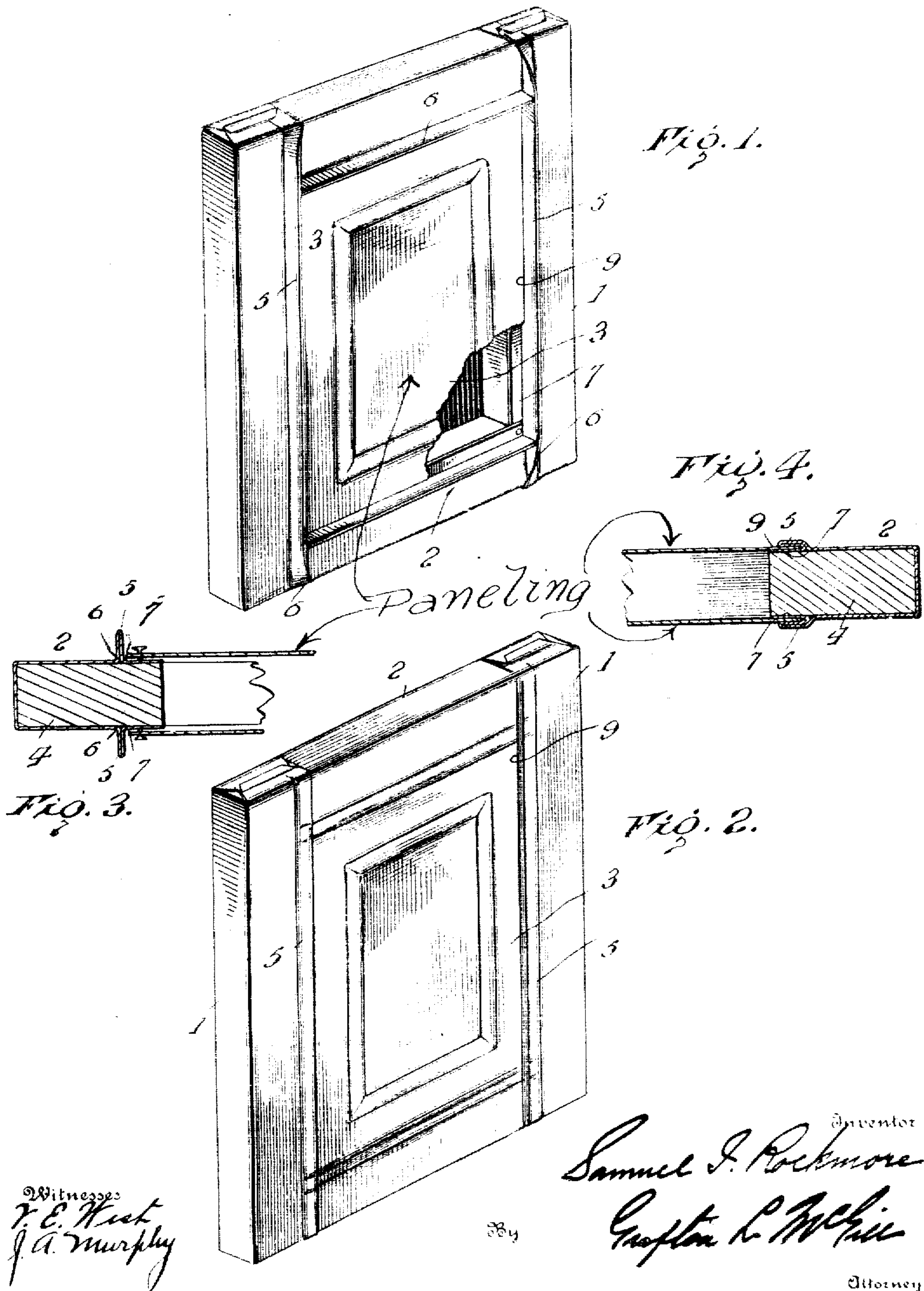


No. 837,734.

PATENTED DEC. 4, 1906.

S. I. ROCKMORE.
FIREPROOF DOOR.

APPLICATION FILED MAR. 29, 1906



Witnesses
F. E. Hook
J. A. Murphy

384

Inventor
Samuel I. Rockmore
Grafton L. White
Attorney

UNITED STATES PATENT OFFICE.

SAMUEL I. ROCKMORE, OF NEW YORK, N. Y.

FIREPROOF DOOR.

No. 837,734.

Specification of Letters Patent.

Patented Dec. 4, 1906.

Application filed March 29, 1906. Serial No. 308,741.

To all whom it may concern:

Be it known that I, SAMUEL I. ROCKMORE, of New York, in the county of Kings and State of New York, have invented certain
5 new and useful Improvements in Fireproof Doors; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to
10 make and use the same.

This invention contemplates improving the construction of fireproof doors, having special reference to the means for securing the panels to the rails and stiles and securing
15 the rails and stiles to each other. As heretofore constructed, these doors comprising a wooden core or filler, have been completely incased with metallic sheathing, the rails and stiles fitting over the edges of the core and
20 connected to one another and to the adjacent panels and rails by marginal lips each of which has been bent back upon itself and into engagement with the adjacent lip to form a lap-joint. This is substantially the
25 construction of the old and well-known "Fire Underwriters' door." Practice has demonstrated, especially in the manufacture of panels of ornamental design for interior construction where a neat finish is essential, that
30 considerable workmanship is required to insure seams of uniform thickness and evenness of surface where marginal lips or lap-joints are employed.

