

July 1, 1930.

B. W. LEE

1,769,439

RADIO DIAL

Filed Aug. 22, 1929

2 Sheets-Sheet 1

Fig. 1.

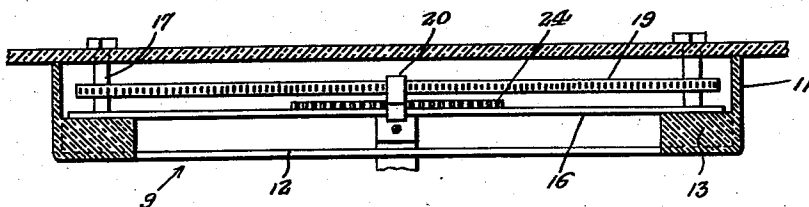
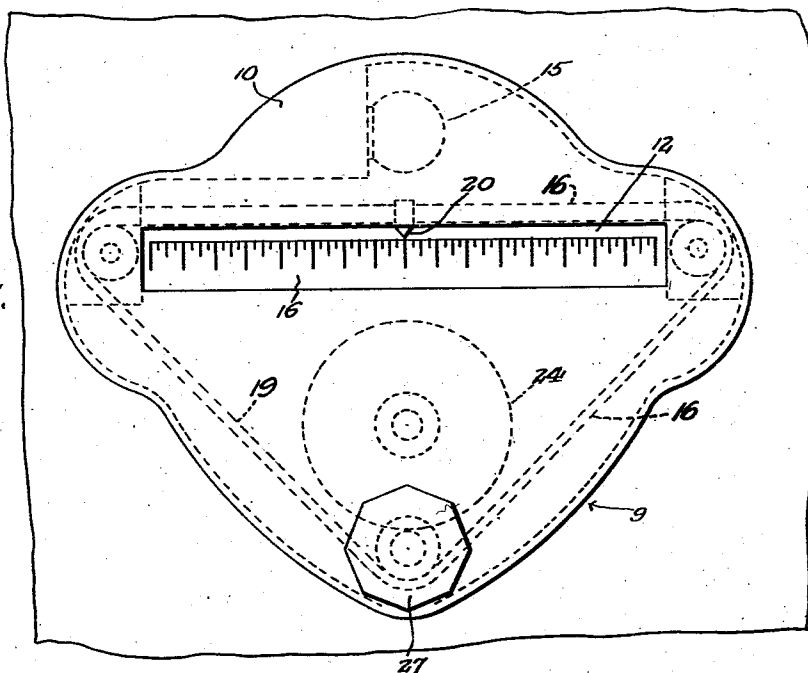


Fig. 2.

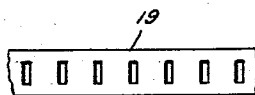


Fig. 7.

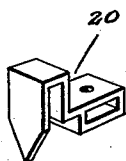


Fig. 8.

Inventor

Bing W. Lee,

By Clarence A. O'Brien
Attorney

July 1, 1930.

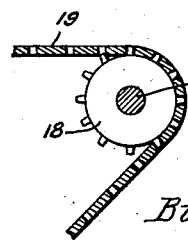
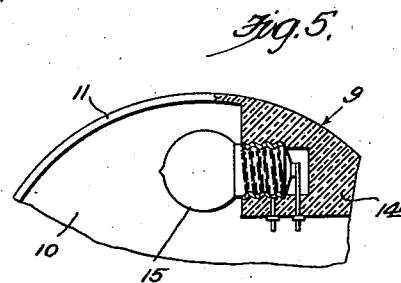
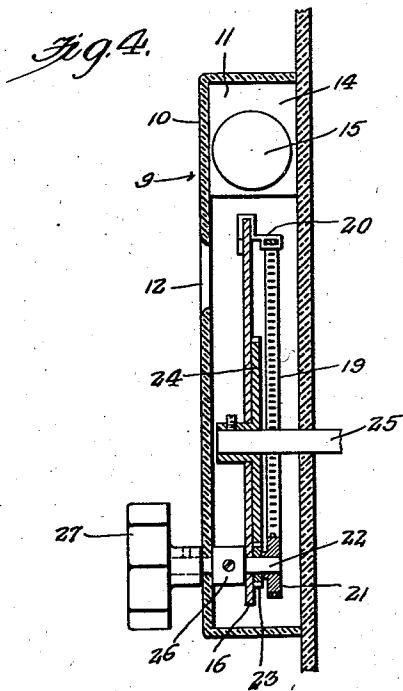
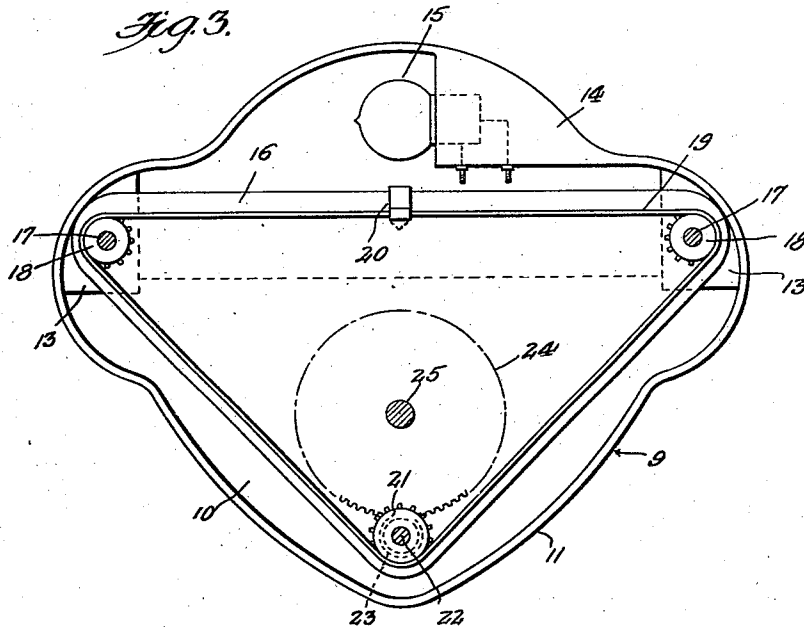
B. W. LEE

