

No. 608,310.

Patented Aug. 2, 1898.

B. TANNER.

HAY RACK.

(Application filed Nov. 12, 1897.)

(No Model.)

2 Sheets—Sheet 1.

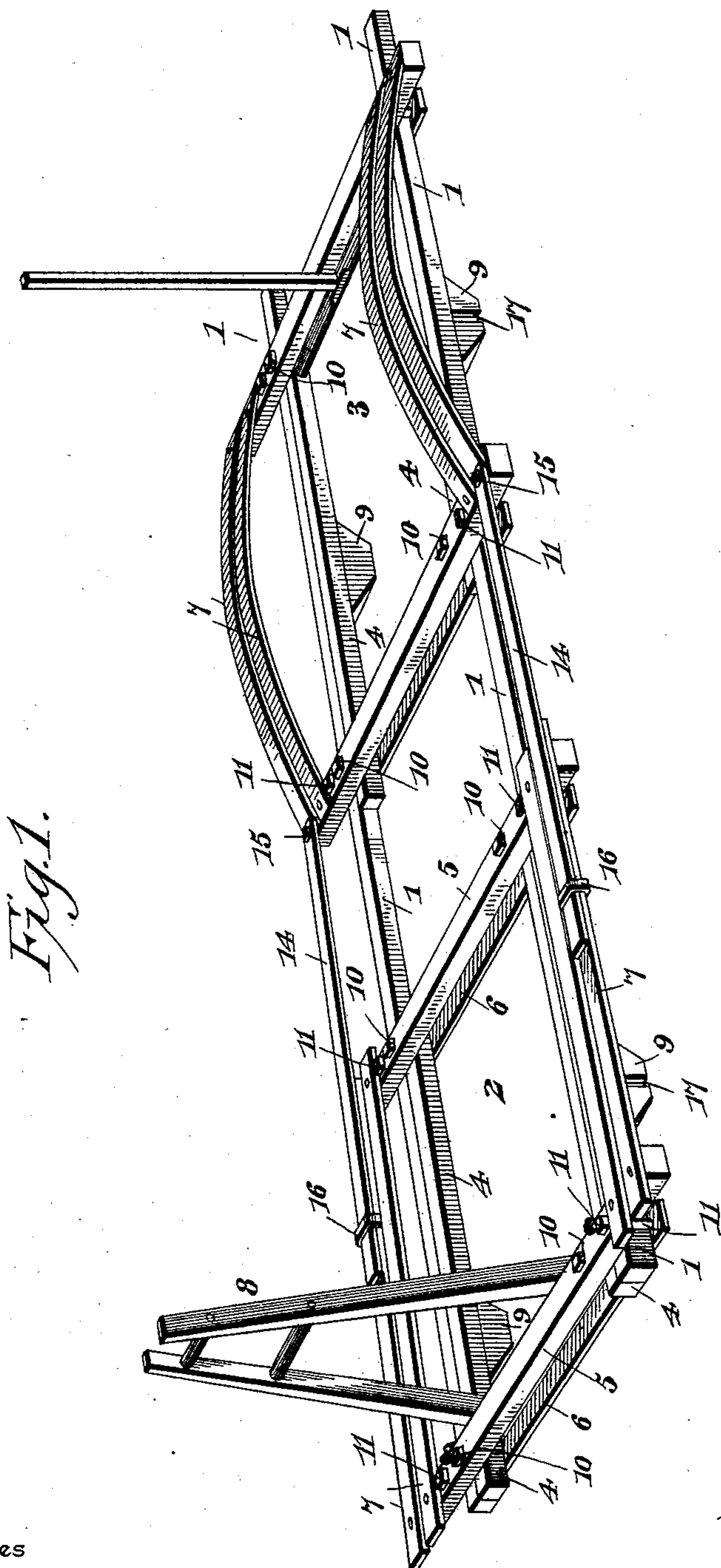


Fig. 1.

