No. 841,759. PATENTED JAN. 22, 1907.

H. H. BAKER.

WOODEN BUILDING.

APPLICATION FILED APR. 5, 1906.

Fig. 1.

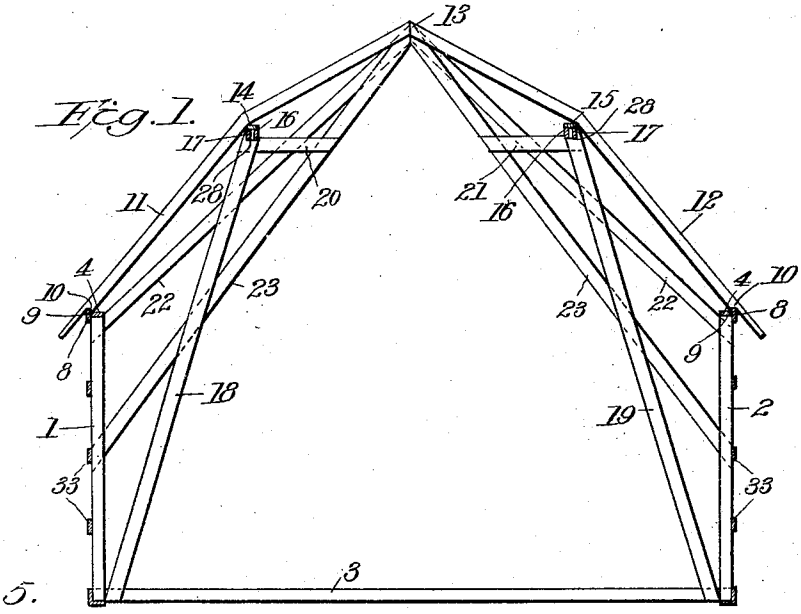


Fig. 5.

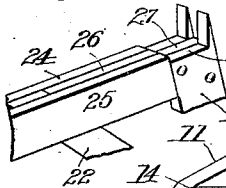


Fig. 2.

Fig. 3.

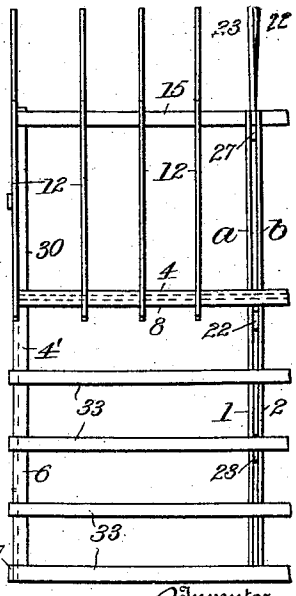
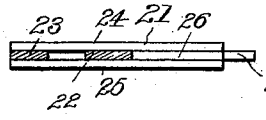


Fig. 4.



Witnesses

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WOODEN BUILDING.

No. 841,759. Specification of Letters Patent. Patented Jan. 22, 1907.

Application filed April 5, 1906. Serial No. 310,053.

To all whom it may concern:

Be it known that I, HARRY H. BAKER, a citizen of the United States, residing at Urbana, in the county of Champaign and State of Ohio, have invented certain new and useful Improvements in Wooden Buildings, of which the following is a specification.

This invention relates to wooden buildings, and more particularly to that class known as "barns."

One object of the invention is to provide a strong, substantial, durable, efficient, and comparatively inexpensive structure of the character stated.

Another object resides in the provision of a structure of the nature stated embodying such characteristics as to obviate the employment of beams, trusses, and the like extending entirely across the barn and to lessen the number of bents in a structure of the present character.

With the above objects in view the present invention consists in the combination and arrangement of parts hereinafter more fully referred to, illustrated in the accompanying drawings, and particularly pointed out in the appended claims.

In the drawings, Figure 1 is a front view of an intermediate frame or bent. Fig. 2 is a front view of one end frame or bent of the barn. Fig. 3 is a side view illustrating a portion of a barn. Fig. 4 is a plan view of one of the short braces 20 and 21, the diagonal braces 22 and 23 being shown in section. Fig. 5 is a detail fragmentary view illustrating the connection of one of the purlin-posts with the outer end of one of the aforesaid braces.

