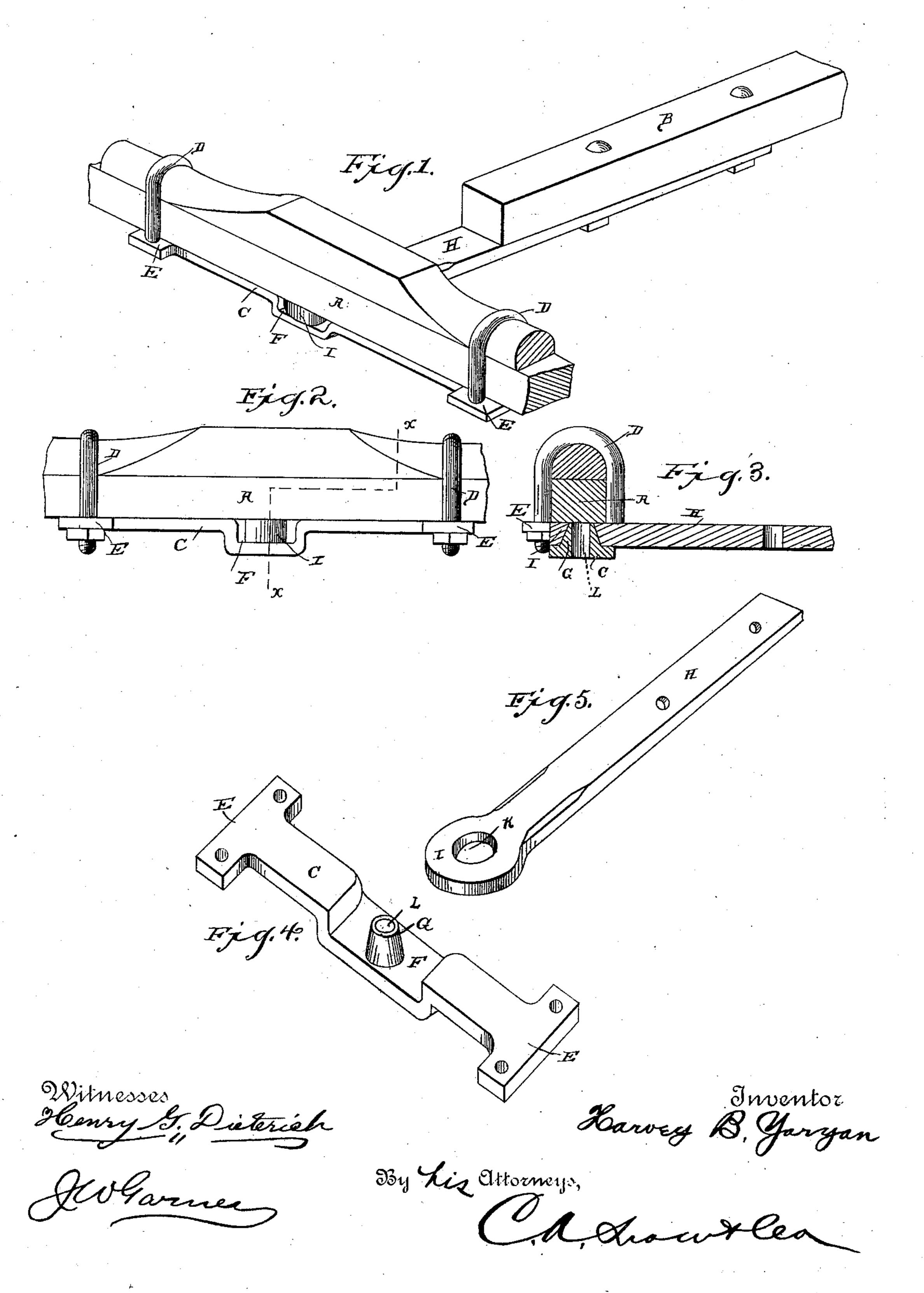
H. B. YARYAN.

REACH COUPLING.

No. 370,916.

Patented Oct. 4, 1887.



United States Patent Office.

HARVEY B. YARYAN, OF CRAWFORDSVILLE, INDIANA, ASSIGNOR OF TWO-THIRDS TO JAMES H. WATSON AND CHARLES N. VANCLEAVE, BOTH OF SAME PLACE.

