

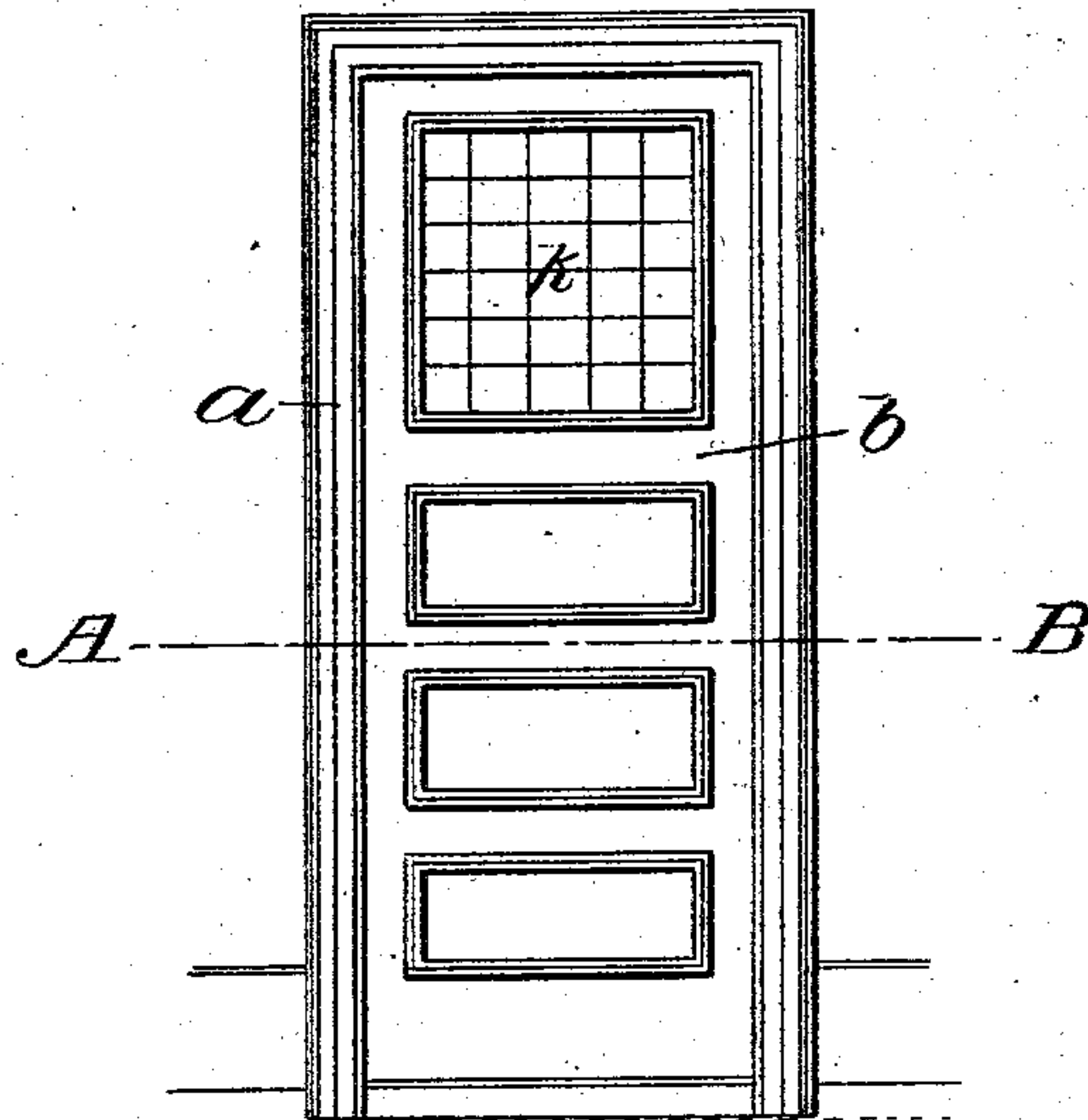
No. 753,209.

PATENTED FEB. 23, 1904.

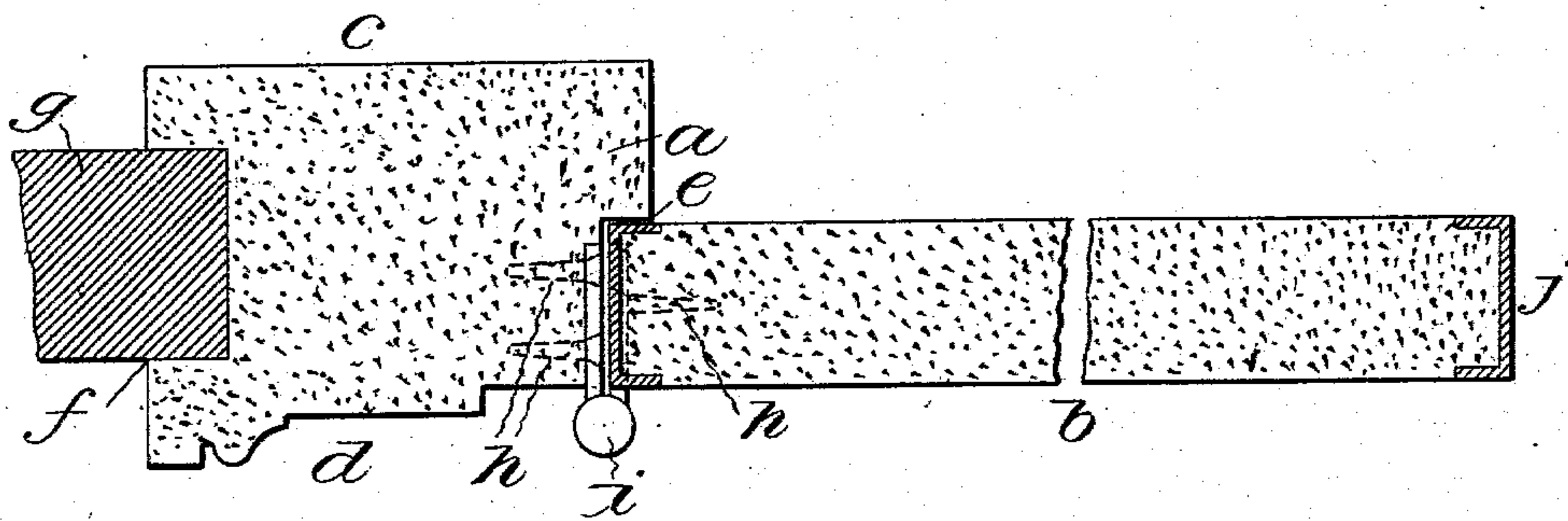
N. POULSON.  
FIREPROOF STRUCTURE.  
APPLICATION FILED NOV. 20, 1903.

