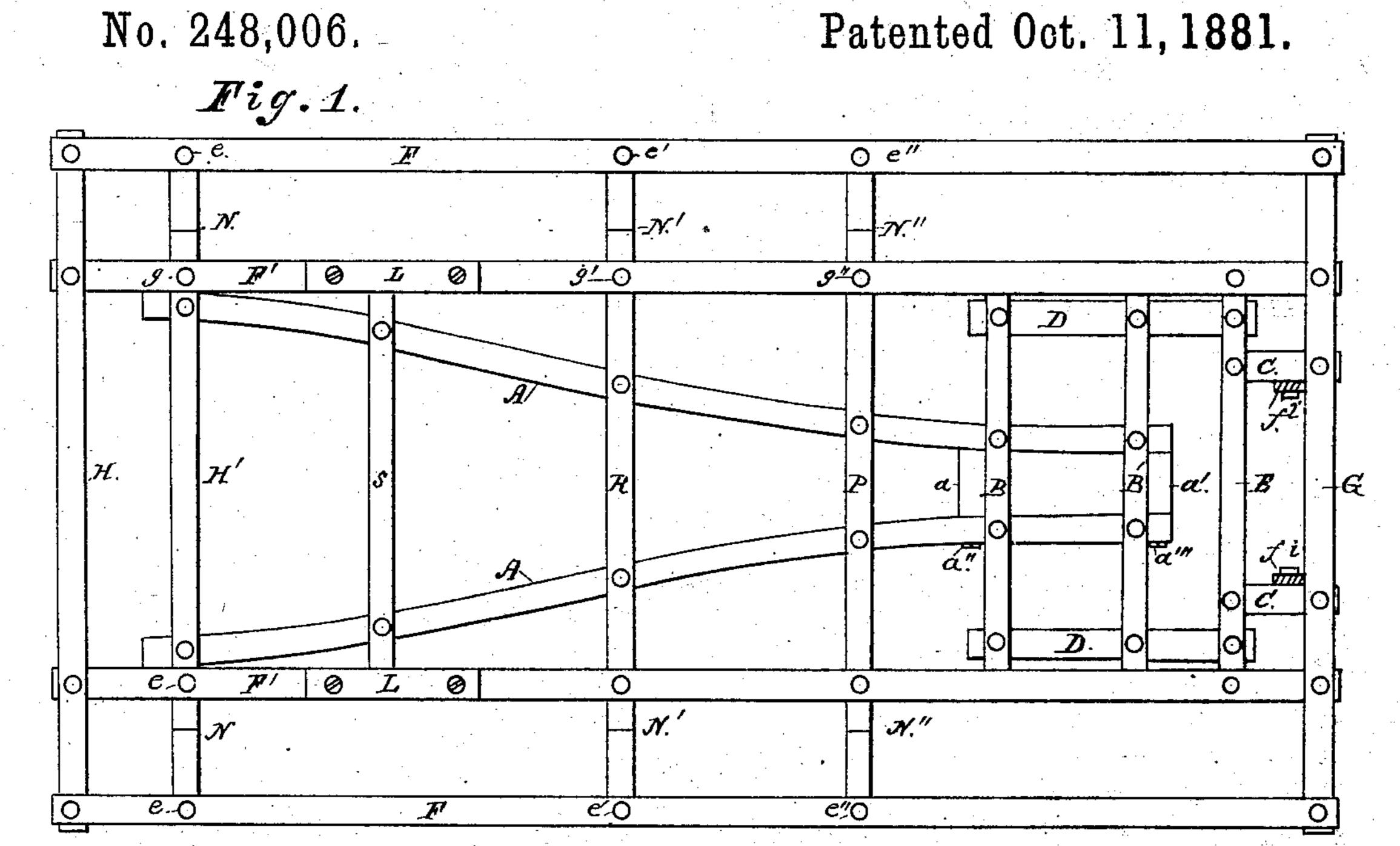
