Aug. 26, 1941. F. LUX 2,253,715

CLOCK

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Fig. 1.

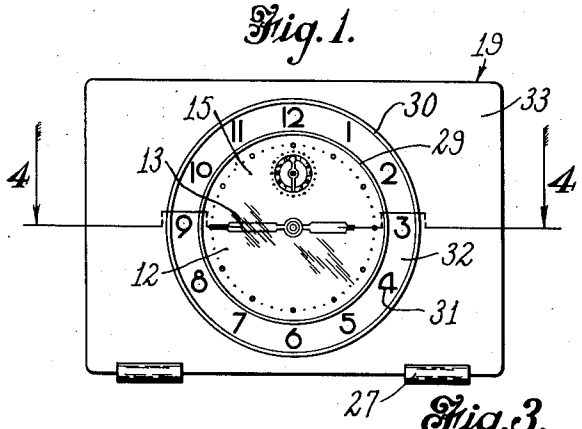


Fig. 2.

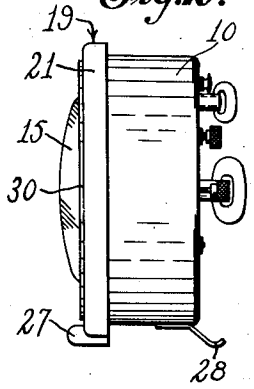


Fig. 3.

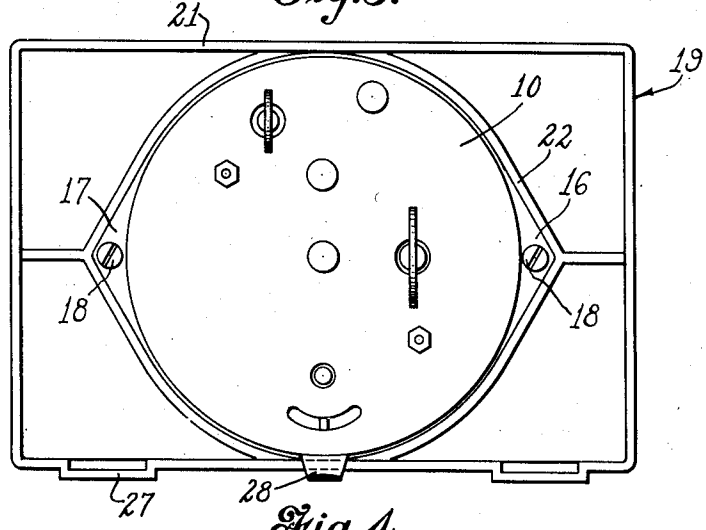
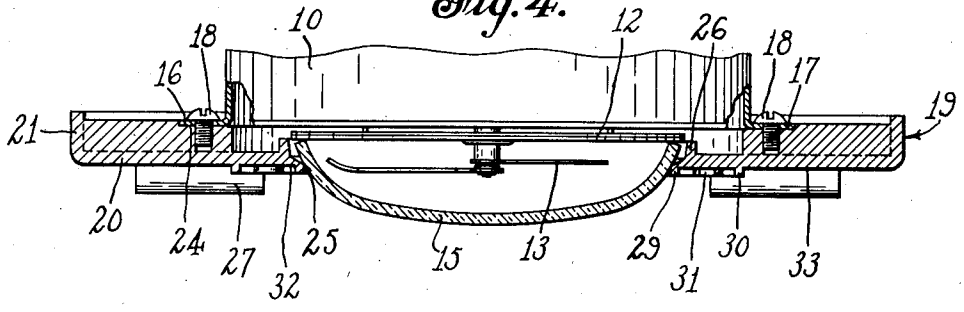


Fig. 4.



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Fig. 5.

