N. H. SHAW.

Thill-Coupling.

No. 64,715. Patented May 14, 1867.

Fig. 1.

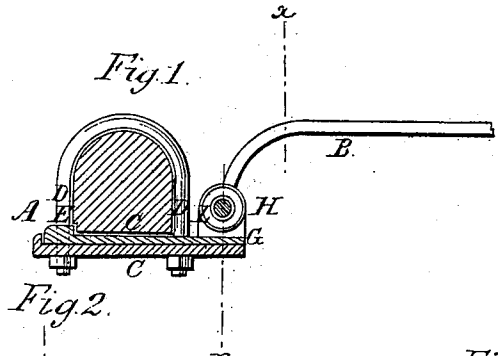


Fig. 2.

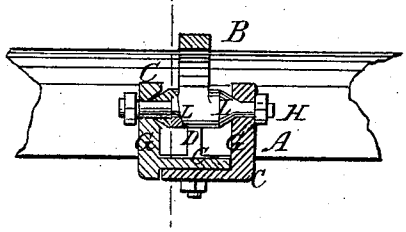


Fig. 3.

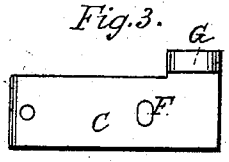
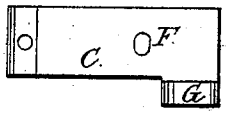


Fig. 4.



Witnesses.
Theo Tusche.
J. A. Scrivner

Inventor.
N. H. Shaw
Per Munn & Co
attys.

United States Patent Office.

N. H. SHAW, OF HOLDERNESS, NEW HAMPSHIRE.

Letters Patent No. 64,715, *dated May* 14, 1867.

IMPROVEMENT IN ATTACHING THILLS TO VEHICLES.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, N. H. SHAW, of Holderness, Grafton county, New Hampshire, have invented new and useful Improvements in Shaft-Couplings; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

The shaft-coupling embraced in the present invention, by that part of the same which is secured to the axle, is made in two parts or sections, placed one upon the other, and both turning at one end upon one end of the bolt-stirrup or strap encircling the shaft and forming the means of fastening the coupling thereto, while at their other ends, between the ear-pieces at such ends, is hung, by its T-shaped end, the strap or bar secured to the carriage axle; this construction of the coupling enabling the wear of the shaft-strap to be compensated for or taken up, from time to time, as by such construction the ear-pieces between which the shaft-strap is hung can be drawn or brought closer together, as will be obvious from the detail description thereof to be hereinafter given. In the accompanying plate of drawings my improvements in shaft-couplings are illustrated—

Figure 1 being a transverse vertical section through the axle, and one coupling attached thereto.

Figure 2, a vertical section taken in the plane of the line *y y*, fig. 1; and

Figures 3 and 4 views in detail of the two parts to the coupling.

Similar letters of reference indicate corresponding parts.

A, in the drawings, represents that part of a shaft-coupling, for carriages and other vehicles, which is secured to the axle of the carriage, and B the bar or strap which is fastened to the shaft. The part A of the coupling is made in two parts or pieces C, that are placed one upon another under the axle, and are there secured by a strap or yoke-bolt, D, encircling the axle; the two parts C turning loosely on one end E of this bolt, while by its other end it passes through an elongated opening, F, made in the two parts of the coupling, which allows the two pieces C to be swung or turned upon each other similar to a hinge-joint. Each part of the shaft portion of the coupling is provided with an ear-piece, G, between the inside faces of which, across from one to the other, the bar or strap B, secured to the shaft, is hung by its T-shaped end, and there secured by a centre cross-pin or bolt H, on which it is to swing.

With a shaft-coupling constructed and applied to the axle in the manner above described, it is plain to be understood that the distance between the two ear-pieces, where the shaft is hung to the coupling, can be adjusted according as circumstances or the wear of the shaft-strap therein may require, by simply loosening or tightening the centre-bolt extending across from one to the other of the said ear-pieces, as is obvious without any further explanation.

The ear-pieces are countersunk at the proper point for bearings to the T or cross-head of the shaft-strap B of the coupling, and in such countersunk seats or bearings the ends of the said cross-head turn. The end or cross-head to the shaft-strap I make of a conical shape at each of its tips L, with the seats or bearings in the ear-pieces of a corresponding conical shape thereto, whereby the coupling can be more perfectly adjusted as its bearing surface from time to time wears away. In lieu of the conical-shaped tips to the shaft-bar they may be provided with the conical-shaped bearings or seats, and the ear-pieces with corresponding-shaped teats or projections to fit in such bearings, the same result and effect being produced as that described for the conical tips.

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

1. Suspending the shaft to its coupling on carriage-axle, between two bearings or ear-pieces thereof, susceptible of adjustment, substantially as described.

2. A shaft-coupling having that part of the same attached to the axle made in two parts or sections secured and hung together at one end, and one upon the other, with the shaft-strap or bar suspended by a centre-bolt between ear-pieces at their other ends, substantially as and for the purpose described.

3. The conical-shaped bearings between the shaft-strap or bar and the part of the coupling secured to the axle, substantially as described,

The above specification of my invention signed by me this 11th day of March, 1867.

N. H. SHAW.

Witnesses:

WM. F. MCNAMARA,

ALBERT W. BROWN.