

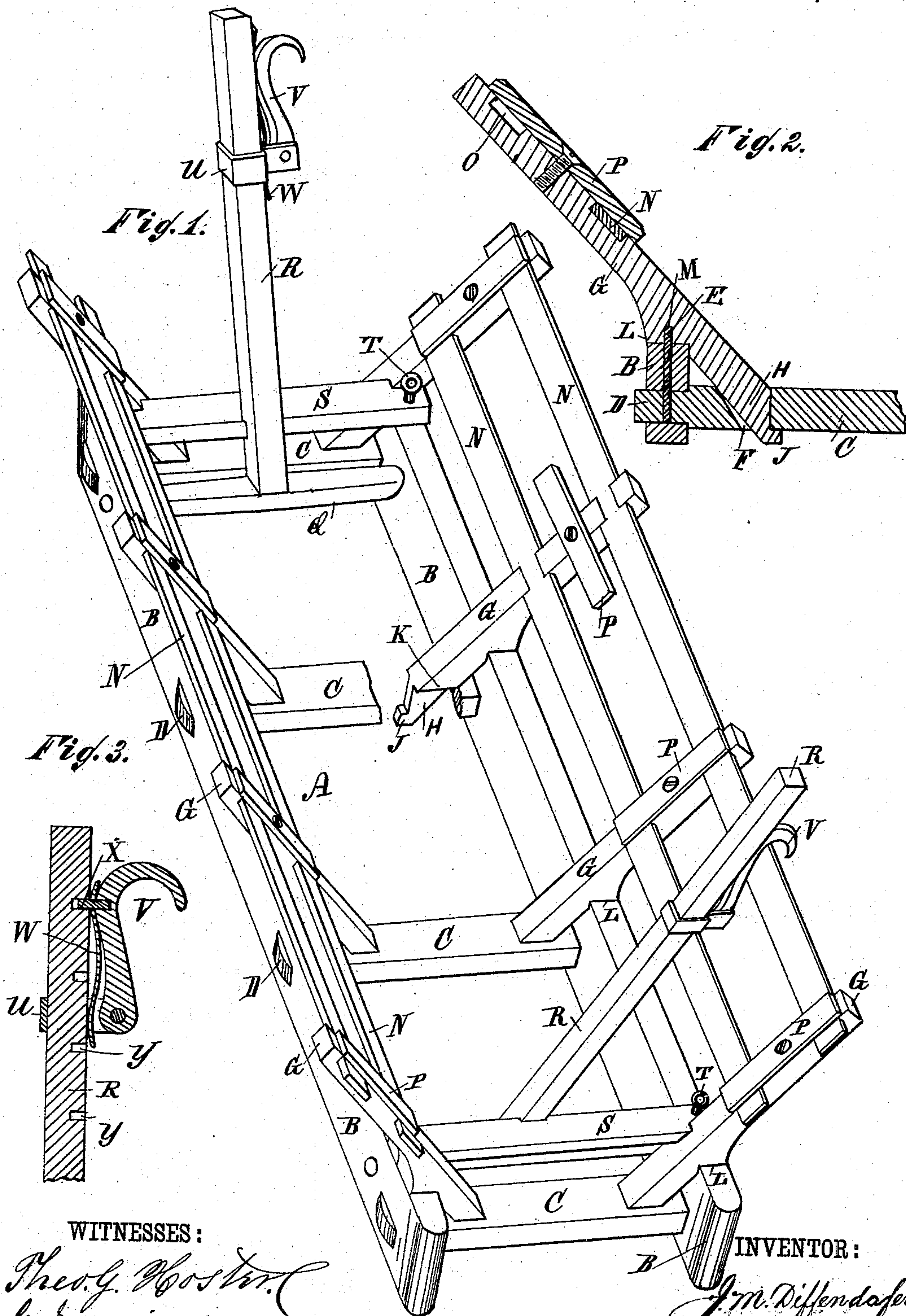
(No Model.)

J. M. DIFFENDAER.

HAY RACK.

No. 252,196.

Patented Jan. 10, 1882.



WITNESSES:

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UNITED STATES PATENT OFFICE.

JAMES M. DIFFENDAFER, OF GREEN CENTRE, INDIANA, ASSIGNOR TO HIMSELF AND DANIEL A. LEITCH, OF SAME PLACE.

HAY-RACK.

SPECIFICATION forming part of Letters Patent No. 252,196, dated January 10, 1882.

Application filed September 14, 1881. (No model.)

