

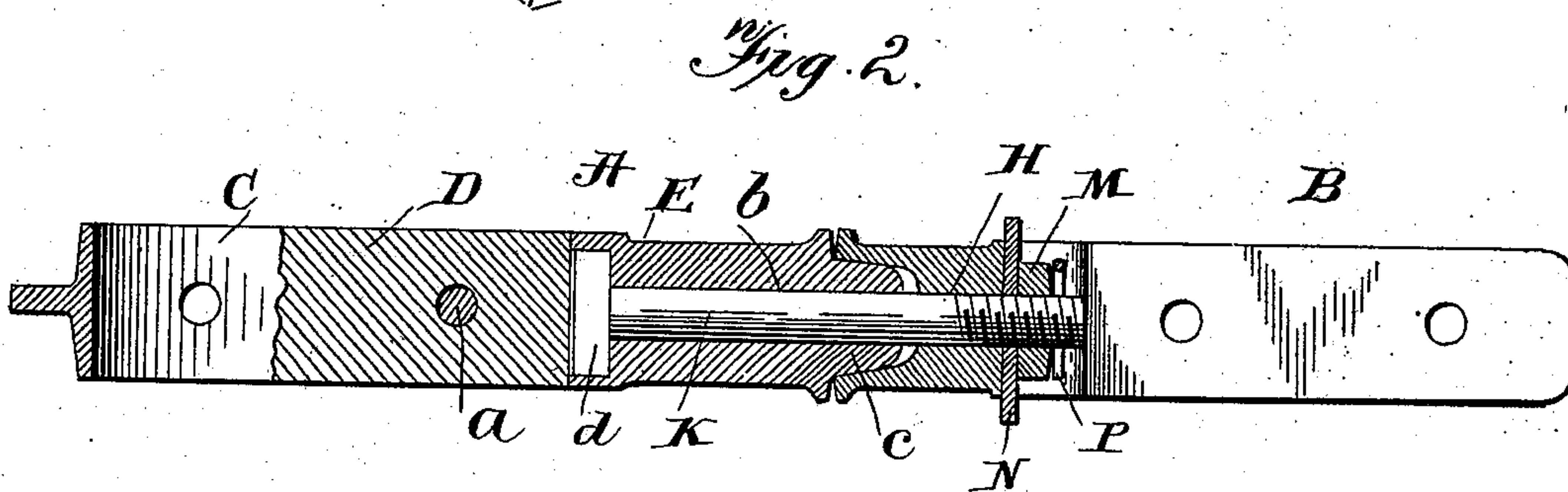
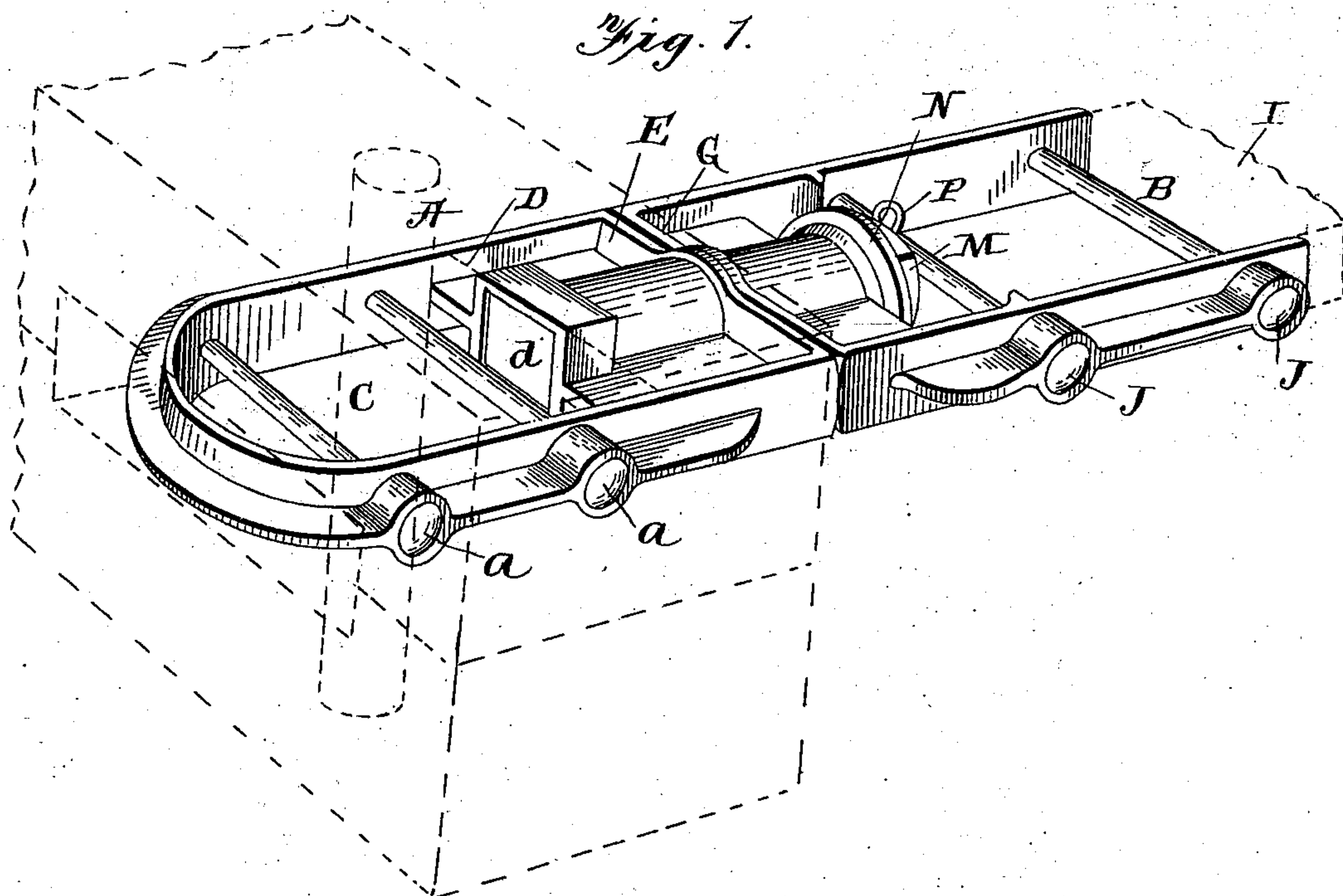
No. 670,434.

