

K. J. GUILFOYLE.

Improvement in Attaching Whiffletrees to Vehicles.

No. 130,217.

Patented Aug. 6, 1872.

Fig. 1.

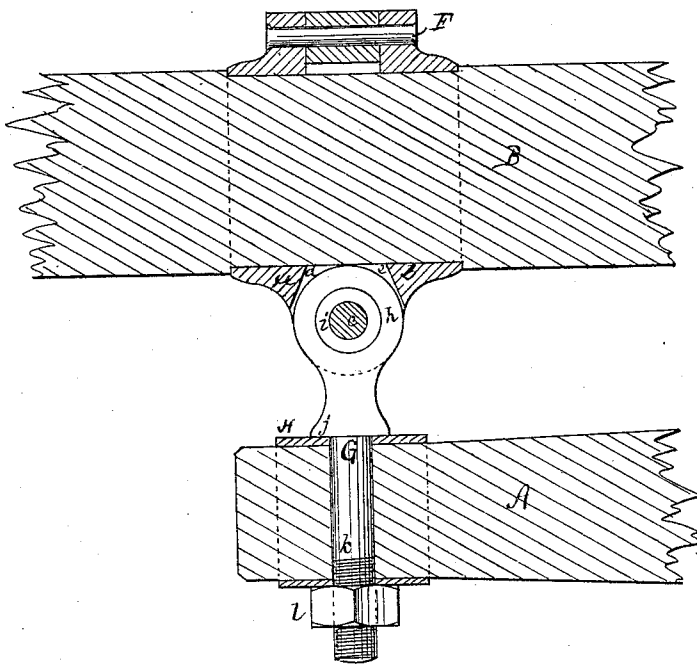


Fig. 2.

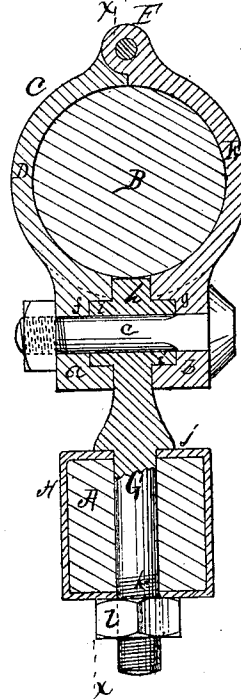
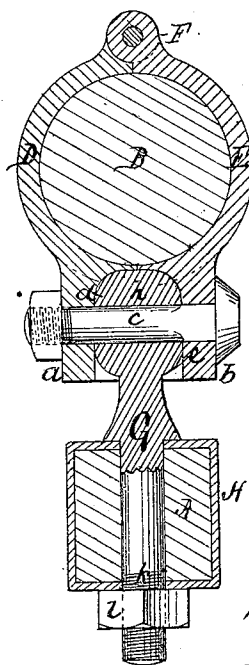


Fig. 3.



Witnesses:
M. H. Finckel.
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Inventor:
Chas. J. Guilfoyle.
 By Atty.
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UNITED STATES PATENT OFFICE.

KERAN J. GUILFOYLE, OF NEW YORK, N. Y.

IMPROVEMENT IN ATTACHING WHIFFLETREES TO VEHICLES.

Specification forming part of Letters Patent No. 130,217, dated August 6, 1872.

SPECIFICATION.

Be it known that I, KERAN J. GUILFOYLE, of New York city, in the county of New York and State of New York, have invented certain new and useful Improvements in Attaching Whiffletrees to the Sway or Cross Bar of Vehicles, of which the following is a specification:

The object of this invention is to provide a simple, ready, and efficient means for attaching whiffletrees to the sway or cross bar of vehicles, whereby the connection of such is rendered more secure and the strength of whiffletrees not impaired by holes made in the same for the reception of bolts, &c. My invention consists of a coupling-sleeve made in two parts, which are hinged or pivoted together so as to receive and surround the whiffletrees, the parts of the said coupling-sleeve being united firmly together by means of a fastening-bolt passing through ears or lugs formed with the same. The invention further consists in forming in the head of the connecting-bolt an eye, through which passes the bolt that unites the two parts of the hinged coupling-sleeve together, said bolt being the medium for uniting the whiffletree with the sway or cross bar, and which may be formed, when desired, with journals or gudgeons for engaging with recesses or sockets formed in the said coupling. The invention further consists of a combination of parts, as will hereinafter be more fully set forth.

