

No. 614,329.

Patented Nov. 15, 1898.

R. W. LYLE.
FIREPROOFING.

(Application filed Mar. 29, 1897.)

(No Model.)

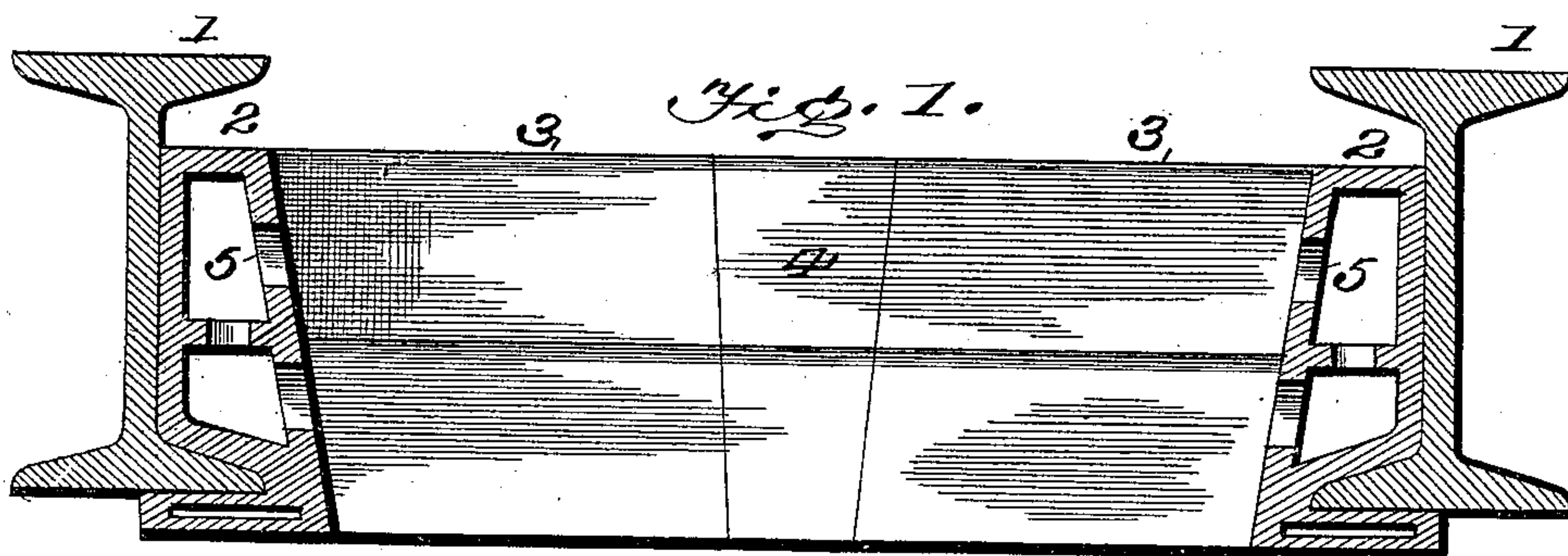


Fig. 2.

