

(No Model.)

L. S. PIERSON.
FIREPROOF FLOOR OR CEILING.

No. 533,201.

Patented Jan. 29, 1895.

Fig. 3.

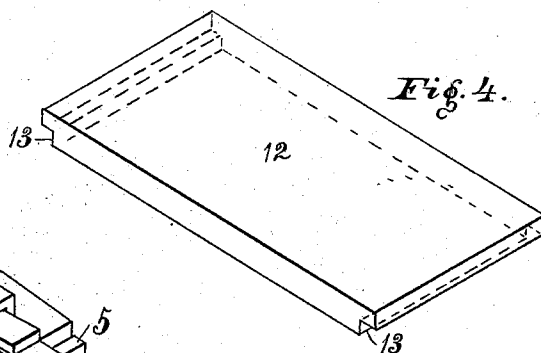
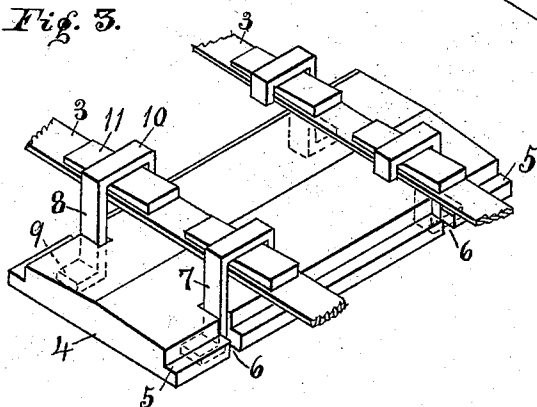


Fig. 2.

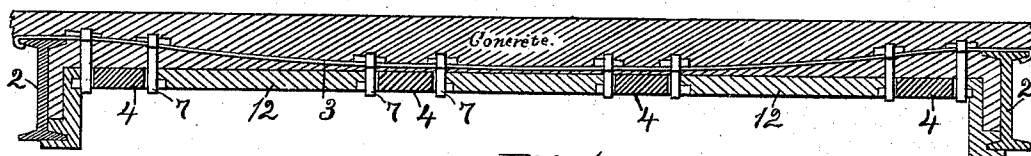
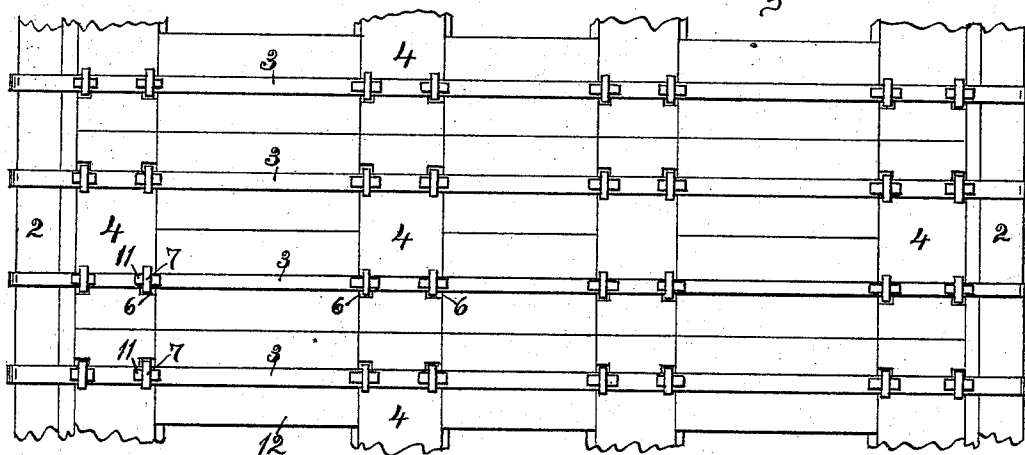


Fig. 1.

WITNESSES:

V. M. Hood.
J. F. Schmidt

INVENTOR

Levi S. Pierson.

BY

H. P. Hood.

ATTORNEY.

UNITED STATES PATENT OFFICE.

