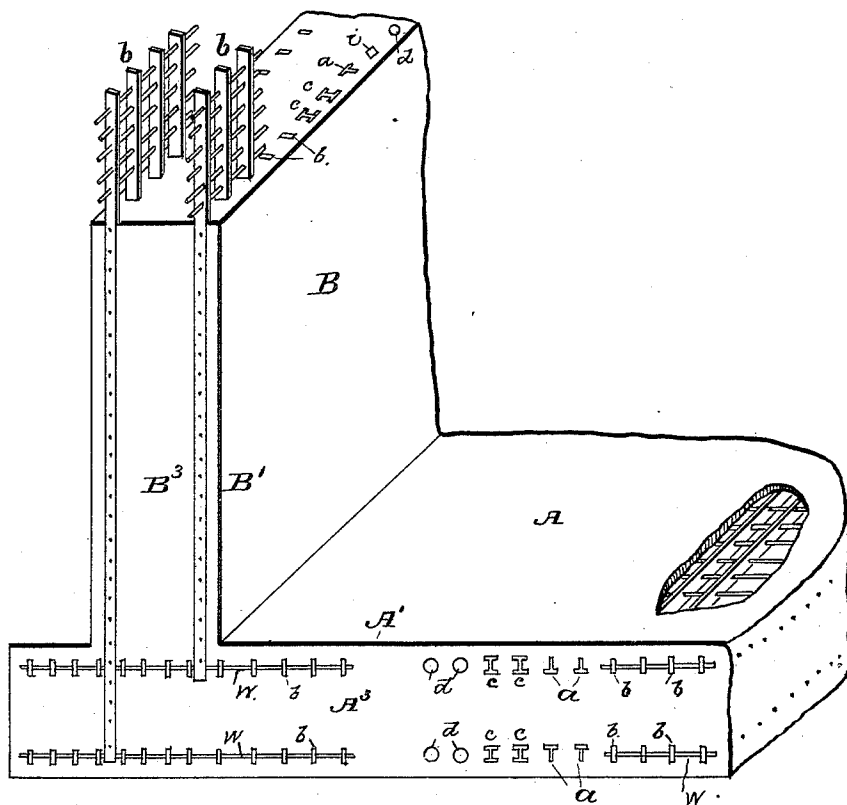


(No Model.)

P. H. JACKSON.
CONSTRUCTION OF FLOORS OR WALLS.

No. 462,437.

Patented Nov. 3, 1891.



ATTEST.

J. Henry Kaiser.
Chas. E. Hunt.

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UNITED STATES PATENT OFFICE.

PETER H. JACKSON, OF SAN FRANCISCO, CALIFORNIA.

CONSTRUCTION OF FLOORS OR WALLS.

SPECIFICATION forming part of Letters Patent No. 462,437, dated November 3, 1891.

Application filed May 21, 1889. Serial No. 311,595. (No model.)

To all whom it may concern:

Be it known that I, PETER H. JACKSON, of San Francisco, in the county of San Francisco and State of California, have invented certain new and useful Improvements in the Construction of Floors or Walls; and I 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.

My invention relates to building basement, cellar, or vault constructions.

The object of the invention is to increase the stiffness and strength of walls or floors of buildings without increasing their thickness, so that a building will remain integral as in condition of original construction, will resist tensile and compressive strain, remain erect under the weakening effects of fire, and will withstand earthquake-shocks; furthermore, to produce a construction of vault or cellar adapted for building where the ground has been filled in or is otherwise soft and affords a poor foundation; furthermore, to produce a vault or cellar construction adapted for building where a larger surface than that inclosed by the walls of a building is required to support it, owing to the earth being soft or wet beneath and thus a poor resistant to the load above.

With these objects in view the invention resides in a building or similar structure comprising a wall or floor of two surface portions, each provided with metallic ties or small beams, whereby the wall or floor is stiffened and each portion made capable of withstanding strain; furthermore, in a construction for buildings comprising a foundation, cellar, or basement wall and a floor, both the wall and the floor being provided with metallic ties or beams joined, whereby the floor alone is made to form a firm, solid, and substantial foundation for a building.

I have illustrated the invention in the accompanying drawing, in which the figure represents a perspective view of a wall and basement-floor constructed in accordance with my invention, a portion of the concrete of the floor being broken away in order to illustrate the arrangement of the ties or beams.

In the drawing, A represents a floor of a cellar or basement, and B indicates one of the walls thereof. Both the wall and the floor are shown as made with two surface portions, (marked, respectively, B' and A') built of hydraulic cement, concrete, or of brick, stone, or like material cemented together, and metallic ties *a*, *b*, *c*, *d*, and *i*, embedded slightly beneath both surfaces of the wall and the floor for the purpose of resisting tensile and compressive strain caused by transverse pressure in either direction. Between the surface portions of both the wall and the floor are the intermediate main courses of the wall and floor B and A, which are of brick, stone, or the like. If desired, I may interpose a stratum of asphaltum or other damp-resistant substance or material for the purpose of rendering the structure dry.

In the drawing I have shown the floor A as extending beyond the walls. This construction may be employed, if desired, though I do not wish to limit myself strictly thereto.

It is of advantage in positions where a larger surface than that inclosed by the walls is required to support it, owing to the earth being soft or wet beneath, thus affording a poor resistance to the great pressure of the weight of the building. It is advantageous that the ties or beams of the floor be attached to those of the wall, in order that the greatest strength and bracing-power may be produced.

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

A foundation, cellar, or basement wall each surface portion of which is provided with metallic ties or beams, which make both the surface portions capable of resisting strain, the floor extending under the wall, the metallic ties or beams of the floor contiguous to those of the walls, whereby the floor alone is made to form a firm, solid, and substantial foundation for a building, substantially as herein described.

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

PETER H. JACKSON.

Witnesses:

E. H. THARP,
W. D. WALKER.