

No. 667,493.

Patented Feb. 5, 1901.

A. L. BUCHER.  
VEHICLE RACK.

(Application filed May 28, 1900.)

(No Model.)

2 Sheets—Sheet 1.

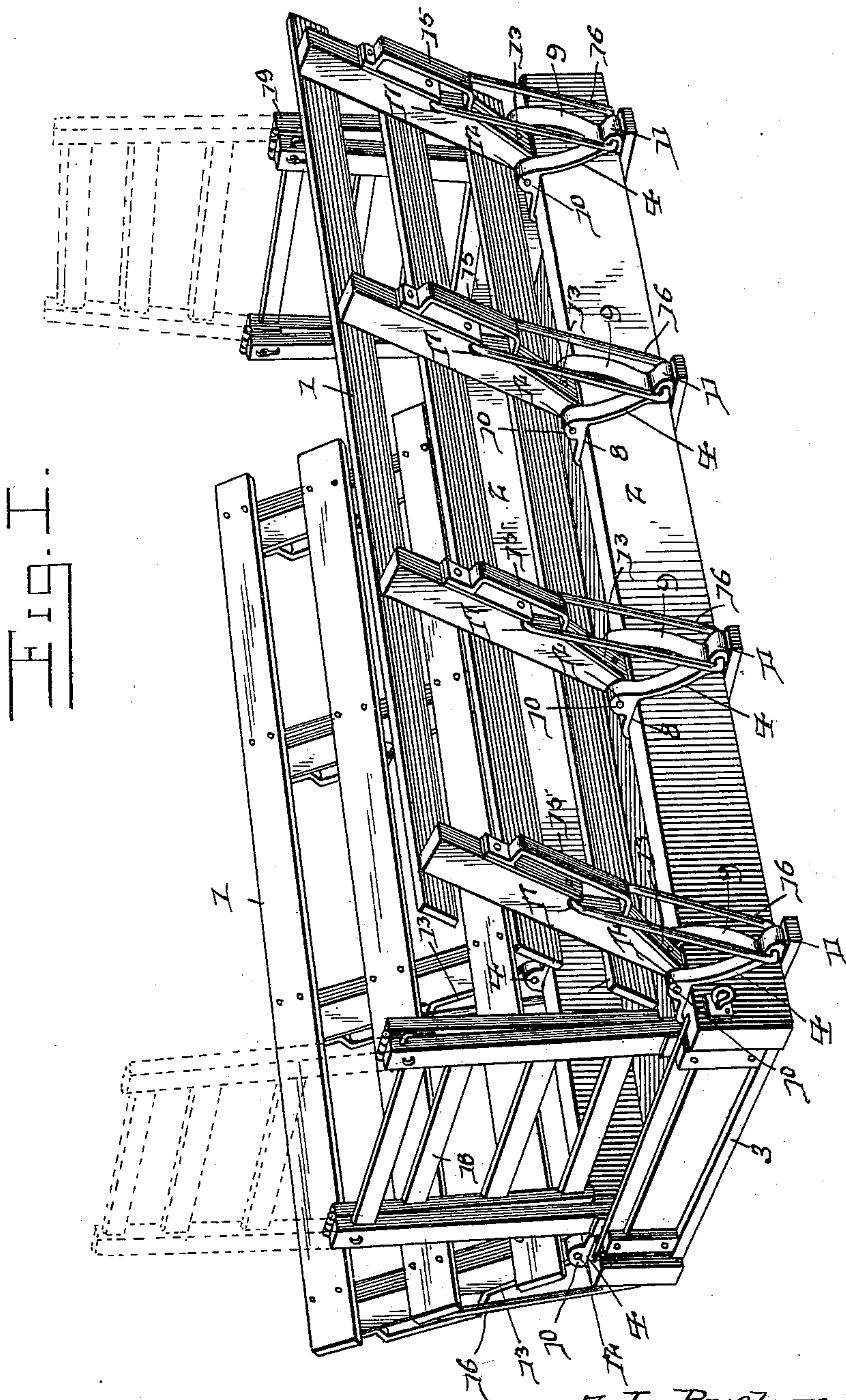


Fig. 1.

