

(No Model.)

E. McKIM.
COMBINED GRAIN, HAY, AND STOCK RACK.

No. 602,093.

Patented Apr. 12, 1898.

FIG. 1.

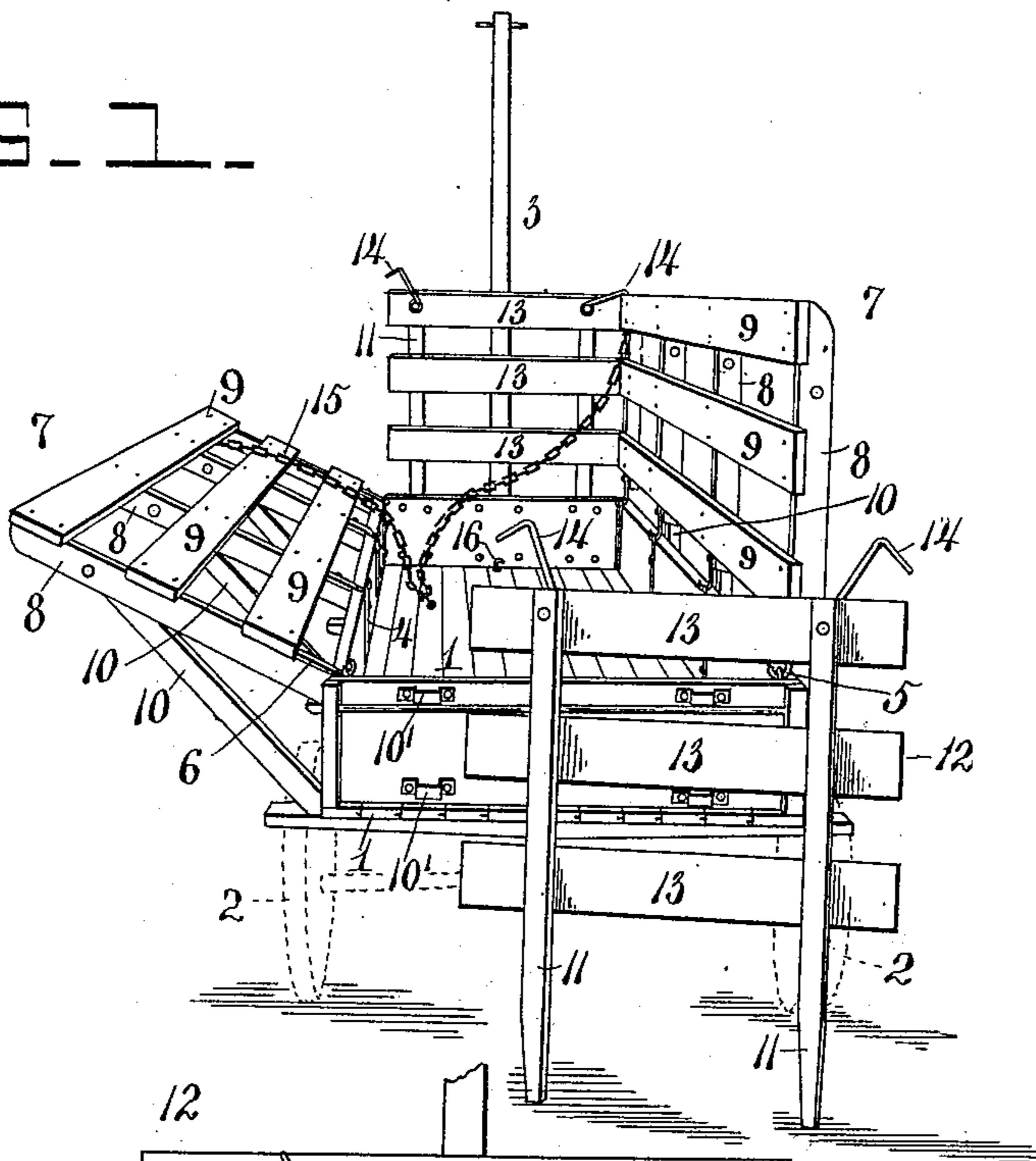
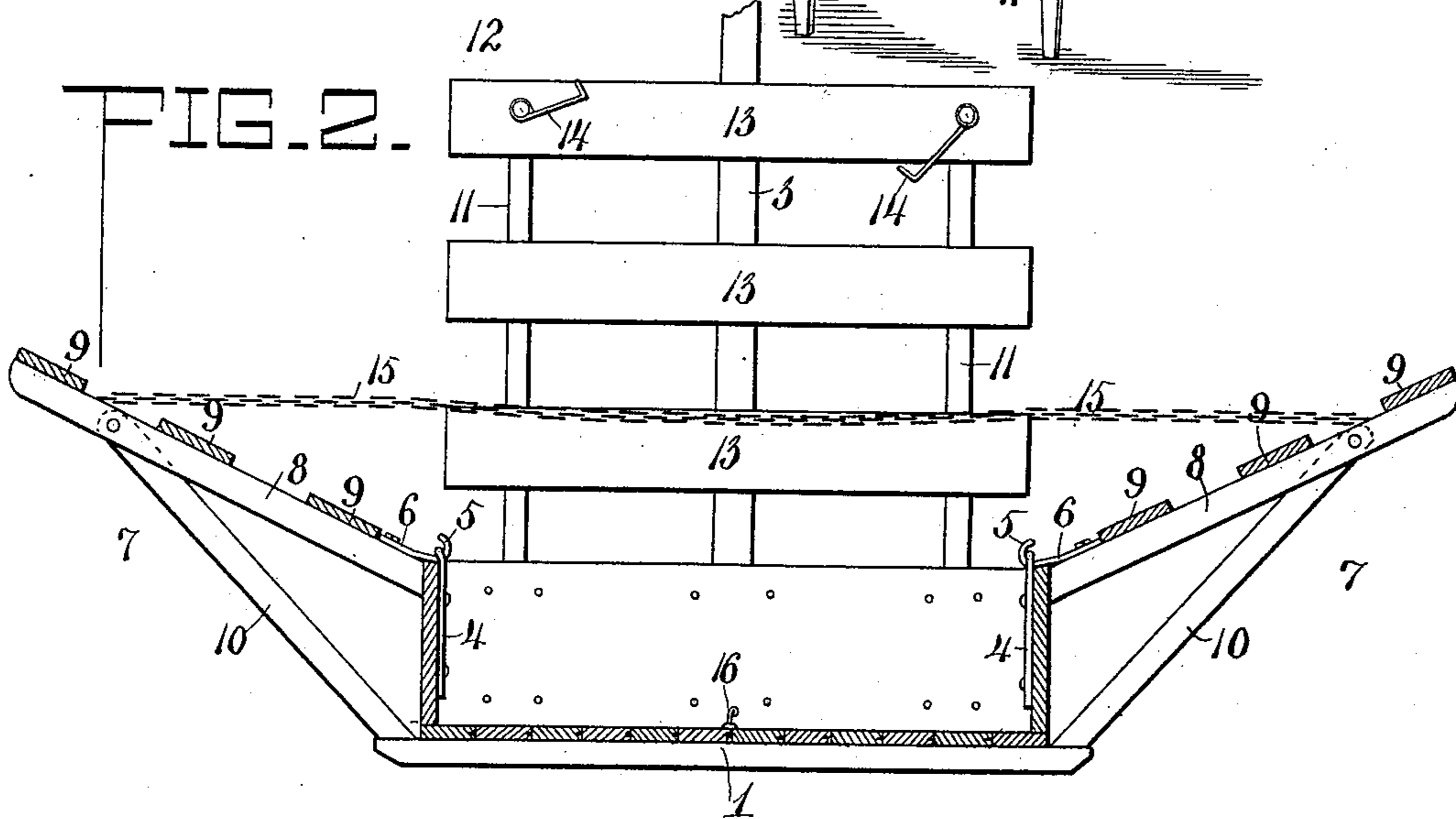


