No. 879,911. PATENTED FEB. 25, 1908.

J. A. SAMPLE.

DRAFT GEAR FOR CAR COUPLINGS.

APPLICATION FILED FEB. 21, 1907.

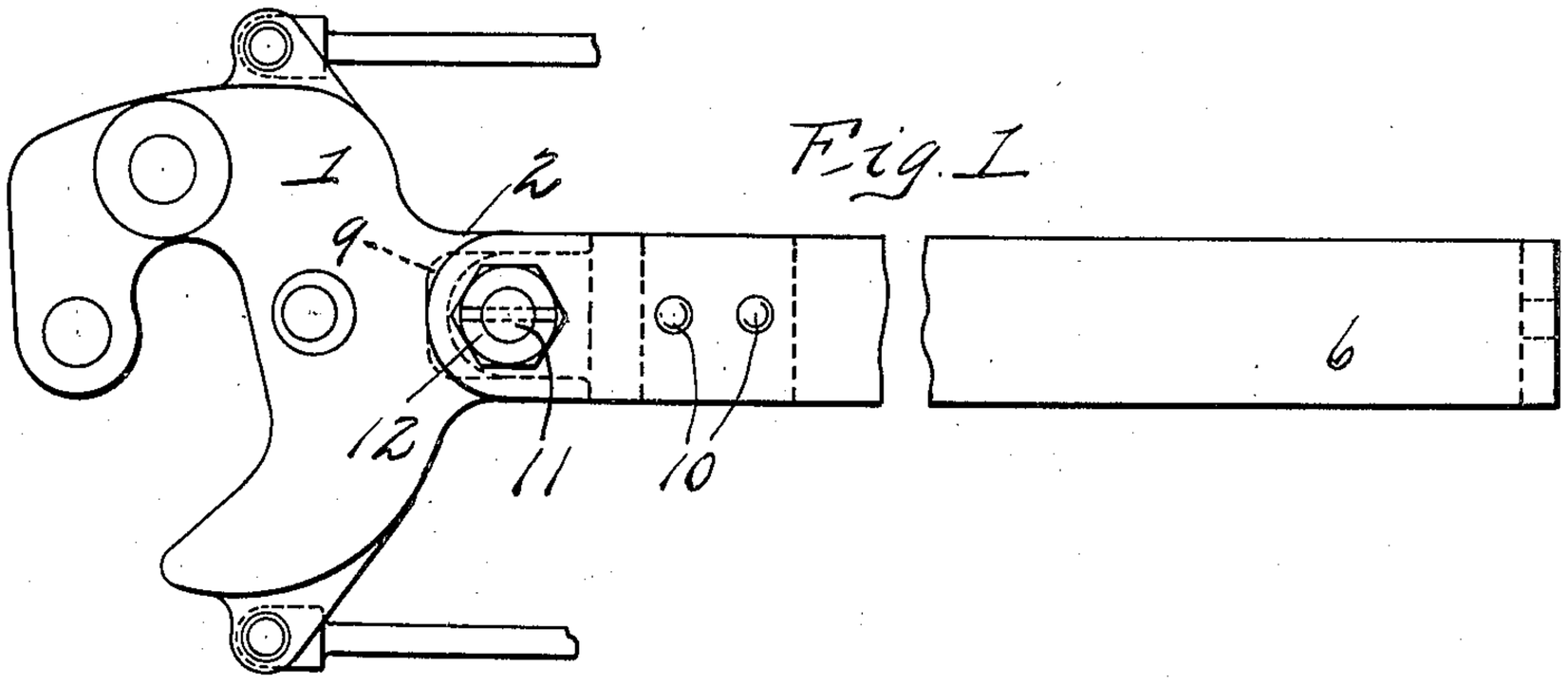

Fig. 1.

