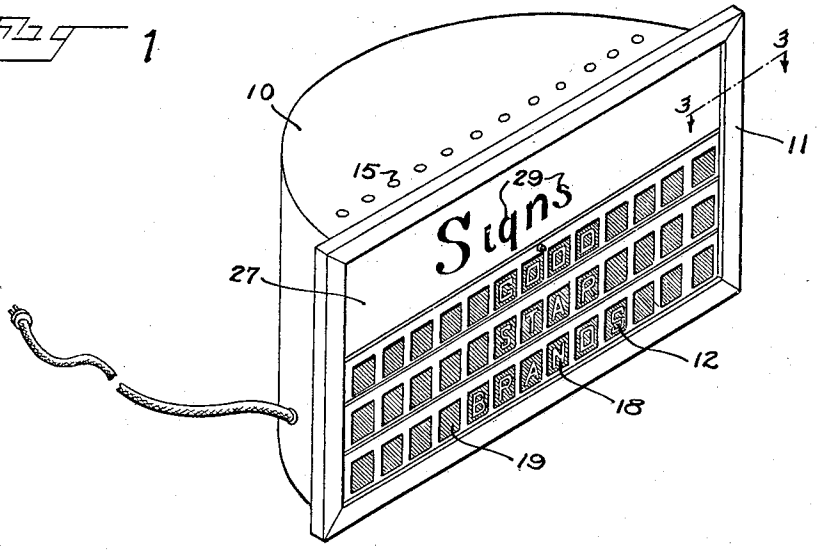
Feb. 18, 1930. J. E. STEWART ET AL 1,747,400

SIGN CONSTRUCTION

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Fig 1



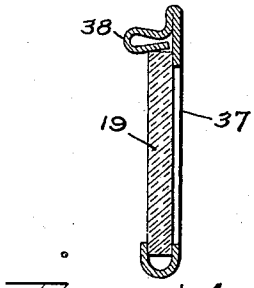


Fig 4

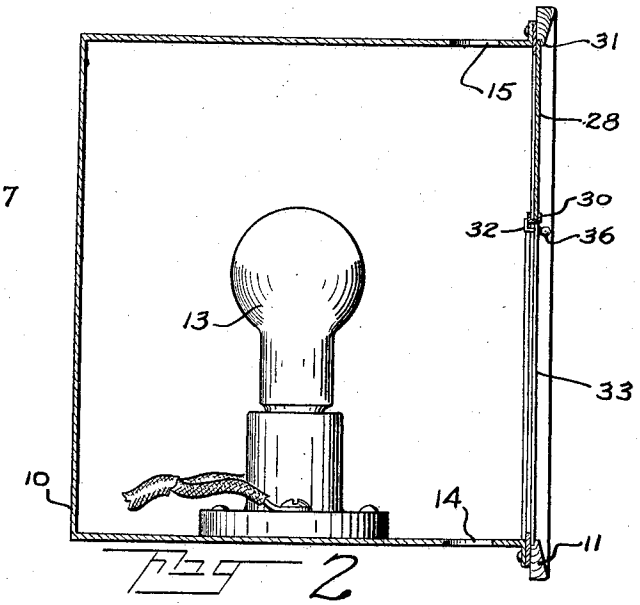


Fig 2

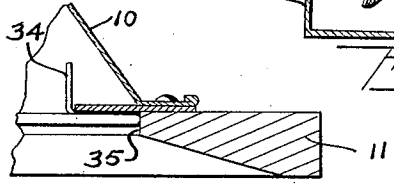


Fig 3

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Feb. 18, 1930. J. E. STEWART ET AL 1,747,400

SIGN CONSTRUCTION

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Fig 4

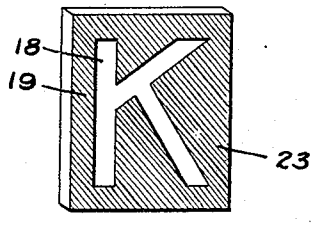
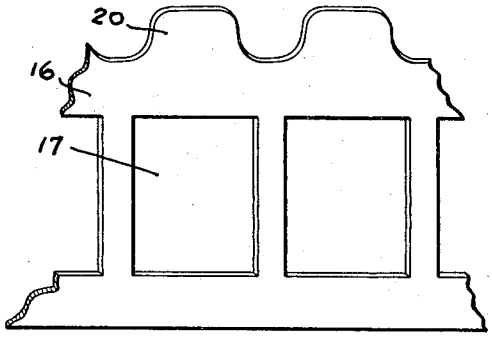


