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J. G. STEISS

1,777,866

DISPLAY APPARATUS

Filed April 18, 1929

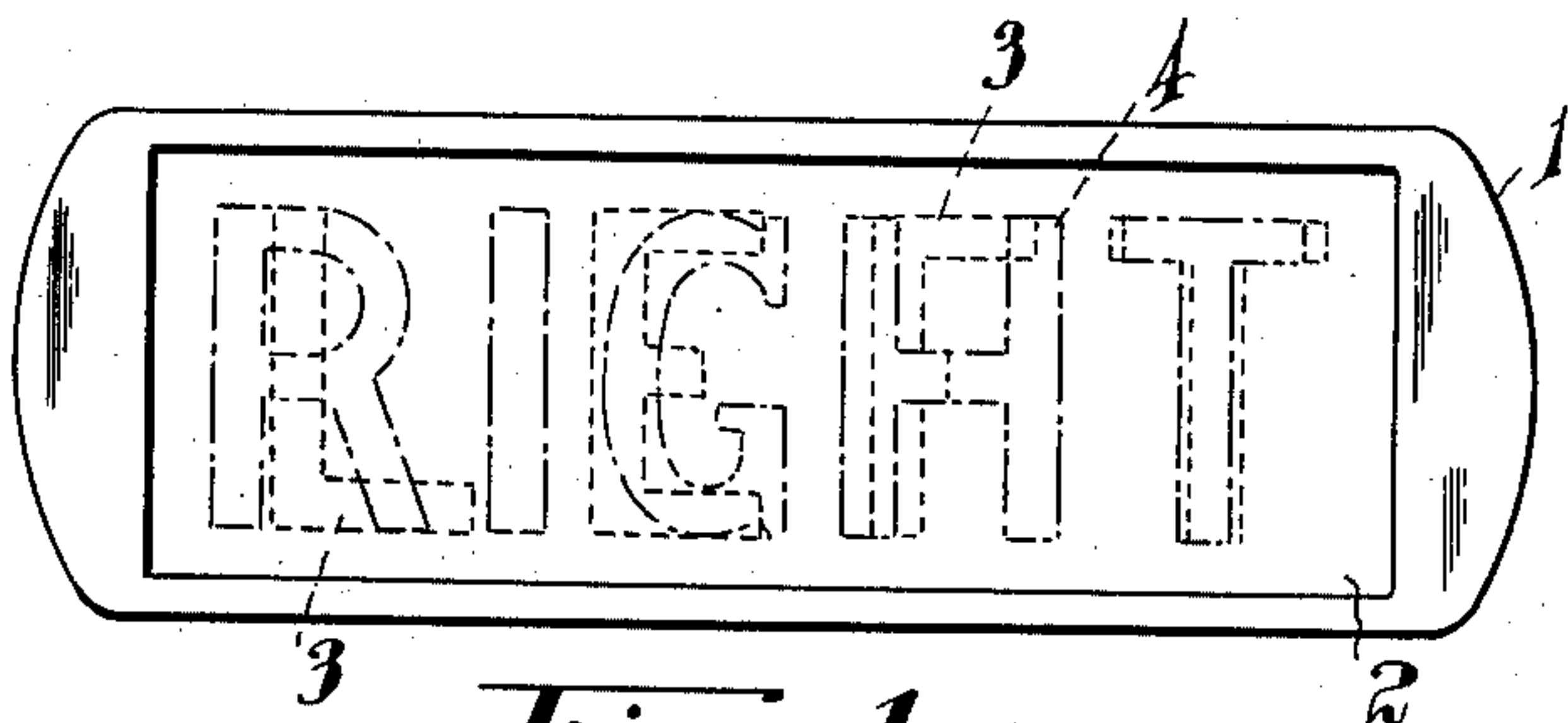


Fig. 1.

