

No. 665,049.

Patented Jan. 1, 1901.

T. A. BAKKEN.
COUPLING FOR WHIFFLETREES.

(Application filed Sept. 15, 1900.)

(No Model.)

Fig. 1.

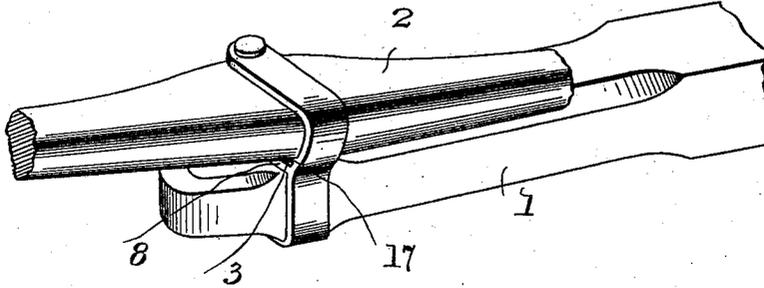


Fig. 2.

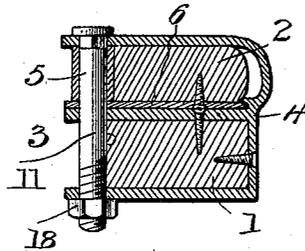


Fig. 3.

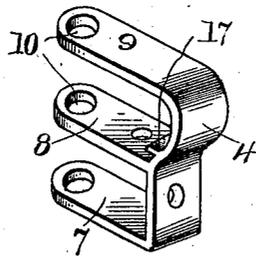


Fig. 4.

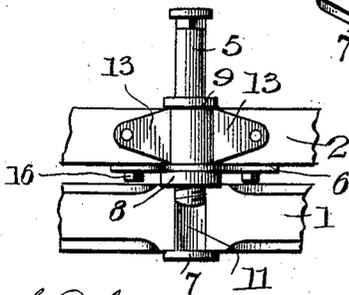
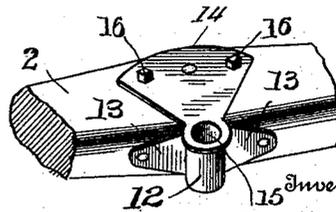


Fig. 5.



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COUPLING FOR WHIFFLETREES.

SPECIFICATION forming part of Letters Patent No. 665,049, dated January 1, 1901.

Application filed September 15, 1900. Serial No. 30,144. (No model.)

To all whom it may concern:

Be it known that I, THORE A. BAKKEN, a citizen of the United States, residing at De Soto, in the county of Vernon and State of Wisconsin, have invented certain new and useful Improvements in Couplings for 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 appertains to make and use the same.

My invention relates to improvements in couplings for whiffletrees; and it consists in a clevis or clip adapted to embrace both a doubletree and a singletree and having a central piece extending between the two, a plate mounted upon the singletree, and an overhanging ledge formed upon the clip or clevis for engaging the said plate to prevent tipping of the singletree.

It also consists of certain other novel constructions, combinations, and arrangements of parts, as will be hereinafter more fully described and specifically claimed.

In the accompanying drawings, Figure 1 represents a perspective view of a coupling made in accordance with my invention and applied to a double and single tree. Fig. 2 represents a vertical cross-section through the said coupling. Fig. 3 is a perspective view of the clip or clevis forming a part of the said coupling. Fig. 4 is a front elevation of the coupling, showing the pivot-pin partially removed; and Fig. 5 is a perspective view of the under side of the singletree, showing the plate and means for limiting the movement of the said singletree.

My improved clevis or clip is so constructed that the pivot-pin does not have to be passed through the whiffletrees, so that all strain upon the said pivot-pin will be well braced, and at the same time any tipping of one whiffletree with respect to the other will be entirely guarded against.

