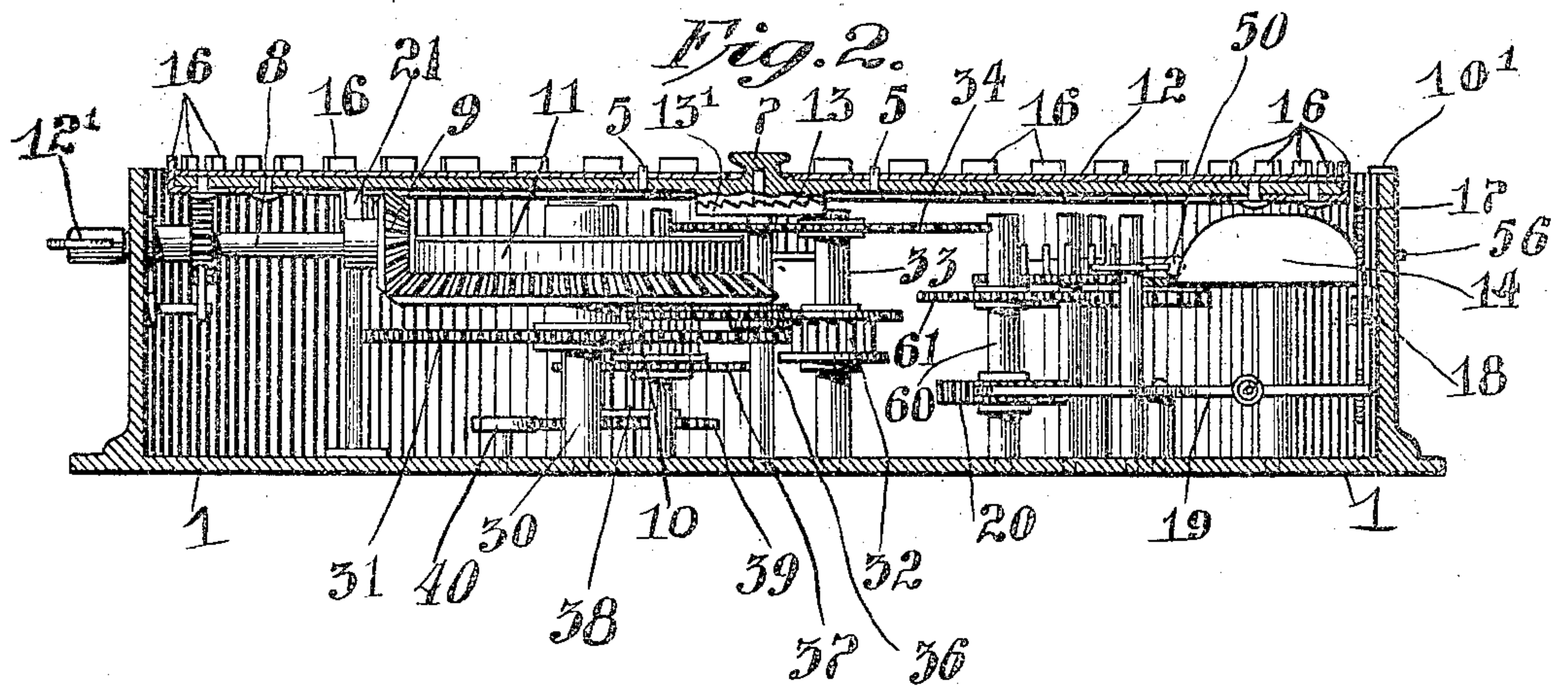
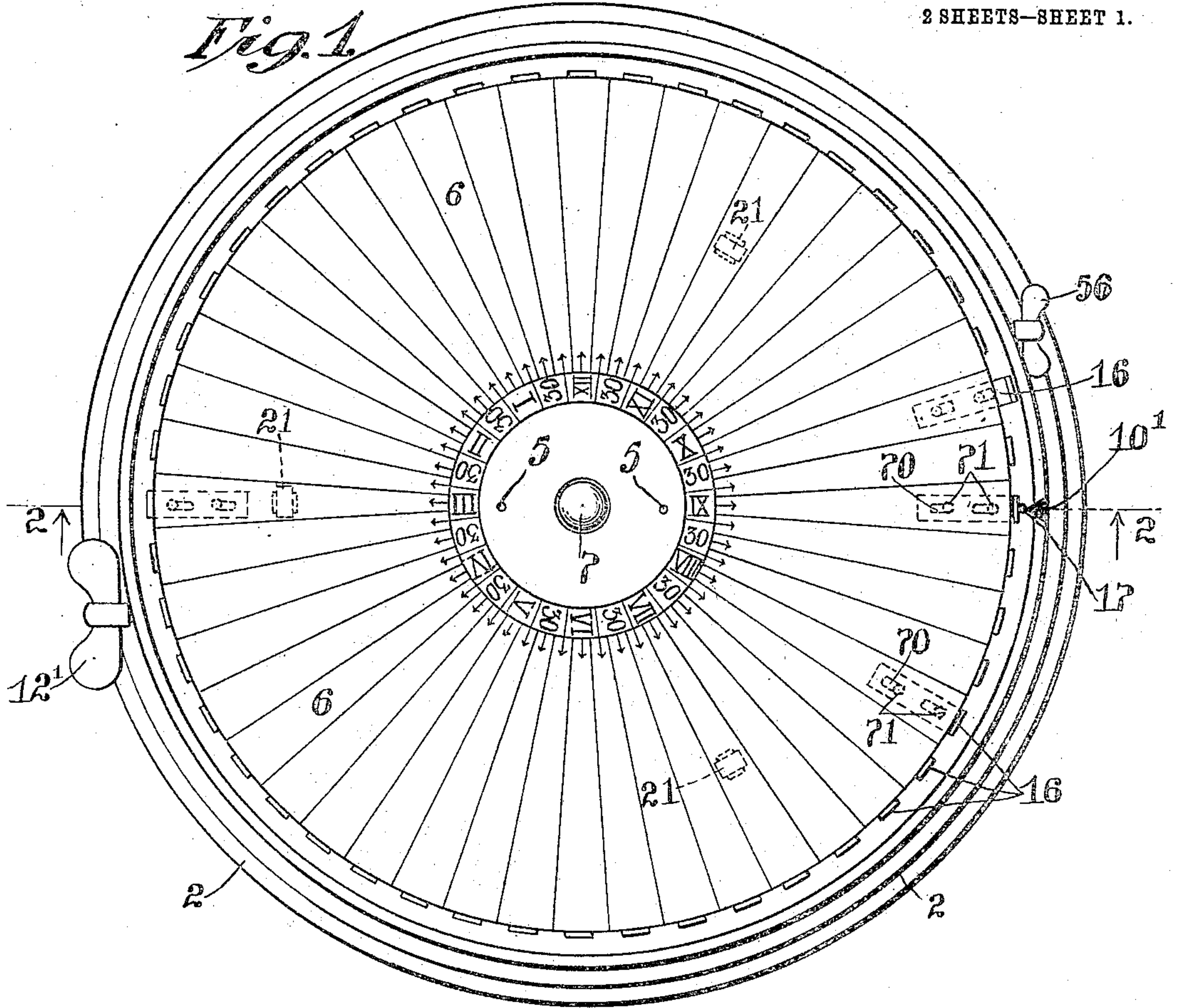


