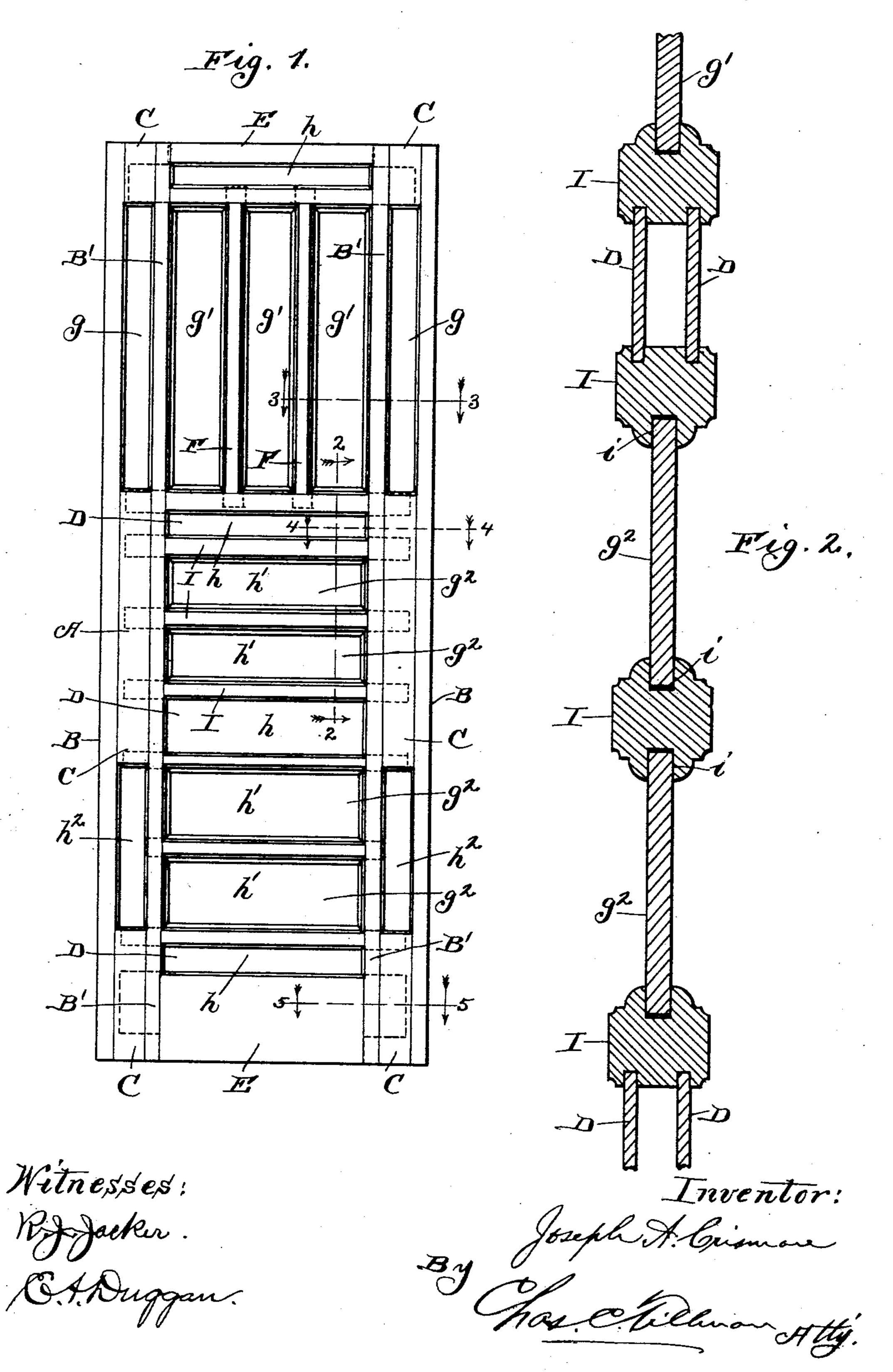
## J. A. CRISMORE. DOOR.

No. 541,316.

Patented June 18, 1895.



## J. A. CRISMORE. DOOR.

No. 541,316.

Patented June 18, 1895.



