B. E. MOOREHOUS.

FRAME.

APPLICATION FILED MAY 4, 1918.

1,315,196.

Patented Sept. 2, 1919.

2 SHEETS—SHEET 1.

Fig. 1.

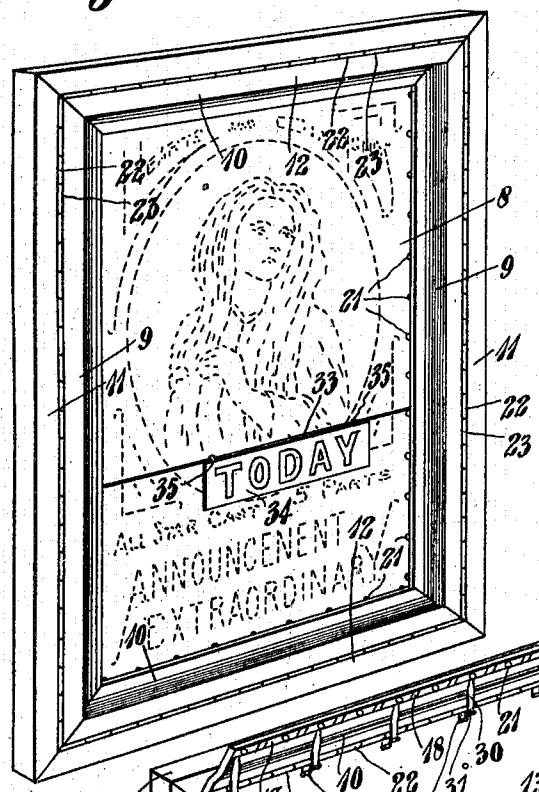


Fig. 2.

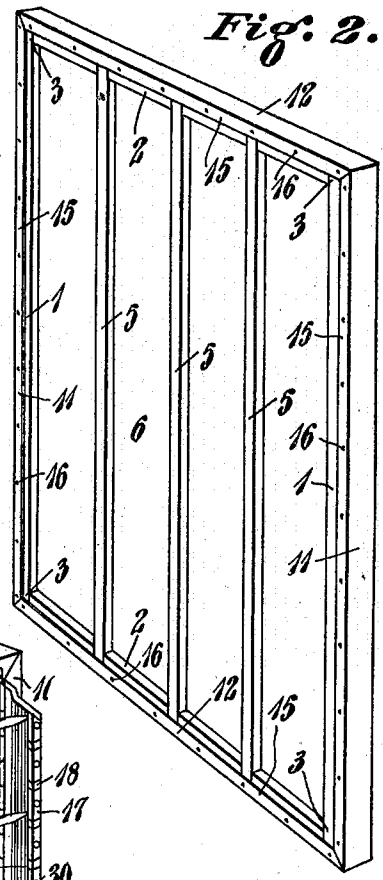
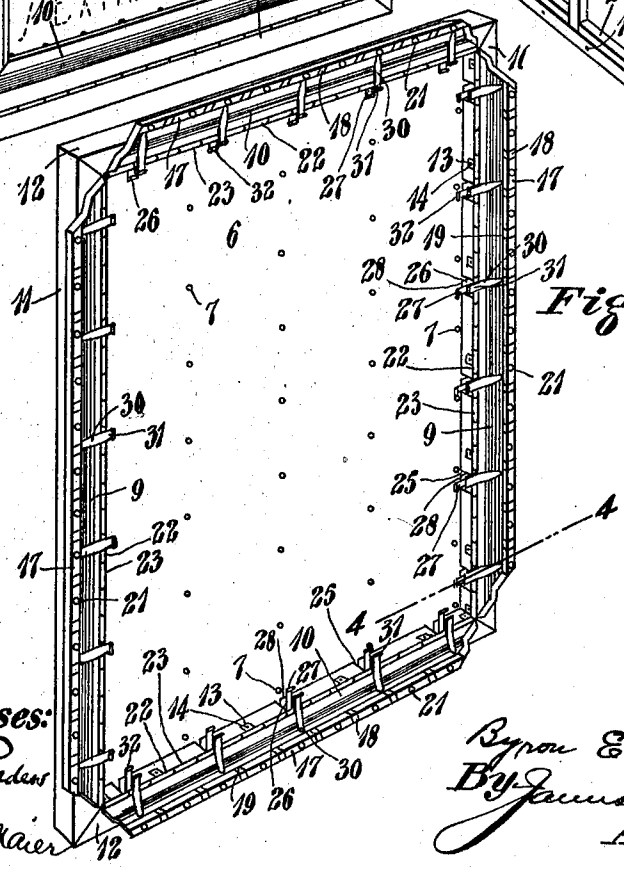


Fig. 3.



