Sept. 15, 1953 L. K. FARGO 2,651,908

WALL MOUNTING FOR CLOCKS

Filed March 16, 1951 2 Sheets-Sheet 1

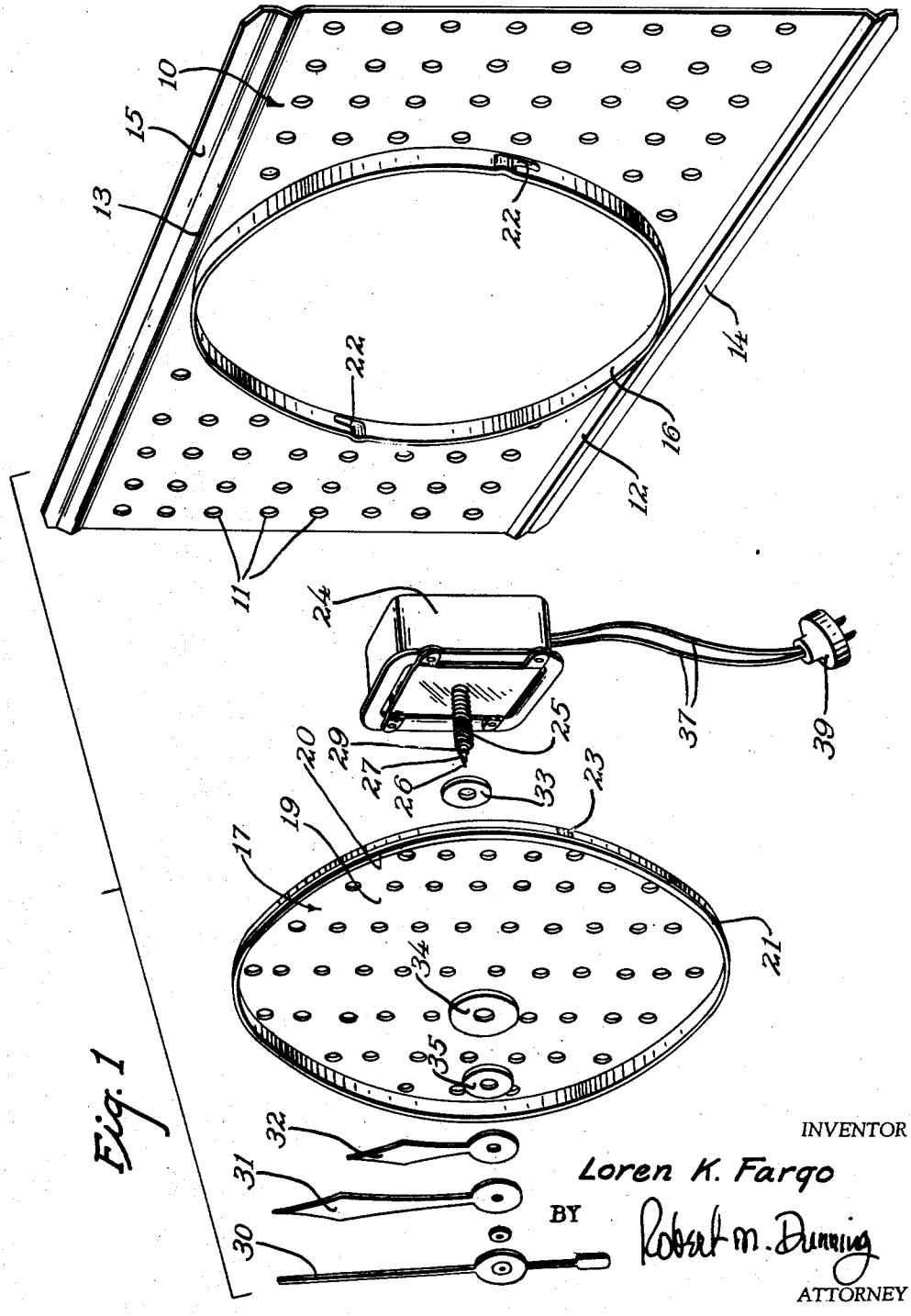

Fig. 1

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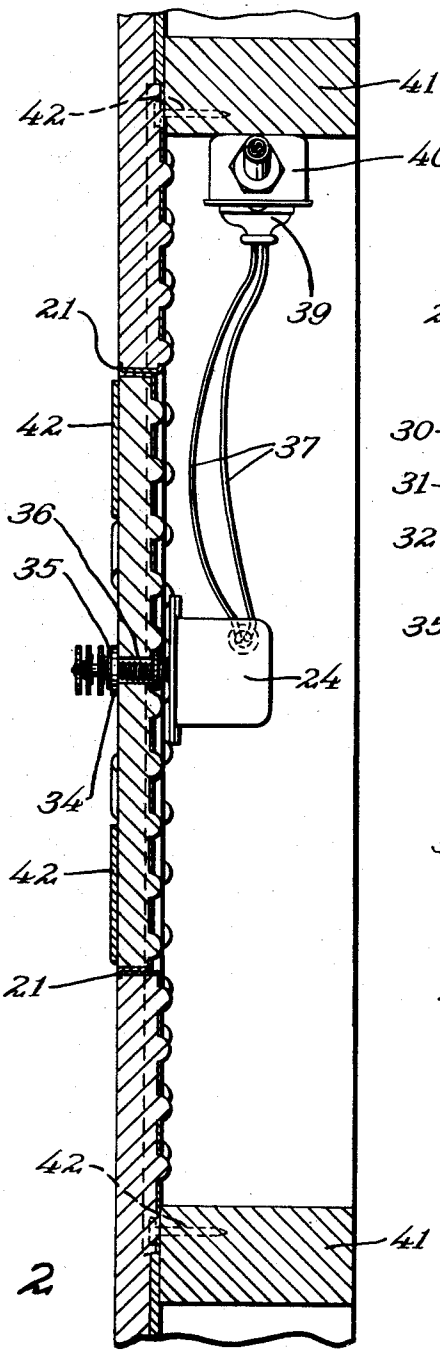

Fig. 2

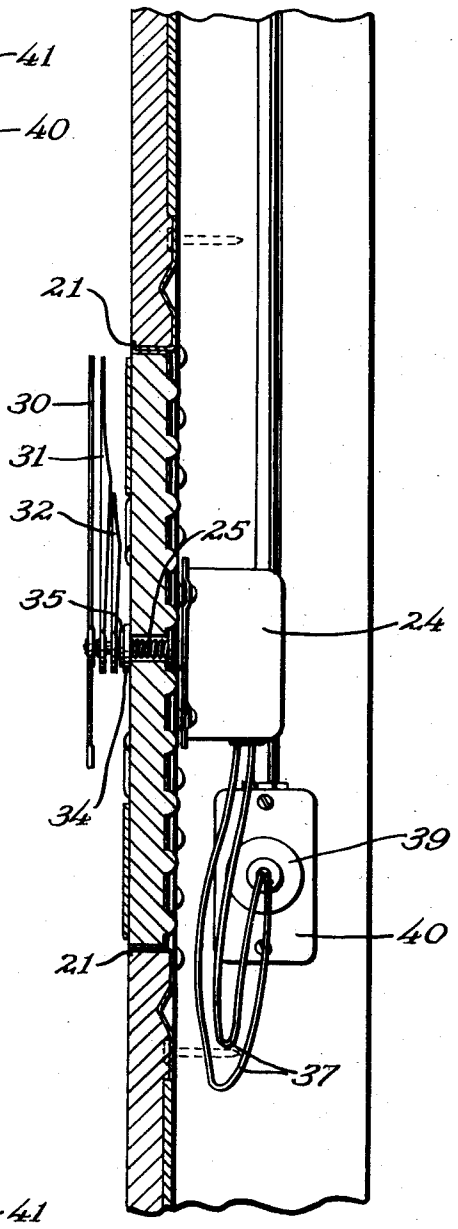

Fig. 3

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WALL MOUNTING FOR CLOCKS

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10 Claims. (Cl. 58—56)

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This invention relates to an improvement in wall mounting for clocks and deals particularly with a type of clock which may be recessed into a wall.

