

No. 716,628.

Patented Dec. 23, 1902.

A. DICKEY.  
FIREPROOF FLOORING.

(Application filed May 19, 1902.)

(No Model.)

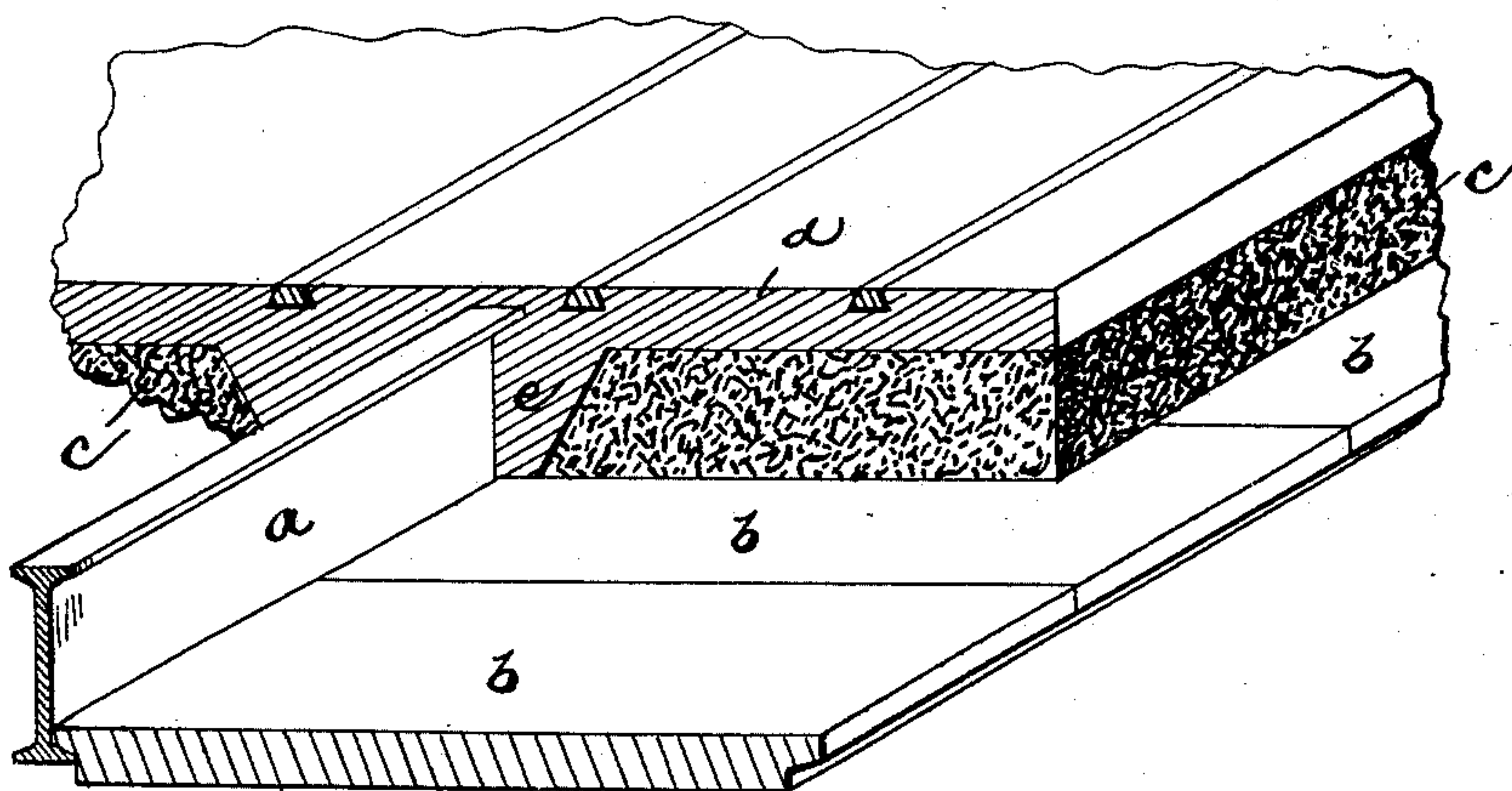


Fig. 1.