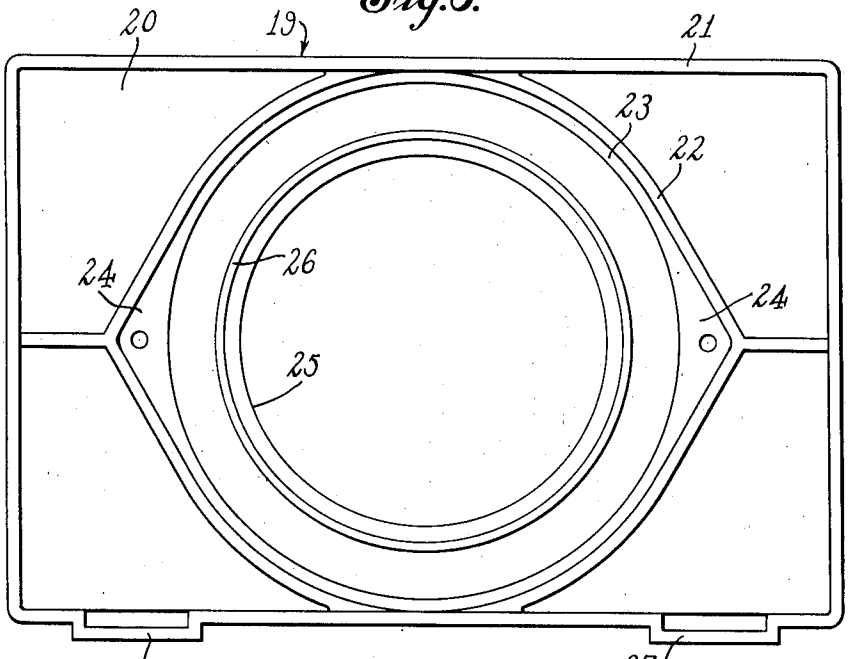


Fig. 6.

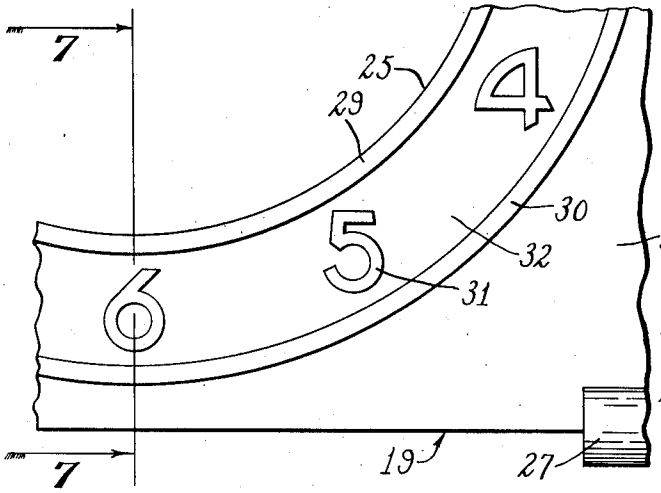
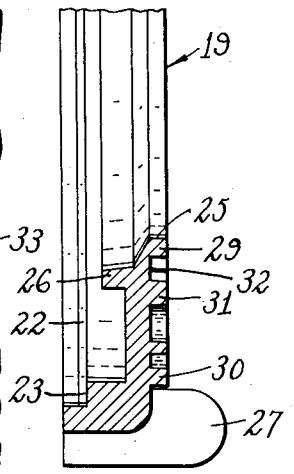


Fig. 7.



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UNITED STATES PATENT OFFICE

2,253,715

CLOCK

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Application February 2, 1940, Serial No. 316,950

3 Claims. (Cl. 58—53)

This invention relates to clocks and more particularly to a clock designed to be placed upon a desk, table or stand, such as an alarm clock, although the principles of the invention are applicable to clocks of other kinds as well.

In the manufacture of clocks, usually the clock mechanism is placed within a case, the mechanism including a clock face, usually with dial markings thereon, and a glass or crystal covering the face. In the usual form, a bezel ordinarily of metal, surrounds the crystal to hold it in place. Sometimes when an ornamental front is desired for the clock, such a front is supplied and is provided with an opening through which the crystal is exposed, the front being secured to the case in some convenient manner.

It is contemplated by the present invention to provide a relatively inexpensive clock structure having an ornamental front portion wherein the front portion will also serve as the bezel and dial. That is, the front portion will secure the crystal to the case and will also have the dial markings thereon to cooperate with the hands to indicate the correct time. This structure is particularly adaptable to molded fronts which are ornamental and upon which the dial characters may be readily provided. In the present case, this front not only serves as a bezel to hold the glass or crystal in place but also serves as a supporting member, being provided with legs or elements for this purpose, and as stated, also serves as the dial.

