April 8, 1924. 1,489,296

D. ZAIDEN

CLOCK CASE OR SIMILAR STRUCTURE

Filed July 24, 1923

Fig. 1

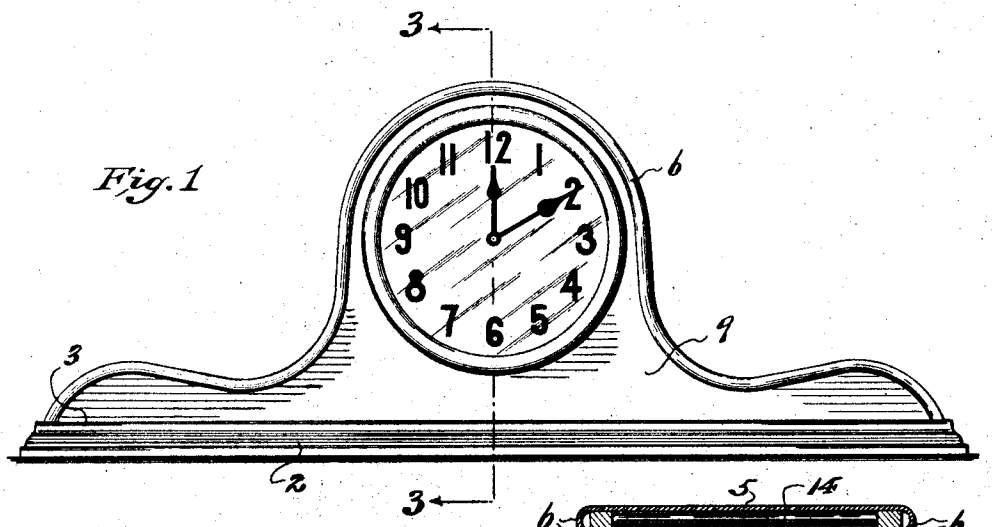


Fig. 5

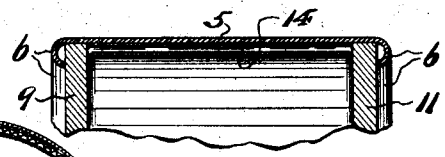


Fig. 2

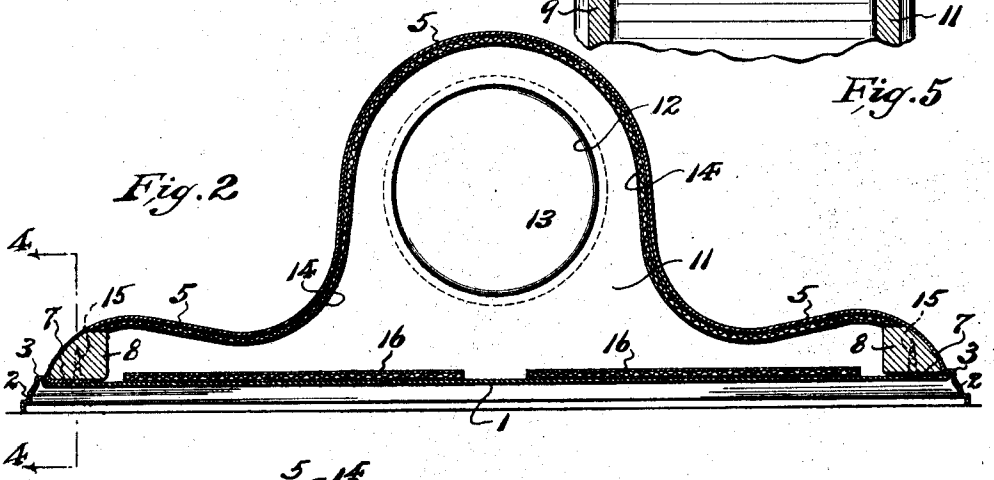


Fig. 3

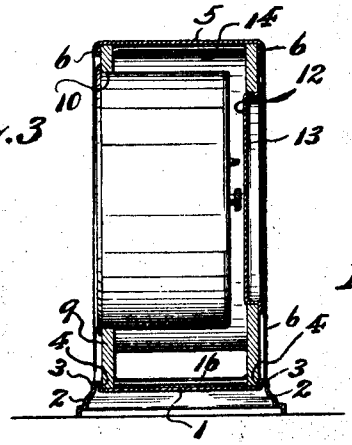
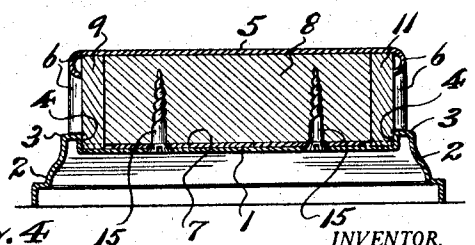


Fig. 4



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UNITED STATES PATENT OFFICE.

DAVID ZAIDEN, OF BROOKLYN, NEW YORK.

CLOCK CASE OR SIMILAR STRUCTURE.

Application filed July 24, 1923. Serial No. 653,427.

To all whom it may concern:

Be it known that I, DAVID ZAIDEN, a citizen of Russia, residing at Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Clock Cases or Similar Structures; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to characters of reference marked thereon, which form a part of this specification.

This invention relates, generally, to improvements in the construction of cases for clocks, radio apparatus and similar devices.

The invention has for its principal object to provide an improved construction of metallic casing comprised of but few parts, adapted to be assembled and secured together in a manner, and with necessity of using but a minimum of fastening elements. The novel construction of casing is such that a great variety of shapes may be employed, and particularly shapes possessing graceful and pleasing curves; and, furthermore, the construction is such that the cases may be made to simulate in appearance expensive wood casings such as are usually employed for clocks and similar devices.

Other objects of this invention, not at this time more particularly enumerated, will be clearly understood from the following detailed description of the same.

With the various objects of this invention in view, the same consists, primarily, in the novel construction and arrangement of casing for clocks and the like hereinafter set forth; and the invention consists, furthermore, in the novel arrangements and combinations of the various devices and parts, as well as in the details of the construction of the same, all of which will be hereinafter more fully described, and then finally embodied in the claims appended to this specification.