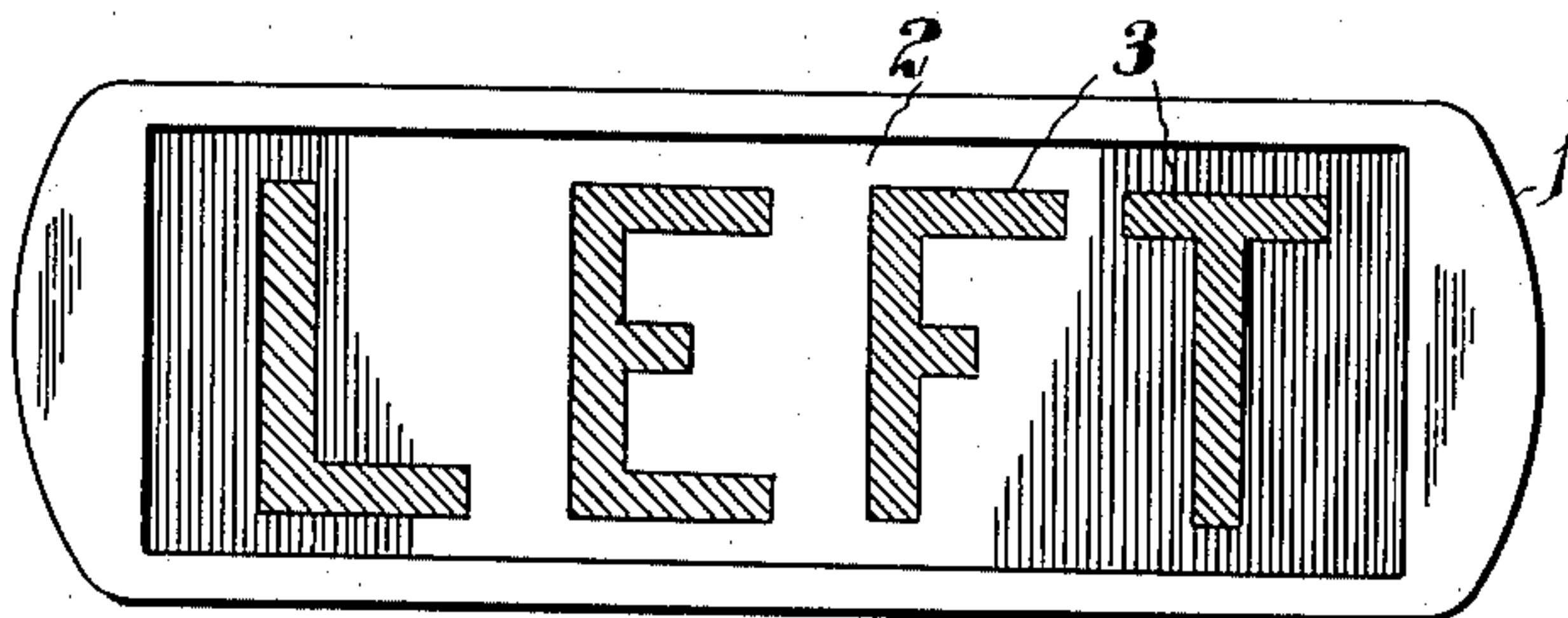


Fig. 4.

