

May 26, 1925.

1,539,633

F. W. BENTON ET AL

DISPLAY PANEL

Filed Aug. 25, 1924

2 Sheets-Sheet 1

Fig. 1.

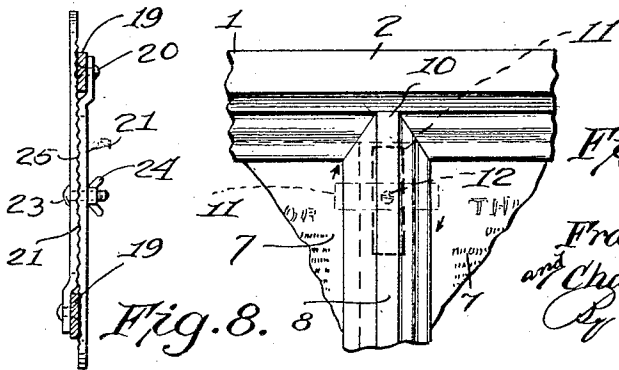
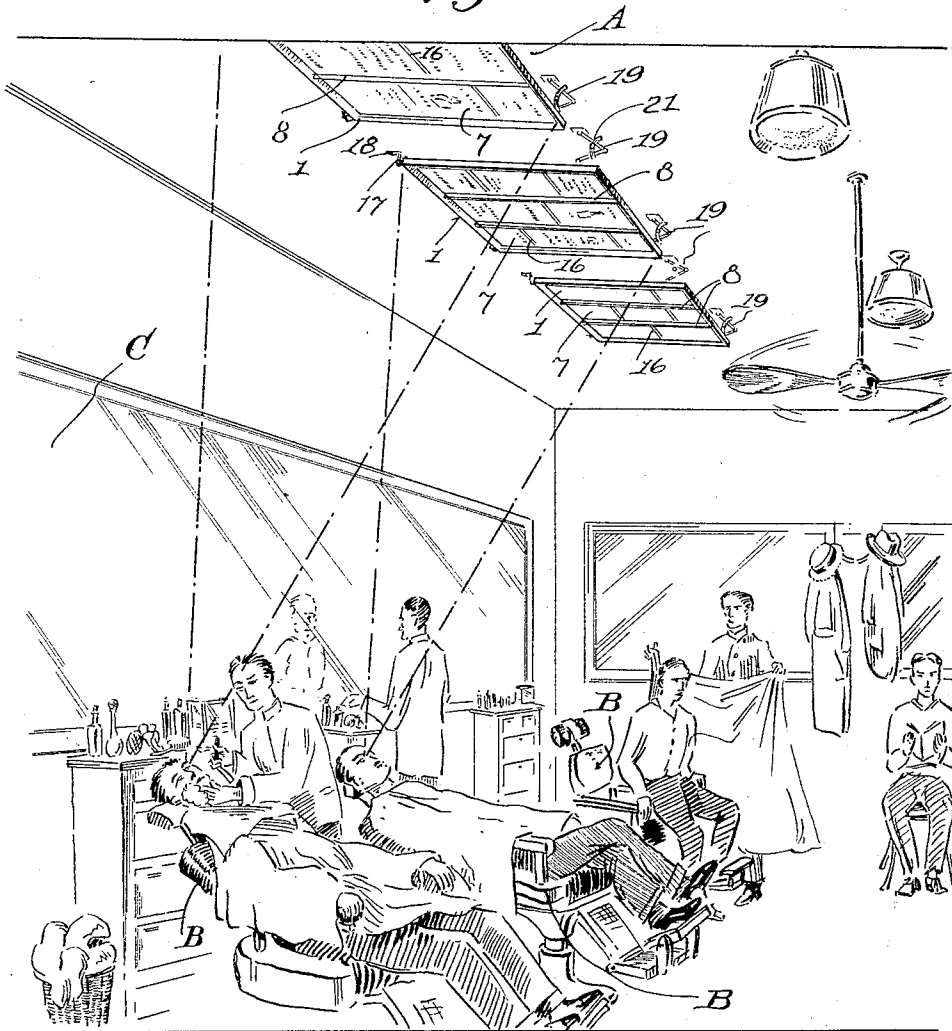


Fig. 7.

