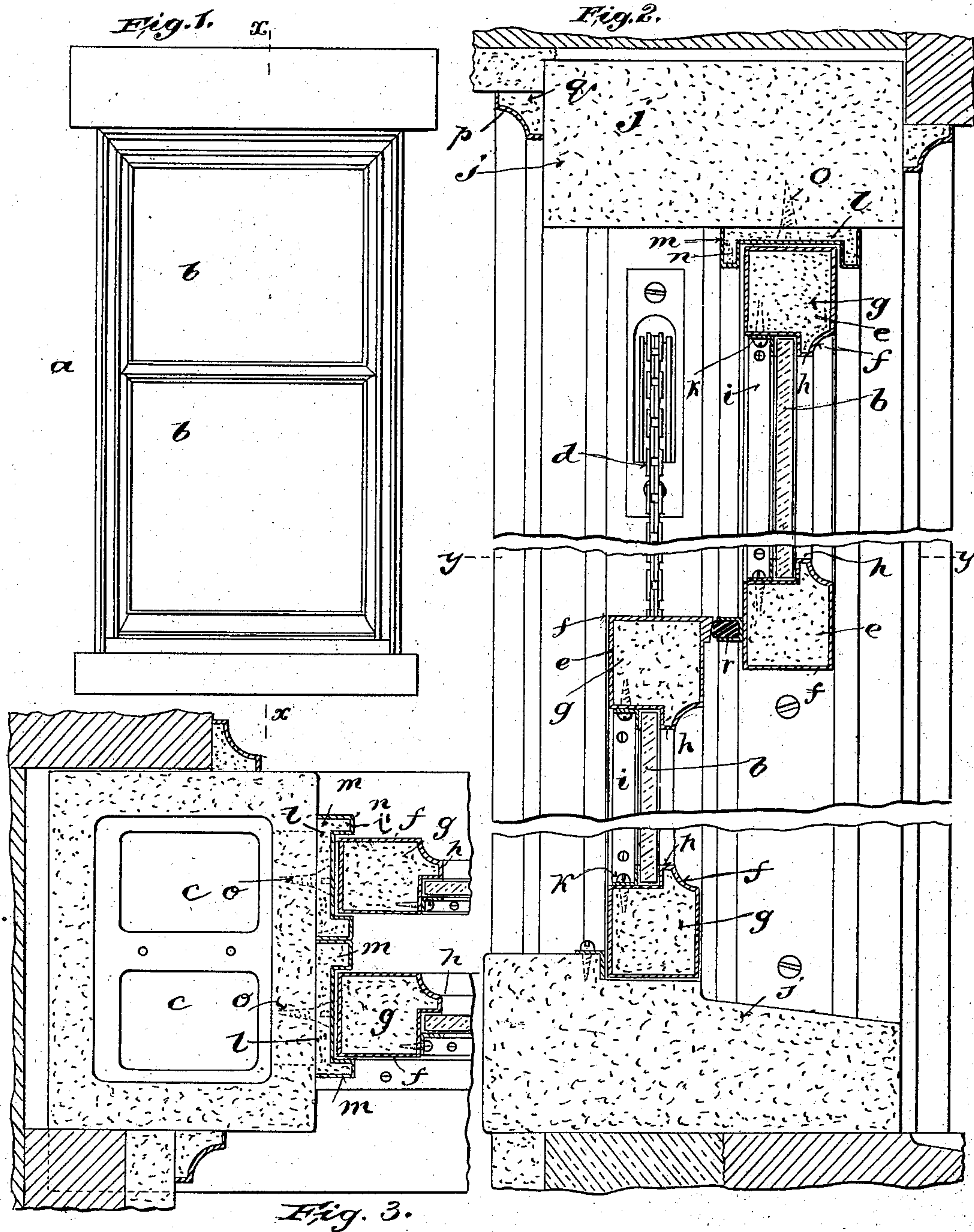


No. 741,544.

PATENTED OCT. 13, 1903.

N. POULSON.  
FIREPROOF STRUCTURE.  
APPLICATION FILED MAR. 1, 1902

NO MODEL.



Witnesses:  
C. Benjamin  
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# UNITED STATES PATENT OFFICE.

NIELS POULSON, OF BROOKLYN, NEW YORK.