Referring now more particularly to the accompanying drawings, the reference characters 1 and 2 indicate spaced members of oppositely-disposed posts of an intermediate frame or bent. These side posts are made up of the spaced members 1 and 2 and may be secured to opposite ends of the floor-supporting beam 3. Disposed upon the upper ends of the members 1 and 2, forming the intermediate side posts, are strips 4, which connect the posts of the intermediate frames or bents with the corresponding corner-posts of the end frame or bent, the corner-posts each consisting of members 5 and 6, arranged at an angle to each other at each end of the floor-supporting beam 7, as indicated by dotted lines in Fig. 3. Secured along the outer edge of each strip 4 and arranged in a plane at a direct right angle thereto is another strip 8, which is so disposed with relation to the corresponding strip 4 as to form a T-shaped element in cross-section, whose head is formed by the strip 8 providing a shoulder 9 for coöperation with the corresponding shoulder 10 of the rafters 11 and 12, which latter meet at a point 13, as shown. These rafters 11 and 12 rest upon the purlin-beams 14 and 15, respectively, and each purlin-beam is made up of two separate spaced strips 16 and 17 for a purpose presently understood.

To support the purlin-beams 14 and 15, I provide purlin-posts 18 and 19, which consist of spaced members *a* and *b* and which extend upwardly thereto on convergent lines with respect to each other, with their lower ends connected to the opposite sides of the floor-supporting beam 3 adjacent the aforesaid intermediate side posts, and in order to brace the purlin-posts I provide short braces 20 and 21, which are connected in any suitable manner to the purlin-posts at the upper ends of the latter and to each of the diagonal braces 22 and 23, each of which latter consists of a single strip connected at one end between the members 1 and 2 of the outer intermediate side posts at different elevations and which converge toward each other, passing between the members *a* and *b* of each of the purlin-posts 18 and 19 to be connected together and to the rafters 11 and 12 at the aforesaid meeting-point 13. These diagonal braces 22 and 23 are also fixedly connected between each pair of purlin-posts 18 and 19 and to the short braces 20 and 21 in any suitable manner, and it will be seen that each short brace 20 and 21 comprises three strips 24, 25, and 26, arranged side by side and secured together in any suitable manner, the strip 26 projecting beyond the other members to fit between the two members forming the purlin-posts 18 and 19, the outer upper face of each of the members recessed or notched and the upper end of each of the purlin-posts being notched to form a seat 28 for the reception of members forming the purlin-beams 14 and 15.

It will now be understood that I have described one intermediate frame or bent for the structure, and my reason for spacing the members 16 and 17 of the purlin-beams 14 and 15 is to provide a space therebetween for the reception of a strip *c* of a pair of strips forming spaced main supporting-posts 29 and 30 at the end frame or bent of the structure, there being an intermediate pair of end sup-

porting-posts 31 and a series of horizontal braces 32 connecting the series of end posts 29, 30, and 31 to the corner-posts 4', as shown.

Connecting the corner and intermediate outer posts of the structure are horizontal strips 33, to which the side boards (not shown) of the structure may be secured in any suitable manner.

It is to be understood that, if desired, I may substitute any form of beam for the strips 4 and 8, which form the T-shaped beams, and that, in fact, the elements 4 and 8 may consist of a single piece of material and that I may make other changes in the construction and arrangement of any of the parts with respect to themselves and to one another so long as I do not depart from the scope of the appended claims.

What is claimed is—

1. A building comprising an end frame and an intermediate frame, the intermediate frame including side posts, purlin-posts, rafter-beams, brace connections between the side posts and the rafter-beams, and a brace between each purlin-post and the aforesaid brace connections.

2. A building comprising an end frame and an intermediate frame, the intermediate frame including side posts each made up of a pair of spaced members, purlin-posts each made up of a pair of spaced members, rafters arranged above the side posts and purlin-posts, diagonal braces arranged upon each side of the structure with corresponding ends between the members forming the side posts and passed through the members forming the purlin-posts, and a brace connecting each purlin-post and each of the aforesaid diagonal braces.

3. A building comprising an end frame and an intermediate frame, the intermediate frame including side posts comprising spaced members, purlin-posts comprising spaced members, a beam arranged upon each side post, a beam arranged above each purlin-post, the latter beams each comprising a pair of spaced members, rafters mounted upon said beams, diagonal braces each having its corresponding end secured between the members of the corresponding side posts and passed upwardly between the members forming the purlin-posts, braces each having one end fitting between the members forming the corresponding purlin-posts and connected to the corresponding diagonal braces, each of the second-mentioned braces having a seat for the reception of the members forming the beams above the purlin-posts, both sets of beams connecting the intermediate frame and the end frame, and other connections between the end frame and the outer posts of the intermediate frame.

In testimony whereof I hereunto set my hand and seal this 15th day of March, 1906.

HARRY H. BAKER. [L. S.]

In presence of—
B. H. WEAVER,
F. M. GODDARD.