

No. 722,775.

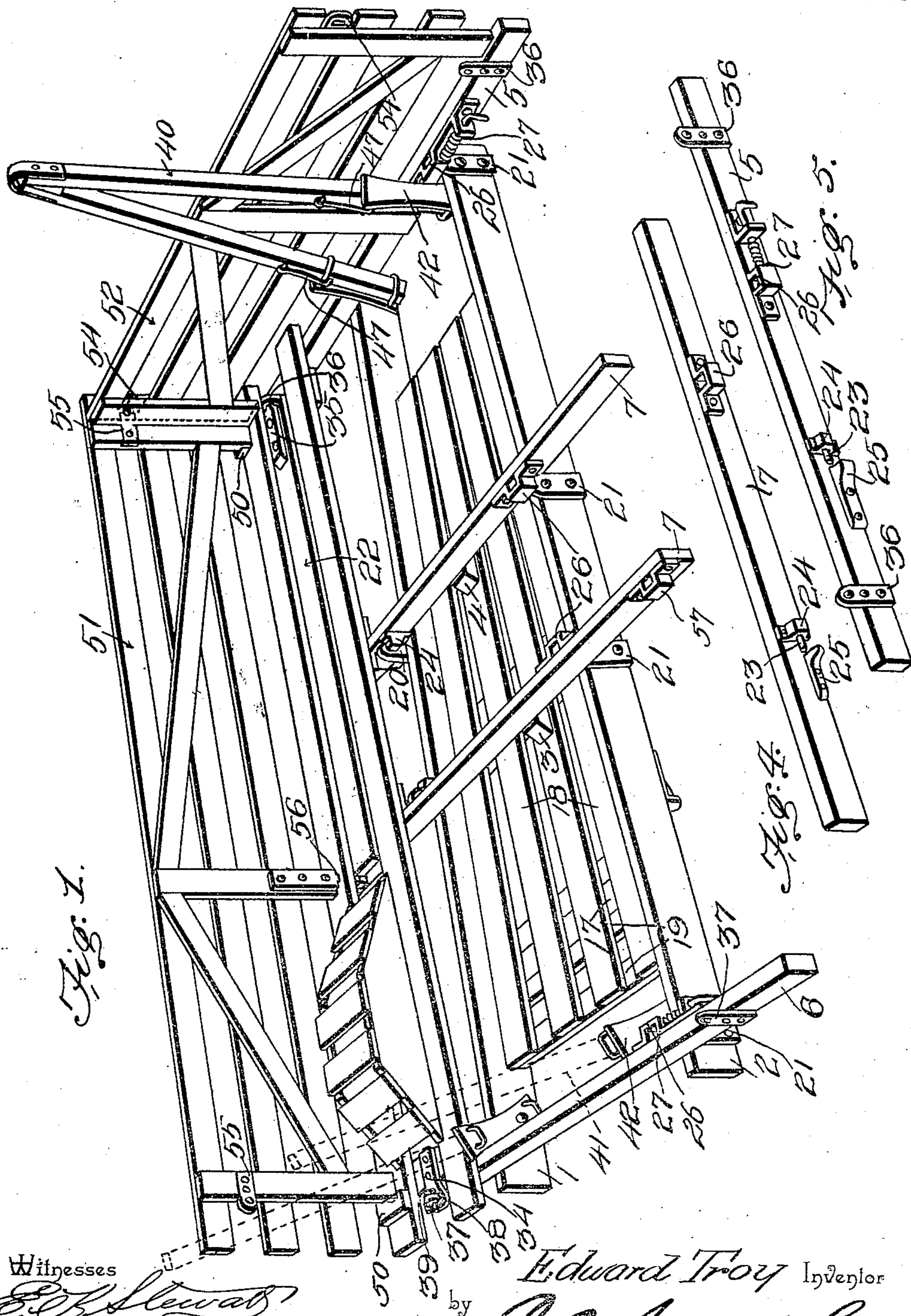
PATENTED MAR. 17, 1903.

E. TROY.  
HAY RACK.

APPLICATION FILED MAY 7, 1902.

NO MODEL.