1 in the drawings represents a doubletree, 2 a singletree, and 3 a coupling for securing the double and single tree. The coupling comprises a double clip or clevis 4, a pivot-pin 5, and a lock-plate 6. The double clevis 4 is preferably applied to the rear edges of the whiffletrees which are to be connected and is provided with forwardly-extending attach-

ing portions, as 7, 8, and 9. The projections 7 and 9 extend above and below the two whiffletrees, as shown in the drawings, while the central projection 8 is interposed between the doubletree 1 and the singletree 2. All of these projections extend sufficiently far forward to engage the pivot-pin 5, which passes down through apertures, as 10 10, formed in their free ends. The pivot-pin also engages a semicircular notch, as 11, formed in the front edge of the doubletree 1 and passes through the bearing formed in the bracket or bearing-plate 12, which is provided with laterally-extending flanges 13, by which it may be riveted or otherwise secured to the edge of the singletree. The singletree 2 is thus mounted just to the rear of the pivot-pin and bears against its rear surface, the said singletree not being perforated or reduced in strength by its engagement with the said pin. The singletree 2 carries upon its under side a segmental plate, as 14, which is preferably provided with an aperture 15, adapted to engage the pivot-bolt 5. The plate 14 is also riveted or bolted to the singletree, and two of the said bolts, as 16 16, are formed with projecting heads. The heads are made of suitable size to extend downwardly on each side of and engage the central projection 8 of the double clip or clevis. They are placed at a suitable distance apart to give the singletree room for all necessary movement upon the pivot-pin and yet to limit the said movement to the desired extent. These bolt-heads provide a limiting means which is simple in construction and yet very effective and does away with limiting-straps, such as are commonly used. These straps are likely to get out of order or become loose or be broken, and my invention obviates these more or less expensive additions. The segmental plate 14 performs an important function in preventing the tipping or turning over of the singletree, since its rear edge is made to engage a ledge or rib 17, formed upon the inner surface of the double clip. This ledge, as will be seen by reference to Fig. 1 of the drawings, hooks over the rear edge of the segmental plate 14, and while it permits the movement of the said plate with the singletree, yet it always engages the rear curved edge of the plate 14, so as to effectually prevent the tipping of the

singletree and the consequent strain produced by such tendency upon the pivot-pin 5. The double clip may be secured to the doubletree 1 by screws or bolts in addition to the pivot-pin 5, if desired. The pivot-pin 5 is preferably held in position by means of a suitable nut, as 18.

From the above description it will be apparent that my improved coupling is well adapted for use upon all single and double trees, and that a strong bearing is provided for the singletree by means of the bearing-plates 12, so that the parts are not likely to become loose by wear, and that the singletree is positively held against all tendency to tipping with relation to the doubletree. The double clip also is firmly held in place by the pivot-pin, and its central projection extending between the whiffletrees forms a wearing-plate for the singletree, as well as affording additional strength to the clip or clevis. It will be apparent that a coupling of this kind could be applied to all kinds of whiffletrees and that the lock-plate 14 could be used in the connecting of a doubletree to the tongue or pole of a wagon with great advantage.

While I have particularly described the device as shown in the drawings, yet it will be apparent that slight changes in the construction could be made without departing from the spirit of the present invention, and that the device could be applied to other articles besides single and double trees, all within the scope of the said invention.

Having now described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A coupling for whiffletrees, comprising a double clip having integral projections adapted to extend upon each side and between the whiffletrees to be connected, and a lock-plate mounted upon one of the whiffletrees and adapted to engage a rib or projection formed upon the double clevis or clip, substantially as described.

2. A coupling for whiffletrees, comprising a

clip or clevis having projections, the central one of which passes between the trees, while the outer ones pass above and below the same, a pivot-bolt extending in front of the trees and passing through apertures in each of the said projections, whereby all strain will be brought to bear against the rear surface of the pivot pin or bolt, and means upon one tree for engaging the said projection of the clip for limiting the pivotal movement of the said tree, substantially as described.

3. A coupling for whiffletrees, comprising a double clip having forwardly-extending projections, one of said projections extending between the whiffletrees, a lock-plate carried by one of the said whiffletrees, an overhanging ledge upon the double clip for engaging the rear edge of the said lock-plate, whereby the tree carrying the said plate cannot be tipped with respect to the other tree, a bearing-plate upon the front edge of one of the trees, the pivot-pin extending through apertures in the free ends of the double clevis or clip and engaging the said bearing-plate, and bolts or screws for fastening the lock-plate in position and having projecting heads adapted to engage the edge of the middle projection on the clip or clevis, whereby the movement of the whiffletrees with respect to each other is limited, substantially as described.

4. A coupling for whiffletrees, comprising a clip adapted to embrace both trees to be connected having a central wearing-plate adapted to project between the double and single tree, and screws secured to the singletree and having projecting heads arranged so as to embrace between them the wearing-plate and adapted to engage the edges of the said wearing-plate for limiting the movement of the said singletree, substantially as described.

In testimony whereof I hereunto affix my signature in presence of two witnesses.

THORE A. BAKKEN.

Witnesses:

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