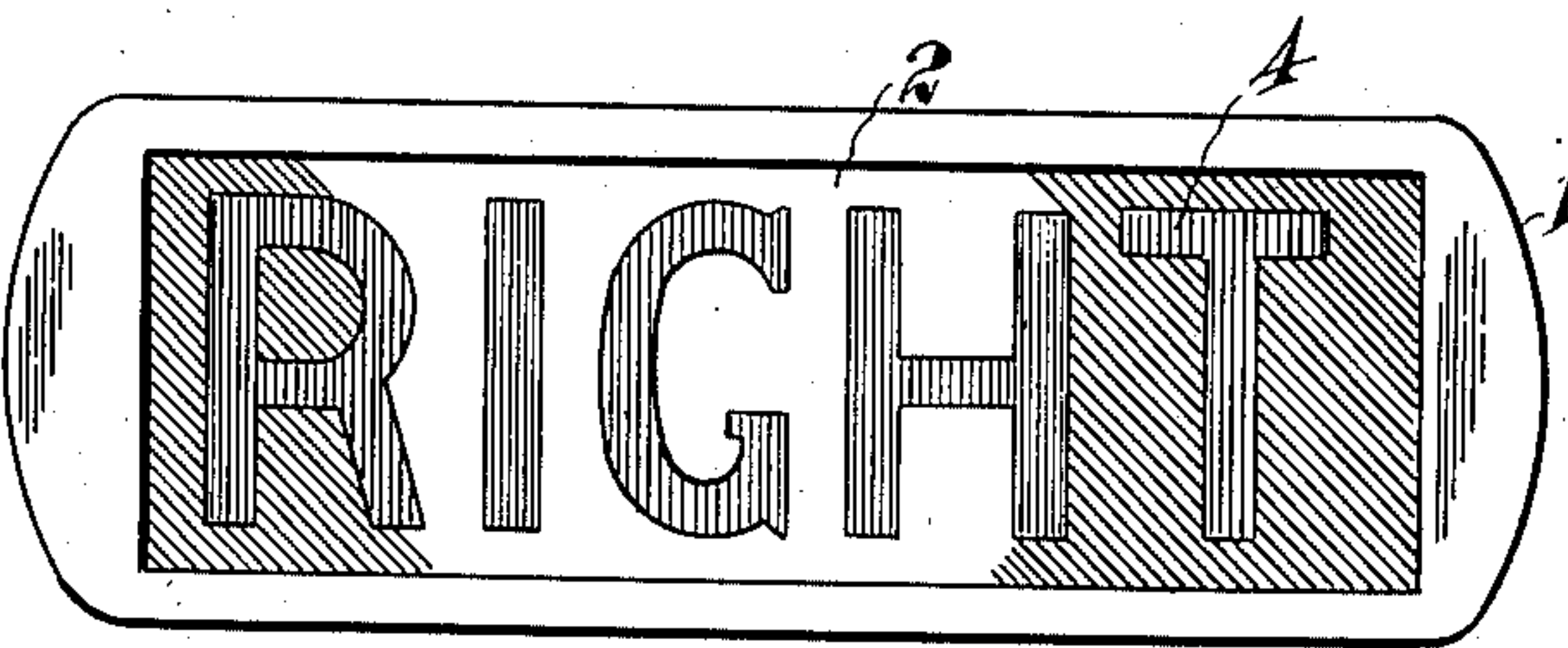


Fig. 6.

