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MEANS FOR USE IN MAKING CONCRETE SKY VAULT OR FLOOR LIGHTS.

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1,211,133. Patented Jan. 2, 1917.

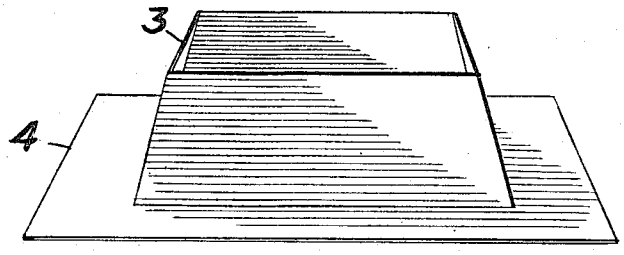


FIG. 1.

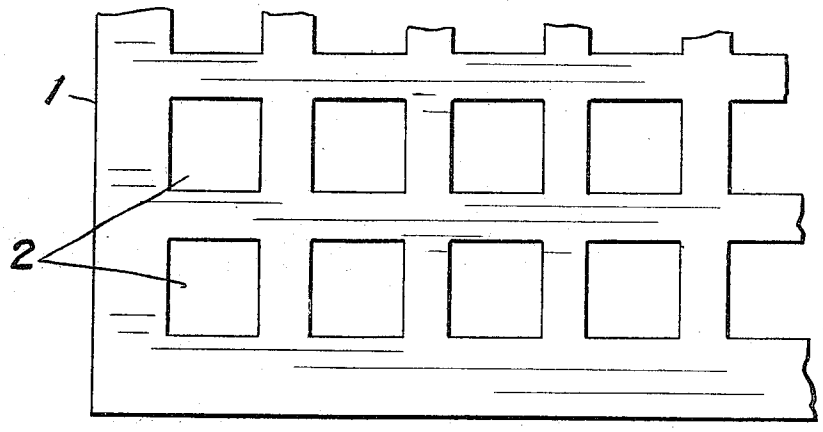


FIG. 2.

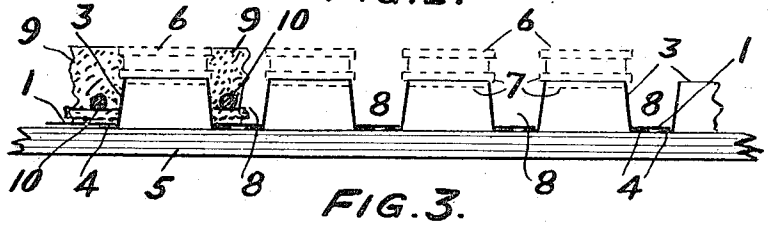


FIG. 3.

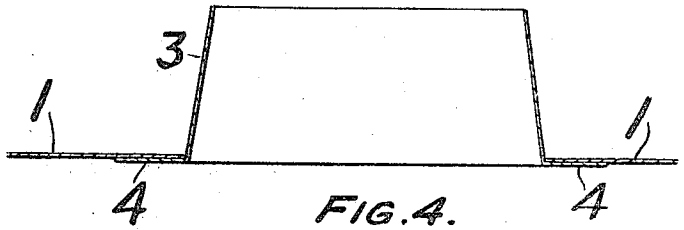


FIG. 4.

WITNESS:

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UNITED STATES PATENT OFFICE.

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MEANS FOR USE IN MAKING CONCRETE SKY-VAULT OR FLOOR LIGHTS.

1,211,133. Specification of Letters Patent. Patented Jan. 2, 1917.

Application filed May 5, 1916. Serial No. 95,565.

To all whom it may concern:

Be it known that we, FREDERICK J. GEIGER and ANTHONY ELTON DAVIS, both citizens of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have jointly invented certain new and useful Improvements in Means for Use in Making Concrete Sky-Vault or Floor Lights, of which the following is a specification.

In making glass and concrete sky-vault or floor lights it is customary to provide a temporary support upon which the concrete is laid and supported until it has set, and it is necessary to provide for holding the glasses in proper position during the application of the concrete.

