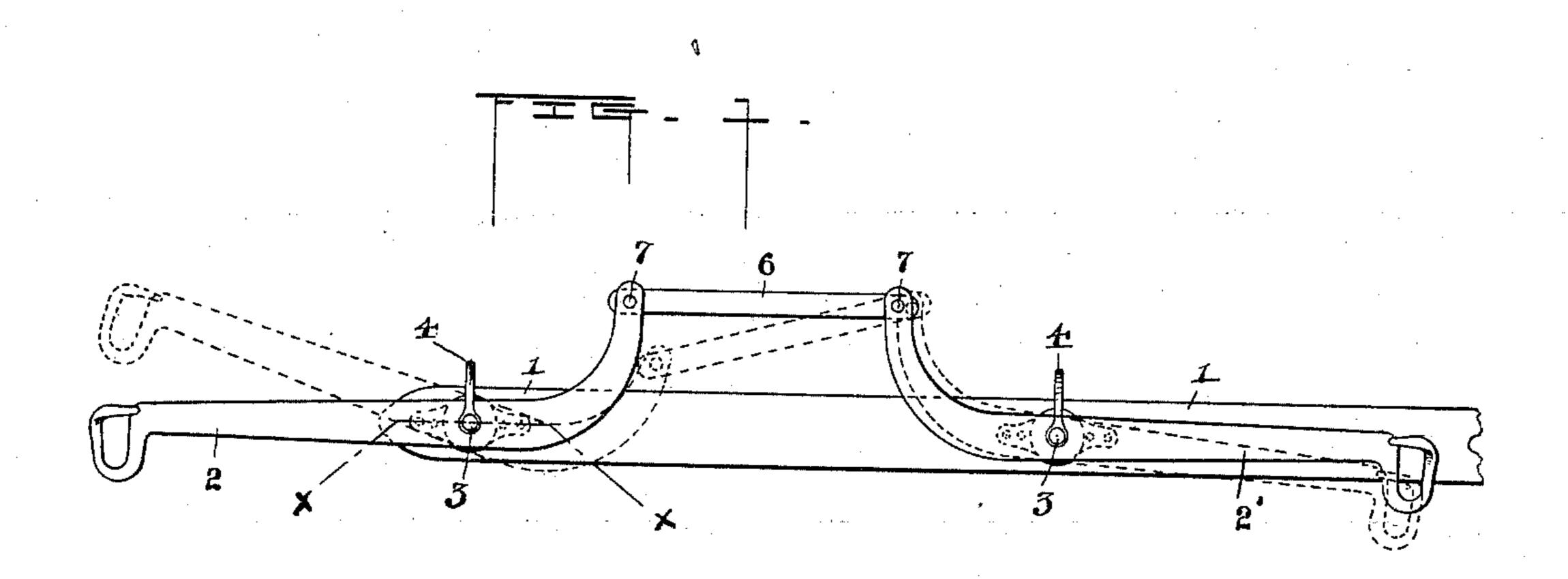
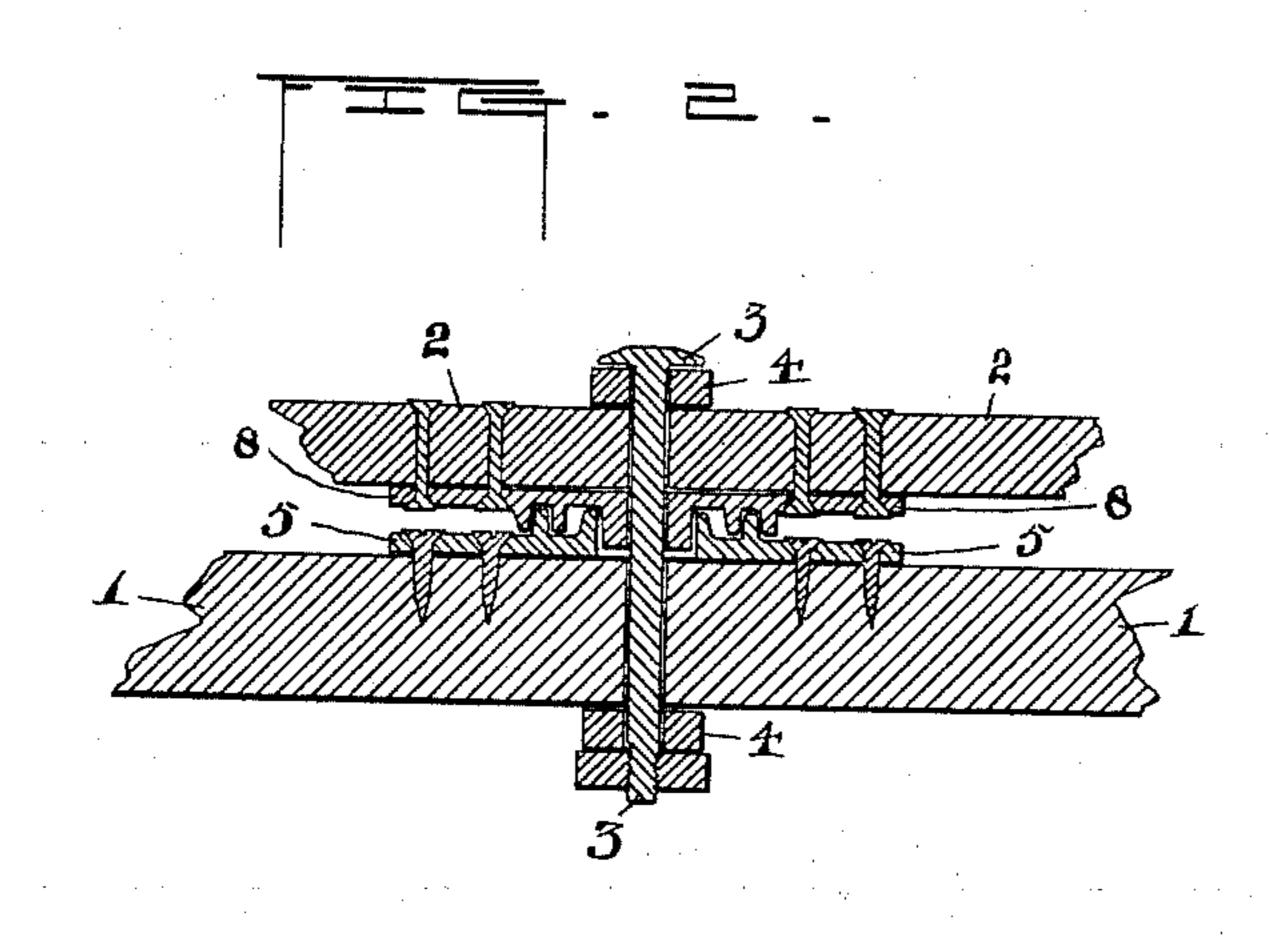
(No Model.)