Fig. 8.

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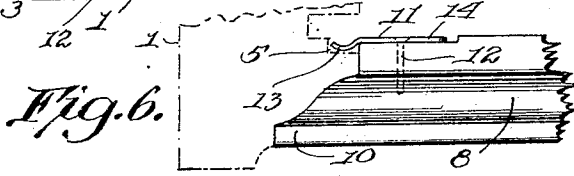
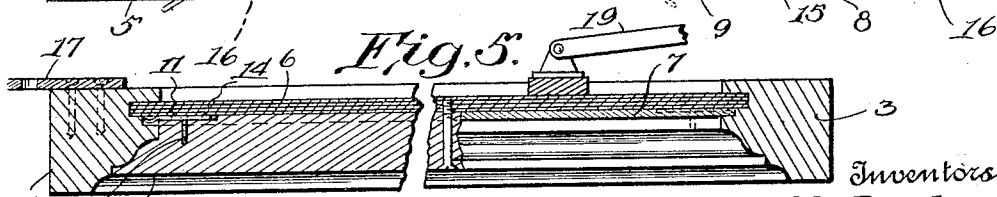
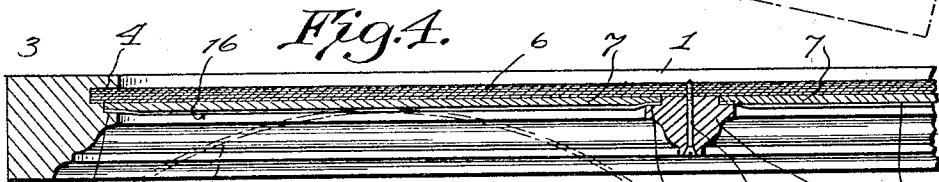
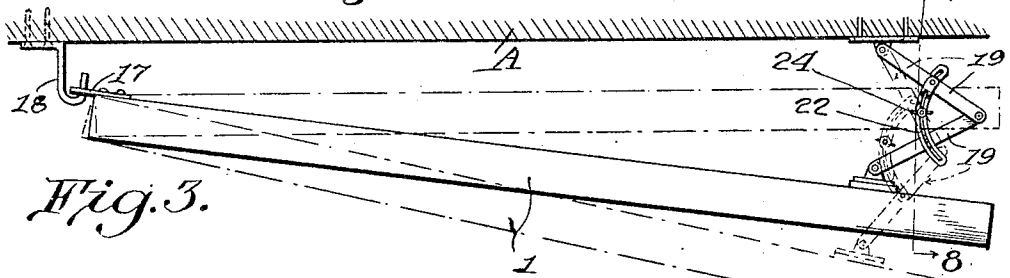
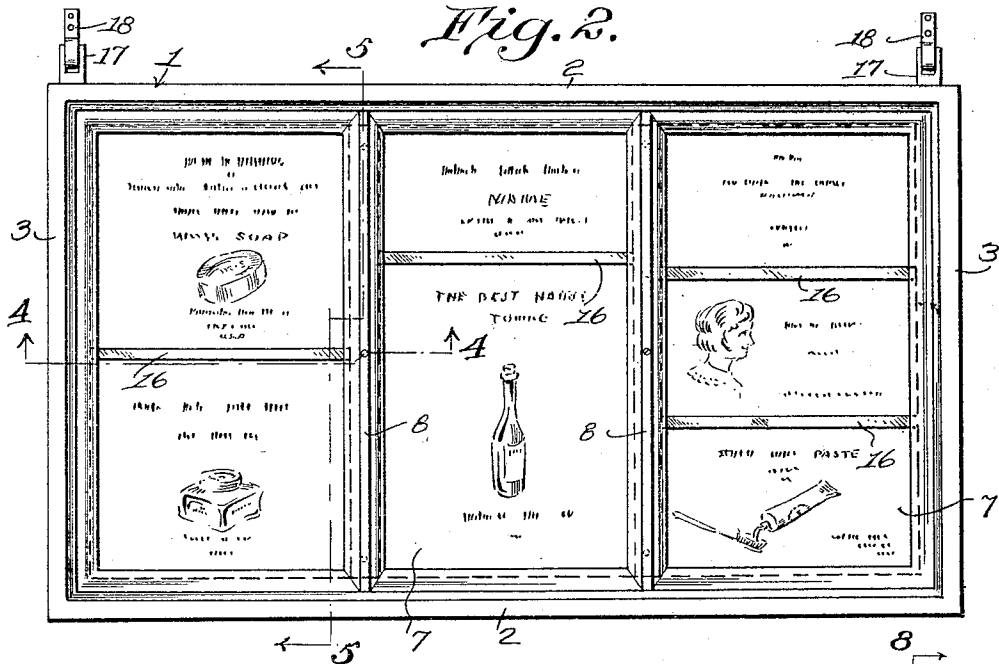
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F. W. BENTON ET AL

