Nov. 18, 1930. C. SCHEIBEL 1,782,368

RADIO TUNING MECHANISM

Filed Aug. 13, 1930 2 Sheets-Sheet 1

Fig. 1.

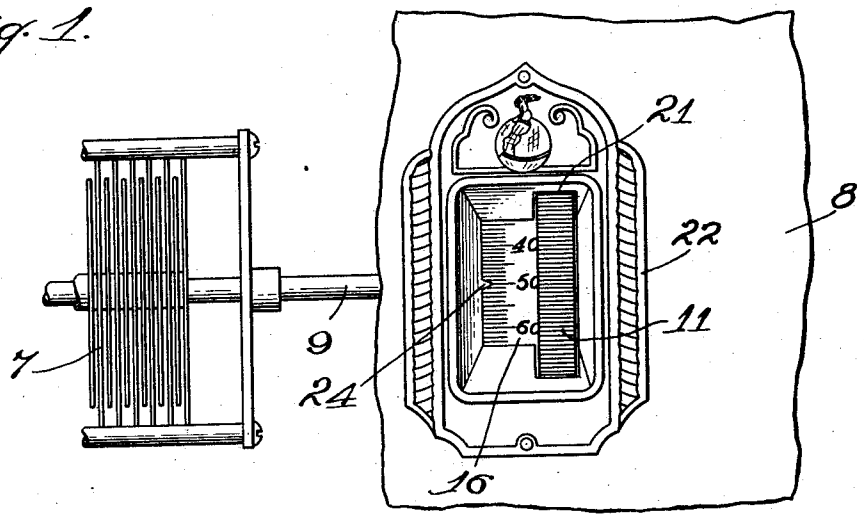
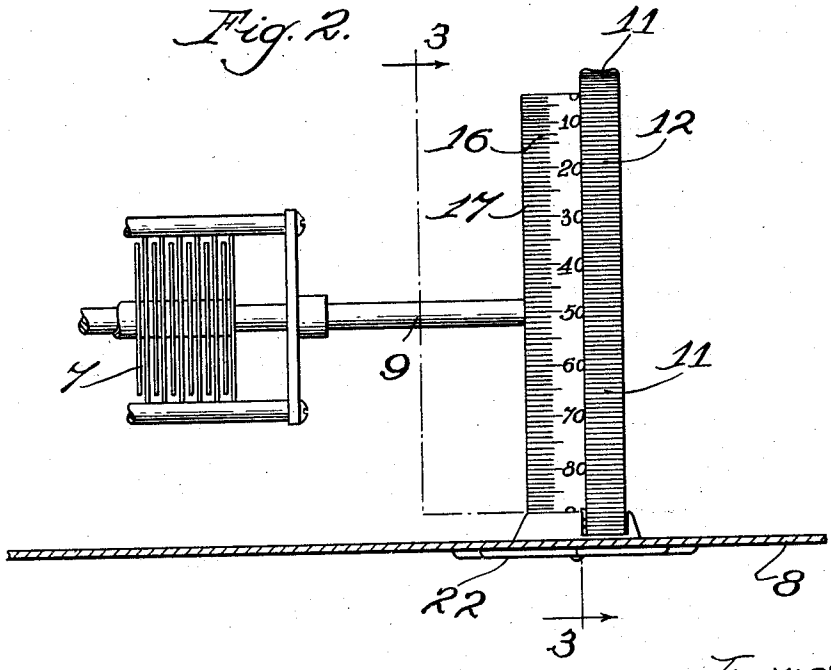


Fig. 2.



Inventor.
Charles Scheibel.
By Dyrenforth, Lee, Chritton & Wiles
Attys.

Nov. 18, 1930. C. SCHEIBEL 1,782,368

RADIO TUNING MECHANISM

Filed Aug. 13, 1930 2 Sheets-Sheet 2

Fig. 3.

