No. 808,265. PATENTED DEC. 26, 1905.

J. VOGEL.

RACK FOR HAY WAGONS.

APPLICATION FILED JULY 24, 1905.

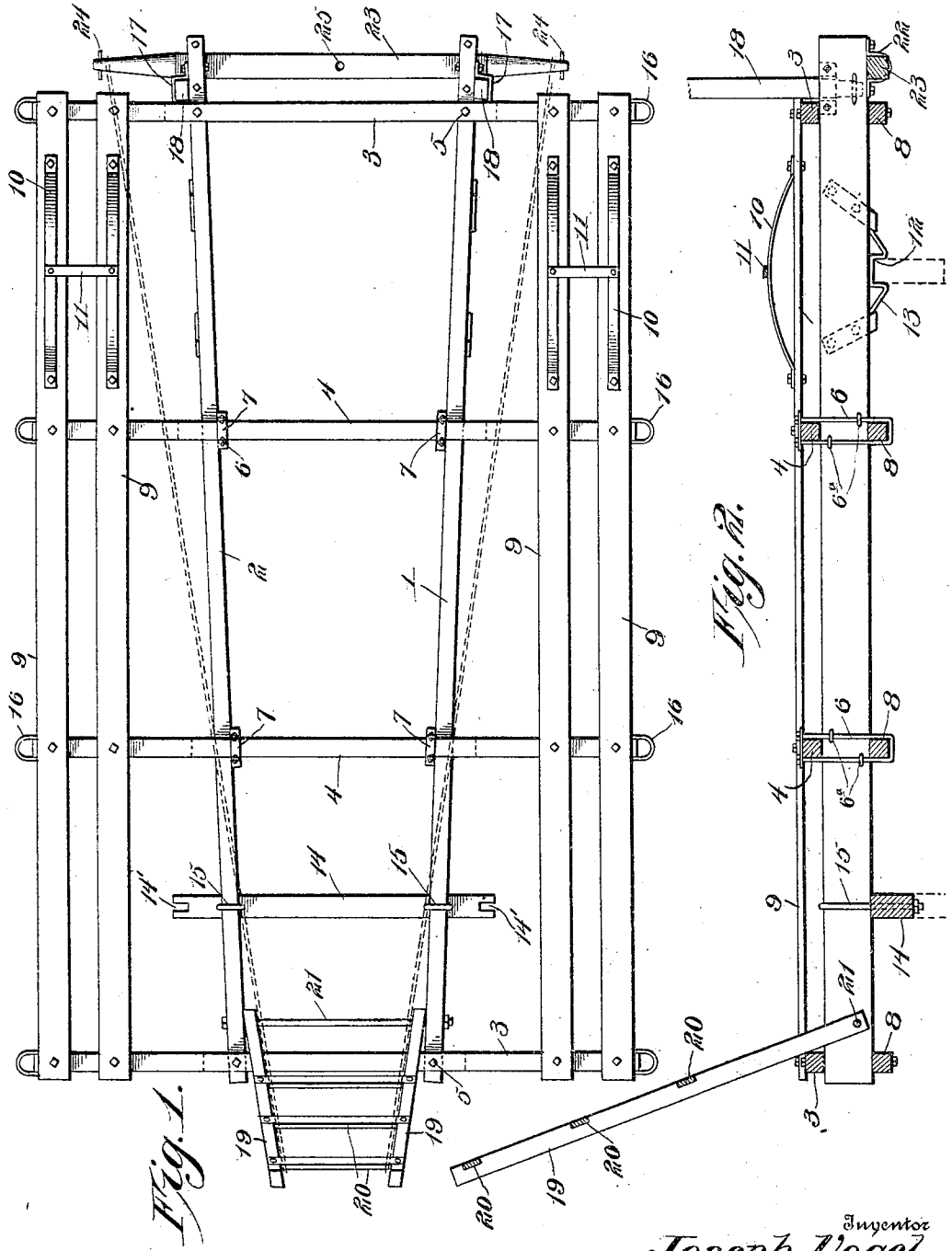


Fig. 1.

Fig. 2.

Witnesses

Louis D. Heinrichs

Herbert L. Lawson

Inventor

Joseph Vogel

By W. J. FitzGerald & Co

Attorneys

UNITED STATES PATENT OFFICE.

JOSEPH VOGEL, OF MAXVILLE, MISSOURI.

RACK FOR HAY-WAGONS.

No. 808,265. Specification of Letters Patent. Patented Dec. 26, 1905.

Application filed July 24, 1905. Serial No. 271,081.

To all whom it may concern:

Be it known that I, JOSEPH VOGEL, a citizen of the United States, residing at Maxville, in the county of Jefferson and State of Missouri, have invented certain new and useful Improvements in Racks for Hay-Wagons; and I do hereby 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 relates to racks for hay-wagons; and its object is to provide a simple and durable device of this character and the parts of which are rigidly connected so as to be capable of supporting a suitable quantity of hay or like material.

Another object is to provide a rack of this character having means whereby the material supported by it can be securely held thereon.

With the above and other objects in view the invention consists of a pair of longitudinally-extending beams which are interposed between upper and lower series of cross-beams, all of which are fastened together in a novel manner. Means are employed for preventing longitudinal or lateral displacement of the rack when in position upon a vehicle, and additional means are also used for fastening the hay or other similar material after it has once been placed upon the rack.

