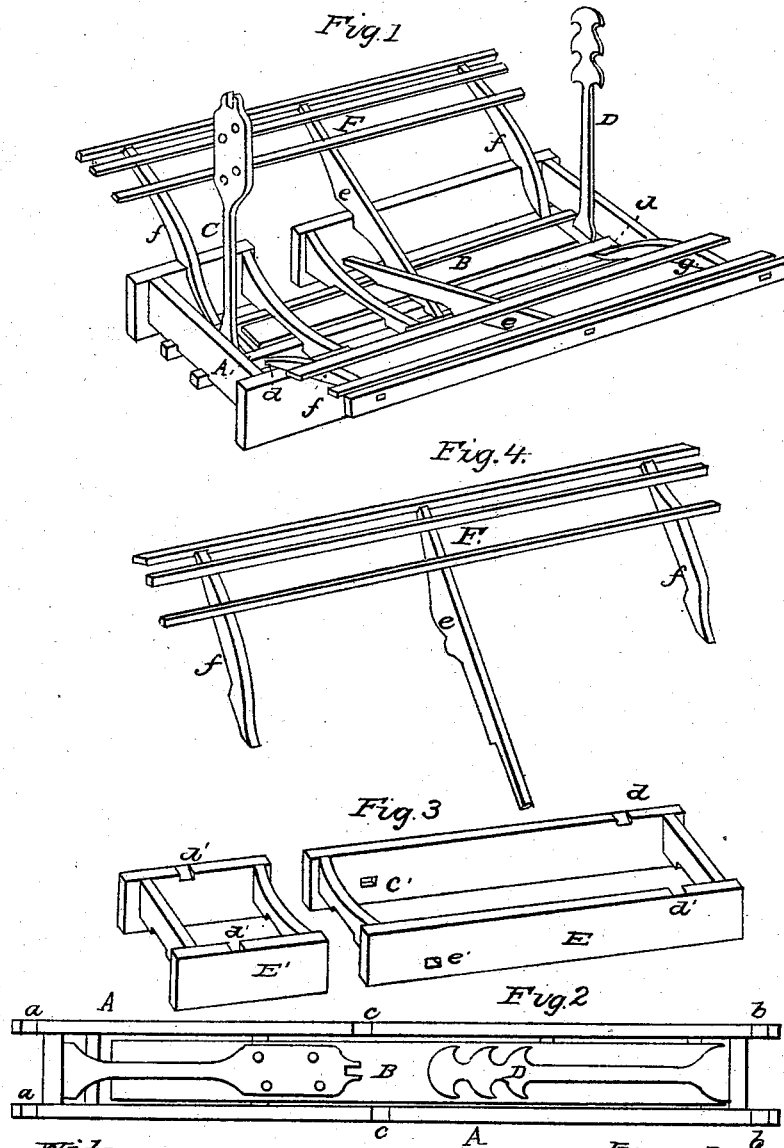


F. L. NAGLER.

Hay Rack.

No. 111,138.

Patented Jan'y 24, 1871.



Witnesses.  
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# United States Patent Office.

FRANZ LOUIS NAGLER, OF IRVING TOWNSHIP, MICHIGAN.

Letters Patent No. 111,138, dated January 24, 1871.

## IMPROVEMENT IN HAY-RACKS.

The Schedule referred to in these Letters Patent and making part of the same.

### To whom it may concern:

Be it known that I, FRANZ LOUIS NAGLER, of Irving township, in the county of Berrien and State of Michigan, have invented a new and useful Improvement in a Sectional Hay-Rack; and I do declare that the following is a true and accurate description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon, and being a part of this specification, in which—

Figure 1 is a perspective view of my improvement;

Figure 2 is a plan of the bed-frame with the binding standards pivoted at each end thereof;

Figure 3 shows the construction of the box-frames; and

Figure 4 is a perspective of one of the rack-wings. Like letters refer to like parts in each figure.

This invention relates to that class of hay-racks which is composed of detached parts and sections, so that the same may be erected on the wagon by one person, and when not in use can be compactly stowed away under cover; and

It consists in the novel and peculiar construction of its various parts, and the method of locking the same together without using bolts or their equivalents for that purpose.

In the drawing—

A represents the sill or bed-frame of my rack, composed of two longitudinal sills, connected by short transverse bars framed therein, and on which is laid the bottom-board B.

C is the front binding standard, the cross-bar at the lower end of which is pivoted in the sills. In the upper portion of the standard is a series of holes for the reception of the end of the binding-pole.

D is the rear binding standard, in like manner pivoted in the rear end of the frame, and has on its edges a series of hook-shaped notches, into one of which the rear end of the binding-pole engages when the rack is loaded, being drawn down before entering the notch, so as to securely bind the load. When not in use, the standards may be folded down flat on the bottom board.

Across the front ends of the frame are formed notches *a*, and at the rear ends are similar notches *b*. *c* are inclined notches in the upper edges of the sills, midway of their length; and

*d* are inclined sockets in the sides thereof.

The frame constructed as above described can readily be placed on the bolsters of the wagon by one person.

E E' are box-frames, the latter and smaller one being placed on the front end of the bed-frame, with its front transverse bar resting in the notches *a* thereof, and the rear transverse bar being notched to embrace the longitudinal sills of said bed-frame.

In the upper edges of the side pieces of the box-frame are cut inclined notches *d'*, in line with the sockets *d*.

The larger box-frame is in like manner constructed and attached to the main and rear portion of the bed-frame, being provided with similar notches *d'*, and in addition thereto with inclined sockets *c'* abreast of the notches *c* of the bed-sills. The box-frame sections being in place, the binding-standards are elevated to a vertical position.

F are the wings or side-pieces of the rack, formed of several light longitudinal bars, secured to a central cantalever, *e*, and to a shorter one, *f*, at the front end, and a similar one, *g*, at the rear end. These last rest in the notches *d'*, on the upper edge of the box-frame, and are stepped in the sockets *d* in the bed-frame, while the longer cantalever *e'*, resting on the edge of the rear side of the box-frame, and on the further side of the bed-frame, has its end inserted in the socket *c'* of the box-frame, passing on its way thereto in the inclined notch *c* in the edge of the bed-frame.

It will readily be seen that when the various parts are put together in the order named, that they interlock with each other, and that they cannot be taken apart without lifting upward the outer edges of the wings to disengage the cantalevers from the notches and sockets, thereby greatly facilitating its application to and removal from the wagon, as well as securely holding the load in position.

In order to facilitate the turning of the wagon, the box-frame is made in two sections, as shown, the fore-wheel in cramping coming in between the sections.

Having thus described my invention,

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

The construction and arrangement of the bed-frame A, binding standards C D, sectional box-frames E E', and wings F, substantially as herein described, and for the purpose set forth.

FRANZ LOUIS NAGLER.

Witnesses:

FREDERICK EBERTS,  
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