

G. H. Johnson,

Hollow Tile Wall.

No. 112,925.

Patented Mar. 21, 1871.

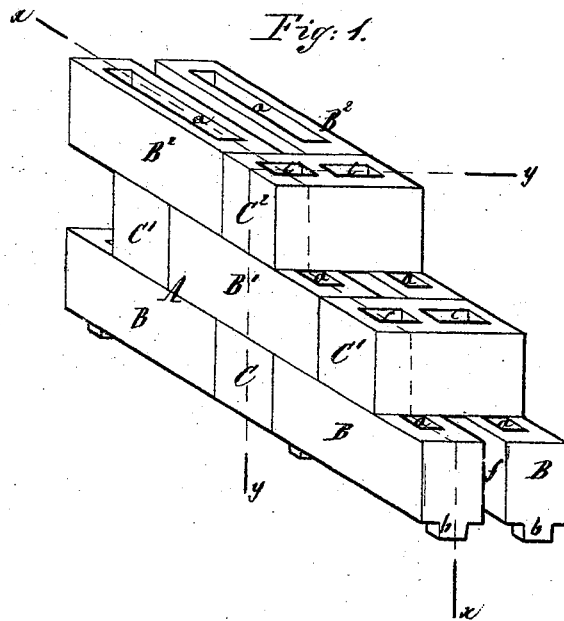


Fig. 2.

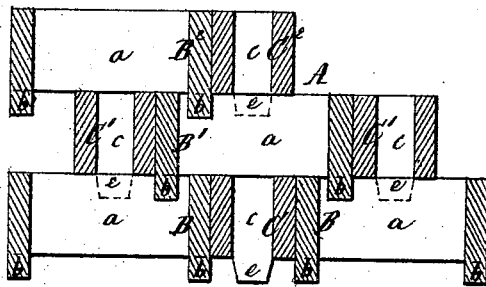
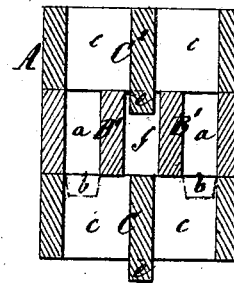


Fig. 3.



Witnesses:
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IMPROVEMENT IN HOLLOW-TILE WALLS.

Specification forming part of Letters Patent No. **112,925**, dated March 21, 1871.

To whom it may concern:

Be it known that I, GEORGE H. JOHNSON, of the city, county, and State of New York, have invented a new and useful Improvement in Hollow-Tile Walls; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing, forming part of this specification, in which drawing—

Figure 1 represents a perspective view of this invention. Fig. 2 is a longitudinal vertical section of the same, the line *x x*, Fig. 1, indicating the plane of section. Fig. 3 is a transverse section of the same, taken in the plane indicated by the line *y y*, Fig. 1.

Similar letters indicate corresponding parts.

This invention relates to a wall which is constructed of hollow tiles, each provided with one or more air-channels and with one or more lips, in such a manner that when the tiles are put together the lips of the runners (or tiles put down with their long sides in the direction of the front of the wall) will catch into the air-channels of two runners below, while the lips, of the binders (or tiles placed in a transverse direction) catch in the spaces left between the runners below, and by these means a wall is obtained which is very firm, and which allows of a free circulation of the air.

In the drawing, the letter A designates a wall, which is composed of runners B and binders C. The runners are constructed each with one air-channel, *a*, and with two lugs or lips, *b*, projecting from their ends in a downward direction, (best seen in Fig. 2,) while the binders are provided each with two air-channels, *c*, which are separated from each other by a partition, *d*, (see Fig. 3,) and from the bottom edge of this partition projects a lip, *e*.

In building a wall with these tiles, I place

two runners, B, side by side, leaving an intermediate space, *f*, and across their ends I place a binder, C, (see Fig. 1,) and then again two runners, and so on. Over the binder C in the bottom layer I place two runners, B' B', Fig. 1, the lugs of which catch in the air-channels *a* of the runners below, and across the ends of these two runners I place binders C' C', the central lugs of which catch in the spaces *f* between the runners B B of the first layer. The third layer is arranged precisely like the first, and the fourth like the second, and so on.

By these means a wall is obtained which is very firm in every direction, and which, on account of the free circulation of the air through the several air-channels, is dry and warm; and, furthermore, a wall constructed according to my invention is comparatively light, so that no extraordinary foundation is required to support a building of great strength and durability.

My wall can be put up by ordinary labor, since the work cannot be got out of perpendicular, and it can be erected in winter or in wet weather, since it readily dries. Hot or cold air may be forced through it for heating and ventilating the building.

My wall is also of great advantage for partitions in the interior part of a building, since it is light, and, at the same time, fire-proof.

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

A wall composed of the runners B, with air-channels *a* and lugs *b*, in combination with the binders C, having air-channels *c* and lugs *e*, said runners and binders being arranged in relation to each other substantially as described, for the purpose specified.

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Witnesses:

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