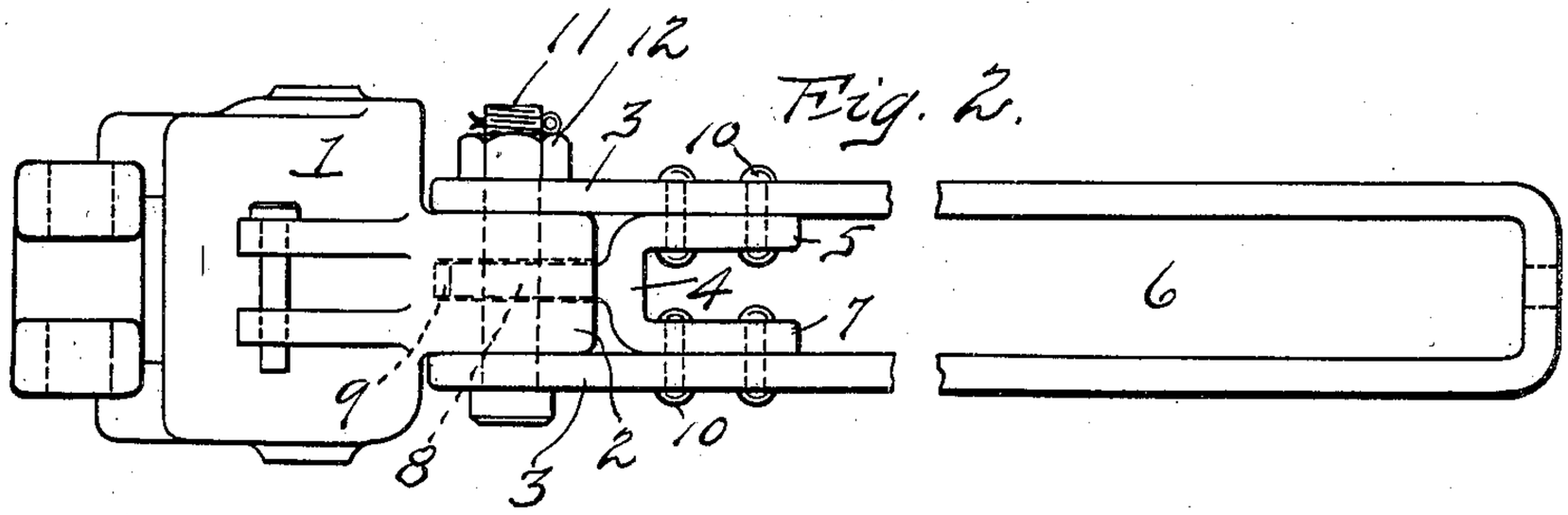

Fig. 2.

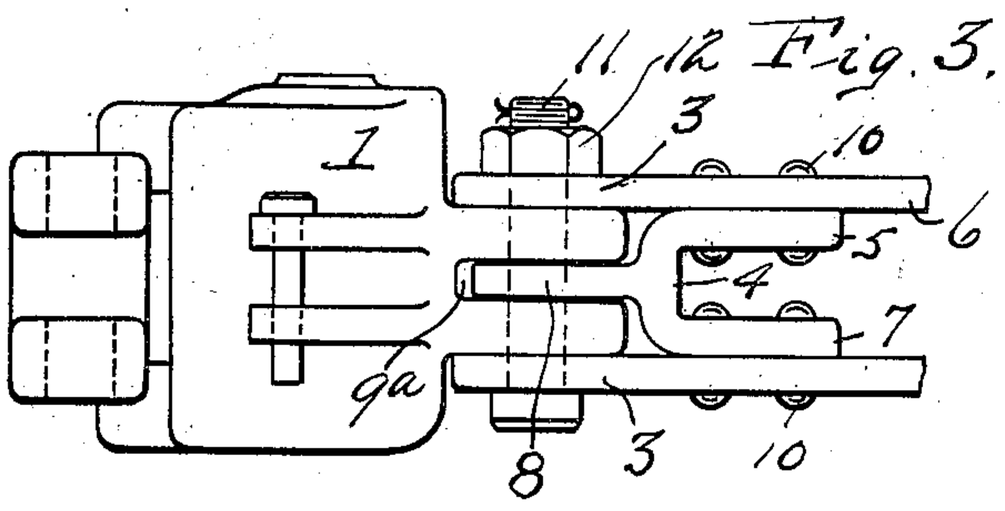

Fig. 3.