DISPLAY PANEL

Filed Aug. 25, 1924

2 Sheets-Sheet 2



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UNITED STATES PATENT OFFICE.

FRANK W. BENTON AND CHARLES C. BENTON, OF WILSON, NORTH CAROLINA.

DISPLAY PANEL.

Application filed August 25, 1924. Serial No. 734,084.

To all whom it may concern:

Be it known that we, FRANK W. BENTON and CHARLES C. BENTON, both citizens of the United States, residing at Wilson, in the county of Wilson and State of North Carolina, have invented new and useful Improvements in Display Panels, of which the following is a specification.

This invention relates to means for displaying advertisements and other like matter in barber shops and other places, the main object in view being to provide means whereby the advertisements or other display matter will fall within the direct line of vision of a person reclining in a barber's chair, so that he can read or observe the advertisements or other matter while being shaved or receiving other treatment from the barber or operator.

Another object of the invention is to provide a display panel which may be mounted upon the ceiling of a barber shop or the like in such manner as to be adjustable with relation to the ceiling and to a barber's chair below, so that the advertising matter or the like may be disposed at a proper angle and within normal vision range for a clear display, or to suit variations in ceiling levels or differences in lighting effects in different shops, whereby the panel may be arranged to conform to varying service conditions to give a clear display and to prevent light reflections, blurring, light and shadow effects or other defects annoying to the observer or liable to cause eye strain.

Still another object of the invention is to provide a display panel or frame adapted to hold one or more advertising cards or signs of various sizes and embodying means for varying the sizes of its sign receiving spaces and for permitting of the ready and convenient changing of the signs whenever desired.

Still another object of the invention is to provide simple, reliable and efficient means for adjusting the panel to and holding it in adjusted position, for subdividing the panel into sign receiving spaces of the same or different sizes, and for clamping the signs in the receiving spaces in a manner to permit of their ready and convenient application and removal.

The invention consists of the features of construction, combination and arrange-

ment of parts, hereinafter fully described and claimed, reference being had to the accompanying drawings, in which:—

Figure 1 is a perspective view illustrating the use of the invention.

Figure 2 is a face view of the display panel.

Figure 3 is a side elevation, showing the manner of mounting the panel and illustrating its adjustability.

Figure 4 is a section on line 4—4 of Figure 2.

Figure 5 is a section on line 5—5 of Figure 2.

Figure 6 is a fragmentary side view of one of the removable partitions or molding strips, the frame molding appearing in dotted lines, showing one of the fastening devices for holding the removable strip in position.

Figure 7 is an enlarged view of a portion of the panel, illustrating in full and dotted lines one of the end fastenings of a removable strip in securing and released positions.

Figure 8 is an enlarged detail section on line 8—8 of Figure 3.

In the practical embodiment of our invention, we provide a display panel 1 in the form of a holding frame, of rectangular, oblong rectangular, or other suitable shape, that shown in the present instance being of oblong rectangular shape and comprising side pieces or walls 2 and end pieces or walls 3. These walls 2 and 3 may be of wooden or other molding strips rigidly united to provide a frame of any suitable size. The walls 2 and 3 are, as shown, rabbeted around their inner edges to provide inner grooves or recesses 4 and outer grooves or recesses 5 intersecting the same, the grooves 4 being adapted for the reception of the marginal edges of a backing 6 of any suitable stiff or rigid material.

