

No. 774,662.

PATENTED NOV. 8, 1904.

W. H. GIESE.  
HAY RACK.

APPLICATION FILED JUNE 23, 1904.

NO MODEL.

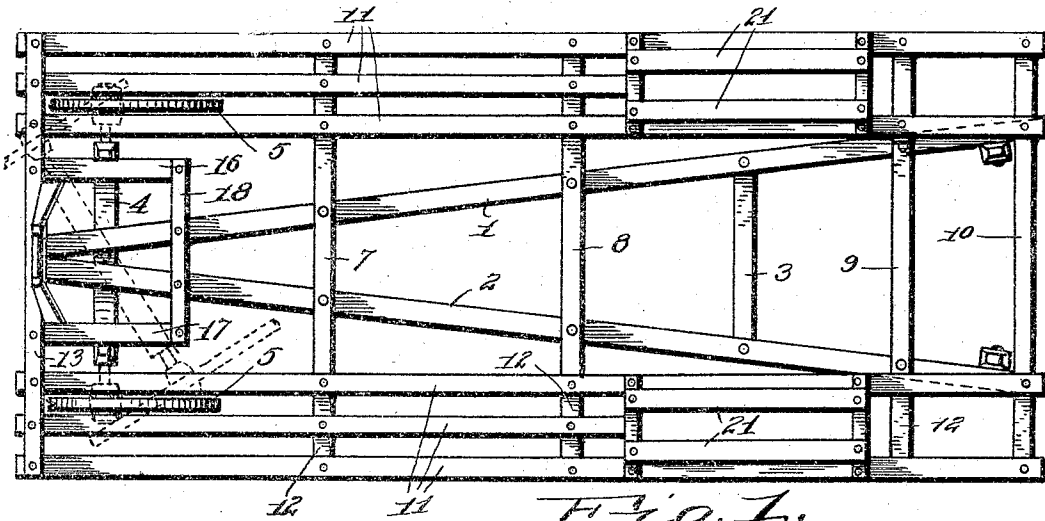


Fig. 1.

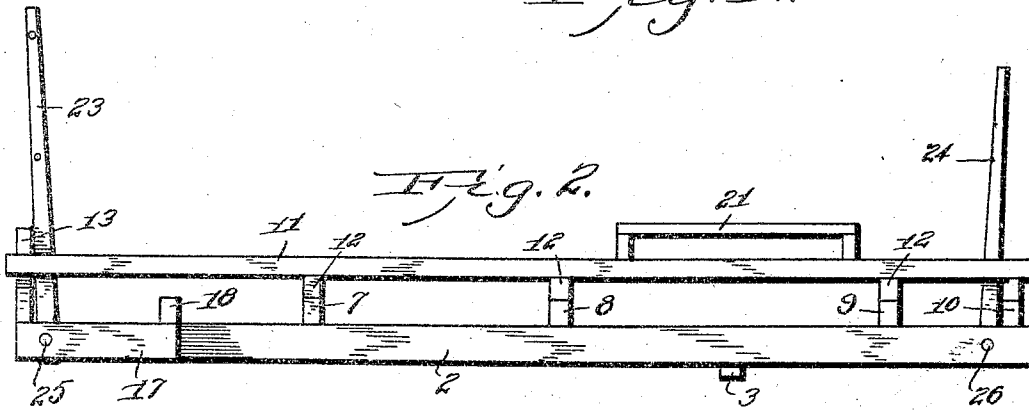


Fig. 2.

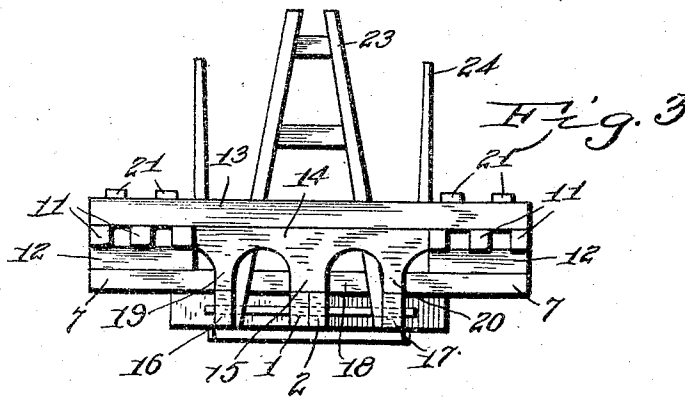


Fig. 3.

