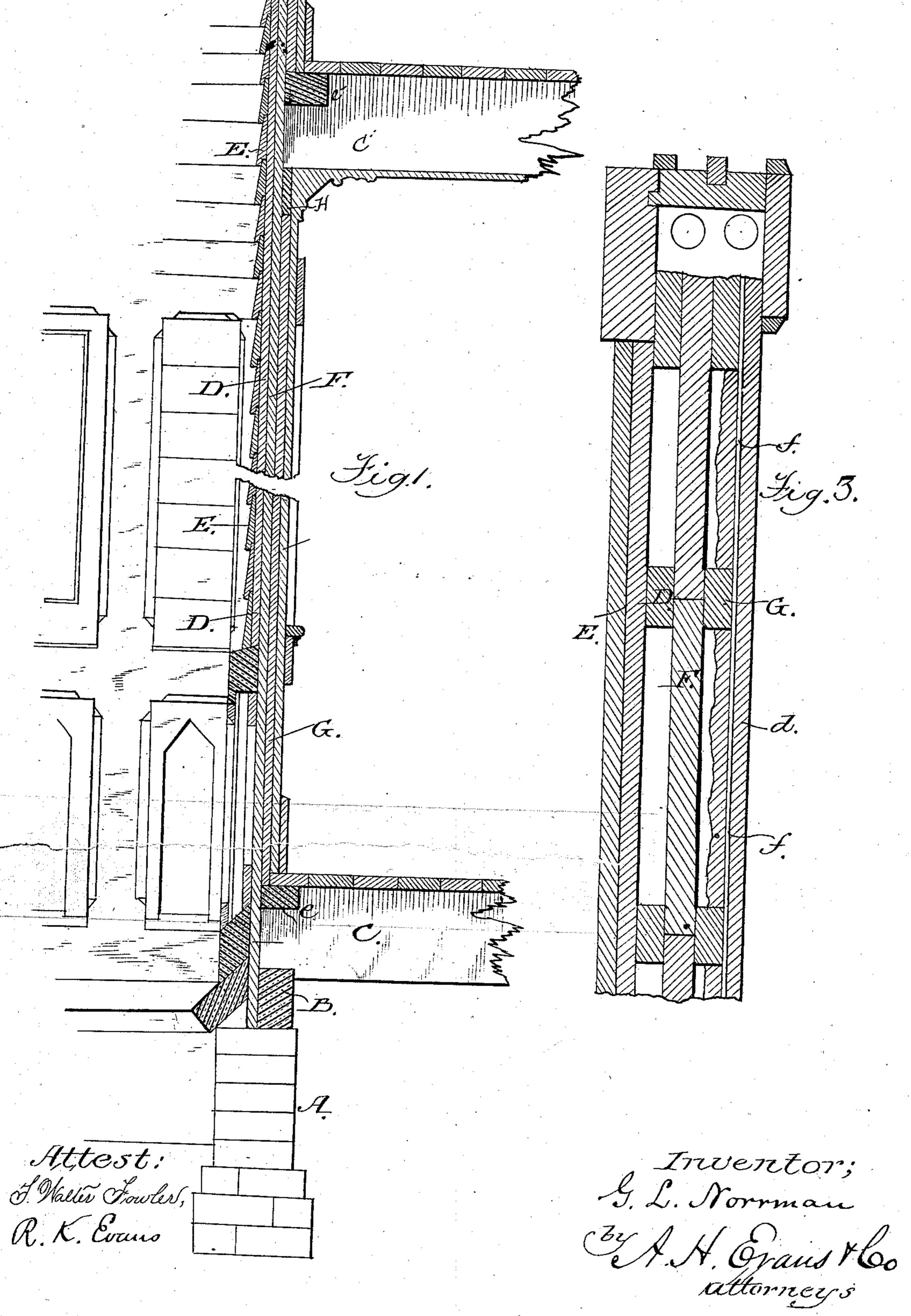
G. L. NORRMAN, House.

No. 239,534.

Patented March 29, 1881.

