C. G. DUFFY.

GRILLE AND METHOD OF CONSTRUCTING SAME.

APPLICATION FILED JULY 17, 1915.

1,257,985.

Patented Mar. 5, 1918.

2 SHEETS—SHEET 1.

Fig. 1.

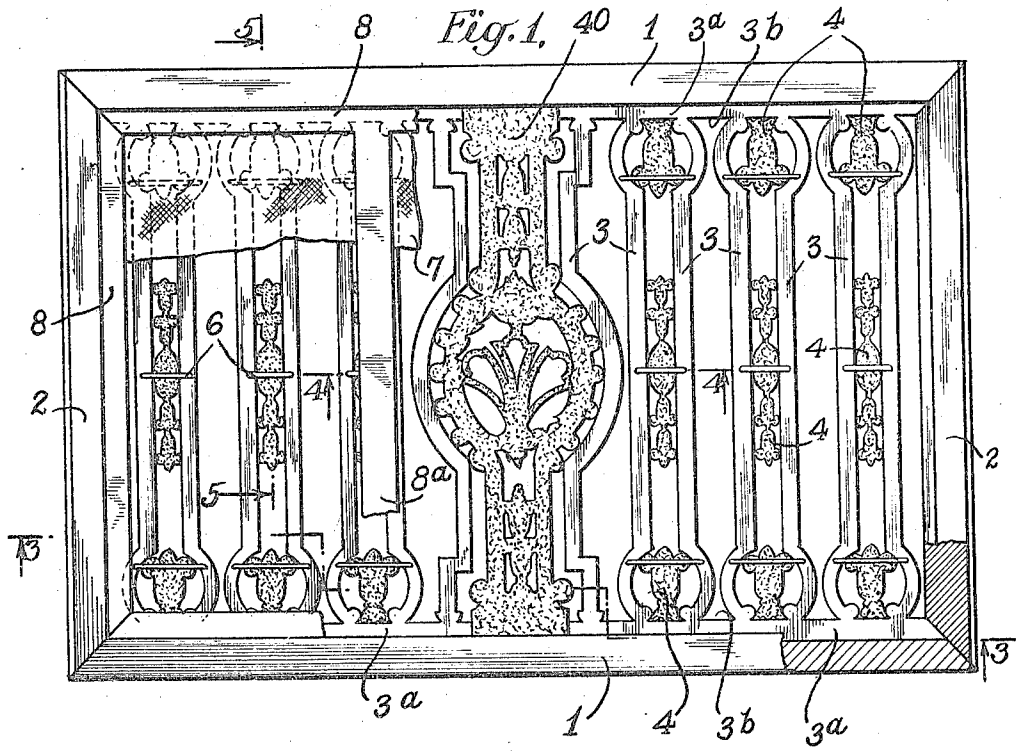
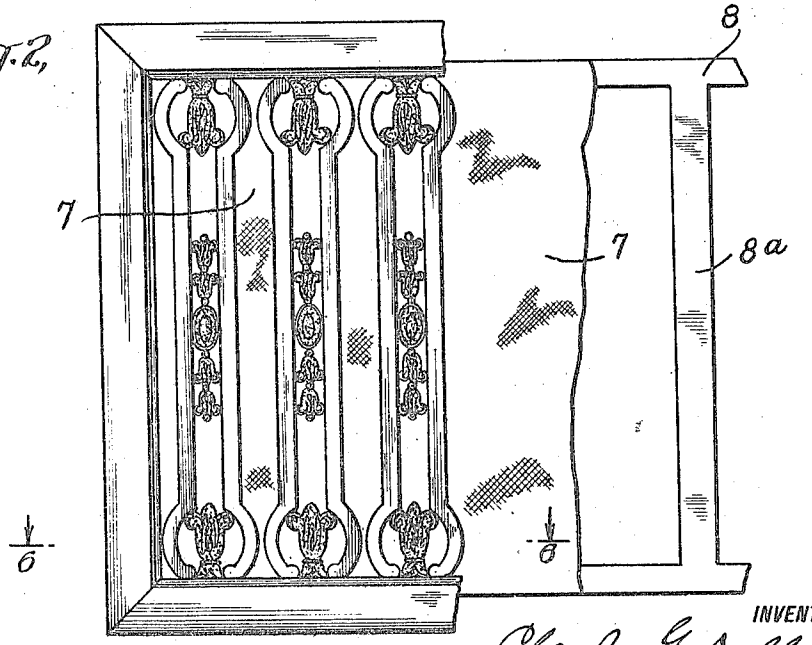


Fig. 2.



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2 SHEETS—SHEET 2.

Fig. 3.