REACH-COUPLING.

SPECIFICATION forming part of Letters Patent No. 370,916, dated October 4, 1887.

Application filed March 22, 1887. Serial No. 231,987. (No model.)

To all whom it may concern:

Be it known that I, HARVEY B. YARYAN, a citizen of the United States, residing at Crawfordsville, in the county of Montgomery and 5 State of Indiana, have invented a new and useful Improvement in Reach-Couplings for Buggies, of which the following is a specification.

My invention relates to an improvement in reach-couplings for buggies; and it consists in to the peculiar construction and combination of devices, that will be more fully set forth hereinafter, and particularly pointed out in the claims.

The object of my invention is to provide a 15 coupling to connect the front end of the reach to the center of the front axle without the necessity of employing a king-bolt or making an opening through the axle, and this object I accomplish by the devices hereinafter de-20 scribed, and illustrated in the drawings, in which-

Figure 1 is a perspective view of a portion of a front axle of the reach and my improved coupling devices to connect the reach to the 25 axle. Fig. 2 is a front elevation of my invention attached to the front axle. Fig. 3 is a vertical sectional view taken on the line x x of Fig. 2. Fig. 4 is a detailed perspective view of the axle-plate. Fig. 5 is a similar 30 view of the reach plate or arm.

A represents the front axle of the buggy. B represents the reach, and C represents a plate which is adapted to be placed under the center of the front axle, and is attached thereto 35 by means of clip-bolts D. The ends of the plate are provided on opposite sides with projecting ears E, having openings to receive the lower ends of the clip-bolts. At the center of the plate C is a depending offset, F, the up-40 per side of which is at a suitable distance below the front side of the axle, thereby leaving a space between the said plate and the axle, as shown at Fig. 2. On the upper side of this offset, and at the center of the plate and di-45 rectly in line with the center of the axle, is a vertical annular boss, G, the upper end of which is on the same plane with the upper side of the plate.

H represents a plate or arm, which is bolted

thereof, and the extreme front end of the said arm or plate is provided with a circular head, I, having a vertical central opening, K, adapted to receive the boss G. The latter forms the frustum of a cone, and the opening K has its 55 sides flared to an angle corresponding with the inclination of the sides of the boss.

Before securing the plate C to the under side of the axle the front end of the reach arm or plate is caused to engage the boss, so that 60 when the plate C is secured to the axle the reach will be firmly coupled thereto.

It will be readily understood from the foregoing description that by employing my improved coupling the reach may be connected 65 to the front axle without the use of a kingbolt and without the necessity of making an opening through the axle, and thereby weakening the same. Moreover, my reach-coupling is exceedingly cheap and simple, is very 70 strong and durable, and may be attached to or disconnected from the running-gear of the buggy in a very short time.

In order to adapt my reach-coupling to be employed in buggies having king-bolts, I pro- 75 vide the boss G with a vertical central opening, L, to receive the lower end of the kingbolt, as shown at Fig. 4.

Having thus described my invention, I claim-

1. In a reach-coupling for buggies, the combination of the plate C, adapted to be secured to the front axle and having the depending offset at its center, and the arm or plate bolted to the reach and having its front end bearing 85 on the offset of the plate C and pivoted thereto beneath the axle, substantially as described.

2. The combination, in a reach-coupling for buggies, of the plate C, having the depending central offset, and the boss projecting upwardly 90 from the center of the said offset, with the reach arm or plate having the opening at its front end adapted to receive the boss, substantially as described.

3. The combination of the front axle, the 95 plate C, having the depending central offset and provided with the ears F, the clip-bolts embracing the axle and having their lower ends extending through openings in the ears 50 to the under side of the reach at the front end | F to secure the plate to the lower side of the 100

axle, and the reach arm having its front end bearing on the offset in the plate C and pivoted thereto, substantially as described.

4. The combination, in a buggy-coupling, 5 of the plate C for the front axle, having the depending central offset, and the conical boss projecting upward from the center of the said offset, and the reach arm or plate having the head I at its front end provided with the flared

opening K, adapted to receive the boss, sub- to

stantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

HARVEY B. YARYAN.

Witnesses:

WILL H. THOMPSON, James M. Seller.