

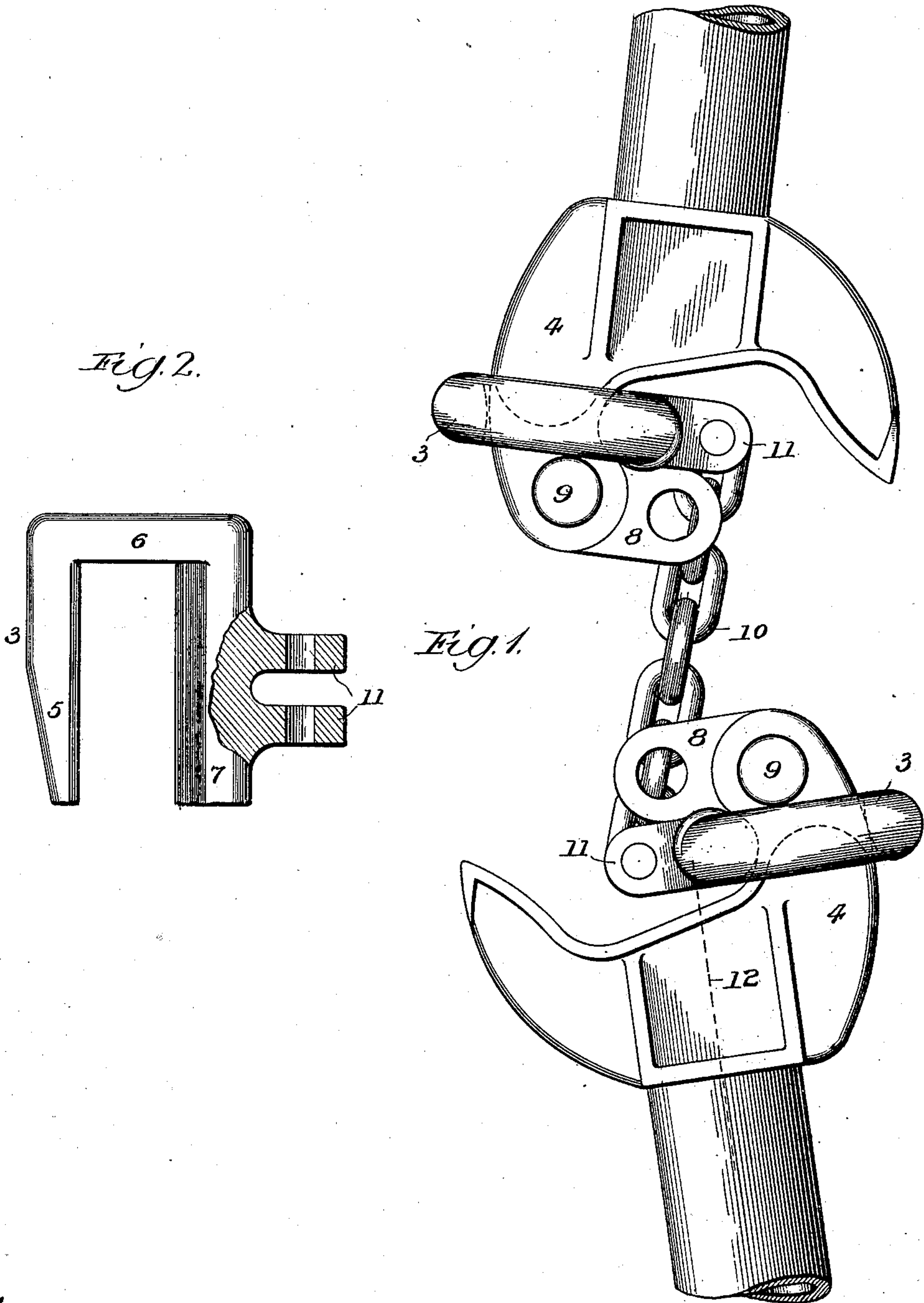
No. 673,178.

Patented Apr. 30, 1901.

W. D. SARGENT.
COUPLING DEVICE.

Application filed Nov. 26, 1900.)

(No Model.)



Witnesses:
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UNITED STATES PATENT OFFICE.

WILLIAM DURHAM SARGENT, OF CHICAGO, ILLINOIS.

COUPLING DEVICE.

SPECIFICATION forming part of Letters Patent No. 673,178, dated April 30, 1901.