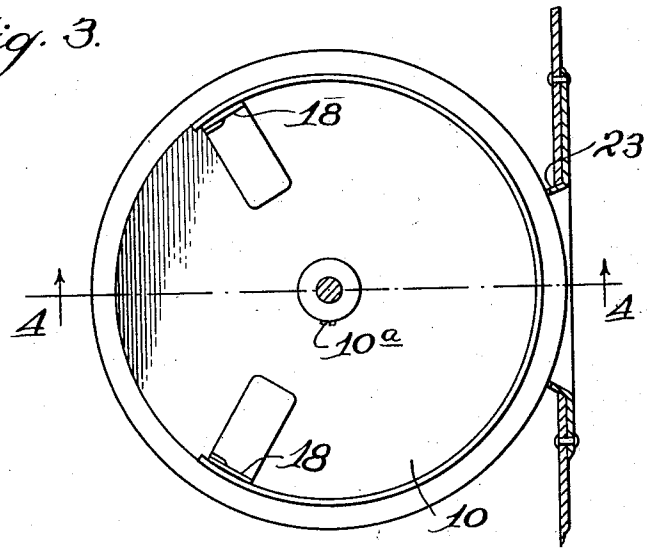


Fig. 4.

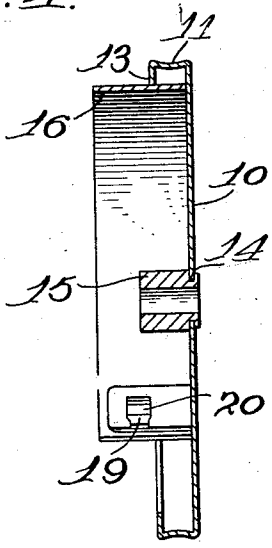


Fig. 5.

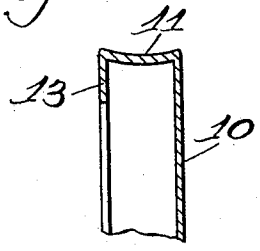
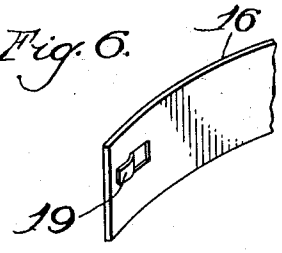


Fig. 6.



Inventor.
Charles Scheibel.
By Dyer, Foith, Lee, Christton & Kills.
Attys.

Patented Nov. 18, 1930

1,782,368

UNITED STATES PATENT OFFICE

CHARLES SCHEIBEL, OF CHICAGO, ILLINOIS, ASSIGNOR TO CROWE NAME PLATE & MANUFACTURING CO., OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS

RADIO TUNING MECHANISM

Application filed August 13, 1930. Serial No. 475,025.

My invention relates, more particularly, to radio-tuning mechanism of the rotary dial type and in which the dial is mounted for rotation about an axis extending substantially parallel with the front panel of the casing of the radio-receiving apparatus and is actuated by manual force applied to it at its peripheral edge.

My primary objects, generally stated, are to provide a novel, simple and inexpensive construction of scale-dial of the type stated; to provide a construction of such form as to adapt it for greater ease of accurate positioning rotatably about its axis; to provide a novel, and simple means for securing the scale strip to the disk portion of the dial device; and other objects as will be manifest from the following description.

Referring to the accompanying drawings:

Figure 1 is a fragmentary front view of a radio-receiving apparatus equipped with a dial embodying my invention.

Figure 2 is a plan sectional view taken through the radio-receiving apparatus showing my improved dial and the condenser connected therewith and operated by said dial, in plan.

Figure 3 is a section taken at the irregular line 3—3 on Fig. 2 and viewed in the direction of the arrow.

Figure 4 is a sectional view of the dial taken at the line 4—4 on Fig. 3 and viewed in the direction of the arrows.

Figure 5 is a sectional view taken through the peripheral portion of the dial; and

Figure 6 a perspective view of one end of the scale-strip forming a part of the dial device.

In the drawings I have shown my improved scale-dial for controlling the operation of condenser mechanism, of radio-receiving apparatus, represented at 7 and shown partly broken away, a portion of the front panel of the casing of the apparatus being shown at 8, the shaft of the condenser mechanism being shown at 9.

My improved scale-dial comprises a sheet-metal circular disk 10 having extending laterally therefrom a peripheral annular rim 11 of concavo-convex shape in cross-section with its concave surface, which is exposed at the outer surface of the rim, knurled as represented at 12, the edge of the rim opposite that at which it is connected with the disk 10 being provided with an inwardly extending annular flange 13 forming a shoulder, the disk 10, rim 11 and flange 13 being preferably formed integrally as by forming them from a single sheet of metal.