Fig 5



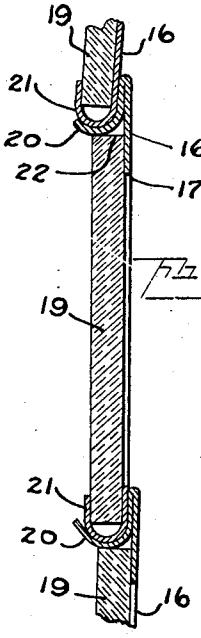


Fig 6

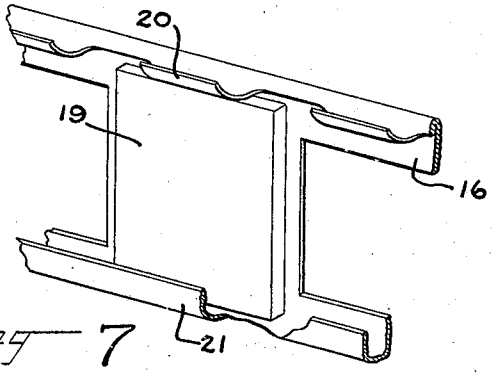


Fig 7

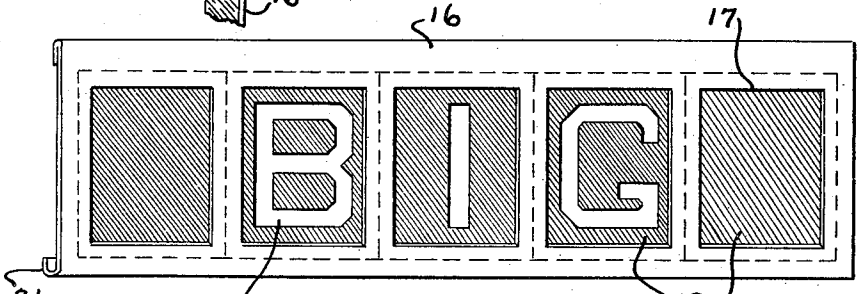


Fig 8

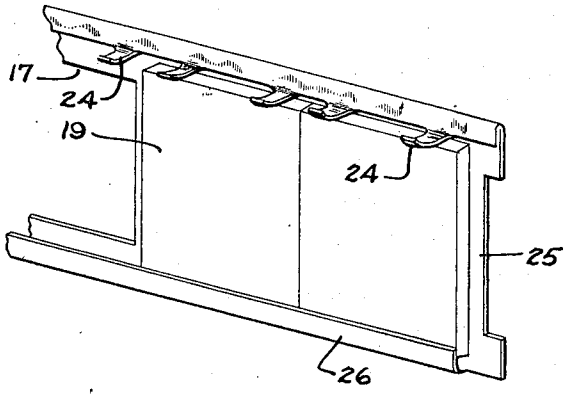
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SIGN CONSTRUCTION

