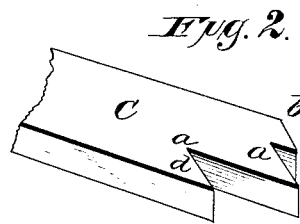
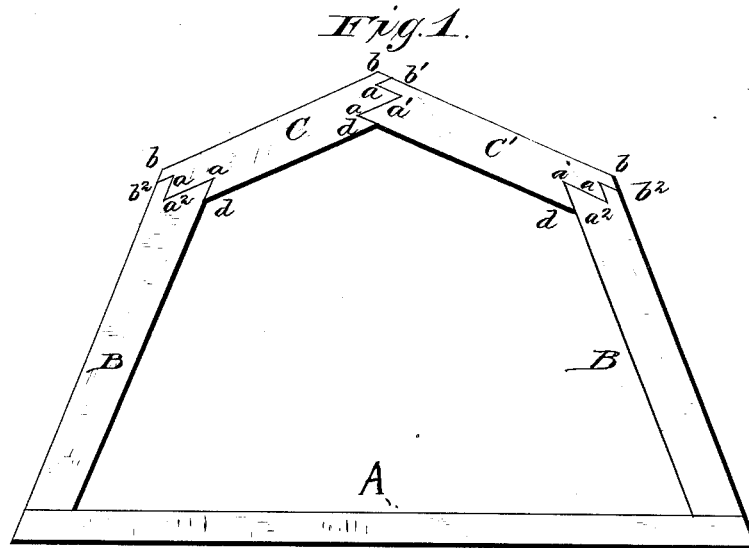


W. HALL.
Rafter.

No. 214,127.

Patented April 8, 1879.



WITNESSES
A. L. Curaud
J. J. McCarthy

INVENTOR
Walton Hall
By *Alexander T. Mason*
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UNITED STATES PATENT OFFICE.

WALTON HALL, OF LODI, NEW YORK, ASSIGNOR TO JOHN N. NEAL, CHARLES E. MEEKER, AND DARWIN SPENCER, OF SAME PLACE, ONE-SIXTH TO EACH.

IMPROVEMENT IN RAFTERS.

Specification forming part of Letters Patent No. 214,127, dated April 8, 1879; application filed February 19, 1879.

To all whom it may concern:

Be it known that I, WALTON HALL, of Lodi, in the county of Seneca, and in the State of New York, have invented certain new and useful Improvements in Rafters for Roofs; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the construction of a rafter for roofs, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawings, in which—

Figure 1 is a side elevation of my rafter. Fig. 2 is a detailed view of a part thereof.

A represents a sill to which the rafter is secured, the rafter proper consisting of the two side pieces, B B, and the two top pieces, C C'. The side pieces or bars, B B, incline inward at a suitable angle, and their upper ends are connected by the top bars, C C'. The bar C is cut at each end to form two angular shoulders or offsets at *a a*, leaving a tongue, *b*, at the top and a lip, *d*, at the bottom. The bar C' is, at its lower end, cut in the same manner, while its upper end has only one angular shoulder or offset, *a'*, forming one tongue, *b'*, at the top. The upper ends of the side bars, B B, are also

cut, each with one angular shoulder or offset, *a'*, and one tongue, *b'*.

In putting the parts together it will be noticed that the end of the side bar, B, fits directly in the lower end of the corresponding top bar, and the upper ends of the bars C C' also fit into each other, forming at every joint four points of bearing, which makes the rafter strong and durable without the aid of any locking-plates or other auxiliary devices.

The tongues and offsets being formed with acute angles and firmly and deeply interlocked, the joint is adapted to resist a transverse breaking-strain.

No particular devices are required to retain the parts in place. Brads, nails, or screws may be used in any suitable manner for that purpose.

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

A roof-rafter composed of the side bars, B B, and top bars, C C', all joined together in the manner shown and described, to form four points of bearing at every joint, substantially as herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand and seal this 12th day of February, 1879.

WALTON HALL. [L. S.]

Witnesses:

H. V. L. JONES,
C. E. MEEKER.