Application filed November 26, 1900. Serial No. 37,741. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM DURHAM SARGENT, a citizen of the United States, residing at Chicago, Cook county, Illinois, have invented certain new and useful Improvements in Coupling Devices, of which the following, taken in connection with the accompanying drawings, is a specification.

This invention is primarily designed for temporary use in connection with the standard forms of coupler-head commonly employed in railroad service in all such places and under such circumstances as render it difficult or impossible to get the standard coupler-heads to properly engage—as, for example, on a very sharp curve, upon which, as is well known to railroad men, it is sometimes impossible to get the standard Master Car-Builders' couplers to properly unite on account of the respective knuckles overlapping each other, because of the angularity of the center lines of the coupler-shanks being too great to permit the coupler-knuckles to pass even when opened. Under conditions such as have just been referred to the common practice is to use either a link or a chain, such as is employed to fasten two cars together when one or the other of the coupler-heads become broken. Of the two devices mentioned the link is liable soon to become unavailable because of the fact that the link-slot commonly employed in the coupler-knuckles is being or is about to be abandoned because of the large amount of knuckle breakage experience has shown to be incident to its use.

The first of the objects of my present invention is the provision of a coupling device designed particularly for temporary use, such as has been above indicated and which is especially applicable to couplers of the standard Master Car-Builders' type and which, being compact and, comparatively speaking, light in weight, can be kept in convenient places, such as upon the engines or cabooses and applied without delay or trouble whenever occasion may arise requiring its use.

Another object of my present invention is the provision of a device of this kind which will be capable of application to the coupler-head and equally efficient in its operation whether the knuckle or other parts of the

coupler be broken or not and which will also transmit the pulling strain carried by it, approximately in the direct line of draft of the coupler-shanks.

The above, as well as such other objects as may hereinafter appear, I attain by means of a construction which I have illustrated in preferred form in the accompanying drawings, in which—

Figure 1 is a plan view showing two standard Master Car-Builders' couplers in a position relative to each other about such as they would occupy when the cars to which they are attached approach each other on a sharp curve, and Fig. 2 illustrates in detail the dog or hook which forms a part of my coupling device.

In carrying out my invention I provide first two hooks or dogs 3, adapted to engage a portion, preferably the knuckle-arm of the coupler-head 4, in the manner shown in the drawings, the outer leg or projection 5 of the dog 3 being upon the outside of the coupler-head, the upper part 6 passing across the top and the inner part 7 down upon the inside just within the point of attachment of the knuckle 8 and preferably back of the knuckle-pin 9. Upon the part 7 of the dog 3 I provide a means for attaching a chain or other connection 10, preferably flexible, which is preferably made in the shape of a bifurcated boss 11 and which for convenience I shall hereinafter term an "anchor-shackle." The anchor-shackle 11 is so located upon the dog that the flexible connection 10 when put under strain will exert a pull approximately in the direct line of draft 12 of the coupler-shank. In other words, the point upon the dog at which the flexible connection is secured to the dog is located approximately in or near the center line of the shaft of the coupler.

Where the knuckles are provided with the usual link-slot, the chain or flexible connection 10 will pull directly through the link-slot. Where the knuckle has no link-slot the chain will of course be thrown somewhat out of line, extending around the end of the knuckle, as will be readily seen on an examination of the drawings.

Having described my invention, what I

claim as new, and desire to secure by Letters Patent, is—

1. A coupling device comprising a dog constructed to engage the knuckle-arm of a Master Car-Builders' coupler, substantially as shown, a flexible connection secured to said dog, and means secured to said flexible connection whereby to attach the other end thereof to another draw-bar, substantially as described.

2. The combination in a coupling device of a flexible connection, a dog constructed to engage a Master Car-Builders' coupler-head, a shackle or point of attachment for said flexible connection upon said dog approximately in or near the line of draft of the draw-bar when the device is applied thereto, and means whereby to secure the other end of said flexi-

ble connection to another draw-bar, substantially as described.

3. A coupling device comprising a pair of dogs, constructed to engage the knuckle-arms of two coupler-heads, substantially as shown, and a connection between said dogs, substantially as described.

4. A coupling device comprising two hooked dogs, a bifurcated projection upon each of said dogs, and a chain connecting said bifurcated projections, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

WILLIAM DURHAM SARGENT.

Witnesses:

HENRY K. GILBERT,
PAUL CARPENTER.