Electric clocks are usually supported on a flat surface or suspended upon the inner surface of a wall. Such clocks are seldom supported near an electric outlet box so that it is usually necessary to provide a cord extending from the clock to the outlet socket. When clocks have been recessed into a wall some difficulty has been experienced in supporting the clock mechanism so that it may be detached for cleaning and for repair. It has also been usually necessary to attach the clock mechanism housing to a supporting wall by a series of spaced screws or bolts, all of which must be removed in order to disconnect the mechanism housing from the wall. These supporting screws are particularly objectionable where the clock mechanism is mounted upon a panel of mirrored glass or the like, as in such an event it is necessary to drill holes through the glass to support the anchor bolts. It is the main object of the present invention to eliminate these previous difficulties.

An object of the present invention lies in the provision of a clock structure which may be readily built into a wall when the wall is built so as to permanently support the clock on the wall. Means are provided for removably supporting a portion of the wall and for mounting the clock mechanism upon this removable wall portion. As a result when the clock is removed for cleaning or repair, the movable wall portion may be removed, whereupon the clock mechanism is immediately accessible.

A feature of the present invention resides in the provision of a clock mounted upon a wall portion encircled by a rim which outlines the removable portion of the wall. This rim is relatively narrow in width so that it is relatively invisible when the wall is finished. However, this portion of the wall may be removed from its supporting frame. If the clock mechanism is attached to the rear surface of this removable wall portion, the removal of this wall portion renders the clock mechanism immediately accessible.

An added feature of the present invention lies in the provision of a clock supporting mechanism including a panel designed for support between a pair of spaced studs and which may act as a base for plaster or plaster board. This panel is provided with a flange projecting forwardly therefrom, this flange being substantially the same depth as the plaster or plaster board. A pan shaped section is designed to frictionally engage within the panel flange, the marginal ridge of the pan shaped support preferably interlocking with the panel flange. This pan shaped member is designed to accommodate plaster or plaster board which extends flush with the rim of the pan shaped member. The clock mechanism is detachably supported by this pan shaped member and is removable from the remainder of the wall therewith.

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A feature of the present invention lies in the provision of a clock support which may form a permanent part of the wall once the wall is constructed. The clock support includes a panel forming a part of the plaster base of the wall, preferably taking the place of metal lath usually used as the plaster base. The clock support also includes a pan shaped section having a peripheral rim interengaging with a projecting flange on the mounting panel so as to form a continuous portion of the wall. When plaster is applied to the wall, it is applied flush with the marginal rim of the pan shaped removable section of the wall so that the only visible portion of the support comprises the peripheral rim of the removable wall section. A hole is ordinarily drilled centrally through this removable section after the plaster has hardened, or a hole is formed during the plastering process. The removable wall section may be removed after the plaster has hardened and the clock mechanism mounted thereupon. An electrical outlet box is supported within the wall adjacent to the removable wall portion so that the clock mechanism may be connected thereto in such a way that the wiring is entirely concealed. The clock mechanism is provided with a projecting sleeve which extends through the removable portion of the wall and includes suitable spindles for supporting the hands of the clock.

Another feature of the present invention resides in the particular manner in which the mechanism housing is secured to the removable wall panel. The mechanism housing is provided with a projecting sleeve designed to encircle and protect the rotating portions of the spindles to which the hands are connected. This sleeve is externally threaded and is provided with clamping nuts which clamp the portion of the wall through which the sleeve extends. Thus the clock housing is actually supported by the sleeve encircling the hand spindles, thus requiring no additional anchor bolts or screws.

The clamping nut or nuts on the outer sur-

face of the wall also serves to conceal the edges of the hole through which the sleeve extends.

