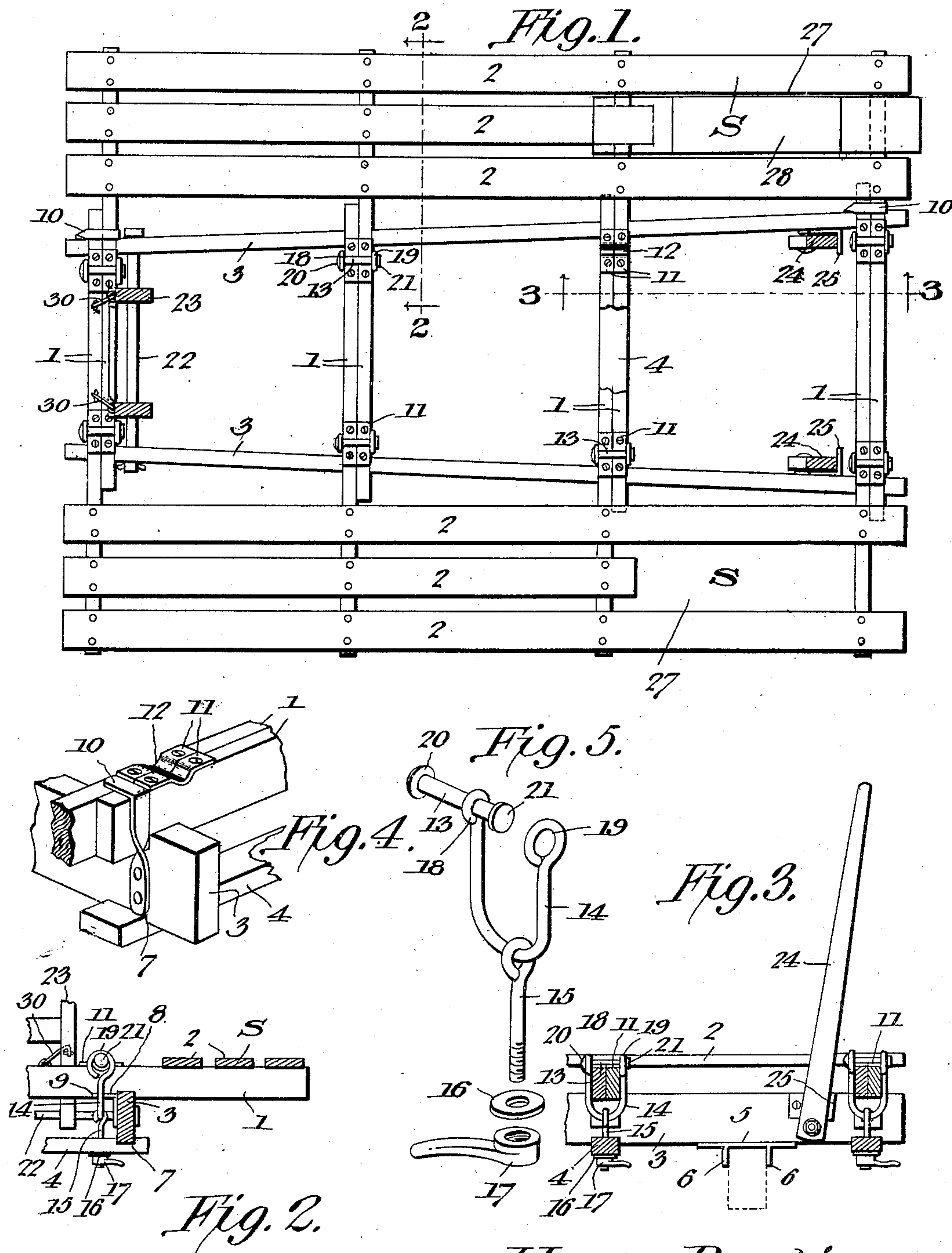


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PATENTED MAY 9, 1905.

H. BASTIAN.
HAY RACK.

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Witnesses
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UNITED STATES PATENT OFFICE.

HENRY BASTIAN, OF METAMORA, ILLINOIS.

HAY-RACK.

SPECIFICATION forming part of Letters Patent No. 789,250, dated May 9, 1905.

Application filed December 27, 1904. Serial No. 238,438.

To all whom it may concern:

Be it known that I, HENRY BASTIAN, a citizen of the United States, residing at Metamora, in the county of Woodford and State of Illinois, have invented a new and useful Hay-Rack, of which the following is a specification.

This invention relates to hay-racks for wagons; and it has among its objects to simplify and improve the construction of this class of devices.

With these and other ends in view, which will readily appear as the nature of the invention is better understood, the same consists in the improved construction and novel arrangement and combination of parts which will be hereinafter fully described, and particularly pointed out in the claims.

In the accompanying drawings has been illustrated a simple and preferred form of embodiment of the invention, it being, however, understood that no limitation is necessarily made to the precise structural details therein exhibited, but that the right is reserved to any changes, alterations, and modifications to which recourse may be had within the scope of the invention and without departing from the spirit or sacrificing the efficiency of the same.