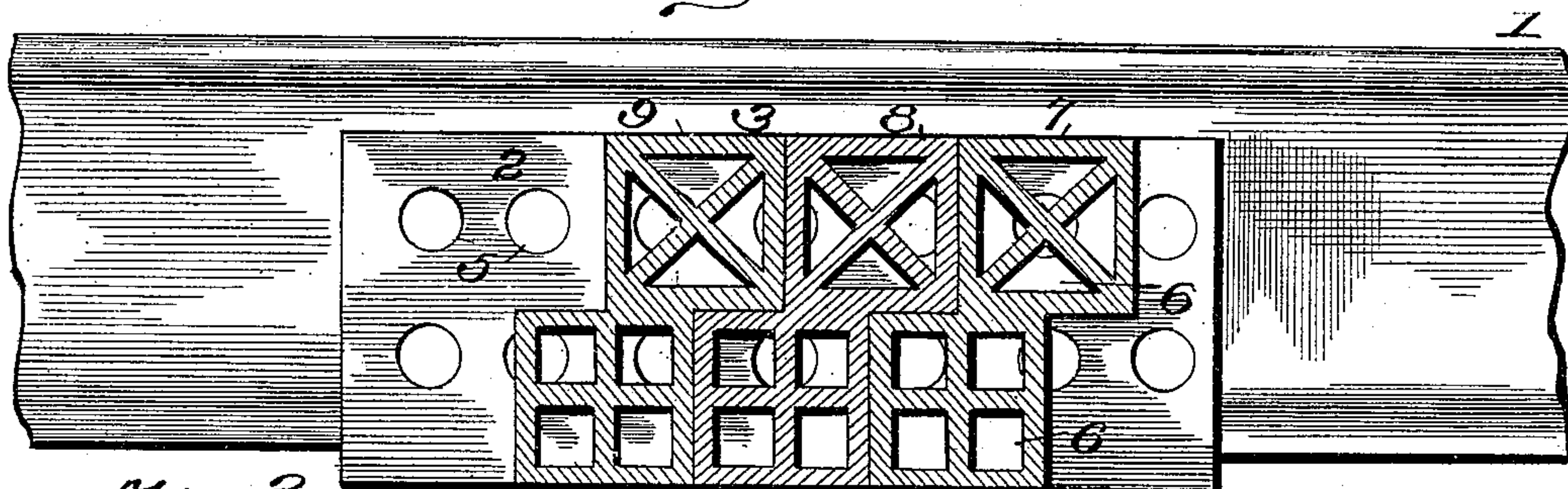


Fig. 3

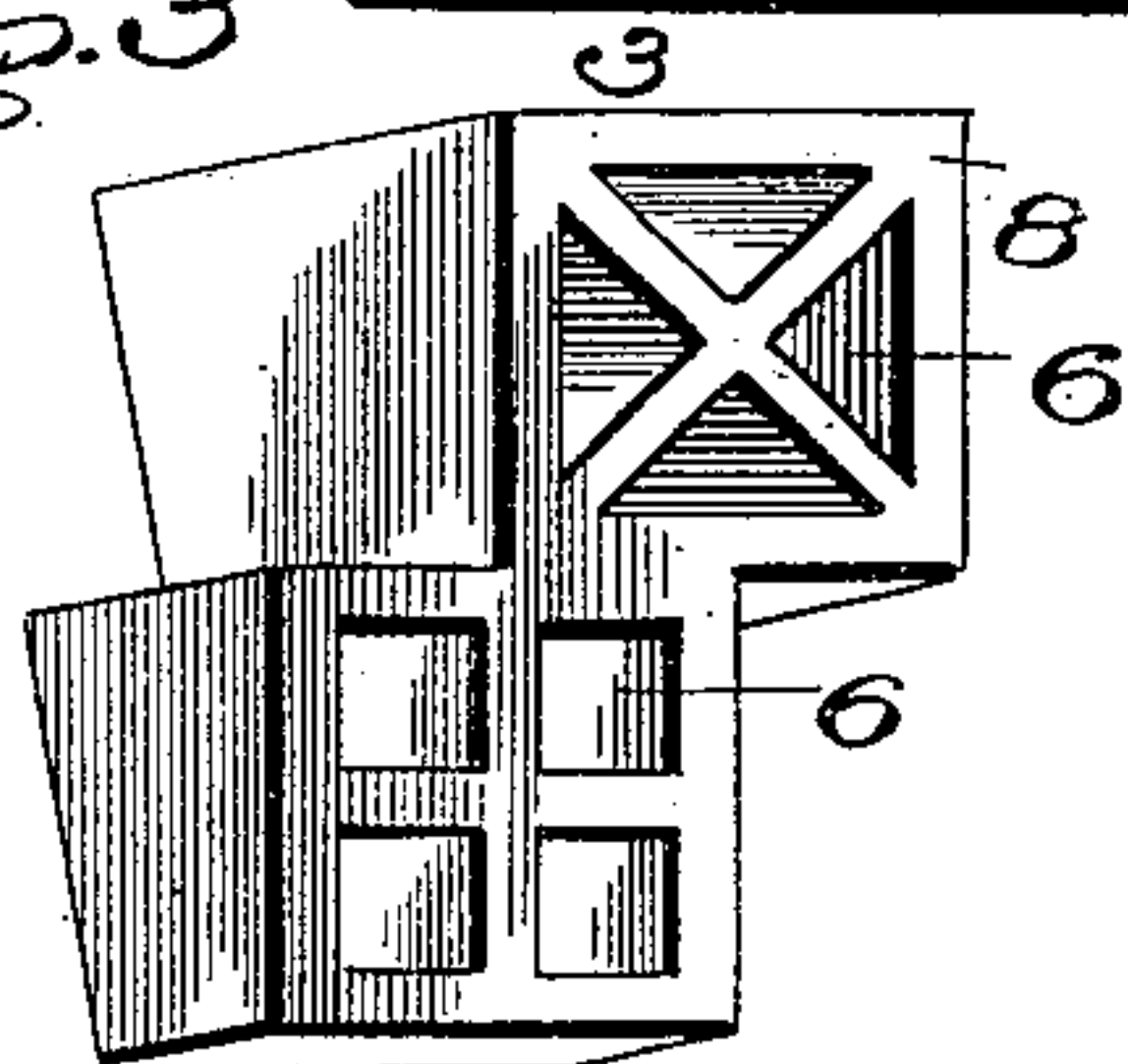


Fig. 4.

