R. S. ROBERTS.

THILL COUPLING.

APPLICATION FILED JULY 24, 1909.

995,906. Patented June 20, 1911.

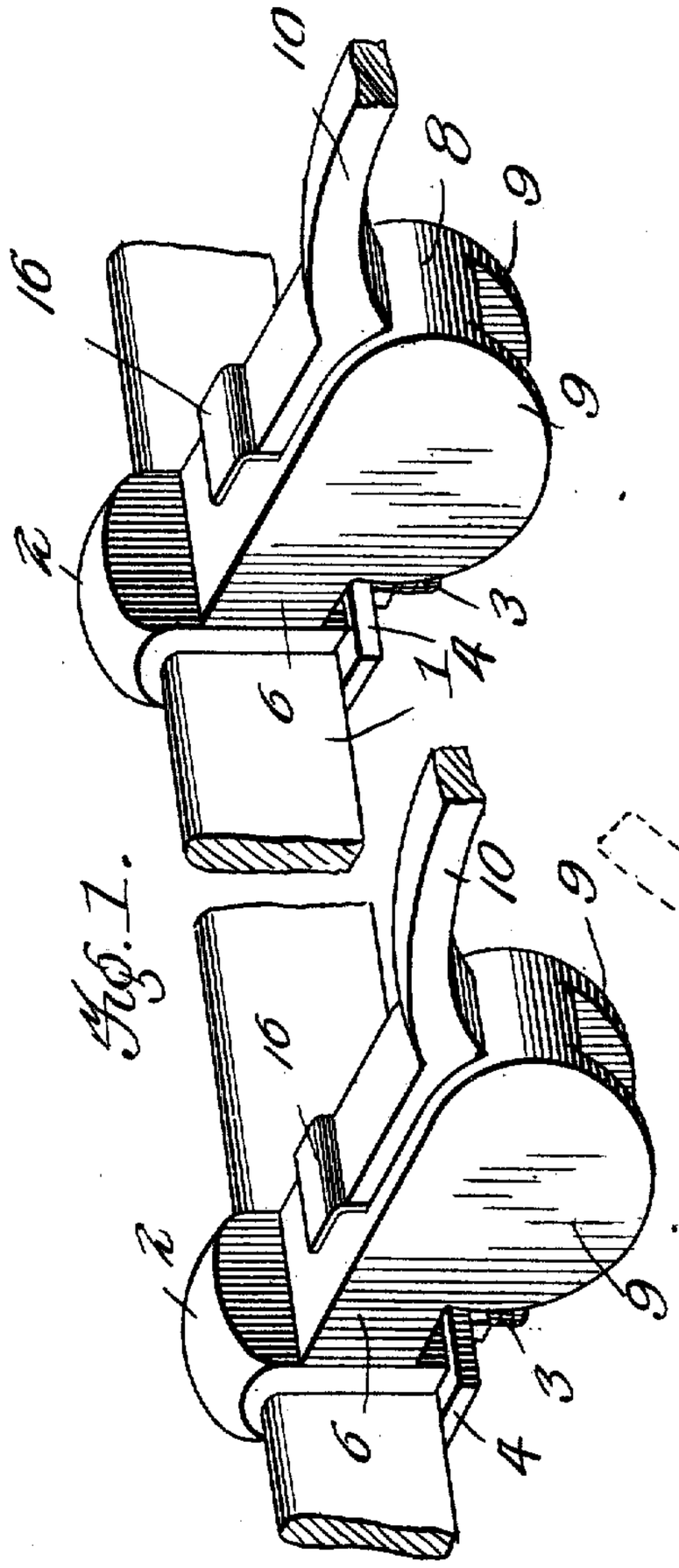


Fig. 1.

