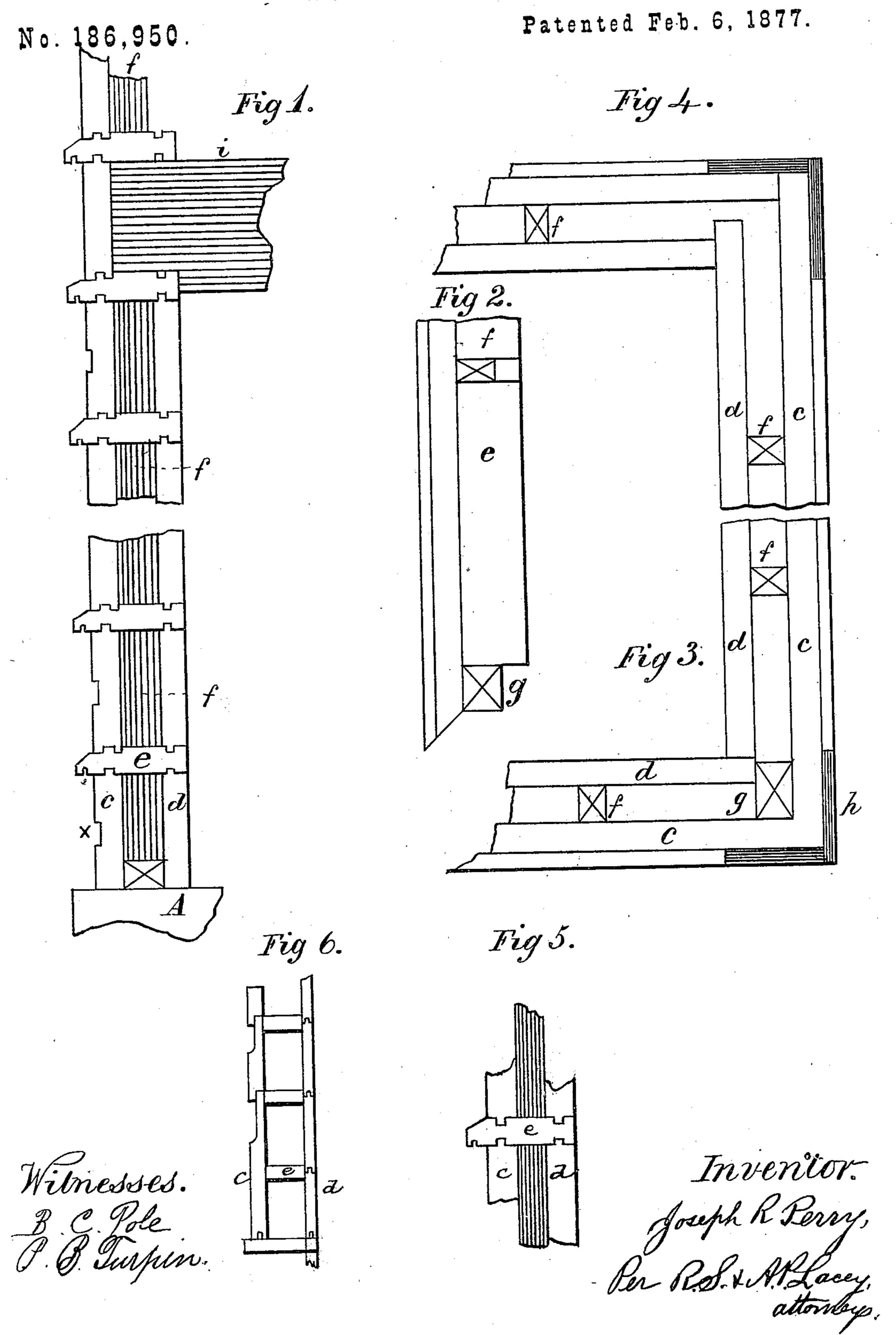
J. R. PERRY.

WOODEN-HOUSES.



UNITED STATES PATENT OFFICE.

JOSEPH R. PERRY, OF WILKESBARRE, PENNSYLVANIA.