WITNESSES:

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DRAFT-GEAR FOR CAR-COUPLINGS.

No. 879,911. Specification of Letters Patent. Patented Feb. 25, 1908.

Application filed February 21, 1907. Serial No. 358,569.

To all whom it may concern:

Be it known that I, JOHN ARTHUR SAMPLE, a citizen of the United States, residing at Rankin, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Draft-Gears for Car-Couplers, of which the following is a specification.

This invention relates to draft gear mechanism for cars in which the yoke is designed to envelop the draft gear as in the Westinghouse friction and the Farlow draft gears.

This invention contemplates a simple method of strengthening the forward part of the yoke to which is secured the coupler, embodying a means for attaching and detaching the coupler shank.

A further object of this device is to provide a larger bearing surface on the bolt that secures the yoke to the coupler shank, whereby the shearing area of the bolt is doubled without increasing the diameter of the bolt.

Another object of this device is to provide for the pivotal action of the coupler by slotting the shank to receive the forwardly extending leg of the strengthening piece.

With these and many other objects in view, which will more readily appear as the nature of the invention is better understood, the same consists in the novel construction, combination, and arrangement of parts, which will be hereinafter more fully described, illustrated, and claimed.

In the accompanying drawings,—Figure 1 is a plan view of the improved draft yoke as attached to the coupler shank, in such a manner that the shank and yoke are rigidly connected. Fig. 2 is a side elevation of the parts shown in Fig. 1. Fig. 3 is a side elevation of my improved draft yoke when applied to a pivoted coupler.

Like numerals designate corresponding parts in the several figures of the drawings.

In carrying out my invention no change is made in the conventional form of the draft gear yoke, the coupler or coupler shank, and in the drawings the numeral 1 designates an ordinary draw head, to which is attached the coupler shank 2 which is designed to work between the forwardly extending jaws 3 of the draft gear yoke.

The distinctive feature of the present invention is the bifurcated strengthening device, designated in its entirety by the numeral 4. This strengthening bracket 4 consists of a forked piece, the upper portion 5 of which is secured to the lower face of the upper jaw of the draft gear yoke 6, while the lower portion 7 of the same is attached to the lower jaw of the yoke, and the tongue or stem portion 8 of said piece 4 extends forwardly into a socket 9 of the coupler shank 2. The forked or bifurcated strengthening bracket 4 is rigidly secured to the yoke by the rivets 10 which pass through the jaws of the yoke and the cheeks of the strengthening piece 4. The pin 11 passes up through the jaws of the yoke and is held in position by the nut 12 screwed down upon the upper jaw, thus keeping the forward part of the yoke and the rear of the coupler shank together. By the introduction of the bifurcated strengthening bracket 4 the shearing area of the bolt 11 is doubled, thus increasing the strength of the connection in such a manner as to overcome the trouble that arises with draft gear yokes pulling off the coupler shanks.

In the arrangement shown in Fig. 3 of the drawing, the invention is illustrated as applied to a pivotal type of coupler head, and in its adaptation to the invention, the socket 9^a which receives the shank or stem 8 of the forked socket 4 is in the form of an open sided slot which permits of the necessary relative pivotal movement of the coupler or coupler head 1.

From the foregoing it is thought that the construction, action, and many advantages of the herein described draft gear will be readily apparent without further description.

I claim:

1. In a draft gear, the combination with the draw head, of a draft gear yoke having its side jaws connecting with the said head, a strengthening bracket secured within the yoke and having a stem also engaging the draw head, and a connecting pin passing through a portion of the draw head and through said stem of the strengthening bracket and the side jaws of the draft gear yoke.

2. In a draft gear, the draw head having a shank provided with a socket therein, a draft gear yoke having its side jaws connecting with said shank at the upper and lower

sides thereof, a forked strengthening bracket rigidly mounted in the draft gear yoke and having a stem projecting into the socket of the draw head shank, and a connecting pin passing through the draw head shank, and also through the side jaws of the yoke and the stem of the strengthening bracket.

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

JOHN ARTHUR SAMPLE.

Witnesses:
GEORGE E. FORD,
WILLIAM H. GUENTHER.