C. G. BEHRE.
INDICATING ANNUNCIATOR.
APPLICATION FILED MAR. 6, 1909.

950,740.

Patented Mar. 1, 1910.

2 SHEETS—SHEET 1.



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2 SHEETS—SHEET 2.

Fig. 3.

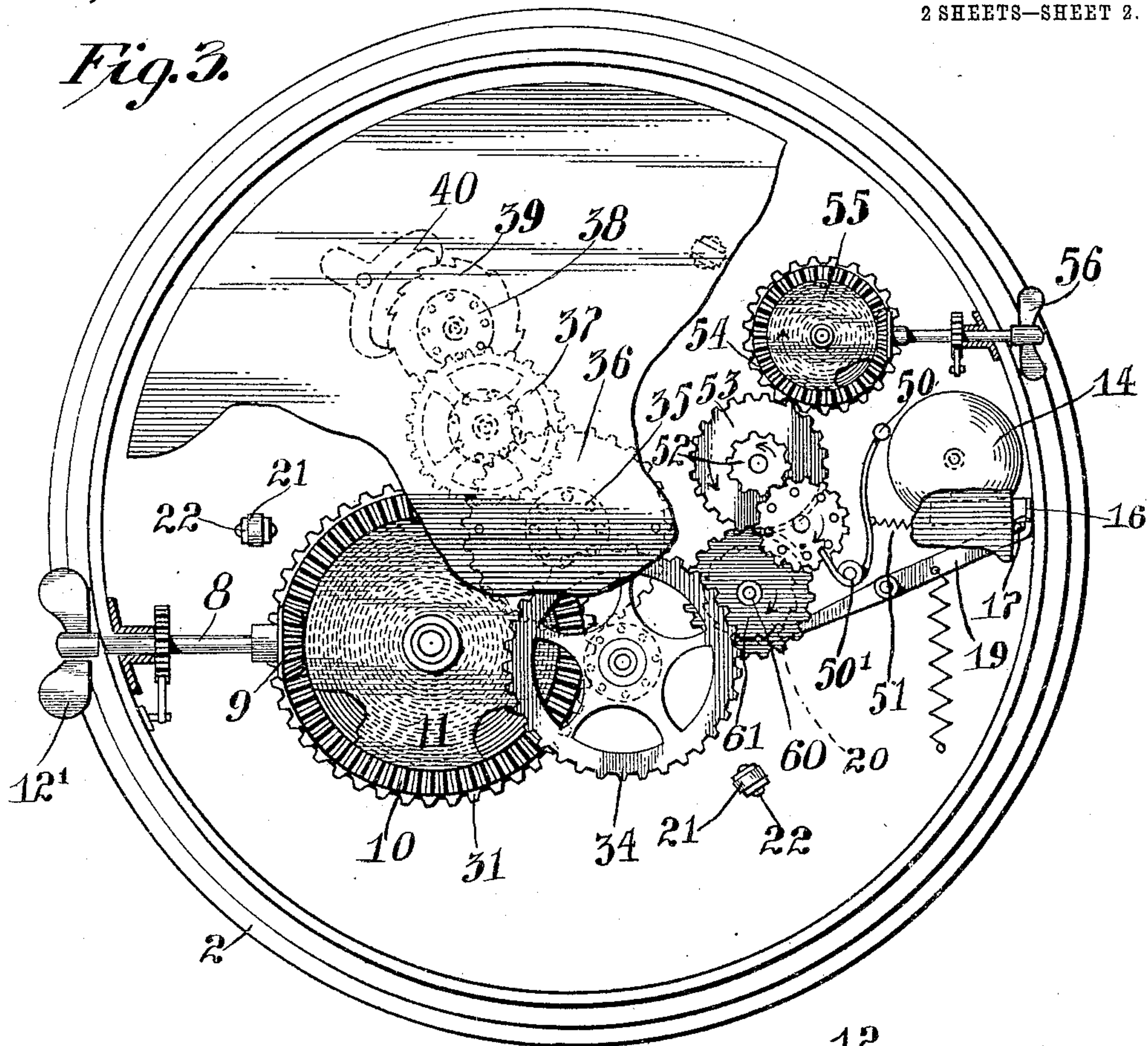


Fig. 4.