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Fig 9



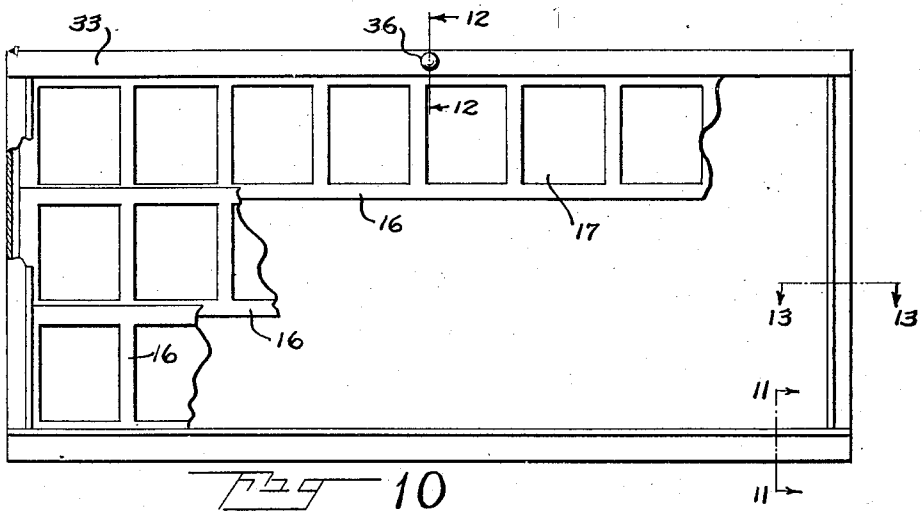


Fig 10

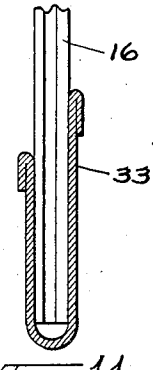


Fig 11

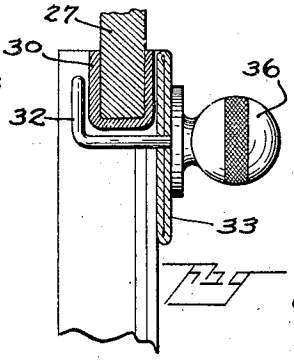


Fig 12

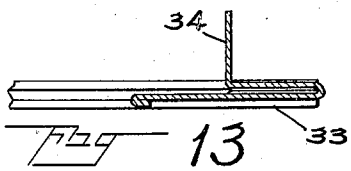


Fig 13

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UNITED STATES PATENT OFFICE

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SIGN CONSTRUCTION

Application filed February 28, 1927, Serial No. 171,530. Renewed July 5, 1929.

This invention relates generally to the construction of a sign or exhibiting device and more particularly to improved means in a sign construction for removably holding exhibitory matter in display position.

In sign constructions, and more particularly of the lamp box or illuminated type, difficulty has been found in providing satisfactory means for mounting interchangeable letters or other display characters in firmly seated positions in the holders. It is necessary to securely hold the characters in display position in order to maintain orderly alinement as well as to maintain contact of the character-bearing members with the surfaces of the holders and thereby cut off the escape of light rays except through the translucent or transparent material of which the characters are formed.

A general object of the present invention is to provide a sign structure which will be free from the objections referred to and which will include character supporting devices arranged to hold the members with the desired immovability and closeness of fit in the seats provided.

The invention comprises a sign structure including a framework provided with sight openings with which character-bearing members cooperate to provide the desired indication. Seat forming flanges are mounted on the inner face of the framework adjacent the openings to receive edge portions of the members. Spring clip members are arranged adjacent the opposite edges of the openings to engage and exert pressure on the rear faces of the members to hold them in snug contact with the inner surface of the framework at the margins of the openings.

Another feature of the invention resides in an arrangement of the spring clip members in such manner as to facilitate the ready interchange of the character bearing members, the spring clip members permitting the rapid removal and replacement of the members as desired.

Other features of the invention will be hereinafter referred to.

In the drawings, in which a number of embodiments of the invention have been selected for illustration:

Figure 1 is a view in perspective showing a sign structure embodying the invention;

Figure 2 is a view in transverse vertical section of the device shown in Figure 1;

Figure 3 is a view in vertical section and on an enlarged scale taken on the line 3—3 of Figure 1;

Figure 4 is a perspective view of a display member used in connection with the invention;

Figure 5 is a front view of a blank from which a display character holder is formed;

Figure 6 is a view in transverse vertical section and on an enlarged scale of the display portion of the device;

Figure 7 is a view in perspective showing the relation of a display character to the holding device;

Figure 8 is a perspective view of a portion of a sign showing the relation of the display characters thereto;

Figure 9 is a view similar to Figure 7 showing a modified form of the invention;

Figure 10 is a front view partly broken away of the display section of the device;

Figure 11 is a view in vertical section and on an enlarged scale taken on the line 11—11 of Figure 10;

Figure 12 is a view in vertical section and on an enlarged scale taken on the line 12—12 of Figure 10;

Figure 13 is a view in horizontal section and on an enlarged scale taken on the line 13—13 of Figure 10.

