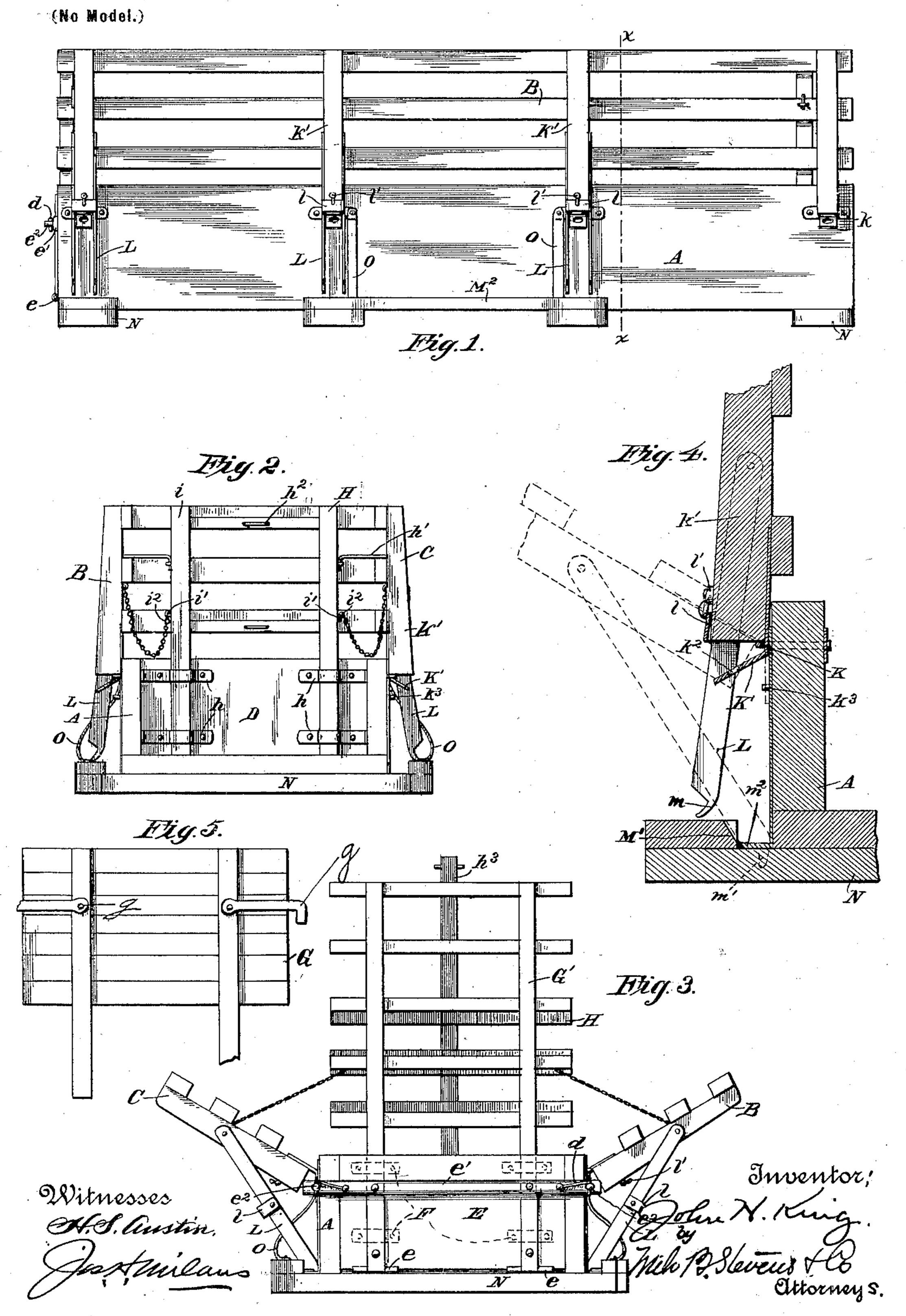
J. H. KING.

COMBINED HAY AND STOCK RACK.

(Application filed May 18, 1900.)



United States Patent Office.

JOHN H. KING, OF DECKERVILLE, MICHIGAN.

COMBINED HAY AND STOCK RACK.

SPECIFICATION forming part of Letters Patent No. 656,770, dated August 28, 1900.

Application filed May 18, 1900. Serial No. 17,156. (No model.)

To all whom it may concern:

Be it known that I, John H. King, a citizen of the United States, residing at Deckerville, in the county of Sanilac and State of Michigan, have invented certain new and useful Improvements in a Combined Hay and Stock Rack; and I do 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, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

and stock rack, and has for its primary object the provision of new and improved means for retaining the adjustable portions of the sides in dropped or raised positions to con-

20 vert a hay-rack into a stock-rack.

The improved details and arrangements of the several parts will be apparent from the description hereinafter given and the ap-

pended claims.

