No. 697,556. Patented Apr. 15, 1902.

J. C. SHANDLEY.

WHIFFLETREE COUPLING.

(Application filed July 12, 1901.)

(No Model.)

Fig. 1.

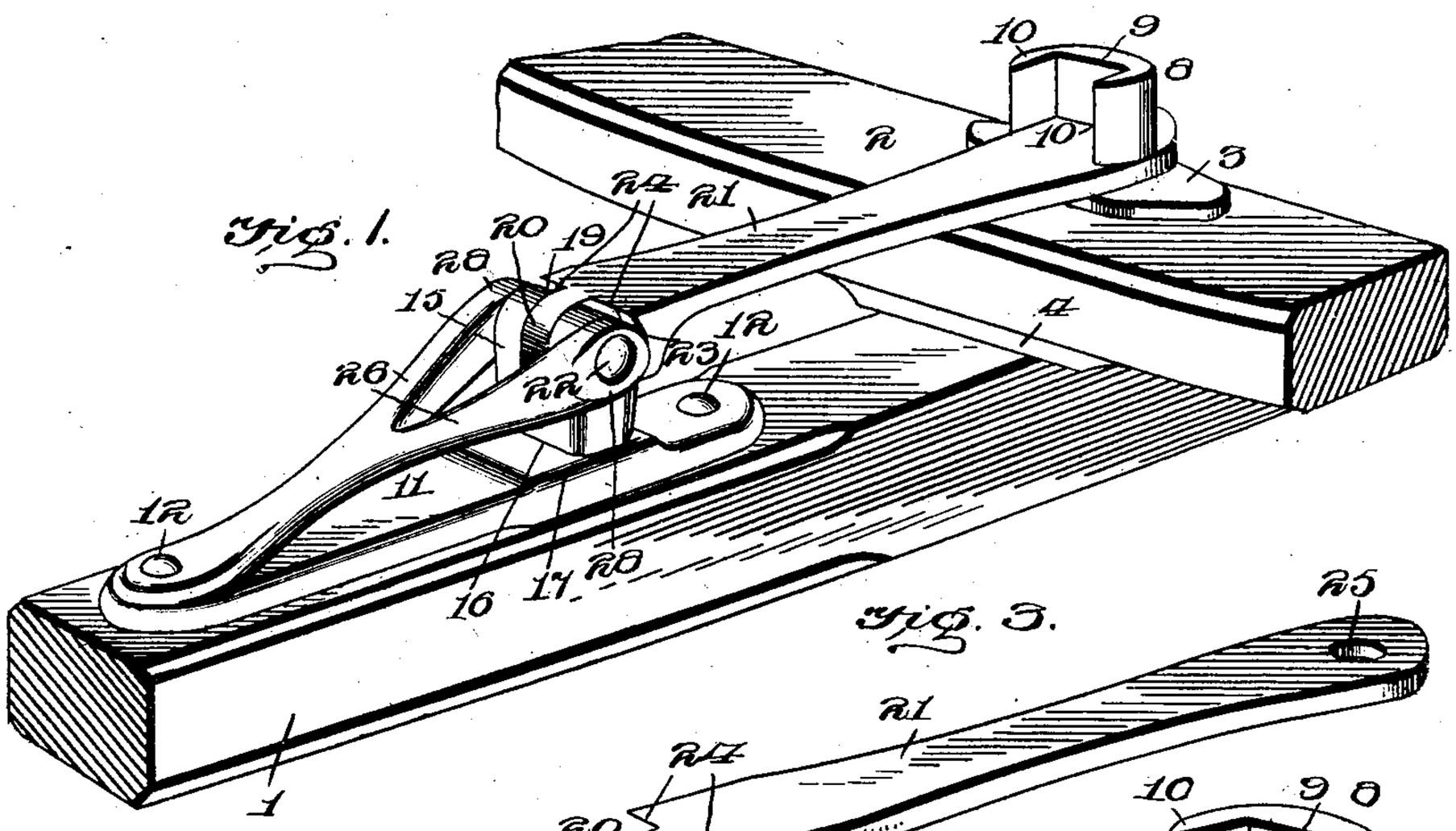
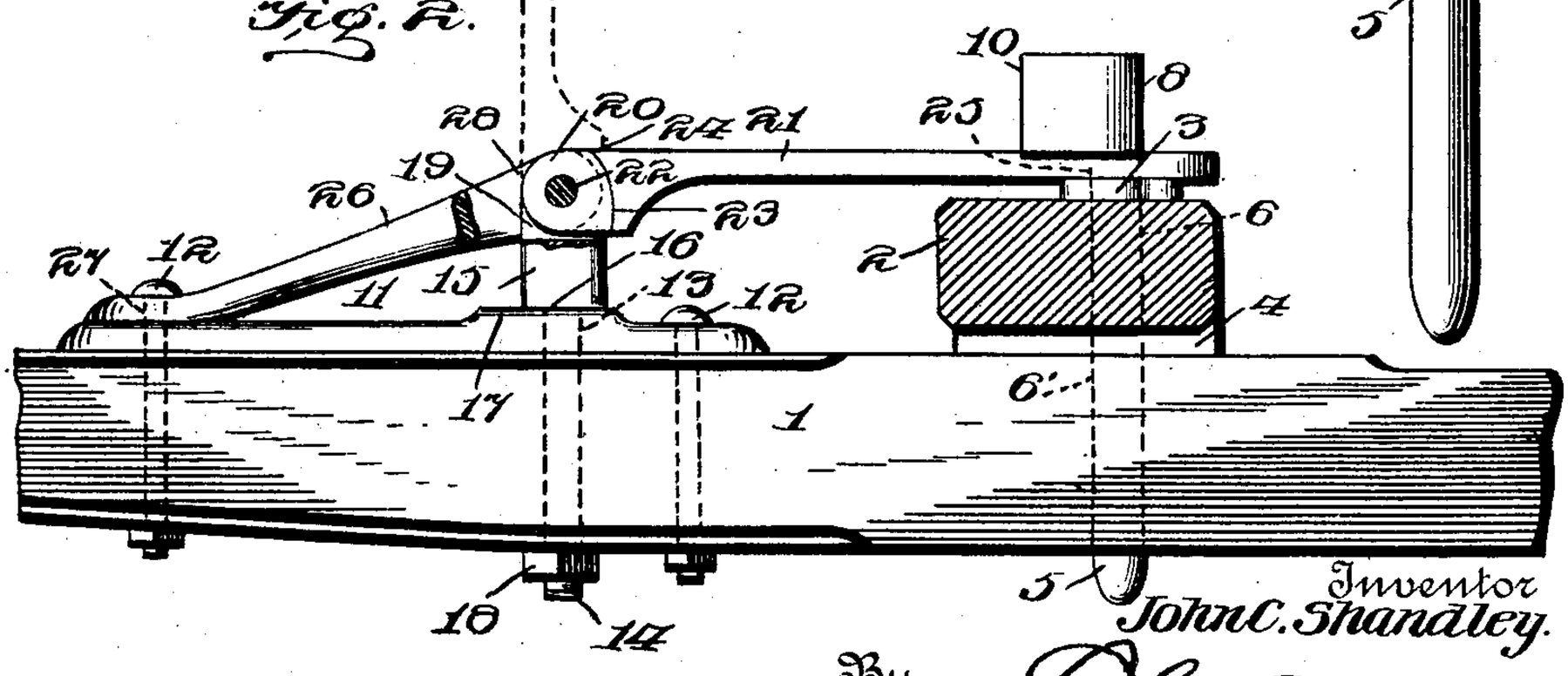


