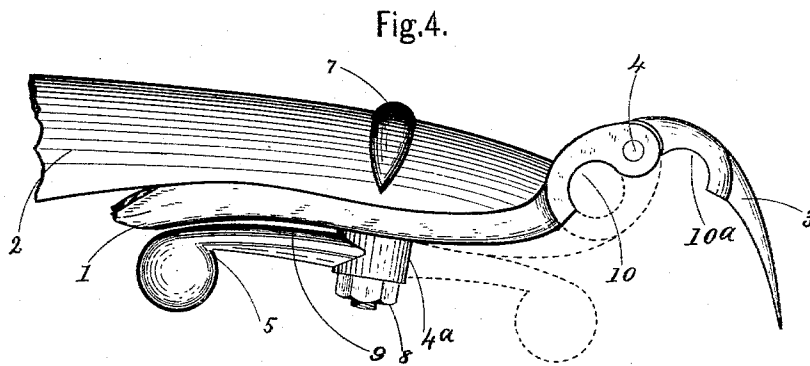
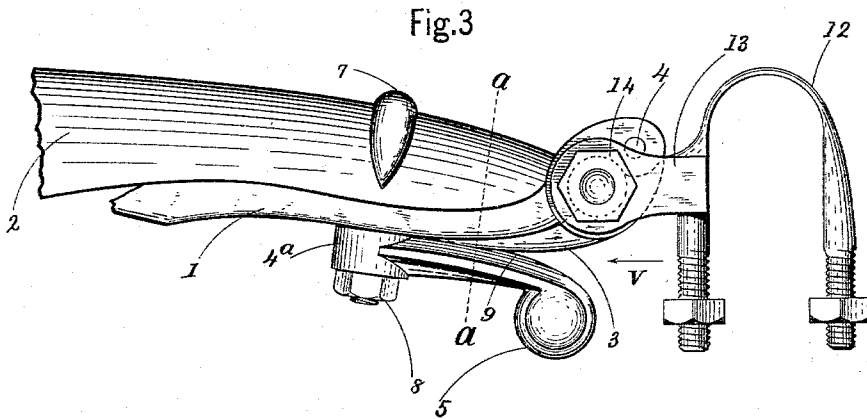
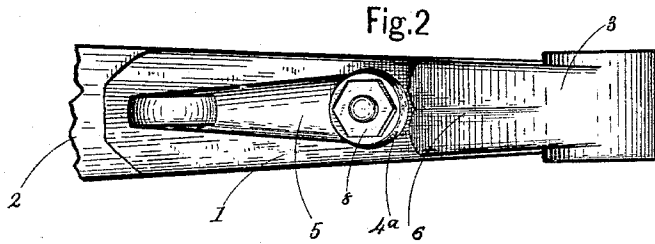
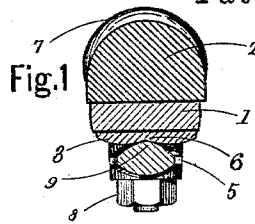


(No Model.)

P. BROADBOOKS.
THILL COUPLING.

No. 546,268.

Patented Sept. 10, 1895.



Witnesses.

L. Spong
A. J. Sangster

Peter Broadbooks Inventor.

By *James Sangster*.
Attorney.

UNITED STATES PATENT OFFICE.

PETER BROADBOOKS, OF BATAVIA, NEW YORK, ASSIGNOR TO HIMSELF
AND LEMUEL L. TOZIER, OF SAME PLACE.

THILL-COUPLING.

SPECIFICATION forming part of Letters Patent No. 546,268, dated September 10, 1895.

Application filed December 15, 1894. Serial No. 531,919. (No model.)

To all whom it may concern:

Be it known that I, PETER BROADBOOKS, a citizen of the United States, residing at Batavia, in the county of Genesee and State of New York, have invented certain new and useful Improvements in Shaft-Eyes for Thill-Couplings, of which the following is a specification.