Figure 14 is a view in vertical section of a modified form of the invention.

Referring to the drawings for a more detailed description of the invention, an illuminated sign structure is shown which includes a lamp house 10 and a frame member 11 designed to hold exhibitory or display matter as at 12. The lamp house 10 is adapted to be equipped with any suitable source of illumination, such as an electric incandescent bulb 13. Preferably ventilating openings are provided at 14 and 15 in the lower and upper walls of the lamp house as is shown in Figure 2 of the drawings.

The invention resides in the structure by which the exhibiting or display elements are removably supported in display position in front of the lamp house 10. Referring to Figures 6, 7 and 8 of the drawings, it will be seen that display member supporting devices are utilized which consist of elongated frame members 16 formed of sheet metal or the like and provided with a series of openings 17. The openings shown in the drawing are rectangular in formation but they may be formed in any other desired shape. The openings 17 function as sight openings through which display characters, such as are shown at 18 in the drawings, are viewed. The display characters 18 are formed on blocks or plates 19 which preferably consist of translucent or transparent material of any suitable character. The display members 19 are arranged to be mounted in position back of the sight openings 17 in the frames 16 in order to support the display characters thereon in the desired display position.

In order to hold the display members 19 in the proper position for exhibition or display, the frame members 16 are provided at the rear of their uppermost and lowermost edges with curved seats or bracket members 20 and 21. The curved seat or flange 21 extending along the lowermost edge of each frame member 16 is adapted to receive the lowermost edge portion of an individual display member 19, the uppermost edge of the display member being adapted to be forced into position beneath the curved flange member 20 which is formed along the upper margin of the frame member. With this construction it will be seen that the display member 19 is seated at its lower edge within the curved flange member 21 at the lower edge of the frame member and that the uppermost edge 22 of the display member makes contact with the lower surface of the curved flange member 20 extending along the upper margin of the frame member 16. The upper frame member therefore acts as a spring tensioned member which serves to exert pressure against the uppermost edge of the display member 19 to hold the display member in its seat 21 and against the rearmost face of the frame member 16 to thereby prevent the leakage of light rays around the edges of the display member and through the sight opening 17.

The effect of this is to insure the transmission of light through the display members only, no light finding its way through the forward wall of the display device except through the formed display characters 18 which are carried by the display members 19.

In order to insure that light passes through the formed characters only, the remaining forward or rearward surface of the display member 19 is coated with opaque material as at 23 in Figure 4 of the drawings.

Not only do the curved flanges or seating members 20 and 21 formed on the frame member 16 serve to support the display members 19 in rigid contacting relation with the rearward faces of the frame member 16 but the uppermost flanges or seating members 20 of each frame member serve also to support the lowermost edges of the overlying frame member. For example, in Figure 6 of the drawings it will be seen that the seating flange member 20 near the upper portion of the figure supports the lowermost seating flange member 21 of the frame member 16 immediately above the one shown in the middle of the figure. On the other hand, near the lower portion of the figure the lower extremity of the middle frame member 16 is supported in the seat 20 formed on the upper extremity of the lowermost frame member 16.

This construction and structural arrangement of parts provides an effective means of interchanging display characters with a minimum degree of trouble so that the changing of the wording of a sign can be rapidly and quickly accomplished. It will be seen that the sign characters are readily removed from their positions by merely withdrawing the upper end from beneath the curved surface of the flange member 20 which bears thereagainst. On the other hand the substitute sign member is as readily snapped into place, the pressure of the curved under surface of the flange member 20 providing the spring pressure required to produce the desired snugness of fit of the sign character in its seat.

In Figure 5 of the drawings there is shown a blank strip of metal cut out in the desired manner to provide the frame member 16 when the upper and lower extremities of the blank are formed into the flange or seating members 20 and 21. The prospective view of the frame members shown in Figure 7 shows the condition of the part when the blank shown in Figure 5 has been subjected to the further forming operation to produce the flanges 20 and 21 thereof. This figure also shows a display member 19 mounted in position between the flange members 20 and 21.