2 SHEETS—SHEET 1.



Witnesses  
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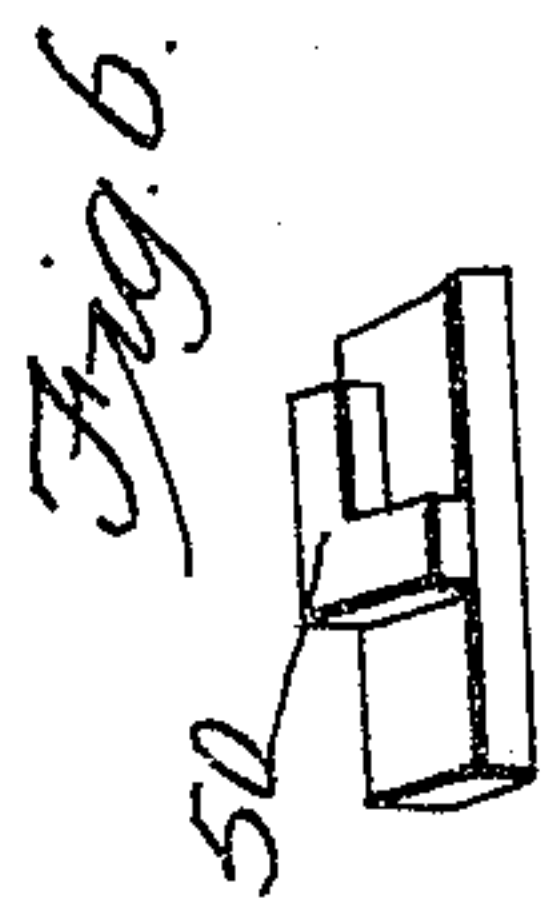
