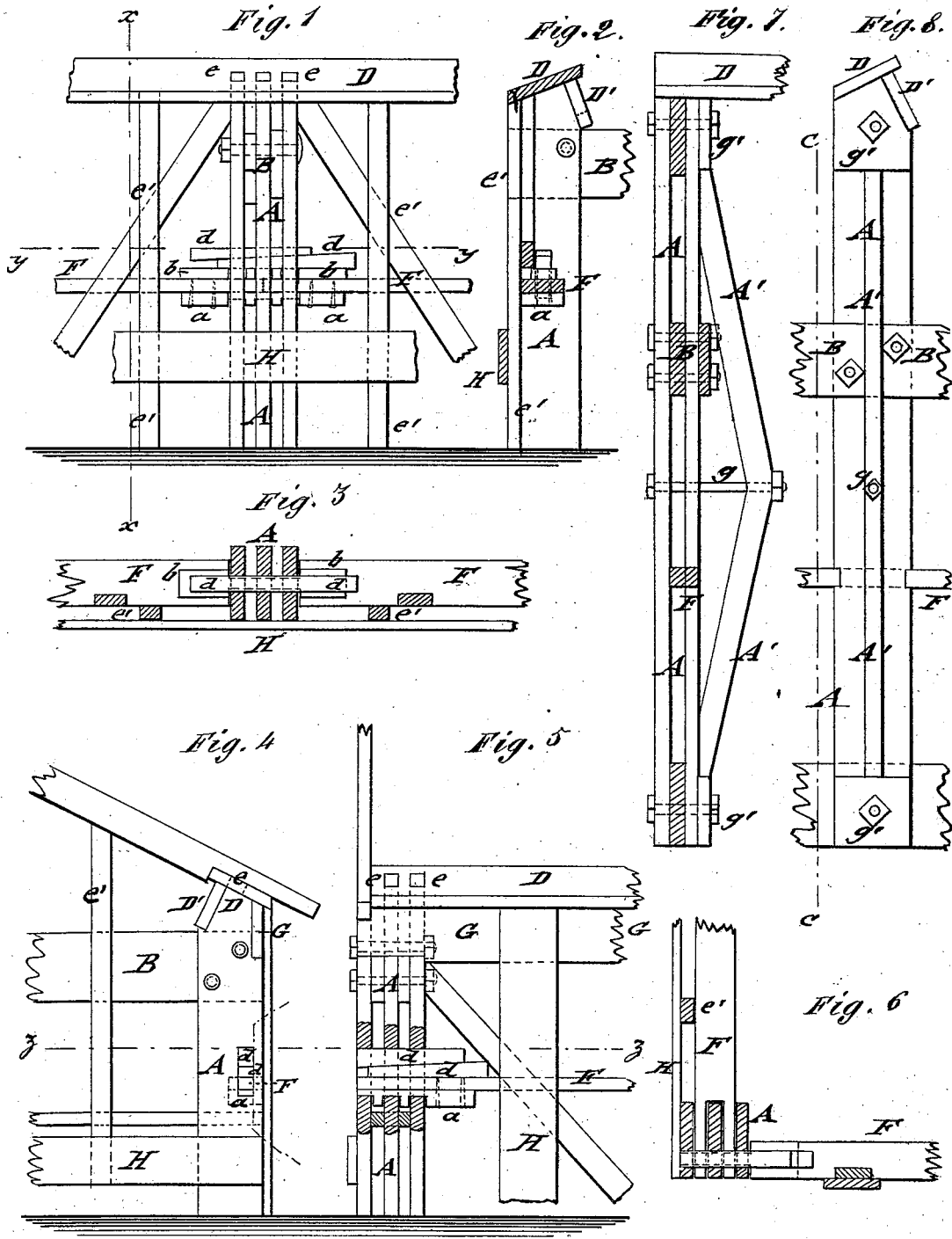


W. R. MORRIS & J. SLANSER.
 FRAME-BUILDINGS.

No. 194,836.

Patented Sept. 4, 1877.



WITNESSES:

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INVENTOR'S

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UNITED STATES PATENT OFFICE.

WILLIAM R. MORRIS AND JOSEPH SLANSER, OF LA RUE, OHIO.

