No. 763,335. PATENTED JUNE 21, 1904.

J. T. SWAN.

# HAY RACK FOR WAGONS.

APPLICATION FILED JAN. 4, 1904.

NO MODEL.

Fig. 1.

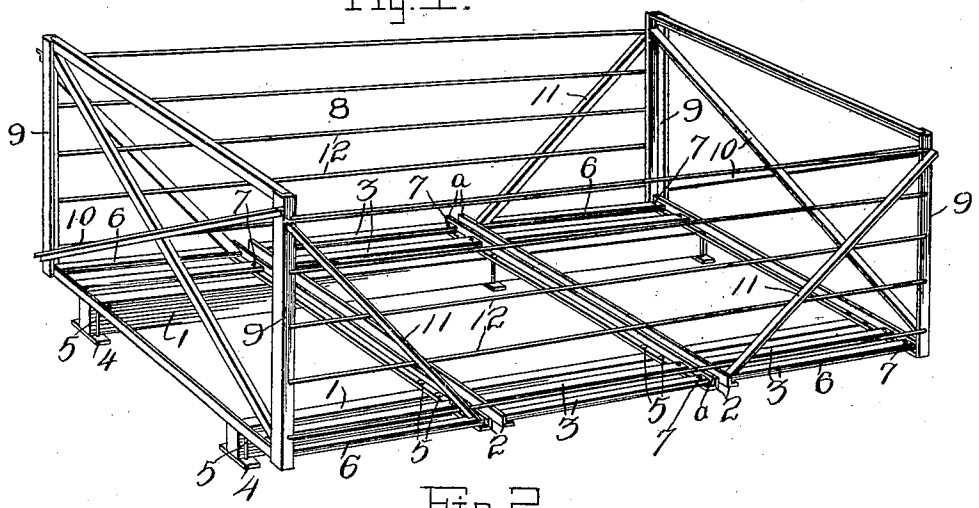



Fig. 2.

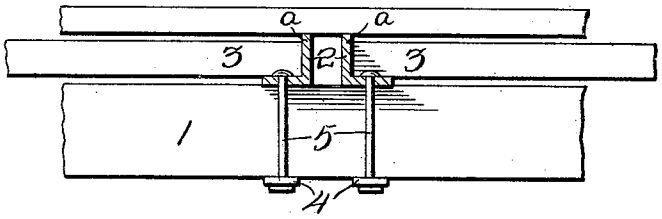



Fig. 3.

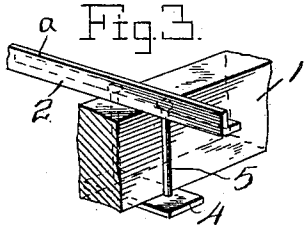
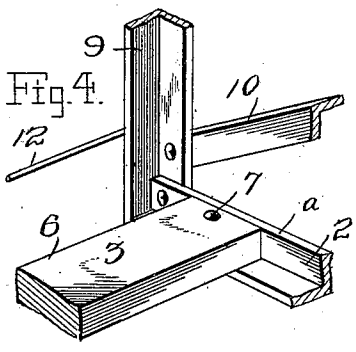



Fig. 4.

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Witnesses

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No. 763,335. Patented June 21, 1904.

# UNITED STATES PATENT OFFICE.

JOHN T. SWAN, OF AUBURN, NEBRASKA.

## HAY-RACK FOR WAGONS.

SPECIFICATION forming part of Letters Patent No. 763,335, dated June 21, 1904.

Application filed January 4, 1904. Serial No. 187,725. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN T. SWAN, a citizen of the United States, residing at Auburn, in the county of Nemaha and State of Nebraska, have invented certain new and useful Improvements in Hay-Racks for Wagons; 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.

My invention is an improved hay-rack for wagons; and it consists in the construction, combination, and arrangement of devices hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a perspective view of a wagon hay-rack embodying my improvements. Figs. 2, 3, and 4 are detail views.

In the embodiment of my invention I construct the bed of the hay-rack of a pair of side beams 1, a number of cross-bars 2, and a number of longitudinal bars or strips 3, which connect those portions of the cross-bars together which project beyond the outer sides of the side beams. The latter are made of wood and are disposed in an upright position, as shown. The cross-bars 2 are made of angle iron or steel of the form shown, each of the cross-bars having flanges *a* disposed at right angles to each other. The cross-bars are placed transversely on the side beams and are of such length that their end portions project outwardly beyond the side beams. In the form of my invention here shown I employ six of the cross-bars, a cross-bar being located at each end of the bed and the other cross-bars being disposed in pairs at regular intervals between the ends of the bed, each pair of the intermediate cross-bars being slightly spaced apart, as shown. The cross-bars are disposed flat on the side beams, so that one flange of each cross-bar is vertical. The end cross-bars have their vertical flanges outermost. The pairs of intermediate cross-bars have their vertical flanges on their inner opposing sides. Under the side beams, at the point where the cross-bars bear upon them, are yoke plates or blocks 4. Bolts 5 secure the said cross-bars to the said yoke plates or blocks, the said bolts being employed in pairs and disposed on opposite sides of the side beams without passing through the same, as shown in detail in Fig. 2, so that the side beams are not weakened by holes bored through them for the passage of said bolts, as is usual in the construction of devices of this kind. The projecting portions of the cross-bars are connected together by longitudinal bars or strips 6, which are wooden boards of suitable length, width, and thickness. These bars or strips bear on the horizontal flanges of the cross-bars and are secured thereto by means of bolts 7. Each of the strips or bars 6 is of a length equal to the space between one pair of the cross-bars, so that in effect the cross-bars and longitudinal bars or strips divide the bed of the hay-rack into three sections, which outside of the side beams are separated by the spaces between the pairs of intermediate cross-bars, as shown.

On the sides of the bed are side racks 8, each of which comprises a pair of vertical corner-posts 9, which are made of angle iron or steel similar to that employed for the construction of the cross-bars 2. The corner-posts at the ends of the bed are connected together by crossed braces 10, which are also made of the same kind of angle iron or steel. The corner-posts are braced by similar braces 11, the upper rear ends of which are bolted to the upper ends of the corner-posts, and the lower ends of which are bolted to the outer cross-bars of the intermediate pairs by the same bolts which secure the outer bars or strips 6 thereto. The sides of the rack are formed by wires or ropes 12, which are stretched between and secured to the corner-posts, as shown.

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

A hay-rack bed comprising side beams, cross-bars of angle metal each having a horizontal flange lying on the side beams, and a vertical flange extending upwardly therefrom, said cross-bars being disposed one at each end of the bed and in pairs between the ends of the bed, the vertical flanges of the end cross-bars being outermost and those of the inter-

mediate pairs of cross-bars being disposed on the proximate sides of the said pairs of cross-bars, longitudinal bars or strips connecting the pairs of cross-bars, bearing on the horizontal flanges thereof and having their ends abutting against the vertical flanges thereof, yoke-plates under the side beams, and bolts, on opposite sides of the side beams, extending through the horizontal flanges of the cross-bars and through the yoke-plates, and clamping the side beams, cross-bars and yoke-plates together, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

JOHN T. SWAN.

Witnesses:
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D. L. FRENCH.