IMPROVEMENT IN WOODEN HOUSES.

Specification forming part of Letters Patent No. 186,950, dated February 6, 1877; application filed January 15, 1877.

To all whom it may concern:

Be it known that I, Joseph R. Perry, of the city of Wilkesbarre, in the county of Luzerne and State of Pennsylvania, have invented certain new and useful Improvements in Wooden Houses; 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 which it pertains to make and use the same, reference being had to the accompanying drawing, and to the letters of reference marked thereon, which form

a part of this specification.

The object of my invention is to construct a substantial wooden wall for houses without the use of framings with the least possible quantity of materials and at the lowest cost, and to provide a space to be filled in with sand, mortar, plaster-of-paris and sand, sawdust, or any other suitable materials, to insure it against cold, rain, storm, or fire; and it consists in forming longitudinal compartments by means of sides and cappings or plates, and their intermediate supports, furnishing a smooth inner wall suitable for painting or clothing and papering, all of which is fully explained in the accompanying drawings, forming a part of this specification.

Figure 1 is a sectional end elevation, showing a wall constructed according to my invention, in which A represents the bottom sill, on the top of which a strip, B, is nailed lengthwise, to be as wide as the space required within the walls. The outside and inside boards or plank c and d are nailed to the strip B, in order to fasten their bottoms firmly to the sill A. The outside of the wall may be planed into any form for ornamentation, or a recess, X, made to improve their appearance. They are designed to run in width from five to twelve inches, if so desired, and are plowed and tongued, and planed on their outer sides and both edges, but for very cheap buildings may be nailed together in a rough state. The intermediate capping-piece e, when placed upon the sides c and d, completes one compartment of this wall. Having the spaces for doors and windows set off in erecting this wall, a strip, f, about one or one and one-half inch thick, is nailed up plumb on each side of the doors or windows, and a corner-post, g, say two by

three, is nailed and stayed at each corner. (Shown by Figs. 2 and 3, which are top views of the wall, omitting tongues and grooves.) The strips f form jamb pieces for the doors and windows. In addition to these, every two to six feet apart, place another strip, f, along the wall, and this will be all the support needed to erect and maintain the walls in an upright position.

Fig. 2 shows how to cut the plates or cappings e, so as to slide them onto the sides c and d. Whatever filling is intended to be used and in all ordinary buildings dry sand will be the cheapest and best on account of its tendency to absorb moisture—must now be put in, and the plate driven down and nailed. The tongues and grooves should fit snugly, so as to drive down tight. The capping e is made to project so as to form a water-table to each compartment, and is formed with a plowed recess and tongue on its outer and upper edge or face. (Shown at the arrow head.) By this means a double tongue and groove is formed in driving on the outside board c, making it impossible for rain or storm to enter. In this manner every other compartment is formed until the building is completed.

The corners may be formed by mitering, as in Fig. 3, or, as in Fig. 4, by butting each alternate compartment and nailing into their ends, with or without the corner-post g. On the outside of the corners the boards h are

nailed to finish it off.

After filling the inside of the chambers with sand, and no rain being likely to penetrate them, the cappings and sides may be formed as seen in Fig. 5; and in Fig. 6 (an end view) is shown another method of forming the compartments, but not so good as those described.

At the top of Fig. 1 the joist i is notched, and rests upon the capping or plate e, and is nailed to it, and may be nailed from the outside board into the end. Between each joist the inside wall is firmly nailed, and held by the cappings e. The door and window casings are nailed against the sides by cutting away the drip portion of the cappings, as is usual with such projections.

Having thus fully described my improvement, what I claim as new, and desire to se-

cure by Letters Patent, is—

1. A hollow wooden wall composed of longitudinal compartments, which are limited in size by their sides c and d, plates or cappings e, and their intermediate supports f and g, substantially in the manner and for the purpose specified.

2. The double tongue and groove formed by capping e, combined with the outside board c, in the manner and for the purpose specified.

In testimony that I claim the foregoing as my own invention I affix my signature in presence of two witnesses.

JOSEPH R. PERRY.

Witnesses:
CHAS. A. ZIEGLER,
FELIX GERHARD.