In the drawing, Figure 1 is a horizontal section through the device as attached to the whiffletree and sway-bar, taken on line *x x*, Fig. 2. Fig. 2 is a vertical cross-section; and Fig. 3 is a similar view, showing a different form of bolt-head and socket.

The drawing shows only a part of the sway-bar and one whiffletree connected by my improved coupling, the letter A designating the sway-bar and B the whiffletree. C is the hinged coupling-sleeve, which fits around the whiffletree, preferably, in a recessed portion provided for the purpose. This sleeve is made of cast, malleable, wrought, or other metal, in two pieces, D E, which, when brought together, create a space corresponding with the shape or form of the whiffle or single tree. At one juncture of these two pieces eyes are

formed, through which a bolt or pin is passed to secure the pieces together like a hinge, as at F, so that the pieces D E form a hinged coupling. At the opposite ends of these hinged pieces ears or projections *a b* are made, having openings, preferably a square and round eye, respectively, through which a fastening-bolt, *c*, passes for uniting the parts together. The inner parts of the ears *a b* will, in most instances, be cut away or recessed at *d e* to form a socket to receive the head of a connecting-bolt, as in Fig. 3, and will also be made with circular recesses *f g*, as shown in Fig. 2, to receive the gudgeons of the head of a bolt connecting the whiffletree with the sway-bar. G is the connecting-bolt, formed with or without gudgeons. Its head *h*, also, is made to correspond with the recesses or sockets in the ears of the coupling. The part *h* fits in the socket formed at *d e* in the ears, when the sleeve is closed, the gudgeons fitting in the circular recesses *f g*. The bolt *c* is then passed through the eyes of ears *a b* and secured by a nut, as seen in Fig. 2, thereby securing the bolt in the sleeve C. A shoulder, *j*, is made on the bolt so as to fit against the sway or cross bar A, and around the eye through the end of said bar, to afford a turning surface for the whiffletree. The portion *k* of said bolt is threaded on its end to receive a nut, *l*, for fastening said bolt in the bar. In Fig. 3 I have shown the ears forming a socket, *d e*, without the recesses, and I use a bolt, G, with an oblong rounded head, through which the bolt-eye is made, that fits nicely in said socket, forming equally as sure connection, and one that is much cheaper to manufacture.

A metal sheathing tip or sleeve, H, may be used to surround the ends of the sway-bar, or around the cross-bar at the point of attachment to it, for protecting it against the wear of the bolt.

Any suitable locking device may be applied to the nut *l* to hold it more securely in the proper position.

With a coupling thus constructed the whiffletree can be secured to the sway-bar or cross-bar in such manner as to have the greatest desirable freedom of motion, while the strength of the connection is not in the least impaired.

What I claim is—

1. A hinged or pivoted coupling-sleeve for surrounding single-trees, provided with ears to receive a confining-bolt, *c*, said ears being so constructed as to receive the head of a connecting-bolt for connecting said single-trees with a sway or cross bar.

2. The ears or lugs of the hinged coupling-sleeve *C*, formed with sockets or recesses to receive the head or journals of a connecting-bolt for uniting a single-tree to a sway or cross bar, for the purpose set forth.

3. The bolt *G* formed with a head, *h*, and an eye, through which a fastening-bolt passes, for securing said bolt with a coupling-sleeve

that surrounds a whiffle or single tree, substantially as and for the purpose specified.

4. The combination with each other of the hinged sleeve *C*, a fastening-bolt, *c*, and a connecting-bolt, *G*, forming a device for attaching whiffletrees to their sway-bar or cross-bar, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 25th day of June, 1872.

KERAN J. GUILFOYLE.

Witnesses:

WM. S. GUERINEAU,

WM. H. DRAKE.