Feb. 22, 1927

1,618,921

S. B. FORD, JR

RADIODIAL

Filed May 20, 1925

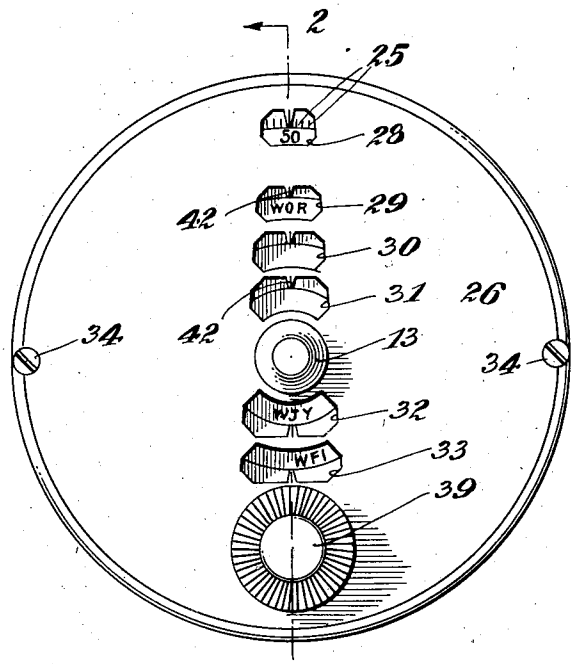


Fig. 1.

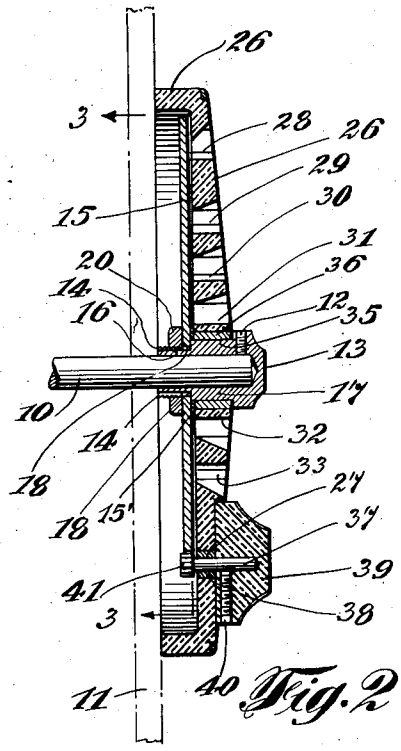


Fig. 2.

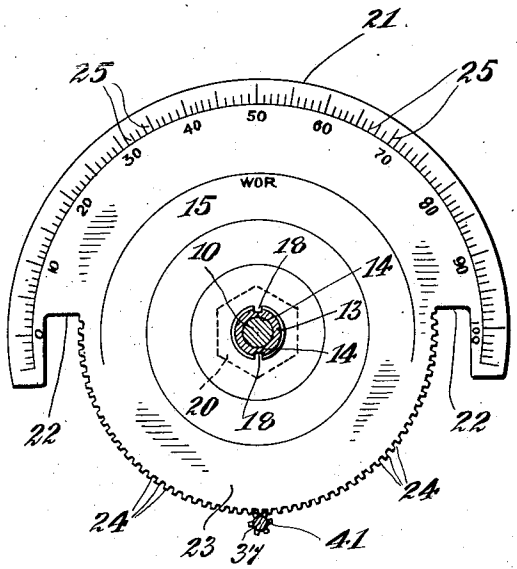


Fig. 3.

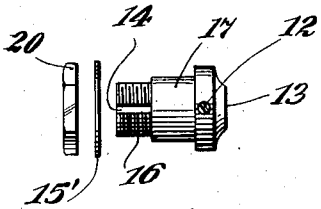


Fig. 4.

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UNITED STATES PATENT OFFICE.

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RADIODIAL.

Application filed May 20, 1925. Serial No. 31,594.

My invention relates to radio devices and refers particularly to devices adapted for the tuning in of broadcasted radio wave lengths.

Devices of the character described must be simple in construction, effective in operation, positive and delicate in manufacture and should be attractive in appearance.

The device of my invention possesses all of the above, and other, advantageous features, as will be evident upon a consideration of my specification and its accompanying drawings.

My device presents, in a general way, a device whereby radio broadcasting stations may be accurately tuned in and whereby the name of the station may be recorded by the operator so that future operations may be controlled by either the wave length of the station, as indicated by the scale graduations, or by the name of the station itself.

In the accompanying drawings illustrating one form of the device of my invention, similar parts are designated by similar numerals.

Figure 1 is a front view of one form of the device of my invention.

Figure 2 is a cross-section through the line 2—2 of Figure 1.

Figure 3 is a cross-section through the line 3—3 of Figure 2.

Figure 4 is the un-assembled elements of the disc retaining means.