The frame is designed for the reception of objects 7, which may consist of sign cards or the like displaying the same or other different advertisements or other display matter. The frame is of such construction that it may receive and hold an advertising or sign card of the same internal dimensions as the frame, or it may be subdivided into receiving spaces to receive a number of sign cards or the like of the same or different sizes. For the purpose of subdividing the

frame in one direction into spaces, one or more division strips or moldings 8 may be provided to extend between the sides 2. Each of these strips 8 is provided in the rear faces of its side edges with grooves or recesses 9 complementary to the grooves 5, for a purpose hereinafter described. Each strip has its ends formed with lapping projections 10 to overlie portions of the faces of the strips 2, and is provided upon the inner side of its body portion, at each end, with a fastening or retaining member 11 pivotally connected therewith, as indicated at 12, and provided with outer and inner end portions 13 and 14. The outer end portions 13 of the members 11 are bent or offset to have a spring pressure action and extend beyond the ends of the body of the strip 8 so as to project into the grooves 5 of the strips 2 and bear against the backing 6 when said ends 13 are projected for a retaining action. When the projected ends 13 of the members 11 extend into the recesses 5, which position they are adapted to occupy when the members 11 lie parallel with the strips 8, the member 8 is held thereby from outward displacement. In such position of the members 11, however, they also slidably connect the strips 8 with the strips 2, so that the member 8 may be adjusted longitudinally of the frame 1 to lie at different distances from one or the other of the end pieces 3 and thereby divide the interior of the frame 1 into longitudinal spaces of a size determined by the position of the strip or strips 8. The fastenings 11 may be retracted by simply inserting the blade of a penknife, screw-driver or other thin blade, beneath the strip 8 and into engagement with the ends 14 of each fastener 11 in turn, whereby under pressure the fasteners 11 may be swung from a parallel locking position, as indicated in full lines in Figure 6 and heavy dotted lines in Figure 7, to a position at right angles to the strip 8, as indicated in light dotted lines in Figure 7, whereupon the strip 8 will be released from engagement with the frame 1, as will be readily understood. For the purpose of preventing the strips 8 from becoming displaced after adjustment, screws or like fastenings 15 may be provided for passage therethrough and engagement with the backing 6, whereby the strips 8 will be firmly held in fixed position.

The spaces formed by the strips 2, 3 and 8 may be employed for the reception of sign cards 7 of suitable size or sizes to fit within the formed spaces, which cards may be suitably placed in position so as to have their marginal edges seat within the grooves or recesses 5 and 9, whereby they will be held clamped against the backing 6 against any possibility of displacement. We, however, provide means whereby the frame may be

further subdivided into spaces to receive cards of a still smaller size or sizes, such means comprising one or more division and clamping strips 16. These division or clamping strips 16 are designed for subdividing the space or spaces formed between the strips 2 and two of the molding strips 8, or between the strips 2, 3 and one or more strips 8, into division spaces of a smaller size or sizes as desired or required in service. Each strip 16 comprises, as shown in dotted lines in Figure 4, a piece of bowed spring metal which is designed in practice to overlap and conceal the adjoining edges of adjacent sign cards 7 in a space divided thereby and to be engaged at its ends in the grooves 5 in opposed sides of two strips 8 or one of the strips 3 and a strip 8, so as to be interlocked with the stationary strips and bear with spring pressure against the underlying edges of the cards, thereby concealing such edges and any gap which may exist between them and clamping the same by spring pressure in position. In applying each strip 16, it is disposed with its convex side, as shown in dotted lines in Figure 4, against the edges of the cards 7, and then pressed inwardly until it is substantially flat, in which operation its ends are projected into the grooves 5 by extension of the said strip 16 in the process of straightening, or the strip 16 may, in order to facilitate the engagement of its ends with the grooves 5, be disposed at an angle and pivotally or slidably shifted as it is straightened out to bring its ends into engagement with grooves 5, as will be readily understood. A reverse motion of the strips 16 will, it is obvious, admit of their disconnection from the frame for application at other points or to admit of the removal of sign cards and the substitution of other sign cards therefor. It will thus be seen that the invention provides simple and efficient means whereby the panel may be subdivided into sign receiving spaces of the same or different sizes, and for clamping the signs in the receiving spaces in a manner to permit of their ready and convenient application and removal.