The center of the disk 10 is apertured as represented at 14 in which a tubular member 15 is secured, the dial thus being adapted for connection with the shaft 9 by sliding it over the latter, a set-screw 10^a on the dial and engaging the shaft holding the dial rigidly on the shaft.

The scale-dial also comprises a member presenting a scale calibrated as is customary in radio receiving apparatus and cooperating with a stationary pointer to guide the operator in rotatably adjusting the condenser to the desired position.

The scale-equipped member referred to is in the form of a strip 16 of metal or other suitable material presenting on a face thereof the scale referred to and represented at 17.

The scale-member 16, preferably of sheet metal, is positioned to extend at its outer scale-equipped face flatwise against the inner edge of the flange 13 and preferably at its inner edge against the face of the disk 10 adjacent the flange 13, the member 16 being held stationarily on the disk 10 by lugs 18 extending laterally from the disk 10, these lugs being shown as formed of tongues partially cut from the metal of the disk 10 and bent to extend at a right-angle thereto.

The member 16 bears flatwise against the outer surfaces of the lugs 18 and is shown as connected therewith by tougues 19 partially cut from the metal of the member 16 at its end portions and bent to extend through openings 20 in the lugs 18 and underlie the inner surfaces of the lugs as shown.

The tongues 19 preferably are so disposed, as shown, that when bent back into position to interlock with the lugs 18, they extend in opposite directions toward the adjacent ends of the member 16, and the lugs 18 and tongues 19 are so relatively disposed that in bending

the tongues 19 to the interlocking condition above-referred-to they exert a pushing force on the ends of the member 16 toward the middle of the strip causing this member to snugly conformingly fit against the inner edge of the flange 13.

The dial which is thus positioned substantially at a right angle to the panel 8 registers with, and projects into, an opening 21 in an escutcheon plate 22 secured to the front face of the panel at an opening 23 in the latter, whereby the peripheral edge of the dial is rendered accessible for engagment by the operator for actuating the condenser.

The opening 21 is so shaped as shown in Fig. 1 that it registers with the scale-portion 16 of the dial for exposing the latter to view, the pointer hereinbefore referred to for cooperation with the scale being provided on the escutcheon 22 and represented at 24.

A dial thus constructed is not only of simple and inexpensive construction, but the provision of the outer surface of the rim-portion 11 of concave form ensures a more accurate fingering of the dial.

While I have illustrated and described a particular construction embodying my invention I do not wish to be understood as intending to limit it thereto as the same may be variously modified and altered without departing from the spirit of my invention.

What I claim as new, and desire to secure by Letters Patent, is:

1. A radio drum tuning dial having a concaved peripheral edge.

2. A radio drum tuning dial having a concaved knurled peripheral edge.

3. A radio drum tuning dial comprising a disk of sheet material provided with a rim, and a flange extending inwardly from said rim toward the central axis of said disk.

4. A radio drum tuning dial comprising a disk having an arc shaped shoulder at one side of said disk, lugs projecting from said disk at said side, a scale-strip, and means for attaching said strip to said lugs operative, in the act of attaching said strip to said lugs, to force said strip into close engagement with said shoulder.

5. A radio drum tuning dial comprising a disk having an arc shaped shoulder at one side of said disk, lugs projecting from said disk at said side, a scale-strip, and tongues on said strip for interlock with said lugs.

6. A radio drum tuning dial comprising a disk having an arc shaped shoulder at one side of said disk, lugs projecting from said disk at said side, a scale-strip, and bendable tongues on said strip for interlock with said lugs, said tongues being so disposed that they operate when bent to attaching position relative to said lugs, to force said strip into engagement with said shoulder.

7. A radio drum tuning dial comprising a disk of sheet material provided with a rim, and a flange at the outer edge of said rim and extending inwardly toward the central axis of said disk.

8. A radio drum tuning dial comprising a disk of sheet material provided with a rim, and a flange extending inwardly from said rim toward the central axis of said disk and spaced from the body portion of said disk.

CHARLES SCHEIBEL.