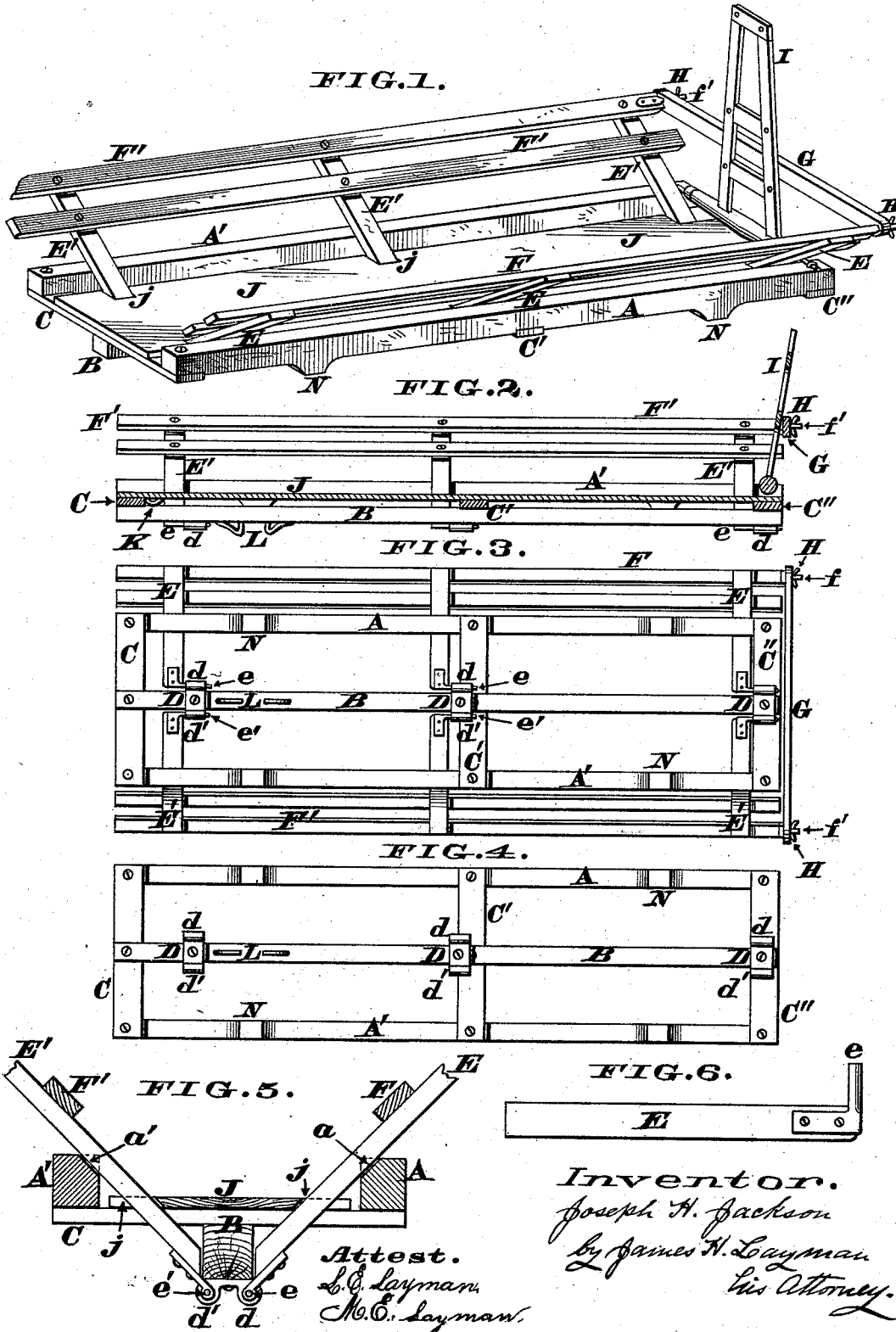


J. H. JACKSON.
Hay-Rack.

No. 214,824.

Patented April 29, 1879.



Inventor.
Joseph H. Jackson
by James H. Layman
his Attorney.

Attest.
J. C. Layman
Notary Public.

UNITED STATES PATENT OFFICE.

JOSEPH H. JACKSON, OF GALVESTON, INDIANA.

IMPROVEMENT IN HAY-RACKS.

Specification forming part of Letters Patent No. **214,824**, dated April 29, 1879; application filed March 20, 1879.

To all whom it may concern:

Be it known that I, JOSEPH H. JACKSON, of Galveston, Cass county, Indiana, have invented certain new and useful Improvements in Wagon-Racks, of which the following is a specification.

This invention relates to those racks which are capable of being temporarily secured to the running-gear of wagons when it is desired to haul hay, flax, oats, straw, and other farm products; and my improvement comprises a novel combination of main frame, rack-panels, and bottom board, the construction of these devices being such as to insure said panels being firmly coupled to said frame when the bottom board is placed in position, as herein-after more fully described.

