Oct. 10, 1933. A. S. GREENWOOD 1,929,582

DIAL CONSTRUCTION

Filed March 24, 1932

Fig. 1

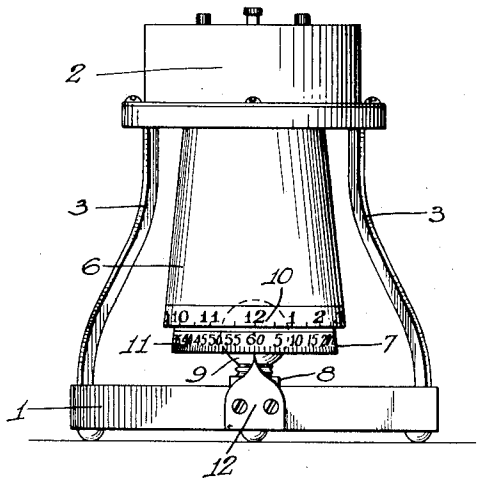


Fig. 3

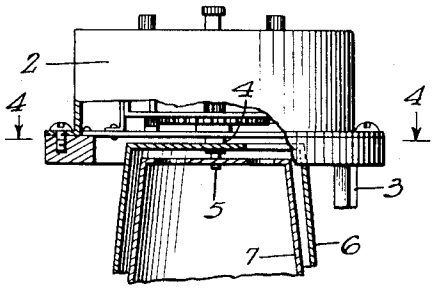
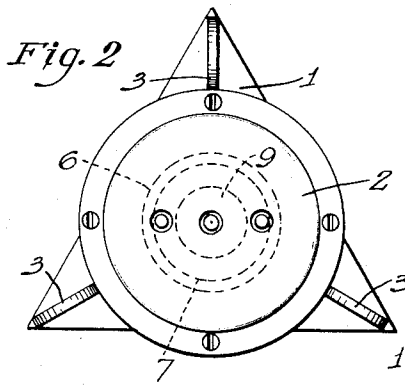


Fig. 2



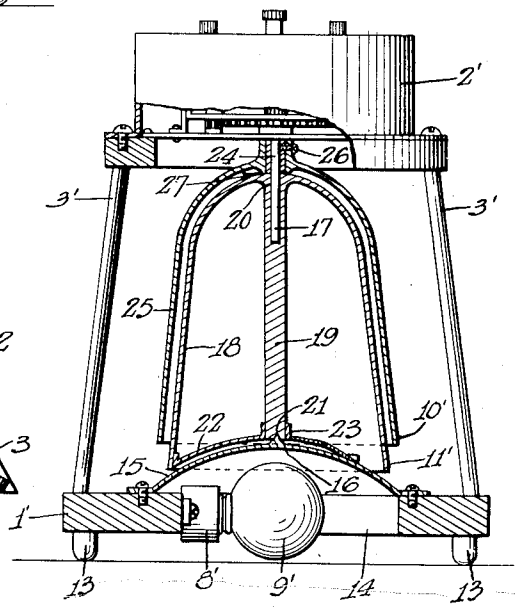
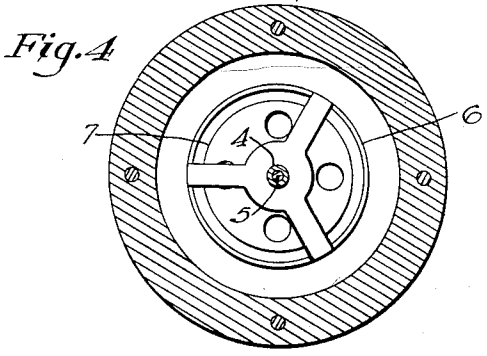


Fig. 5

Fig. 4



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UNITED STATES PATENT OFFICE

1,929,582

DIAL CONSTRUCTION

Alexander S. Greenwood, Chicago, Ill.

Application March 24, 1932. Serial No. 601,033

2 Claims. (Cl. 58—50)

My invention relates to improvements in dial constructions, and it consists in the combinations, constructions, and arrangements herein described and claimed.

An object of my invention is to provide a dial construction which is particularly adapted for use on clocks, radio receiving sets, meters, and other devices utilizing calibrated scales.

Another object is to provide a dial construction of the class described particularly adapted to add to the appearance of the device or instrument to which it is attached.

A further object is to provide a transparent or translucent dial construction of the class described which is provided with a lamp, the rays of which illuminate the scales of the dial construction.

A further object is to provide an illuminated clock means which may also serve as a night lamp.

Other objects and advantages will appear in the following specification, and the novel features of the invention will be particularly pointed out in the appended claims.