FIG. 2.



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ELIAS MCKIM, OF CASS CITY, MICHIGAN.

COMBINED GRAIN, HAY, AND STOCK RACK.

SPECIFICATION forming part of Letters Patent No. 602,093, dated April 12, 1898.

Application filed August 18, 1897. Serial No. 648,651. (No model.)

To all whom it may concern:

Be it known that I, ELIAS MCKIM, a citizen of the United States, residing at Cass City, in the county of Tuscola and State of Michigan, have invented certain new and useful Improvements in a Combination Grain, Hay, and Stock Rack; and I do hereby 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.

My invention relates to new and useful improvements in hay or grain racks, the primary object of the invention being to provide a rack of this character which with very little change or adjustment can be converted into a rack for transporting live stock.

A further object of the invention is to provide a device of this character that will be especially simple in construction, economical, and one which will possess the requisites of strength and durability.

A still further object is to so construct the movable sections that they can be readily adjusted, removed, or replaced when desired.

I am enabled to accomplish the objects of my invention by the simple means illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of my improved rack. Fig. 2 is a transverse section of the same, showing the side sections rocked to position to use the device for transporting hay, grain, or the like.

Referring to the drawings, the numeral 1 indicates a rectangular body preferably mounted upon wheels 2 and provided at the front thereof with a tongue 3. Secured to the sides of the body, on the inner sides thereof, are a series of metallic cleats 4, perforated for the passage of rivets, by which means they are secured to the body. Said cleats are provided at their upper ends with eyes adapted to receive the hooks 5 upon the lower ends of cleats 6, secured to side sections 7, which sections in the present instance are constructed of a series of vertical parallel bars 8 and a series of horizontal slats 9. Pivotaly secured to the bars 8 of said sections are a series of supporting-arms 10, adapted to rest upon the extremities of the cross-bars at the under side of the wagon-body when said sections are in

the position shown in Fig. 2 for the purpose of transporting hay, grain, or the like.

Secured to the ends of the body, on the outer sides thereof, are metallic keepers 10', adapted to receive the tapering ends of the side bars 11 of the end sections 12, which sections are formed by said bars 11 and cross-slats 13, secured to said bars in any convenient manner.

The numeral 14 indicates four hooks, two of which are secured to each end section, and said hooks are adapted to hook over bars 8 at each end of the side sections for the obvious purpose of locking the sections together when it is desired to transport live stock or the like.

In lieu of the brace-bars 10 I provide at the front of the side sections a chain 15, having its outer ends connected to said sections in any convenient manner and extending into the wagon-body, at the front end thereof, where the links are adapted to engage a hook 16, in practice the brace-bar 10 being found to interfere with the front wheels of the wagon. But a single chain 15 is employed, by the provision of which the said sections 7 are capable of being supported in their inclined or open positions, one from the other—that is to say, the weight upon one of said sections is directly opposed to the weight upon the other, the strain exerted by each nullifying the effect of the other. This construction also relieves the strain from the bottom or frame of the body, which would be exerted were separate chains employed, secured, respectively, to the side sections and to the body. Furthermore, by the provision of a single chain connected at its outer ends to the two side sections and of a single hook to which the links of said chain are adapted to be attached I am enabled to adjust the positions of the sections 7 relative one to the other by a single adjustment of the chain 15 upon the hook 16—that is, should it be desired to have one of the side sections open farther than the other the chain 15 could be adjusted on the hook 16, so that both adjustments of the sections 7 could be made simultaneously.

When it is desired to remove the side and front sections, it is only necessary to rock the side sections toward the center of the body, one at a time, to a certain point, when the hooks 5 will readily become disengaged from

the eyes 4. The hooks having been disengaged from the side sections, the said sections can be readily lifted out of the keepers 10'.

5 I do not desire to be understood as limiting myself to the precise construction of parts shown in the drawings, as many minor changes involving mechanical skill may be made in the scope of the invention without departing from the spirit thereof.

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

15 In a combined grain, hay and stock rack and wagon, the combination with the body thereof, provided on its sides with upright cleats, having eyes in their upper ends, and at its ends with angular metallic keepers, of side sections comprising vertical bars and horizontal slats, hooks secured to said side
20 sections and adapted to engage said eyes, end sections comprising vertical bars and horizon-

tal slats, said bars being adapted to enter said end keepers, hooks upon the end sections adapted to engage the side sections, a chain secured at its outer ends to the said sections 25 for supporting the same one from the other, a hook secured to the wagon-floor adapted to engage the links of said chain for the purpose of adjusting the positions of said side sections relative one to the other, and bars 30 pivotally connected to the vertical bars of the side sections, whereby the rear and middle portions of said sections are supported, as and for the purpose set forth.

35 In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

ELIAS MCKIM.

Witnesses:

HERBERT LENZNER,
A. A. P. McDOWELL.