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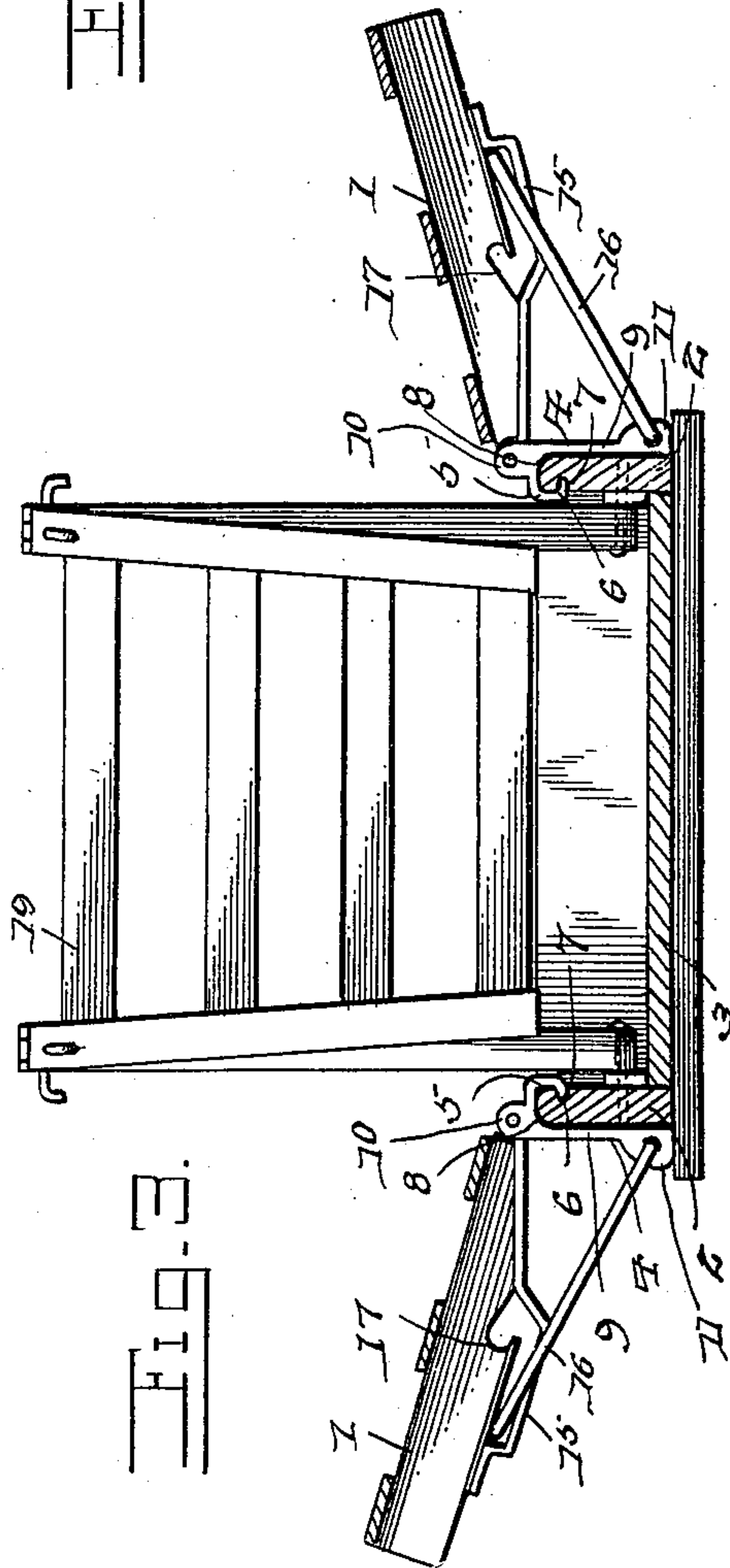