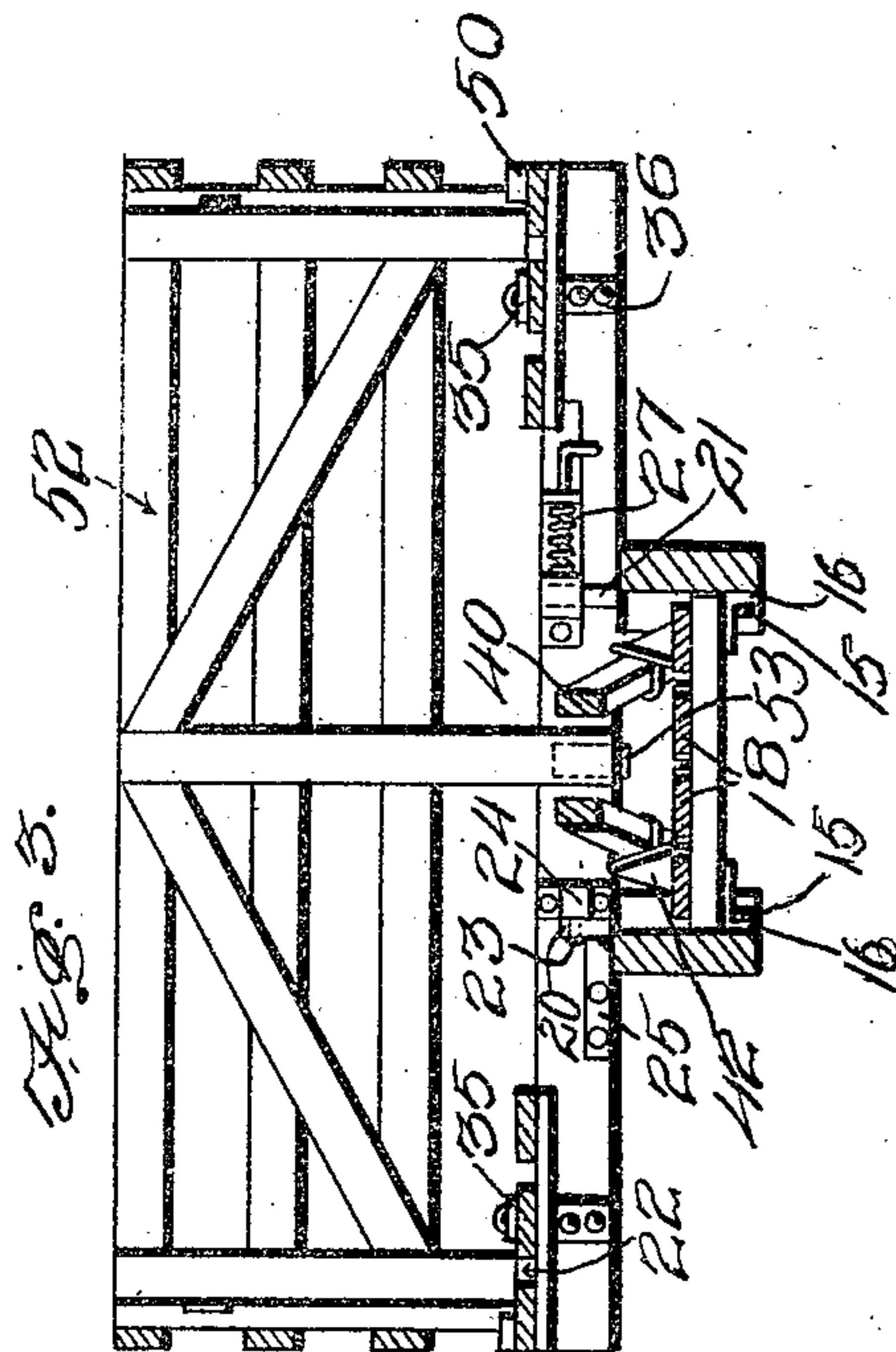
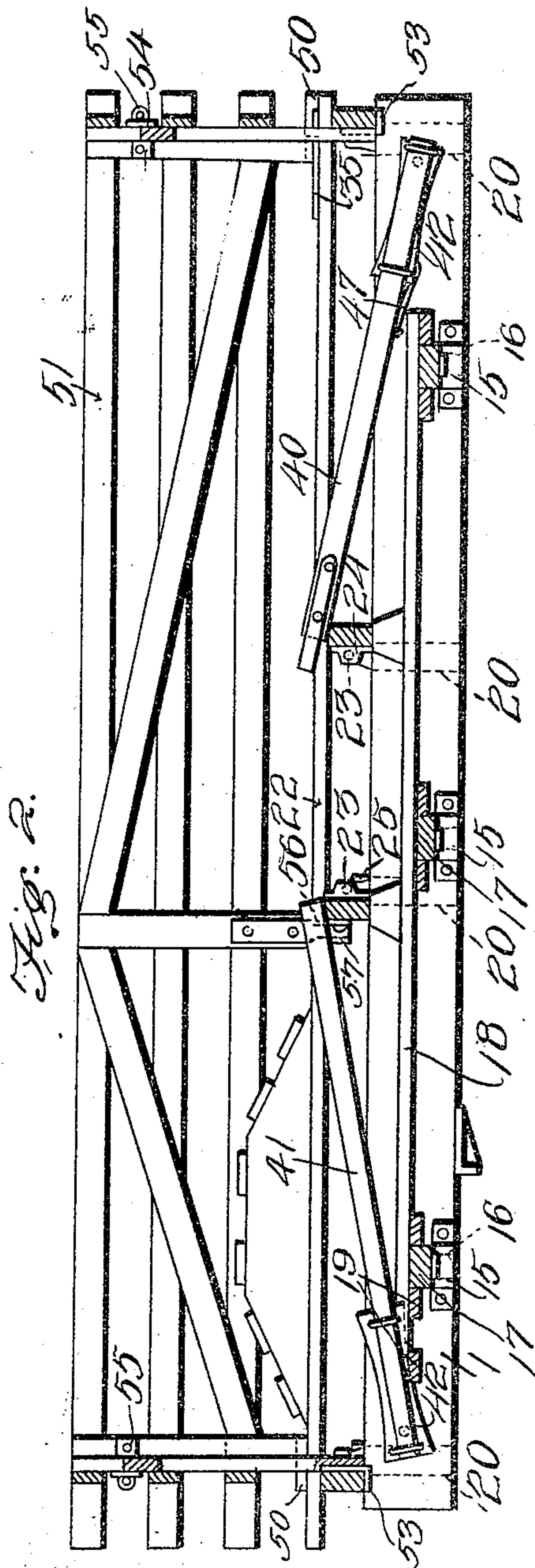
PATENTED MAR. 17, 1903.

