No. 704,858. Patented July 15, 1902.

W. S. CHAPMAN.

COUPLING FOR WAGONS.

(Application filed Apr. 19, 1902.)

(No Model.)

Fig. 1

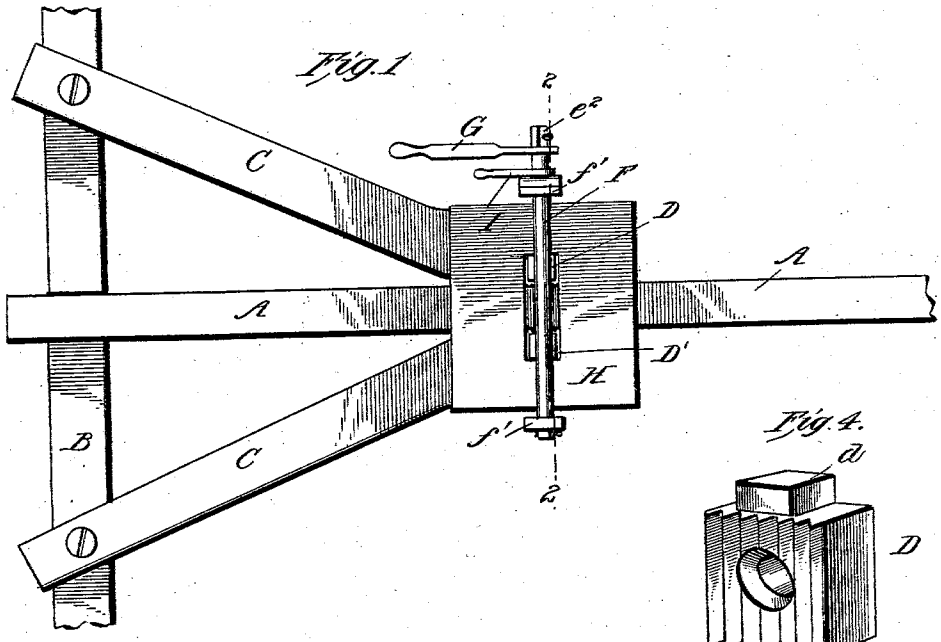


Fig. 4.

Fig. 2.

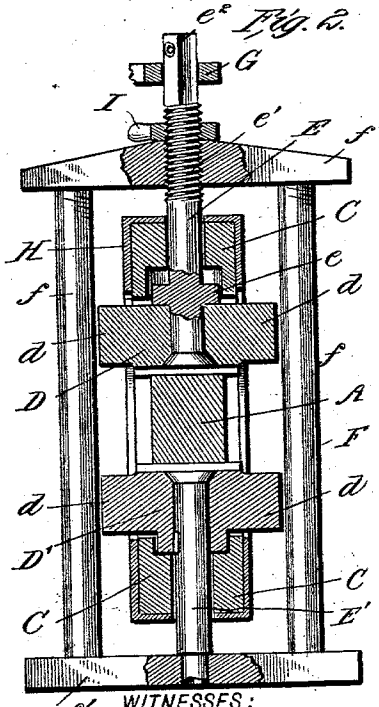
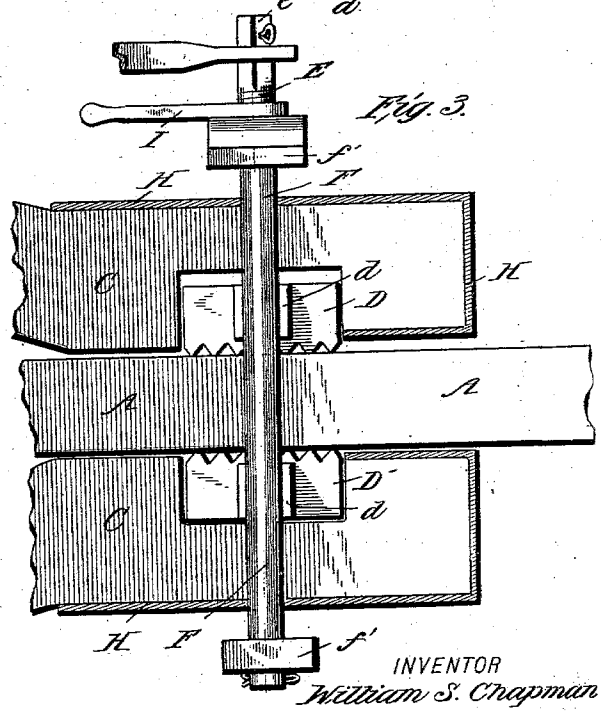


Fig. 3.