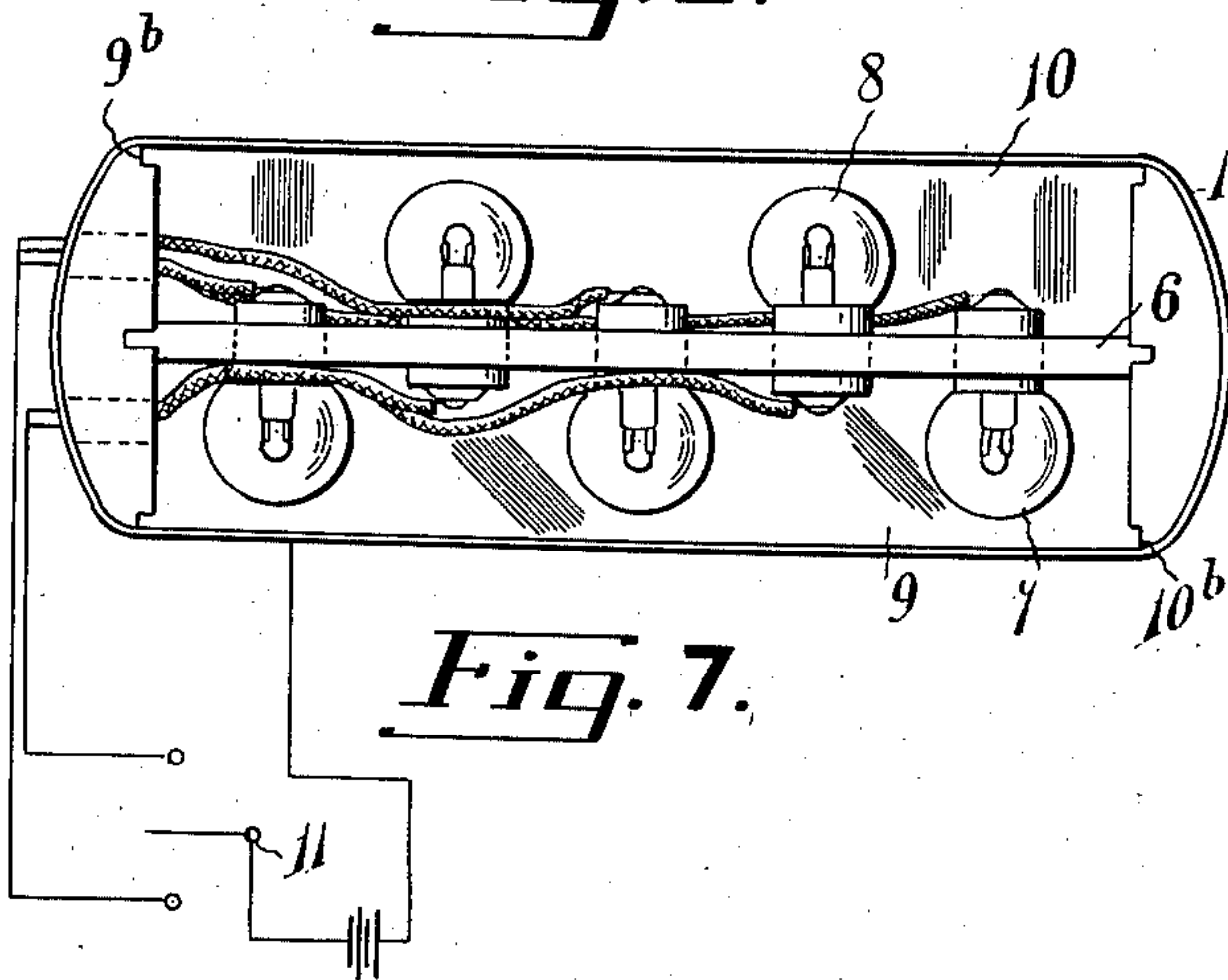


Fig. 7.

