

(No Model.)

J. SCHEIDLER.
BARN.

No. 506,732.

Patented Oct. 17, 1893.

Fig. 1.

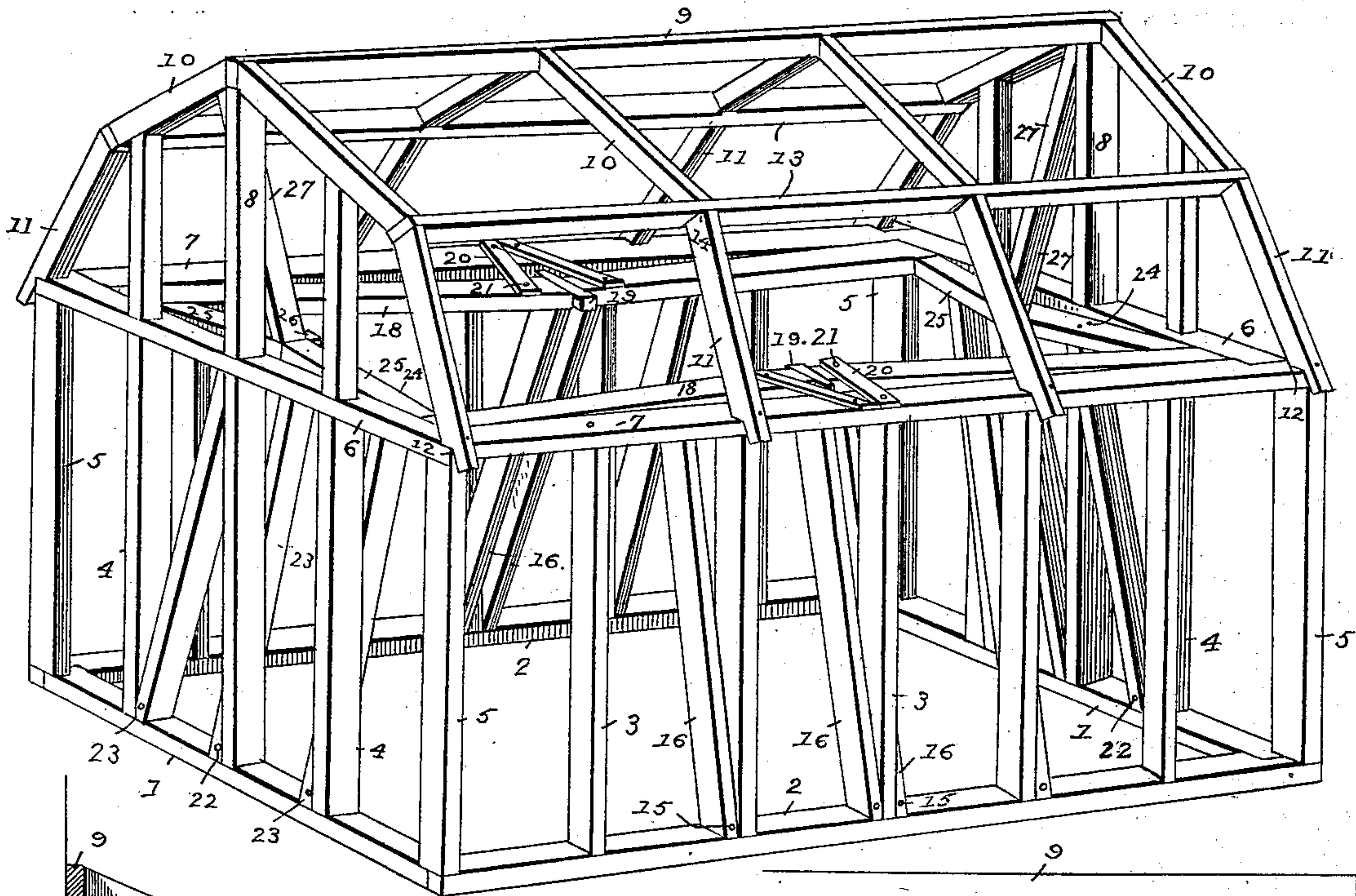


Fig. 2.

