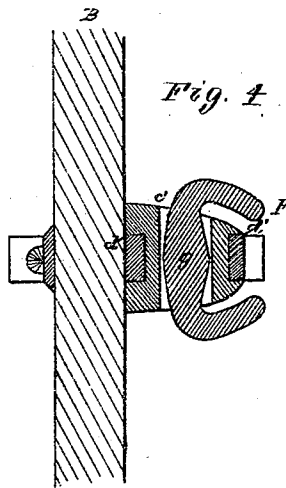
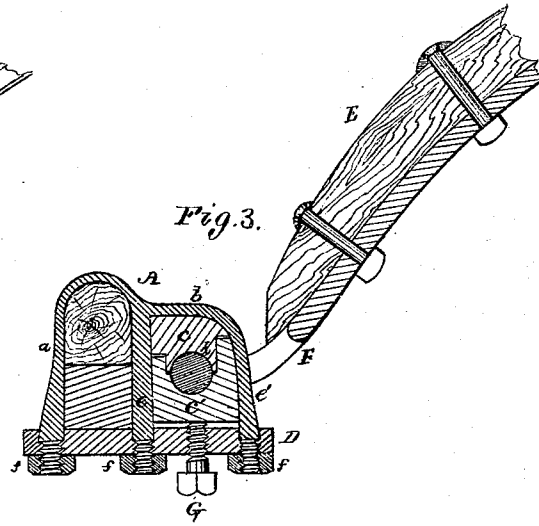
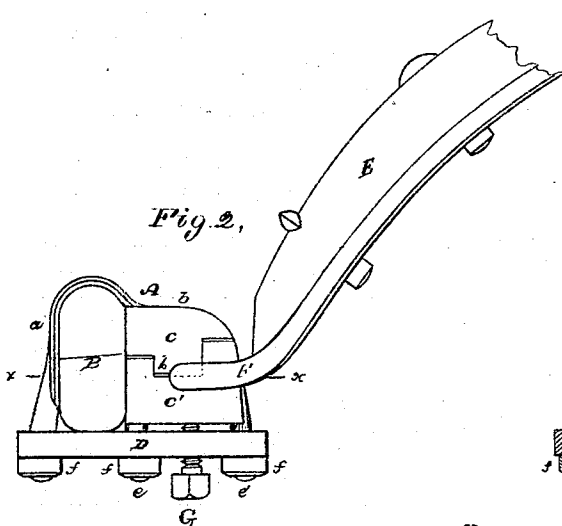
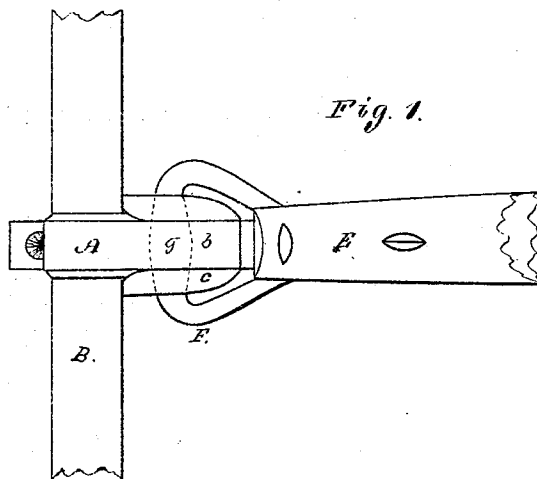


A. D. TYLER.

Improvement in Thill Coupling.

No. 123,597.

Patented Feb. 13, 1872.



Witnesses.

Saml. Colt

A. C. Hale

Abel D. Tyler

by his attorney

J. P. Hale

UNITED STATES PATENT OFFICE.

ABEL D. TYLER, OF NORTH BRIDGEWATER, MASSACHUSETTS.

IMPROVEMENT IN THILL-COUPPLINGS.

Specification forming part of Letters Patent No. 123,597, dated February 13, 1872.

To all whom it may concern:

Be it known that I, ABEL D. TYLER, of North Bridgewater, in the county of Plymouth and State of Massachusetts, have invented an Improved Carriage-Shackle, or device for connecting a thill or pole with an axle; and do hereby declare the same to be fully described in the following specification, and represented in the accompanying drawing, of which—

Figure 1 is a top view of a thill and axle as connected with my improved shackle. Fig. 2 is a side elevation of the same; Fig. 3, a longitudinal section thereof; Fig. 4, a horizontal section taken on the line *xx* of Fig. 2.

The object of my invention is to provide a simple, strong, and effective mode of connecting a thill or pole with the axle of a carriage, one which will not only prevent the disagreeable rattling of the parts of the coupling as ordinarily made, but prevent any wearing of the parts from weakening the connection of the thill or pole with the axle; and my invention consists in the improved method of constructing and combining the parts of the coupling, as will be hereinafter fully described.

In the said drawing, A is what may be termed a double clip, one part, *a*, of which embraces the axle B, and is firmly affixed thereto; the other or front portion, *b*, receives within it a sectional box, whose parts *c c'* have grooves *d d* made in their outer vertical faces to receive the two legs, *e e'*, of the clip *b*, and thus serve to preserve the parts of the box from any lateral displacement. D is a metallic yoke formed with slots, through which the legs of the clip pass, each of the said legs having a male screw on its lower end to receive a nut, *f*, by which the clip is firmly connected with the axle. To the lower end of the thill E a thill-iron, F, is affixed, the same terminating in an eye or loop, which is approximately of a triangular shape, the base *g* of which is of an oval, globular, or double-conic form, as shown in Figs. 1 and 4, and fitting

into a corresponding-shaped groove made in the two halves of the box; the object of such enlargement being two-fold—viz.: to prevent any endwise movement of the “iron” within its box, and also to afford a wearing-surface on which all the wear of the iron should come, and which, under any reduction thereof, would not in anywise interfere with the strength and firmness of the coupling. G is a set-screw which works through the yoke D, and against the lower surface of the interior half *c'* of the box, the same serving to maintain the parts of the coupling in their due relation in case of any wear thereof. The two parts or sections *c c'* of the box are formed as male and female; the upper or male portion having an extension, *h*, which projects into a chamber formed in the lower or female part, as shown in Figs. 2 and 3; the object of such construction being to prevent an forward or backward movement of the two parts upon each other.

From the above it will be seen that by my peculiar construction and arrangement of the parts I produce a firm, compact, and reliable shackle or means for connecting a thill or pole with an axle of a carriage—one which is little liable of getting out of order, the wearing parts being so constructed that as they become worn they can not only be maintained in their due relation, but such wear does not tend to weaken the connection of the coupling.

Having described my invention, what I claim is as follows:

The improved carriage-shackle, substantially as described, the same consisting of the double clip A, the sectional box *c c'*, the yoke D, the set-screw G, and the thill-iron F, the whole being constructed, combined, and arranged, and applied to the axle and thill or pole of a carriage, in manner as set forth.

Witnesses:

ABEL D. TYLER.

F. P. HALE,
F. C. HALE.