To all whom it may concern:

Be it known that I, JAMES MADISON DIFFENDAFER, of Green Centre, in the county of Noble and State of Indiana, have invented a new and Improved Hay and Straw Rack for Wagons, of which the following is a full, clear, and exact specification.

The invention consists of a longitudinal base-frame carrying two detachable vertically-inclined side frames composed of a series of posts provided at the lower ends with tenons fitting in mortises in the cross-bars of the base-frame, which posts are united by longitudinal rails fitting in recesses in the inner sides of the posts, and held therein by a strip pivoted to the inner side of these posts. A boom-pole is attached to each of two bars journaled in the ends of the base-frame, on each of which boom-poles a hook slides, which is provided with a friction-spring for locking it in the desired position on the boom-pole, and is also provided with a stud fitting in apertures in the boom-pole.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of my improved hay and straw rack for wagons. Fig. 2 is a cross-sectional elevation of part of the same. Fig. 3 is a longitudinal sectional elevation of the boom-pole.

A base-frame, A, is constructed of the two longitudinal bars, B, united by cross bars C, provided with tenons D, fitting in mortises in the bars B, these tenons being held in the mortises by pins E, passing into or through the tenons and projecting from the upper surface of the bars B, as shown in Fig. 2. The cross-bars C are provided near each end with a slot, F, having the side toward the corresponding end of the cross-bar inclined downward from the end toward the middle, so that the upper opening of the slot F will be larger than the lower opening.

A series of posts, G, are provided with tenons H, terminating in a short projection, J. The shoulders K, formed by the tenons H, are inclined to the longitudinal sides of the posts G,

so that when the tenons H are passed into the mortises or slots F the shoulders K will rest on the upper surfaces of the bars C, the projections J being directly below the bars C and the posts being inclined upward and outward from the ends of the bars C. Each post G is provided in the outer edge with a notch forming an offset or shoulder, L, resting on the upper edge of the corresponding beam or bar B. In this offset the posts are each provided with an aperture or recess, M, into which the upper ends of the pins E pass, and thus serve to prevent side movements and swinging of the posts G. The posts G are connected by longitudinal rails N, fitting in recesses O in the inner longitudinal edges of the posts G, in which recesses the rails N are held by latch-strips P, pivoted to the inner edge of the posts.

A shaft, Q, is journaled in each end of the frame A, and to each of these shafts a boom-pole, R, is attached, which boom-poles can thus swing in the direction of the length of the frame A. Cross-bars S are held to each end of the frame on the upper surface of the beams B by pins or bolts T, against which bars the boom-poles R rest, and are thus held at the desired inclination. A sleeve or collar, U, fitting on the poles R, is loosely mounted on each pole, and has a hook, V, pivoted thereto. A friction-spring, W, is attached to each hook V, and is interposed between the collar or sleeve U and the pole R. This spring serves to produce sufficient friction to hold the sleeve U at various heights on the poles R. Each hook V is provided with a projection or stud, X, which can be passed into one of a series of apertures, Y, in one of the edges of the poles R.

The hooks V serve to hold the boom, which rests longitudinally on the hay-load, and which holds the hay or straw on the rack. As these hooks can be adjusted higher or lower on the poles R loads of any size can be held by the boom.

The rack can be erected very easily and rapidly, as all the parts fit together, and screws, &c., are not required. When not in use the rack can be folded very compactly, so as to occupy but a very small space.

Having thus fully described my invention,

I claim as new and desire to secure by Letters Patent—

1. In a hay and straw rack for wagons, the combination, with the longitudinal bars B and the cross-bars C, of the posts G, the longitudinal rails N, and the latch-strips P, pivoted to the posts G, substantially as herein shown and described, and for the purpose set forth.

2. In a hay and straw rack for wagons, the combination, with the longitudinal bars B and the cross-bars C, provided with slots F, of the posts G, provided with tenons H, having projection J and offsets L at the ends, and of the longitudinal rails N, substantially as shown and described, and for the purpose set forth.

3. In a hay and straw rack for wagons, the combination, with the longitudinal bars B and the cross-bars C, provided with slots F, of the

posts G, each provided with a tenon, H, an offset, L, and an aperture, M, of the pins E and the longitudinal rails N, substantially as herein shown and described, and for the purpose set forth.

4. The combination, with a boom-pole, R, of the collar or sleeve U, the hinged hook V, and the spring W, substantially as herein shown and described, and for the purpose set forth.

5. The combination, with the boom-pole R, provided with apertures or recesses Y, of the collar or sleeve U, and the hook V, provided with a stud, X, substantially as herein shown and described, and for the purpose set forth.

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