In said drawings, Figure 1 is a top plan view of a hay-rack constructed in accordance with the principle of the invention, the ladder or booming-piece and the rear uprights being shown in section. Fig. 2 is a sectional detail view taken on the line 2 2 in Fig. 1. Fig. 3 is a sectional detail view taken on the line 3 3 in Fig. 1. Fig. 4 is a perspective detail view of one corner of the rack. Fig. 5 is a perspective detail view of one of the clips or fastening devices.

Corresponding parts in the several figures are indicated by like characters of reference.

The improved hay-rack is composed of two side members S S, each of which comprises a plurality of arms or cross-bars 1 1, upon the outer ends of which boards 2 2 are nailed or otherwise secured. These side members are in practice supported upon sills 3 3, the latter being supported upon cross-braces 4 4, as shown. Each sill is provided on its under side with a plate or casting 5, having flanges 6 6 to

engage the bolster of the wagon in connection with which the device is used, as will be readily understood by reference to Fig. 3 of the drawings. The sills 3, the bars or arms 1, and the cross-bars 4 are each provided with notches or gains 7, whereby they will be interlocked when assembled, as will be readily understood. The sills 3 are also provided on their inner sides with angle-plates 8, engaging notches 9 in the under sides of the arms 1 to assist in holding the latter securely in position. This construction is resorted to in order to avoid weakening the wooden arms and sills by cutting deep notches or gains therein.

One of the sills is provided near the ends thereof with hook members 10, which are for the purpose of assisting in the ready assembling of the device by permitting the ends of the arms 1 of the opposite side member to be inserted under said hooks when the side member is first placed in position, as will be readily seen by reference to Fig. 1 of the drawings. Similar hooks may, if desired, be placed upon the opposite sill; but this is not considered essential.

The arms 1 of each side member are provided upon their upper sides with plates 11, the upper sides of which have indentations 12. These indentations are for the reception of clevis-pins 13, that engage eyes in clevises 14, that are arranged in engagement with the sides of the arms 1. The clevises are provided with eyebolts 15, extending through the cross-braces 4, and provided with washers 16 and tail-nuts 17, whereby they may be tightened. The eyes at the ends of the clevis-arms are of different size, each clevis being provided with a relatively small eye 18 and a larger eye 19. The clevis-pin 13 is of a size that will enable it to fit and to slide freely in the smaller eye, and the ends of said clevis-pin are provided with heads 20 21, the latter of which is of a size that will permit it to pass through the larger eye 19 of the clevis. The heads 20 21 will prevent the clevis-pin from becoming detached from the clevis, while at the same time the head 21 will readily pass through the eye 19. It will be observed that by the construction described the clevises may

be permitted to remain permanently in engagement with the cross-bars 4. When the side members of the rack are placed in position, the clevises may be raised and placed in engagement with the sides of the arms 1 1, and the clevis-pins will then be placed in engagement with the eyes 19, after which the tail-nuts 17 may be tightened, thus causing the clevis-pins to engage the recesses or indentations 12 in the plates 11. An absolutely secure connection of the parts will be thereby insured. To disassemble the parts, it is only necessary to loosen the tail-nuts 17 sufficiently to permit the withdrawal of the pins 13, when the clevises may be dropped down below the arms 1 and the side members of the rack may then be readily detached.

The sills are connected near the front ends by means of a cross member or shaft 22, upon which the ladder or booming-piece 23 is mounted in the usual manner. Rear uprights 24, pivotally connected with the sills, are also provided, as well as brackets 25, against which the said uprights may be supported when raised to operative position.

From the foregoing description, taken in connection with the drawings hereto annexed, the operation and advantages of the invention will be readily understood. The improved hay-rack may be manufactured at a very moderate expense. The parts thereof may be very conveniently assembled or disassembled, as required, and owing to the peculiar construction of the clips or fastening members herein described the parts are not liable to become misplaced and lost.

The members of the rack are preferably provided with openings, as 27, for the accommodation of the upper portions of the hind

wheels, and boxes, as 28, are provided when needed to prevent said wheels from rubbing against the load.

For the purpose of sustaining the ladder or booming-piece in operative position connecting members, such as hooks 30, are provided.

Having thus described the invention, what is claimed is—

1. In a hay-rack, a pair of sills, side members having arms adapted to extend across said sills, and cross-bars extending transversely beneath the sills, said sills, arms and cross-bars being provided with notches or gains; and angle-plates connected with the sills and engaging notches in the under sides of the arms.

2. In a hay-rack, a pair of sills, side members having arms adapted to extend across said sills, cross-bars extending beneath the sills, clevises connected flexibly with said cross-bars and having eyes of unequal sizes, and headed pins slidably engaging the smaller eyes.

3. In a hay-rack, a pair of sills, side members having arms adapted to extend across said sills, cross-bars extending beneath the sills, clevises connected adjustably with said cross-bars and having pin-receiving eyes, and pins engaging said eyes and adapted to extend across the arms of the side members; said arms being provided with plates having indentations forming seats for said pins.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

HENRY BASTIAN.

Witnesses:

HENRY LONGENBACHER,
JAS. MARCHAND.