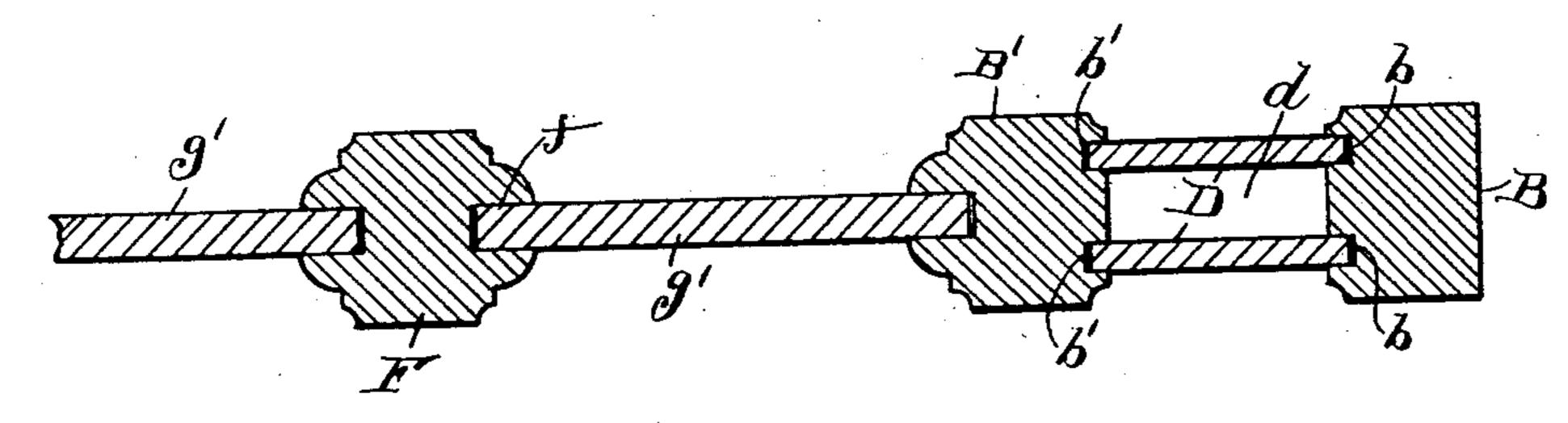


Fig.4.

