

(No Model.)

J. TORRANCE.

THILL COUPLING.

No. 364,144.

Patented May 31, 1887.

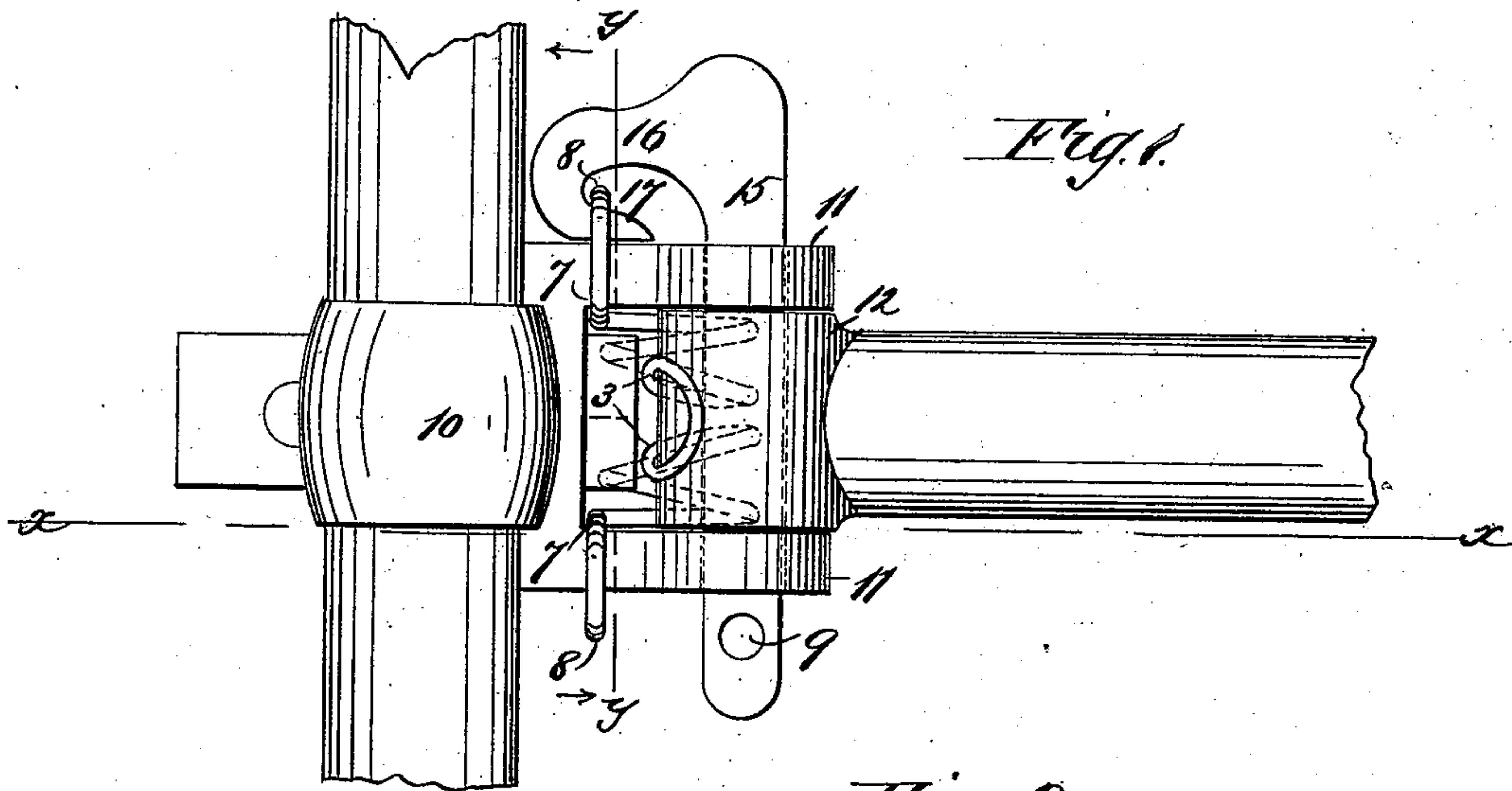


Fig. 2.