My invention is illustrated in the accompanying drawing, forming part of this application, in which

Figure 1 is an elevational view of a combination clock and lamp construction embodying my invention,

Figure 2 is a top plan view of the same,

Figure 3 is an enlarged detailed view partly in section of the upper portion of the construction shown in Figure 1,

Figure 4 is a section taken along the line 4—4 of Figure 3, and

Figure 5 is an elevational view partly in section showing a modified form of my invention.

In carrying out my invention I provide a base 1 and a clock 2. The clock is supported well above the base 1 by a plurality of legs 3 which are carried by the base. The clock 2 is provided with an hour hand shaft 4 and a minute hand shaft 5. Inverted cup-like dial members 6 and 7 are rigidly secured to the shafts 4 and 5, respectively, and are suspended therefrom one within the other, substantially as shown.

An electric socket 8 is mounted on the base directly beneath the shafts 4 and 5 and is provided with an electric light bulb 9. The dial members 6 and 7 are made of any suitable translucent or transparent material. It will be noted that the dial member 7 is concentrically positioned within the dial member 6 and that its lower end extends slightly below the lower end of the dial member 6. The dial member 6 is provided with an hour scale 10 and the dial member 7 is provided with a minute scale 11. Each of these scales is positioned near the lower end of their respective dials and may be arranged substantially as shown.

The base is provided with a pointer 12 for indicating the angular position at which the dials are set so that the time can be correctly read from the dials. In Figure 1 the position of the dials with respect to the pointer is such that they indicate exactly twelve o'clock. The socket 8 may of course be operatively connected to any suitable electric light circuit.

In Figure 5, I have shown a modified form of my invention. In this form a base 1' is provided which is supported by short legs 13 so as to raise the base above the level of its support. The base 1' is provided with a central opening 14 adapted for receiving a socket member 8' and an electric light bulb 9'.

It will be noted that in this model the central axis of the socket and the bulb 9' lies in a vertical plane. A transparent dome-shaped means 15 is mounted on the base and extends over the central opening 14. The central portion of the dome-shaped means is provided with a bearing 16. The base 1' carries legs 3' upon which is supported the clock 2'. The clock 2' is provided with a minute hand shaft 17.

Slidably mounted on the shaft 17 is a bell-like dial member 18 which is provided with a centrally disposed rod 19 which may be integral with the dial member 18. The upper portion of the dial member 18 and the rod 19 is recessed, as is indicated at 20, to receive the minute hand shaft 17. The shaft and the recessed portion may each be angular in form so that the bell 18 may be turned by the shaft 17. The lower portion of the rod 19 may be recessed, as is indicated at 21, to provide a bearing surface for receiving the bearing 16.

If desired, the bell 18 may be reenforced by a spider 22 having a collar 23. The collar 23 may be fixedly secured in any suitable manner to the rod 19. The outer end of the spider 22 may be similarly secured to the bell 18. The clock 2' is also provided with an hour hand sleeve or shaft 24 on which is fixedly mounted a second bell 25 by any suitable means, such as for instance, by a threaded means 26.

The bell 25 is of course provided with a central opening at its upper portion adapted to receive the sleeve 24. The bells 18 and 25 are each provided with bearings, as indicated at 27,

so that at least a portion of the weight of the bell 25 may be carried by the rod 19 of the bell 18 and the dome 15.

The bells 18 and 25 may be placed one over the other, substantially as shown. The bell 25 and the bell 18 may be provided at their lower edges with scales 10' and 11', respectively. These scales may be similar to those employed in the preferred form of my invention shown in Figures 1 to 4 inclusive.

It will of course be understood that two synchronous electrical clock mechanisms may be employed, each of which has one dial means operatively connected thereto. In this case, the two clock mechanisms may be spaced apart and disposed opposite to each other in such a manner that the scales on their dial means may be positioned parallel to each other. In this modification the front of the clocks will of course face each other, and the end of the dial means on which the scales are impressed or otherwise indicated will be adjacent and opposite each other.

I claim:

1. Mechanism of the class described comprising a supporting base, an upwardly extending supporting arm secured to said base, a clock movement having downwardly extending hour and minute shafts supported at the upper end of said arm, concentric depending hour and minute dials each secured to one of said shafts for rotation by the same and having, respectively, hour and minute graduations at their lower edges, and a lamp supported by said base for illuminating said dials.

2. Mechanism of the class described comprising a supporting base, a supporting structure extending upwardly therefrom, a clock movement secured to said support above said base and having downwardly extending concentric hour and minute shafts, concentric bell shaped dials, one secured at its upper end to each of said shafts for rotation therewith, said dials being provided with annular graduated scales at their lower edges and a lamp supported by said base for illuminating the interior of said dials.

ALEXANDER S. GREENWOOD.