LEVI S. PIERSON, OF INDIANAPOLIS, INDIANA.

FIREPROOF FLOOR OR CEILING.

SPECIFICATION forming part of Letters Patent No. 533,201, dated January 29, 1895.

Application filed November 28, 1894. Serial No. 530,283. (No model.)

To all whom it may concern:

Be it known that I, LEVI S. PIERSON, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented a new and useful Improvement in Fireproof Floors or Ceilings, of which the following is a specification.

My invention relates to an improvement in the construction of fire-proof floors and ceilings.

The object of my improvement is, to avoid, in that class of fire-proof floors which consist of concrete supported by iron girders, the necessity for the use of "false-work" to support the concrete when soft.

The accompanying drawings illustrate my invention.

Figure 1 represents a transverse section of flooring constructed with my improvement. Fig. 2 represents a plan of the same without the concrete. Fig. 3 represents, on a larger scale, a view in perspective of one of the slabs forming the ceiling, and the means for supporting it. Fig. 4 represents a view in perspective of one of the intermediate ceiling slabs.

In the drawings, 2, 2, indicate a pair of iron girders which support a section of flooring. Said girders are connected by a series of straps, 3, 3, formed of light bar-iron, and extending across the space between the girders.

The construction thus far is well known and common in this class of flooring, the space above and below the straps being filled with cement concrete.

Heretofore, in constructing this class of flooring, it has been necessary to erect below the connecting straps and between the girders, a false work of wood, to receive and support the concrete while soft. To avoid the construction of such a false work, and to form a ceiling for the room below, I form in suitable molds a series of slabs, 4, similar to that shown in Fig. 3, from cement concrete, clay, or other plastic material. The longer edges of said slabs are rabbeted as at 5, and are provided in said edges with notches, 6. Several series of slabs thus formed, arranged end-to-end, are suspended from the straps 3, at intervals between the girders, by means of hang-

ers, 7, 7. Each of said hangers is formed with a vertical portion, 8, and laterally projecting arms 9, and 10, the vertical portion of the hanger entering the notch 6 in the edge of the slab, one of the lateral arms engaging the under surface of the slab, while the other arm engages the strap. For the purpose of nicely adjusting and leveling the slabs, a wedge 11, is inserted under that arm of each of the hangers which engages the strap. The several series of slabs 4 having been placed in position the spaces between them are filled by a series of similar slabs, 12, shown in Fig. 4, having rabbeted portions, 13, adapted to interlock with the opposed edges of two of the series of slabs 4, thus forming a continuous surface below the straps, and suspended therefrom by the hangers 7. The space above the surface thus formed being filled with concrete in the usual manner, the concrete adheres to the slabs and forms a solid mass therewith in which the straps and the hangers depending therefrom are embedded.

I claim as my invention—

1. In a fire-proof floor, the combination of the pair of girders, the series of straps connecting said girders, a continuous surface composed of separately molded slabs of plastic material arranged below said straps and suspended therefrom by suitable hangers, and a mass of concrete resting upon said slabs and embedding said straps and hangers, substantially as set forth.

2. In a fire-proof floor, the combination of the pair of girders, the series of straps connecting said girders, a continuous surface composed of separately molded slabs of plastic material arranged below said straps and suspended therefrom by suitable hangers, means for adjusting said hangers vertically relatively to said straps, and a mass of concrete resting upon said slabs and embedding said straps and hangers, substantially as set forth.

3. In a fire-proof floor, the combination of the pair of girders, the series of straps connecting said girders, the separately molded slabs 4, having rabbeted edges 5, and notches 6, said slabs being arranged in series and suspended at intervals from said straps be-

tween said girders by means of hangers adapted to enter said notches and provided with a pair of lateral arms one of which engages the slab and the other of which engages the strap, and intermediate separately
5 molded slabs 12 arranged to fill the spaces between said slabs 4, whereby a continuous surface is formed below the straps and suspended therefrom, substantially as and for the purpose specified.

LEVI S. PIERSON.

Witnesses:

V. M. HOOD,
H. P. HOOD.