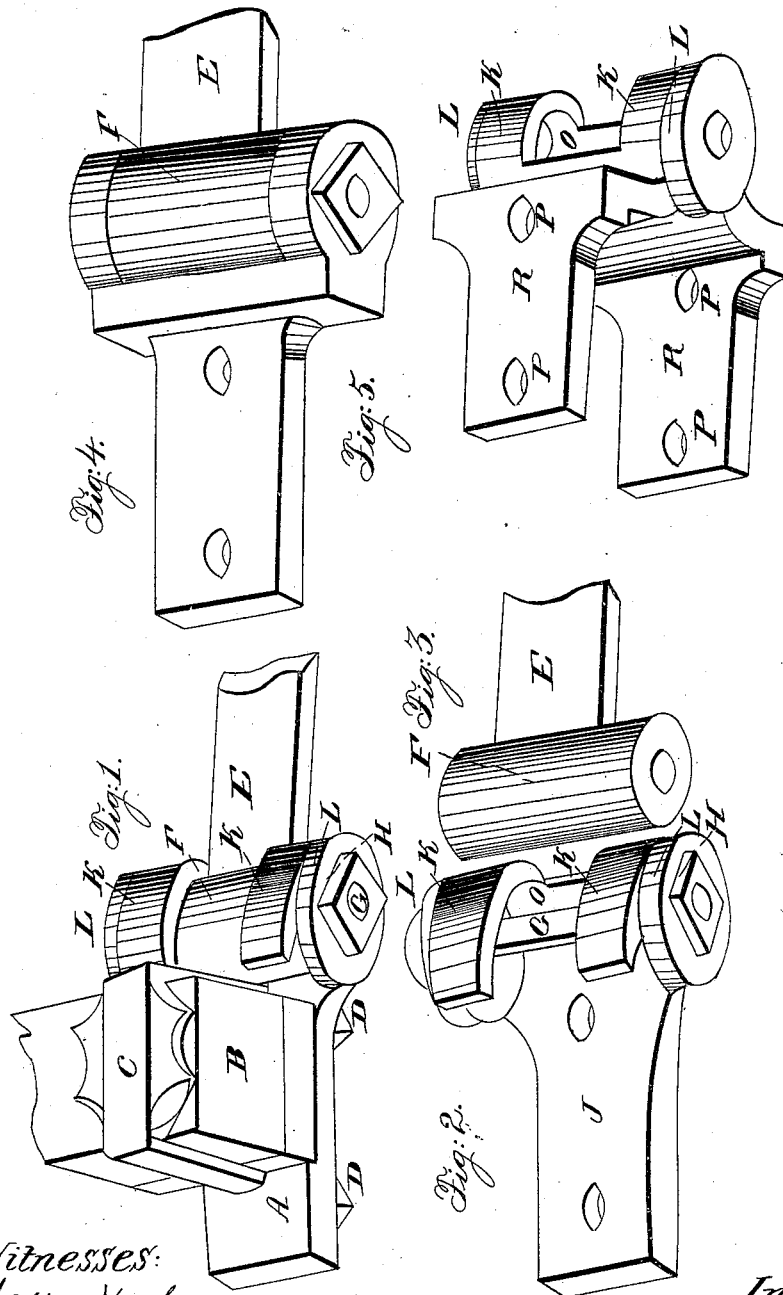


J. COOPER.
Thill-Coupling.

No. 1,073

Patented Jan. 22, 1839.



Witnesses:
Walter Hunt
Vern. B. Atkins

Inventor
John Cooper

UNITED STATES PATENT OFFICE.

JOHN COOPER, OF NEW YORK, N. Y.

MODE OF CONSTRUCTING SHAFT-CLIPS FOR CARRIAGES.

Specification of Letters Patent No. 1,073, dated January 22, 1839.

To all whom it may concern:

Be it known that I, JOHN COOPER, of the city, county, and State of New York, formerly of Bristol, England, have invented a new and useful Improvement in the Construction of that Portion of the Ironwork Belonging to Carriages Called the "Shaft-Clips," and that the following specification contains a full and accurate description of the same.

My improved shaft-clip with its immediate appendages, consists of the following pieces or parts. First, the shaft-clip A, (see Figure 1,) in the annexed drawings, which is secured to the under surface of the axle-tree B, by means of the axle-clip C, striding over the same and secured underneath by the nuts D, D.

E, is the strap to which the shaft is attached, and upon the back end of which (made entire with the same) is the pipe-eye F, which plays in the box of the shaft-clip upon the bolt G, which is secured by the nut H, upon the end of the same.

As my improvement consists exclusively in the form of the joint of the shaft-clip I will describe it separately. (See Fig. 2.) In the annexed drawing J, is the shank end of this clip which is attached to the axle-tree. The opposite end which forms the joint is widened and fork-shaped, the prongs K, K, of which are flattened and curved upward forming about three fourths of a circle about 1 inch in diameter with heads L, L, of corresponding dimensions upon the ends forming a cylindrical box about 3 inches long open at the back from head to

head, and about one inch more or less in front and around the upper section between the prongs. In this box or case, O, plays the pipe-eye F, (see Fig. 3,) forming a kind of knuckle joint, the bolt G, passing through the heads L, L, and the center of the pipe-eye, as before mentioned. By this arrangement accidents arising from the failure of the bolts, as ordinarily constructed, (see Fig. 4,) will be obviated; as the pipe-eye F, cannot be removed from the clip-box O, although the bolt G, is withdrawn until the clip J, is disengaged from the axle-tree B. For heavy carriages, the prongs K, K, may be united above, as at the bottom, and be secured in like manner upon the top of the axle-tree or bed, by the clip C, or (see Fig. 5,) by bolts through the holes P, P, P, P, through the straps R, R.

What I claim as my invention in the above described implement, and for which I solicit Letters Patent, secured to me, and my legal representatives is—

The exclusive privilege and right of making, construction, &c., of box-joints in shaft-clips for carriages, &c., in such manner that the pipe-eye, or connecting end of the shaft-strap shall not depend upon the bolt for its support, but on the contrary upon the box or case in which it is inclosed in the manner herein described, whether the form of the said box be cylindrical, conical, or spherical.

JOHN COOPER.

Witnesses:

WALTER HUNT,
WM. B. AITKEN.