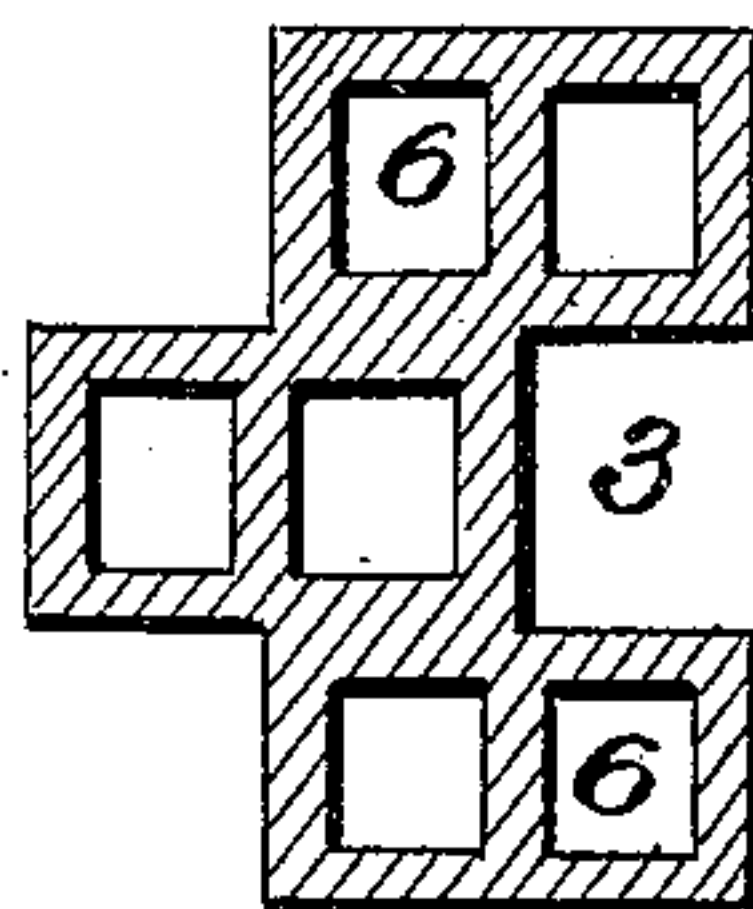


Fig. 5.

