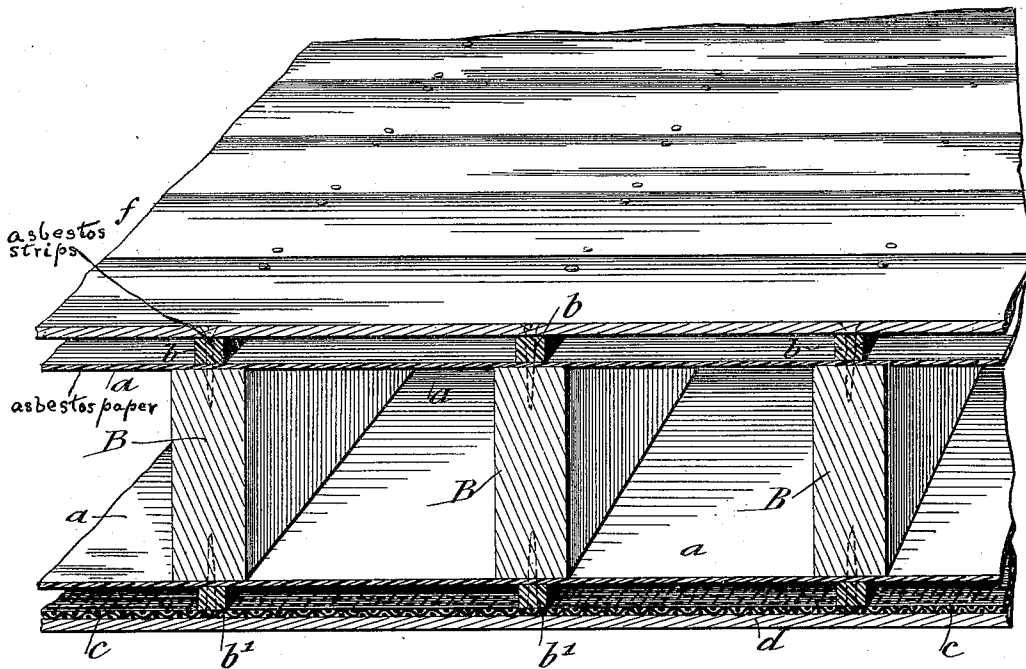


(No Model.)

J. E. HINTZE.  
FIREPROOF BUILDING.

No. 593,804.

Patented Nov. 16, 1897.



WITNESSES  
*George J. Ackel*  
*Carl Kable*

INVENTOR  
*Julius E. Hintze*  
BY *George Regnier*  
ATTORNEYS.

# UNITED STATES PATENT OFFICE.

JULIUS E. HINTZE, OF BROOKLYN, NEW YORK.

## FIREPROOF BUILDING.

SPECIFICATION forming part of Letters Patent No. 593,804, dated November 16, 1897.

Application filed March 18, 1897. Serial No. 628,155. (No model.)

*To all whom it may concern:*

Be it known that I, JULIUS E. HINTZE, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Fireproof Buildings, of which the following is a specification.

My invention relates to fireproof buildings, and has for its object the production of an economical and efficient construction for the floors, ceilings, and partitions of ordinary wooden-beam structures.

My invention consists of means for rendering wooden structures fireproof and comprises a fireproof sheathing placed above and below the floor-joists and secured thereto by longitudinal fireproof strips, a flooring attached to the top strips, and a fireproof ceiling secured to the fireproof bottom strips.

My invention consists, further, of details of construction hereinafter described, and pointed out in the claims.

The accompanying drawing, which forms a part of my specification, represents a sectional perspective view of the floor and ceiling of my improved fireproof wood structure.

Referring to the drawing, B B represent the ordinary wooden floor beams or joists of a building. These beams are covered above and below by sheathing or a layer of fireproof material *a*, preferably asbestos paper. This asbestos sheathing extends over the floor-space above and below said floor-beams. Fireproof strips *b b'*, which are cut from thick asbestos pasteboard, are nailed longitudinally along the beams above and below and serve to secure the said sheathing to the beams. An ordinary flooring *f*, constructed of the usual floor-planks, is supported on the strips *b*, thus leaving an open space between the said flooring and the sheathing. To the lower strips *b'* are attached sheet-metal lathing *c*, and a suitable plaster *d* is laid therein, forming an ordinary ceiling. The metal lathing may be replaced by a sheathing of wire-gauze, which may be nailed to the asbestos strips *b'* and covered with suitable plaster, forming a ceiling. Thin metal sheets may also be substituted for the lathing or gauze or terra-cotta or other fireproof plates or slabs

be used in place of the lathing and plaster. An open space is also provided between the sheathing and the metal lathing by the strips *b'*.

It is obvious that the above-described structure can be applied to the partitions and walls as well as to the floors of a building, thus rendering the entire building fireproof.

My improved means for rendering structures fireproof may be applied to buildings already completed as well as to those in the course of erection, it being only necessary in the former case to remove the old flooring and ceiling. It will be noted from the above description that the floor beams or joists are protected on both sides by the fireproof sheathing. The open spaces above and below said joists act as an additional protection.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. In a fireproof structure, the combination, with the wooden floor-joists, of a fireproof sheathing attached to the upper and lower sides thereof, and longitudinal fireproof strips secured to the upper and lower sides of said joists and serving as a means by which the floor and ceiling are attached to said joists, substantially as set forth.

2. In a fireproof structure, the combination with the floor-beams of a fireproof sheathing applied to the upper and lower sides thereof, fireproof strips extending longitudinally along the upper and lower surfaces of said floor-beams, a flooring secured to the upper strips, a fireproof ceiling secured to the lower strips and air-spaces formed above and below said floor-beams, substantially as set forth.

3. In a fireproof structure, the combination, with the wooden floor-joists, of an asbestos sheathing attached to the upper and lower sides thereof, longitudinal asbestos strips secured to the upper and lower sides of said joists, a flooring attached to the upper strips, and metal lathing secured to the lower strips and adapted to receive a plaster, substantially as set forth.

4. In a fireproof structure, the combination, with the floor-beams, of a fireproof sheathing applied to the lower side of said floor- 100

beams, fireproof strips extending longitudinally along said floor-beams, and serving to secure said sheathing thereto, and a fireproof ceiling secured to said strips and forming an  
5 air-space between said sheathing and ceiling, substantially as set forth.

In testimony that I claim the foregoing as

my invention I have signed my name in presence of two subscribing witnesses.

JULIUS E. HINTZE.

Witnesses:

PAUL GOEPEL,  
GEO. W. JAEKEL.