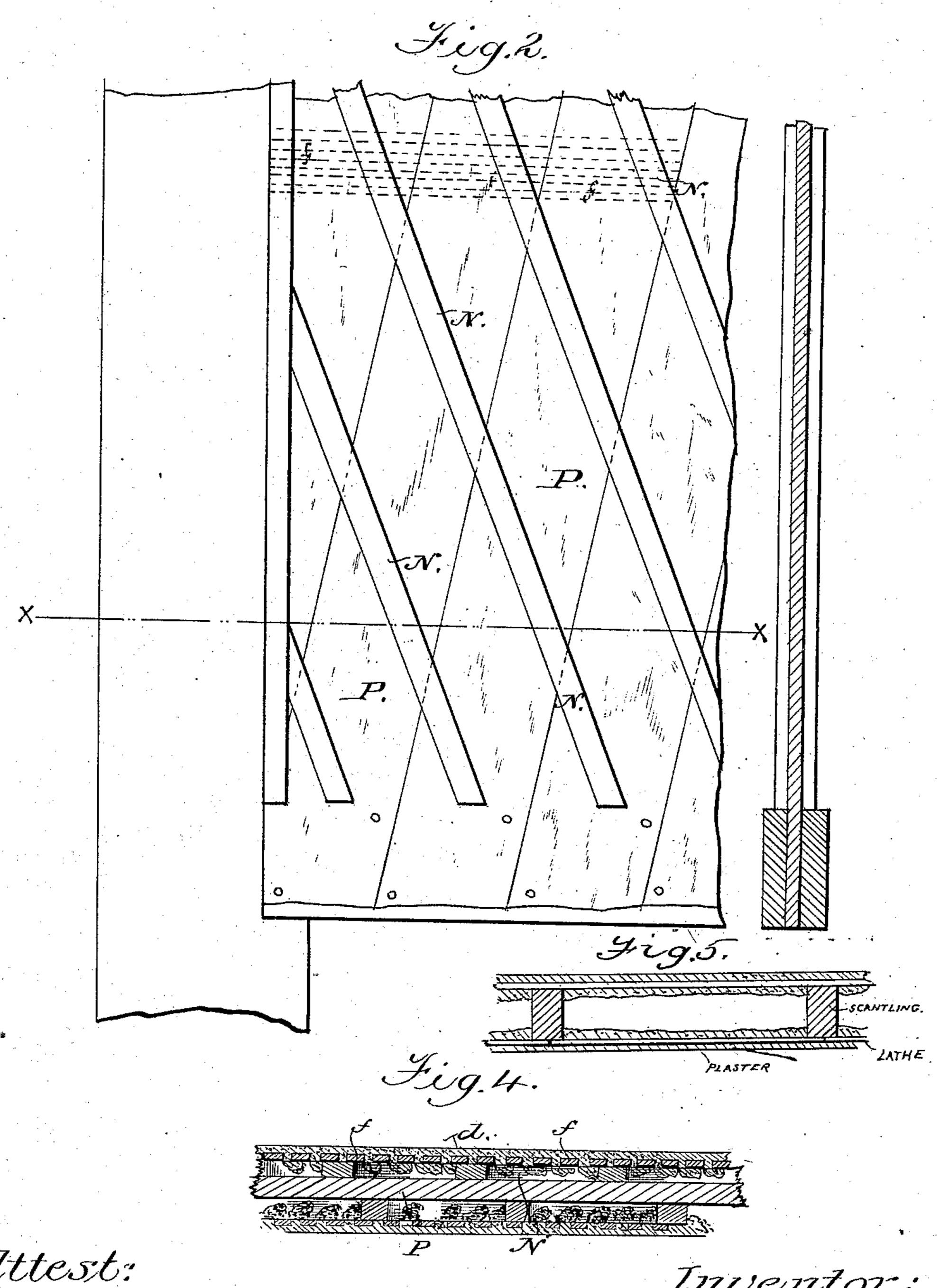


## G. L. NORRMAN.

House.

No. 239,534.

Patented March 29, 1881.



Attest: Naller Fourles, R. K. Evans

Inventor;

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## United States Patent Office.

GOTTFRIED L. NORRMAN, OF SPARTANBURG, SOUTH CAROLINA.

## HOUSE.

SPECIFICATION forming part of Letters Patent No. 239,534, dated March 29, 1881. Application filed October 27, 1880. (No model.)

To all whom it may concern:

Beitknown that I, GOTTFRIED L. NORRMAN, of Spartanburg, in the county of Spartanburg and State of South Carolina, have invented 5 certain Improvements in the Construction of Houses; and I hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, in which-

Figure 1 is a vertical section of the outer wall. Fig. 2 is an elevation, showing the manner of constructing the partition-wall. Figs. 3 and 4 are details. Fig. 5 illustrates the or-

dinary construction of frame houses.