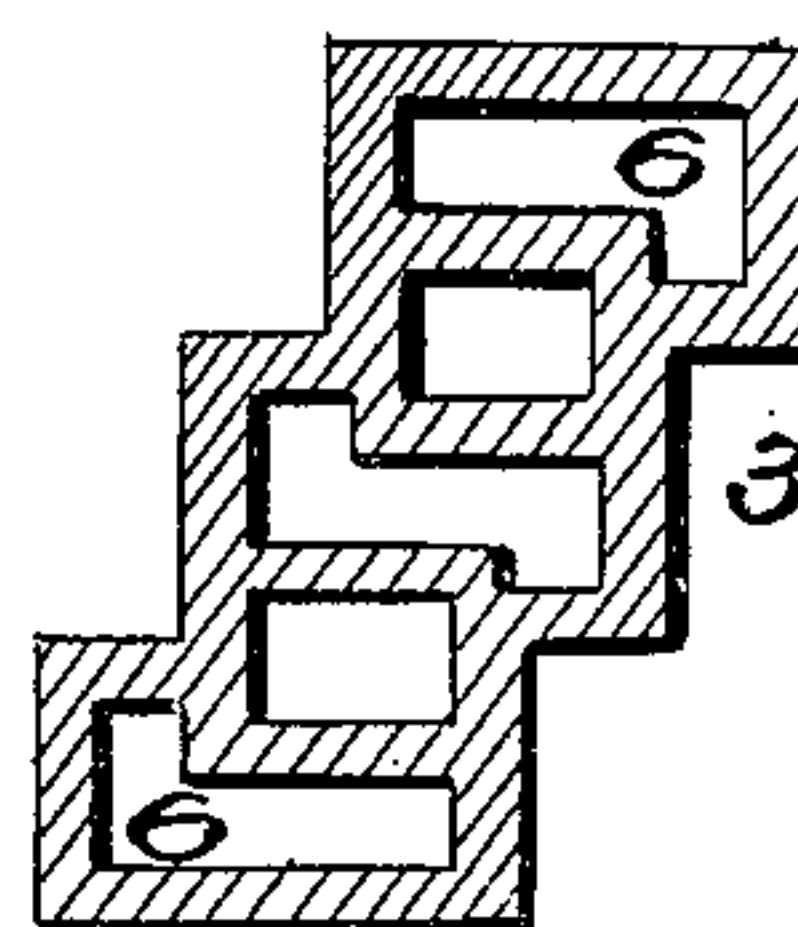


Fig. 6.