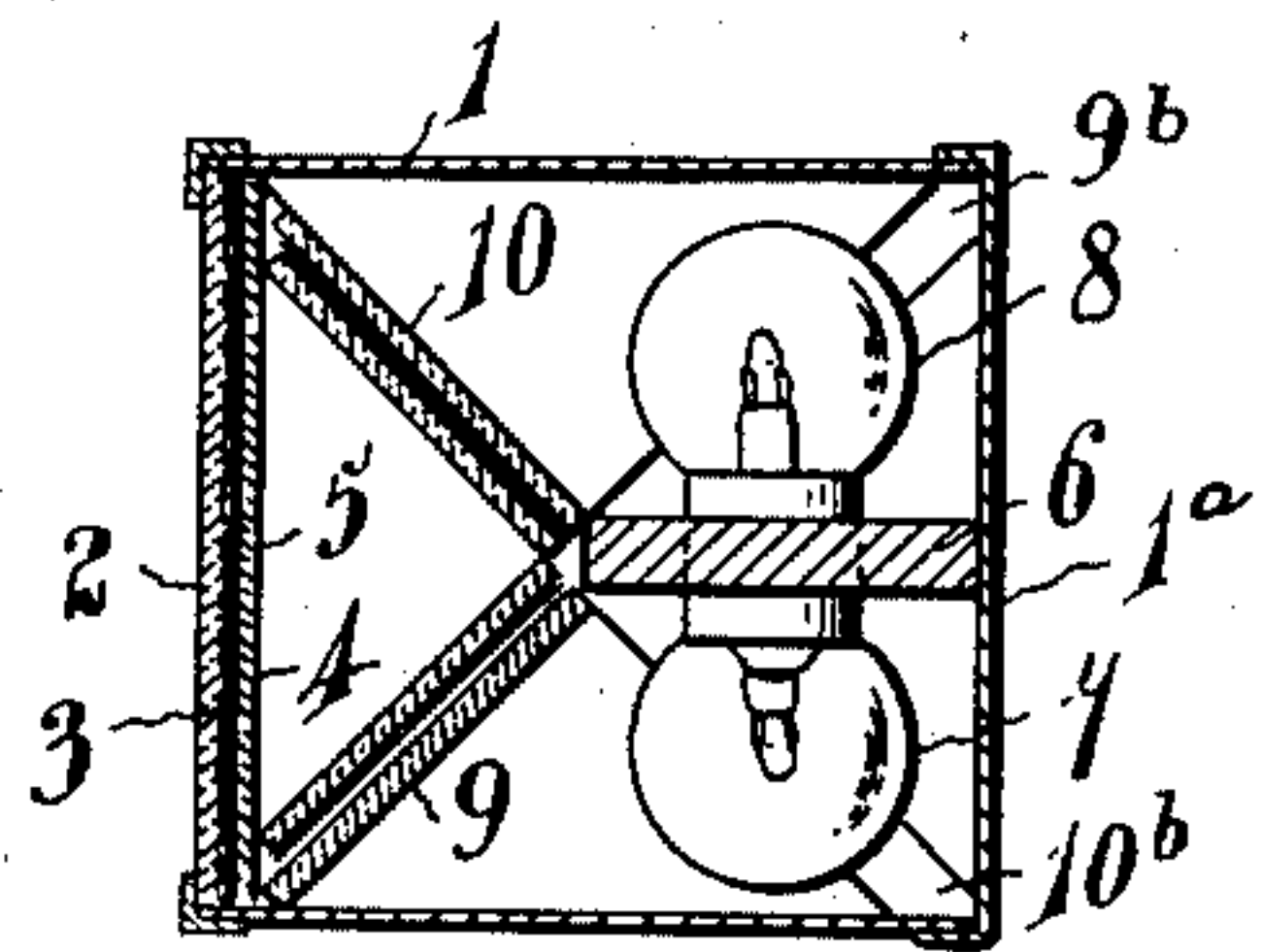


Fig. 2.

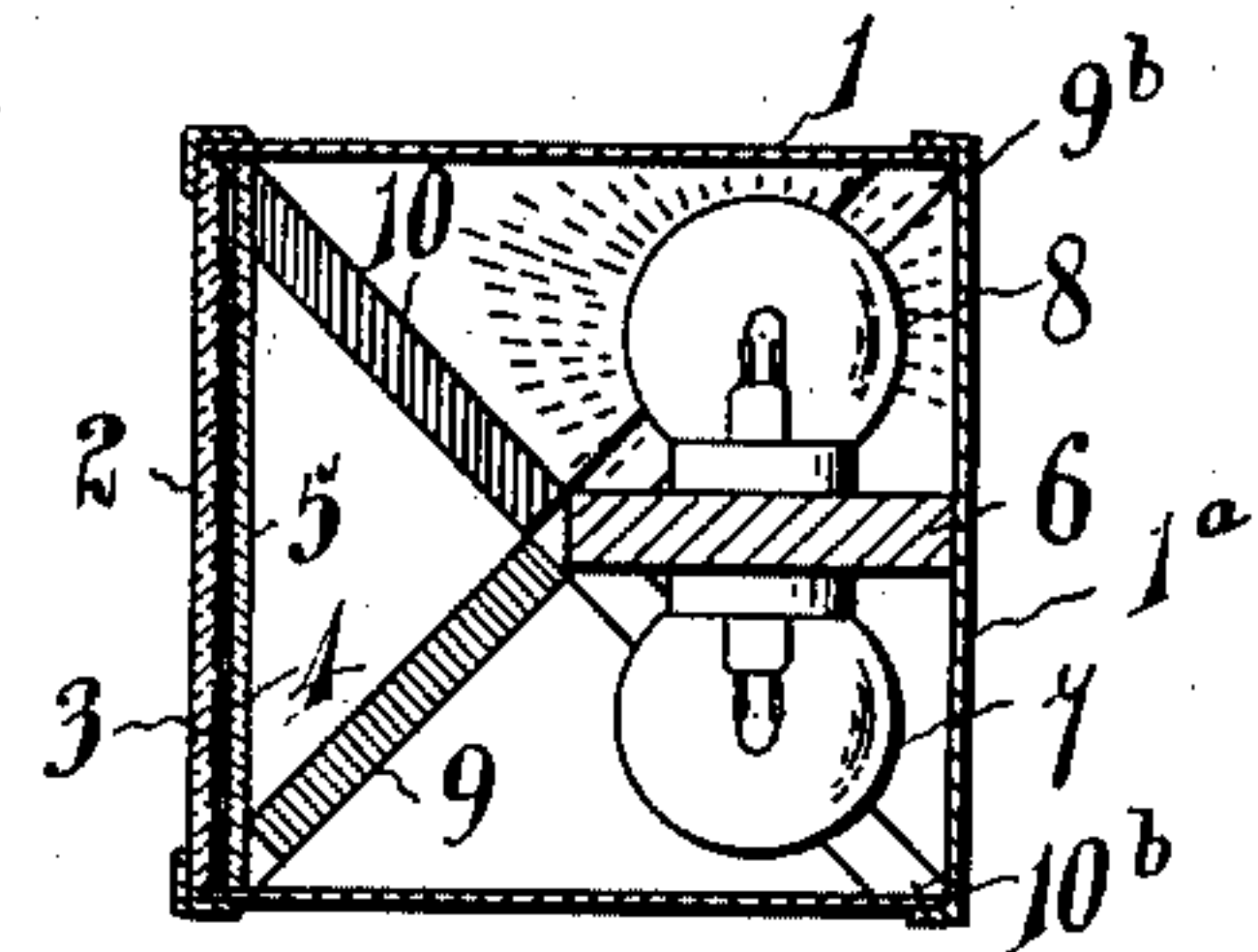


Fig. 3.