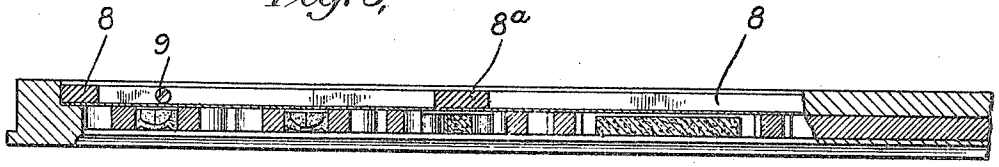


Fig. 4.

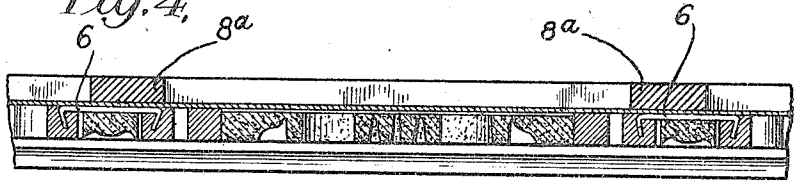


Fig. 5.

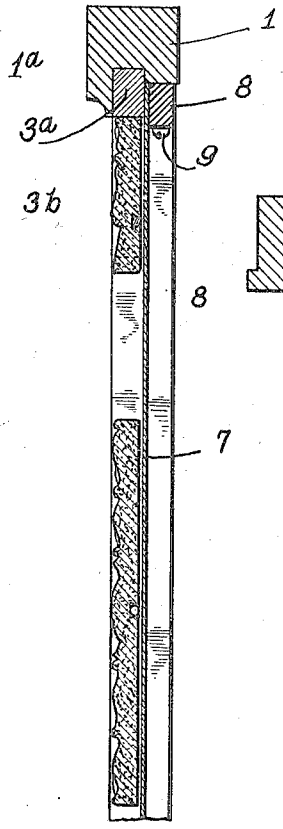


Fig. 6.

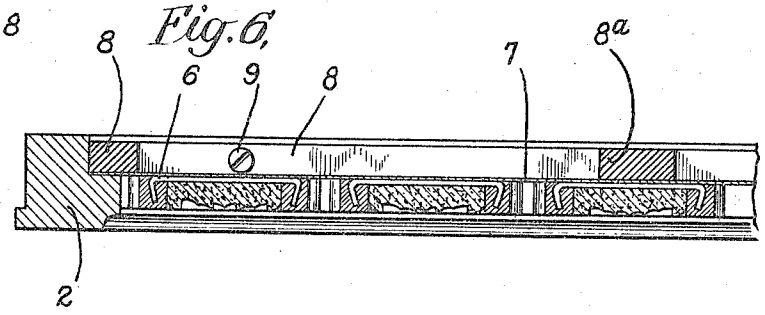
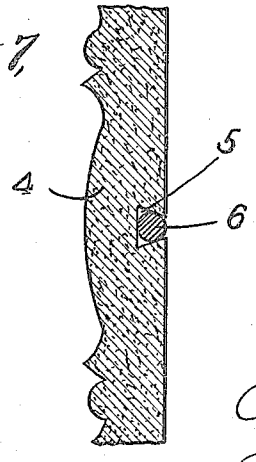


Fig. 7.



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UNITED STATES PATENT OFFICE.

CHARLES G. DUFFY, OF BROOKLYN, NEW YORK, ASSIGNOR TO THE AEOLIAN COMPANY, A CORPORATION OF CONNECTICUT.

GRILLE AND METHOD OF CONSTRUCTING SAME.

1,257,985. Specification of Letters Patent. Patented Mar. 5, 1918.

Application filed July 17, 1915. Serial No. 40,481.

To all whom it may concern:

Be it known that I, CHARLES G. DUFFY, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Grilles and Methods of Constructing Same, of which the following is a specification.

My present invention relates to improvements in grilles and methods of constructing same, the features and advantages of which will be apparent to those skilled in the art from an understanding of the following description in connection with the drawings.

In the latter, Figure 1 is a rear elevation of a grille suitable for a cabinet door or other closure, portions being broken away or shown in section better to disclose the construction; Fig. 2 is a front view of one end of the same grille; Fig. 3 is an enlarged sectional view on the line 3—3 in Fig. 1 looking in the direction of the arrows; Fig. 4 is the same on the line 4—4 in Fig. 1; Fig. 5 is the same on the line 5—5 in Fig. 1; Fig. 6 is the same on the line 6—6 in Fig. 2; and Fig. 7 is an enlarged cross sectional view of a detail.