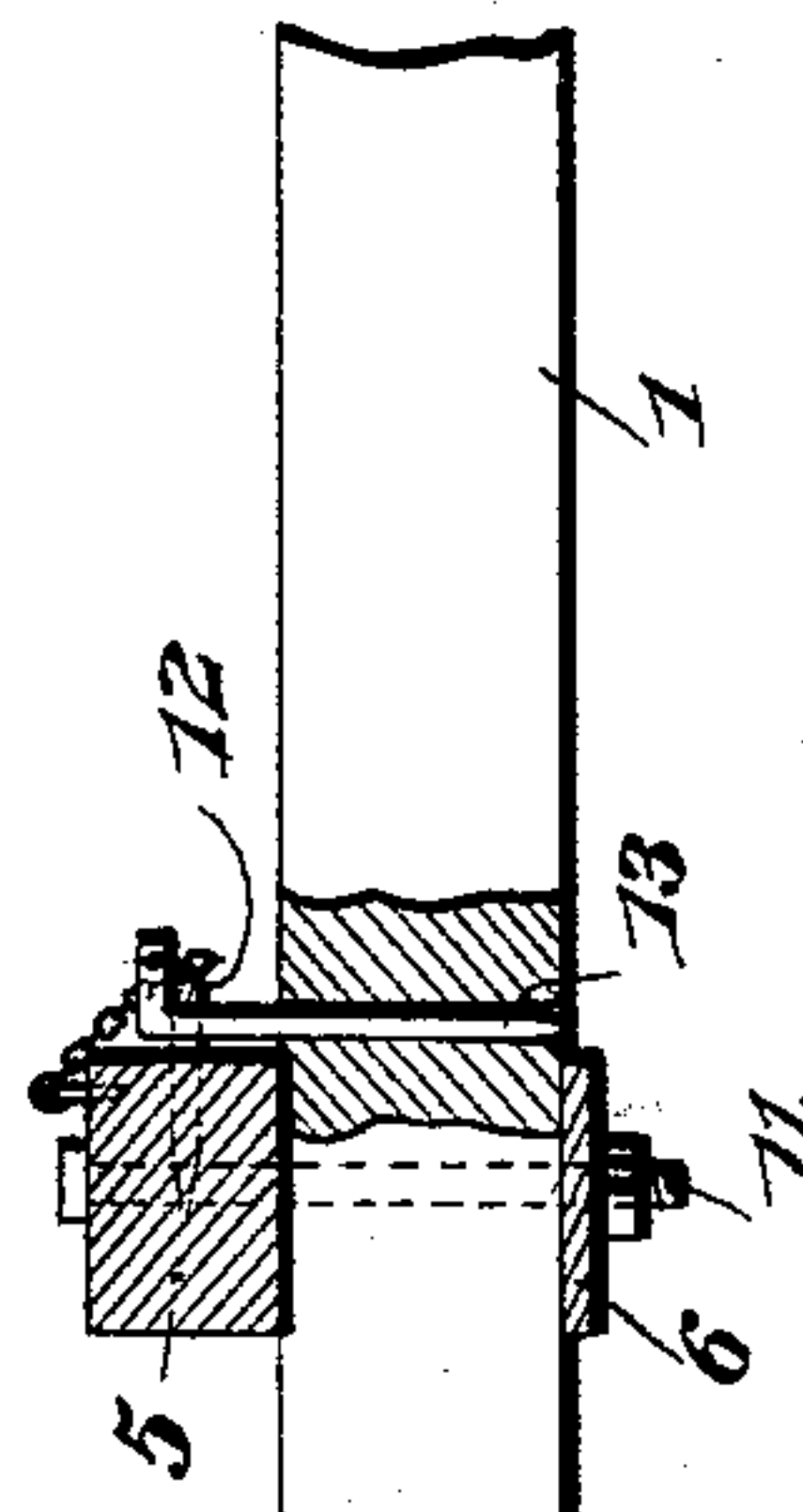


Fig. 4.