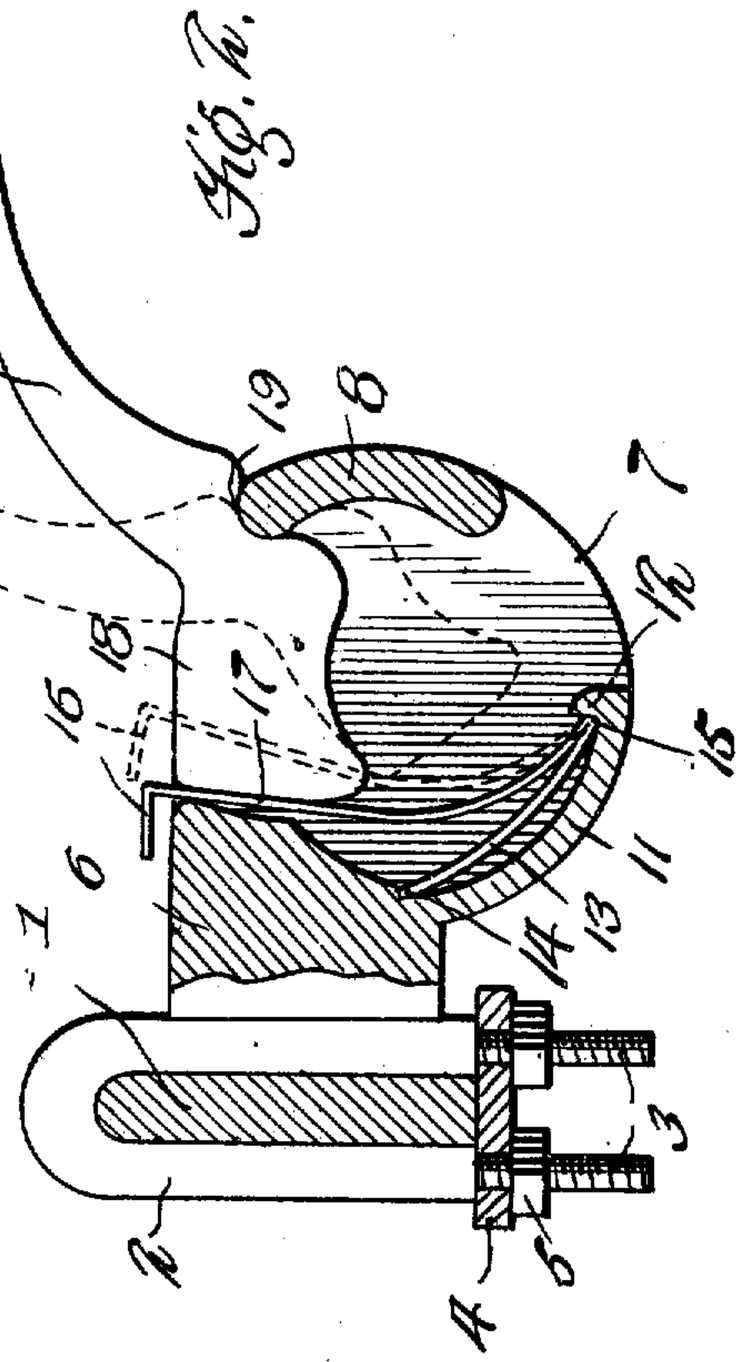


Fig. 2.

Witnesses

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# UNITED STATES PATENT OFFICE

RICHARD S. ROBERTS, OF NEW ORLEANS, LOUISIANA, ASSIGNOR OF ONE-FOURTH TO JOHN SHEPPARD AND ONE-FOURTH TO GEORGE SHEPPARD, OF NEW ORLEANS, LOUISIANA.

## THILL-COUPLING.

995,906. Specification of Letters Patent. Patented June 20, 1911.

Application filed July 24, 1909. Serial No. 509,351.

*To all whom it may concern:*

Be it known that I, RICHARD S. ROBERTS, a citizen of the United States of America, residing at New Orleans, in the parish of Orleans and State of Louisiana, have invented new and useful Improvements in Thill-Couplings, of which the following is a specification.

This invention relates to thill couplings, and the object of the invention is to provide a device of this character which shall be simple in construction, which will permit the thill to move up and down freely, and which will be provided with an anti-rattler spring to take up lost motion.

With the above, and other objects in view which will be more apparent as the nature of the description progresses, the invention resides in the novel construction and combination of parts hereinafter fully described and claimed.

In the drawings—Figure 1 is a perspective view of a pair of couplings secured to an axle, the central portion and ends of the axle being broken away, and the thill irons being also shown as broken away. Fig. 2 is a sectional view taken through the axle and a portion of the coupling, the thill iron being shown in elevation and in its adjusted positions by the dotted lines.

In the drawings, the numeral 1 designates an axle.

The numerals 2 designate the clips which are formed integrally with the coupling. These clips are substantially U-shaped and the lower ends 3 thereof are reduced and threaded.

The numeral 4 designates a plate which is provided with perforations for the reception of the threaded members 3, and the projecting ends of the said threaded members are adapted to receive suitable securing elements, such as nuts 5.

The numerals 6 designate the coupling members. Each of the said members is rounded on its under side and each of the said members is recessed to provide spaced side walls 9. The front portions of the walls are connected through the medium of a curved member 8, which has its upper edge rounded for a purpose which will presently be set forth. The rear wall 11 of each of the coupling members is provided with an off-set 14, and the lower wall is formed with a projecting lug 12.

The numeral 13 designates a two armed spring, one of the arms of the said spring being adapted to engage between the shoulder 14 and the lug 12 as at 15, while its second and longer arm 17 projects through the opening 7 provided between the walls 9 of the coupling. The upper extremity of the said projecting arm of the spring is off-set and continued rearwardly as indicated by the numeral 16.

The numeral 10 designates the thill member. This thill member is formed with an enlarged head 18, the same being provided with a curved depression or recess 19 which is adapted to engage with the rounded end of the curved front 8 of the coupling member 6. The body 18 of the said member has its opposite face substantially straight and the said face is adapted to be contacted by the longer arm 17 of the spring 13.

From the above description, taken in connection with the accompanying drawings, it will be noted that the invention is simple, can be produced at low cost, can be readily connected with an axle, and is safe, reliable and efficient for its purpose, and will permit the ready attachment or detachment of the thills or tongue.

Having thus fully described the said invention, what I claim is:—

A thill coupling comprising an axle clip and a coupling member formed thereon, said coupling member being recessed to provide spaced side walls and a rear wall, the front edges of the said side walls having a connecting member formed with a rounded upper edge, the rear wall of the coupling member, between the side walls, being provided with a shoulder and with a projecting lug, a thill iron, said iron having an enlarged head having a curved recess adjacent its front end and adapted to engage with the rounded edge of the connecting member, a two armed spring, one of the arms of the said spring engaging between the shoulder and the lug

of the coupling member, the second arm of the spring extending upwardly through the open top of the coupling member and contacting the rear wall of the enlarged head, and the extremity of the said arm being bent rearwardly, substantially as and for the purpose set forth.

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

RICHARD S. ROBERTS.

Witnesses:
K. ALLEN,
WM. A. ASHTON.