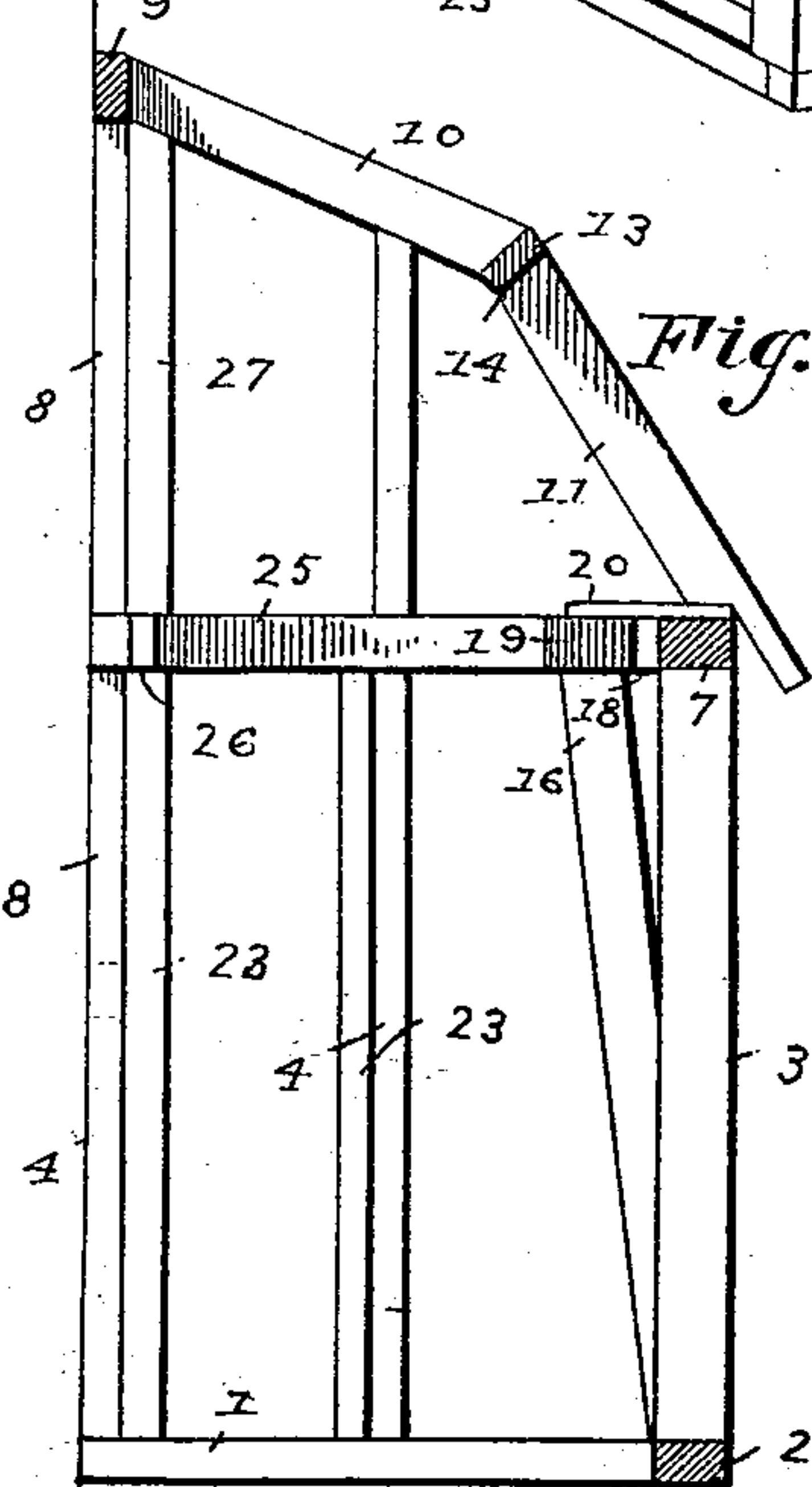
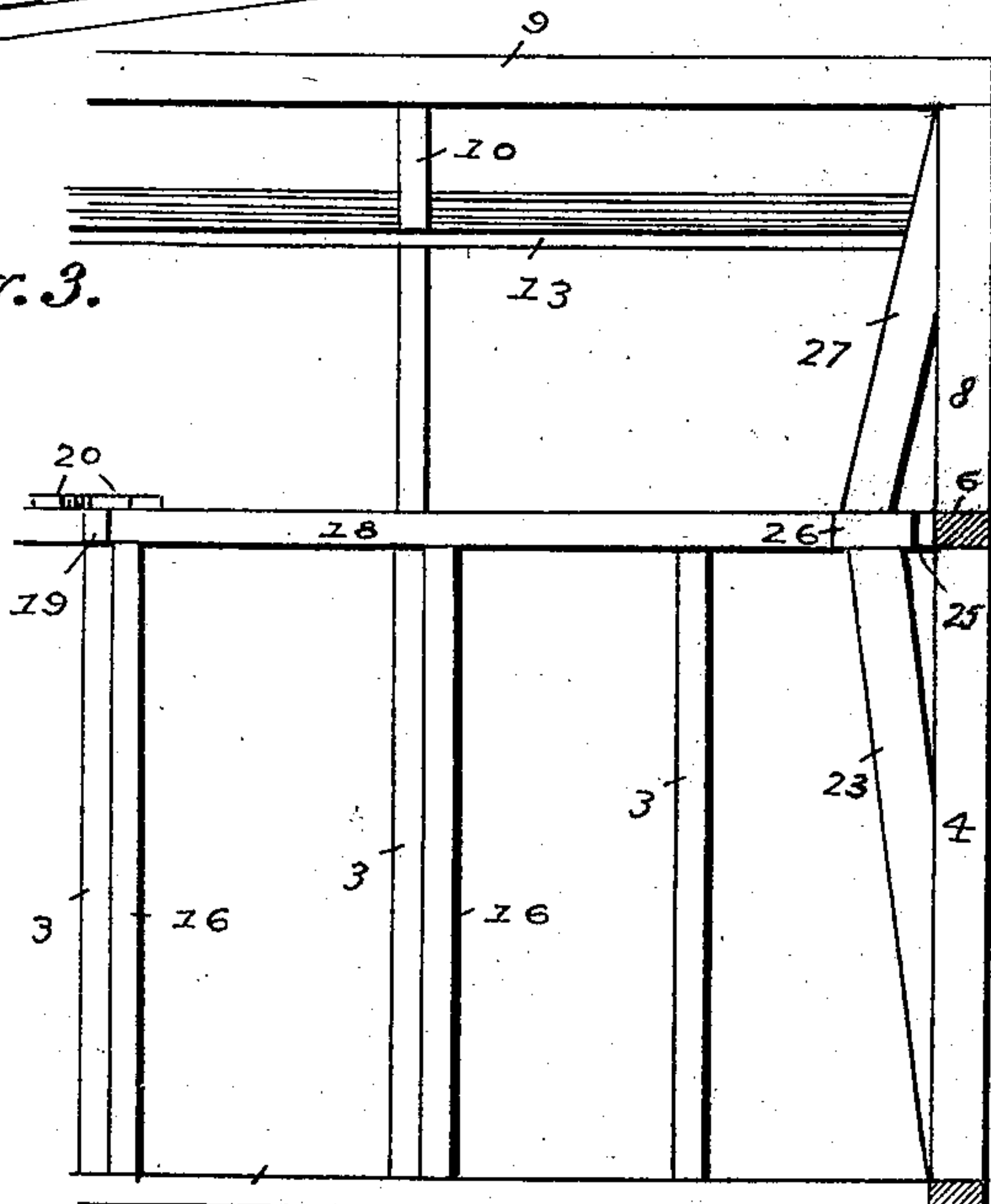