The object of my invention is to provide a construction of walls for frame houses which shall be approximately weather and rat proof.

Heretofore it has been customary, in the construction of the walls of frame houses, for the 20 outer walls to be made by laying the siding or sheathing on the outer faces of the scantling or other timbers and nailing the weatherboarding over the sheathing, the laths being nailed directly to the inner faces of the same 25 timbers and the plastering applied. In making partition-walls it has been customary to nail the laths on the opposite faces of the scantling and apply the plaster. In both these constructions a space of considerable size-gen-30 erally the thickness of the timbers—is left within the walls, as the keys of the plaster rarely project more than from half to three-quarters of an inch within the wall. Through the cracks in the weather-boarding and sheathing 35 in outside walls the air has free access to the space described and absorbs a great amount of heat from the plastering, and in both outside and partition walls the space affords a thoroughfare for rats to move about a house, 40 and my improved construction is for the purpose of avoiding these objections.

Myinvention consists, first, in a combination of two battens, one arranged on the inside and one on the outside of the sheathing, with the 45 weather-boarding laid on the outside battens and the laths and plastering laid on the inside battens, whereby two separate and distinct chambers are made within the wall; second, in a partition-wall constructed of a solid plank 50 base overlaid on each side with diagonal battens, the relation between the opposite bat-

tens, or between the battens and the planking raking in opposite directions, being such as to form a truss, which prevents the partition sagging and cracking the plastering, as herein- 55 after more specifically described; and it further consists of sundry details of construction, as hereinafter more fully described and claimed.

In order that those skilled in the art may make and use my invention, I will proceed to 60 describe the manner in which I have carried

it out.

In the said drawings, A represents the foundation, upon which I lay a sill, B, that supports the floor-joists C. The siding F is 65 nailed on vertically to the sill, with the lower ends resting on the foundation, and should extend the full height of the building, if possible, it being most convenient to have the siding either eight or twelve inches wide. The 70 joints between the siding-boards are covered on both sides with battens D G about one inch by two and a half inches. The inside battens rest with their lower ends on pieces e, and the upper ends support girths H, on which rest 75 joists C', and the same construction of the battens is carried on in the second story. The piece e is to give good nailing-support to the siding. The outside battens are put on vertically over the joints of the siding, in the same 80 manner as the inside battens, when the outside is intended to be weather-boarded, as shown in the drawings; but when the walls are shingled or paneled on the outside the outside battens should be put on horizontally. 85 To the inside battens the laths are nailed and the plastering applied in the usual manner. To the outside battens is nailed weather-boarding, shingles, or other desided covering.

In applying the plastering d, the keys be- 90 tween the laths, projecting into the space between the siding and the laths, so nearly fills the space as to prevent rats from moving in it. (See Fig. 3.) It will be observed that this construction leaves two distinct non-communi- 95 cating air-chambers within the wall, the inner one containing a body of confined air, which acts as an insulating medium against changes of temperature.

The partition-wall I construct as follows: I 100 arrange a solid plank partition, P, the planks being arranged diagonally, as shown, by nailing the plank to the side of the joists at the top and bottom. Over this partition, on both sides, I nail battens N, arranged in an opposite diagonal direction from the planks P. To these battens are nailed the laths ff, not less than one-half inch apart, so as to allow the mortar of the plastering d to go through the

mortar of the plastering d to go through the openings and fill up the space between the laths and the solid plank partition. This will make a rat-proof and nearly fire proof.

make a rat-proof and nearly fire-proof partition, and the relative arrangement of the battens will form a perfect truss to prevent the partition sagging. Moreover, it possesses the advantage over the ordinary partition that nails can be driven into it at any point, so that they will hold regardless of any studding.

It is obvious that the planks of the partition may be arranged vertically, the battens on the

opposite sides raking in opposite directions, without departing from the spirit of my in- 20 vention.

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

1. A series of battens, D G, in combination 25 with an interposed vertically-arranged sheathing, F, weather-boarding E, lathing f, and plastering d, for purpose set forth.

2. The partition-walls consisting of plank partition P, combined with diagonal strips N 30 and superimposed laths and plastering, substantially as set forth.

GOTTFRIED L. NORRMAN.

Attest:

W. F. MORSELL, M. M. ROHRER.