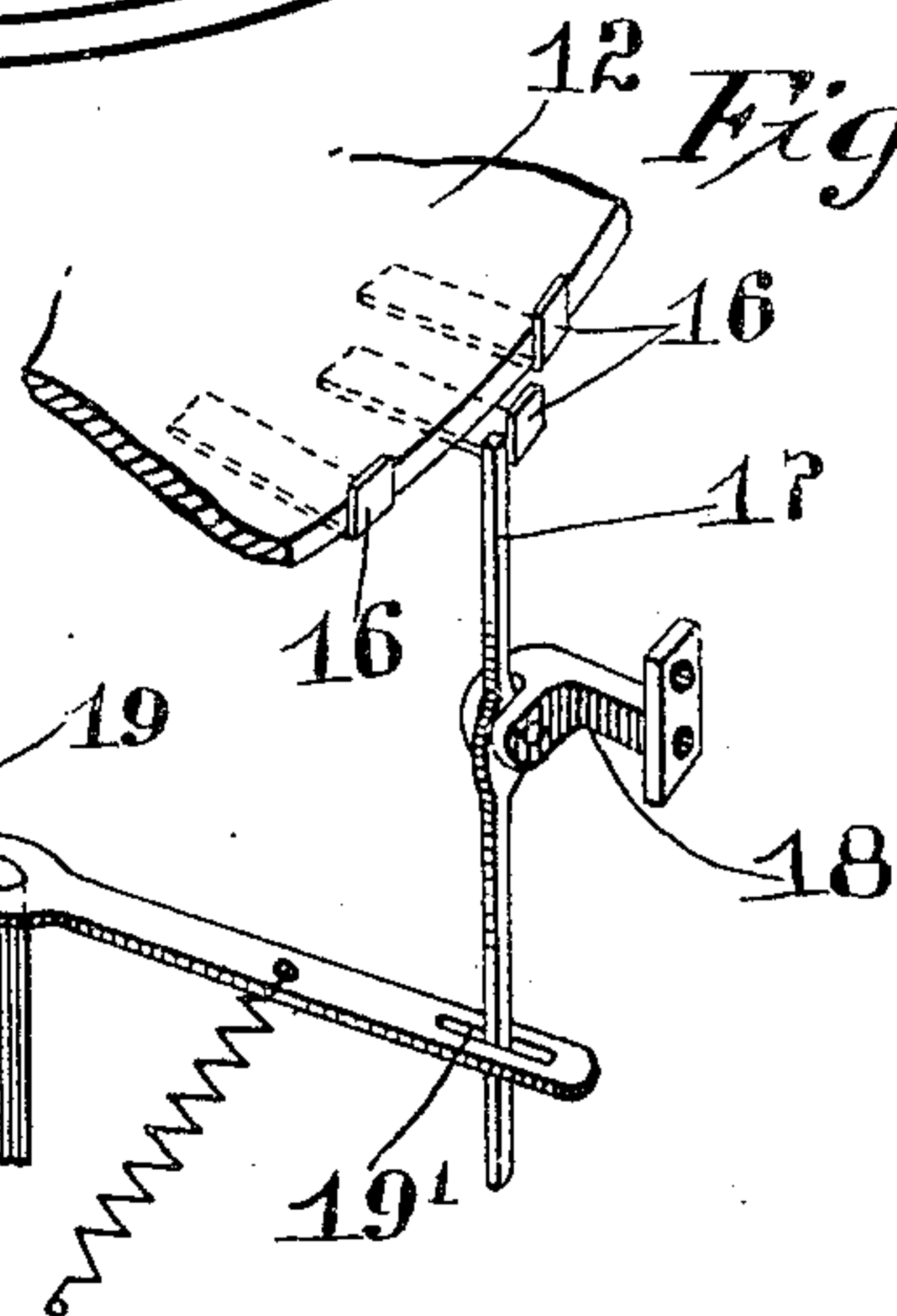
