

F. COLLIN.

Improvement in Constructing Hollow Walls.

No. 127,848.

Patented June 11, 1872.

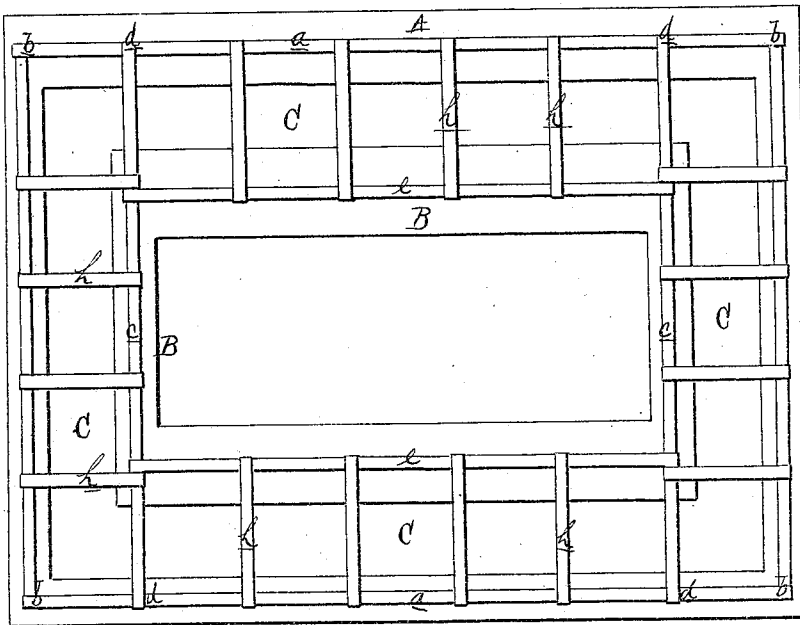


Fig. 1

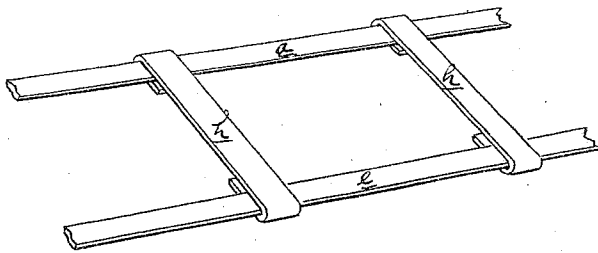


Fig. 2.

ATTEST:

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FRANCIS COLLIN, OF DETROIT, MICHIGAN.

IMPROVEMENT IN CONSTRUCTING HOLLOW WALLS.

Specification forming part of Letters Patent No. 127,848, dated June 11, 1872.

To whom it may concern:

Be it known that I, FRANCIS COLLIN, of Detroit, in the county of Wayne and State of Michigan, have invented a new and useful Improvement in the Construction of Buildings; and I do declare that the following is a true and accurate description thereof, reference being had to the accompanying drawing, and to the letters of reference marked thereon, and being a part of this specification, in which—

Figure 1 is a plan of an unfinished wall. Fig. 2 is a detail of the binders.

Like letters refer to like parts in each figure.

The nature of this invention relates to an improvement in the connection of brick or stone walls of houses where it is desired that the inner wall shall be free from dampness. The invention consists in the peculiar fastenings or binders used to tie the walls together, so that no dampness can be communicated from the outer to the inner wall.

In double-walled buildings it is usual to use a brick or stone binder or header, and it is found from practical experience that they furnish a communication for moisture from the outer to the inner walls, and that they frequently break by the settling of one wall more than the other, the rigidity of the binders preventing their giving to these inequalities of the settling walls.

In the accompanying drawing, A represents the outer and B the inner walls of a building, with an annular space, C, between them, extending from the foundation to the top of the walls. Between the courses of brick or stone of which these walls are constructed there are placed the binders, made of strap-iron, in the following manner: The straps *a* are laid in the middle of the outer wall and fastened

together at the corners by lap-joints *b*. Other straps, *c*, extend from front to rear straps *a*, and over the center of the inner end walls, as shown. These straps are connected at their ends to the front and rear straps by lap-joints *d*. Other straps, *e*, are laid along the front and rear inner walls, and connected at their ends by lap-joints to the straps *c*. Other short straps, *h*, as many as may be necessary, and at suitable intervals, connect by lap-joints the straps in the outer and inner walls together. These straps should be painted or coated with coal-tar, and sanded, to prevent corrosion; and being somewhat flexible they will allow the walls to settle somewhat unevenly without the danger of the binders being broken. In brick walls they should be placed between every third and fourth course of brick. The space between the walls may be as wide or narrow as desired, and it may be utilized in various ways. By suitable ventilators in the inner walls cool air may be admitted. Water and steam heating pipes may be carried through this space, or the heated air from furnaces in the cellar may be discharged into this space and thence, by suitable ventilators in the inner walls, carried into the various rooms of the house. And these metallic binders will not convey moisture from the outer to the inner walls.

What I claim as my invention, and desire to secure by Letters Patent, is—

A double-walled building of brick or stone wherein metallic straps *a c e h* are employed as binders, and connected together substantially as and for the purposes set forth.

FRANCIS COLLIN.

Witnesses:

H. S. SPRAGUE,
C. E. HUESTIS.