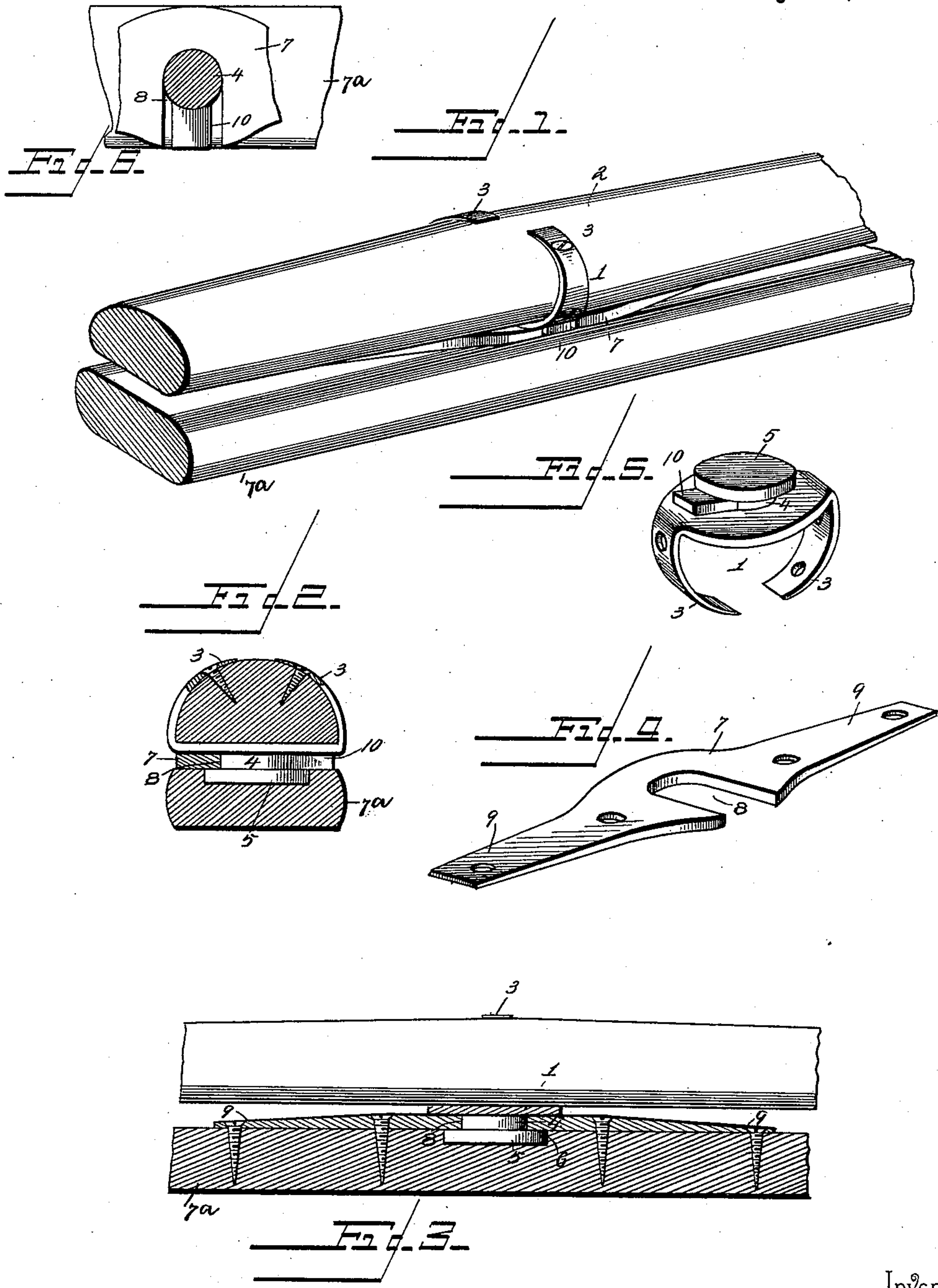


(No Model.)

R. J. VANDERBECK.  
WHIFFLETREE COUPLING.

No. 564,264.

Patented July 21, 1896.



Inventor.

R. J. Vanderbeck.

Witnesses  
Thos. W. Riley.  
J. F. Riley

By his Attorneys.

C. A. Snow & Co.



# UNITED STATES PATENT OFFICE.

R J. VANDERBECK, OF SHELDON, IOWA, ASSIGNOR OF ONE-HALF TO  
W. H. SLEEPER, OF SAME PLACE.