Witnesses  
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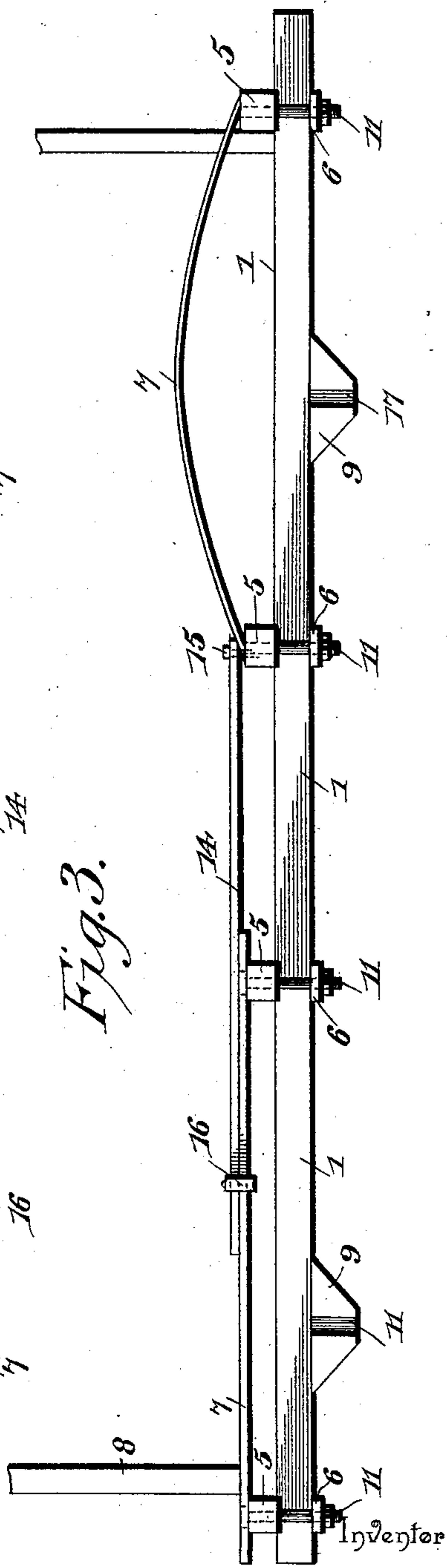
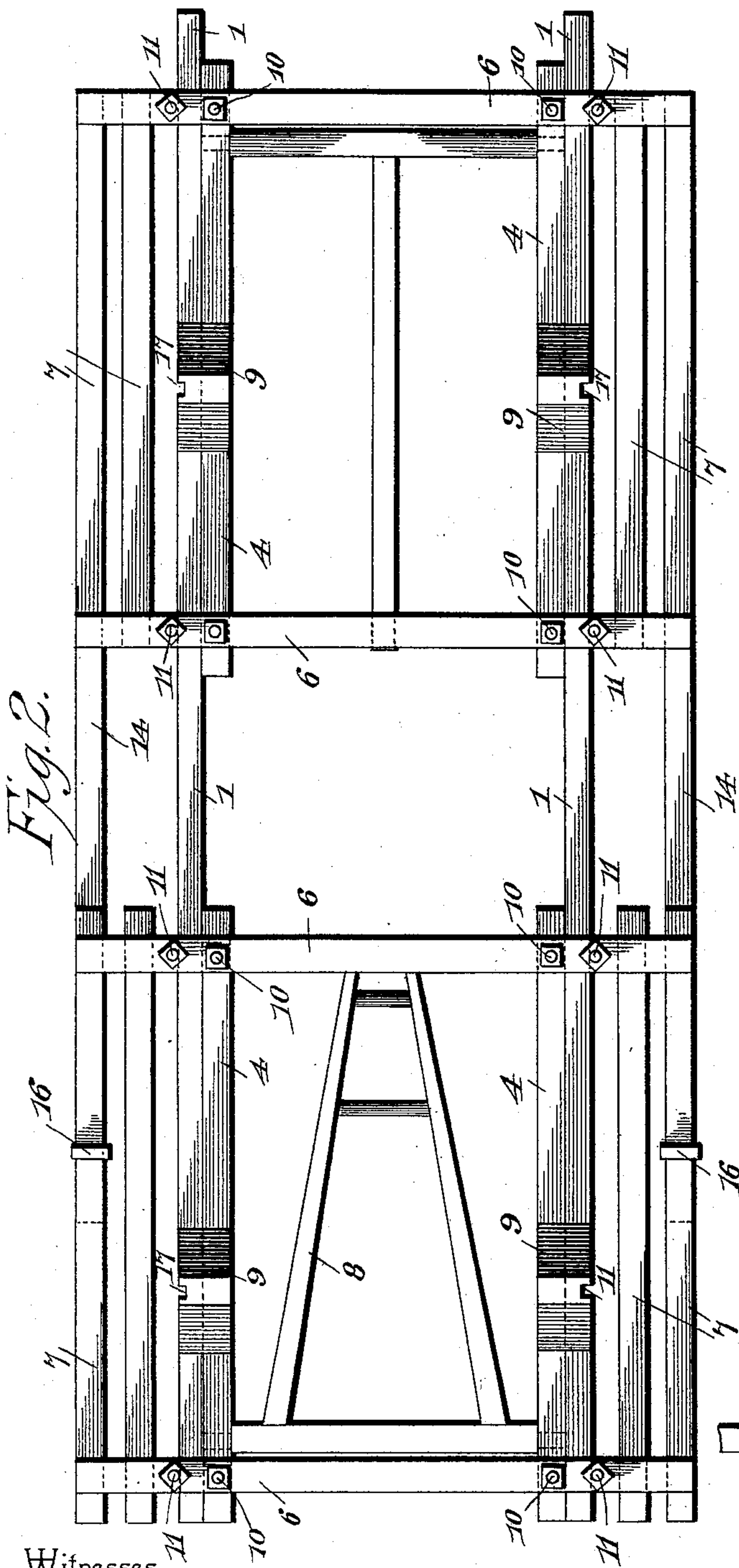
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# UNITED STATES PATENT OFFICE.

BENJAMIN TANNER, OF STURGIS, MICHIGAN.

## HAY-RACK.

SPECIFICATION forming part of Letters Patent No. 608,310, dated August 2, 1898.

Application filed November 12, 1897. Serial No. 658,342. (No model.)

*To all whom it may concern:*

Be it known that I, BENJAMIN TANNER, a citizen of the United States, residing at Sturgis, in the county of St. Joseph and State of Michigan, have invented a new and useful Hay-Rack, of which the following is a specification.