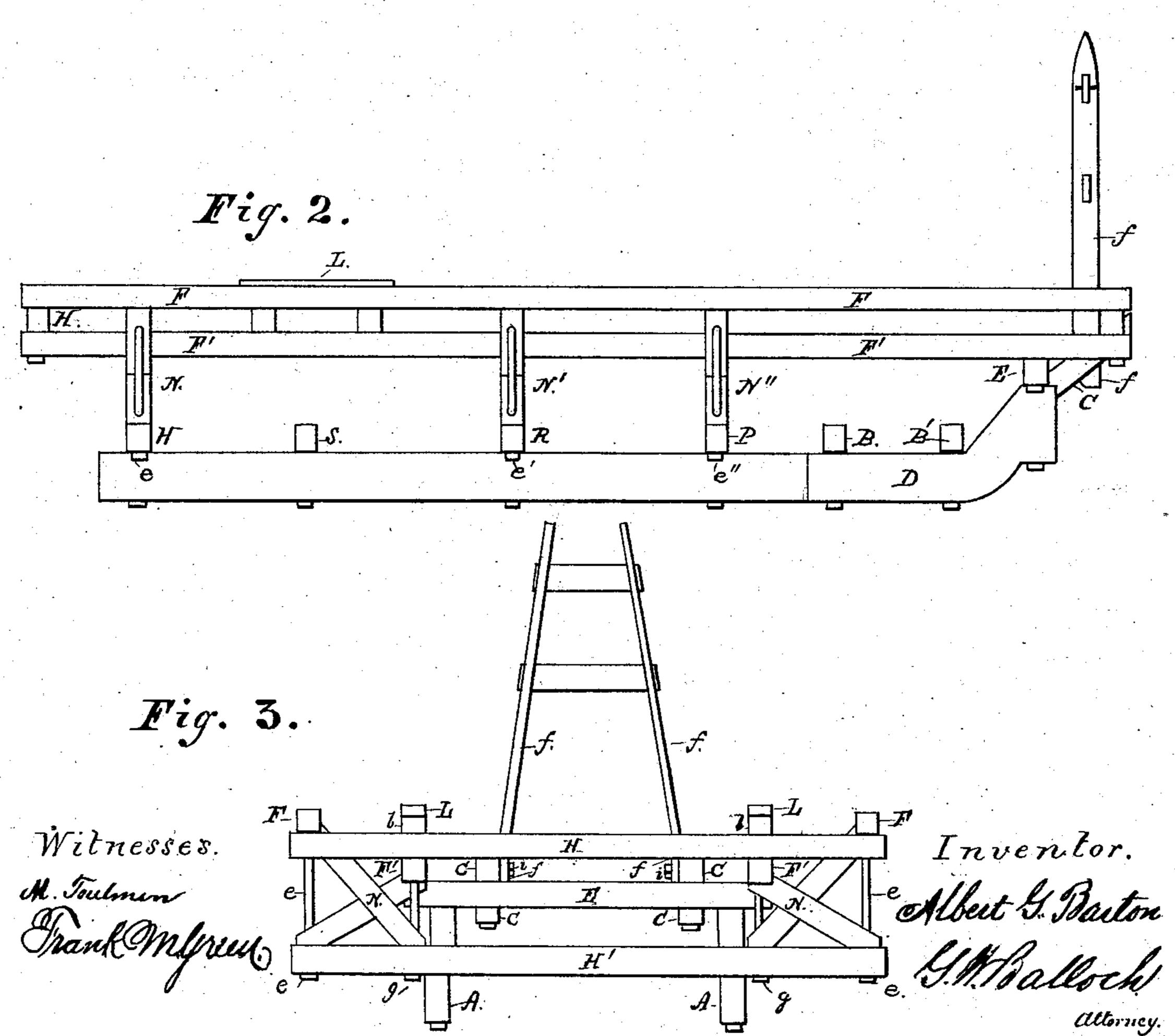
## A. G. BARTON.