Fig. 3.

Fig. 4.

Fig. 2.



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UNITED STATES PATENT OFFICE.

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WHIFFLETREE-COUPLING.

SPECIFICATION forming part of Letters Patent No. 697,556, dated April 15, 1902.

Application filed July 12, 1901. Serial No. 68,056. (No model.)

To all whom it may concern:

Be it known that I, JOHN C. SHANDLEY, a citizen of the United States, residing at Fairmont, in the county of Marion and State of West Virginia, have invented a new and useful whiffletree-Coupling, of which the following is a specification.

This invention relates to whiffletree-couplings; and the object in view is to provide a coupling device for eveners or whiffletrees whereby the same may be detachably mounted upon the draft-pole or tongue so that they may be quickly taken off whenever necessary.

It is also an object of the present invention to construct the coupling in such manner that it will form a reliable and efficient bracing-support for the pin by means of which the whiffletree is pivotally connected with the tongue.

The device forming the subject-matter of this invention comprises a pivotal draft-bar or hammer-strap; and it is the object of the invention to so arrange and mount the said bar or strap that the pivot or fulcrum thereof will be efficiently braced with relation to the tongue or pole, so as to stand any amount of strain which may be thrown thereon by the draft-animals.

The detailed objects and advantages of the present invention will appear more fully in the course of the ensuing description.

The invention consists in certain novel features and details of construction and arrangement of parts, as hereinafter fully described, illustrated in the drawings, and incorporated in the claims.

In the accompanying drawings, Figure 1 is a perspective view of a portion of a draft-pole or tongue, showing an evener or whiffletree coupled by means of the device of this invention. Fig. 2 is a side elevation of the same, showing the hammer-strap or draft-bar thrown back in dotted lines. Fig. 3 is a detail perspective view of the hammer-strap or coupling-bar. Fig. 4 is a detail perspective view of the coupling-pin.

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

In the accompanying drawings, 1 designates the draft-pole or tongue of a vehicle or farming implement, &c., while 2 represents the ordinary whiffletree or evener, which is pivotally connected to the tongue and provided on its upper and lower sides with wear-plates 3 and 4, respectively.

In carrying out the present invention I connect the whiffletree to the tongue by means of a coupling-pin 5, which passes through an opening 6, extending through the whiffletree and the wear-plates, on the upper and lower sides thereof, and also into a socket 6′ in the tongue or pole 1, the said socket being shown in the form of a hole extending transversely through the tongue and the pin 5 being shown as of sufficient length to pass through the whiffletree and tongue. The coupling-pin 5 is provided with an enlarged head 8, which is flat on one side, as at 9, and provided on the same side with flanges 10, the inner surfaces of which are flat and arranged parallel to each other, the said flat surfaces 9 and 10 forming a wrench of suitable size to fit the nuts on the vehicle or implement to which the pole or tongue is connected. The head 8 also provides a shoulder for limiting the downward movement of the coupling-pin, thus holding the same always in proper position and at the same time providing means whereby the pin may be grasped and withdrawn in an upward direction for disconnecting the whiffletree from the tongue or pole.

The improved coupling device comprises an attaching-plate 11, which is secured to the upper face of the pole or tongue and extends longitudinally thereof, being secured at its opposite ends to the tongue by means of retaining-bolts 12, which pass through the base-plate and also through the tongue and receive securing-nuts on their lower ends. At a point intermediate its ends the base-plate is provided with an opening 13 to receive a bolt 14. This bolt extends also through a registering opening in the tongue and is provided at its upper end with a head 15, forming a shoulder 16, which bears against the upper surface of the thickened portion 17 of the base-plate 11. The lower end of the bolt is threaded to receive a retaining-nut 18, which bears against the bottom of the pole or tongue. The head 15 is bifurcated or provided with a central slot 19, in which is received a lug or ear 20 on the rear end of the draft-bar or ham-

