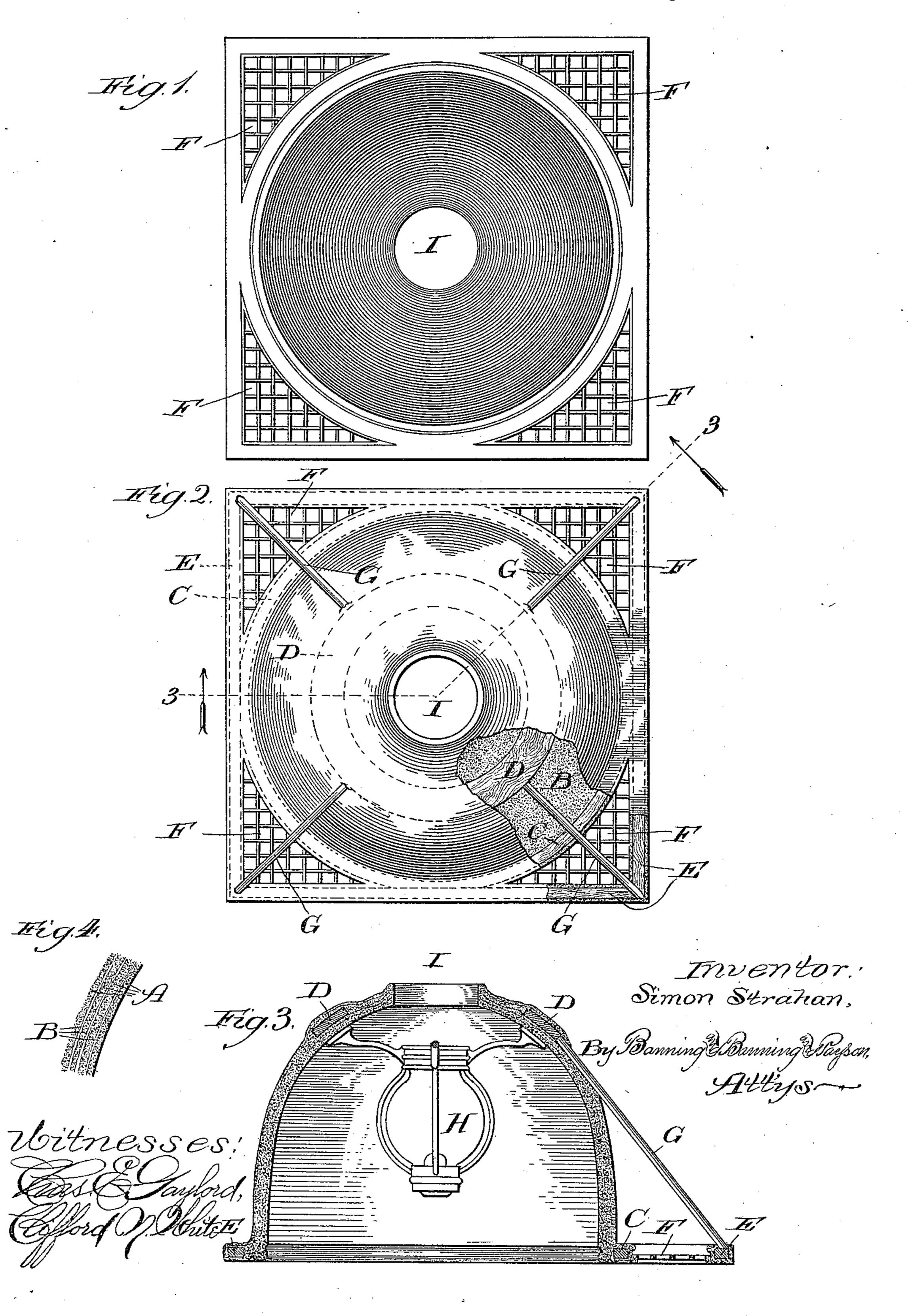
## S. STRAHAN. CAR OR OTHER DOME.

No. 428,428.

Patented May 20, 1890.



## United States Patent Office.

SIMON STRAHAN, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE DECORATOR'S SUPPLY COMPANY, OF SAME PLACE.

## CAR OR OTHER DOME.

SPECIFICATION forming part of Letters Patent No. 428,428, dated May 20, 1890.

Application filed December 14, 1889. Serial No. 333, 748. (No model.)

