July 9, 1929. L. G. HALLETT 1,720,648

TUNING DEVICE FOR RADIOS

Filed April 28, 1927 2 Sheets-Sheet 1

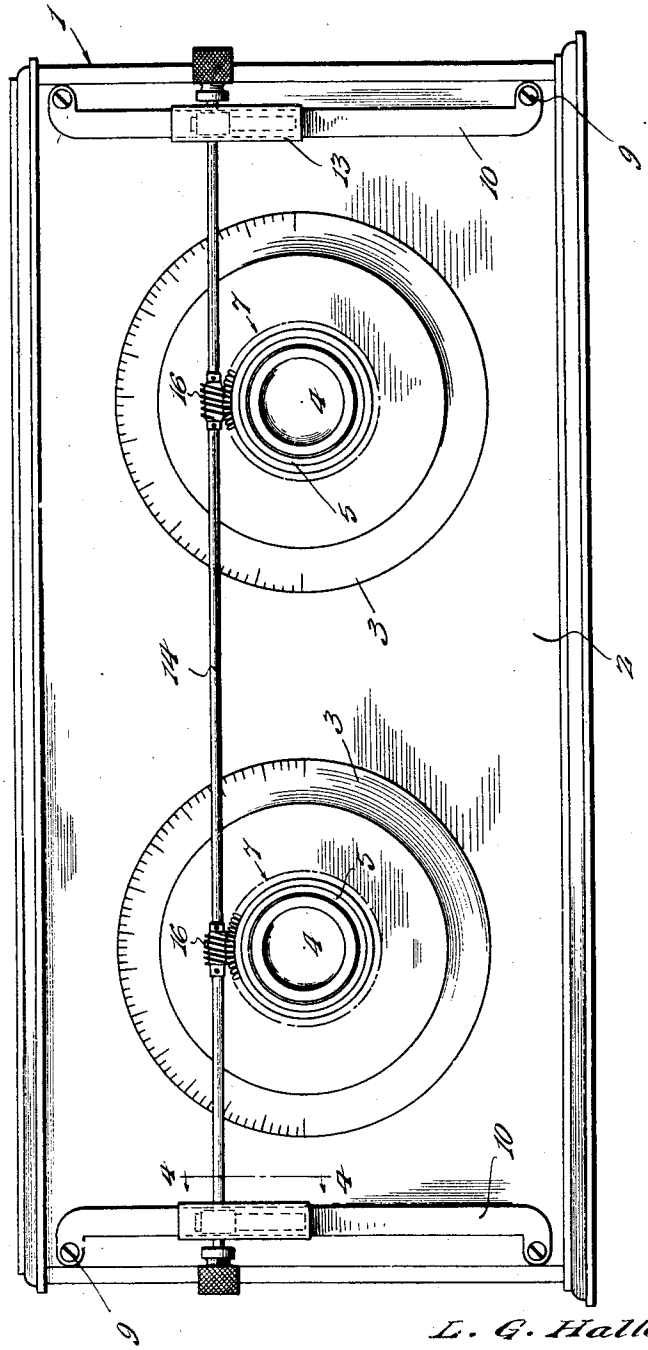


Fig. 1.

Inventor

L. G. Hallett.

By Lacey & Lacey, Attorneys

July 9, 1929. L. G. HALLETT 1,720,648

TUNING DEVICE FOR RADIOS

Filed April 28, 1927 2 Sheets-Sheet 2

Fig. 2.

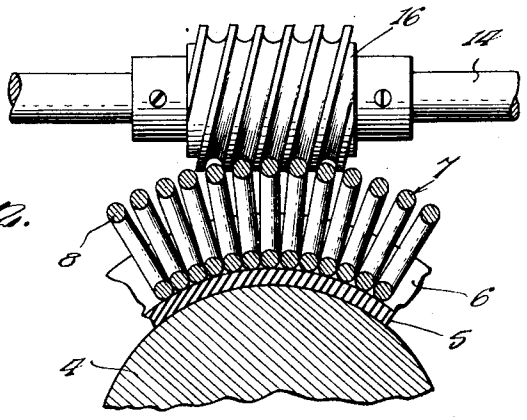


Fig. 3.

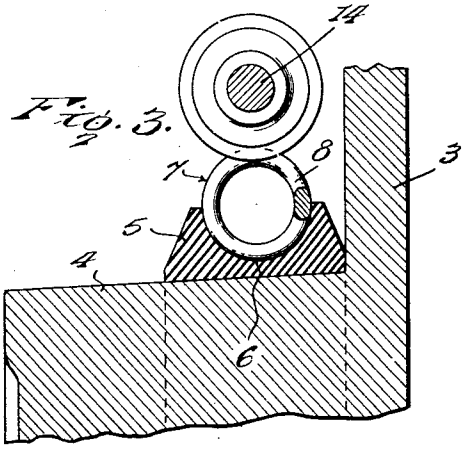


Fig. 4.

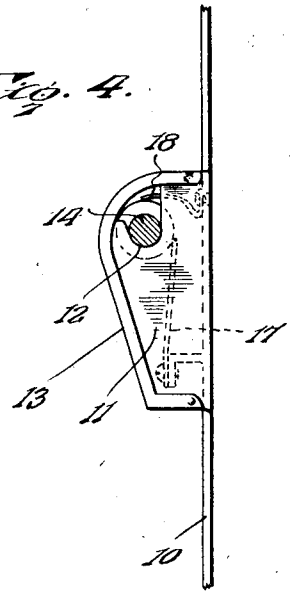
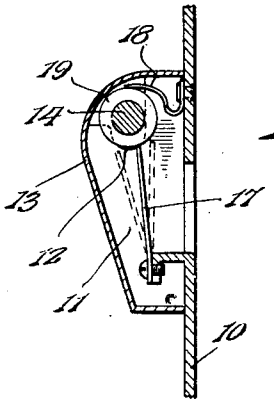


Fig. 5.