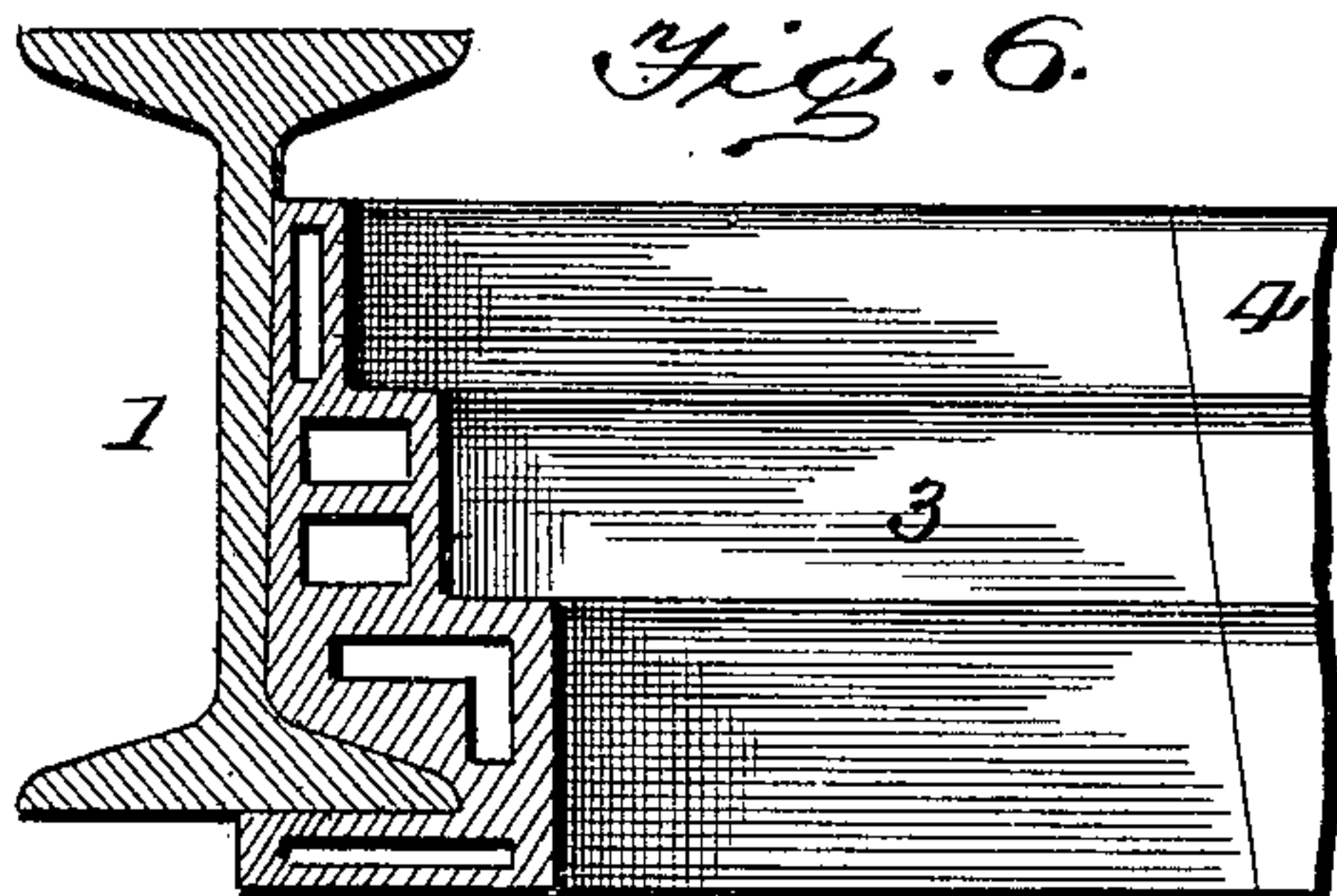
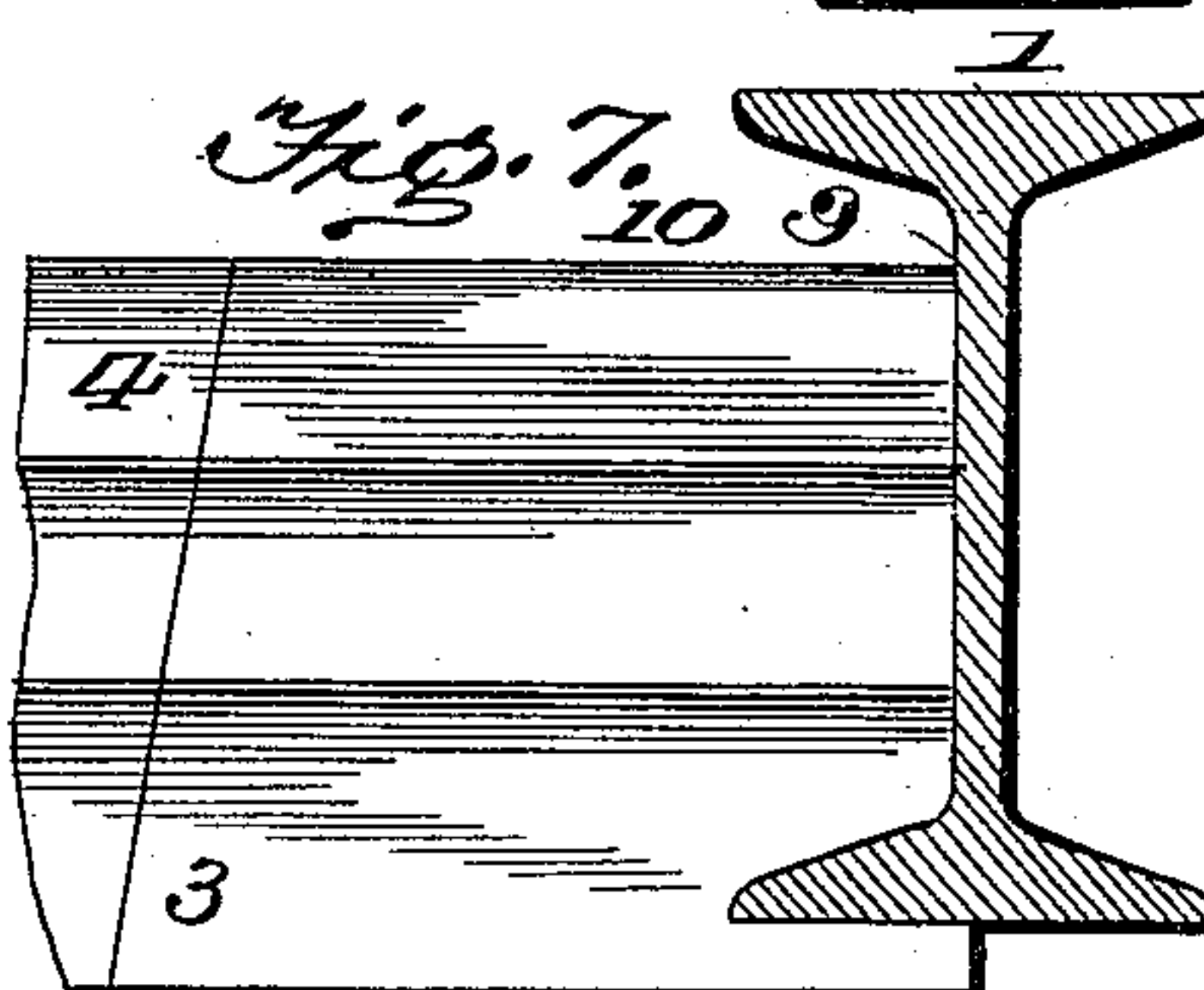


Fig. 7.



Witnesses

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UNITED STATES PATENT OFFICE.

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FIREPROOFING.

SPECIFICATION forming part of Letters Patent No. 614,329, dated November 15, 1898.