The particular form of my device illustrated in the accompanying drawings comprises a shaft 10 revolubly carried by the panel 11. Fixedly attached to the shaft 10 by means of the set screw 12 is a hub casing 13, having a plurality of slot recesses 14, 14. A disc 15 having a central opening for the shaft 10 and the annular portion 16 of the hub casing 13, abuts upon the shoulder 17 of the casing 13, the tongues 18, 18 of the disc, or dial 15, filling in the slots 14, 14 of the casing 13 and keying the disc 15 to the hub casing 13. The disc 15 is prevented from longitudinal movement by the threaded nut 20 thereunder upon the threaded portion 16 of the hub casing 13.

The disc 15 is of a broken circular shape, a portion of the lower periphery being removed, leaving the arc-portion 21. The disc 15 has the two recesses 22, 22 and the arc 23 carrying the cogs, or teeth 24, 24. The arc-portion 21 carries a plurality of numbered graduations 25, 25. The front face of the disc 15 is made of, or covered with, some material capable of receiving pencil, or ink markings, for purposes to be described later.

Covering the face of the disc 15 and extending somewhat below the same is a cover 26 having a circular opening 27 and a plurality of openings 28, 29, 30, 31, 32 and 33. This cover 26 is fixedly attached to the panel 11 by means of screws 34, 34. The cover 26 has also an opening 35 through which the hub casing 17 passes, a bushing 36 being between the casing 17 and the cover 26 and a spacing bushing 15′ as indicated.

A shaft 37 passes through the opening 27 of the lower portion of the cover 26 and revolves within the bushing 38. A finger crown 39 is fixedly attached to the outer end of the shaft 37 by means of the set-screw 40 and a differential gear 41, meshing with the cogs, or teeth, 24, 24 is fixedly attached to the inner extremity of the shaft 37.

The operation of the device, as illustrated, is as follows:—

The finger crown 39 is turned, which in turn revolves the disc 15 until a broadcasting station is tuned in, when designating marks indicating the initials, or name, of the station are written with pencil, or pen, upon the face of the disc 15 exposed through one of the openings 29, 30, 31, 32 or 33. The graduation reading 25 corresponding to the station shows through the opening 28 of the cover 26. Each opening of the cover is so shaped that a central portion 42 thereof will point to the center of the station name when it is properly tuned in.

It will be seen, therefore, from the above that by means of my device, a station may be turned in by either the proper scale graduation or the name of the station, and that the names of the stations may be properly recorded upon the disc by the operator, and changed from time to time, if necessary, by simply erasing the incorrect station name, or station name position, and writing in the proper one.

It will be further seen, that the entire scale graduations are invisible except those which are approximate to the desired one, thus making the scale reading easier, and that stations may be tuned in without reference to their wave lengths as indicated upon the scale.

It will be further noted that fine variations in wave lengths may be made because

of the comparative diameter of the two intermeshing gears.

It will be further noted that my device is attractive in appearance as all moving parts are concealed from view and that the operation of the device is accomplished by the revolution of the finger 39.

My device, therefore, presents an attractive, simple and effective means for tuning in upon broadcasted wave lengths with simplicity of operation and accuracy of results.

I do not limit myself to the particular size, shape, number or arrangement of parts illustrated and described, as these are given simply as a means for clearly explaining the device of my invention.

What I claim is:—

1. In a radio dial in combination, a panel; a revoluble shaft passing through and revoluble in said panel; a disc fixedly attached to said shaft external of the panel having graduations upon a portion of its periphery, having designating marks upon a portion other than its periphery and carrying a plurality of teeth; a fixed cover for said disc and external thereof, having a plurality of radially positioned openings through one of which a portion of the disc graduations is visible and through one of which a designating mark is visible, and means exterior of the cover meshing with the disc teeth whereby the disc can be revolved.

2. In a radio dial, in combination, a panel, a revoluble shaft passing through and revoluble in said panel; a disc capable of receiving pencil markings fixedly attached to said shaft external of the panel and having graduations upon its periphery and carrying a plurality of teeth; a fixed cover for said disc and external thereof fixedly attached to the panel and having a plurality of radially positioned openings therein, through one of which a portion of the disc graduation is visible, and through one of which a penciled designating mark upon the disc is visible, a second revoluble shaft, a gear carried by the second shaft meshing with the disc teeth and means external of the device whereby the second shaft can be revolved.

3. In a radio dial, in combination, a revoluble disc carrying graduations and designating marks, a fixed cover for the disc having a plurality of openings therein through one of which a portion of the graduations are visible and through one of which a designating mark is visible, and means external of the device whereby the disc can be revolved.

4. In a radio dial, in combination, a revoluble disc capable of receiving pencil markings and carrying graduations, a fixed cover for the disc having a plurality of radially positioned openings therein through one of which a portion of the graduations are visible, and through one of which a penciled designating mark upon the disc is visible, and differential means for revolving the disc.

Signed at New York city in the county of New York and State of New York this 15th day of May, 1925.

SETH B. FORD, JR.