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2 SHEETS—SHEET 2.

Fig. 4.

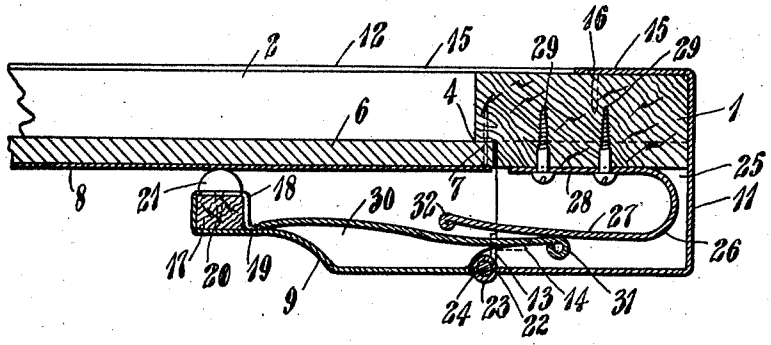


Fig. 5.

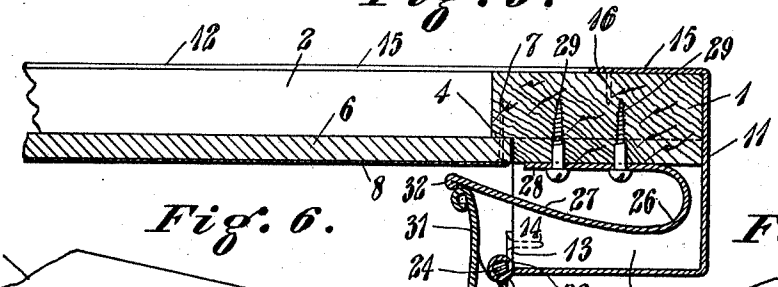


Fig. 6.

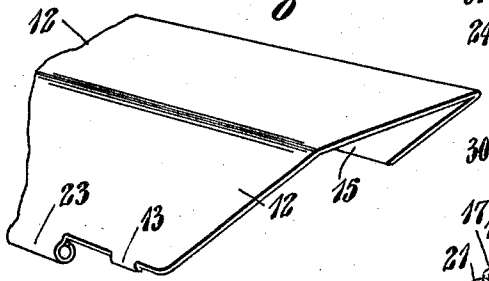


Fig. 9.

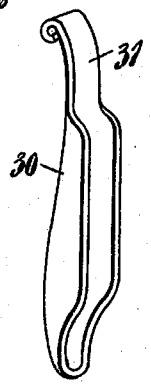


Fig. 7.

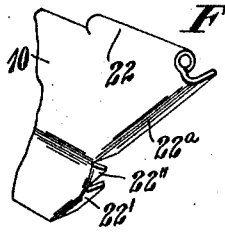
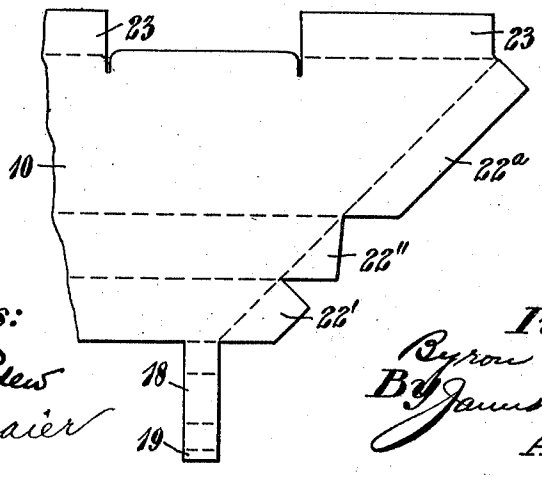


Fig. 8.



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UNITED STATES PATENT OFFICE.

BYRON E. MOOREHOUS, OF CINCINNATI, OHIO, ASSIGNOR OF ONE-HALF TO JESSE MEIS, OF CINCINNATI, OHIO.

FRAME.

1,315,196. Specification of Letters Patent. Patented Sept. 2, 1919.

Application filed May 4, 1918. Serial No. 232,475.

To all whom it may concern:

Be it known that I, BYRON E. MOOREHOUS, a citizen of the United States, and a resident of Cincinnati in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Frames, of which the following is a specification.

My invention relates to frames for pictures and the like, and to changeable exhibitors, and more especially to the latter. Its object is to firmly hold any flat object, such as a poster or picture, for display, but at the same time to be adapted to readily release the poster or the like for renewal or replacement. The more especial object is to afford a means for thus securely holding and attractively displaying advertising posters at the fronts of theaters and to permit the ready removal of these posters without damage to them, and the insertion of other posters.