In the annexed drawings, Figure 1 is a perspective view of my improved rack in condition for use. Fig. 2 is a longitudinal section of the same, taken in the plane of the central rail of the main frame. Fig. 3 is a plan of the under side of the rack, the bottom board being removed. Fig. 4 is a plan of the under side of the main frame, the rack-panels and bottom board being detached therefrom. Fig. 5 is an enlarged transverse section of the rack, taken in the plane of the panel-arms; and Fig. 6 shows one of said panel-arms detached from the rack.

Referring more especially to Fig. 4, it will be seen that the main frame of my rack is composed of two outer longitudinal rails, A A', and an inner or central rail, B, said rails or sills being secured together with a system of cross-ties, C C' C'', of which ties two or more may be used.

These cross-ties are attached to the upper side of central rail, B, and support the outer rails, A A', so as to elevate the latter above said inner one, B, as more clearly shown in Fig. 5. Secured to the under side of central rail B are plates or bars D, having suitable sockets *d d'* to receive pivots or pins *e e'*, attached to the inner ends of the converging arms E E', to which arms are fastened the slats F F', that constitute the two opposite panels of the rack proper; or said plates D may be omitted, and the pivots or pins *e e'* may hook into staples or eyes driven into the opposite sides of rail B, or any other readily-

detachable devices may be substituted for these pivots or hooks and staples.

The forward ends of the upper slats of each panel are furnished, respectively, with studs *f f'*, which, after passing through suitable perforations in the spreader G, receive spring pins or keys, or other convenient retaining devices, H.

I is an ordinary falling ladder journaled near the front ends of sills A A'. Adapted to rest upon the cross-ties C is a bottom board, J, notched at *j* to engage around the panel-arms E E', as seen in Figs. 1 and 5. Projecting from the under side of this board is a suitable detent, K, adapted to bear against the hind cross-tie, C, as seen in Fig. 2, and thereby prevent said board being shifted to the rear of main frame A A' B C. L are stops to engage with the rear bolster of the wagon.

Rails A A' are blocked at N, or otherwise increased in thickness for the purpose of allowing said rails to rest on the bolsters. Finally, the upper inner edges of said rails may be notched, as shown at *a a'* in Fig. 5, to afford a more secure bearing for panel-arms E E'.

My rack is fitted together in the following manner: The body or bed of the wagon is first lifted off of the running-gear, and the main frame A A' B C is applied to the latter, the stops L being engaged over the rear bolster, so as to maintain the frame in position. Panel E F is now applied to said frame in such a way as to cause the hooks *e* to enter sockets *d*, after which act the opposite panel, E' F', is fitted to the frame by engaging the other hooks, *e'*, with sockets *d'*. The frontends of the two rack-panels E F E' F' are then secured together by the spreader G and retaining devices H, and bottom board J is applied so as to cause its detent K to bear against the hind tie, C, while its gains *j* fit snugly around the panel-arms E E', as seen in Fig. 1.

The panels E F E' F' are now securely attached to main frame A A' B C, and, as the plates D prevent any forward movement of arms E E', it is evident said racks cannot be shifted in that direction, while the contact of detent K with cross-tie C prevents these racks sliding rearwardly and thus disengaging the hooks *e e'* from their respective sockets *d d'*. When these component members are thus

united together, a light, secure, and capacious rack is afforded, which rack is especially adapted for conveying hay, straw, oats, flax, barrels, and other articles. To remove the rack it is only necessary to disengage the retaining devices H, lift out bottom board J, and then slide the panels E F, E' F' far enough rearwardly to unship the hooks *e e'* from sockets *d d'*, and said panels can then be detached. The panels and the main frame being quite light the rack when thus unlimbered can be readily handled by a single man.

The invention can be modified by gaining the upper edges of rails A A' to receive the transverse slats of a rack adapted to take the place of the bottom board J, which transverse slats can be so disposed as to prevent any accidental rearward shifting of panel-arms E E'. Furthermore, the main frame may be adapted to rest directly on the wagon bed or body; but such a construction is not recommended, because it would increase the weight of the vehicle and render it top-heavy.

I claim as my invention—

1. In a wagon-rack, the panel-arms E E', coupled to the central rail, B, of the main frame by the devices *d d' e e'*, and maintained in position by bottom board J *j*, substantially as herein described, and for the purpose set forth.

2. The combination, in a wagon-rack, of main frame A A' B C C'', sockets *d d'*, hooks *e e'*, rack-panels E F E' F', and bottom board J *j*, substantially as herein described, and for the purpose set forth.

3. An improved wagon-rack, consisting of the main frame A A' B C C' C'', sockets *d d'*, hooks *e e'*, rack-panels E F *f*, E' F' *f'*, bottom board J *j*, detent K, spreader G, and retaining devices H, substantially as herein described, and for the purpose set forth.

In testimony of which invention I hereunto set my hand.

JOSEPH H. JACKSON.

Witnesses:

G. W. WILLIAMS,
M. F. AULT.