The invention is clearly illustrated in the accompanying drawings, in which:—

Figure 1 is a front elevation of one form of the novel construction of casing for clocks and the like, made according to and embodying the principles of this invention; Figure 2 is a longitudinal vertical section of the same; Figure 3 is a transverse vertical section, taken on line 3—3 in Figure 1; Figure 4 is a transverse vertical section, taken on line 4—4 in said Figure 2, said view being drawn on an enlarged scale; and Figure 5 is a fragmentary transverse section through the top of the case, said view being drawn on an enlarged scale.

Similar characters of reference are employed in all of the hereinabove described views, to indicate corresponding parts.

Referring now to said drawings, the reference character 1 indicates the base portion of the novel casing. Said base portion is preferably made of sheet metal, which is pressed out by suitable dies to provide a downwardly projecting marginal flange 2 which may be suitably shaped to provide any desired ornamental molding effect. The main body of said base portion 1 is downwardly off-set or depressed to provide an upstanding marginal bead 3 extending around the edges of the base at the juncture of said base and its flange 2, thereby providing a seat 4 for receiving the superstructure of the casing.

The reference character 5 indicates a top-plate. This top-plate is also made of sheet metal, and may be bent to follow a curvilinear or angular plane, as the case may be to produce a desired ornamental configuration or conformation of the top outline of the casing. In the illustration of my invention as embodied in the drawings, the said top-plate is preformed to provide a rounded central portion of apex, from each side of which extend graceful downwardly and longitudinally flowing cyma curves. The longitudinal marginal edges of said top-plate 5 have integrally formed in connection therewith downwardly projecting rim beads 6 of convex shape in cross section. Connected with each end of said top-plate 5 is an inwardly projecting horizontal bottom flange or foot piece 7. Secured within the angles formed at the juncture of said top-plate 5 with each bottom flange or foot piece 7 is a wooden block or anchor piece 8.