Referring to Figure 9 of the drawings there is shown a modified form of the invention in which a different form of seating member 24 is used at the upper portion of the frame member 25. The lower flange member or seat 26 is, however, similar in all respects to the seat 21 shown in Figure 7.

Figure 10 of the drawings shows the display surface of the device and the assembled relation of a plurality of frame members 16. It will be seen that three frame members are used having overlapping relation at their upper and lower extremities to thereby prevent the passage of light rays between the frames. The interengagement of the frames with each

other is the same as that shown in the enlarged sectional view of Figure 6.

The upper portion of the forward display surface of the device preferably has a panel formation as at 27 in Figure 1. The panel effect thus provided consists of a single plate or section of material such as is shown at 28 in Figure 2, this section of material having characters 29 formed therein to permit the passage of light therethrough. The remaining portions of the forward surface of the panel section 28 are coated with opaque material as will be clear. The panel section 28 is mounted at its lower edge in a channel-like member 30. The panel member 28 is movably mounted in its seat, the channel member 30 being arranged to move vertically in order to provide for the removal of the upper edge of the panel 28 from a groove 31 provided for the purpose in the upper member of the framework 11. A hook member 32, terminating in a knob 36, is arranged to engage the inner face of the channel member 30 at a mid point therein to lock the removable lower frame member 33 in position in the enclosing frame member 11.

In Figure 3 of the drawings there is shown a vertically disposed flange member 34 so positioned as to preclude light rays escaping from the lamp box along the lateral edges 35 of the display members.

In Fig. 14 is shown a modified form of the invention in which the frame member 37 which in general is similar to that shown in Fig. 6 is formed at its upper end with a folded back portion 38 for holding the blank 19.

Any suitable material may be used in the construction of the display members. Glass, celluloid, casein, bakelite, or other materials, are capable of use in the manner described, and the particular material employed forms no essential part of the present invention.

The terms and expressions which we have employed are used as terms of description and not of limitation, and we have no intention, in the use of such terms and expressions, of excluding any mechanical equivalents of the features shown and described, or portions thereof, but recognize that various structural modifications are possible within the scope of the invention claimed.

What we claim is:

1. In an exhibiting sign construction, a framework having a series of alined sight openings, an elongated seat mounted on the inner surface of the framework and extending along one of the margins of the openings, and spring clip members mounted on the framework adjacent the margins of the openings opposite the seat, said spring clip members having bowed portions arranged to engage the adjacent edge and the rear surfaces of display members supported in said seat in display relation to said openings and having exterior seat portions shaped to mate with the elongated seat of a similar adjacent framework.

2. In an exhibiting sign construction, a series of frame members provided with display openings, each of the frame members being provided with a seat forming flange in which to receive display members mounted in display position with relation to the display openings, and a seat formed on the opposite margin of each frame member in which to receive the seat forming flange of another frame member in the series.

3. In an exhibiting sign construction, a series of frame members provided with display openings, each of the frame members being provided with a seat forming flange along one margin thereof in which to receive display members mounted in display position with relation to the openings, the opposite margin of each frame member being provided with a spring tension member for engaging the adjacent edge of the display member and holding the display member in display position, and the next adjacent frame member in the series occupying an overlapping relation with the margin of the first named member.

4. In an exhibiting sign construction, a series of frame members provided with display openings, each of the frame members being provided with a seat forming flange member extending along one margin thereof in which to receive display characters arranged in display position with relation to the openings, each of said frame members being provided with a seat forming flange member adjacent its opposite margin, said seat forming flange being so arranged that its convex surface engages the edge of a display member to hold the display member in display position, and the concave surface of said flange member being adapted to receive the seat forming flange of an adjacent frame member in the series.

5. In an exhibiting sign construction a series of sheet metal frame members provided with display openings, each of the frame members being provided with a seat forming flange member extending along one margin thereof in which to receive display characters arranged in display position with relation to the openings, each of said frame members being provided with a seat forming flange member adjacent its opposite margin, said seat forming flange member being arranged to provide on one face a retaining seat for the display member and on its opposite face a seat for engagement with a similar adjoining frame member, substantially as described.

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