Patented Mar. 26, 1901.

L. T. RECTOR.
REACH COUPLING.

(Application filed June 18, 1900.)

(No Model.)



Witnesses

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LOUIS T. RECTOR, OF CUBA, ILLINOIS.

REACH-COUPLING.

SPECIFICATION forming part of Letters Patent No. 670,434, dated March 26, 1901.

Application filed June 18, 1900. Serial No. 20,742. (No model.)

To all whom it may concern:

Be it known that I, LOUIS T. RECTOR, a citizen of the United States, residing at Cuba, in the county of Fulton and State of Illinois, have invented certain new and useful Improvements in Wagon Reach-Couplings, of which the following is a specification.

My invention relates to improvements in wagon reach-couplings, and pertains to an improved reach-coupling, all of which will be fully described hereinafter and particularly pointed out in the claims.

The object of my invention is to so construct the reach by an intermediate swivel connection that the great wear and breakage consequent to the use of a rigid reach are overcome and a reach produced which is much longer lived and avoids the objection to the common rigid reach.

In the accompanying drawings, Figure 1 is a top perspective view of the front end of the reach and a portion of the front axle with my invention applied thereto. Fig. 2 is a vertical longitudinal central sectional view of my swivel reach-coupling.

Referring now to the drawings, A is the front member of my reach-coupling, and B the rear member. The front end of the front member has an opening C therein, which may be of any desired contour, and situated within and filling this opening is a wood king-bolt bearing-block D. This block in its contour corresponds with the contour of the opening C and is held in position within the said opening through the medium of transversely-extending bolts *a*, which pass through the side walls of the said opening C and through horizontal openings formed in the bearing-block D. The rear wall E of the front member A has a longitudinally-extending swivel bolt-bearing *b*, the inner end of the said opening being preferably angular in cross-section, as shown, the remainder of the opening being preferably round. Projecting rearward from the rear side of the rear wall of the front member A and surrounding the bolt-bearing before mentioned is a cone-shaped flange or projection *c*.

The rear member B of my coupling is somewhat similar to the front member A, with the exception that its front end is closed by a transverse web G, and this transverse web G has a longitudinally-arranged passage-way or

bearing H, which coincides and registers with the bearing in the rear end of the front member A. The end of this bearing or opening is made cone-shaped to correspond with and to receive the rearwardly-extending cone-shaped flange upon the rear wall of the rear end of the front member A before mentioned. The rear end of this rear member B of my coupling is adapted to receive the front end of a wood reach I of an ordinary wagon, and this forward end of the reach is held in position by means of the transversely-extending bolts J.

Passing through the bearings in the rear end of the front member A and the front end of the rear member is a swivel or pivotal bolt K, its front end having an angular head *d*, corresponding with the angular-shaped forward end of the bolt-bearing, and the rear end of this bolt is screw-threaded to receive a suitable nut M. Preferably (though not necessarily) situated between the inner sides of the said nut and the adjacent rear side of the transverse web at the front end of the rear member B is a washer N, and passing through the bolt, which projects beyond the nut, is a key or keeper P for the purpose of preventing the nut from becoming loose and falling from the pivotal bolt.

In the usual construction of the reach-coupling for wagons about two inches play up and down is allowed between the axle and the sand-board, which vertical movement wears the axle in two in a very few years and also wears the king-bolt opening in a way to interfere with the application of the brake to the wheels of the wagon by permitting the front running-gear to move forward under the pressure of the brake-shoes. In passing over rough roads a torsional strain is exerted upon a rigid pole, which experience teaches soon splits the pole and wears the axle to a very damaging extent. These defects in the rigid reach for wagons are overcome by my simple, strong, and durable swivel reach connection, which is adapted to be applied to almost any wagon.

The wood king-bolt bearing-block D being detachable, it can be readily removed from the front member A for the purpose of being substituted by a new one when occasion makes it desirable.

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

1. A wagon reach-coupling comprising a
5 front member having a rear transversely-arranged web with a longitudinal bolt-opening, a rear member having a front transverse web with a longitudinally-registering bolt-opening, the adjacent faces of the adjacent ends of
10 the members having a cone-shaped bearing, and a pivotal or swivel bolt passing through the bolt-openings, substantially as described.

2. An improved wagon reach-coupling comprising a front member having a rear trans-
15 verse web closing its rear end, a detachable

wood king-bolt bearing-block secured in the front end of the front member, the rear member having a rearwardly-extending opening to receive the front end of the wood reach, the adjacent ends of the two members hav- 20 ing a longitudinally-arranged swivel-bolt opening and a swivel-bolt passing through the said opening and carrying clamping means, substantially as described.

In testimony whereof I affix my signature 25 in presence of two witnesses.

LOUIS T. RECTOR.

Witnesses:

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