The reference character 9 indicates a front plate, the upper edge of which possesses a marginal shape conforming and corresponding to the shape of said top-plate 5, while its bottom edge is straight and adapted to engage with the main body of the base 1. Said front plate may be made of sheet metal, fibre board, wood or any other suit-

able material, and the same is provided with a suitably disposed opening 10 to receive and expose a clock or other desired mechanism or device desired to be mounted and assembled with said casing.

The reference character 11 indicates a back plate, the upper edge of which also possesses a marginal shape conforming and corresponding to the shape of said top plate 5, while its bottom edge is straight and adapted to engage with the main body of the base 1. Said back plate may likewise be made of sheet metal, fibre board, wood or any other suitable material, and the same may be provided with a suitably disposed opening 12 giving access to the interior of the casing, which opening may be closed by a suitable cover plate 13.

In assembling the base 1, top plate 5, and front and back plates 9 and 11 together, said front plate 9 is assembled with said top-plate so that its upper edge engages the underside of said top-plate, with the marginal portions of said upper edge stopped against the rim bead 6 at one side of said top-plate, and thus held against outward displacement. In like manner, said back plate 11 is assembled with said top-plate so that its upper edge engages the underside of said top plate, with the marginal portions of said upper edge stopped against the rim bead 6 at the opposite side of said top-plate, and thus held against outward displacement. When the front and back plates 9 and 11 are thus assembled with the top-plate I insert between the inner sides of said front and back plate, and against the under surface of the top-plate, a sheet of corrugated paper or the like which is longitudinally flexible, which provides a combined lining member and keeper means 14, and which serves to hold said front and back members spaced apart and firmly placed against the respective rim beads 6 of the top-plate 5, and thus stopped against inward displacement. This lining member and keeper means 14, if made of corrugated paper, should have the corrugations thereof running transversely, so that while the same is free to flex in a longitudinal direction, it is stiff and non-flexible in a lateral direction. It is preferable that the width of said lining member and keeper means, should be slightly greater than the width of the space intermediate the back and front plates 9 and 11 when the same are assembled with the top-plate 5, so that when forced between the former and against the underside of the latter, the longitudinal edges thereof will be compelled to make a strong frictional engagement or contact with the inner sides of the front and back plates, and thus assure the secure holding of said lining member and keeper means against downward displacement from the above described operative assembled position thereof. By reason of the fact that said lining member and keeper means is longitudinally flexible, the same may easily be caused to conform to any irregular or curvilinear shape presented by the under side of the top-plate 5. Another advantage of the lining member and keeper means is, that it serves to muffle metallic sounds or ringing of the metallic casing if the latter is accidentally struck.

The assembled top-plate and front and back plates are now ready to be mounted on the base, and the dimensions of the under side of said assembled structure is such that it will be received within the marginal bead 3 of the base 1 in such manner that the bottom edges of the front and back plates and the underside of the bottom-flanges or foot pieces 7 of the top-plate will engage the base 1, and the structure will be stopped against outward displacement from the base 1, in all directions, by the surrounding marginal bead 3 of said base 1. In order to secure said assembled casing structure to the base 1, the body of the latter and the overlying foot-pieces 7 are pierced to receive fastening screws 15, which are screwed up into the blocks or anchor pieces 8, thus holding all parts together in complete assembled relation. For the purpose of retaining the lower edges of the front and back plates against inward buckling or displacement, I insert therebetween, so as to lie on said base 1, the keeper members 16, which are preferably made of corrugated paper, and which are frictionally held in place in the same manner as already described in connection with the lining member and keeper means 14.