In the accompanying drawings an embodiment of the invention is illustrated, and when referring to the same like letters of reference designate corresponding parts in the several views.

Figure 1 is a side elevation of the rack. Figs. 2 and 3 are respectively end views. Fig. 4 is a cross-section on the line xx of Fig. 1, and Fig. 5 is a detail view of one of the detachable end members.

Referring more specifically to the drawings, A designates the body portion, which forms a permanent portion of the construc-

tion.

B and C are slatted sides hingedly secured to the upper edges of the sides of the body portion A in a manner to be hereinafter pointed out and adapted to be lowered into the position shown by dotted lines in Fig. 4 or to be elevated into a vertical position.

45 (Shown by full lines in the same figure.)

D and E represent the respective end portions of the body, the former being permanently secured in place and the latter being hingedly secured at e, so as to be swung outwardly. When in closed position, this hinged end E is locked by means of the rod e', perforated at its opposite ends and adapted to

project over perforated pins e^2 , extending rearwardly from the sides of the body portion A. Pivotally secured at the opposite 55 ends of the rod e' are catches d, adapted to drop into the perforations in the pins e^2 and lock the rod e' thereon, as clearly seen from Fig. 3. On the inside of the end E, just referred to, are brackets F, designed to support 60 the end member G' when the construction is used as a hay-rack, or a substantially-similar member G, Fig. 5, shorter in height, when the construction is used as a stock-rack. The portion G has the hooks g, designed to engage 65 over the slats in the sides B and C when in their vertical position. The end D of the body is provided with brackets h, similar to the brackets F, and these brackets are designed to retain in position the end H of the 70 rack, the same being provided with hooks h', adapted to engage over the slats into eyelets on the sides B and C. The end H has in turn brackets h^2 , designed to support a rope guide or hanger h^3 . The side bars i of this end H 75 are provided with eyelets i', adapted to be engaged by hooks i^2 , carried at the ends of chains linked to the sides B and C to give an independent end support or brace to said sides when lowered into a position to consti- 80 tute a hay-rack.

The means for hingedly securing the sides B and C to the body comprise the loops or brackets K, secured to the sides of the body through the medium of bolts k, passing there- 85 through, and strap portions K', secured to the cross pieces or rods k' of the sides, adapted to project through the loops or brackets K. These strap portions K' are apertured at k^2 and are bent at such an angle as to engage 90 over and be held in place by pins k^3 , projecting from the sides of the body. The sides when in their lowermost position are further braced by the pivoted arms L, connected by U-shaped bands l, adapted when the sides 95 are in elevated position to surround the crossrods of the sides and be held from swinging movement by the catches l'. These pivoted arms L are provided at their lower ends with fingers m, adapted to project into apertures 100 m', formed in metallic plates m^2 , supported in the sides of the wagon-body by the beams N. These pivoted brace-rods are further confined in proper position and rendered from lateral

movement by the guides M', the two central ones of which have a connecting-rod M² and are braced from the sides by the brackets O. This method of bracing and supporting the sides when the bracket is employed for carrying hay is a very simple and efficient one, and, as will be readily apparent, when the sides are elevated the brace-rods dropped by gravity into vertical alinement therewith, and by simply operating the catches they are prevented from any swinging movement whatever.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a convertible hay and stock rack, the combination with a body portion, of sides hingedly secured thereto, means for locking the sides in vertical position, means for supporting or bracing the sides when in lowered position, and means for locking said braces from swinging movement when the sides are in elevated position comprising means carried by the sides adapted to detachably en-

2. In a convertible hay and stock rack, the combination with a body portion, of sides, hinges for connecting said sides to said body portion, comprising loops or brackets on the sides of said body, perforated strap members on the sides and adapted to project through the loops or brackets, pins projecting outwardly from the sides of the body portion

adapted to engage and retain in proper position the strap members carried by the sides 35 when the sides are in their lowered positions, substantially as described.

3. In a convertible hay and stock rack, the combination with a body portion, of sides pivotally secured thereto, pivoted brace-rods sequenced to said sides, hooks at the lower portion of said brace-rods adapted to project into apertured plates carried by the body portion, a U-shaped band connecting the said brace-rods, and a catch adapted to engage said band 45 to lock the said brace-rods from swinging movement, substantially as described.

4. In a convertible hay and stock rack, the combination with a body portion, of sides pivotally connected thereto, brace-rods capable 50 of independent swinging movement for the said sides when in their lowered positions, fingers on said brace-rods adapted to project into apertured plates carried by the body, guides for the edges of said rods to prevent 55 lateral movement thereof when in operative position, and means on the sides for confining said rods to the sides when the sides are elevated, substantially as described.

In testimony whereof I affix my signature 60

in presence of two witnesses.

JOHN H. KING.

Witnesses:

N. Landsburg,

E. M. MARK.