In the drawings, 1—1 are the rails and 2—2 the stiles which are mitered together to form the frame of the grille. The splats 3 are sawed out of wood and 4 are molded or pressed ornaments made of a non-fragile composition. Thus a composition may be used comprising wood-fibers and a suitable binder. 40 is a large center ornament made similarly of composition.

The splats 3 are united in groups or units by end continuations or tongues 3^a which project into grooves 1^a formed longitudinally, one on the inside of each rail 1. In the same way, the center ornament 40 is long enough at the ends to project into these grooves and is held thereby like the splats in the frame. The tongues of the aforesaid parts are forced against each other endwise in the groove by the end contact of the stiles 2—2 (see Fig. 1) when the latter are framed to the rails.

The inside 3^b of the tongues may be cut to be flush with the finished inside edge of the rails and will remain substantially so, in spite of changes in the wood due to atmospheric conditions because the splats and tongues are cut lengthwise of the grain and in this direction the changes are slight.

On the other hand, I have avoided grooves on the inside of the stiles 2—2 to receive straight splats which might be received like the aforesaid tongues into said grooves. This additional or alternative way of securing the splats in the frame I have discovered to be objectionable because the shrink and swell of the splats being transverse to their length, the even or flush finish previously referred to cannot be secured and maintained between the inside of the tongues and the inside of the frame.

The ornaments 4 are inserted between the splats and while most of their outline is out of contact with the splats to give an open airy, carved appearance to the grille, nevertheless projections are suitably provided or the splats are suitably shaped to the ornaments, so that they are gripped or held between the splats.

In addition to glue applied at these points of contact between the ornaments and the splats and their tongues, I provide the following means and method to secure them in their inserted positions: I make saw-cuts 5 across the wide portions of the ornaments and slightly under-cut the sides of the cuts. I then take metal staples 6 whose cross-pieces are slightly too thick to pass through the mouth of the saw-cuts. The grille is then laid face down on a support in contact with the face of the splats. One of the ornaments is then inserted face down in proper position between its pair of splats. A pair of holes are then formed by a suitable two pointed punch in the splats to receive the points of the prongs of the staple. The staple is then driven with a hammer until the prongs are fully driven into the splats and until the cross-piece of the staple is squeezed down into the saw-cut in the ornament (compare Fig. 7.) The result is that the ornament is securely attached to the staple and the staple to the splats. Further the splats are drawn together by the stapling operation due to the convergence of the prongs of the staple driven into the aforesaid holes formed with this object in view. Glue having previously been applied to the contact points between the ornament and the splats, the net result I find is that

the inserted ornament is strongly and firmly secured in place. The described staples do not show from the front of the grille (Fig. 2) because care is taken to locate them across the wide parts of the ornaments as in Fig. 1.

This completes the grille except if desired, a silk fabric or other backing 7 may be provided. To mount this so as to be taut and otherwise proper is not easy and I have discovered that an excellent method is to provide a light back frame 8. This fits snugly into a recess in the back of the grille-frame. Compare Figs. 1, 3, 5, etc. A piece of the silk is held stretched taut on a table, whereupon the frame 8 with glue applied to its front face, is pressed face down upon the silk. After the glue has dried, the silk is cut around the edges of the frame which is now ready to be inserted silk-side forward into its recess in the grille-frame, and secured therein by the screws 9. Cross-pieces 8^a are further preferably provided on this back-frame to which the fabric will also be glued as aforesaid, said cross-pieces being located behind the fabric and the splats in the grille, of course, cannot be seen from the front.

The result of this invention is a grille which has the appearance of a hand carved grille and which is superior in the respects that it is much stronger and more durable as well as much cheaper.

What I claim is:—

1. A grille comprising splats, a molded ornament inserted between said splats, the outline of said ornament having a portion which bridges the space between them, and attaching means secured to the back of both the splats and the ornament at said bridging portion.

2. A grille comprising splats, a molded ornament inserted between said splats, the outline of said ornament having a portion which bridges the space between them, and attaching means secured to the back of both the splats and the ornament at said bridging portion, said means being such that it draws the splats together to squeeze the ornament between them.

3. A grille comprising splats, a molded ornament inserted between said splats and a staple whose cross-piece is secured to the ornament and whose prongs coact with the adjacent splats to pull them together against the ornament.

4. A grille comprising splats, a molded ornament inserted between said splats, said ornament having a groove across its back, and a staple whose cross-piece is forced into said groove, and whose prongs are entered into the splats.

5. A grille comprising splats, a molded ornament inserted between said splats, said ornament having a groove across its back, and a staple whose cross-piece is forced into said groove, and whose prongs coact with the adjacent splats to pull them together against the ornament.

In testimony whereof, I have signed my name to this specification this 13th day of July, 1915.

CHARLES G. DUFFY.

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