This invention relates to hay-racks designed to be removably supported on the running-gear of a wagon; and the objects of the invention are to simplify, strengthen, and otherwise improve the construction of these devices.

With these objects in view the invention consists of the several details of construction and combination of parts, as will be hereinafter fully described, and particularly pointed out in the claim.

In the drawings, Figure 1 is a perspective view of a hay-rack made in accordance with my invention. Fig. 2 is a bottom plan view of the same. Fig. 3 is a side elevation. Fig. 4 is a sectional detail of the locking device which connects one of the rack-sections to the bed-timbers.

Similar reference-numerals indicate similar parts in the several figures.

The main bed-timbers are indicated by 1, the front section of the rack by 2, and the rear section thereof by 3. The bed-timbers are of sufficient length to permit of the adjustment of one of the rack-sections longitudinally thereof in order that the rack may be lengthened or shortened to adapt it for use on running-gears of different lengths.

Each rack-section consists of a pair of longitudinally-disposed bars, (indicated by 4,) a pair of cross-bars, (indicated by 5,) a pair of transverse brace-bars (indicated by 6) and which latter are connected to the cross-bars, a series of longitudinally-disposed slats or boards, (indicated by 7,) a pivoted tongue (indicated by 8) adapted to be swung into a vertical position or folded down upon the section, and a pair of bolster-blocks 9. All these parts are similar on both sections, except that the slats 7 on the rear section are curved upwardly to afford room for the rear wheels of a running-gear, and the pivoted tongue of the front section is preferably double, while that on the rear section is single.

The bars 4 are preferably of the same depth

as the bed-timbers 1 and lie against the inner faces thereof when the rack-sections are in position. The cross-bars 5 are secured to the longitudinal bars, near the ends of the latter, by bolts 10 or similar fastening devices, and these cross-bars rest upon the upper faces of the bed-timbers and extend at each end beyond them. The brace-bars 6 extend across below the bed-timbers 1 in the same vertical planes as the respective cross-bars of the rack-sections, and these braces extend at each end beyond the bed-timbers and are connected to the respective cross-bars 5 by the vertical bolts 11, which pass through the cross-bars and the projecting ends of the brace-bars, and these bolts will be in close proximity to the outer vertical face of the respective bed-timbers. The bolts 10 also pass through the brace-bars. The slats 7 are arranged in pairs on each side of the rack-sections and secured on the upper faces of the cross-bars by any suitable fastening devices.

The rear rack-section 3 is intended to slide upon the bed-timbers and the front section 2 to be detachably secured to the bed-timbers, and in order to do this I secure staples 12, preferably in the front cross-bar 5 of the front section, and provide pins 13, which pass loosely through the respective staples into openings in the respective bed-timbers.

14 indicates slats or boards, one of which is detachably connected at its rear end to the front cross-bar of the rear section, near each end thereof, preferably by a bolt 15, and in alinement with the respective outer slats on said section. A collar 16 is secured to each slat 14 near its forward end, which collars fit loosely over the outer slats 7 of the front section to slide freely thereon. Each of the bolster-blocks 9 is provided with a vertical groove 17 in its outer face to receive the standards of the running-gear.

From the foregoing description it will be seen that by the use of the transverse braces 6 the hay-rack will be greatly stiffened and strengthened and that by the use of these braces I am enabled to dispense with the metal clips usually employed in these devices to hold the rack-sections against vertical movement on the bed-timbers, and the device will thus be made much lighter and will also be less expensive to manufacture, while



at the same time it will possess more strength. By having the pins 13 loosely fitted in the staples 12 and the openings in the bed-timbers the said pins can be easily removed  
5 when it is desired to remove the front section of the rack from the timbers, as is usually done when the device is stored away.

It will be understood that changes in the form, proportion, and the minor details of  
10 construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

Having thus described the invention, what I claim is—

15 In a hay-rack, a pair of main bed-timbers, the front and rear rack-sections, each comprising a pair of longitudinally-disposed side bars 4 arranged flat against the inner sides of the bed-timbers, inner and outer cross-bars  
20 5 lying above the bed-timbers and side bars

and connecting the opposite ends of the latter, corresponding inner and outer brace-bars 6 lying in the vertical planes of said cross-bars beneath the latter, and inner and outer bolts 10 and 11 passing through the contiguous end portions of the cross and brace bars  
25 respectively at opposite sides of the bed-timbers, the inner bolts 10 also passing through the side bars 4, a slidable connection between the two rack-sections, and locking-pins carried by one of the rack-sections and adapted  
30 to engage the bed-timbers to detachably lock said section thereto, substantially as set forth.

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

BENJAMIN TANNER.

Witnesses:

BURRITT HAMILTON,  
RANSOM E. STEPHENS.