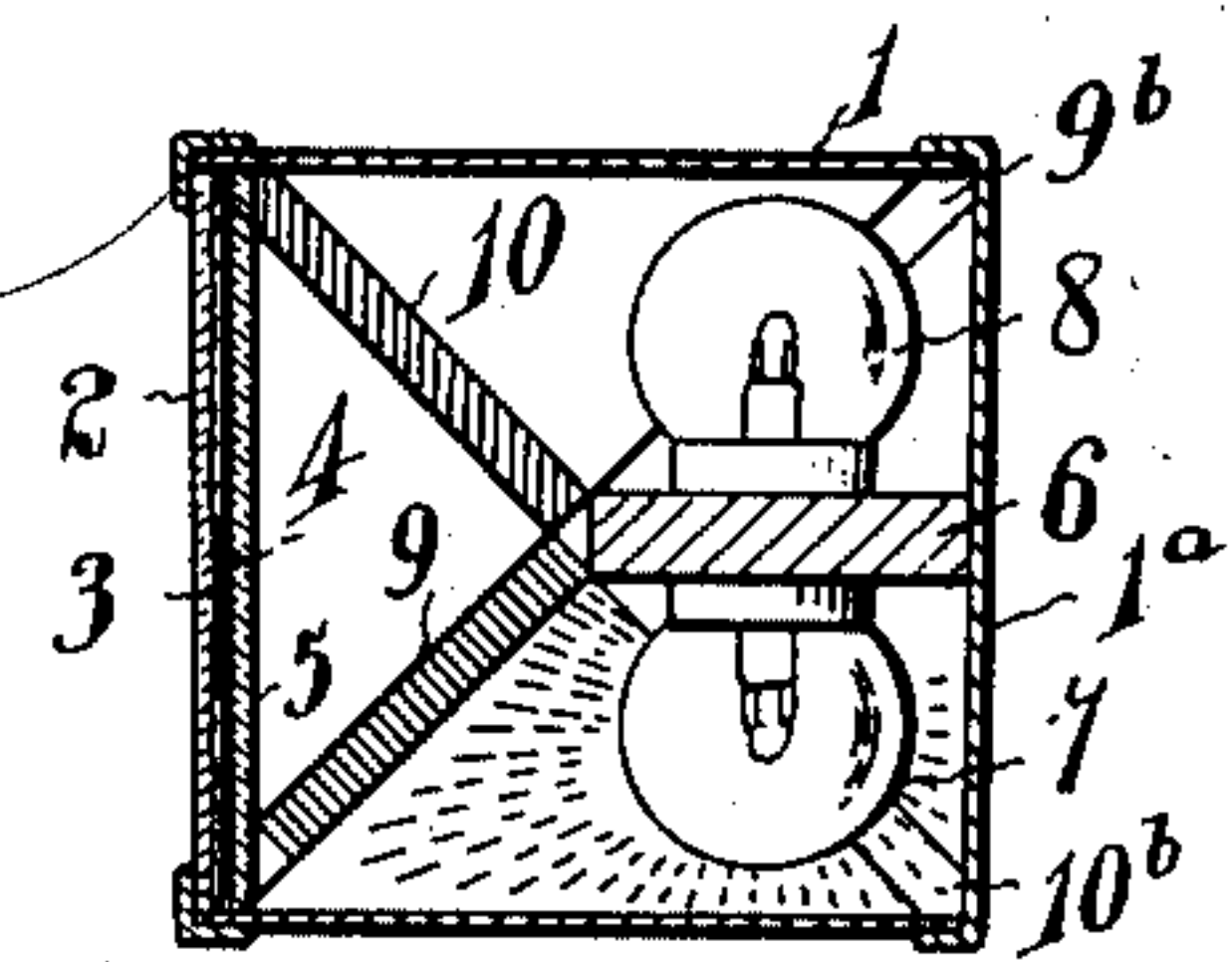


Fig. 5.