Inventor

L. G. Hallett.

By Lacey & Lacey, Attorneys

Patented July 9, 1929. 1,720,648

UNITED STATES PATENT OFFICE.

LYLE G. HALLETT, OF FOREST CITY, IOWA.

TUNING DEVICE FOR RADIOS.

Application filed April 28, 1927. Serial No. 187,279.

The present invention is directed to improvements in devices for tuning radio receiving sets.

The primary object of the invention is to provide a device of this character so arranged that a plurality of tuning dials may be rotated simultaneously or singly.

Another object of the invention is to provide a device of this kind which can be conveniently attached to the cabinet of the receiving set and capable of being easily and quickly moved to a position for operating the tuning dials in unison or moved to a position to permit the dials to be operated independently.

With these and other objects in view, this invention resides in novel features of construction, formation, combination and arrangement of parts to be hereinafter more fully described, claimed and illustrated in the accompanying drawing, in which,—

Figure 1 is a front elevation of a radio receiving cabinet, showing the device in place thereon.

Figure 2 is a detail view of the dial turning gear, partly in elevation.

Figure 3 is a transverse sectional view through the dial turning gear.

Figure 4 is a sectional view on line 4—4 of Figure 1.

Figure 5 is a vertical, central sectional view through the shaft controlling spring.

Referring to the drawings, 1 designates a cabinet and 2 the panel thereof, upon which are mounted tuning dials 3, two of which are shown. The dials are provided with turning knobs 4 of conventional form and engaged thereon are elastic collars 5 formed with annular grooves 6 and confined in said grooves are coils 7, the helices of which constitute gear teeth 8.

Supported upon the panel 2 by screws 9 which hold the panel on the cabinet, are brackets 10 having bearings 12 in their upper edges, there being casings 13 confining said plates.

A shaft 14 is provided and has its ends journaled in the bearings 12, there being knobs 15 upon the extreme outer ends of the shaft to facilitate the rotation thereof, said shafts having fixed thereon worm gears 16—16 adapted to mesh with the teeth 8 of the respective coils 7 in order to impart rotary movement simultaneously to the dials 3 when the shaft 14 is rotated.

The bracket 10 has fixed thereto the lower ends of leaf springs 17, and spring fingers 18, said springs and fingers being located between the plates 11.

As shown in Figure 1 the worm gears are engaged with the coils 7 and when thus engaged rotary motion of the shaft will obviously rotate both dials in unison. The shaft 14 is provided at points between the plates 11 with rubber sleeves 19 and against which the upper ends of the leaf springs 17 rest when both dials are being rotated. When it is desired to rotate the dials independently the shaft 14 is elevated by turning the shaft 14 in opposite directions, as shown in Figure 5, whereupon the leaf springs 17 will flex outwardly in order that their upper terminals will engage the under surface of the sleeves 19, thus holding the shaft elevated and the worm gears 16—16 out of mesh with the coils 7. The spring fingers 18 will yieldably engage the sleeves 19 when the shaft is elevated or is occupying the bearings 12.

Since the collars 5 are capable of being slipped upon the tuning dial knobs 4, and the brackets can be attached to the panel of the cabinet with the usual securing screws 9, it is obvious that the device can be readily applied to a radio cabinet already in use, and thus is in the nature of an attachment.

Having thus described the invention, I claim:

1. The combination with a radio receiving cabinet including a panel, of tuning dials rotatably mounted on the panel, knobs carried by the dials, elastic collars removably engaged with the knobs and having coils carried thereby, a shaft supported upon the panel and having worm gears thereon, said shaft being adjustable to cause the engagement of the worm gears with the coils, or disengagement therefrom, said shaft being adapted to be rotated to impart rotary movement simultaneously to the coils and thus the dials.

2. The combination with a radio receiving cabinet including a panel, tuning dials rotatably mounted upon the panel and including knobs, elastic collars detachably mounted upon the knobs, coils engaged upon the collars and constituting teeth, a shaft mounted upon the panel and having worm gears carried thereby adapted to mesh with the teeth of the coils to impart rotary movement to the coils and thus the dials upon rotation of the shaft.

3. The combination with a radio receiving cabinet including a panel, of tuning dials ro-

tatably mounted thereon, a shaft supported by the panel, sleeves upon the shaft, means carried by the shaft for simultaneously rotating the dials, and leaf springs carried by the shaft supporting means for engagement with the sleeves to maintain the shaft elevated to permit independent rotation of the dials.

4. The combination with a radio receiving cabinet including a panel, of tuning dials rotatably mounted thereon, and including knobs, elastic collars removably engaged in the knobs and having annular grooves formed therein, coils confined in said grooves and constituting teeth, a shaft, said shaft having worm gears fixed thereto and adapted to engage the teeth formed by the helices of said coils, means carried by the panel for holding the shaft and thus the worm gears elevated and out of engagement with said coils to permit independent rotation of the dials.

In testimony whereof I affix my signature.

LYLE G. HALLETT. [L. S.]