lights and

positioned so as to be viewed from the rear of the train and if the device rotates to the right, it will indicate that the train is moving from the point of vision and, when rotating in the opposite direction or to the left, it will indicate that the train is backing toward the point of vision.

It will thus be seen that by the provision of a visual signaling apparatus as shown and described, the observer may readily determine by noticing the rotatable signal at a distance, the speed at which the train is moving and as to whether or not it is traveling to or from the observer. If not moving, the indication will be that the train is at a stand-still.

While I have shown my invention as applied to a car, it will be understood that it will be equally well adapted for use in connection with automobiles, boats and vehicles of various descriptions, the apparatus being given a rotary movement by belted connection with some driving part of the vehicle.

What I claim is:—

1. A visual signaling apparatus for cars, automobiles, etc., comprising, in combination with a rotatable shaft, a rotary casing having openings therein, whereby lights may be disclosed therefrom, connections between said shaft and casing for rotating the latter, and means for lowering said casing to throw the same out of operative connection with said shaft, as set forth.

2. A visual signaling apparatus for cars, automobiles, etc., comprising, in combination with a rotatable shaft, a rotary casing having openings therein, whereby lights may be disclosed therefrom, connections between said shaft and casing for rotating the latter, a spring-pressed member upon which said casing is mounted, and means for moving said member, whereby it will be thrown out of operative connection with said shaft, as set forth.

3. A visual signaling apparatus for cars, automobiles, etc., comprising, in combination with a rotatable shaft, a rotary casing having openings therein, whereby lights may be disclosed therefrom, connections between said shaft and casing for rotating the latter, a plate upon which said casing is rotatably mounted, a spring adapted to hold said plate at its highest throw, and a lever adapted to bear against the plate to move the same

downward against the tension of said spring, whereby the casing may be thrown out of operative connection with said shaft, as set forth.

4. A visual signaling apparatus for cars, automobiles, etc., comprising, in combination with a rotatable shaft, a rotary casing having openings therein, whereby lights may be disclosed therefrom, connections between said shaft and casing for rotating the latter, a plate upon which said casing is rotatably mounted, a spring adapted to hold said plate at its highest throw, and a cam lever pivotally connected independent of the plate and adapted to bear against the end of the latter, whereby the plate may be moved against the tension of the spring to which it is connected, as set forth.

5. A visual signaling apparatus comprising, in combination with a car having a rotatable shaft, a longitudinally movable plate, a rotatable casing mounted thereon and provided with openings to disclose lights there-through, belted connection between said shaft and casing, said plate having slots therein, pins projecting from the car frame and disposed in said slots, whereby the plate may be guided, a buffer fixed to the frame, and projections upon said plate adapted to contact with said buffer, as set forth.

6. A visual signaling apparatus comprising, in combination with a car having a driven shaft, a vertically disposed plate, a rotatable casing mounted upon said plate having a grooved way about its circumference, means for moving said plate longitudinally, a belt passing about a grooved way on the casing and about said shaft, and pivot weighted cups carried by said casing and adapted to hold lights to be disclosed at openings formed in the casing, as set forth.

7. A visual signaling apparatus comprising, in combination with a car having a driven shaft, a rotatable casing, belted connections between the same and said shaft, weighted cups pivotally mounted upon said casing, and lids to said casing provided each with an opening designed to disclose lights carried by said cups, as set forth.

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

WILLIAM L. McWILLIAMS.

Witnesses:

W. B. CAROLUS,
JOHN A. WARD.