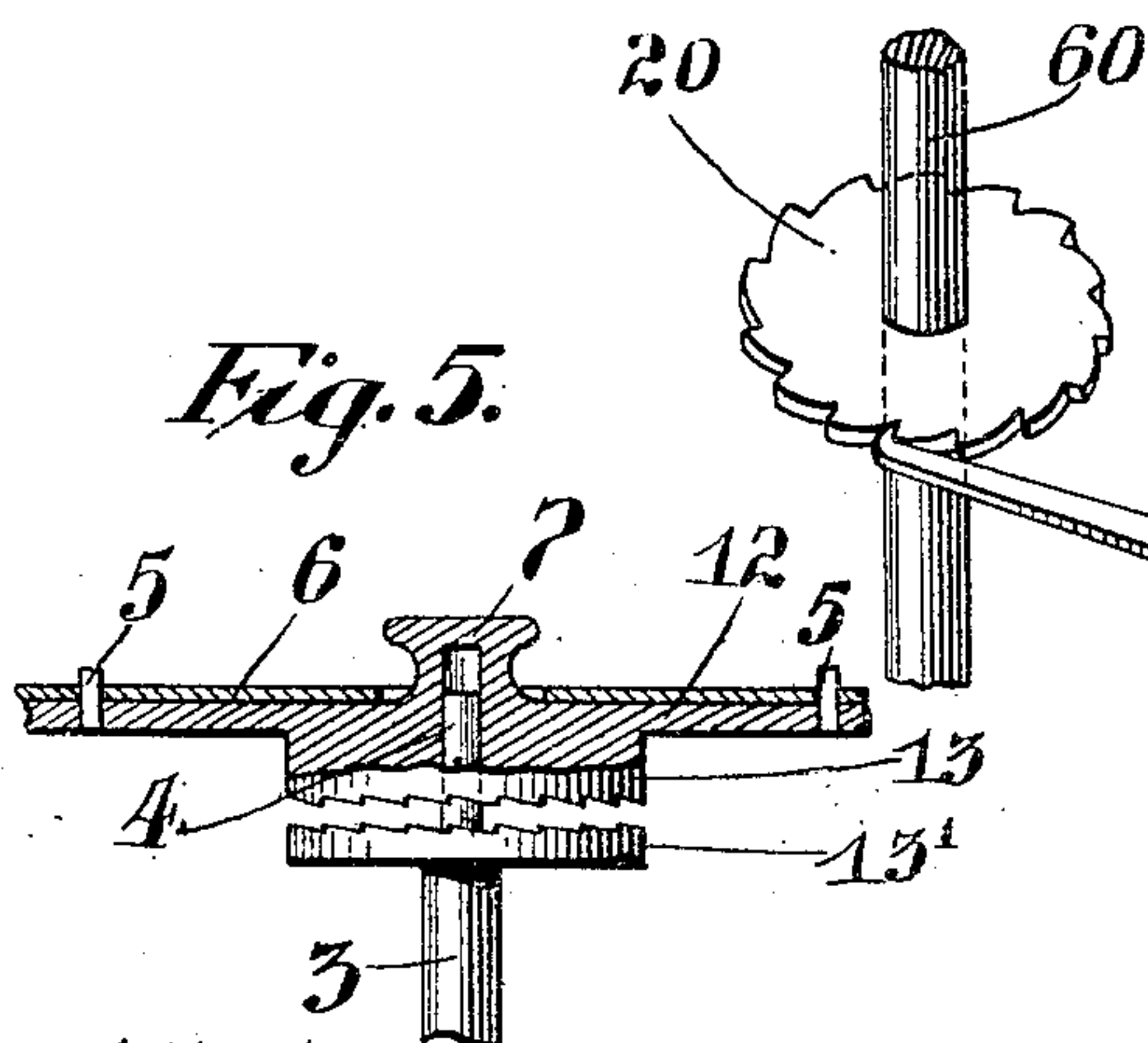