One object of the present invention is the provision of a clock structure of improved form having a combined bezel member and dial.

A further object of the invention is the provision of a clock of improved form having a front ornamental plate-like member serving to support the clock mechanism and also serving as a bezel to hold the crystal in place against the face of the clock to protect the hands.

A still further object of the invention is to provide a new and ornamental dial member for a clock case, which dial member will also serve as a bezel to secure the crystal of the clock in place, and will also be provided with supporting elements so that it will not only serve as a dial and bezel but will serve as a support for the clock mechanism as well.

Further objects of the invention will be apparent as the description proceeds, one of which is the provision of a molded front supporting plate having provision by which the clock case carrying the clock mechanism may be conveniently secured thereto, and which plate will serve to locate and hold the crystal in proper position on the case, and will also be provided with dial characters to cooperate with the clock hands.

To these and other ends, the invention consists in the novel features and combinations of parts to be hereinafter described and claimed.

In the accompanying drawings:

Fig. 1 is a front elevational view of a clock structure embodying my invention;

Fig. 2 is a side elevational view of the same;

Fig. 3 is an enlarged rear elevational view;

Fig. 4 is a sectional view on line 4—4 of Fig. 1;

Fig. 5 is a rear view of the molded combined dial and bezel member with the clock mechanism detached therefrom;

Fig. 6 is an enlarged fragmentary face view of the dial portion of the molded member, and

Fig. 7 is a sectional view on line 7—7 of Fig. 6.

To illustrate a preferred embodiment of my invention, I have shown a clock structure comprising a casing 10, within which the clock mechanism is housed. As the case and the mechanism therein may be of the usual form, disclosure of these features is not considered necessary. As shown, however, in Figs. 1 and 4, the mechanism may be provided with the usual clock face 12, in front of which stand the hands 13, and which are in turn designed to be covered by a glass or crystal 15 of convex form so as to rest against the face 12 and at the same time give sufficient room for the operation of the hands. The illustrated form of my invention is that of an alarm clock but it will be understood that the inventive concepts may be applied to other types of clocks as well.

The case 10 of the clock may be provided with projecting ears or lugs 16 and 17 by means of which it may be secured by the screws 18 at the back of a molded member, designated generally by the numeral 19, which molded member as will be explained is specially formed to cooperate with the parts of the clock so that it serves a mechanical function in securing the parts of the clock together as well as serving as the dial of the clock and as a supporting means for the clock structure. This member may be made of any of the well-known moldable plastic materials, so that it will be of ornamental character and may be readily formed with the configurations necessary to the completed structure.

As shown particularly in Figs. 1 and 5 of the drawings, the member 19 will comprise a plate-like body portion 20, having a peripheral flange 21 about the edge thereof to provide for an appearance of depth. Wihin this flange at the back of the plate-like member 20 is an upstanding substantially annular socket-forming flange 22, having an internal seat 23 extending around the flange and provided at each side with enlarged portions 24, adapted to receive the screws 18. The seat 23, as shown in Figs. 3 and 4, is adapted to receive thereon the front portion of the clock case 10 so that the case seats within the flange 22.

The member 19 is also provided with an opening 25 through which the clock face and crystal 15 are exposed, and about this opening and spaced slightly therefrom is an upstanding flange 26 within which the crystal 15 is adapted to lie, as shown in Fig. 4. It will be obvious that as the member 26 is slightly spaced from the edge of the opening 25 a narrow width of material adjacent the edge of the opening is arranged to engage over the crystal 15 of the clock and hold it in place against the face 12, the crystal lying within and being located laterally by the flange 26.

Adjacent its lower end, the combined dial and supporting member 19 may be provided with supporting elements 27, which are formed integrally with the member 19 and which will serve in cooperation with the member 28 upon the case 10 to support the structure in proper position from a table or other horizontal surface.