Fig. 3.



Witnesses

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JOHN SCHEIDLER, OF COLDWATER, MICHIGAN.

BARN.

SPECIFICATION forming part of Letters Patent No. 506,732, dated October 17, 1893.

Application filed December 30, 1892. Serial No. 456,820. (No model.)

To all whom it may concern:

Be it known that I, JOHN SCHEIDLER, a citizen of the United States, residing at Coldwater, in the county of Branch and State of Michigan, have invented a new and useful Barn, of which the following is a specification.

My invention relates to improvements in the construction of barns and other buildings designed to contain grain and similar stuffs.

10 The objects in view are to improve the framework thereof and strengthen the same against bulging at the sides and ends by reason of the weight of the grain, and also to render the roof in a manner self-supporting.

15 With these several objects in view, and other detail objects too numerous to mention, the invention consists in certain features of construction hereinafter specified and particularly pointed out in the claims.

20 Referring to the drawings:—Figure 1 is a perspective view of the framework of a barn constructed in accordance with my invention. Fig. 2 is a transverse vertical section through one of the side walls. Fig. 3 is a similar view
25 through one of the end walls.

Like numerals of reference indicate like parts in all the figures of the drawings.

30 In practicing my invention I employ the usual end and side-sills 1 and 2, respectively, which are spiked together at their ends or otherwise jointed.

