

G. M. GUERRANT & T. L. SYDNOR.
ADVERTISING DEVICE.

APPLICATION FILED FEB. 15, 1907. RENEWED SEPT. 24, 1908.

914,656.

Patented Mar. 9, 1909.

2 SHEETS—SHEET 1.

Fig. 1.

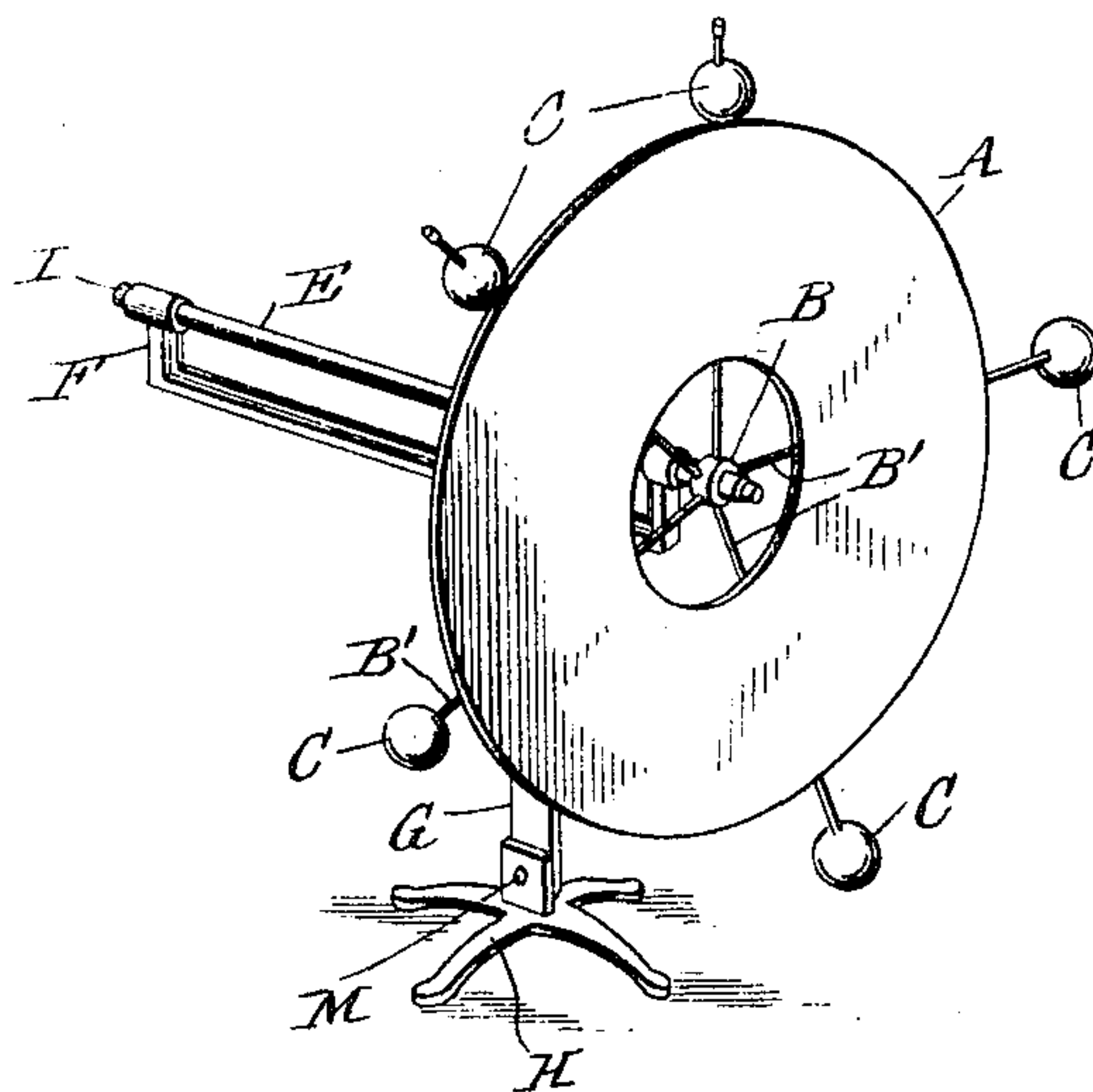
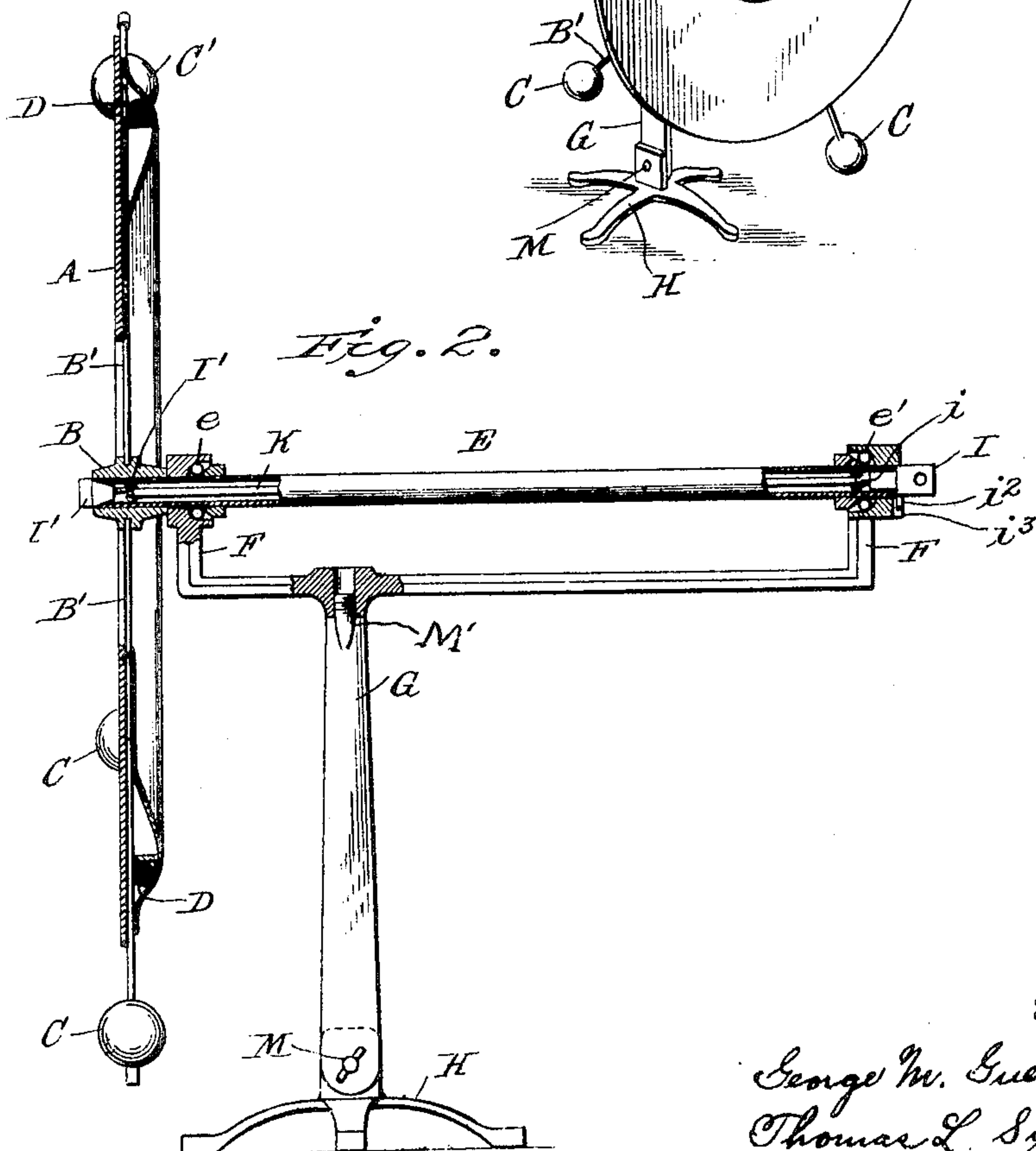