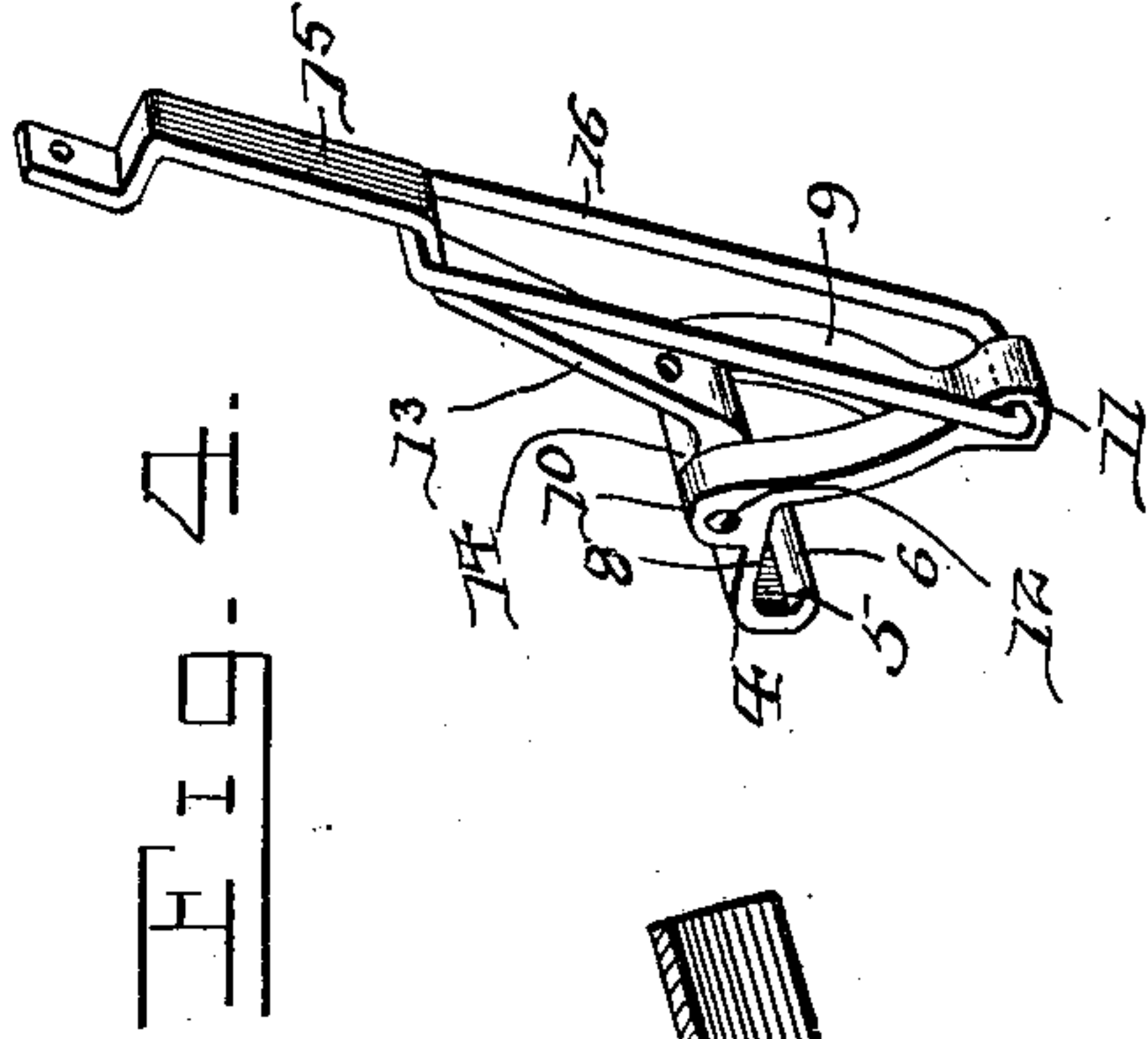
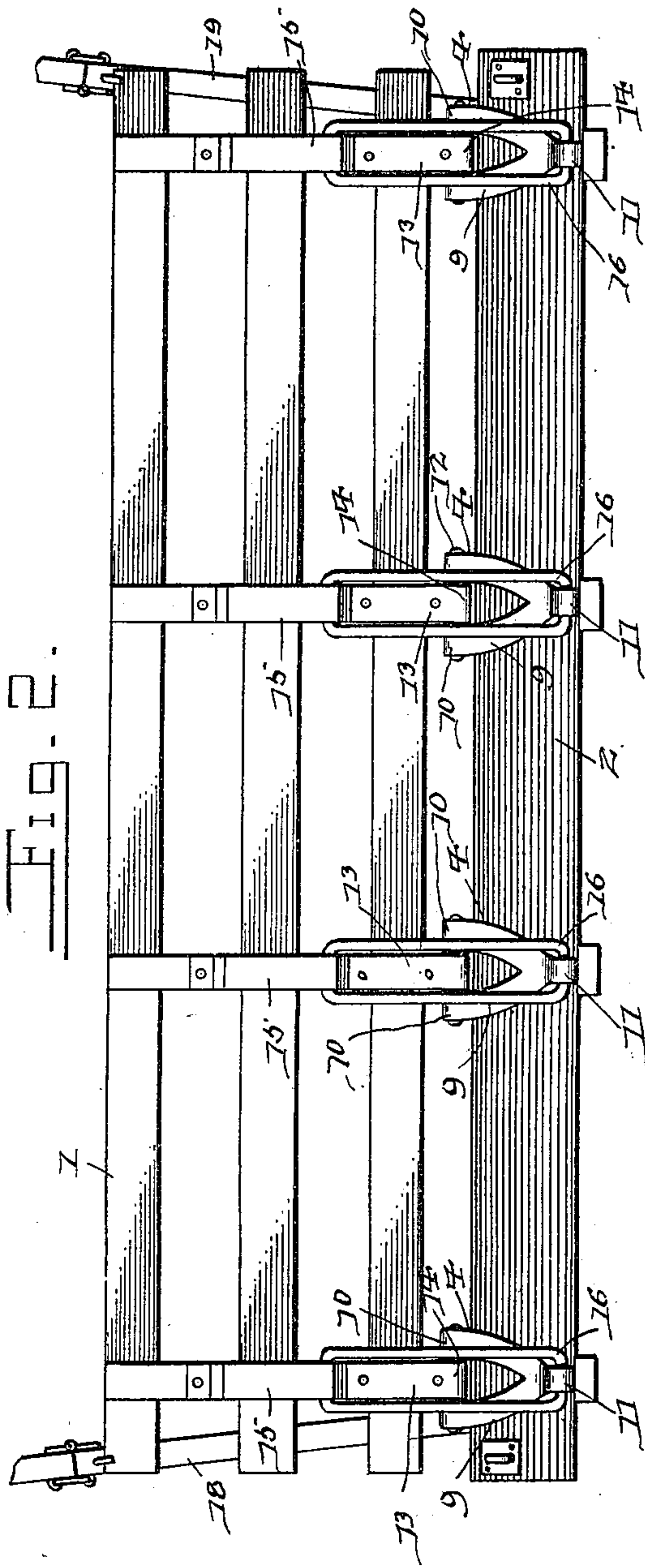
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2 Sheets—Sheet 2.