mer-strap 21, the said parts being pivotally connected by means of a pivot-bolt 22, which passes through the head and lug 20 and is held in place by a retaining-nut or in any other convenient manner. The hammer-strap is provided on opposite sides with laterally-projecting portions 23, which are recessed to admit the bifurcated portions of the head 15, thereby forming stop-shoulders 24, which are adapted when the hammer-strap is thrown backward to come in contact with the rear side of the head 15 and limit the rearward movement of the hammer-strap and hold it in a convenient position. The forward free end of the strap or bar 21 is formed with an opening 25 for the reception of the coupling-pin 5, said pin passing first through the strap or bar 21 and thence through the whiffletree or evener into the opening provided therefor in the tongue or pole. The pivot-bolt 22 is effectually supported and the draft and strain thereon is taken by means of the brace 26, extending from the bolt 22 to the rear end of the base-plate 11, where it is provided with an opening 27, through which one of the securing-bolts 12, hereinabove referred to, passes. The forward end of the brace is bifurcated or forked, and the branches 28 of the fork extend upon opposite sides of the head 15 and are provided with holes to receive the pivot-bolt 22. The pivot-bolt 22 is located about the same distance from the tongue as the top of the whiffletree, so that the strain on the pivot-bolt is in a direct line with the draft, the strap or bar 21 being substantially straight from the pivot-bolt 22 and its point of connection with the coupling-pin and the brace 26 being substantially straight from the pivot-bolt 22 to its point of connection with the securing-bolt 12 at the rear end of the base-plate.

From the foregoing description it will be seen that the coupling-pin 5 is braced and supported on both sides of the whiffletree or evener by means of the tongue 1 and the plate or bearing 21; also, that the coupling-pin is braced at its upper end and on a line substantially parallel with the tongue; also, that the pivot-bolt 22 is braced on a straight line extending from said bolt rearward to the bolt which connects the rear end of the brace to the tongue. Whenever it becomes necessary to disconnect the whiffletree, the coupling-pin 5 may be lifted and detached, after which the strap or bar 21 may be thrown rearward to the dotted-line position shown in Fig. 2.

From the foregoing it is thought that the construction, operation, and many advantages of the herein-described whiffletree-coupling will be readily apparent to those skilled in the art without further description, and it will be understood that various changes in the form, proportion, and minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

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

1. The combination with a draft-pole, a relatively fixed whiffletree, and a pivot-bolt piercing these parts, of a brace having one end connected to the pivot-pin, a laterally-projected support carried by the pole and located at the opposite end of the brace, a pivotal connection between the support and the brace.

2. The combination with a draft-pole, a relatively fixed whiffletree and a pivot-bolt piercing these parts, of a laterally-directed projection carried by the pole, a brace having its opposite ends connected, respectively, to the projection and the pivot-pin, and an inclined brace having its opposite ends connected with the pole and projection and extended away from the first-mentioned brace.

3. The combination with a draft-pole, a relatively fixed whiffletree, and a pivot-pin piercing these parts, of a laterally-directed and bifurcated projection carried by the pole, a substantially horizontal brace having one end provided with an opening receiving the pivot-pin, and its opposite end provided with a reduced perforated bearing-ear which is received within the bifurcation of the projection, a forked inclined brace having one end connected to the pole and its forked members embracing the projection, and a pivot-pin piercing the forked members, the projection and the bearing-ear of the first-mentioned brace.

4. A whiffletree-brace embodying a support constructed for application to a draft-pole, a whiffletree-brace having one end pivotally connected to the support and its opposite end provided with a perforation for the reception of the pivot-pin of a whiffletree, and an inclined brace having one end connected to the support and located opposite the whiffletree-brace, the outer end of the inclined brace having means for connection with a draft-pole.

5. A whiffletree-brace embodying an attaching-bracket, having a laterally-directed projection, which is bifurcated longitudinally, a whiffletree-brace having one end provided with a perforate bearing-ear mounted within the bifurcation of the projection, and its opposite end provided with a perforation for the reception of a whiffletree-pin, and an inclined brace located opposite the whiffletree-brace and having its outer end connected to the bracket, the opposite end of said brace being bifurcated to straddle the projection, and a pivot-pin piercing the forked portion of the inclined brace, the projection and the bearing-ear of the whiffletree-brace.

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

JOHN C. SHANDLEY.

Witnesses:
CHARLES E. MANLEY,
A. F. PEDDICORD.