Fig. 2.



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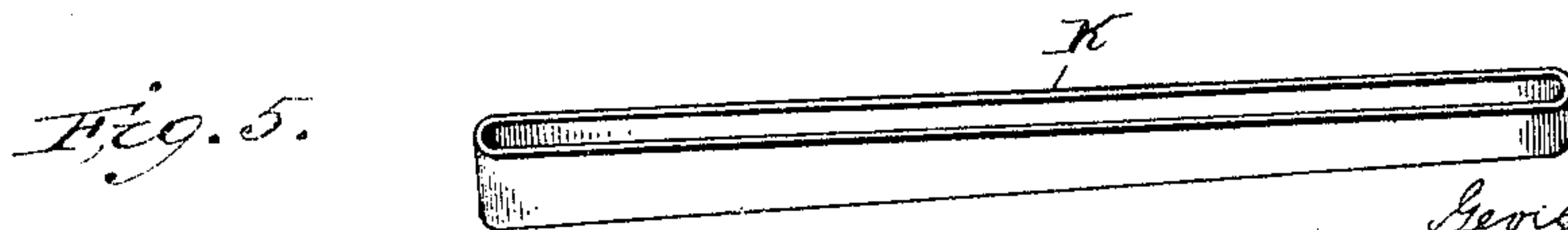
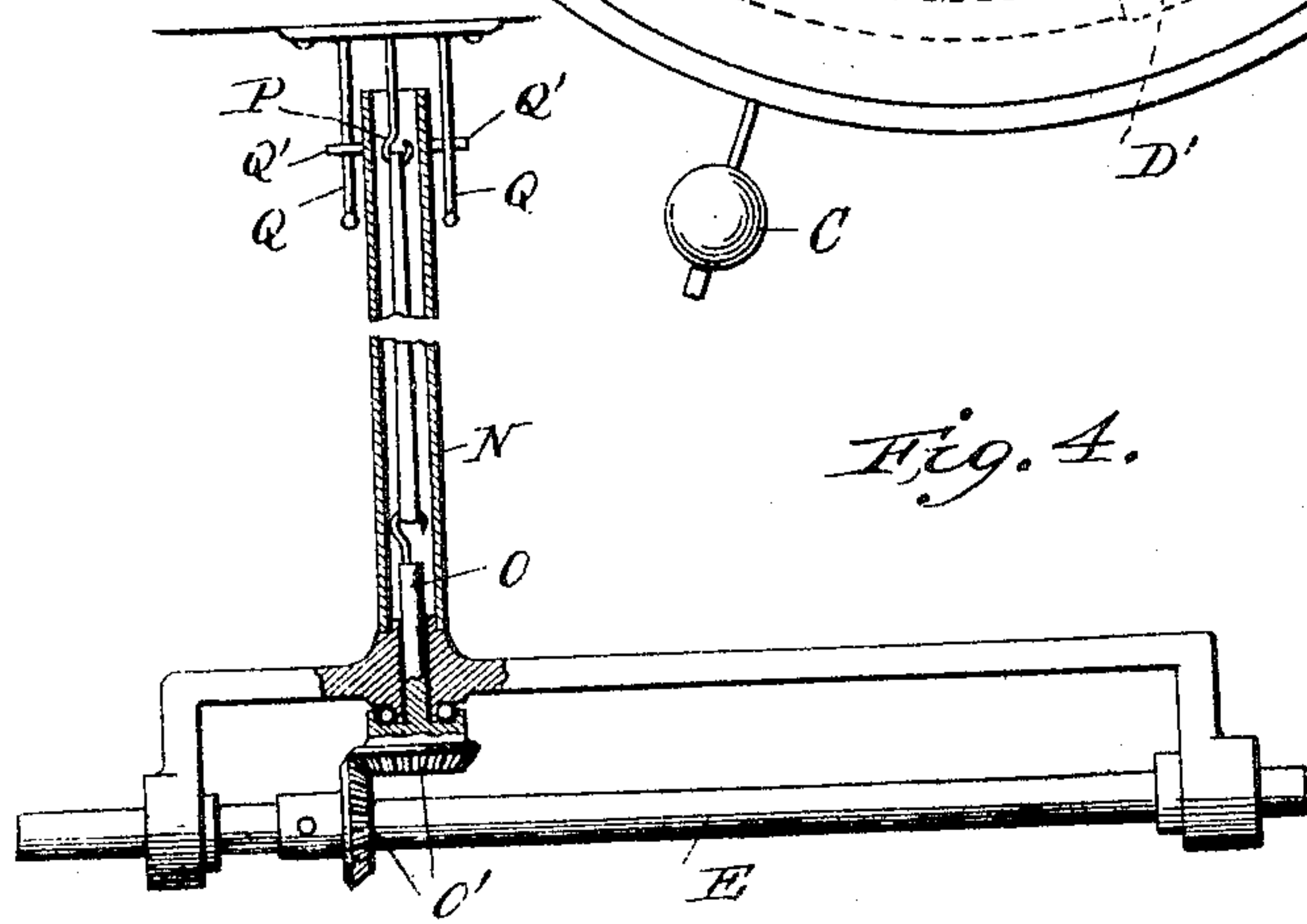