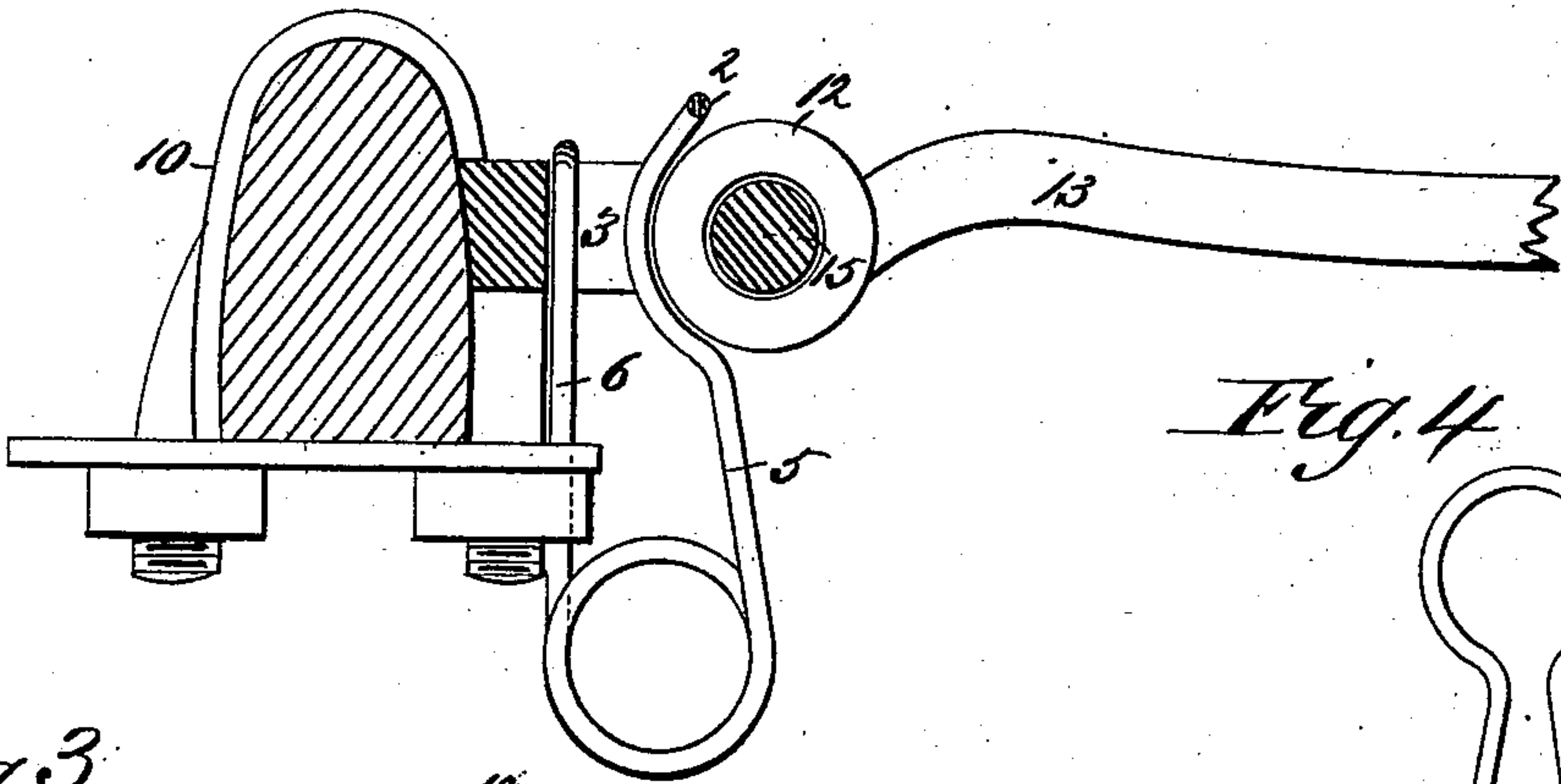
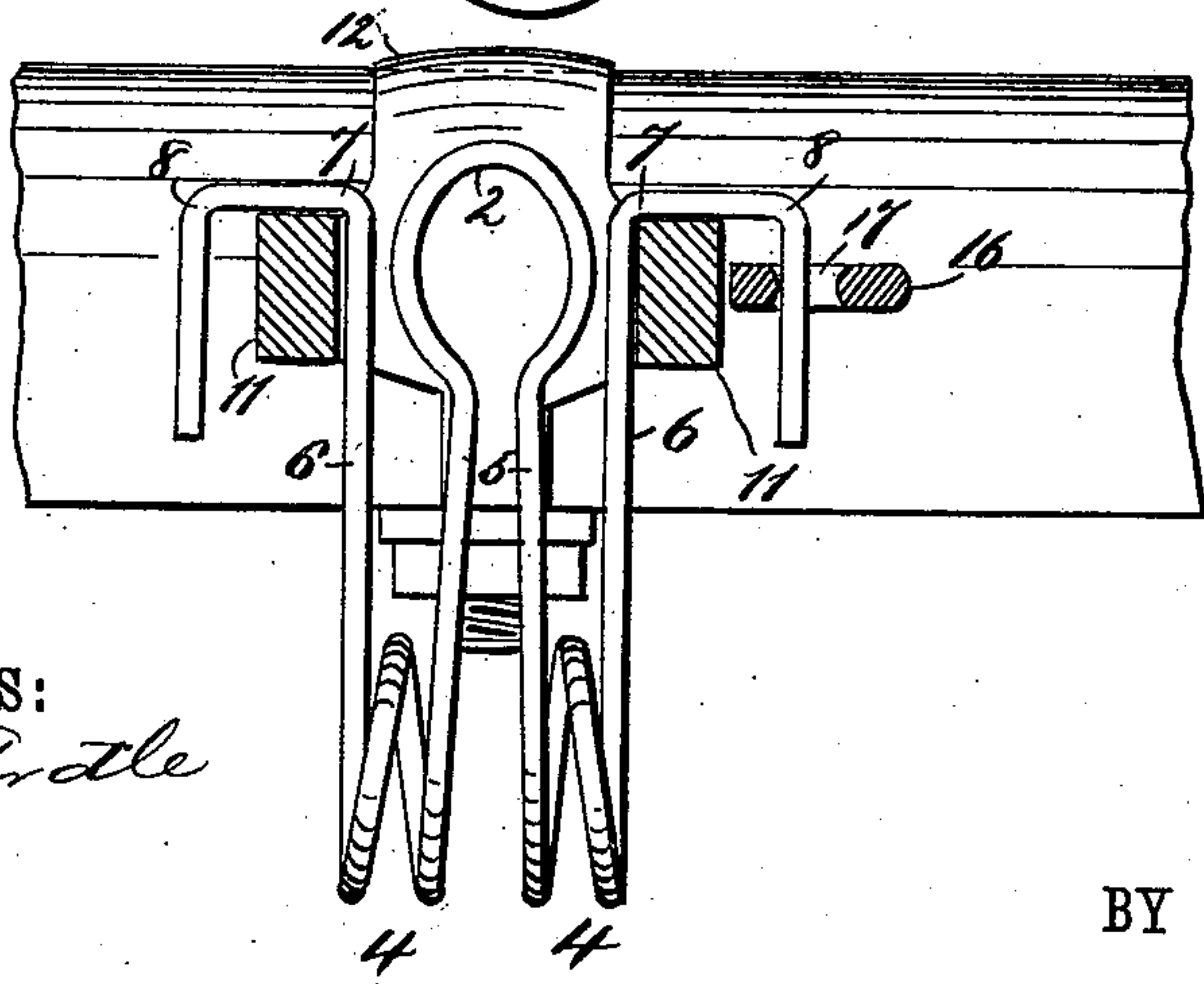