The invention also consists of the further novel construction and combination of parts hereinafter more fully described, and pointed out in the claims.

In the accompanying drawings I have shown the preferred form of my invention.

In said drawings, Figure 1 is a plan view of a rack constructed in accordance with my invention. Fig. 2 is a central longitudinal section through the rack.

Referring to the figures by numerals of reference, 1 and 2 are longitudinally-extending main beams, and located upon these beams and extending transversely thereof are parallel top beams 3 and 4. The ends of beams 3 are fastened to the ends of the main beams by means of bolts 5, whereas the intermediate beams 4 are fastened to the main beams by means of looped rods 6, which extend downward under and into engagement with the lower surfaces of short bottom beams 8 and are secured at their ends within plates 7, which rest upon the beams 4. The rods are then secured to the inner faces of the beams 1 and 2 by staples 6^a. By employing one of these looped rods 6 and one plate 7 at each point of intersection of the beams 4, 1, and 2 said parts can be tightly bound together without necessitating the formation of apertures therein, which would tend to weaken them. Beams 3 and 4 extend laterally any desired distance beyond the main beams 1 and 2. The shorter bottom beams 8 are arranged directly under and parallel with the beams 3 and 4, and these are fastened in place by means of the rods 6 referred to. The bolts 5 may be utilized for securing both the beams 3 and 8 to the main beams. These bottom beams 8 do not extend the full length of the beams 3 and 4, but are adapted to lie between the paths of the wheels of the vehicle. Pairs of slats 9 are secured upon the beams 3 and 4 adjacent their ends, and each pair of slats is adapted to receive a rear wheel of the vehicle therebetween. Bowed strips 10 are secured upon the slats adjacent their rear ends and are suitably connected, as by means of a connecting-strip 11. These strips 10 and 11 constitute shields for keeping the material on the rack out of contact with the wheels. Secured to the main beams 1 and 2 adjacent their rear ends are bolster-engaging brackets consisting of central receiving portions 12, having integral end brackets 13, which are secured to the beams. The receiving portion and brackets of each of the devices are formed in a single strip of metal, and it will be understood that the said portion 12 is of sufficient size to readily receive the rear bolster of a vehicle.

A holding-strip is secured to the lower faces of the main beams 1 and 2 and extends downward therefrom. This strip is secured to the main beams preferably by means of looped rods 15, the ends of which extend through the strip and are secured by means of nuts or in any other suitable manner. The ends of strip 14 are recessed, as shown at 14′, for the reception of standards which are adapted to extend upward from the front bolster of a vehicle. Straps 16 are suitably disposed at the ends of beams 3 and 4 for receiving standards, (not shown,) and additional straps 17 are located near the rear ends of the beams 1 and 2, which receive long end standards 18. A standard formed of oppositely-disposed strips 19 and connecting-slats 20 is pivoted upon a rod 21, which connects the main beams near their front ends, and this standard is normally supported by the adjoining

end beam 3. Brackets 22 extend downward from the rear ends of beams 1 and 2 and constitute bearings for a bar 23, the ends of which extend laterally beyond the beams 1 and 2 and are tapered toward their ends. Short pins 24 are located at the extremities of these tapered portions, and an aperture 25 is formed adjacent the center of the bar.

When the rack herein described is in position upon a vehicle, the rear bolster thereof fits within the receiving portions 12 of the bolster-engaging devices and the holding-strip 14 rests upon the front bolster. Hay or other like material is placed upon the rack after the standards 18 have been placed in their brackets. After a desired quantity has been piled upon the rack ropes are fastened to the upper end of the pivoted standard, while their other ends are secured to the pins 24 of bar 23. Said bar is then rotated by placing a stick or other like device within the aperture 25, and as said ropes are wound they will travel along the tapered portions of the bar. By tapering this bar, as shown and described, the ropes are caused to wind close together, the taper being sufficient to counteract the side pull of the ropes during the winding operation. By leaving one of the sticks in the aperture 25 the ropes will be prevented from unwinding. These ropes will, as is obvious, tightly secure the hay or other material upon the rack and prevent it from becoming displaced.

As hereinbefore stated, the rear wheels of the vehicle rest between the slats 9 and the bowed strips 10, which constitute guards. In the drawings I have indicated the bolsters by dotted lines, and in Fig. 1 I have also shown by dotted lines the ropes extending from the pivoted standard to the ends of the bar 23.

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

1. A rack for hay-wagons and the like comprising longitudinally-extending main beams, transversely-extending beams connecting the same, means secured to the main beams for detachably engaging the bolsters of a vehicle, a pivoted standard connected to one end of the main beams, a rotatable device connected to the rear ends of the main beams, said device having tapered ends and rope-engaging means at the extremities of the tapered portions.

2. A rack for hay-wagons and the like comprising longitudinally-extending main beams, transversely-extending top, and bottom beams fastened to the main beams, a pair of longitudinally-extending slats secured upon the ends of the top beams, a wheel-guard mounted upon each pair of slats, bolster-engaging devices secured to and depending from the main beams, a standard pivoted to the main beams at one end, a rotatable device mounted upon the beams at the other end, and having tapered extremities, and rope-engaging devices at the small ends of said extremities.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOSEPH VOGEL.

Witnesses:
HENRY ZIEGELMEYER,
FRANK NEES.