My invention consists in the combination of parts and in the details of construction and arrangement of parts as will hereinafter be more fully described and claimed.

In the drawings:

Figure 1 is a front perspective view of a frame embodying my invention, and showing it in closed condition, and showing how a subsidiary display means is supported thereby;

Fig. 2 is a rear perspective view of the frame;

Fig. 3 is a front perspective view of the same in open condition;

Fig. 4 is a horizontal partial cross-section on a plane corresponding to the line 4—4 of Fig. 3, but illustrating the parts in closed condition as in Fig. 1;

Fig. 5 is a similar view, but showing the parts in partially opened condition;

Fig. 6 is a detail perspective view of part of the frame-casing;

Fig. 7 is a similar view of part of the molding;

Fig. 8 is a partial plan view of the blank for the molding; and

Fig. 9 is a detail perspective view of one of the ribs.

Such convenience of removal and replacement of posters, which are necessarily made of thin and inexpensive paper which is readily torn, is of especial importance in connection with moving-picture theaters where the change of display must be made daily, or at least every few days, and this must be done during the last performance advertised by the poster, generally late at night. Such work, under the ordinary conditions of management of such theaters, must be done hurriedly, and frequently under bad weather conditions, as, for instance, in a strong wind. The result is that with ordinary methods heretofore employed, the posters are badly damaged, both in insertion and removal. It is a distinct economy if the posters can be preserved in good condition for repeated use by successive theaters, and the time and labor of placing and removing the posters is, of course, also economized.

As I prefer to construct my invention for this as well as other purposes to which a frame is adapted, and as exemplified herein, there is the base structure composed of the upright stiles 1 at the sides and the rails 2 at the top and bottom, respectively, which are suitably joined at the corners 3 in any approved manner; it being understood that these parts 1 and 2 are preferably made of wood. They thus make up the rectangular base structure and the inner sides of these parts 1 and 2 preferably have the rabbet 4 (Fig. 4) all around, while the backs of the rails 2 are mortised down to the rabbet 4 to receive the ends of the relatively light upright stiles 5 at intervals across the structure which thus bring their front sides flush with the front side of the rabbet 4. Against these front sides is supported the flat backing 6 which preferably is of heavy wall-board or the like and fastened to its supporting structure in a suitable manner as by nails 7 (Fig. 3). It is against the front surface of this backing 6 that the picture, poster or other flat object 8 is placed; the structure being so proportioned with respect to the picture or the like, preferably, that the picture or the like has its edges lying close to the inner sides of the stiles 1 and nails 3 all around the structure.

It has been the custom, with some such structure as has so far been described, to tack the picture or poster or the like to the backing, either with ordinary tacks or with thumb tacks; and such holders for the post-

Thus, as exemplified herein, there are side molding sections 9 and upper and lower molding sections 10. Fitting around the upright stiles 1 are the frame-casings 11, and around the upper and lower rails 2, similar frame-casings 12. These casings are preferably of sheet metal bent into the cross-section clearly shown in Figs. 4 and 5 covering the front and outer side of the respective stile 1 or rail 2 and mitered at the corners, having lugs 13 that come against the inner sides of the stiles or rails and are secured thereto as by nails 14 (Figs. 4 and 5) and having a rear flange 15 that comes around against the rear side of the stile or rail and is secured by nails 16. It is to the respective frame-casings 11 or 12 that the moldings 9 or 10 are hinged. Each molding section is made of sheet metal formed into a suitable cross-sectional shape to give it a desirable appearance when closed, as indicated in Fig. 1; such a cross-section being more clearly shown in Figs. 4 and 5. Whatever be the particular ornamental configuration of this cross-section, I prefer to provide the molding along its inner edge with a suitable reinforcement, which, as here shown, comprises a wooden strip 17 around which the metal of the molding is bent to hold the strip to the molding. As here shown, the metal of the molding is cut away so that only tongues 18 thereof come around the rear and inner sides of the strip 17, which tongues have their ends 19 soldered to the rear side of the molding. These tongues 18 may be integral with the molding, as indicated in Fig. 8, or may be made separate and soldered or otherwise suitably secured to the molding. If the tongues are used, the wood of the strip 17 is left exposed at its rear side, making it slightly more convenient to secure therein the nails 20 which depending in shape and number upon the ornamental configuration to be given thereto. By having these flanges turned down at the miters, there is a more extended bearing with the molding sections neatly fitted to each other than there is with the thin edges of the sheet metal of the sections; thus better providing for the mutual reinforcement of these sections by each other where they meet at their corners, without any especial connecting means thereat.

