Nov. 3, 1936. I. FRIEDMAN 2,059,332

GLASS STEEL BUILDING CONSTRUCTION

Filed Oct. 23, 1935

Fig. 1

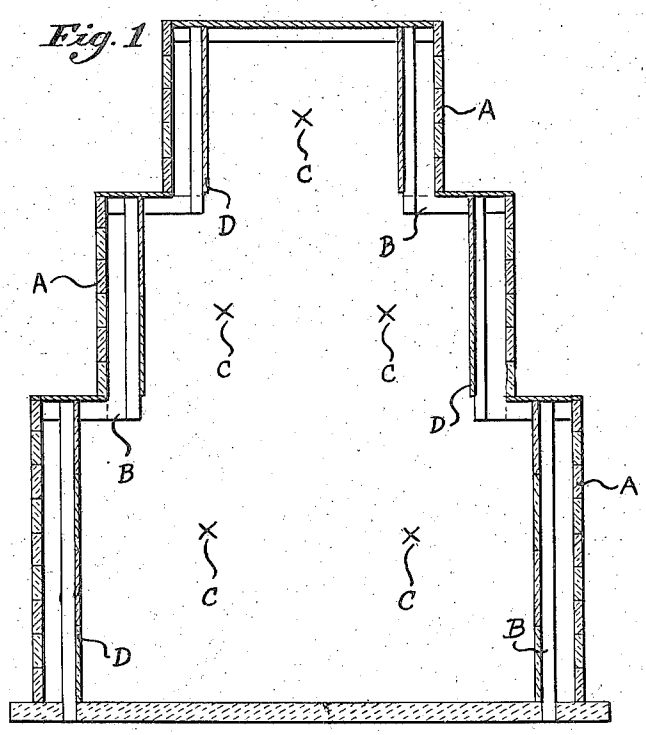
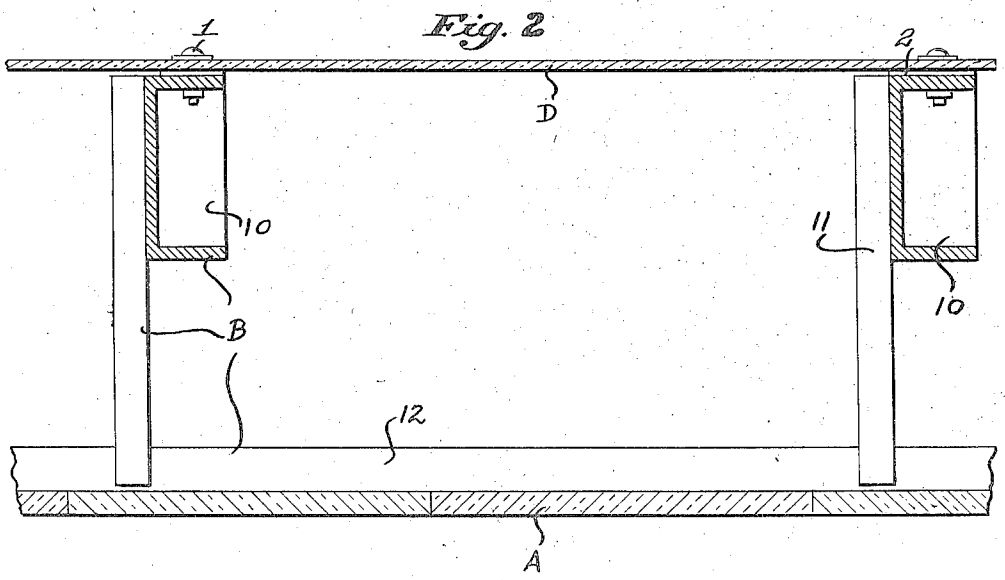


Fig. 2



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GLASS-STEEL BUILDING CONSTRUCTION

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3 Claims. (Cl. 189—1)

The present invention relates to improvements in the construction of buildings and the like of the so-called "steel-glass" type, such for example as those which have recently come into vogue particularly in the construction of gasoline filling stations. These buildings consist essentially of an exterior lining of glass made up, for instance of squares of pebble-finished or other glass mounted on and supported in any suitable manner by an interiorly-disposed framework of any conventional and/or suitable construction. Certain of the glass squares, which may for example be 6'' squares about ¼'' thick, may be colored in contrast to the others, and may be arranged to spell certain words or names to identify the building, the product, etc. A building of the character described, in addition to being capable of construction in a relatively short time, presents a highly ornamental appearance both by day and night. It is apparent that, by day, the sun shining on the glass exterior of the building will enhance its appearance, and at night, when the building lights in the interior are turned on, the contrasted squares of glass cause the word or name which they spell to stand out in bold relief, visible for a great distance.