My invention is designed, primarily, to
35 simplify this construction and entirely obviate the employment of marginal lips.

The invention will be hereinafter fully set forth, and particularly pointed out in the claims.

40 In the accompanying drawings, Figure 1 is a perspective view with parts broken away, showing a door constructed in accordance with my invention, the parts being partially assembled. Only a single panel is shown, as
45 the connection thereof to the rails and stiles would be merely repeated several times in a full-size door having several panels and intermediate rails. Fig. 2 is a face view of a completed construction. Figs. 3 and 4 are sectional views, the former showing the flange
50 as in Fig. 1 and the latter showing the completed form.

Referring to the drawings, 1 designates the stiles, and 2 the rails, which with the panels 3
55 completely inclose a wooden core or filler 4. This sheath-covered wooden core is the ap-

proved construction, as it is well established that even under intense heat such a door will maintain its integrity, while a door of solid metal, such as iron, will warp and upon bend-
60 ing out of shape will disclose the passage and admit the draft, thus defeating the essential purpose of fireproof doors and shutters.

The sheathing according to my invention is secured to the rails and stiles by a construc-
65 tion which is identical throughout, and the formation of the sheathing on the stiles is similar to that on the rails, so that a single detail description of one portion will suffice. The sheathing is shown in Fig. 3 carried
70 about flush with the inner edge of the rail 2. At a point in the width of the rail, and preferably near the inner edge thereof, the sheathing is formed with a flange 5, which before the panel is inserted projects at right angles
75 to the outer face of the rail, as shown also in Fig. 1. This flange is preferably formed by bending the sheathing outwardly, as at 6, then back upon itself to the rail, and then flat against the rail to the inner edge of the latter,
80 forming an inner strip or shoulder 7. The sheathing is secured by nails driven through the strip 7 into the core. On the opposite face of the door this construction is repeated.

3 designates the panel of the sheathing,
85 which, it will be understood, is also of metal and suitably stamped in panel design and duplicated on opposite sides of the door. These panels are shown formed with extended flat edges 9, so that the entire size of the
90 panel is greater than the area inclosed by the inner edges of the rails and stiles and about equal to that inclosed by the flanges 5. The panel is designed to be accommodated within the flanges and in contact with strips or
95 shoulders 7. After it is in place each of the flanges is bent inwardly over the edge of the panel and hammered or pressed into the form shown in Fig. 2.

The engagement of the rails with the stiles
100 will be readily understood. As shown, the rails are in the same positions relatively to the stiles as is the panel—that is, the rails are placed between the opposite flanges of the two stiles—and when the flanges of the rails
105 are bent down they are out of the way of the flanges of the stiles, and these also may be bent.

The advantages of my invention are apparent. It will be especially noted that I
110 am enabled to entirely avoid the use of "lap-joints" as that term is commonly used to des-

ignite those connections in which each part is formed with marginal lips which are bent to engage the adjacent lips.

The advantages residing in a construction embodying my invention are that less workmanship is involved, the panel edges being entirely plain and straight, and the readiness with which the parts may be assembled. In this connection it will be further noted that the panel is securely held within the channels formed by the flanges 5 and strips 7. Where marginal lips have heretofore been dispensed with, the securing means, while usually holding the panel as against removal, has yet permitted it to move laterally or shift about. This is obviously undesirable and is avoided by my construction, where the edges of the panel are in close contact with the angles between strips 7 and flanges 5.

I claim as my invention—

1. In a fireproof door, a core having rails and stiles and metallic sheathing inclosing the faces and outer edges thereof, flanges on said sheathing within the width of said rails and stiles and projecting outwardly from the faces thereof, and panels having flat, straight edges designed to be accommodated between said flanges, said flanges being designed to be bent over the edges of said panels.

2. In a fireproof door, a core having rails and stiles and metallic sheathing inclosing the faces and outer edges thereof, flanges on said sheathing within the width of said rails and stiles and projecting outwardly from the

faces thereof forming shoulders on said rails and stiles within said flanges, and panels having flat, straight edges designed to be accommodated between said flanges and in contact with said shoulders, said flanges being designed to be bent over the edges of said panels.

3. In a fireproof door having metallic sheathing comprising rails and stiles and panels, said rails and stiles being bent to form outwardly-projecting flanges, said flanges being bent back upon themselves and thence inwardly to form strips or shoulders, said panels having flat, straight edges designed to contact with said strips or shoulders within said flanges and said flanges designed to be bent over the edges of said panels.

4. In a fireproof door having metallic sheathing comprising rails and stiles and panels, said rails and stiles being bent to form outwardly-projecting flanges, said flanges being bent back upon themselves and thence inwardly to form strips or shoulders, said panels having uniform straight edges designed to contact with said strips or shoulders within said flanges, and said flanges designed to be bent over the edges of said panels.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

SAMUEL I. ROCKMORE.

Witnesses:

GRAFTON L. MCGILL,
ALICE D. LIND.

222,842,

405,379,

464,694,

810,887,

755,585,

Rapp,

"

Ohmstrand,

Kinnear,

Smith,

653,400, July 10, 1900,

660,223, Oct. 23, 1900,

751,097, Feb. 2, 1904,

464,694, Dec. 8, 1891,

755,585, Mar. 22, 1904,

183-13,
Iron Structures, Metal
Sheathing,
Windows.