(No Model.)

R. W. LYLE.

FIREPROOFING.

No. 590,327. Patented Sept. 21, 1897.

Fig. 1.

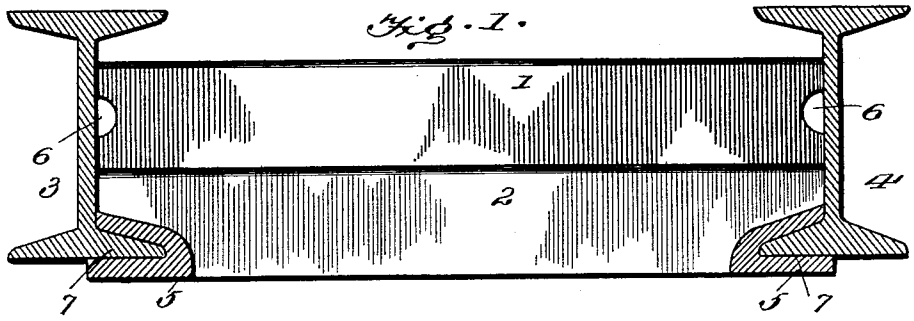


Fig. 2.

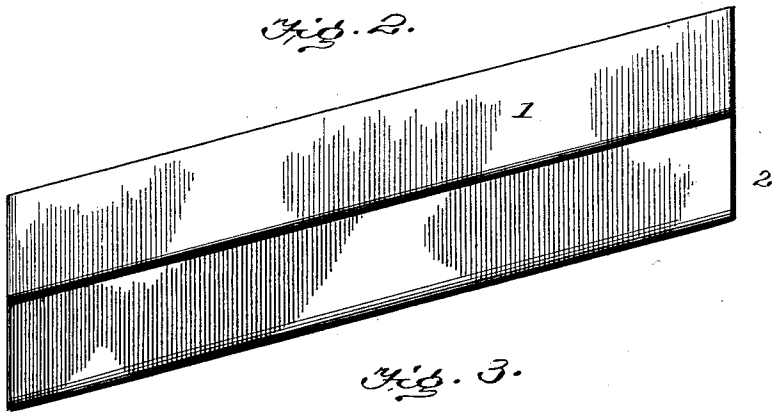


Fig. 3.

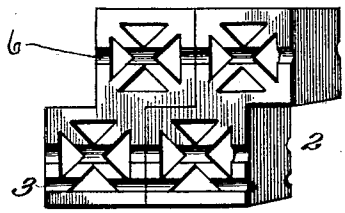
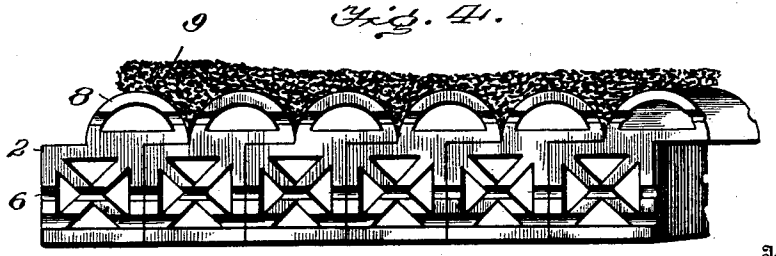


Fig. 4.



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UNITED STATES PATENT OFFICE.

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FIREPROOFING.

SPECIFICATION forming part of Letters Patent No. 590,327, dated September 21, 1897.

Application filed May 4, 1897. Serial No. 635,072. (No model.)

To all whom it may concern:

Be it known that I, ROBERT W. LYLE, a citizen of the United States, residing at Perth Amboy, in the county of Middlesex and State of New Jersey, have invented a certain new, useful, and valuable Improvement in Fireproofing, of which the following is a full, clear, and exact description.

My present invention relates to fireproofing, and has for its objects to provide, first, an improved form of fireproofing which is especially practical and economical of manufacture; second, to provide a form of fireproofing the use of which saves both labor and time in placing in position between the supporting-beams; third, to provide a form of fireproofing which is adapted to withstand great strains and heat; fourth, to provide a form of lintels for fireproofing which may or may not be topped with concrete or cement.

To attain these ends, I provide the combination and arrangement of parts illustrated in the accompanying drawings, in which—

Figure 1 is taken transversely of the I-beams supporting my improved fireproof-flooring and showing side elevation of my lap-jointed lintel. Fig. 2 is a top view of the same lintel, showing how it is cut on the bias. Fig. 3 is an end view of two of my improved lintels. Fig. 4 is an end view showing six lap-jointed lintels having their semicircular upper sections surmounted with concrete or cement.

This present invention, while approximating the structural features shown and described in my pending applications in the same class, Serial No. 628,516, filed March 20, 1897, and Serial No. 629,696, filed March 29, 1897, and even several prior patents, still differentiates in a patentable degree from all of these, as I will now attempt to show.

Taking up the lintel shown in Figs. 1 and 2, in which the upper section 1 overhangs the lower section 2, as shown in Fig. 3, which feature is particularly covered and claimed in my said application, Serial No. 629,696, the advantages of such lap-jointed lintels are supplemented in this case by cutting their ends on a bias, which gives them the important advantage of allowing them to be set in place between the stationary I-beams 3 4 without the use of skewbacks or dividing-keys, although in Fig. 1 I have shown U-shaped skewbacks 5, encompassing the lower shoulders of the I-beams; but said skewbacks may be readily dispensed with, as is evident by the succeeding figures. Running transversely of the upper section 1 of the lintel shown in Figs. 1 and 2 are grooves 6, which permit of a transfer of air from one lintel to another, which means of ventilation is advantageous in case of severe fires and extreme heat.

A modified form of lintel is shown in Fig. 3, wherein the lower section 2 is grooved, as at 3, to receive the lower shoulder 7 of the supporting I-beams, thus dispensing with any form of skewback, as this lintel, like all others shown in this case, is cut on a bias.

The lintels shown in Fig. 4 are of the same general form as those shown in Fig. 3, the main difference being in the semicircular upper section 8 of the former, which latter may or may not be topped with the concrete or cement 9.

The forms of lintels shown in Figs. 3 and 4 are also provided with the ventilating-grooves 6.

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

1. In a fireproof floor or ceiling, the combination with suitable supporting-beams, of a series of hollow lintels arranged transversely of and supported by the beams, the ends of said lintels being cut on a bias and each end portion provided with a transverse ventilating-groove.

2. In a fireproof floor or ceiling, the combination with suitable supporting-beams, of a series of hollow rectangular lintels each having an overhanging hollow arched head extending throughout its length, the ends of said lintels being cut on a bias, and supported by the beams.

3. In a fireproof floor or ceiling, the combination with suitable supporting-beams, of a series of hollow rectangular lintels each having an overhanging hollow arched head extending throughout its length, said lintels and heads being each provided with a transverse ventilating-groove.

In testimony whereof I affix my signature in the presence of two witnesses.

ROBERT W. LYLE.

Witnesses:
H. V. WINNE,
EDWIN FRENCH, Jr.