To all whom it may concern:

Be it known that I, SIMON STRAHAN, a citizen of the United States, residing at Chicago, Illinois, have invented certain new and useful Improvements in Car or other Domes, of which the following is a specification.

The object of my invention is to make a dome for railroad-cars, steamboats, private and public buildings, and for other similar purposes, in which a lamp is located that will be fire-proof, light, durable, and ornamental; and my invention consists in the features and details of construction hereinafter described and claimed.

In the drawings, Figure 1 is a plan view of the dome viewed from the under side. Fig. 2 is a plan view of the dome from above with a part of the material broken away. Fig. 3 is a vertical section taken in the line 3 of Fig. 20 2, looking in the direction of the arrow; and Fig. 4 is a transverse section of a portion of the dome, showing the material of which it is composed enlarged

is composed, enlarged.

Before my invention

Before my invention lamp-domes for use in vestibule-cars, steamboats, and similar places have been made entirely of wood, so that they have been liable to take fire from the lamp in them, and have also been expensive, owing to the difficulty of working the wood into the proper symmetrical form and the labor and time required in their construction. By my invention I propose to obviate both of these objections and to make a dome that will be cheap, fire-proof, and ornamental in design and configuration.

In making my improved dome I employ molds of the desired form and size, into which I flow gelatine, gutta-percha, or other material that can be melted and which will harden 40 as it becomes cooled. The molds may be either plain or provided with various ornamental work, as scrolls, vines, leaves, or other figures, which may be delineated in either raised or sunken designs. Whatever figures of ornamentation may be provided in the molds will be reproduced in raised or sunken outlines, as the case may be, on the form of gelatine or other material. When the form has cooled, so as to retain its shape and condition, it is removed from the mold and placed

on the work-table with its dome portion or convex surface up. I then make a composition of some material that will be light, strong, and fire-proof, by which I mean that it is either wholly fire-proof or very difficult to ig- 55 nite—as, for instance, a composition composed of paper-pulp, wood pulp, cork-dust, asbestus, or other plastic material intimately mixed with plaster-of-paris, and cover the form with a thin layer A of the composition, which is of 60 the right consistency to conform to the lines and figures of ornamentation provided on the surface of the form. I then cover the layer of composition with a layer of open-mesh fiber cloth B and following that with another 65 layer of composition. Alternate layers of composition and open-mesh fiber cloth are employed until the requisite thickness has been secured. During the building up of the dome, however, I introduce rings of wood, metal, or 70 other material to give it additional strength and to afford means for attaching the dome to its place of use and for securing the lamp which is intended to be suspended in the same. One of these rings C is arranged near the 75 bottom and another one D near the top. After the rings are arranged in position they are covered with alternate layers of composition and cloth until they are firmly and securely incorporated into the body of the dome, so as 80 to form a part of the same.

A square frame E is preferably placed around the dome and the composition extended over the same, as shown in Fig. 2, but with the corners left open to be filled by net- 85 work F, made of paper, composition, or other light and strong material, and rods are fastened to the ring D, so as to extend to the corners of the frame E, and thus securely bind the frame-work together, and thus increase the 90 strength of the dome. A lamp H can be arranged in the dome with its brackets attached to the frame D, so as to suspend it within the same and beneath the opening I, provided in the center of the dome. After the dome 95 has thus been built up it is removed from the form of gelatine or other material and placed in a kiln or oven, where it is subjected to a sufficiently high temperature to thoroughly dry and bake the same. This operation may 100

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occupy from one to two or three days, after which the material composing the dome will be found to be dry, impervious to water, strong, light, and fire-proof. It may then be arranged in position in the top of a car, steamboat, or other place of use.

What I regard as new, and desire to secure

by Letters Patent, is—

1. As a new article of manufacture, a dome in which lamps are to be suspended, composed of fire-proof composition, substantially as described.

2. A dome in which lamps are to be suspended, consisting of fire-proof composition

and open-mesh fibrous cloth arranged in alternate layers and then dried, substantially as described.

3. A dome in which lamps are to be suspended, consisting of fire-proof composition and open-mesh fibrous cloth arranged in alternate layers and rings of wood or other strengthening material embedded in the composition, substantially as described.

SIMON STRAHAN.

Witnesses:

THOMAS A. BANNING, SAMUEL E. HIBBEN.