

B. C. ROCKWELL.

DOOR.

APPLICATION FILED APR. 7, 1911.

1,028,280.

Patented June 4, 1912.

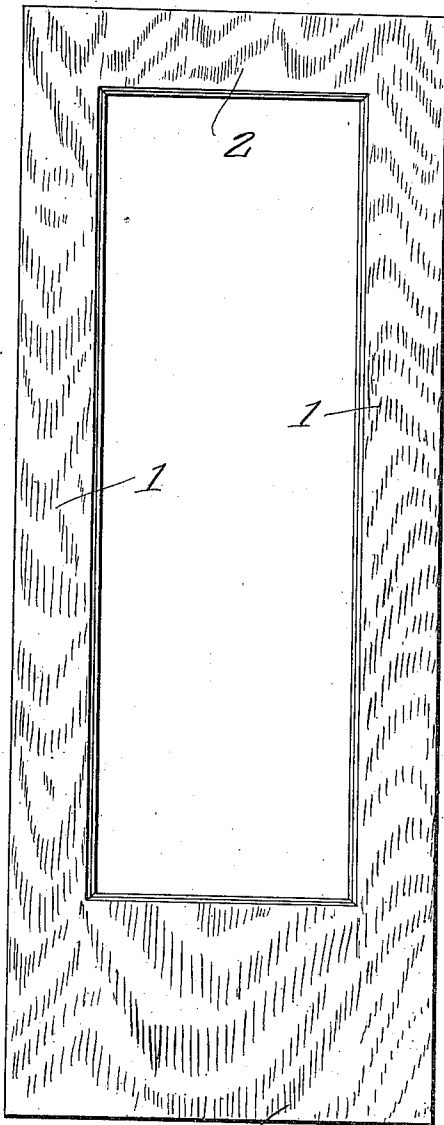


Fig. 1.

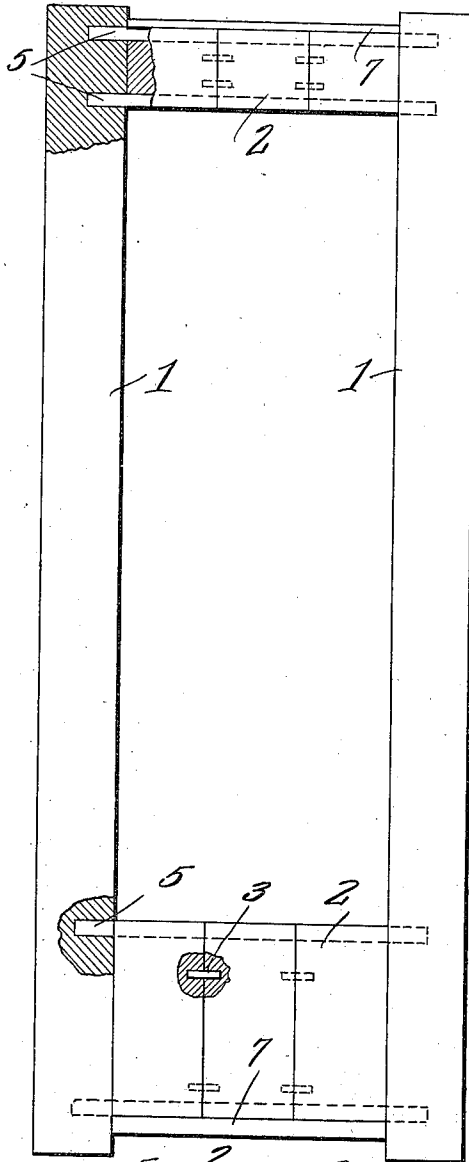


Fig. 2.

Fig. 3.

Witnesses:

J. J. Quinn
R. M. Elliott

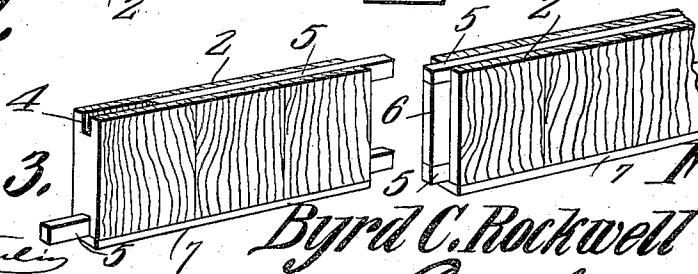


Fig. 4.

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DOOR.

1,028,280.

Specification of Letters Patent.