Application filed March 29, 1897. Serial No. 629,696. (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 object to provide, first, an improved form of fireproofing which is practical and economical of manufacture; second, to provide a form of fireproofing which can be placed in position or erected with less labor and in less time than the form of fireproofing usually employed, and, third, to provide a form of fireproofing which when in position will stand more strain and heat than that usually employed. To attain these ends I provide the combination and arrangement of parts illustrated in the accompanying drawings, in which—

Figure 1 is a longitudinal sectional view of a section of my improved flooring between two I-beams. Fig. 2 is a transverse sectional view of the same. Fig. 3 is a perspective view of a lintel. Fig. 4 is an end view of a modified form of lintel. Fig. 5 is an end view of a three-step lintel. Fig. 6 is a detail view of a lintel made step shape next the skewback. Fig. 7 is a similar view showing how the lintel is set directly against the I-beam.

Like numerals of reference indicate corresponding parts throughout the several views. I will first take up the form shown in Figs. 1 and 2, in which the space between the two I-beams 1 1 is shown built in with my improved fireproofing, which in this case consists of the two skewbacks 2 2, the two lintels 3 3, and the wedge or key 4. The skewback 2 is of the form shown and described in my application filed March 20, 1897, Serial No. 628,516, and provides for a free circulation of air longitudinally therethrough and transversely through its side holes 5 into the recesses 6 of the lintels 2. For a more thorough description of the ventilation effected through said lintels and skewbacks reference should be had to my said copending application, it being the especial object of this invention to describe and claim the various forms of interlocking lintels herein shown and which

may or may not be made ventilating, as shown in Figs. 1 and 2. The lintels 3 3 are formed of two overlapping sections of rectangular form, as clearly shown in Fig. 2, the upper section in this case overhanging the lower section one-half their respective widths. In laying a floor (see Fig. 2) the row of lintels 7 would first be placed in position with their beveled outer ends against the skewbacks 2 and their inner beveled ends engaged and wedged by the key 4, which corresponds in cross-section to the lintels 3. After the first line of lintels 7 is set thereafter one workman can finish laying that entire section of floor—as, for instance, he rests the upper overhanging sections of the lintels forming row 8, Fig. 2, upon the lower section of the lintels forming row 7 while he is adjusting and setting the wedge 4 properly, and in setting row 9 he utilizes row 8, and so on until the entire section of floor is laid by the one man.

The form of lintel shown in perspective in Fig. 3 is identical with that shown in Figs. 1 and 2, except that its overhang is equal to only one-third the width of either of its two sections and its inner end 8 is straight or perpendicular, so that it will butt flat up against a correspondingly-shaped lintel. This reduction of the amount of the overhang renders the two sections of the lintel less apt to break apart longitudinally.

The three-step lintel shown in Fig. 5 does not differ in its mode of use from those previously described; but it is possibly more desirable for some uses, particularly where narrow lintels are required.

The tongue-and-groove form of lintel shown in Fig. 4 is not so desirable as the other forms shown, as it is impracticable to so readily place it in position.

The step-shape skewback shown in Fig. 6 has several points of advantage, one of which is to form a solid and unchangeable rest for the outer ends of the lintels.

Skewbacks may be dispensed with entirely by having the ends 9 of lintels 10, as shown in Fig. 7, set directly against the I-beams, as shown.

Various unimportant modifications may be made without changing the spirit of my invention, as

What I claim is—

1. In a fireproof flooring, the combination with the supporting-girders, of hollow skewbacks supported by the girders, and hollow
5 lintels stepped longitudinally on lines parallel with the girders and arranged transversely between the latter and supported at their ends by the skewbacks, each of said lintels comprising two or more integral stepped sections;
10 one section arranged above and in advance of the other to form a series of stepped shoulders arranged transversely to the girders.

2. In a fireproof flooring, the combination with the supporting-girders, of longitudinally-
15 stepped skewbacks supported by said girders, and hollow lintels each having shoulders stepped longitudinally on lines parallel with the girders and supported by the stepped skewbacks, said lintels each comprising two
20 or more integral overlapping sections forming longitudinal shoulders arranged trans-

versely to the girders, substantially as described.

3. In a fireproof flooring, the combination with the supporting-girders, of hollow stepped
25 skewbacks supported by the girders, and hollow lintels stepped longitudinally on lines parallel with the girders and braced at their ends by the skewbacks transversely to and
between the girders, each of said lintels comprising two or more integral stepped sections;
30 one section arranged above and in advance of the adjacent section to form a series of longitudinal stepped shoulders arranged transversely to the girders, substantially as described.
35

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

ROBERT W. LYLE.

Witnesses:

H. V. WINNE,

EDWIN FRENCH, Jr.