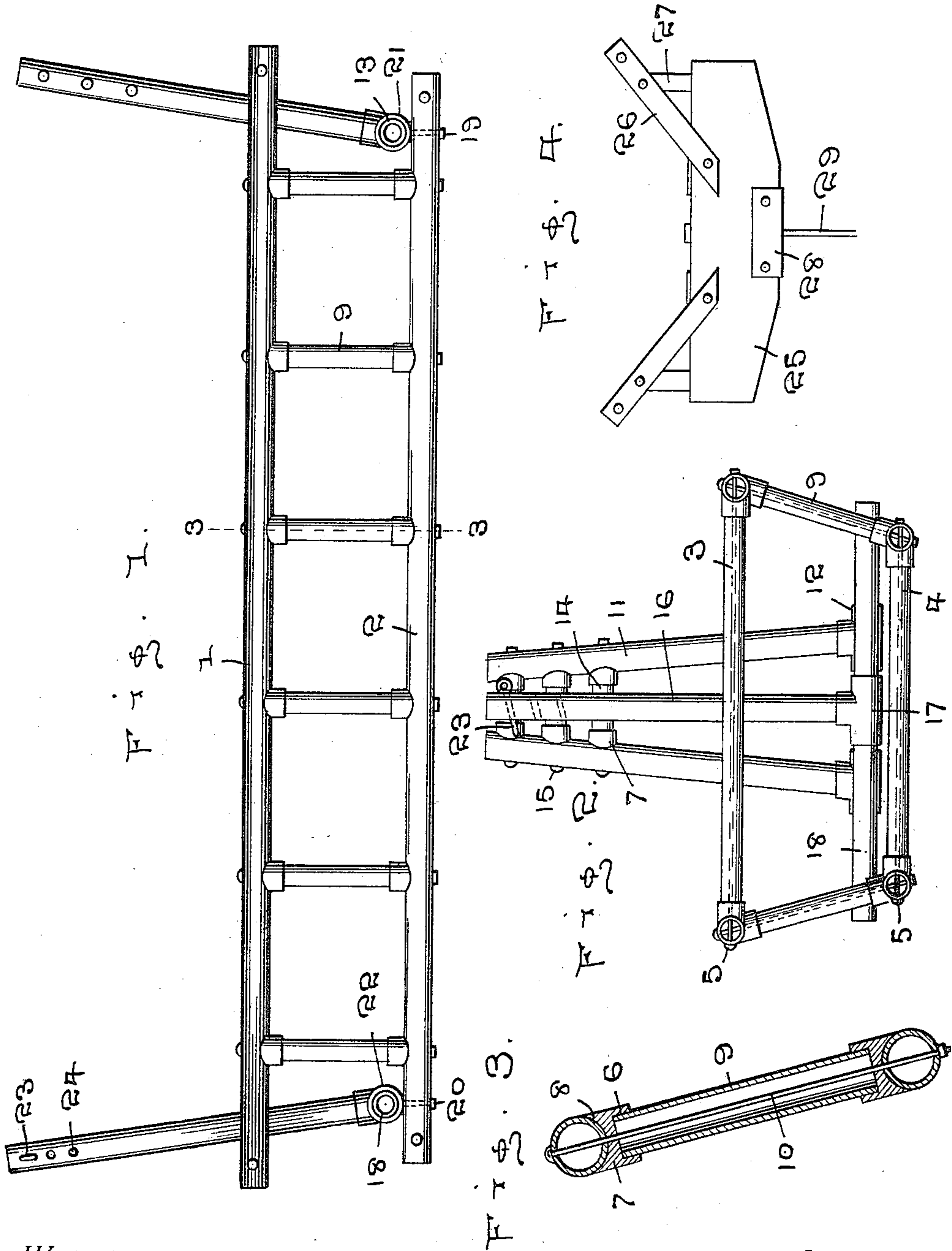


E. M. SNAVELY.
HAY RACK.
APPLICATION FILED JUNE 3, 1910.

994,207.

Patented June 6, 1911.



WITNESSES:

Thos. W. Riley
M. Newcomb.

INVENTOR
E. M. Snavely

BY
W. J. FitzGerald & Co.
Attorneys

UNITED STATES PATENT OFFICE.

EDWARD M. SNAVELY, OF MIDDLETOWN, PENNSYLVANIA.

HAY-RACK.

994,207.

Specification of Letters Patent.

Patented June 6, 1911.

Application filed June 3, 1910. Serial No. 564,808.