Fig. 5.



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UNITED STATES PATENT OFFICE.

CHARLES GEORGE BEHRE, OF NEW YORK, N. Y.

INDICATING-ANNUNCIATOR.

950,740.

Specification of Letters Patent.

Patented Mar. 1, 1910.

Application filed March 6, 1909. Serial No. 481,740.

To all whom it may concern:

Be it known that I, CHARLES GEORGE BEHRE, a citizen of the United States, residing at 100 Broadway, New York city, New York, have invented new and useful Improvements in Indicating-Annunciators, of which the following is a specification.

This invention relates to indicating annunciators, and particularly to an appointment announcing device.

In offices and businesses where miscellaneous appointments are made for different times during the day, it is frequently a matter of greatest importance that these be recorded and announced successively as the time arrives in order that business may be kept moving without waste of time or delay either by or on the part of the maker of the appointment, or by or on the part of the party with whom the appointment is made. It is desirable also to have it possible to note appointments sometimes considerably in advance of the day and also it is frequently valuable to have a record of the appointments of any day.

To the end therefore of producing an annunciator which will make possible the previous preparation of a memorandum of appointments, a timely indication and announcement of the same at the time, and a subsequent record, I have devised my present invention which will be more fully described in the specification which follows.

In the specification, by way of illustration of the principles of my invention, I have set forth and described an embodiment showing a form adapted to certain uses, and this I have illustrated in the drawings which accompany the specification, and which are made a part thereof by corresponding reference numerals uniformly employed throughout both.

In the specification, by way of illustration of an annunciator embodying my invention, of which, Fig. 2 is a side view in central section on the line 2—2 of Fig. 1. Fig. 3 is a plan view with dial removed and disk partly broken away to expose the mechanisms of the annunciator. Fig. 4 is a detail of the annunciator release, and Fig. 5 a detail of the drive and set of the dial.

1 is a back and 2 a side wall of a suitable casing in which is a central rotatable shaft 3 on which is supported a disk 12 formed with a knob 7.

13 is a lower ratchet clutch member fast

on the shaft 3 and 13' a similar upper clutch member facing and adapted to engage therewith. The disk 12 and the upper member 13 are loosely coupled to the shaft 3 and the lower clutch 13' by a pin 4 which permits the disengagement and reversal of the disk for the purpose of setting or the like.

The disk 12 is provided with pins 5 on which the dial card 6 is impaled to secure positive rotation with the disk. The disk 12 is supported on rollers 21 carried in posts 22 which permit writing pressure on the dial card 6 while on the disk without danger of damaging the underlying mechanisms. The disk is driven by a spring in a casing 11 wound by a key 12' which turns a shaft 8. The shaft 8 has a pinion 9 which meshes with a gear 10 to wind the spring of the casing 11.