The front face of the member 19 is shown particularly in Figs. 1 and 6, from which it will be seen that surrounding the opening 25 into which the crystal of the clock extends, are a pair of spaced annular ribs or ridges 29 and 30. These ribs stand upwardly from the face of the clock so as to provide between them a space in the form of a channel. Dial characters, designated by the numeral 31, are provided in this channel upon the bottom surface 32 thereof, which dial characters as well as the ribs 29 and 30 may be molded integrally with the member 19. It will be understood that the surface 32 upon which the dial characters are formed, is generally in the plane of the front face 33 of the member 19, and it is of considerable advantage to provide the characters 31 of the same height as the ribs 29 and 30.

It will be understood that the dial characters will preferably be of a color contrasting with the color of the surface 32. It is of convenience in the manufacture of the device to make the member 19 of ornamental material and paint the surface 32 in a contrasting color. When this has been done, and any paint, as is quite apt to occur, remains on the dial figures or on the upper surfaces of the ridges 29 and 30, this paint may be conveniently wiped off by a flat wiping member moved over the surface of the dial, which member, it will be seen, will engage the dial characters as well as the top edges of the ridges 29 and 30, which members all stand at the same height from the surface 33, but will not engage the surface 32 below the ridges.

As will be apparent from Fig. 4 of the drawings, the member 19 when secured to the clock case 10, serves to hold the crystal 15 in place against the face 12 and thus acts as the clock bezel. The crystal, as shown, lies within the well formed within the flange 26 and is clamped against the face by the edge of the dial plate 19, which surrounds the opening 25. In addition, it will be observed that the seat and socket-forming means in the structure of the flange 22 and seat member 23, serve to locate the clock structure accurately in position with respect to the member 19. Moreover, it will be observed that the dial characters are not formed on the face 12 of the clock but are formed on the ornamental member 19, which also serves as the bezel and the supporting means for the clock case. By this construction, there is provided in a very economical manner, a clock having desirable ornamental and mechanical characteristics, so constructed that the parts may be assembled with a minimum of effort.

It will be seen that in the illustrated construction, the case proper or body portion 10 of the case is preferably made of metal so that it may be readily and cheaply formed. As stated, the front portion 19 of the case is made of a moldable plastic material, which is of ornamental character and may be made in attractive colors. Viewed from the front, the clock case is to all appearance a molded case and therefore has the advantages of the appearance of a molded case but is much less expensive than such a case on account of the fact that the body of the case may be made much more economically from such a substance as metal. Therefore, by making the body of the case of metal but connecting it to the more ornamental plastic front plate, I secure the appearance of a molded case while avoiding the relatively greater expense of such a case.

While I have shown and described a preferred embodiment of my invention, it will be understood that it is not to be limited to all of the details shown but is capable of modification and variation within the spirit of the invention and within the scope of the appended claims.

What I claim is:

1. A combined front support and dial member for a clock having a case and a crystal, said member having an opening to expose the crystal and having dial markings about said opening, the edge of said member adjacent the opening projecting over the crystal to hold it in place, and said member having integrally formed crystal locating means on its rear face and also having on said face socket-forming means to receive and locate the case, and cooperating means on said case and front support to support the clock in upright position.

2. A combined front support, dial member and bezel for a clock having a case and a front face, a crystal covering said face, said member being of plate-like formation and having an opening to expose the crystal, said member being provided with means to engage the edge of the crystal and clamp it against the clock face and with means on its rear face to locate the crystal laterally, means to secure the member to the clock case, and said member also being provided on its rear face with seat-forming means to receive and locate the front edge of the clock case whereby the latter is concealed from the front of said member, and means on the case cooperating with the lower portion of the front support to support the clock in upright position from a flat surface.

3. A clock structure having a case comprising a body portion formed of sheet metal, and a front plate-like portion formed of a moldable plastic material, the body portion of the case having secured thereto clock mechanism including a face, a crystal covering said face, and said front plate-like portion being secured to the case to conceal the same from the front thereof and having an opening therein to expose said crystal and the edge of said portion adjacent the opening overlying the edge of the crystal to clamp the crystal against said face and cooperating supporting feet on said case and front plate-like portion to support the structure.

FREDERICK LUX.