My invention relates to a new and improved shaft-eye for thill-couplings, whereby the coupling may be instantly and securely attached to or released from the shaft, all of which will be fully and clearly hereinafter described and claimed, reference being had to the accompanying drawings, in which—

Figure 1 represents a vertical cross-section in or about line *a a*, Fig. 3. Fig. 2 is an under side view of the device, showing the locking-lever turned back to expose the under side of the hinged clip. Fig. 3 represents a side elevation showing the device attached to the draw-clip and securely fastened. Fig. 4 is a side elevation showing the hinged clip opened and the locking-lever turned back, showing also the closed position of these parts by dotted lines.

Referring to the drawings in detail, the upper half 1 is that part which is adapted to be welded to the shaft-iron and bolted in the usual way to the shaft 2. The lower half, forming the hinged clip 3, is hinged or pivoted, by a pin 4 to the end of the upper portion 1, on which it swings, so that it can be opened out, substantially as shown in Fig. 4, or closed, as shown in Figs. 2 and 3. The end of the hinged clip 3 extends, when closed, as in Fig. 2, up to the head 4^a of the locking-lever 5. The back of the hinged clip 3 inclines both ways to the center 6, (see Fig. 1,) thereby forming a slight longitudinal depression at that point. The locking-lever 5 is secured to the shaft by means of the usual T-head shaft-bolt 7, on which it turns, and it is secured on the bolt 7 by a nut 8. The upper side of the locking-lever inclines upward toward the center 9, thereby forming a comparatively sharp portion or ridge, substantially as shown in Fig. 1, which fits into the depression 6 when the device is locked, as in Fig. 3, and substantially as shown in the section, Fig. 1. The

hinged clip 3, when closed over the draw-bolt, does not come quite close to the upper part 1, so that it acts as a strong spring when the locking-lever is turned over it and thereby holds it securely.

It will be noticed that in the upper portion 1 there is a semicircular depression 10, (see Fig. 4,) extending transversely entirely across near the joint end and forming one half of the shaft-eye, and that the hinged clip 3 is also provided with a corresponding transverse semicircular depression 10^a, forming the other half of the shaft-eye, so that when the hinged clip is closed it forms an eye in which the draw-bolt may be inclosed or instantly released.

When it is desired to change from a shaft to a pole, it is accomplished instantly by turning the locking-lever around to the position shown in Figs. 2 and 4, when the hinged clip may be easily and quickly opened, as shown in Fig. 4, and the device removed from the draw-bolt.

The axle-clip 12 (shown in Fig. 3) carries the draw-bolt (the end of which is shown by the dotted lines 14 in said Fig. 3) between the clip-ears 13, and it will be readily seen by reference to Fig. 4 how easy it is to remove it or replace it.

I claim as my invention—

1. A shaft eye for thill couplings, consisting of the part 1, adapted to be secured to a vehicle shaft or pole, having a semi-circular depression 10, extending transversely across it, in combination with a hinged clip having a corresponding semicircular depression extending entirely across it, a slight longitudinal depression 6, on the back of the hinged clip, and a locking lever having a sharp ridge adapted to fit into said depression, and secure the clip when closed, substantially as set forth.

2. A shaft eye for thill couplings, consisting of two portions 1 and 3, hinged together and provided with transverse depressions forming a circular opening when closed, for receiving a draw-bolt, means for rigidly securing portion 1, to a vehicle shaft, a longitudinal depression 6, on the back of the portion of clip 3, and a locking lever 5, provided

with a ridge 9, adapted to fit into the depression 6, when the device is closed, substantially as described.

5 3. A shaft eye for thill couplings, consisting of two portions 1 and 3, hinged together and provided with transverse depressions forming a circular opening when closed, for receiving a draw-bolt, means for rigidly securing portion 1, to a vehicle shaft, a longitudinal depression 6, on the back of the portion or clip 3, and a locking lever 5, pivoted

to the shaft by the shaft bolt, 7, a ridge 9, centrally located on said lever, and adapted to fit into the depression 6, when the clip is closed over the draw-bolt, and the locking lever turned latterly over the clip, substantially as and for the purposes described.

PETER BROADBOOKS.

Witnesses:

EDWARD C. DRIHER,

HENRY S. HARRIS.