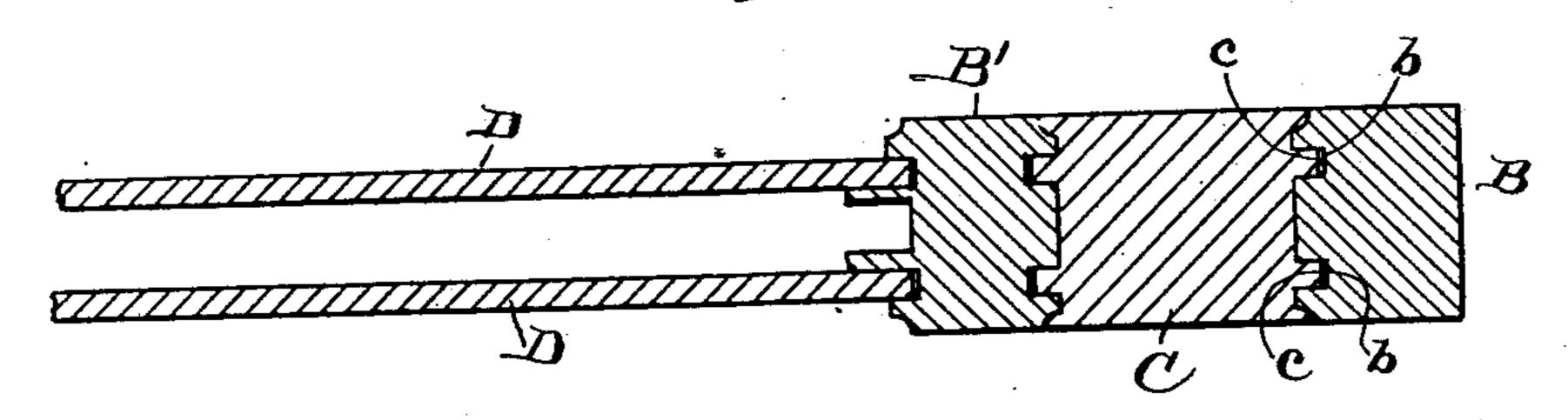
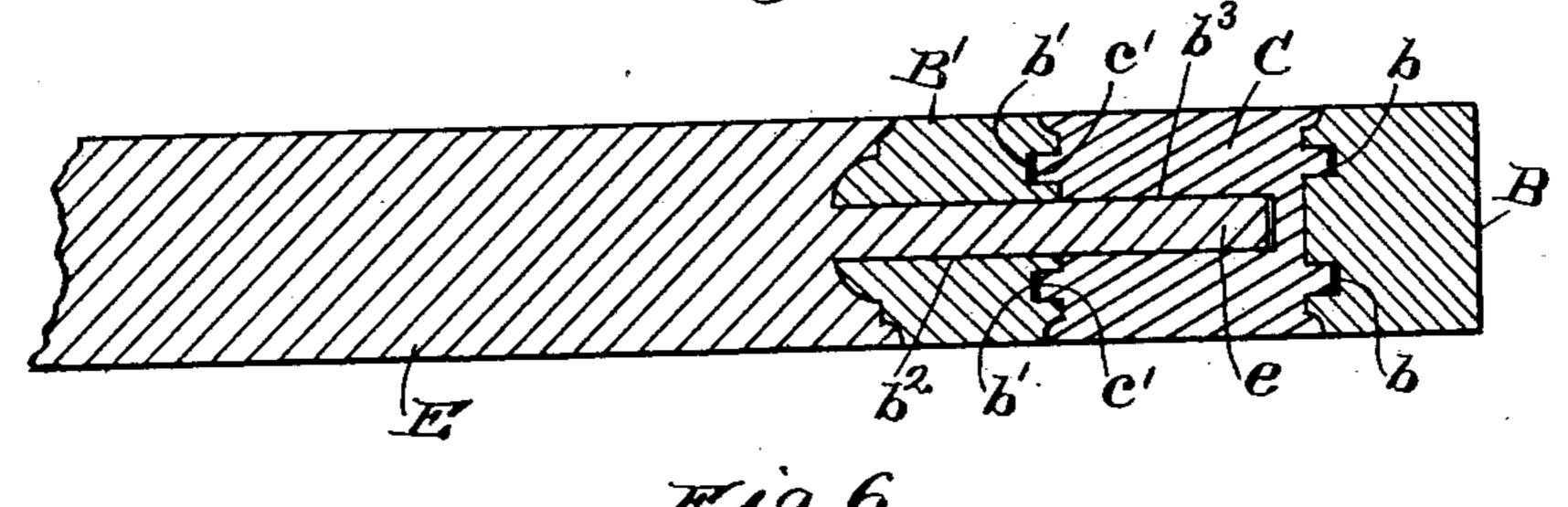
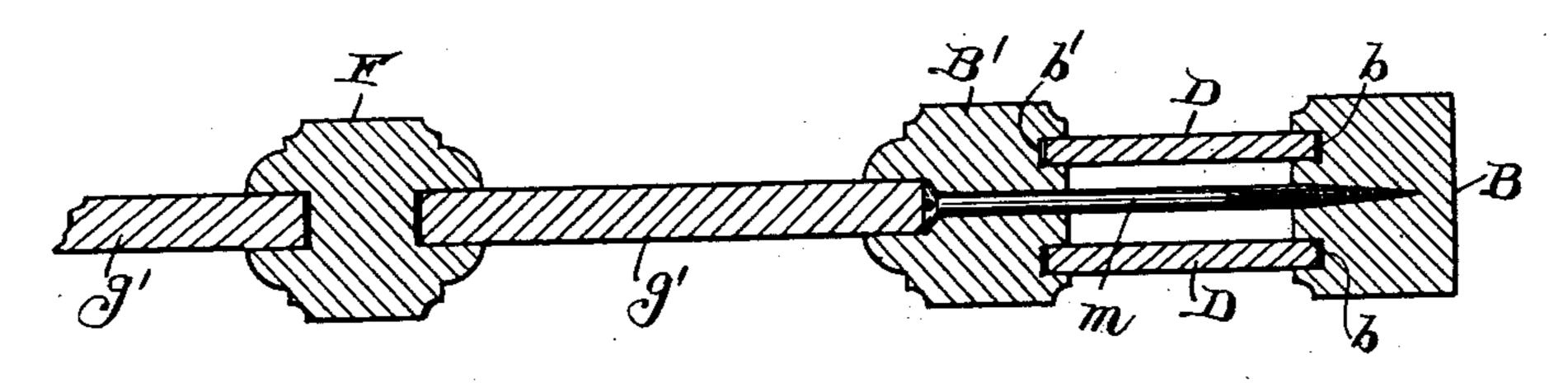


Fig. 5.





Witnesses
Rigacker.

Inventor: Joseph A. Crimone

## United States Patent Office.

JOSEPH A. CRISMORE, OF CHICAGO, ILLINOIS.

## DOOR.

SPECIFICATION forming part of Letters Patent No. 541,316, dated June 18, 1885,

Application filed March 2, 1895. Serial No. 540,274. (No model.)

To all whom it may concern:

Be it known that I, Joseph A. Crismore, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illi-5 nois, have invented certain new and useful Improvements in Doors, of which the follow-

ing is a specification.