Patented June 4, 1912.

Application filed April 7, 1911. Serial No. 619,579.

To all whom it may concern:

Be it known that I, BYRD C. ROCKWELL, a citizen of the United States, residing at Malvern, in the county of Hot Spring and State of Arkansas, have invented a new and useful Door, of which the following is a specification.

This invention relates to doors.

One object of the invention is, in a ready, practical and efficient manner, to render it possible to utilize waste stock in the construction of the top and bottom rails of a door, whereby to cheapen the cost of its production and also to effect a large saving in material that would otherwise be lost, the result being that a decrease in the selling price of high grade doors made from the same stock will be permissible, without detracting from the profits.

A further object is to lessen the time and labor required to smooth or dress a door after the parts are assembled, and to produce a more highly finished effect.

A further object is to render it possible to employ cheap stock, and easily grain it to imitate high grade woods.

With the above and other objects in view, as will appear as the nature of the invention is better understood, the same consists, generally stated, in a door having its top and bottom rails constructed of short sections or lengths of stock, the grain of which runs in the same general direction as that of the stiles, the sections being individually connected by glue, or other adhesives, and, if preferred, by dowel pins, and collectively by cleats that are rabbeted into the upper and lower edges of the rails, and are mortised into the stiles. Moreover, the outer cleats at the upper and lower edges of the door may be provided with filler strips, to provide stock for removal to fit a door in its case without weakening the adjacent cleat.

The invention consists further in the various novel details of construction of a door, as will be hereinafter described and claimed.

In the accompanying drawing forming a part of this specification, and in which like characters of reference indicate corresponding parts: Figure 1 is a view in elevation of a door constructed in accordance with the present invention, and displaying the same as it appears when finished. Fig. 2 is a view similar to Fig. 1 of an unfinished door.

Fig. 3 is a perspective detail view of one of the rails. Fig. 4 is a similar view of a slightly modified form of rail. Referring to the drawings, 1 designates the stiles, which, as usual, are constructed each from a single length of material, and 2 the top and bottom rails. As clearly shown in Fig. 3, each rail may be constructed of a plurality of sections or length of stock, three in this instance being shown, that are held assembled by having their edges glued together, and if desired, dowel pins 3 may be employed for still further strengthening the connection between the parts, or they may be tongued and grooved as preferred.

In the form of the invention shown in Figs. 2 and 3, the upper and lower edges of the rail are formed with longitudinal grooves 4 in which are secured cleats 5 that project beyond the terminal sections, and are seated in mortises in the inner faces of the stiles as shown in Fig. 2. In Fig. 2 there is illustrated on the outer tenon 5 of the lower rail a filler strip 7 adapted to be trimmed with the lower ends of the stiles to fit the opening in which the door is to be arranged without weakening the joints between the rail and the stiles. Moreover, it will be noted that in Fig. 4 is shown a rail provided with a terminal tenon 6, which may be employed to strengthen the structure. The grain of the sections of the rails and of the stiles runs in the same general direction, so that the labor of dressing down a door, when the parts are assembled, will be reduced to a minimum, and further, this arrangement will permit of the employment of a low grade of stock, which may be grained to imitate one of high grade.

The improvements herein described, while simple in character, will be found of the highest utility in use, inasmuch as a large amount of stock that has heretofore been wasted in door factories and at saw mills, can be easily utilized in the construction of durable and highly finished doors, and further, such doors may be manufactured at a cost that will permit of their being sold at a lower price than would be possible if the rails were constructed each from a single piece of stock.

The frame herein shown is intended more particularly to be used in the construction of one-light glazed doors, but is also partic-

ularly adapted to screen doors, and one panel doors of various types in which wide rails are used.

I claim:

- 5 1. A door having one-piece stiles and multi-piece rails, the grain of all of the parts running in the same general direction.
2. In a door, stiles provided with mortises, rails composed of a plurality of connected sections, the upper and lower edges of which are grooved, and cleats engaging the grooves and the mortises.
- 10 3. In a door, stiles provided with mortises, rails composed of a plurality of connected sections, the grain of which runs in the same general direction as that of the

stiles, and cleats disposed in grooves in the upper and lower edges of the rails and engaging the mortises.

4. A door having stiles, interposed sectional rails, and cleats connecting the rail sections and engaging the stiles, one of the outer tenons being provided with a filler strip between the stiles.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses:

BYRD C. ROCKWELL.

Witnesses:

U. S. GRANT,

H. S. GINGRICH.

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