E. TROY.  
HAY BACK.

APPLICATION FILED MAY 7, 1902.

NO MODEL.

2 SHEETS—SHEET 2.



Witnesses  
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# UNITED STATES PATENT OFFICE.

EDWARD TROY, OF LACEY, IOWA.

## HAY-RACK.

SPECIFICATION forming part of Letters Patent No. 722,775, dated March 17, 1903.

Application filed May 7, 1902. Serial No. 106,357. (No model.)

*To all whom it may concern:*

Be it known that I, EDWARD TROY, a citizen of the United States, residing at Lacey, in the county of Mahaska and State of Iowa, have invented a new and useful Storm-Rack for Hay-Racks, of which the following is a specification.

The invention relates to a storm-rack for hay-racks.

The object of the present invention is to provide for hay-racks a simple and comparatively inexpensive storm-rack adapted to be readily applied to any flat hay-rack and capable of protecting the lower portion of a load of hay and of preventing the same from being blown away by high winds.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a perspective view of a portion of a storm-rack constructed in accordance with this invention and shown applied to a hay-rack, one side and end being removed to show the parts more clearly. Fig. 2 is a longitudinal sectional view. Fig. 3 is a transverse sectional view. Figs. 4 and 5 are detail views of the intermediate and end transverse bars. Fig. 6 is a detail view of one of the L-shaped plates which form corner-recesses for the sides and ends of the storm-rack.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

1 and 2 designate longitudinal sills designed to be mounted on the front and rear bolsters of a running-gear and forming supports for front and rear transverse bars 5 and 6 and intermediate transverse bars 7. The longitudinal sills are provided at their inner faces with loops 15, consisting of plates located adjacent to the lower edges of the sills and bent outward between their ends to form sockets for the reception of depending tongues 16 of horizontal cross-pieces 17. The depending tongues are formed by L-shaped plates secured to the lower faces of the cross-pieces 17; but any other suitable means may be employed for detachably locking the cross-pieces 17 with the sills. The cross-pieces 17,

which are arranged at intervals, form supports for a horizontal platform 18, consisting of longitudinal slats or bars and connecting transverse slats or bars 19, arranged in pairs at the lower face of the platform and located in advance and in rear of the cross-pieces 17, as clearly shown in Fig. 2. This construction permits the platform to be readily detached when desired. The platform is supported and prevented from rising by blocks 3 and 4, located beneath the intermediate transverse bars 7 and disposed at opposite sides of the center of the platform and secured to the longitudinal slats or bars. These blocks engage the intermediate transverse bars, and the platform may, if desired, be extended to the front and rear transverse bars and be provided with blocks for engaging the same. When the platform is extended to the ends of the hay-rack frame, the standards hereinafter described may be pivotally connected to the platform, and any suitable means may be provided for locking the standards when folded down upon the platform to prevent them from swinging outward in removing the platform from the hay-rack.

The longitudinal sills 1 and 2 are provided at their outer faces with bars or irons 20 and 21, projecting from their upper faces and adapted to be engaged by front and rear and intermediate transverse bars which extend from the side sills to support the longitudinal side portions 22 of the hay-rack. The bars 20 are provided with perforations and are adapted to be engaged by laterally-projecting pins 23, extending outward from inner blocks 24 and projecting over outer blocks 25, which are located at the bottom of the transverse bars at points below the laterally-projecting pins. The laterally-projecting pins permit the transverse bars to be partially rotated to arrange them in a horizontal position over the bars 20, whereby the lower block 25 will be carried to one side of the same to permit the pins 23 to be engaged with and disengaged from the said bars or irons 20, and the blocks 25 are beveled slightly at the bottom to permit the other end of the transverse bar to be lifted out of engagement with the vertical bar or iron 21. After the pin 23 of the transverse bar is engaged with the perforation of one of the projecting bars or irons 20 the said



transverse bar is partially rotated to arrange it in a vertical plane to carry the lower block 25 to a point in front of the bar or iron 20, whereby the pin is prevented from becoming disengaged therefrom by longitudinal movement of the transverse bar. The bar or iron 21 of the other longitudinal sill engages a loop 26 of the transverse bar. The front and rear transverse bars are secured to the lugs or projections formed by the bars or arms 21 by means of spring-actuated bolts 27, extending through perforations of the adjacent loops and engaging corresponding perforations or recesses of the upright bars or irons 21. The intermediate transverse bars do not require such fastening devices, as the side portions 22, which are interlocked with the end transverse bars, retain them in position. The front ends of the side portions 22 are provided with longitudinal pins or projections 35, formed integral with attachment-plates and engaging perforated ears or lugs 36 of the front transverse bar, and the rear transverse bar is provided with perforated lugs 37, extending through slots 38 of plates 34 and engaged by suitable fastening devices 39, consisting, preferably, of keys; but catches or any other suitable locking devices may be employed.