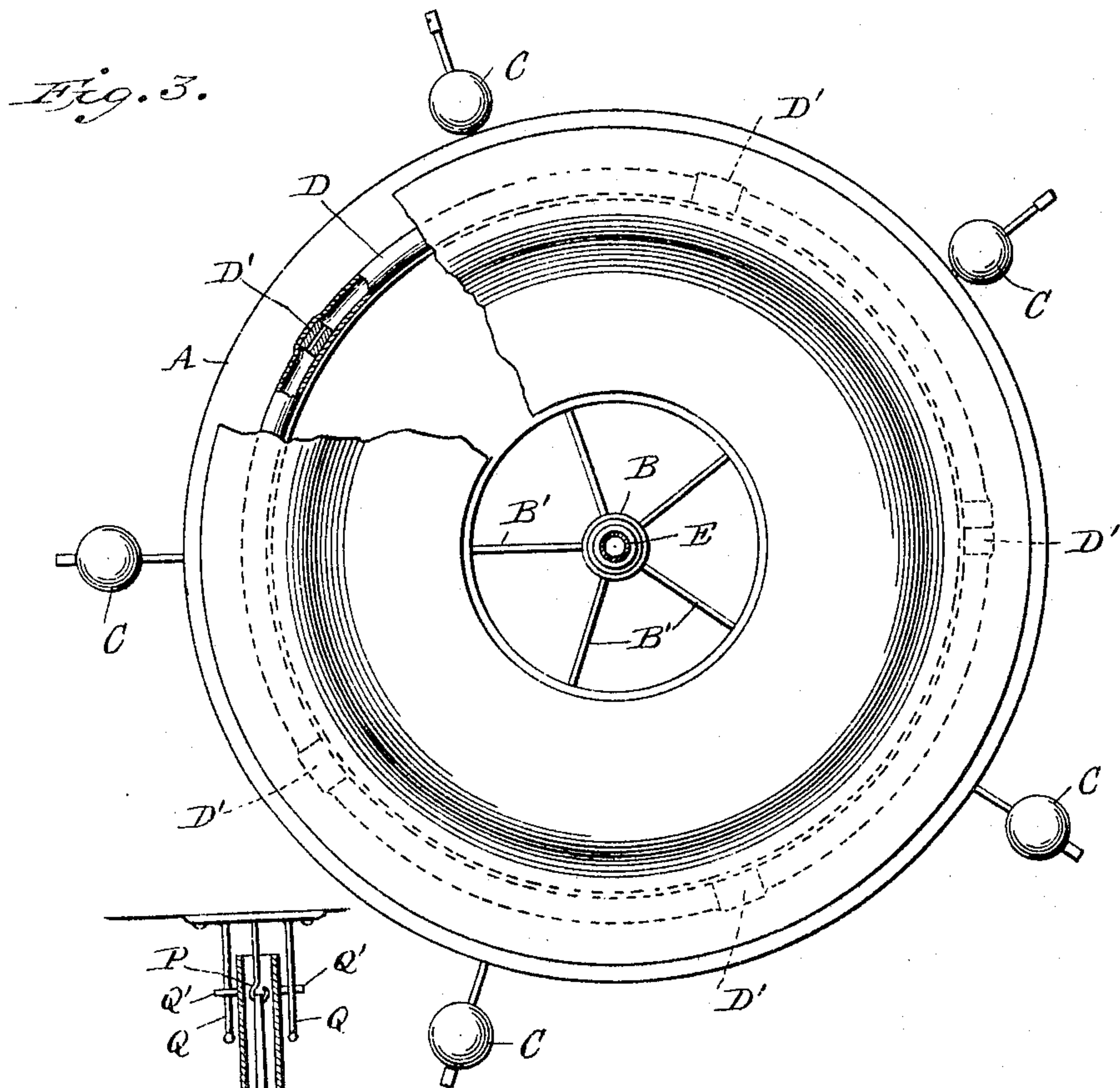
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UNITED STATES PATENT OFFICE.

