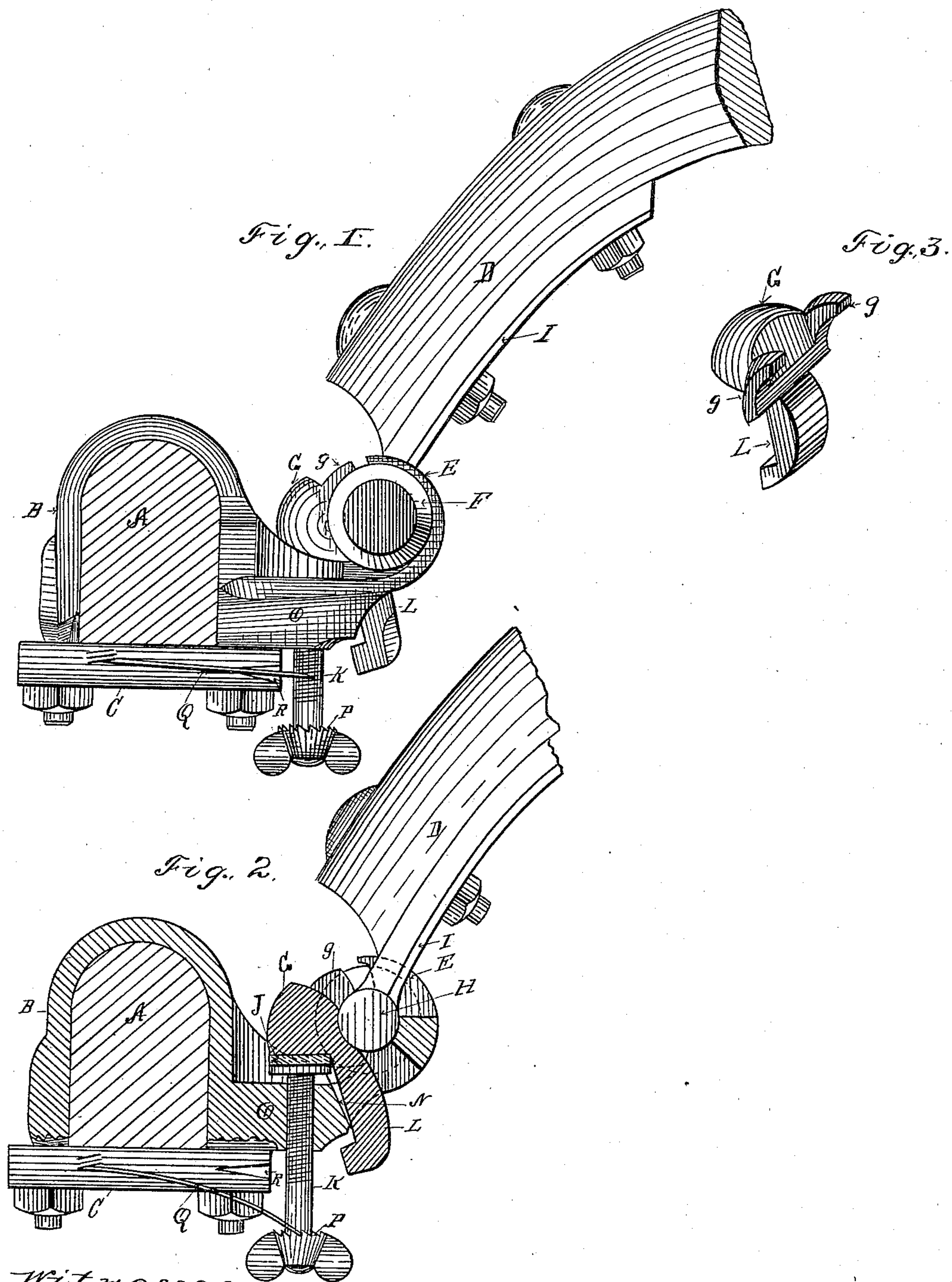


(No Model.)