The hay-rack is provided with front and rear standards 40 and 41, which are mounted in pivoted holders 42, consisting of plates provided at their upper and lower ends with loops. The front standards, which are adapted to be engaged at their tops by a pole, are secured in the pivoted holders by means of hooks 47, hinged at a point above the upper loops and having bills engaging suitable holes located below the upper loops.

The sides 22 are provided at their corners with approximately L-shaped plates 50, forming inner corner-recesses and adapted to receive sides and ends 51 and 52 of a storm-rack, which is mounted on the hay-rack at the sides and ends thereof and which is adapted to protect the lower portion of a load of hay to prevent the same from being blown from the hay-rack. The sides and ends 51 and 52 consist of upright bars, horizontal slats or bars connecting the upright bars, and inclined braces supporting the sides and ends, as clearly shown in Fig. 1. The ends are detachably interlocked with the sides and are provided with centrally-arranged outwardly-extending lugs 53 for engaging beneath the front and rear transverse bars, whereby the storm-rack is held down upon the hay-rack. The lugs 53 are preferably formed integral with plates which are secured to the lower ends of the central vertical bars of the end sections of the storm-rack, and the front and rear transverse bars are preferably provided at their lower edges with wear-plates arranged to be engaged by the bottom lugs. The end portions or sections of the storm-rack are provided, adjacent to the sides of the same, with upper loops 54, preferably consisting of open-

ings of plates secured to the vertical end bars of the end sections 52 and receiving perforated lugs 55 of the side sections of the storm-rack. The perforated lugs 55 consist of plates secured to the vertical end bars and projecting outward therefrom, as clearly shown in Fig. 1 of the drawings. The perforated lugs are secured in the loops of the end sections by means of keys or other suitable fastening devices; but spring-catches or any other desired fastening means may be employed for connecting the end and side sections of the storm-rack, and they may also be arranged at both the top and bottom of the sections.

The storm-rack may be made of any desired height, and it is firmly supported against lateral or longitudinal movement by the L-shaped brackets or plates at the corners of the hay-rack, and it is securely anchored to the hay-rack by the projecting bottom lugs, which may be of any desired number. The storm-rack is adapted to protect the lower portion of a load of hay, and it will prevent the same from being drawn away, and it will also save much of a load which is lost by reason of the same coming in contact with vehicles or other objects. The sides of the storm-rack are also provided with depending tongues or fingers 56, formed integral with attachment-plates 57 and extending through perforations of the side portions 22 of the hay-rack and engaging outer loops 57 of the adjacent transverse bar. The loops 57 form sockets for the depending tongues or fingers 56, and they are preferably formed by angularly-bent portions of plates similar to the loops 26. Any number of depending projections or tongues 56 may be employed for supporting the side sections of the storm-rack.

What I claim is—

1. The combination with a hay-rack having horizontal sides and provided with corner plates or brackets forming recesses, side and end sections arranged vertically on the hay-rack and fitted in the recesses of the corner plates or brackets, and means for connecting the side and end sections and for securing the same to the hay-rack, substantially as described.

2. The combination with a hay-rack having horizontal sides, of a storm-rack composed of side and end sections arranged at the sides and ends of the hay-rack, outwardly-extending bottom lugs located at the centers of the end sections at the bottoms thereof and engaging the hay-rack, and fastening devices detachably securing the sections together, whereby the said lugs will hold both the side and end sections of the storm-rack upon the hay-rack, substantially as described.

3. The combination with a hay-rack having horizontal sides provided with sockets and having L-shaped corner plates or brackets, of a storm-rack composed of sides fitted in the corner plates or brackets and having



depending tongues or projections depending into the said sockets, and the end sections also fitted in the corner plates or brackets and detachably secured to the side sections and having bottom lugs interlocked with the hay-rack, substantially as described.

In testimony that I claim the foregoing as

my own I have hereto affixed my signature in the presence of two witnesses.

EDWARD TROY.

Witnesses:

W. G. JONES,  
C. V. RICHMOND.