NO MODEL.

*Fig. 1.*



*Fig. 2.*



WITNESSES:

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# UNITED STATES PATENT OFFICE.

NIELS POULSON, OF NEW YORK, N. Y.

## FIREPROOF STRUCTURE.

SPECIFICATION forming part of Letters Patent No. 753,209, dated February 23, 1904.

Original application filed March 1, 1902, Serial No. 96,309. Divided and this application filed November 20, 1903. Serial No. 181,994. (No model.)

*To all whom it may concern:*

Be it known that I, NIELS POULSON, a citizen of the United States of America, and a resident of the borough of Brooklyn, in the city and State of New York, have invented a new and useful Improvement in Fireproof Structures, of which the following is a specification.

This invention relates specifically to the construction of fireproof doors and door-frames for fireproof buildings; and its objects are to render the doorways of such buildings as fully fireproof as the customary fireproof partitions, to accomplish this result in the most simple and inexpensive manner, and at the same time to provide for a neat and workmanlike appearance which may be and preferably is similar to that of cabinet woodwork.

The present invention consists in a fireproof door-frame of novel construction and in its combination with a fireproof door, as hereinafter set forth and claimed.

A sheet of drawings accompanies this specification as part thereof.

Figure 1 is a face view of a fireproof door and door-frame, illustrating this invention; and Fig. 2 represents a cross-section at A B, Fig. 1, on a larger scale.

Like reference-letters refer to like parts in the two figures.

The door-frame *a* and the door *b* or its body are preferably and conveniently in common of the material known as "lignolith," consisting of a composition of fibrous material—such as excelsior, cocoanut fiber, or the like, with oxid of manganese and chlorid of manganese in suitable proportions, the same being mixed with water to the consistency of a paste and permitted to harden in suitable molds.

The door-frame *a* is constructed of lignolith, including, with the door-frame proper or its body and in one piece therewith, the architraves *c* and *d*, Fig. 2, any required internal rabbet or rabbets *e*, Fig. 2, and a suitable recess *f*, Fig. 2, which admits and incloses the adjoining edge of the wall or partition *g*, Fig. 2, in which the doorway is formed. Being of lignolith, as aforesaid, the door-frame *a* and

the door *b* or its body are adapted to admit and to securely hold wood-screws *h*, Fig. 2, fastening thereto any required attachments, as suitable hinges *i*, Fig. 2.

For the purposes of the leading features of the present invention the door *b* may be of any known or improved construction. The specific construction represented in Fig. 2 comprises a body of lignolith, as aforesaid, having a metallic frame or edge piece *j*, Fig. 2, in the form of a channel-bar with inwardly-directed flanges between which the lignolith is solidly molded and provided with holes through which the screws *h* extend into the lignolith body of the door.

The door-frame *a* and door *b* together constitute a fireproof structure that is not only new in the art, but of demonstrated effectiveness.

A glazed opening in the door *b* is represented at *k* in Fig. 1, the glass panel of which may be of the fireproof construction set forth and claimed in my Patent No. 673,009, dated April 30, 1901.

The lignolith body of the specific door shown at *b* may be and preferably is of the construction set forth and claimed in the specification of my original application, Serial No. 96,309, of which this is a division.

The term "lignolith" as used in my claims hereto appended is intended to include the specific material so named and any equivalent material adapted to be used in substantially the same manner and with the same or substantially the same effects.

Having thus described said improvement, I claim as my invention and desire to patent under this specification—

1. A fireproof door-frame constructed of lignolith and including architraves in one piece with the body of the frame, substantially as hereinbefore specified.

2. A fireproof door-frame constructed of lignolith and including architraves in one piece with the body of the frame, a rabbet within the frame, and a recess which admits and incloses the adjoining edges of the parti-

tion in which the doorway is formed, substantially as hereinbefore specified.

3. A fireproof structure consisting of a door-  
frame constructed of lignolith having archi-  
5 traves in one piece with the body of the frame,  
a door having a body of lignolith, hinges connecting the door-frame and door, and wood-

screws attaching the hinges to the respective parts and having their hold in the lignolith, substantially as hereinbefore specified.

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Witnesses:

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