35 From the side-sills rise vertically the outer studding 3, and from the end-sills rise the outer studding 4, corner-posts 5, being located at the corners of the rectangle formed by the juncture of the sills 1 and 2. Supported by the series of posts 5 and the outer studding 3 and 4, are the end-plates or sills 6, and the side-plates or sills 7, the same having their
40 ends spiked to the upper ends of the posts and studding.

45 From the end-plates or upper sills 6, rises the roof-studding 8, and the same are attached to end rafters and the ridge-pole 9. Rafters 10, are secured to the opposite sides of and decline from the ridge-pole 9, and corresponding rafters 11, have their under edges at their lower ends rabbeted as indicated at 12, and spiked at intervals to the side-sills or
50 plates 7. The adjacent ends of the rafters 10 and 11 are spiked to the opposite sides of

rectangular rafters 13 and combine with the same to form a series of hip-joints 14.

55 Spiked, as at 15, to the sills 2 at the sides of the central outer-studding 3 of the framework and at the outer sides of one or more of said studding, is a series of inner inclined-studding 16, whose upper ends extend upward and inward from the sill 2 and terminate about flush with the upper ends of the
60 studding 3. To the upper ends of these standards 16, at each side of the central studding 3 there are spiked trusses 18, whose ends abut against the upper end-sills 6 adjacent to the side-sills 7, and whose adjacent ends consequently form a V-shaped space or recess into which is driven a V-shaped wedge or key 19. Short pieces of plank 20, may be employed to surmount the trusses 18 and the upper sills
65 or plates 7, and in such case are spiked, as indicated at 21, at their ends to both the sills 7 and trusses 18. By reason of the fact that the studs 16 are spiked at the ends only, it will be seen that they are capable of a slight yielding from inside pressure.

75 Spiked as at 22, to the end bottom-sills 1 to the series of studding 4, is a series of inner inclined-studding 23, which extends upward and inward within the frame of the structure and terminate at their upper ends opposite
80 the outer end-studding 4. To the upper ends of these series of inner studding 23, there is spiked at 24 a pair of trusses 25, whose outer ends rest against the inner faces of the trusses 18, and being of a combined length slightly
85 greater than the distance between the two outer ends of the side-trusses 18, form a V-shaped recess at their meeting ends into which a wedge-shaped key 26, is driven. The upper inner inclined studding 27 have their
90 lower ends spiked to the truss 25 and inclined outward and have their upper ends spiked to the upper ends of roof-studding 8 before mentioned. The four sides of the structure being thus constructed, it will be seen that
95 the frame may be made rigid and thoroughly braced against all outward pressure against the sides and ends by the contents of the building, and that the greater the pressure against the sides and ends the more thoroughly
100 does the frame become braced, so that any bulging of the outer studding usually

employed is avoided; furthermore, that in the same manner, that is by an adjustment of the wedges, the roof is propped or supported by the trusses and inner inclined studding 16 so that the weight rests upon the top-sills, 6, or, in other words, upon the walls of the structure, and has its major weight supported directly from the ground-sills 1 and 2.

Having described my invention, what I claim is--

1. The combination, in a building, of upper and lower sills and interposed vertical-studding, of inner side and end-studding inclined and rising from the lower sills, opposite trusses mounted upon the upper edges of the inner inclined studding and bearing at their outer ends against the sides and ends of the frame, and wedge-shaped keys driven between the meeting-ends of the side and end-trusses, substantially as specified.

2. The combination, in a building, of upper and lower sills and intermediate vertical studding, of inner inclined studding extending from the lower sills at the sides and ends of the frame, opposite side-trusses mounted on the inner inclined side-studding and their outer ends bearing against the upper sill, wedge-shaped keys driven between the adja-

cent ends of said side-trusses, opposite pairs of end-trusses mounted on the inner inclined end-studding and having their outer ends resting against the inner faces of the side-trusses, and wedge-shaped keys driven between the meeting ends of said end-trusses, substantially as specified.

3. The combination, in a building, of upper and lower sills, interposed studding, rafters rising from the upper sills, a ridge-pole connecting the rafters, and the lower ends of said rafters bearing on the upper sills, of opposite inwardly-inclined end-studding rising from the end-sills, trusses supported upon the said studding and having their outer ends bearing against the framework, wedges interposed between the meeting-ends of the trusses, and the upper inclined-studding at each end of the frame rising from the trusses to the upper end of roof-studding, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JOHN SCHEIDLER.

Witnesses:

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C. T. GILBERT.