To all whom it may concern:

Be it known that I, EDWARD M. SNAVELY, a citizen of the United States, residing at Middletown, in the county of Dauphin and State of Pennsylvania, have invented certain new and useful Improvements in Hay-Racks; 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 new and useful improvements in hay racks and more particularly to that class adapted to be used upon farm wagons and my object is to provide a rack, all the parts of which are formed of metal.

A further object is to provide means for connecting the parts of the rack together.

A further object is to provide means for attaching standards at the ends of the rack, and, a further object is to provide means for attaching the usual form of boom pole to the rack.

Other objects and advantages will be hereinafter referred to and more particularly pointed out in the specification and claim.

In the accompanying drawings which are made a part of this application, Figure 1 is a side elevation of the rack. Fig. 2 is an end elevation thereof. Fig. 3 is an enlarged sectional view as seen on line 3—3 Fig. 1, and Fig. 4 is an elevation of a bolster to receive the forward end of the rack.

Referring to the drawings in which similar reference numerals designate corresponding parts throughout the several views, 1 and 2 indicate respectively the upper and lower side bars of the rack and 3 and 4 indicate space bars for the upper and lower side bars respectively, all of said bars being formed of hollow tubing. The space bars 3 are longer than the space bars 4 so as to cause the side walls of the rack to flare. The space bars are attached to the side bars by introducing bolts 5 transversely through the side bars and longitudinally through the space bars, the ends of the space bars being entered in sockets 6 of washers 7, the opposite faces of the washers having curved channels 8, in which are seated the side bars, the curvature of the channels being coincident to the curvature of said side bars. The side bars 1 are positioned a distance above the side bars 2 and

are held in their elevated positions by auxiliary space bars 9, which auxiliary space bars are connected to the upper and lower side bars by means of bolts 10, the same form of washers being used as with the space bars.

In order to attach the usual form of boom pole (not shown) to the rack, I provide standards at the forward and rear ends of the rack, the forward standard comprising a pair of posts 11, which engage T-couplings 12 of a tubular roller 13, the stems of the T-couplings being preferably inclined toward each other so that the posts 11 will likewise incline toward each other. Between the upper ends of the posts 11 are cross bars 14, which are preferably formed of tubing and engage washers 7, the cross bars being held in position between the posts by bolts 15, which extend transversely through the posts and longitudinally of the cross bars.

The rear standard is formed of a single post 16, the lower end of which is secured to a T-coupling 17, which T-coupling is attached to a roller 18 at the rear end of the rack.

The rollers 13 and 18 are rotatably mounted upon the lower bars 2 by extending downwardly through said lower side bars, bolts 19 and 20 respectively, the upper ends of said bolts having eyes 21 and 22 to receive the ends of the rollers and in this manner, it will be readily seen that the standards can be raised or lowered when desired and when in their raised positions, they will rest against the space bars 3 at the ends of the rack.

The rear end of the boom pole is connected to the post 16 by extending a pin 23 through openings 24 in the upper end of said post and by placing said openings at an incline, the end of the pin engaged by the boom will be disposed at such an angle as to securely hold the boom when engaged therewith.

In Fig. 4 of the drawings, I have shown a special form of bolster 25 for the forward end of the vehicle, said bolster having inclined arms 26 to receive the forward end of the rack, and said arms are provided with braces 27, the lower ends of which are also secured to the bolster, while the upper ends thereof are secured to the arms. The bolster is formed of heavy sheet metal and after being folded in the proper manner, a plate 28 is attached to the lower portion

thereof, through which the king bolt 29 extends.

By forming the rack of the tubular members, as shown, it will be readily seen that
5 the rack will be extremely strong and durable, while at the same time it will be comparatively light in weight. It will further be seen that the parts of the rack can be quickly assembled and when properly as-
10 sembled will be securely braced.

What I claim is:—

In a hay rack, a main frame consisting of upper and lower horizontal side bars and vertical bars united to said horizontal bars
15 by fittings, horizontal end cross bars united to said horizontal side bars by fittings, tie rods extending through the vertical bars

and the horizontal side bars and secured to said horizontal side bars, tie rods extending through the horizontal end cross bars and 20 the horizontal side bars and secured to said side bars, bolts secured to the ends of the horizontal side bars and provided with eyes disposed above said side bars, round mem- 25 bers extended through said eyes for swinging movement, and a vertical support fitted on each of said round members.

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

EDWARD M. SNAVELY.

Witnesses:

MACK L. MUMMA,
E. B. SCHAEFFER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