The front sides of the stiles 1 and rails 2 have at suitable intervals, gains 25, with their bottoms substantially even with the front surface of the backing 6; which thus leave recesses inside the frame casings 11 and 12, in which are mounted the springs 26. Each of these springs 26 is preferably composed of a strip of flat resilient metal bent into U-shape, but with one of the legs 27 considerably longer than the other leg 28. The shorter leg 28 is fastened to the bottom of the gain 25 as by the screws 29, with the bottom of the U close to the inside of the frame-casing, and the longer leg 27 extending out of the gain or recess 25 into the space that receives the poster or the like 8. The molding sections 9 and 10 are provided with ribs 30 at the proper intervals therealong; each rib 30 having a lug 31, which, when the molding section is in closed position with the rubber heads 21 bearing against the poster or the like 8, is projected over into the gain or recess 25 and bears against the front of the long leg 27 of the spring 26. The expanding tendency of this spring is to push forward on this lug 31 and consequently to push the molding section backward so that the heads 21 bear heavily on the poster or the like 8 and clamp it firmly against the backing 6. As many of these heads 21 may be provided as is de-

sirable or necessary to insure the proper holding of the poster or the like around its edges.

When the poster or the like is to be removed, the molding section is simply swung forwardly and outwardly as seen in Fig. 5. During the first stages of this swinging, it compresses the spring 26 still more as its lug 31 swings back; but as soon as the lug 31 begins to swing forward, then the pressure of the spring 26 on this lug tends to throw the molding section forward and outward and to hold it in open position after it has been swung back against the frame-casing at the respective side, as indicated in Fig. 3. This action of the spring 26, in forcing the section to open position after it has passed a certain point is well shown in Fig. 5.

I prefer to turn the free end 32 of the leg 27 of the spring 26 under to make it rounded and thus avoid injury to the edges of the poster 8 or the like when it is being inserted or removed; and the end of the lug 31 of the rib 30 is also preferably turned under to afford a rounded bearing surface where it slides along the front side of the spring 26 in opening or closing. These ribs 30 and their lugs 31 are preferably made of heavy sheet metal formed into channels, as shown in Fig. 9, to fit across the inner surface of the molding section and be soldered or otherwise suitably secured thereto, and thereby act as a transverse reinforcement of the molding. It will be understood that the edges of these channeled ribs will conform to whatever configuration the molding has in any case; and where the lug 31 joins its rib 30 behind the hinged bead 23 or 22, as the case may be, the sides of the channel shape gradually diminish until the cross-section of the lug 31 is substantially flat. However, it is preferred, that the lug 31 should curve slightly rearwardly, as shown, in order to insure that the sole bearing of the spring 26 on the structure thus made up of the molding section, its rib and lug 31, will be at the extreme end of this lug on the outer side of the hinge and not at any point at the other side of the hinge which would result in the spring forcing the molding section forward and releasing the object which it holds.

The poster 8 or the like may be provided with a glass or other transparent covering which may be held thereagainst by the clamping molding sections; or, as in many cases, the posters may be mounted without any covering with the clamping means bearing directly against the face of the poster, as indicated in the drawings. In any event, it is generally desirable to mount a subsidiary display means or sign upon the main display means announcing the date of the performance or other information not contained on the posters as they are supplied to the individual theater. This is very conveniently provided for in my invention by a simple thin, straight rod 33 (Fig. 1) extending across the front of the poster with its end parts bearing on any two opposite ones of the heads or buttons 21 that bear against the poster. Upon this rod 33 anywhere along its length across the poster may be hung the subsidiary sign 34 by means of suitable hooks 35 or other supporting means on its upper edge. It will be seen that this rod may be located variously up and down the poster, and the sign 34 may be located variously along the rod; with the result that it is possible to locate this sign in a part of the poster which may be obscured without detracting from the value of the main display. That is, it may be located in some blank space or margin where there is neither reading matter nor illustrative matter, as is well exemplified in Fig. 1.

While certain constructional details are deemed preferable in connection with my invention, and I have shown and described these rather specifically in elucidating the construction and use of my invention, as is required, I do not wish to be understood as being limited to such precise showing and description, but having thus fully described my invention, what I claim as new and desire to secure by Letters Patent is:

In a frame, a supporting structure, and separate lateral elements hinged to said structure to swing in against and hold a flat object to said structure, or to swing out away from said structure and release said object for ready removal from the frame, and buttons of soft material on said elements to bear against said object, and subsidiary display means comprising a bar to be supported across said object on any two opposite ones of said buttons, and a display element adjustable along said bar, whereby said display element may be supported at various positions up and down or across said object for the purposes set forth.

BYRON E. MOOREHOUS.

Witnesses:
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CLARENCE PERDEW.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."