GEORGE M. GUERRANT AND THOMAS L. SYDNOR, OF DANVILLE, VIRGINIA.

ADVERTISING DEVICE.

No. 914,656.

Specification of Letters Patent.

Patented March 9, 1909.

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To all whom it may concern:

Be it known that we, G. M. GUERRANT and T. L. SYDNOR, both of Danville, in the county of Pittsylvania, State of Virginia, have invented a certain new and useful Improvement in Advertising Devices; and we do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and to the characters of reference marked thereon.

This invention relates to improvements in advertising devices, the objects of the invention being to provide an apparatus which will excite the curiosity of observers with a view to directing their attention to the advertising matter displayed by the device. In attaining the desired object, advantage is taken of the curiosity which attracts observers to an object or body in motion without apparent means for maintaining the motion or movement and particularly if the form of the movable body and character of the movement be deliberate and such as to give the impression that it runs without the expenditure of power and contains no concealed power mechanism.

The invention consists primarily in a rotary wheel or disk like body upon which advertising matter may be displayed with means whereby it is given a tendency to rotate and a continuous governor operating to retard the rotation and itself so concealed by or embodied in the wheel that its existence would not be suspected or discernible without a minute inspection.

The invention further consists in mounting a disk like body carrying a continuous governor in association with a hollow shaft in which an elastic band or similar power spring is concealed for supplying the power for rotating the movable member.

The invention further consists in certain novel details of construction and combinations and arrangements of parts all as will be now described and pointed out particularly in the appended claims.

In the accompanying drawings: Figure 1 is a perspective view of a preferred form of device embodying the present invention. Fig. 2 is a side elevation with portions in section to show the internal construction. Fig. 3 is an elevation looking at the rear of the wheel disk or rotary member and with por-

tions broken away to show the continuous governor. Fig. 4 is an elevation partly in section of a modified arrangement adapted to or suspended from an overhead support. Fig. 5 is a detail showing the preferred form of elastic motor band.

Like letters of reference in the several figures indicate the same parts.

The rotary member for the display of the advertising matter is preferably in the form of a wheel or disk like structure A, which may be of any suitable material, card board, for instance, and it is preferably annular in form so as to leave a central opening through which the support and other parts may be inspected. The part A is preferably mounted on a central hub B to which it is connected by small radial supports or spokes B', and the latter may be extended beyond the periphery of the disk and provided with sliding balls C, which will, as the wheel rotates, travel toward and from the ends of the radial supports, thereby giving the impression or suggestion that the rotative power is derived from them.

On the rear face of the disk or incorporated therewith in any suitable manner, is an endless duct for liquid, or other material capable of flowing therein, said duct having constricted portions at intervals whereby a body of liquid or other flowing material partly filling the duct, will be caused to flow slowly from one part of the duct to another. In the preferred construction, an endless tube D is secured concentrically to the rear face of the disk and within this tube are a series of plugs D' having relatively small apertures therein. A quantity of liquid, water preferred, sufficient to partially fill the tube is placed in the same and inasmuch as the flow of the liquid is retarded by the small apertures in the plugs the rotation of the wheel will be restricted to the speed at which the liquid can flow from one portion of the tube to another, care being taken, of course, to apply a rotative effort to the wheel which is insufficient to elevate and carry the main body of liquid over the highest point of the tube.

Obviously a wide variation in the means for applying a light fairly uniform pressure tending to rotate the wheel is permissible and while we do not wish to be limited to any specific mechanism save when specifically

mentioned in the claims, the preferred mechanism embodies a relatively small tubular shaft in which a power spring such as an elastic band adapted to be twisted is concealed.

In the construction shown in Figs. 1 and 2, the wheel hub is mounted on the end of a tubular shaft E, journaled preferably on ball bearings *e e'* in the ends of their bracket arms F. The bracket arms F are mounted on or formed as a part of a thin standard G, rising from a foot or spider base H, the whole structure being of such character as to give the impression of lightness without the likelihood of concealing any power mechanism or connections. The rear end of the tubular shaft does not pass way through the rear bearing *e'*, but a plug I fits in the rear portion of said bearing and is preferably made to simulate an extension of the shaft.

The power spring or elastic band K extends through the shaft one end being connected with the inner end of the plug I, as by a hook *i*, and the other end being connected by a hook *i'*, with a taper plug I' in the front end of the shaft or hub of the wheel. A pin *i²* on the rear or winding plug is adapted to engage a ratchet tooth *i³* on the bearing, whereby the plug may be turned by a crank handle to wind the spring and reverse rotation will be prevented. Obviously, the twisting of the spring or elastic band will tend to rotate the wheel and shaft and in order to secure the full efficiency of the band it is preferably made somewhat narrower at the forward than at the rear end, as shown clearly in Fig. 5. With this construction the knotting of the band which occurs after the band has been twisted to a certain degree commences at the front or thinner end, leaving the rear portion free and in condition to exert its power in turning the wheel and shaft. It will be noted that any knotting and binding of the spring takes place against the walls of the rotary shaft and therefore the rotative effort is not lost or absorbed as would be the case if the knots contacted with a fixed surface.