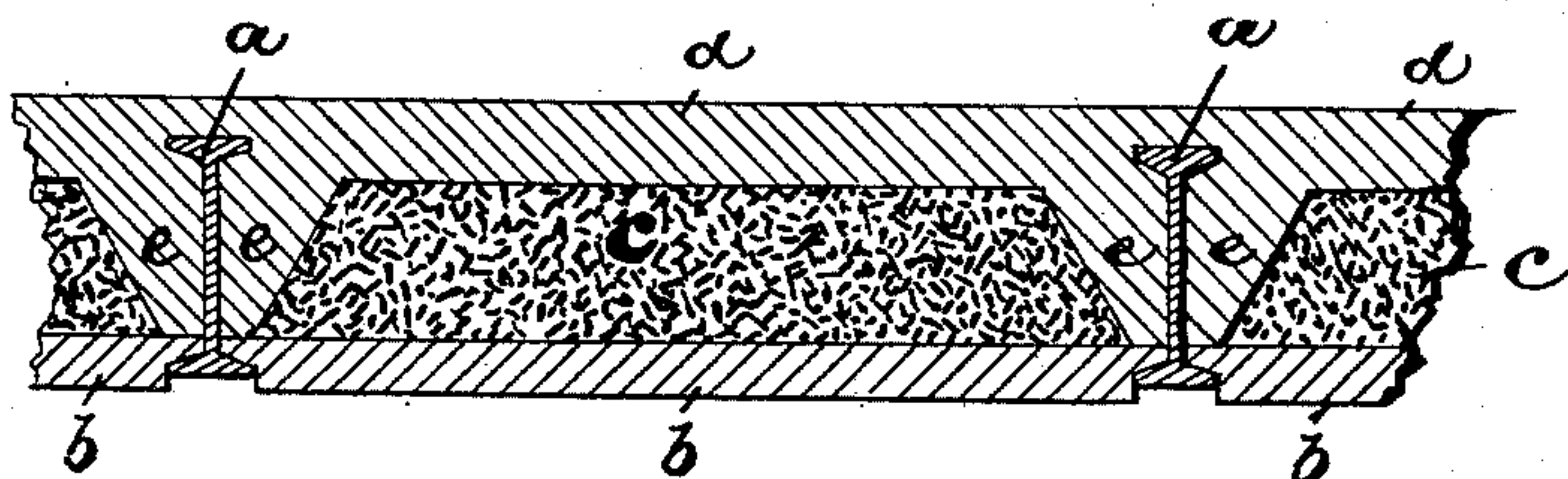


Fig. 2.

WITNESSES:

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# UNITED STATES PATENT OFFICE.

ALEXANDER DICKEY, OF NEWARK, NEW JERSEY.

## FIREPROOF FLOORING.

SPECIFICATION forming part of Letters Patent No. 716,628, dated December 23, 1902.

Application filed May 19, 1902. Serial No. 107,987. (No model.)

*To all whom it may concern:*

Be it known that I, ALEXANDER DICKEY, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Fireproof Flooring; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

The objects of this invention are to facilitate the construction of fireproof flooring, to reduce the weight thereof and at the same time secure great solidity and strength, to avoid the use and construction of "false work" preliminary to laying the permanent flooring and the expense incident thereto, and to secure other advantages and results, some of which may be referred to hereinafter in connection with the description of the parts.

The invention consists in the improved flooring and in the arrangements and combinations of parts thereof, all substantially as will be hereinafter set forth, and finally embraced in the clauses of the claim.

Referring to the accompanying drawings, in which like letters of reference indicate corresponding parts in each of the figures, Figure 1 is a perspective view of a portion of a flooring of my improved construction, and Fig. 2 is a sectional view of the same.

In carrying out the invention I arrange the iron or steel floor-beams *a a*, having at top and bottom lateral flanges, in parallel relation, as heretofore, and between the said beams, on the bottom flanges thereof, which act as supports, I arrange a series of previously-molded slabs *b b*, said slabs bridging the space between said beams. Said slabs are composed of concrete of any suitable composition, which are reduced in thickness at their opposite edges to receive the lower flanges of the beams and enable the said slabs to project a little, if so desired, below the level of the lower surfaces of said beams.

The slabs being uniformly molded present on their under sides when seated on the beams as described a uniformly level sur-

face, so that but little plastering or other work is required to secure a finished wall. Upon the slabs thus arranged in place is placed between each pair of beams a body or core of loose cinders *c*, which is so shoveled as to largely fill the space between said beams from the slab to near the level of the tops of the beams, the sides of said body of cinders which run parallel with the beams being beveled or rounded off and forming longitudinal recesses along the vertical webs of the beams, as shown in Fig. 2. Over the said cinders and into the said recesses and preferably over the tops of said beams is next applied a bed of concrete, which may be of hydraulic cement, broken stone and sand, or of any other suitable and common composition, which after being tamped, beveled, and finished at the top hardens into a solid mass of great supporting strength. Close to the beams the concrete *d* extends down, as at *e*, to the top of the slabs *b* at their edges, where they engage the beams, the upper central part of said concrete arching or bridging the ashes. The top part of the concrete flooring resting in part on the cinders may be strengthened with embedded wire or metal in any manner now common.

The large bed of cinders *c* gives lightness to the construction, and yet the flooring is very strong to resist great weight. It will be obvious that by this construction very little or no preliminary labor, such as the erection of staging and false flooring on which to lay concrete, is required, and thus time, labor, and expense both of erection and removal are avoided.

Having thus described the invention, what I claim as new is—

1. The combination with the supporting-beams having lateral flanges at the bottom thereof, of concrete slabs supported on the bottom flanges and extending from beam to beam, loose cinders arranged on said slabs at the center thereof, the body of the cinders lying away from the sides of the beams, and a bed of concrete lying on said cinders and extending from beam to beam, the said bed of concrete extending down to the slabs and being supported by the said slabs where the latter are supported by the bottom flanges, substantially as set forth.



2. The combination with the supporting-beams having lateral flanges at the bottom thereof, of concrete slabs supported on the bottom flanges and extending downward at the sides of the edges of said flanges, said slabs extending from beam to beam, loose cinders arranged on said slabs at the center thereof, the body of cinders lying away from the sides of the beams, and a bed of concrete lying on said cinders and extending from beam to beam, the said bed of concrete extending down to the slabs and being supported by the said slabs where the latter are supported by the bottom flanges, substantially as set forth.

3. The combination with the supporting-beams having lateral flanges at the top and bottom thereof, of concrete slabs supported on the bottom flanges and extending from beam to beam, a core of loose cinders arranged over the slabs and away from the sides of the beams, and a bed of concrete extend-

ing over the cinders, over the tops of the beams and around the top flanges thereof and downward to the slabs where the latter rest on the bottom flanges of the beams, substantially as set forth.

4. The combination with the supporting-beams having lateral flanges at the bottom thereof, of molded slabs supported on the bottom flanges, a core of loose matter supported on said slabs, and concrete covering said loose matter and the tops of said supporting-beams and, over said flanges, extending downward at the sides of the core of loose matter, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 15th day of May, 1902.

ALEXANDER DICKEY.

Witnesses:

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C. B. PITNEY.