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COUPLING FOR WAGONS.

SPECIFICATION forming part of Letters Patent No. 704,858, dated July 15, 1902.

Application filed April 19, 1902. Serial No. 103,693. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM S. CHAPMAN, a citizen of the United States, residing at Kippen, in the county of Nez Perces and State of Idaho, have made certain new and useful Improvements in Couplings for Wagons, of which the following is a specification.

My invention is an improvement in that class of couplings between the reach and the rear hounds of a wagon which permit adjustment of the hounds and rear axle on the reach, the same being effected by means of a clamp in place of the usual coupling effected by means of a pin passing through the reach, whereby the latter is weakened.

The details of construction, arrangement, and operation of parts are as hereinafter described, reference being had to the accompanying drawings, in which—

Figure 1 is a plan view of the portion of a wagon coupling or running-gear of which my invention forms a part. Fig. 2 is an enlarged cross-section on the line 2 2 of Fig. 1. Fig. 3 is an enlarged horizontal section of the front portion of the hounds, the covering-plate being alone removed. Fig. 4 is a perspective view of one of the gripping-jaws by which the rear hounds are secured to the reach or coupling-pole.

A indicates the reach or coupling-pole, B the rear bolster of the rear axle, and C the hounds. The latter are secured to the reach A by means of gripping-jaws D D′ and a screw-clamp F, which is constructed as hereinafter described. The said jaws D D′ are provided with serrated faces and are arranged diametrically opposite on opposite sides of the reach A, as shown in Figs. 1 and 3. The frame F consists of two parallel bars *f* and two shorter parallel heads *f*′. One of the jaws D′ is rigidly secured to a rod or shaft E′, (see Fig. 2,) which is shouldered and adapted to rotate in the adjacent head *f*′ of the frame F. The other jaw D is secured upon the head of a screw-shaft E, which is adapted to rotate therein. The said shaft E is provided with a collar *e*, adjacent to the jaw D, and also with a screw-thread *e*′ at a point where it passes through the head *f*′, which is similarly screw-threaded. A hand wrench or lever G is applied to the squared end e^2 of the screw-shaft and extends laterally therefrom for use in rotating the shaft. This wrench or handle G may be a permanent attachment of the shaft. It is apparent that if the latter be rotated the block D, to which it is attached, will be moved toward or from the adjacent head *f*′ of the clamping-frame, and that thereby the reach A will be either clamped between the two jaws D D′ or released, as the case may be. In other words, if the screw-shaft E be rotated in one direction the jaws D D′ will be forced toward each other and the reach A will necessarily be clamped between them. If, on the other hand, the screw-shaft be rotated in the opposite direction, the jaws D D′ will be moved apart and the reach A released. The shafts E and E′ pass through the ends of the hounds C, as shown in Fig. 2, and are held rigidly in due position relative to each other and the reach A by means of a metal casing H. This is preferably constructed of cast-iron and so formed as to embrace the heads or ends of the hounds C, as shown. The casing may, however, be constructed of thick sheet metal bent into the required form. The casing H may be secured to the hounds by means of rivets or bolts passing vertically through the same. As shown in Fig. 4, the jaws D D′ are provided with extensions *d*, constituting heads. These heads serve as guides in the movement of the jaws toward and from each other, since they project through and work in guide-slots in the casing H, as will be understood by reference to Figs. 1 and 2. A jam-nut I, having an extended portion that serves as a handle, is applied to the screw-shaft E, adjacent to the outer side of the frame-head *f*′. By this device the screw E may be locked in any adjustment, so that the jaws D D′ will be held engaged with the reach A without danger of becoming loosened by the jar incident to the use of the vehicle.

It will be seen that my invention possesses an important superiority over the ordinary method of attaching the rear hounds to the reach or coupling-pole, since the latter is not weakened by one or more holes bored through the same for the purpose of receiving a fastening-pin. In other words, the coupling-pole is left intact and is as strong at a point where the hounds are secured to it as at any

other. Further, the adjustment is such that the rear axle may be adjusted toward or from the front axle with greater ease than by the usual arrangement.

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

In a wagon-coupling, the combination, with the rear hounds and the reach, of independently-movable gripping-jaws arranged on opposite sides of the reach and provided with extended lugs or heads at the opposite ends, a rigid metal casing applied to the ends of the hounds and extending over the reach and provided on the upper and under sides with guideways for reception of the said heads of the jaws, whereby the latter are adapted to slide laterally in the casing, a frame which surrounds the casing transversely, and the screw-clamp connected with the jaws and frame and adapted for adjusting the jaws relative to the reach, as shown and described.

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