These and other objects and novel features of the present invention will be more clearly and fully set forth in the following specification and claims.

In the drawings forming a part of the specification:

Figure 1 is an exploded view of the parts forming the clock showing the manner in which the various parts are assembled.

Figure 2 is a horizontal section through a wall showing the clock mounted therein.

Figure 3 is a vertical section through the wall showing the arrangement of parts therein.

The various elements forming the clock and support may best be observed from Figure 1 of the drawings. In this figure is disclosed a mounting panel 10 which is generally rectangular in shape and which is provided with apertures 11 therethrough to provide a base to which plaster may adhere. The openings 11 may be of any desired shape or size and may comprise louvers or ears struck from the body in place of the type of apertures illustrated.

The panel 10 is provided with generally parallel ridges 12 and 13 near opposite edges thereof connecting the body of the panel with the anchoring flanges 14 and 15 respectively. These anchoring flanges are designed for connection with spaced studs in a wall structure, as will be later described more fully. A cylindrical rim or sleeve 16 is formed in the panel 10, the sleeve being slightly shorter in length than the plaster thickness of the wall. The sleeve 16 is shown as being cylindrical in shape, this particular shape having the advantage of simplifying the interengagement between the panel and the removable portion of the wall. However, this flange 16 may if desired be rectangular, hexagonal, or other shapes.

A pan shaped support portion indicated in general by the numeral 17 is frictionally engageable within the rim or sleeve 16. The member 17 comprises a perforate disc 19 designed to extend substantially on the plane of the panel body of the panel 10. The disc 19 is provided with a peripheral rim 20 similar in shape to the rim or sleeve 16 and or proper size to snugly fit within the rim 16. As best illustrated in Figures 2 and 3 of the drawings, the rim or flange 20 is provided with an outwardly directed marginal flange 21 designed to overlie the end of the rim or sleeve 16. This flange or bead 21 in actual practice is usually extremely short so as to render the support as unnoticeable as possible. Usually the flange 21 is provided with a finished surface which may be polished to present an attractive appearance. However, if preferred the rim may be painted the same color as the wall so that it is practically invisible.

The rim 16 is provided with a pair of bayonet type grooves 22 which are designed to accommodate cooperable projections 23 on the outer surface of the rim 20. Thus the two parts are interlocked together to prevent accidental disengagement. Obviously the removable part of the wall may be removed by rotating this part slightly and pulling the same outwardly.

The clock mechanism is of any preferred type and is enclosed within a clock housing 24 of any suitable shape or design. The clock housing is provided with a firmly anchored externally threaded sleeve 25 projecting from its forward surface. Through this sleeve 25 extend the center spindle 26 and encircling sleeve spindles 27 and 29 which act to support the second hand 30, the minute hand 31 and the hour hand 32 respectively. The various spindles rotate at a suitable speed to produce the desired rate of movement of the various hands.

As indicated in the drawings a clamping nut 33 is engageable on the sleeve 25 and is adjustable longitudinally thereof. A washer 34 encircles the sleeve 25 on the exterior surface of the removable wall portion and a nut 35 is threaded onto the spindle outwardly of the washer 34. By proper manipulation of the clamping nuts 33 and 35, the sleeve 25 may be allowed to project to the desired extent beyond the wall surface and the portion of the wall encircling the wall aperture 36 is securely clamped to hold the clock mechanism in place.

The clock is operated by a suitable cord or conduit 37, preferably connected to a plug 39 which plugs into a receptacle 40 wired to the source of electric current. The detachable plug 39 is preferable because of the simplicity with which the clock may be detached when necessary for cleaning or repair. However, in cases where the use of a detachable plug within the wall structure is prohibited, the clock mechanism may be connected by suitable approved means to the source of current supply.