## FIREPROOF STRUCTURE.

SPECIFICATION forming part of Letters Patent No. 741,544, dated October 13, 1903.

Application filed March 1, 1902. Serial No. 96,308. (No model.)

*To all whom it may concern:*

Be it known that I, NIELS POULSON, of 118 North Eleventh street, Brooklyn, New York, have invented a new and useful Improved Finish for Buildings, of which the following is a specification.

My improvement relates, primarily, to building structures of a fireproof character, and particularly to what is termed the "finish" material of buildings—that is, to the part constituting the frames of the windows and other openings; and my invention consists of a fireproof finish in which there is a strip of stiff light fireproof composition capable of being shaped and of having parts secured there-  
to like ordinary wood and constituting a fireproof substitute for wooden finishing-strips, as fully set forth hereinafter and illustrated in the accompanying drawings, in which—

Figure 1 is a side view of a window with a frame embodying my invention. Fig. 2 is an enlarged longitudinal sectional view on the line X X, Fig. 1. Fig. 3 is a transverse sectional view on the line Y Y, Fig. 2, with a part broken away.

In carrying out my invention I first produce a supporting-strip, which may be solid, as in Fig. 2, showing the lintel and sill of a window, or hollow, as in Fig. 3, showing one of the side pieces. The strip, whatever its form, consists of a fireproof composition capable of being sawed, cut, and of receiving and retaining screws like wood and of being first brought to a plastic condition and molded or shaped and then hardened, forming a tough, stiff, but comparatively light and inexpensive strip. While different compositions may be used, I prefer to use a composition of earthy and fibrous materials, as mineral wool, asbestos, or excelsior or other woody fibers, and oxid and chlorid of manganese in desired proportions to make a paste which will set and harden to form a strip having the characteristics above described. This strip constitutes the foundation or supporting-strip of the improved builder's finish and has combined therewith guide abutting or parting pieces or beads, which, as shown, are for use with sliding sashes. These pieces are formed  
by bending a strip of metal to form a hollow

member *i'* with a rib or ribs *n m* and is filled with a composition, preferably the same as that which constitutes the supporting-strip, and is secured to the face of the supporting-strip by screws, as indicated by dotted lines. As thus constructed with guide or parting ribs or beads of any suitable form the finishing-strip may be used like one of wood for any desired part of the finish of a building where frames are required and is absolutely fireproof, light in weight, easily cut or shaped as required, capable of a smooth-surface finish, adapted to be stained or painted, and, moreover, deadens sound, and it does not rebound when struck, like metal finish, and is even more fireproof than a metal structure, as it will not bend under heat and is absolutely incombustible. The capacity to receive and retain screws permits the ready attachment of the ribs and other parts by screws, thus avoiding the difficulties incident to structures made of metal, which have to be bolted or bored or tapped.

While for some purposes the supporting-strip may be solid, it is better in other cases to make it hollow, as I have found that this prevents any tendency to twist or warp from any cause.

I have illustrated a window-frame having sashes of hollow metal containing a filler, but do not here claim the same, nor do I claim the construction of the guide-strips of metal with a non-combustible filler, the same being the subject-matter of claims in my applications Serial Nos. 133,766 and 155,359.

Without limiting myself to the form and construction shown, I claim—

1. A fireproof finish for building consisting of a strip of fireproof composition capable of receiving and retaining screws combined with parting or guiding ribs screwed to the face of the strip, substantially as set forth.

2. A fireproof finish for building consisting of a hollow supporting-strip of fireproof composition capable of receiving and retaining screws combined with parting or guiding ribs screwed to the face of the strip, substantially as set forth.

3. A fireproof finish for building consisting of a strip of fireproof composition capable of

receiving and retaining screws combined with  
parting or guiding ribs, consisting of bent  
metal strips each containing a fireproof filler  
secured to the face of said supporting-strip,  
5 substantially as set forth.

4. The combination with the supporting-  
strip of a frame, of a guide consisting of a  
metallic strip bent to form longitudinal ribs,  
containing a fireproof filler and connected to

the face of the supporting-strip, substantially as  
set forth.

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

NIELS POULSON.

Witnesses:

H. G. OGDEN, Jr.,

HENRY C. GARRETSON.