HAY RACK.

Patented Oct. 11, 1881.





## United States Patent Office.

ALBERT G. BARTON, OF CONSTANTINE, MICHIGAN.

## HAY-RACK.

SPECIFICATION forming part of Letters Patent No. 248,006, dated October 11, 1881.

Application filed May 4, 1881. (No model.)

To all whom it may concern:

Be it known that I, A. G. BARTON, of Constantine, in the county of St. Joseph and State of Michigan, have invented a new and useful Hay-Rack; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My invention relates to improvements in hay-racks, in which a frame-work of timber is placed upon the bolsters of a wagon for the purpose of carrying hay or grain; and the object of my improvement is to combine in its

construction great strength with lightness.
I attain this object by the manner shown in the accompanying drawings, in which—

Figure 1 is a plan view of the entire device. Fig. 2 is a side elevation. Fig. 3 is a rear elevation. vation.

Similar letters refer to similar parts throughout the several views.

A A represent two curved bottom rails at the front ends. These bottom rails are fast-25 ened together by two bolts, a'' and a''', which pass through the bottom rails, and two short pieces of timber, a a'. The bottom rails, A A, serve to support the entire structure, and on the upper side have bolted firmly to them six 30 cross-rails—viz., B', B, P, R, S, and H'—the bolts being represented by circles where the bottom rails and cross-rails intersect each other. The bottom rails are spread out gradually from the cross-rail B to the cross-rail H'. The bot-35 tom rails rest upon the bolsters of the wagon, the front standard of bolster passing up just back of cross-rail B'. The standard of the rear bolster of wagon passes up just back of crossrail S.

On each side of the front ends of the bottom rails there is a bolster head-plate, D. These head-plates are attached to cross rails B, B', and E, by six bolts. (Represented by circles where they cross each other.) The front cross-rail, E, is attached to the two long side rails, F', by two bolts, and to two short pieces of timber, C, by two bolts. (Also represented by circles.) The front ends of the two pieces of timber C C are attached to the front cross-rail, G,

by two bolts. The pieces C C also serve as a 50 support to the ladder f, to which it is attached and pivots, by two bolts, i. The cross-rail G extends across the extreme width of the rack, and is attached to the forward ends of the long side rails, F F', by four bolts. (Represented by circles.) The rear cross-rail, H, is attached to the four long side rails, F and F', by four bolts, where the rails intersect each other, and are represented by circles.

To the side rails, F', are fastened two raisers, 60 L, to make that part of the inside rail, F', as high as the top of the outside rail, F, in order that the wheel may run free under a load of grain or hay. The raisers are composed of wooden standards b and caps of wood L, the 65 whole secured to the rails F' by screws or bolts passing through the whole. The long side rails, F and F', are supported and held in place by six supporting cross-braces, N N' N", three ou each side, and attached, respectively, to 70 cross-rails H', R, and P, each brace by a long bolt, e e' e", and a shorter bolt, g g g, respectively. Each bolt passes through the crossrails H', R, and P, the ends of the cross-braces, and through the long side rails, F and F'. 75 The braces are each composed of a short and longer piece of timber halved together in the form of a cross. Each short piece has a shoulder resting against the outside of the long side rails, F', and each longer piece has a shoulder 80 resting against the inside of the long side rails. F. This construction is fully shown in the rear elevation, Fig. 3. The shape of the bottom rails, A A, is clearly shown in Fig. 1, and the shape of the bolster-plates in Figs. 1 and 2. 85

The ladder for the purpose of binding the load of grain or hay on the rack is only shown in the model on the front end of the rack. It may also be placed on the rear end or upon both ends whenever found convenient to do 90 so. When placed upon the rear end of the rack the shape of the pieces attached to the cross-rails H H' will be a little different from those on the front end, C C. I call this a "spread" or "open-bottom" rack.

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

1. In a hay-rack, the combination of spread-

rails A A, bolster - plates D D, and the connecting-rails B B', substantially as described.

2. The combination, in a hay-rack, of the side rails, F and F', end cross-rails, H and G, supporting cross-braces N N' N", raisers L, and cross-rails H', R, and P, as shown and described, and for the purposes set forth.

This specification signed and witnessed this 12th day of October, 1880.

ALBERT G. BARTON.

Witnesses:
M. C. Barry,
John W. Harrison.