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# UNITED STATES PATENT OFFICE.

ALBERT L. BUCHER, OF NORTH BALTIMORE, OHIO.

## VEHICLE-RACK.

SPECIFICATION forming part of Letters Patent No. 667,493, dated February 5, 1901.

Application filed May 28, 1900. Serial No. 18,313. (No model.)

*To all whom it may concern:*

Be it known that I, ALBERT L. BUCHER, a citizen of the United States, residing at North Baltimore, in the county of Wood and State of Ohio, have invented a new and useful Vehicle-Rack, of which the following is a specification.

The invention relates to improvements in vehicle-racks.

The object of the present invention is to improve the construction of combination-racks, more especially that shown and described in Patent No. 636,949, granted to me November 14, 1899, to enable the rack sides and the devices for securing the same to the sides of a wagon body or bed to be readily engaged with and disengaged from the same, and to obviate the necessity of employing bolts or similar fastening devices for effecting this result.

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 wagon body or bed provided with a rack constructed in accordance with this invention. Fig. 2 is a side elevation of the same. Fig. 3 is a transverse sectional view. Fig. 4 is a detail perspective view of one of the devices for connecting the sides of the rack with the wagon-body.

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

1 1 designate rack sides hinged by the means hereinafter described to the sides 2 of a wagon body or bed 3, as clearly shown in Fig. 1 of the accompanying drawings, and the said rack sides are adapted to be swung upward to a vertical or approximately vertical position and to be lowered to a slightly-inclined or approximately horizontal position or secured at an intermediate point to adapt the wagon-body for the load to be hauled. The rack is adapted to be arranged for accommodating a load of hay, wood, grain, and various other classes of loads. The rack sides are detachably clamped to the sides 2 of the wagon body or bed by means of a series of clamps 4, preferably consisting of cast-

ings and provided at their tops with inwardly-extending jaws 5, having inwardly-extending engaging portions or flanges 6, adapted to enter grooves 7 of the inner faces of the sides 2 of the wagon body or bed, as clearly illustrated in Fig. 3 of the accompanying drawings. Each clamp is provided with a horizontal top portion 8 and a depending outer vertical portion 9 and is substantially V-shaped, the upper terminals of the sides being connected by the said jaw 5. The top of the clamp rests upon the upper edge and the depending vertical portion fits against the outer face of the side of the body or bed. The sides of the V-shaped portion are provided at the top of the clamp with upper eyes 10, and the depending portion is provided at its bottom with an eye 11. The eyes 10 receive a transverse pintle 12 for hinging a bar or member 13 to the clamp, and the said bar or member, which is provided at its lower or inner end with an eye 14, has its outer portion angularly bent and offset to provide a keeper 15. The bar or member 13 is secured to the cross-pieces or standards of the rack sides, and the keepers receive the upper ends of adjusting and supporting links or braces 16, which are hinged to the bottoms of the clamps by being linked into the lower eyes 11. By this construction the rack sides and the means for hinging and securing them to the sides of the wagon body or bed are connected together and are adapted to be readily interlocked with and detached from the said wagon body or bed. When the rack sides are removed, they carry with them the clamps, the keepers, and the links, leaving the wagon body or bed entirely free, and when the rack sides are mounted on the wagon body or bed their weight operates to hold the clamps firmly in engagement with the sides of the wagon body or bed and the grooves thereof. The clamps are arranged at a slight inclination to engage them with the grooves, and in order to disengage them therefrom their lower portions must be swung upward, so that there is no liability of the parts becoming accidentally disengaged from the sides of the wagon body or bed. This construction and arrangement also obviates the necessity of providing bolts or similar fastening devices for securing the clamps or irons to the body or bed, and the greater the load placed on the vehicle the



more securely will the clamps be engaged with the body or bed. The clamps may be arranged on an ordinary wagon body or bed or a frame or platform may be constructed to receive the same.

The standards or cross-bars of the rack sides are provided within the keepers with notches or rests 17, which may be of any desired number to secure the necessary adjustments of the rack sides.

The platform or wagon-body has end or head racks 18 and 19 hinged to it, and these end or head racks, which may be constructed in any suitable manner, preferably like those shown and described in the above-mentioned patent, are composed of sections and are adapted to be arranged as shown in dotted lines in Fig. 1, and they constitute end standards when the parts are arranged to form a hay-rack. The head or end racks are preferably secured to the sides of the platform or body by short pivots, as indicated in Fig. 3 of the accompanying drawings.

It will be seen that the vehicle-rack is exceedingly simple and inexpensive in construction, that the sides are detachably mounted on the platform or body without employing bolts or similar fastening devices, and that the weight of the rack sides holds the clamps firmly in engagement with the grooved sides of the said platform or body. It will also be apparent that when the rack sides are removed from the body or platform they carry with them the clamps and the adjusting and

supporting links, leaving the body or platform entirely free.

What I claim is—

1. In a vehicle-rack, the combination of a support or body provided at the inner faces of its sides with grooves, clamps arranged on the sides of the support or body and provided at their tops with jaws having engaging portions or flanges extending into the said grooves, rack sides hinged to the clamps, and means for adjustably connecting the rack sides with the clamps, substantially as described.

2. In a vehicle-rack, the combination of a clamp composed of a substantially V-shaped body portion provided at the top with opposite eyes and having a bottom eye, and a jaw connecting the upper terminals of the sides of the body portion and extending inward and adapted to engage the inner faces of the sides of a wagon body or bed, a bar or member having an eye and hinged between the upper eyes of the clamp, and a brace or link hinged to the bottom eye of the clamp and adapted to support a rack side, 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.

ALBERT L. BUCHER.

Witnesses:

W. H. McMILLEN,  
J. W. STONER.