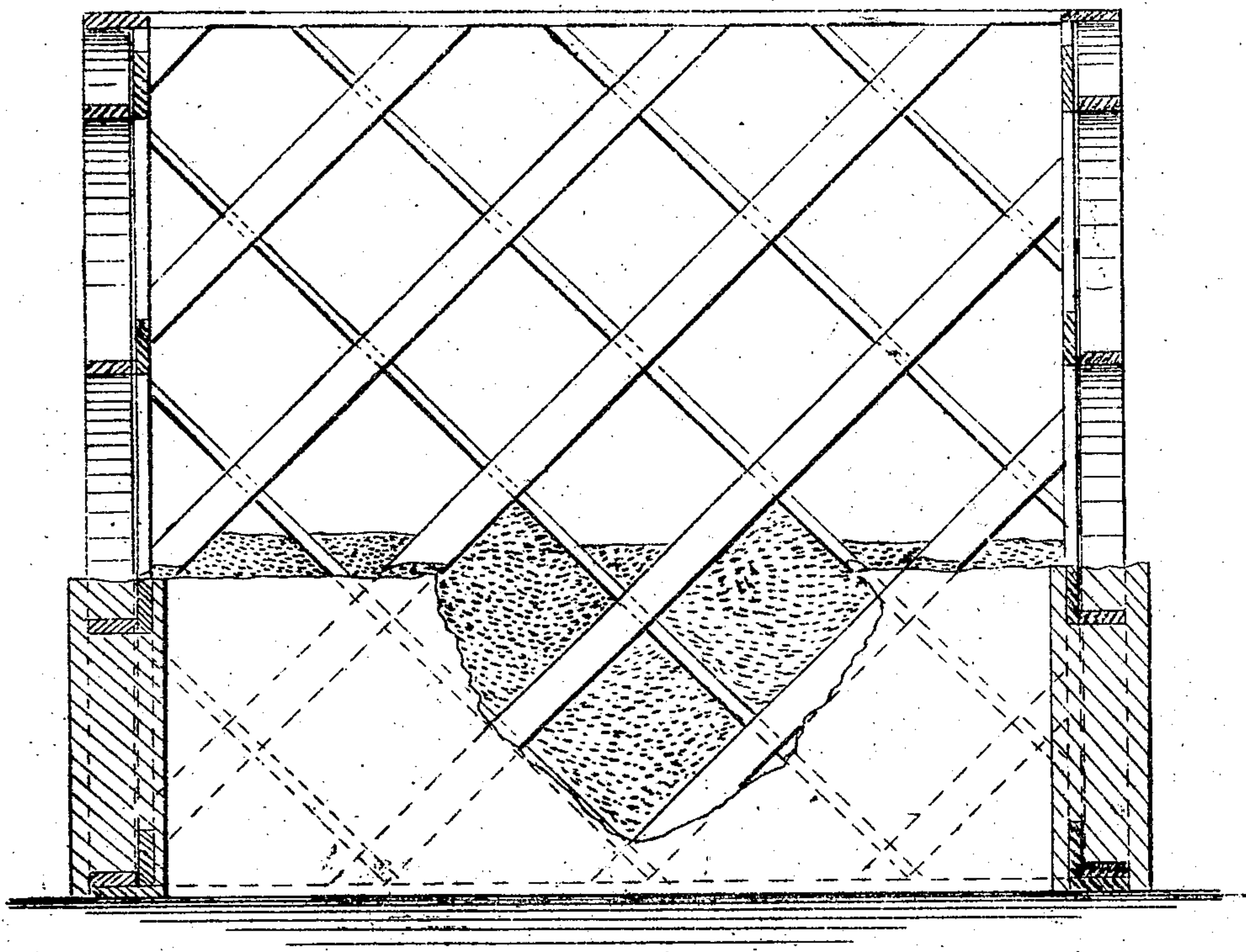


Charles Williams Imp<sup>r</sup> Method of  
constructing the Walls of Buildings.  
*Assigned to Self & Isaac B. Ward*

75098

PATENTED MAR 3 1868



Witnesses:

*Alex. F. Roberts*

*J. M. Corington*

Inventor:

*Chas. Williams*

*per Munn & Co  
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United States Patent Office.

CHARLES WILLIAMS, OF VINELAND, NEW JERSEY, ASSIGNOR TO HIMSELF  
AND ISAAC B. WARD, OF NEW YORK CITY

*Letters Patent No. 75,098, dated March 3, 1868.*

IMPROVEMENT IN CONSTRUCTION OF WALLS OF BUILDINGS.

*The Schedule referred to in these Letters Patent and making part of the same.*

TO ALL WHOM IT MAY CONCERN:

Be it known that I, CHARLES WILLIAMS, of Vineland, Cumberland county, New Jersey, have invented a new and improved Method of Constructing the Walls of Buildings; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to a new and improved method of constructing the walls of buildings, and it consists in forming the walls of a combination of framework and concrete, whereby the wall is made both strong, tight, and durable, as will be hereinafter more fully described.

The drawing represents an elevation of a wall constructed according to my invention. The frame is made of lattice-work, as represented in the drawing, and may be either wood or metal. If made of wood, the slats may be locked together where they intersect, and be fastened by nailing, or in some other substantial manner. If of metal, they may be riveted or fastened together otherwise. In either case, the framework is so formed that corner-posts are dispensed with, and the slats are so placed that they offer the greatest possible resistance to vertical and lateral pressure.

It will be seen that one-half of the slats are placed with their flat sides parallel with the face of the wall, while the other half are placed with their edges parallel with the face of the wall, so that pressure either from a vertical direction or against the side of the wall is resisted by the width of the slats. The lattice framework is to be entirely surrounded with concrete, cement, or other equivalent material. The horizontal timbers for the support of the ceilings and floors of a building would be attached to the lattice-work frame in any convenient and permanent manner.

Walls made of clay, tenacious earth, or of a combination of substances of a similar nature, have a tendency to crack in course of construction, and also to crack and crumble after completion. Various methods have been resorted to for the purpose of strengthening such walls, but hitherto such efforts have met with only partial success. My method of employing lattice framework, in combination with concrete or plastic material, overcomes all objections. The skeleton framework supports the wall during the process of construction, as well as during its whole existence, and I am thereby enabled to make a much lighter as well as stronger and better wall, and at less cost.

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

The arrangement of lattice framework, substantially as herein shown and described, in combination with concrete material, in the formation of walls, substantially as and for the purposes described.

CHARLES WILLIAMS.

Witnesses:

ISAAC B. WARD,  
WM. F. McNAMARA.