A. HANCE. Whiffletree.

No. 203,146.

Patented April 30, 1878.

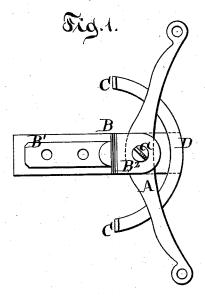


Fig.2.

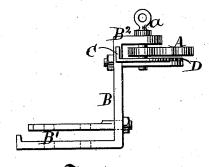
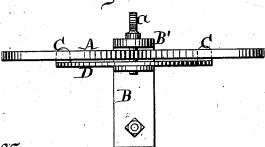


Fig.3.



Chas Wahlers Otto Stupeland Inventor.

archibald Hance
per Van Vantorord & Slauf,
others

## UNITED STATES PATENT OFFICE.

ARCHIBALD HANCE, OF NEW YORK, N. Y.

## IMPROVEMENT IN WHIFFLETREES.

Specification forming part of Letters Patent No. 203,146, dated April 30, 1878; application filed April 10, 1878.

To all whom it may concern:

Be it known that I, ARCHIBALD HANCE, of the city, county, and State of New York, have invented a new and useful Improvement in Whiffletrees, which improvement is fully set forth in the following specification, reference being had to the accompanying drawings, in which-

Figure 1 represents a plan or top view of a whiffletree embracing my invention. Fig. 2 is a side elevation thereof. Fig. 3 is a front view of the same.

Similar letters indicate corresponding parts. My invention relates particularly to whiffletrees for horse railroad-cars, its object being mainly to prevent the ends of the oscillating draft-bar from striking against the dash-board of the vehicle, and to support the ends of said

It consists in a vertical frame or a bar having a rearwardly-extending clip for attachment to the vehicle, and a forwardly-extending clip, provided on its lower portion with a segmental guide-bar, having rearwardly-extending arms, bent upward at their ends to form stops for preventing an excessive oscillation of a whiffletree pivoted in said clip and supported by said arms, as will be hereinafter more particularly described.

In the drawing, the letter A designates the oscillating draft-bar, and B is the supporting-

frame of my whiffletree.

In order to adapt the frame B to be coupled to a horse-car or other vehicle, it is constructed with a clip, B', having one or more holes for the reception of a coupling-pin. I also provide such frame with a secondary clip, B2, in which the draft-bar A is held by a pin, a. This bar is preferably curved, as shown in

The letter C designates the stops, which I use for the purpose of limiting or regulating the motion of the draft-bar A. These stops are situated in a horizontal plane with the bar A—or, in other words, they are situated in the path of such bar; and in order to bring the stops in this position, and at the same time form a bearing for the outer portions of the bar, I form or affix the stops on the respective ends of a segmental guide, D. This guide is constructed as part of the frame B, and it is arranged concentrically to the pivot b, the same being composed of a flat strip of metal or other material, and the stops C being formed by simply bending the ends of such strip upward, as clearly shown in Fig. 2. The stops C, however, can also be arranged in other ways—as, for instance, the same can be affixed to arms projecting from opposite sides of the supporting-frame B.

I prefer to arrange the stops C in such relation to the frame B that they lie in a plane extending at right angles to such frame contiguously to the axis of the draft-bar A; but this position can be varied to suit the vehicle to which my whiffletree is to be attached.

It will be seen that while the stops C permit the draft-bar to describe its required motion, at the same time prevent either end thereof from passing rearward beyond a certain point, and hence the ends of the bar can easily be prevented from striking against the vehicle to which the whole is attached, whereas by the segmental guide D a vibrating or shaking motion of the bar is to a great extent prevented.

If desired, the strip composing the segmental guide D may be duplicated, in order to increase the effect of the guide.

What I claim as new, and desire to secure

by Letters Patent, is-

1. The frame B, having the clip B¹ for attachment to the vehicle, and clip B2, provided with the segmental guide-bar D, having rearwardly-extending arms, bent upward to form stops C C, and adapted to receive a whiffle-

tree, substantially as described.

2. The combination, with the frame B, have ing the clip B<sup>1</sup> for attachment to the vehicle, and clip B<sup>2</sup>, provided with the segmental guide-bar D, having rearwardly-extending arms, bent upwardly to form stops CC, of the oscillating whiffletree A and bolt a, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand and seal this 6th

day of March, 1878.

ARCHIBALD HANCE. [L. S.]

Witnesses:

J. VAN SANTVOORD. CHAS. WAHLERS.