The standard is preferably attached to the foot by a screw M, whereby the inclination may be changed and the bracket is attached to the standard by a sleeve joint at M' to permit of its removal or shifting about with the standard as a center.

Where it is desired to suspend the device from an overhead support, the bracket may be secured to the lower end of a tubular standard or support N (Fig. 4) in which is journaled a short shaft O connected by bevel gears O' with the shaft E, and in this instance the power band or spring is preferably connected with the upper end of the shaft O and with a fixed support or hook P, whereby it will support the weight of the device and

may therefore be simply a flexible band, the weight of the device being relied on to cause the untwisting of the band and through the gears, the rotation of the wheel. Means must of course be provided for preventing the rotation of the device as a whole on a vertical axis and such means may conveniently consist of a pair of downwardly projecting arms Q on the fixed support and lugs Q' on the tubular standard N, whereby the standard may rise or fall with the twisting or untwisting of the band but is held against rotation.

In operation, the rotative effort applied to the wheel, is governed by the continuous liquid governor in accord with the flow of liquid through the restricted portions of the governor duct and the number of restricted parts is preferably made such that the rotation will be very slow and of a more or less intermittent character, due to the fact that the wheel will be held in check until a certain quantity of liquid has passed one of the restrictions and will then be permitted to advance until the next resistance comes into action and lifts sufficient of the liquid to again check the rotation.

Variations of the device in order to render the same attractive and excite the interest of customers for various lines of goods will at once suggest themselves. We do not, therefore, wish to be limited to the specific details of construction nor to the use of a spring, for the motive power as from the modification illustrated in Fig. 4, it is obvious that gravity may be utilized as the motive force and the applications of this force which will at once suggest themselves for rotating the wheel are many and varied but well within the range of mechanical skill.

Having thus described this invention, what we claim as new, and desire to secure by Letters Patent, is:

1. In an advertising device, a rotary wheel or disk having a central opening, a central hub, radial supports or spokes carried by said hub and upon which the disk is mounted, a shaft upon which the hub is mounted, a motor for said shaft, and a continuous duct on the rear face of said disk beyond the opening therein and a shiftable weight medium partially filling said duct.

2. In an advertising device, a rotary wheel or disk having a central opening, a hub, radial supports or spokes carried by said hub and upon which the disk is mounted, a hollow shaft upon which the hub is mounted, a torsion spring in said shaft for imparting motion to the disk, and a continuous duct located in the rear of the disk beyond the opening having constrictions therein and containing a medium capable of flowing.

3. In an advertising device, a rotary wheel embodying a governor consisting of an end-

less tube mounted concentrically on the wheel, having constrictions therein and containing a medium capable of flowing, a tubular support and a torsion spring in said support for imparting sustained rotative effort to the wheel.

4. In an advertising device a rotary wheel embodying a governor consisting of an endless tube mounted concentrically on the wheel, having constrictions therein and containing a medium capable of flowing, a tubular support for the wheel and a flexible driving member extending longitudinally in said support.

5. In an advertising device a rotary wheel embodying a governor consisting of an endless tube mounted concentrically on the wheel, having constrictions therein and containing a medium capable of flowing through the constrictions, a tubular support for the wheel and an elastic driving member extending longitudinally in said support and connected at one end with the wheel and at the opposite end with a fixed support.

6. In an advertising device, a rotary wheel embodying a governor consisting of an endless tube mounted concentrically on the wheel, having constrictions therein and containing a medium capable of flowing through the constrictions, a tubular shaft on which the wheel is mounted, bearings for the shaft and a torsion spring extending through the shaft and connected with the bearing at the rear end of the same.

7. In an advertising device, a rotary wheel embodying a governor consisting of an endless tube mounted concentrically on the wheel, having constrictions therein and containing a medium capable of flowing through the constrictions, a tubular shaft on which the wheel is mounted, bearings in which the shaft is journaled, an elastic band extending longitudinally in the shaft, and connected with the shaft and wheel at its forward end, and a winding plug in the rear bearing in line with the shaft and to which the rear end of the band is connected.

8. In an advertising device a rotary wheel embodying a governor consisting of an endless tube mounted concentrically on the wheel having constrictions therein and containing a medium capable of flowing through the constrictions, a tubular shaft on which the wheel is mounted, an elastic band narrower at one end than at the other extending longitudinally in the shaft and connected with the shaft at its narrower end and a winding plug to which the wider end of the band is connected.

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