## WHIFFLETREE-COUPLING.

SPECIFICATION forming part of Letters Patent No. 564,264, dated July 21, 1896.

Application filed April 11, 1896. Serial No. 546,335. (No model.)

*To all whom it may concern:*

Be it known that I, R J. VANDERBECK, a citizen of the United States, residing at Sheldon, in the county of O'Brien and State of Iowa, have invented a new and useful Whiffletree-Coupling, of which the following is a specification.

The invention relates to improvements in whiffletree-couplings.

10 The object of the present invention is to provide a simple and effective device adapted for pivoting a whiffletree to a doubletree or to the cross-bar of a pair of shafts without employing a pivot-bolt, and capable of main-  
15 taining a whiffletree permanently in proper position to prevent the same from sagging or becoming twisted and causing the strain incident to drawing a vehicle to be exerted on one trace or tug only.

20 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 claim hereto appended.

25 In the drawings, Figure 1 is a perspective view of a portion of a whiffletree and a cross-piece coupled by my improved device. Fig. 2 is a vertical sectional view taken transversely of the whiffletree. Fig. 3 is a similar  
30 view taken longitudinally of the same. Fig. 4 is a detail perspective view of the attachment-plate. Fig. 5 is a detail in perspective view of a whiffletree-plate. Fig. 6 is a horizontal sectional view of the whiffletree-cou-  
35 ling.

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

40 1 designates a whiffletree-plate constructed of suitable metal, preferably wrought-iron, and designed to be arranged on the lower face of a whiffletree 2, which may be either a single or double tree, and the plate is provided with upwardly-extending arms 3, adapted to  
45 be bent inward against the front and rear faces of the whiffletree and to embrace the same and to be secured to the whiffletree by suitable fastening devices, such as screws or the like. The whiffletree-plate is provided  
50 with an integral depending pivot 4, provided at its bottom with a circular head or flange 5,

adapted to fit in a socket 6 of a cross-piece 7<sup>a</sup>, which may be either a doubletree, the cross-bar of a pair of shafts, or a pole or tongue.

The pivot is secured in the socket 6 by an attachment-plate 7, constructed of suitable  
55 metal and provided with a transversely-disposed opening 8, substantially U-shaped and extending inward from one side of the attachment-plate. The attachment-plate embraces  
60 the pivot above the flange or head which projects beyond the opening 8 and bears against the lower face of the attachment and is provided with extensions 9, secured to the upper  
65 face of the cross-piece 7. The whiffletree-plate is provided at one side of the pivot with a lug 10, fitting in the opening and having a limited movement therein and limiting the  
70 swing of the whiffletree, and the open side of the attachment-plate and the lug may be arranged either in front or rear of the whiffletree, but are preferably arranged at the front  
side of the same.

The parts are assembled by first interlocking the pivot of the whiffletree-plate with the  
75 attachment-plate. The latter is then secured to the tree or bar with the head of the pivot in the socket thereof, and the whiffletree is then attached to the parts already assembled by bending the arms of the whiffletree-plate  
80 around it. The whiffletree conceals the fastening devices of the attachment-plate and prevents access to them until the arms of the whiffletree-plate are detached from the whiffletree.  
85

It will be seen that the coupling is simple and inexpensive in construction, that it dispenses with the ordinary pivot-bolt, and that it is capable of being readily applied to singletrees and doubletrees, and that it prevents  
90 them from sagging forward and becoming inoperative.

Changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or  
95 sacrificing any of the advantages of this invention.

Having thus described the invention, what is claimed, and desired to be secured by Letters Patent, is—

100 The combination of a tree or bar provided in its upper face with an annular socket, a

whiffletree, the depending circular pivot provided at its lower end with a circular head arranged in the annular socket of the tree or bar, the attachment-plate 7 secured to the  
5 tree or bar and provided with a substantially U-shaped opening 8 disposed rearwardly and extending to the rear edge of the attachment-plate and receiving the pivot and permanently swiveling the latter to the tree or bar,  
10 a lug mounted on the pivot at the rear side thereof between the head and the whiffletree and located within the U-shaped opening of

the attachment-plate to limit the swing of the whiffletree, and a whiffletree-plate formed integral with the pivot and securing the whiffletree to the same, substantially as described. 15

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

R J. VANDERBECK.

Witnesses:

W. H. SLEEPER,  
P. W. HALL.