A practical difficulty which has been encountered in connection with buildings of the character above described is that, upon illumination thereof in the manner set forth, every piece of steel holding the glass squares as well as all other structural members are visible from the exterior right through the glass, being indicated in shadow upon the latter. This, of course, detracts greatly from the appearance of the building.

A primary object of the present invention is to overcome the above described deficiency and to provide a structure of the character in question adapted to be illuminated from the interior at night without rendering the supporting steel framework visible from the exterior.

Still another object of the invention is to obviate the appearance of the steel framework, upon nocturnal interior illumination, without involving any essential alteration in the construction of the glass-steel type of building as hereinbefore described.

Still another object of the invention is to provide means readily associable with existing glass-steel buildings and adapted to eliminate the above-indicated defect thereof.

Another object of the invention is to overcome the aforesaid difficulty while simultaneously improving the interior appearance of the building and also adding to the insulation thereof.

Further objects will be apparent from the following detailed description of the novel relationships of parts constituting the present invention, whereby the aforesaid several objects are realized, reference being had to the accompanying sheet of drawing.

On the said sheet of drawing,

Fig. 1 is a diagrammatic representation of a glass-steel building of the gasoline-station type with the present invention embodied therein; and

Fig. 2 is a cross sectional detail taken horizontally through a typical exterior wall of such a building.

As shown in Fig. 1, the building according to the present invention consists essentially of an outer glass layer, indicated generally at A (and consisting of the glass squares hereinbefore described), mounted upon and supported by a steel framework, designated generally at B.

The interior of the building is provided with suitable conventional means for illumination thereof at night and such means is indicated diagrammatically at C.

The parts hereinbefore described are old in the relationship set forth and do not, per se, constitute the present invention proper.

It will be apparent that, upon interior illumination, at night, of a construction such as that above described, the framework B arranged intermediate the light source C and the glass exterior A will cast a shadow on the latter, so that in effect the entire steel framework becomes visible from the exterior, thus detracting from the appearance of the building.

In accordance with the present invention, means indicated generally at D is provided to enable the glass squares A to be illuminated from the lights C without causing shadows of the structural members B to be cast thereon.

Means D consists preferably of relatively large plates or slabs of a flashed opal glass, ground glass or any translucent glass or fabric. As shown more particularly in Fig. 2 of the drawing, means D is preferably arranged as an interior lining of framework B, whereby the latter functions simultaneously as a support for the exterior glass wall A and for the interior shadow-eliminating lining D. Any suitable means, such as bolts 1 and cushioning washers 2 arranged as shown in Fig. 2 of the drawing, may be used for securing plates D to supporting means B. As shown in Fig. 2, the latter may consist of a plurality of spaced vertical beams 10, cross members 11, and glass plate supporting bars 12.

It will be apparent from the foregoing that

the interior lining improves the internal appearance of the building, and that by providing a second layer of glass or the like between the interior and the exterior, the heat insulation of the building is considerably enhanced. It is also apparent that association of the means whereby the outer glass wall may be rendered luminous without casting shadows of the structural members thereon does not, according to the present invention, entail any substantial alteration in the basic design and construction of the glass-steel type of building.

Having thus disclosed the invention, what is claimed is:

1. A building construction of the glass-steel type consisting essentially of an outer glass wall and an interiorly-arranged structural framework for supporting said wall, a source of light within said construction for the illumination thereof at night, and a layer of translucent material interposed between the said source of light and the said framework and outer wall for eliminating shadows of the framework cast upon the outer wall upon illumination thereof from the interior, and for simultaneously substantially removing the said framework from view from said interior.

2. A building construction of the glass-steel type comprising an outer glass wall made up of a plurality of glass plates, an inner translucent glass lining similarly made up of a plurality of glass plates, structural supporting framework intermediate said outer wall and said interior lining and simultaneously supporting the wall and lining, and means for illuminating said outer wall, said means being arranged interiorly of said inner lining.

3. In a building of the glass-steel type consisting essentially of an outer glass wall and an interiorly arranged supporting framework, means associated with said framework for eliminating shadows cast by the latter on said outer wall when said building is illuminated from within, said means simultaneously constituting an ornamental inner lining for said building and increasing the heat insulation thereof.

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