Fig. 4



WITNESSES:

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UNITED STATES PATENT OFFICE.

JOHN TORRANCE, OF CHETOPA, KANSAS.

THILL-COUPLING.

SPECIFICATION forming part of Letters Patent No. 364,144, dated May 31, 1887.

Application filed March 11, 1887. Serial No. 230,540. (No model.)

To all whom it may concern:

Be it known that I, JOHN TORRANCE, of Chetopa, in the county of Labette and State of Kansas, have invented a new and Improved Thill-Coupling, of which the following is a full, clear, and exact description.

This invention relates to a simple, cheap, and durable attachment for thill-couplings, the object of the invention being to prevent the rattling of the shaft or thill iron and the axle-clip, and at the same time to hold the bolt by which the shafts are connected to the vehicle in position. This object I accomplish by means of the novel form of clip illustrated in the drawings and to be hereinafter described, and specifically pointed out in the claim.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in all the views.

Figure 1 is a plan view of my improved form of thill-coupling. Fig. 2 is a sectional view taken on line *x x* of Fig. 1. Fig. 3 is a cross-sectional view taken on line *y y* of Fig. 1; and Fig. 4 is a view of a safety-cotter which may be employed in connection with the bolt, but which is not absolutely necessary to the safety of the coupling.

In the drawings above referred to, 10 represents the axle-clip, which, as usual, is formed with two forwardly-extending eyes, 11, between which the eye 12 of the shaft-iron 13 fits, a bolt, 15, of novel construction, being arranged to pass through the apertures of the two sets of eyes. This bolt 15 is formed with a hooked head, 16, the point of the head being carried around so as to extend toward the shank of the hook, thus leaving a space or opening, 17, as is best shown in Figs. 1 and 3.

In connection with the parts described, I employ an anti-rattling and bolt-retaining attachment, consisting of a single length of spring-wire that is centrally bent, as shown at 2, and then the loop so formed is bent outward, as indicated at 3. The two lengths of wire are then bent to form coils 4, and the

ends are carried upward from the coils in lines that are substantially parallel with the downwardly-extending lengths 5, the upwardly-extending portions of the wire being shown at 6. The two lengths 6 are then bent outward at 7 and then downward at 8, as is best shown in Fig. 3.

In applying wire bent as described, the device is adjusted so that the upper and forwardly-extending portion of the main loop of the wire will bear against the rear face of the eye 12, the two lengths 6 being passed downward between the arms which support the eyes 11, while one of the ends beyond its bend 8 is passed through the opening 17 of the bolt 15.

With such an attachment as has been described the shaft-iron is not only held from rattling, but the bolt is held against accidental displacement; and in order to guard against any possible accidental displacement of the bolt, said bolt might be formed with an aperture, 9, adapted to receive a cotter, such as that shown in Fig. 4; but it is not necessary that this cotter should be used. However, in certain cases the spring anti-rattling attachment might become lost or damaged, and then the cotter would come into play.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

In a thill-coupling, the combination, with the eyes 11 of the clip 10 and the eye 12 of the thill-iron 13, of the bolt 15, having the hooked head 16, and a wire having a loop to bear against the eye of the thill-iron, and provided with the coils 4 and the upwardly-projecting arms 6, having their ends bent outwardly and downwardly over the eye of the clip, one of the said downwardly-bent ends being passed over the inwardly-bent portion of the hook 16 of the bolt, substantially as herein shown and described.

JOHN TORRANCE.

Witnesses:

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