One or more panels or frames, constructed as described, and containing the advertising or other matter to be displayed, are designed to be mounted upon the ceiling A of a barber shop or the like, so that the panel or panels will be within the direct range of vision of persons reclining in a barber's chair or chairs B arranged upon the floor below. These sign panels may also be arranged so that the advertising or other matter contained thereon will be reflected in a side wall mirror C so as to be viewed by waiting customers or others seated or standing in the shop and facing in the direction of the mirror. An important object of our invention is to mount

the panels 1 upon the ceiling A so that they may be readily and conveniently adjusted with relation to the ceiling A and chair or chairs B therebelow, for a focusing action or vision range adjustment so that the advertising matter or the like may be displayed at a proper angle and within normal vision range for a clear display. It is also designed to mount the frames 1 so that they may be adjusted as described to suit variations in ceiling levels or differences in lighting effects in different shops, so as to give a clear display of the advertising or other matter under all services or conditions and to prevent light reflections, blurring, light and shadow effects or other defects which may be annoying to the observer or liable to cause eye strains.

For mounting each frame 1 so as to secure the adjustments and advantages stated, one of the walls or strips, as the strip 2, of each frame is provided with apertured hanger plates 17 to engage hooked supporting brackets 18 fixed to the ceiling A, whereby such side of the frame is pivotally and detachably connected with and supported from the ceiling. At its side or end the frame 1 is adjustably supported from the ceiling by oppositely disposed pairs of folding or toggle links 19 pivoted at their remote ends to the ceiling and frame respectively and at their adjacent ends to each other, allowing such side or end of the frame to be raised and lowered to a variety of positions, some of which are indicated in full and dotted lines in Figure 3. Each link 19 has pivotally connected thereto, as at 20, a segmental or arcuately curved latch bar or bracket 21, which latch bars or brackets extend in opposite directions and overlap and are provided with longitudinally extending slots 22 for the reception and adjustment therein of a bolt 23 provided with a clamping nut 24, by means of which the locking bars or brackets may be slidably adjusted on each other in an arcuate path and then clamped firmly in position to hold the hanger link members 19 spread or collapsed to a desired degree and according to the frame adjustment required. If desired, the engaging faces of the bars or brackets 21 may be toothed or serrated for a secure locking engagement and to prevent slippage. It will be seen that by means of these supporting and fastening members, the frame 1 may be quickly and conveniently applied to or removed from the ceiling, and may be mounted upon a ceiling without marring or otherwise injuring the same, and that the frame may be adjusted to lie at different angles to the ceiling and the chair below, and also with relation to a wall mirror C, by means of which the advertising matter may be disposed to lie in the direct line of vision of

a person reclining in a chair B and at different distances from the chair to suit any particular height of ceiling, in order to dispose the sign matter within normal vision range, or to suit any peculiarities in lighting effects in a particular shop so that the sign matter may be clearly displayed. The arrangement described may also be found suitable in many shops for reflecting the sign matter into a side wall mirror, as the mirror C, so that the sign matter, in addition to being directly visible to occupants of the barbers' chairs, may be read clearly through reflection in the mirror by persons seated or standing in other parts of the shop.

It will, of course, be understood that, while the structure disclosed is preferred, modifications within the spirit of the invention and scope of the claims may be made. Also, if desired, a mirror may be arranged as one of the display elements in each frame 1 so that a person reclining in a chair may see himself being shaved or otherwise treated by the barber.