J. H. IRION.
WHIFFLETREE.

No. 467,601.

Patented Jan. 26, 1892.





WITNESSES

anch. M. Cathin. Steve Voyles. John W. Prion by Buy. R. Catlingty.

THE NORRIS FETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

## United States Patent Office.

JOHN H. IRION, OF PAWNEE CITY, NEBRASKA.

## WHIFFLETREE.

SPECIFICATION forming part of Letters Patent No. 467,601, dated January 26, 1892.

Application filed June 29, 1891. Serial No. 397,870. (No model.)

To all whom it may concern:

Be it known that I, John H. Irion, a resident of Pawnee City, in the county of Pawnee and State of Nebraska, have invented certain new and useful Improvements in Whiffletrees; 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 pertains to make and use the same.

The invention has relation to whiffletrees adapted to be used on vehicles, agricultural implements, and the like, and has for its object to maintain equality of strain on the traces under varying conditions, and also to guard against the swinging of the end of the whiffletree against the wheel, and also to distribute the strain upon the doubletree or evener; and the invention consists in the construction hereinafter described and pointed out.

In the accompanying drawings, Figure 1 is a plan view of a singletree and a portion of a doubletree. Fig. 2 is a section on line x x of Fig. 1.

Numeral 1 indicates a portion of a doubletree, and 2 2' portions or sections of a singletree pivotally secured thereto by means of bolts 3 and clevises 4. To the bottom of each singletree-section is secured a bearing-plate 30 8, adapted to rest upon and fit a plate 5 fixed on the doubletree. These plates have circular parts provided with annular bearings, a cross-section of which is shown in Fig. 2.

6 indicates a link or bar connected to the inner ends of the singletree-sections by pivots or bolts 7. The inner ends of said sections 2 and 2' are curved forward, substantially as indicated. The particular form of the curve, however, is not essential, nor is it necessary that the curved parts shall extend forward, as shown in the present instance, since the device would operate, and some of the advantages of the improvement would be secured were they made straight.

The dotted lines in Fig. 1 indicate the extreme movement of the singletree. Each section has a separate pivot, and its motion about

the same is more restricted than when the pivot-bolt passes through the center of a singletree made in one piece. Neither section 50 can be swung back of the position shown in dotted lines at the left of Fig. 1. The latter cannot therefore catch in the wheels. The strain of the singletree upon the doubletree is divided between the two bolts 3, and these 55 can be made smaller than when only one is used, as is customary, and it is obvious that the doubletree will be less liable to break. It is obvious, also, that the invention is applicable to a single carriage in which no double- 60 tree is employed, and also that the forms and proportions illustrated can be varied so long as the mechanical principles and operation are not substantially changed.

Having thus described my invention, what 65 I desire to secure by Letters Patent is—

1. A singletree consisting of two sections, each pivoted intermediate its ends to a double-tree or support, and a rigid link having each of its ends pivoted to one of the said sections, 70 the pivots of the link being normally at one side of the intermediate pivots of the sections and not in the same straight line with either, but adapted to be moved by a suitable movement of the sections into the same straight 75 line with the intermediate pivot of either section, whereby said pivots, link, and section limit the forward movement of the other section about its intermediate pivot, substantially as set forth.

2. The singletree consisting of two sections pivoted intermediate their ends, each having a hook on its outer end and having its inner end curved, and a link pivotally connecting said curved ends, said link being normally 85 free to move about both pivots, substantially as set forth.

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

JOHN H. IRION.

Witnesses:

A. S. STORY, R. C. ANDERSEN.