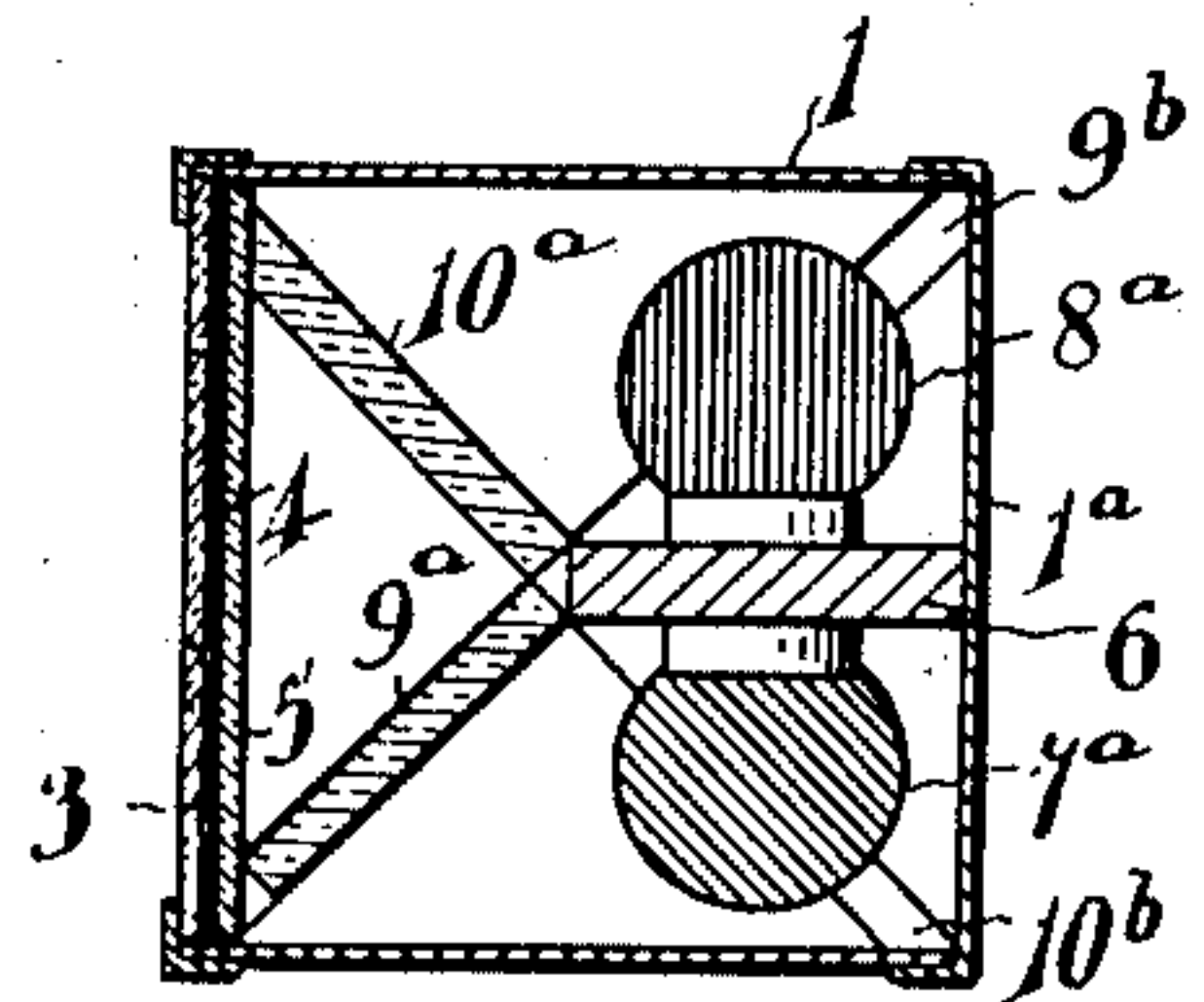


Fig. 8.

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DISPLAY APPARATUS

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This invention relates to display apparatus and more particularly to the type in which a plurality of displays are independently shown on one apparatus, and my object is to provide a device of this character in which the different display matters are shown by contrasting coloured effects and in which the display matters may be superimposed on a common ground.

I attain my object by providing two translucent indicia of contrasting colours which may be superimposed on the back of a translucent window. Behind the indicia are located two independently controllable sources of light having colours substantially corresponding to the indicia whereby the coloured rays from either source of light will pass through the correspondingly coloured indicia and the window to provide a coloured background for the contrasting coloured indicia. This results in the background being illuminated with light of either colour for displaying the indicia of contrasting colour to the light employed. As the light rays of either colour do not pass the contrasting coloured indicia, the latter are shown dark against the lighter coloured background.