Having thus fully described our invention, we claim:—

1. Means for displaying advertisements or other matter in a barber shop so as to be viewed by a customer reclining in a chair, comprising a frame for holding the advertisement, means for hingedly supporting one edge of the frame from the ceiling, and means adjustably connecting an opposite edge of the frame to the ceiling whereby the frame may be disposed at different angles of inclination relative to the chair and ceiling.

2. Means for displaying advertisements or other matter in a barber shop so as to be viewed by a customer reclining in a chair, comprising a frame for holding the advertisement, means for hingedly supporting one edge of the frame from the ceiling, hangers adjustably connecting an opposite edge of the frame with the ceiling, and means for securing said hangers in different positions of adjustment.

3. Means for displaying advertisements or other matter in a barber shop so as to be viewed by a customer reclining in a chair, comprising a frame for holding the advertisement, means for hingedly supporting one edge of the frame from the ceiling, links pivotally connecting an opposite edge of the frame with the ceiling, and fastening means for holding said links in different angular relations.

4. Means for displaying advertisements or other matter in a barber shop so as to be viewed by a customer reclining in a chair, comprising a frame for holding the advertisement, means for hingedly supporting one edge of the frame from the ceiling, folding hangers adjustably connecting an opposite

edge of the frame with the ceiling, and fastening means adjustably connecting said hangers.

5 5. Means for displaying advertisements or other matter in a barber shop so as to be viewed by a customer reclining in a chair, comprising a frame for holding the advertisement, means for hingedly supporting one edge of the frame from the ceiling, hangers 10 pivotally coupled to each other and to the ceiling and an opposite edge of the frame, fastening brackets carried by the hangers, and means adjustably connecting said fastening brackets.

15 6. Means for displaying advertisements or other matter in a barber shop so as to be viewed by a customer reclining in a chair, comprising a frame for holding the advertisement, means for hingedly supporting one edge of the frame from the ceiling, hanger 20 links pivotally coupled to each other and to the ceiling and an opposite edge of the frame, slotted fastening brackets pivoted to the hangers and slidable on each other, and 25 fastening means passing through the slots in the brackets and adjustably connecting the same.

30 7. Means for displaying advertising or other matter upon the ceiling of a barber shop in the direct line of vision of a customer reclining in a chair, comprising a frame for holding the matter to be displayed, and means for supporting said frame from 35 the ceiling and for adjusting said frame to different angles relative to the ceiling and to the line of vision of a person reclining in the chair.

40 8. A display device comprising a frame having grooves or recesses in opposite sides thereof, a division strip extending between said sides, and retaining members pivotally engaging the ends of the strips and slidably engaging the grooves in the frame sides and adapted to be swung into and out of engagement with said grooves. 45

9. A display device comprising a frame

having grooves or recesses in opposite sides thereof, a division strip extending between said sides, retaining members pivotally engaging the ends of the strips and slidably engaging the grooves in the frame sides and adapted to be swung into and out of engagement with said grooves, and means for fixing said strips to the frame against sliding motion thereon. 50 55

10. A display device comprising a frame having its sides provided with grooves, removable division strips for separating the frame into object receiving spaces, fasteners for slidably connecting the ends of the division strips with the grooves or recesses in certain of the sides of the frame, means for fixing said strips against sliding motion, and normally bowed spring strips adapted to be extended across said spaces and flattened against the objects to be held therein and to have their ends sprung into engagement with the grooves or recesses in the frame sides or division strips forming the sides of the enclosing walls of said spaces. 60 65 70

11. A display device comprising a frame formed of sides having inner recesses and outer recesses intersecting said inner recesses, a backing marginally seated in the inner recesses, grooved partition strips extending across the frame in one direction between certain sides thereof and subdividing said frame into object receiving spaces, fasteners carried by said strips for slidable and detachable engagement with said frame sides, means for detachably fixing said strips to the backing, and normally bowed spring cross strips adapted to be extended across and flattened against the objects and to have the ends thereof sprung into engagement with the grooves in the sides or partition strips or a side and a partition strip between which they extend. 75 80 85

In testimony whereof we affix our signatures.

FRANK W. BENTON.
CHARLES C. BENTON.