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# UNITED STATES PATENT OFFICE.

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## HAY-RACK.

SPECIFICATION forming part of Letters Patent No. 774,662, dated November 8, 1904.

Application filed June 23, 1904. Serial No. 213,791. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM H. GIESE, a citizen of the United States, residing at Bloomington, in the county of McLean and State of Illinois, have invented certain new and useful Improvements in Hay-Racks; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

The object of the invention is an improved construction of hay-racks; and, more specifically stated, it consists in the combination and arrangement of parts which constitute the frame of a hay-rack whereby greater rigidity and stability are obtained.

Furthermore, the framework of my improved hay-rack is so designed that without sacrificing in the least the above-mentioned desirable qualities it permits when placed on the bolsters of a wagon for the purpose of transporting hay, grain, and the like a short turn to be made without causing the front wheels to rub against the framework.

The construction by which these and other advantages are obtained will now be explained in detail, reference being had to the accompanying sheet of drawings, in which—

Figure 1 is a plan view of a hay-rack constructed according to my invention. Fig. 2 is a side elevation, and Fig. 3 is a front end elevation thereof.

In said views, 1 and 2 are longitudinal sills running the full length of the rack and forming the main support for the rest of the framework thereof, being adapted to rest directly on the bolsters of the running-gear of a wagon, one such bolster and wheels being indicated at 4 and 5, respectively, in Fig. 1. Of course intermediate supports may be used between said sills and the bolsters if it is desired to further elevate the rack, and a cross-piece 3 is shown adapted to rest on the bolster of the rear wheels. The sills 1 and 2 are not arranged parallel to each other, but converge toward the front end of the rack, as shown in Fig. 1, and are connected interme-

diately their ends by cross-pieces 7, 8, 9, and 10, which in turn support the longitudinal side rails 11 of the rack. In order to raise said side rails to a convenient height, short pieces 12 are placed between them and the cross-pieces 7, 8, 9, and 10, as shown in Fig. 3. A top piece 13 is securely attached to the upper sides of said side rails at their front ends, and this top piece is rigidly connected with the sills 1 and 2 by the end plate 14, which extends across the front end of the rack between the inside side rails and has a central depending portion 15 resting on the ends of said sills, which come together at this point.

While the structure so far described would constitute a rigid and serviceable frame for a hay-rack, yet it would lack stability and would have a tendency to tip laterally if the load were unevenly distributed. To obviate this objection, (and this, taken in connection with the arrangement of converging sills running the whole length of the rack, constitutes the most important feature of my invention,) I employ short parallel bolster-pieces 16 and 17, arranged one on each side of the front ends of the sills 1 and 2, and tie them to the latter by a superimposed short cross-piece 18. Furthermore, the end plate 14 has, in addition to its central depending portion 15, two lateral depending portions 19 and 20, to the lower ends of which the front ends of said bolster-pieces 16 and 17 are bolted.

When in place on the running-gear of a wagon, the two sills 1 and 2 and the two pieces 16 and 17 all rest upon the front bolster, whereby a solid support is provided for the front end of the rack, and at the same time quite a short turn can be made, the front wheel then occupying the position shown in dotted lines in Fig. 1.

The rear wheels (not shown) occupy the raised portions 21 and 22 of the side rails of the rack, and the front and rear standards retain the hay or other load are represented at 23 and 24, respectively, said standards being pivoted at 25 and 26 for convenience in storing.

Having thus described my invention, what

I claim, and desire to secure by Letters Patent of the United States, is—

1. A hay-rack comprising a pair of longitudinal sills converging toward each other  
5 from one end of the rack to the other, cross-pieces secured thereto, side rails secured to said cross-pieces, two short bolster-pieces arranged one on each side of the converging  
10 ends of said sills, a cross-piece and an end plate to secure said bolster-pieces and sills together, said end plate also being secured to  
15 the ends of said side rails.

2. A hay-rack comprising side rails and cross-pieces, a pair of longitudinally-converging sills to which said cross-pieces are se-

cured, a pair of short parallel bolster-pieces arranged on each side of said sills near one end thereof and an end plate having three depending portions to the center one of which the ends of said sills are secured and to the  
20 other two of which the ends of said bolster-pieces are secured and means to secure the ends of said side rails to said end plate.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM H. GIESE.

Witnesses:

AUGUST BOEKER,  
JAS. HOUGHTON.