

C. G. BEHRE.
INDICATING ANNUNCIATOR.
APPLICATION FILED MAR. 8, 1909.

950,740.

Patented Mar. 1, 1910.

2 SHEETS—SHEET 1.

Fig. 1

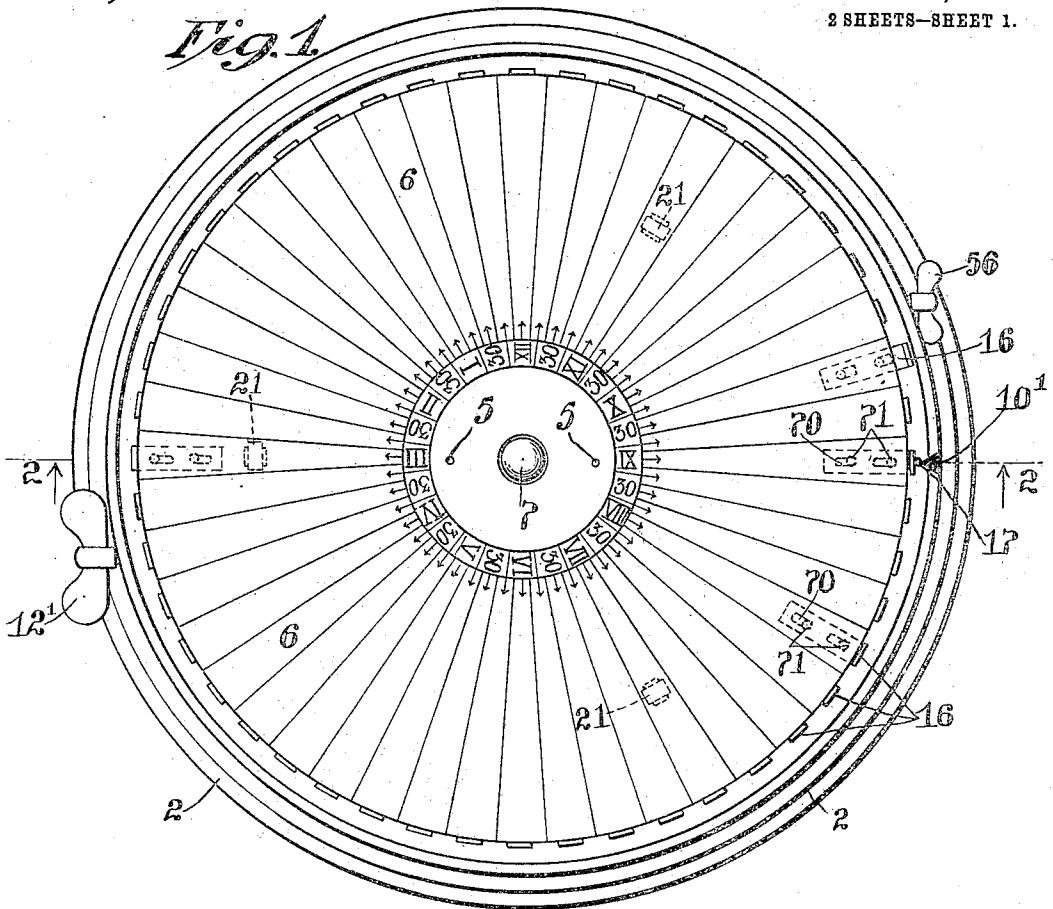
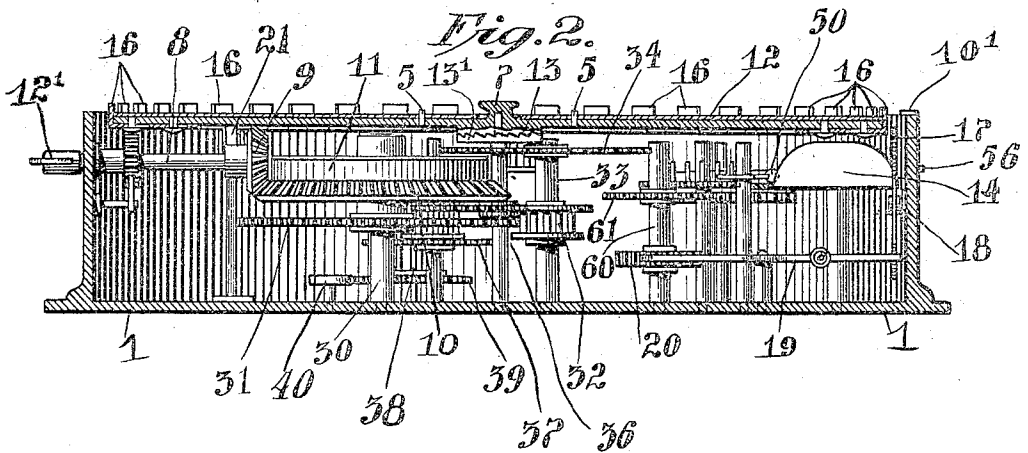


Fig. 2



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Inventor:
Charles Geo. Behre
by *[Signature]* Atty

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2 SHEETS—SHEET 2.

Fig. 3.