1,769,439

RADIO DIAL

Filed Aug. 22, 1929

2 Sheets-Sheet 2



Inventor

Bing W. Lee,

By

Clarence A. O'Brien,

Attorney

UNITED STATES PATENT OFFICE

BING W. LEE, OF ROCKFORD, ILLINOIS

RADIODIAL

Application filed August 22, 1929. Serial No. 387,733.

This invention relates to an improved radio dial of the full vision type which is expressly intended for use in connection with present day types of radio receiving sets.

In carrying the invention into practice, I have evolved and produced a simplified and economical dial construction characterized by two main parts; namely, an ornate shell or casing preferably of bakelite or the like, and a frame mounted in said casing and constituting a support for the internal operating mechanism.

The particular details and their relative arrangement and association will become more readily apparent from the following description and drawings.

In the drawings:

Figure 1 is a front elevational view of a dial constructed in accordance with the present invention.

Figure 2 is a horizontal section through the same.

Figure 3 is an inside view of the structure.

Figure 4 is a vertical sectional view.

Figure 5 is a fragmentary view showing the electric bulb socket.

Figure 6 is a sectional view showing the sprocket structure.

Figure 7 is a fragmentary view of a portion of the sprocket band.

Figure 8 is a perspective view of the pointer or indicator.

In carrying the invention into effect, I provide a casing or shell which is made of some light weight material such as, for example, bakelite or the like. The shell is generally designated by the reference character 9 in Figure 1 and includes an ornamental face portion 10 and the correspondingly shaped rim portion 11. The reference character 12 designates a horizontally elongated slot which functions as a sight opening or window.

On opposite points the shell is thickened on its interior to provide spacing and reinforcing corner blocks 13 as seen in Figure 2. Then as shown in Figures 3 and 5, the material is also thickened and shaped as at 14 to provide a screw-threaded mounting socket for a miniature illuminating bulb or light 15.

The frame structure can be seen by inspect-

ing Figures 2, 3 and 4. For instance, as shown in Figure 3, the frame structure comprises a substantially triangular plate 16 whose upper edge portion is provided with graduations which are exposed through the sight opening and arranged to show the station by wave length or kilocycle, whichever is preferred.

On opposite corners, this plate 16 is provided with rotary shafts 17 carrying small sprocket wheels 18 over which the sprocket band 19 is trained. This band constitutes a mounting or carrier for the indicator 20 which is constructed as seen in Figure 8. This includes a depending pointer which is located to cooperate with the graduations on the scale plate so that the position of the indicator can be easily seen through the sight opening.

In this connection, it will be observed that the plate 16 bears against the spacing corner blocks 13 as seen in Figure 2. Referring now to Figure 4, it will be seen that the reference character 21 designates a third sprocket which is mounted on the operating shaft 22. This shaft is also provided with a smaller pinion 23 which meshes with the teeth of a turning gear 24. The turning gear is fastened on the condenser operating shaft 25. The reference character 26 designates merely a spacing collar and 27 an exteriorly located operating knob.

Thus the knob serves to turn the shaft 22 and the shaft with its master sprocket 21 and pinion 23 serves to simultaneously operate the band 19 and 24 respectively. This action moves the indicator in conjunction with the condensers to accurately show the station tuned.

It is thought by considering the description in connection with the drawings, a clear understanding of the construction, method of attachment, operation, and features and advantages of the improved full vision dial will be had. Therefore, a more lengthy description is regarded unnecessary.

Minor changes in shape, size, materials and rearrangement of details coming within the field of invention claimed may be resorted to in actual practice if desired.

I claim:

1. As a new product of manufacture, a

unit for use and association with a casing of the class described comprising a substantially triangular mounting plate having its upper edge portion provided with scale graduations, a plurality of shafts mounted for rotation on the corner portions of said plate, sprockets carried by said shafts, and a turning knob carried by one shaft, an operating pinion also carried by said one shaft, an endless sprocket band trained over said sprockets, an indicator carried by said band and co-operable with said graduations, and a conductor shaft gear associated with said scale plate and in mesh with said pinion.

2. As a new product of manufacture, a unit for use and association with a casing of the class described comprising a substantially triangular mounting plate having its upper edge portion provided with scale graduations, a plurality of shafts mounted for rotation on the corner portions of said plate, sprockets carried by said shafts, and a turning knob carried by one shaft, an operating pinion also carried by said one shaft, an endless sprocket band trained over said sprockets, an indicator carried by said band and co-operable with said graduations, and a conductor shaft gear associated with said scale plate and in mesh with said pinion, said casing comprising a hollow enclosure of ornamental configuration having a horizontally disposed sight opening through which the scale graduations are visible.

In testimony whereof I affix my signature.

BING W. LEE.