IMPROVEMENT IN FRAME BUILDINGS.

Specification forming part of Letters Patent No. 194,836, dated September 4, 1877; application filed July 9, 1877.

To all whom it may concern:

Be it known that we, WILLIAM R. MORRIS and JOSEPH SLANSER, of La Rue, county of Marion and State of Ohio, have invented a new and Improved Frame Building, of which the following is a specification:

The invention will first be described in connection with the drawings, and then pointed out in the claims.

Figure 1 represents a front elevation, and Figs. 2 and 3, respectively, a vertical transverse section and a horizontal section on lines *x x* and *y y*, Fig. 1, of a post and girder-joint. Figs. 4, 5, and 6 are a side elevation, end view, and horizontal section on line *z z*, Fig. 4, of a corner-post, showing connection with girders and rafters; and Figs. 7 and 8 are, respectively, a vertical transverse section on line *c c*, Fig. 8, of a post that is not tied to the building, and a rear view of the same.

Similar letters of reference indicate corresponding parts.

This invention relates to improvements in the method of constructing frame buildings by the use of planks of suitable length and thickness, (for which Letters Patent have heretofore been granted to us under date of December 26, 1876, and numbered 185,690,) so that the entire building may be finished in its several parts and finally put up in strong and reliable manner and without skilled help. Farm and other buildings of all kinds may in this manner be shipped to any point, and erected in cheap manner, entirely of planking, and without the use of timber for the posts, beams, rafters, &c.

The invention consists, essentially, of the connection of the intermediate and corner plank posts with the girder-joints and ends; also, of the connection of the posts with the rafter-bearing plates and siding-strips; and, finally, of the construction of a post that is not tied to the building by a girder or beam.

By referring to the drawing, A represents the supporting-posts, which are made of two or more planks of suitable dimensions, according to the size of the building to be erected. The planks are placed at some distance from each other and bolted firmly to the beams B, which are made of several planks interposed between the upright planks of the

posts, so as to form therewith a compound plank construction that gives strength and rigidity to the building.

The lateral post connecting girders F are passed through mortises of the plank-posts, and secured rigidly at the meeting ends or joint of two girders by a recessed key, *a*, that is first passed through the mortises of the post and then placed in position, the girder ends being then inserted and connected by a second recessed top key, *b*, of less width, which keys are both spiked to the girder ends, to unite the same. The keys and girder-joint are finally rigidly locked to the mortises of the plank-post by two wedge-keys, *d*, running in opposite directions to each other, as shown in Fig. 1.

The girders F are connected to the corner-posts A by a similarly-recessed key, *a*, that is inserted, turned, and placed in position in the mortises of the post, and then spiked or bolted to the girder, which is finally locked by wedge-keys, as shown in Figs. 4, 5, and 6.

The rafters are seated by their recessed ends on the rafter-bearing plates D, which are supported by plate-supporting pieces D', set at right angles to the plates D, and fitted to the recessed ends of the posts, and spiked thereto. The top ends of the posts are provided with tenons *e*, that enter mortises of the rafter-bearing plates D, so as to produce the rigid interlocking of the posts and rafter-plates. The vertical siding-strips *e'* are nailed to rafters, rafter-plates, girders, &c., to receive the horizontal siding-boards H.

A horizontal siding-strip, G, runs below the inclined rafter-bearing plate D from post to post, when vertical siding H is desired, as in Figs. 4 and 5.

In some cases posts are required that are not tied to the building by a girder or beam, in which cases the post A is strengthened by a brace construction, A', as shown in Figs. 7 and 8. The brace A' is made of one piece and attached to a central bolt and nut, *g*, and seated at the ends against shoes *g'*, bolted to the posts, to form thus a rigid stiffening of the posts.

In this manner the construction of our compound plank-frame buildings is perfected and rendered stronger and more durable.

Having thus fully described our invention, we claim as new and desire to secure by Letters Patent—

1. The combination of the recessed and tenoned upper end of the plank-post A with the mortised rafter-plate D and lateral supporting-piece D', substantially as and for the purpose described.

2. The combination of a compound plank-

post, A, which is not tied to the building, with a trussed brace, A', resting on end shoes and center stiffening-bolt *g*, substantially as specified.

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Witnesses:

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