As shown in the drawings, when the novel casing is used as a clock case, the clock mechanism 17 is supported in connection with the opening 10 of the front plate, with the body of the clock mechanism disposed within the casing, and the clock dial facing outwardly from said opening 10. Of course, it will be understood, that the casing may be employed to house other mechanisms beside clocks, such e. g. as radio apparatus, meters, or scientific instruments of various kinds.

From the above description it will be clearly evident, that this invention provides a novel casing structure of very simple character, the elements of which interlock themselves together in assembled relation with necessity for using but a minimum number of mechanical fastening elements such as the screws 15. The structure is therefore cheap to produce, but is nevertheless of very fine appearance, comparable, in respect to appearance, with the expensive wood joinery produced by the cabinet maker's art. The structure in principle, lends itself to reproduction in various ornamental shapes and contours, so that I do

not limit myself to the exact ornamental shape of casing as illustrated in the accompanying drawings.

I claim:—

1. In a device of the kind described, a base-portion, a top-plate having depending stop-beads along its longitudinal edges and inturned foot pieces at its respective ends, a front plate, a back plate, said front and back plates having their upper edges conformed to the contour of said top-plate and stopped against outward displacement by said top-plate stop beads and their bottom edges conformed to the surface of said base-portion, a combined lining and keeper means engaged against the underside of said top-plate intermediate said front and back plates having its longitudinal edges in frictional engagement with the latter, and means for fastening said foot pieces of said top-plate to said base-portion.

2. In a device of the kind described, a base-portion, a top-plate having depending stop-beads along its longitudinal edges and inturned foot pieces at its respective ends, a front plate, a back plate, said front and back plates having their upper edges conformed to the contour of said top-plate and stopped against outward displacement by said top-plate stop beads and their bottom edges conformed to the surface of said base-portion, a combined lining and keeper means engaged against the underside of said top-plate intermediate said front and back plates having its longitudinal edges in frictional engagement with the latter, anchor blocks embraced within the angle of said top-plate and its foot pieces, and fastening screws passing through said base portion and foot pieces into said anchor blocks.

3. In a device of the kind described, a base-portion, a top-plate having depending stop-beads along its longitudinal edges and inturned foot pieces at its respective ends, a front plate, a back plate, said front and back plates having their upper edges conformed to the contour of said top-plate and stopped against outward displacement by said top plate stop beads and their bottom edges conformed to the surface of said base-portion, a combined lining and keeper means engaged against the underside of said top-plate intermediate said front and back plates having its longitudinal edges in frictional engagement with the latter, means for fastening said foot pieces of said top-plate to said base-portion, and keeper means engaged upon said base portion intermediate said front and back-plates having the side longitudinal edges thereof in frictional engagement with the latter.

4. In a device of the kind described, a base-portion, a top-plate having depending stop beads along its longitudinal edges inturned foot pieces at its respective ends, a front plate, a back plate, said front and back plates having their upper edges conformed to the contour of said top-plate and stopped against outward displacement by said top plate stop beads and their bottom edges conformed to the surface of said base-portion, a combined lining and keeper means engaged against the underside of said top-plate intermediate said front and back plates having its longitudinal edges in frictional engagement with the latter, anchor blocks embraced within the angle of said top-plate and its foot pieces, and fastening screws passing through said base portion and foot pieces into said anchor blocks, and keeper means engaged upon said base portion intermediate said front and back plates having the side longitudinal edges thereof in frictional engagement with the latter.

5. In a device of the kind described, a base portion having an upstanding marginal bead, a metallic top-plate having depending stop beads along its longitudinal edges and inturned foot pieces at its respective ends, a front-plate, a back plate, said front and back plates having their upper edges conformed to the contour of said top-plate and stopped against outward displacement by said top plate stop beads and their bottom edges conformed to the surface of said base portion and stopped against outward displacement by said portion bead, a longitudinally flexible combined lining and keeper means made of transversely corrugated paper engaged against the underside of said top plate intermediate said front and back plate having its longitudinal edges in frictional engagement with the latter, the ends of said top plate being stopped against outward displacement by said base portion bead, and means for fastening said foot pieces of said top plate to said base portion.