The manner in which the clock support is mounted and used is believed generally obvious from the foregoing description. The panel 10 is supported between the studs 41 by nails 42 or other suitable attaching means and forms a part of the plaster base. The removable section 11 is inserted into the rim 16 before the wall is plastered. When the plaster is applied, it is applied flush with the surface of the flange 21, the entire panel 10 as well as the removable section 17 being covered. Usually the plaster is applied to fill the removable section 17, although if preferred a suitable core may be secured to the disc 19 at the center thereof so as to form a hole 36 through the center of this section. Numerals 42 which may be either in the form of Roman or Arabic numerals, or merely in the form of dots or bars, are applied to the surface of the removable portion either before or after the plaster has set. These numerals are usually provided with pins which project into the plaster for anchoring the numerals in place.

After the plaster has dried, the removable section is removed from the wall and the center hole 36 is drilled therein if this hole has not been previously formed. The clock housing 24 is then attached by first mounting the clamping nut 33 on the threaded sleeve 25, inserting the sleeve through the hole in the removable wall portion and applying the washer 34 and nut 35 to the outer surface of the plaster. Oftentimes the nut 33 is threaded far back on the sleeve 25 until after the nut 35 is in place so that the sleeve may project from the wall the desired distance. The clamping nut 3 may then be tightened to clamp the portion of the wall and to hold the clock mechanism in place.

When the clock mechanism has been mounted, the hands may be applied to the projecting spindles in the usual way. The plug 39 may be attached to the electric outlet 40 previously provided in the wall and the removable wall section reinserted into place. The flange 21 may either be polished or may be painted over to be the same color as the wall.

I have found that the clock mounting thus

provided is extremely attractive in new homes, or in homes being remodeled. Electric clock mechanisms ordinarily work for long periods of time without attention, and as the clock mechanism is usually substantially sealed, there is little likelihood of difficulty. However, in the event it becomes necessary to clean or repair the clock mechanism this may be done by removing the wall segment and detaching the clock mechanism. The clock may be set at any time by rotation of the hands to the desired point.

In accordance with the patent statutes, I have described the principles of construction and operation of my clock structure, and while I have endeavored to set forth the best embodiment thereof, I desire to have it understood that obvious changes may be made within the scope of the following claims without departing from the spirit of my invention.

I claim:

1. A clock mounting including a panel designed for attachment between supports, a rim projecting from said panel, a pan shaped support removably engaged within said rim, and a clock mechanism secured to said removable support.

2. A clock support including a panel having an opening therein, a rim encircling said opening, a removable panel member having an encircling rim designed to substantially fill said opening in the first named panel and to fit within the rim thereupon, a clock mechanism secured to said removable panel member and having hand supporting spindles extending through said removable panel member.

3. The structure described in claim 2 and including interlocking means between the two rims.

4. The structure described in claim 2 and in which the panel and removable panel member are recessed in a wall.

5. The structure described in claim 2 and in

which the panel and removable panel member are recessed in a plaster wall, the plaster extending substantially flush with the edges of said rims.

6. A wall support for a clock for use in a plastered wall having spaced supporting studs, the clock support including a panel designed to bridge the space between spaced studs and to be secured thereto, a forwardly projecting rim on said panel substantially equal in depth to the thickness of plaster on the plaster wall, a removable support having a peripheral flange in telescoping relation with the forwardly projecting rim, and a clock mechanism secured to said removable support and having hand spindles projecting beyond the plane of the edge of said peripheral flange.

7. The structure described in claim 6 and in which the clock mechanism is supported on one side of said support with the hand spindles extending through the support.

8. The structure described in claim 6 and in which the support is apertured to serve as a plaster base.

9. The structure described in claim 6 and including interengaging means on the projecting rim and on the peripheral flange.

10. The structure described in claim 9 and in which the removable support is filled with plaster to the plane of the edge of the peripheral flange.

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UNITED STATES PATENTS

Number	Name	Date
1,773,152	Ostler	Aug. 19, 1930
2,532,599	Bourquin	Dec. 5, 1950

FOREIGN PATENTS

Number	Country	Date
420,013	Great Britain	Nov. 23, 1934