The constructions are hereinafter more fully described and illustrated in the accompanying drawings in which

Fig. 1 is a front elevation of my device showing two separate display matters superimposed on the back of the window of the device;

Fig. 2 a cross section thereof with both sources of light extinguished;

Fig. 3 a cross section showing the source of light behind the red coloured screen to be lighted;

Fig. 4 a front elevation of Fig. 3 showing the matter displayed;

Fig. 5 a cross section showing the source of light behind the green coloured screen to be lighted;

Fig. 6 a front elevation of Fig. 5;

Fig. 7 a rear view of the device; and

Fig. 8 a cross section of a modified form of my device.

1 is a casing provided with a translucent window 2 which is preferably formed of

semi-transparent crinkly white glass to produce a light dispersive effect and to reduce the visibility by daylight of contrastingly coloured indicia 3 and 4 located behind the window. Any suitable means, such as a sheet of clear glass 5, may be used to hold the indicia in position against the inner side of the window. The indicia 3 may be coloured green or blue and the indicia 4 may be coloured red, cerise, or amber. While the general terms green and red are used throughout the specification, it will be distinctly understood that any contrasting or complementary colours will come within the meaning of these terms.

The casing is divided by means of an opaque separator 6 into two compartments in which sources of light 7 and 8 are suitably mounted. Between these compartments and a compartment in which the indicia is carried at the rear of the window 2, are screens 9 and 10 of colours substantially corresponding to the colours of the indicia 3 and 4 respectively.

By lighting the bulb or bulbs 8, see Figs. 3 and 4 the screen 10 transmits red coloured rays of light to illuminate the window 2 and these rays pass through the red coloured indicia 4 to illuminate the portion of the window against which the indicia 4 lies. As the red rays will not pass through the green indicia 3, the latter is displayed on the red background. When the bulb or bulbs 7 are lighted, see Figs. 5 and 6, the window 2 is illuminated by green coloured rays of light through the screen 9 and these pass through the green coloured indicia 3 to provide a green coloured background for the red coloured indicia 4 which is thus displayed. In other words, the green coloured light rays pass the green coloured indicia to cut out the latter and thus provide a green background for the red coloured indicia, and similarly the red coloured light rays pass the red coloured indicia to cut out the latter and thus provide a red background for the green coloured indicia.

In Fig. 8 lenses 9^a and 10^a are substantially for the screens 9 and 10 and the bulbs 7^a, 8^a are coloured green and red respectively. Any

ordinary two contact switch 11 may be employed to control the lighting of the bulbs 7 or 7^a independently of the bulbs 8 or 8^a when the device is used as a direction indicator as illustrated in the drawings.

5 It will readily be seen that, by substituting sets of advertising matter of contrasting colours for the sets of direction matter shown and by substituting any well known electric flasher for the switch shown, the device will
10 alternately display the sets of advertising matter. The manner in which the results are obtained will create an interest by the public in the display apparatus itself which will increase its value as an advertising medium.
15 Further, interest and a reduction in the amount of material required to build each device are obtained by superimposing the indicia 3 and 4 on one another.

20 The parts of the device may be positioned by sliding the ends of the screens 9 and 10 in grooves 9^b and 10^b formed in the ends of the casing so that the screens engage the glass 5. The screens are held in position by the separator 6 which in turn is engaged by the removable cover 1^a of the casing.
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Coloured glass may be used for the screens or they may be made by inserting coloured transparent sheets of gelatinous material between two sheets of clear glass. In the latter
30 case the sheets of each screen may be of slightly different shades so that they will blend to obtain the best results.

What I claim is:

35 Display apparatus comprising a casing; two superimposed translucent indicia of contrasting color supported at the front of the casing; a longitudinal partition extending from the back of the casing partway towards
40 the front; two translucent screens of similar color to the aforesaid indicia extending from end to end of the casing, one extending from the front edge of the aforesaid partition to one longitudinal edge of the front of the casing and the other from the front edge of the
45 aforesaid partition to the other longitudinal edge of the front of the casing; and two independently controllable sources of light within the casing behind the screens and at
50 opposite sides of the partition.

Signed at Kitchner this 2nd day of April, 1929.

JOHN GORDON STEISS.

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