6. In a device of the kind described, a base portion having an upstanding marginal bead, a metallic top-plate having depending stop heads along its longitudinal edges and inturned foot pieces at its respective ends, a front plate, a back plate, said front and back plates having their upper edges conformed to the contour of said top-plate and stopped against outward displacement by said top plate stop beads and their bottom edges conformed to the surface of said base portion and stopped against outward displacement by said base portion bead, a longitudinally flexible combined lining and keeper means made of transversely corrugated paper engaged against the under side of said top plate intermediate said front and back plate having its longitudinal edges in frictional engagement with the latter, the ends of said top plate being stopped against outward displacement by said base portion bead, means for fastening said foot pieces of said top plate to said base portion, anchor

blocks embraced within the angle of said top plate and its foot pieces, and fastening screws passing through said base portion and foot pieces into said anchor blocks.

7. In a device of the kind described, a base portion having an upstanding marginal bead, a metallic top-plate having depending stop beads along its longitudinal edges and inturned foot pieces at its respective ends, a front plate, a back plate, said front and back plates having their upper edges conformed to the contour of said top-plate and stopped against outward displacement by said top plate stop beads and their bottom edges conformed to the surface of said base portion and stopped against outward displacement by said base portion bead, a longitudinally flexible combined lining and keeper means made of transversely corrugated paper engaged against the under side of said top plate intermediate said front and back plate having its longitudinal edges in frictional engagement with the latter, the ends of said top plate being stopped against outward displacement by said base portion bead, and keeper means engaged upon said base portion intermediate said front and back plates having the side longitudinal edges thereof in frictional engagement with the latter.

8. In a device of the kind described, a base portion having an upstanding marginal bead, a metallic top-plate having depending stop beads along its longitudinal edges and inturned foot pieces at its respective ends, a front plate, a back plate, said front and back plates having their upper edges conformed to the contour of said top-plate and stopped against outward displacement by said top plate stop beads and their bottom edges conformed to the surface of said base portion and stopped against outward displacement by said base portion bead, a longitudinally flexible combined lining and keeper means made of transversely corrugated paper engaged against the under side of said top plate intermediate said front and back plate having its longitudinal edges in frictional engagement with the latter, the ends of said top plate being stopped against outward displacement by said base portion bead, means for fastening said foot pieces of said top plate to said base portion, anchor blocks embraced within the angle of said top plate and its foot pieces, and fastening screws passing through said base portion and foot pieces into said anchor blocks, and keeper means engaged upon said base portion intermediate said front and back plates having the side longitudinal edges thereof in frictional engagement with the latter.

9. In a clock case or the like, a longitudinally curvilinear metallic top-plate having depending stop beads along its longitudinal edges, a front plate, a back plate, said front and back plates having curvilinear upper edges conformed to the shape of said top plate and engaged against the underside of the latter with their marginal portions stopped against outward displacement by said stop beads, and a combined lining and keeper means engaged against the underside of said top plate intermediate said front and back plates having its longitudinal edges in frictional engagement with the latter.

10. In a clock case or the like, a longitudinally curvilinear metallic top-plate having depending stop beads along its longitudinal edges, a front plate, a back plate, said front and back plates having curvilinear upper edges conformed to the shape of said top plate and engaged against the underside of the latter with their marginal portions stopped against outward displacement by said stop beads, and a longitudinally flexible lining and keeper means made of transversely corrugated paper inserted between said front and back plates and against the underside of said top-plate.

In testimony that I claim the invention set forth above, I have hereunto set my hand this 20th day of July, 1923.

DAVID ZAIDEN.

Witnesses:

GEORGE D. RICHARDS,

MARION M. BANTA.