G. TYLER.  
THILL COUPLING.

No. 334,910.

Patented Jan. 26, 1886.



Witnesses  
H. M. Sturgeon  
John B. Rilling.

Inventor  
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Per H. M. Sturgeon  
Atty



# UNITED STATES PATENT OFFICE.

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WILLIAM C. STILES, OF ROME, OHIO.

## THILL-COUPLING.

SPECIFICATION forming part of Letters Patent No. 334,910, dated January 26, 1886.

Application filed November 6, 1885. Serial No. 182,073. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE TYLER, a citizen of the United States, residing at Rock Creek, in the county of Ashtabula and State of Ohio, have invented certain new and useful Improvements in Thill-Couplings; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, forming part of this specification.

My invention relates to thill-couplings; and it consists in the improvements hereinafter set forth and explained.

My invention is illustrated in the accompanying drawings, in which Figure 1 is a side elevation of my improved thill-coupling. Fig. 2 is a vertical section through the center of the same. Fig. 3 is a perspective view of a detachable jaw forming part of my clamping device.

Like letters refer to like parts in all the figures.

In the construction shown, A is a section of a vehicle-axle; B C, a clip for securing my improved coupling to the axle, and D a section of a thill. The section B of the clip is provided with a projection, O, which extends out in front of the axle A, and has formed thereon hooked bearings or jaws E, the ends of which bearings are closed up by circular caps F, forming part thereof, between which caps and jaws the movable jaw G (shown detached in Fig. 3) is placed. This jaw G is provided with ears *g g*, which ears, together with the hooks E, form circular bearings for the ends of the T H on the thill-strap I, the ends of the T H being round. The jaw G is also provided with a block of rubber, J, in the bottom thereof, against which the end of regulating-screw K operates. The movable jaw G is also provided with a hooked arm, L, which passes through the slot N in the clip B. The regulating-screw K operates in a thread cut in the projection O, and is provided with a washer on its upper

end, which operates against the rubber cushion J in the movable jaw G, so that when it is screwed up it tends to close the hooked portion *g g* of the movable clamp up toward the hooks or jaws E on the projection O of the clip, thereby tightening them around the T H on the thill, the rubber cushion acting as a spring to take up the wear and prevent rattling. It is also obvious that the coupling may be adjusted at any time and that any wear can be taken up by simply turning up the screw K, and when it is desired to remove the thills from the clamp it can be done by turning back the screw K, which permits the movable jaw G to fall back from the hooked jaws E on the stationary portion of the clamp a sufficient distance, so that the T H on the thill A can easily be lifted out, and to secure the thills again in place the T's thereon have only to be dropped into the hooks E and the screw K set up, which closes the clamp and secures the thill in place. I have also shown a ratchet, P, on the head of the screw K, against which an adjustable spring-catch, Q, impinges to prevent the screw K from turning back. A catch, R, is also provided on the side of the section C of the clip, to which the spring-catch Q can be raised up, and thereby retained out of contact with the ratchet P when it is desired to turn the screw back to loosen the clamp.

Having thus fully described my invention, so as to enable others skilled in the art to which it appertains to construct and use the same, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. The combination, in a thill-coupling, of an axle-clip provided with a pair of hooked jaws adapted to engage with the front sides of trunnions on a thill-iron, and also with a vertical slot between said hooked jaws, and a regulating-screw, substantially as shown, with a movable jaw operating in said vertical slot, provided with hooked ears adapted to engage the back side of trunnions on a thill-iron, and also provided with an elastic cushion,

substantially as shown, and for the purpose set forth.

2. The combination, in a thill-coupling, of the axle-clip B, having hooked jaws E E, and the slot N between said jaws, and a regulating-screw, K, provided with a ratchet, P, and a spring, Q, and a movable jaw, G, provided with hooked ears *g g*, and the elastic cushion J, with the thill-iron I, provided with

a T, H, all operating together substantially as and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE TYLER.

Witnesses:

E. H. PIFER,  
A. B. SMITH.