This invention relates to improvements in doors and while it is more especially adapted 10 to be used for the doors of buildings, yet it is applicable to doors for cars, steamboats, &c., and consists in certain peculiarities of the construction, novel arrangement and operation of the various parts thereof, as will be 15 hereinafter more fully set forth and specifi-

cally claimed.

The objects of my invention are, first, to provide a door, which shall be simple and inexpensive in construction, strong and durable, 20 and attractive in appearance; second, such a door, which shall be light in weight and can be constructed at a less expense than is required for doors now in general use, and, third, a door, in which the veneer used in its con-25 struction will be so secured that it will not warp or become loose, as is frequently the case in doors of the ordinary construction, but will be firmly and durably retained in its proper position.

30 In order to enable others skilled in the art to which my invention pertains to make and use the same, I will now proceed to describe | it, referring to the accompanying drawings, in

which—

Figure 1 is a view in front elevation of a door embodying my invention. Fig. 2 is an enlarged vertical sectional view taken on line 22 of Fig. 1. Fig. 3 is a plan or cross-sectional view of a portion of the door, taken on line 40 3 3 of Fig. 1. Fig. 4 is a similar view taken on line 4 4 of Fig. 1. Fig. 5 is a like view taken on line 5 5 of Fig. 1; and Fig. 6 is a plan or cross-sectional view taken on line 33 of Fig. 1, showing a modification therein.

Similar letters refer to like parts throughout the different views of the drawings.

A, represents the door proper in its entirety, which may be made of any suitable size, style and material,—that is, it may be provided 50 with any desired number of horizontal or vertical panels, and the same may be arranged or disposed in any desired manner.

The stiles B, at each edge of the door are provided on their inner surfaces with vertical mortises b, for the reception of the tenons c, 55 on the inner piece or block C, and for the veneer pieces D, which unite the stiles B, with the inner stiles or pieces B', which are provided on their surfaces adjacent to the outer stiles B, with mortises b', for the tenons c', 60 on the opposite surfaces of the pieces C, and the opposite edges of the veneer pieces D.

By reference to Figs. 3 to 6, inclusive, of the drawings, it will be seen that the mortises b, and b', in the stiles B, and pieces B', are 65 located a little distance from the front and rear surface of said pieces, so that when the pieces of veneer D, are placed therein, they will form a hollow or chamber d, thus dispensing with an extra amount of wood and render- 70 ing the door lighter. By securing the veneer pieces D, by means of the mortises, it is apparent that they will be more securely retained in position, than if glued on the surface of the wood, as is ordinarily the case. It 75 is also apparent that by this manner of securing the veneer, the same will not be liable to peel off or become warped from the action of the atmosphere or changes in temperature. The upper and lower portions of the pieces 80 B', are formed with a central mortise or slot  $b^2$ , for the reception of the tenon e, on each end of the horizontal end pieces E, which tenons extend into a suitable mortise  $b^3$ , in the blocks or pieces C, which unite the stiles B, 85 and pieces B', as above set forth.

In the drawings, I have shown a door provided in its upper part with vertical panels g, and g', and below said panels horizontal ones h, h', and near its lower portion vertical 30 panels  $h^2$ , near the edges of the door. As before stated these panels may be arranged in any suitable manner and any number of them may be employed without departing from the spirit of my invention. The panels g, are 95 formed by the use of the veneer pieces D, while the panels g', are of single pieces tenoned in suitable mortises f, in the munnions F. The lower panels  $h^2$ , are also formed by

means of the double veneer pieces D, and the 100 horizontal panels h, are likewise constructed, while the panels h', are made of single pieces  $g^2$ , which are secured in suitable mortises i, of the rails I, located between said panels.

In Fig. 6 of the drawings I have shown a modification in the construction of the door, in which the parts are arranged as above described, with the exception that the stiles B, and pieces or inner stiles B', are held together by means of a hidden screw m, which is passed through the inner stile or piece B', between the veneer pieces D, and into the outer stile B, with which it engages on its inner surface.

The pieces C, may be of any desired length

The pieces C, may be of any desired length and are provided with glue at proper points to securely unite the different parts of the door and especially where the horizontal pieces or rails are connected thereto.

Having thus fully described my invention,

what I claim as new, and desire to secure by Letters Patent, is—

As an improved article of manufacture a door consisting of the stiles B, and B', having the mortises b, and b', respectively for the reception of the pieces D, and the tenons c, and c', on the pieces or blocks C, the rails I, and cross-pieces E, tenoned in the pieces C, and the panels g, g', h, and h', all constructed, arranged and operating substantially as and for 25 the purpose set forth.

JOSEPH A. CRISMORE.

Witnesses:
CHAS. C. TILLMAN,
E. A. DUGGAN.