The principal objects of the present invention are to provide improved and efficient means for holding the glasses against movement of any kind during the application and spreading of the concrete; to confine the concrete while it is plastic and so prevent it from marring the underface of the construction; to effect an economy in the depth of the glass; and to facilitate the removal of the temporary construction that was used as a support for holding and centering the glass.

The invention will be claimed at the end hereof but will be first described in connection with the accompanying drawings forming part hereof and in which—

Figure 1, is a perspective view of a flanged bottomless cup embodying a part of the invention. Fig. 2, is a top or plan view, drawn to a reduced scale, of a sheet having openings therethrough and embodying a part of the invention. Fig. 3, is a diagrammatic view illustrating the use of the means embodying features of the invention, and Fig. 4, is a sectional view drawn to an enlarged scale and illustrating the combination of parts embodying features of the invention.

In the drawings 1, is a sheet having openings 2, formed through it. The size and shape of these openings 2, may vary but they are shown as generally rectangular.

3, are bottomless cups having end flanges 4. As shown these cups taper internally and externally away from their flanges. The cups 3, are adapted to protrude through the openings 2, with their flanges 4, in contact with the surface of the sheet 1. Sheet metal or paper is an appropriate material from which to make the sheet and the cups, but the invention is of course not necessarily limited to the employment of those materials.

5, is a temporary support such as a suitable wood flooring laid over the opening which is to be closed by the concrete and glass construction.

The use of the means above described may be explained as follows: The cups 3, are arranged to protrude through the openings 2, with their flanges 4, in contact with the face of the sheet. The sheet with the cups protruding through it is laid upon the temporary support 5. Glasses 6, are mounted on the cups and are held to place thereon by suitable flanges 7, or their equivalents. The shape of the glasses is not material so long as it corresponds with the protruding portions of the cups. However, as shown the glasses are rectangular. Reinforcements 10, arranged in crossed relation are placed in the intersecting channels 8. The bottoms of the channels 8, are closed by reason of the fact that the flanges 4, of the cups underlap the portions of the sheet 1, between the openings 2, so that concrete 9, when applied to the structure is confined to the channels 8, and thus a smooth, neat appearance for the underside of the concrete is insured. The cups 3, are held in place while the layer 9, of concrete is being applied by reason of their flanges 4, which lie between the sheet 1, and the temporary support 5. The cups 3, are immovable during the application of the concrete, as has been stated, and they hold the glasses immovable during this operation so that the concrete can be properly applied and brought to the requisite level without danger of any movement of the glasses. After the concrete is set the temporary support 5, is removed and the flanges 4, afford means which are useful in withdrawing the cups, and after the cups are withdrawn the sheet 1, can be removed leaving a smooth sightly surface on the underside of the construction.

It will be obvious to those skilled in the art that modifications may be made in details of construction and arrangement without departing from the spirit of the invention which latter is not limited as to such

matters nor in any way other than the prior state of the art and the appended claims may require.

What we claim is:

1. Means for use in making glass and concrete sky-vault and floor light constructions which comprise the combination of a removable centering sheet having openings therethrough and adapted to temporarily underlie and support a layer of concrete, and bottomless cups having end flanges and adapted to protrude through the openings to support glasses above the sheet with their end flanges in contact with the underface of the sheet to prevent the escape of plastic concrete and afford means by which the cups can be removed from the set concrete, substantially as described.

2. Means for use in making glass and concrete sky-vault and floor light constructions which comprise the combination of a removable centering sheet having openings therethrough and adapted to temporarily underlie and support a layer of concrete, and bottomless tapering cups having end flanges and adapted to protrude through the openings to support glasses above the sheet with their end flanges in contact with the underface of the sheet to prevent the escape of plastic concrete and afford means by which the cups can be removed from the set concrete, substantially as described.

3. Means for use in making glass and concrete sky-vault and floor light constructions which comprise the combination of a temporary support, a centering sheet having openings therein and adapted to rest upon said support, and bottomless cups adapted to protrude through said openings and having end flanges adapted to lie between the support and sheet, substantially as described.

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