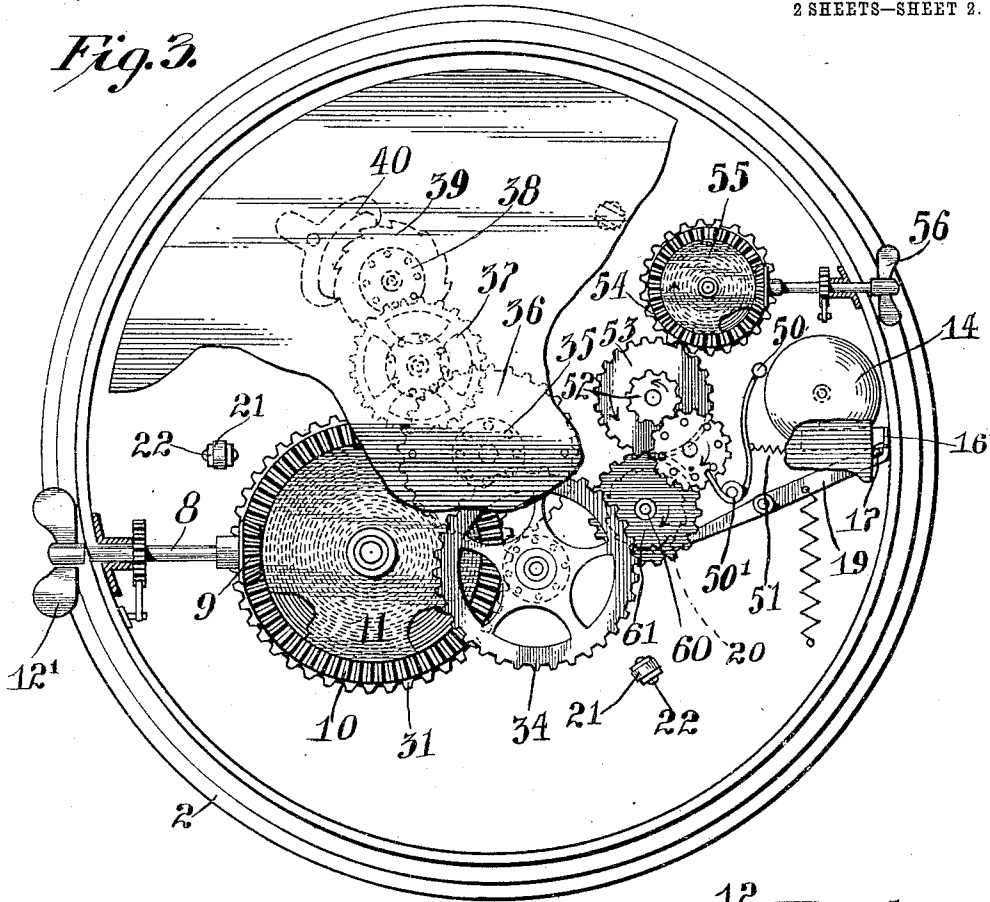


Fig. 4.

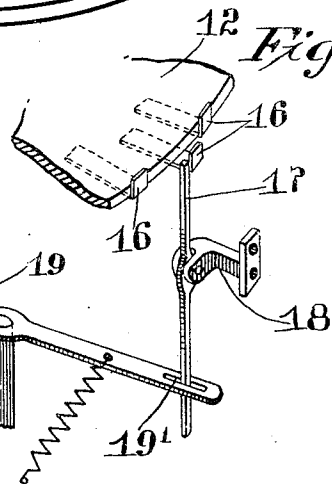
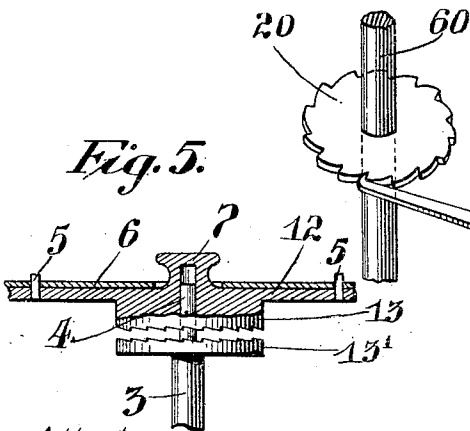


Fig. 5.



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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 53 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
5 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 op-
posite the proper hour. As each appoint-
10 ment is noted the dog 16 of that space is
pulled out until it projects beyond the
periphery of the disk 12. As the disk ro-
tates therefore it presents successively at
the points 10' the appointment notices writ-
15 ten thereon, and as they are presented the
corresponding dog 16, which has been pro-
jected, engages the release lever 17 and per-
mits the escapement of the train which
actuates the hammer 50 of the annunciator
20 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
25 throughout the day successively presenting
the notices written on the dial and succes-
sively ringing the bell for each. After the
appointments for the day are completed the
dial card is removed and the card for the
30 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 ap-
35 pended claims without departing from the
spirit of my invention.

What I claim is:—

1. A device of the class described com-
prising a casing, a central shaft therein,
40 means for rotating the shaft, a toothed por-
tion mounted on the upper end of said shaft,
a disk having a corresponding toothed por-
tion mounted loosely on the upper end of
the shaft, the said two toothed portions be-
45 ing 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 com-
prising a casing, a shaft mounted therein,
50 means for rotating the shaft, a disk re-
movably carried by said shaft, posts mount-
ed 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 55
rotating the shaft, a disk removably carried
by said shaft, rollers supported in the cas-
ing on which the disk rolls, pins projecting
from said disk, and a dial, and holes therein
adapted to engage with said pins whereby 60
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 65
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 70
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 75
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 pro-
jecting through the casing for winding up 80
the spring, an announcement dial remov-
ably carried by said disk, said dial having
radial announcement spaces for receiving
announcements, a radially movable tripper
projectable beyond the periphery of said 85
disk for each space, a stationary indicator
adjacent the periphery of said disk, an an-
nunciator, a coiled spring, a shaft carrying
the same, a chain of gearing from the said
shaft to the annunciator, a key projecting 90
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 hav- 95
ing one end engaging with the first men-
tioned lever and its other end adjacent the
said indicator and adapted to be engaged by
said tripper.

In testimony whereof I have signed my 100
name to this specification in the presence of
two subscribing witnesses.

CHARLES GEORGE BEHRE.

Witnesses:

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