30 is a spindle having a gear 31 which meshes with a gear 32 on the countershaft 33 from which transmission is secured by a gear 34 which drives the gear 35 on the main shaft 3.

36, 37 and 38 are an intermeshing gear train leading to a wheel 39 and escapement 40.

14 is an annunciator bell rung by a hammer 50 actuated by a spring 51 and tripped on its pivot 50' by a wheel 55 driven by a gear train 52, 53, 54, which are moved by a spring in a casing 55 wound by a key 56.

About the periphery of the disk 12 are set dogs 16 slotted at 70 and held by pins 71 so as to be movable radially to project beyond the periphery of the disk.

10' is the indicator point at which the appointment is read and adjacent thereto is arranged the free end of a lever 17 pivoted in a bracket 18. The lower end of the lever 17 works in a slot 19' of a stop arm 19 which engages with its opposite end a toothed wheel 20 on a shaft 60 which also carries a gear 61 which meshes with the gear 53 of the annunciator train.

The dial card 6 is ruled radially to afford twenty-four spaces which are indicated at their inner ends by the hours and half hours of the day. The spaces may of course be made of a greater or less number, but I have shown half-hour spacing as being of average utility.

The operation of my device is as follows:—A card is selected for the given day and appointment noted thereon. The card is then applied to the disk 12 with the knot

7 protruding through the central opening of the card, as shown in Fig. 2 and the pins 5 passing through the card to insure the positive rotation thereof. The driving mechanism is then wound and the dial set to the proper time relative to the indicator 10'. Further appointments made from time to time may be noted on the card opposite the proper hour. As each appointment is noted the dog 16 of that space is pulled out until it projects beyond the periphery of the disk 12. As the disk rotates therefore it presents successively at the points 10' the appointment notices written thereon, and as they are presented the corresponding dog 16, which has been projected, engages the release lever 17 and permits the escapement of the train which actuates the hammer 50 of the annunciator bell 14. To stop the bell and acknowledge the announcement it is merely necessary to push in the dog 16 and so disengage the lever 17. The dial continues to rotate throughout the day successively presenting the notices written on the dial and successively ringing the bell for each. After the appointments for the day are completed the dial card is removed and the card for the next day is applied to the disk. The card removed may be preserved as a record and filed for future reference.

Various modifications in driving means and in dial and annunciating devices may be employed within the limits of the appended claims without departing from the spirit of my invention.

What I claim is:—

1. A device of the class described comprising a casing, a central shaft therein, means for rotating the shaft, a toothed portion mounted on the upper end of said shaft, a disk having a corresponding toothed portion mounted loosely on the upper end of the shaft, the said two toothed portions being adapted to engage with each other, and a knob on said disk whereby the disk may be removed from the shaft.

2. In a device of the class described comprising a casing, a shaft mounted therein, means for rotating the shaft, a disk removably carried by said shaft, posts mounted in the casing, and rollers carried by the ends of the posts on which the disk rolls.

3. In a device of the class described, a casing, a shaft mounted therein, means for rotating the shaft, a disk removably carried by said shaft, rollers supported in the casing on which the disk rolls, pins projecting from said disk, and a dial, and holes therein adapted to engage with said pins whereby the dial will be held on the disk.

4. In a device of the class described, a casing, a shaft mounted therein, a disk loosely mounted on the end of the shaft, a clutch connection between the disk and the shaft, a coiled spring in connection with the shaft for rotating the same, an alarm, a coiled spring for operating the alarm, means for normally preventing the alarm from operating, and movable releasable means on the disk for engaging with said means to cause the alarm to operate.

5. In a device of the class described, a casing, a shaft mounted therein, a disk loosely mounted on the upper end of the shaft, a clutch connection between the shaft and disk, a coiled spring, a shaft carrying the same, gearing between the said shaft and the first mentioned shaft, a key projecting through the casing for winding up the spring, an announcement dial removably carried by said disk, said dial having radial announcement spaces for receiving announcements, a radially movable tripper projectable beyond the periphery of said disk for each space, a stationary indicator adjacent the periphery of said disk, an annunciator, a coiled spring, a shaft carrying the same, a chain of gearing from the said shaft to the annunciator, a key projecting through the case for winding up said spring, a release for said annunciator comprising a two armed lever normally engaging with one of the gears for preventing movement thereof, and a second two armed lever having one end engaging with the first mentioned lever and its other end adjacent the said indicator and adapted to be engaged by said tripper.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHARLES GEORGE BEHRE.

Witnesses:

E. S. MITCHELL,
C. S. ASHLEY.