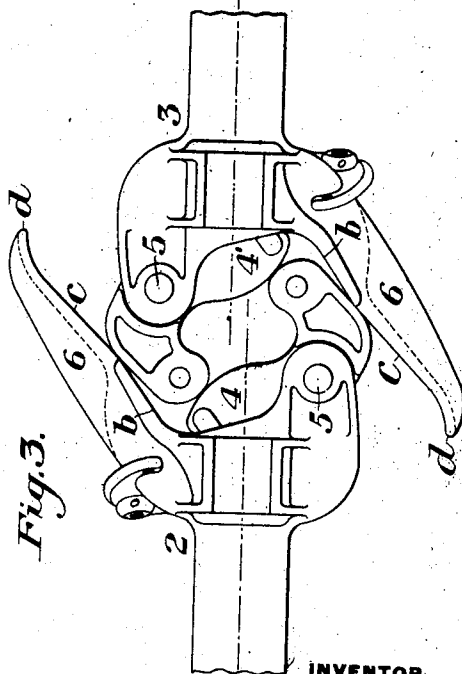
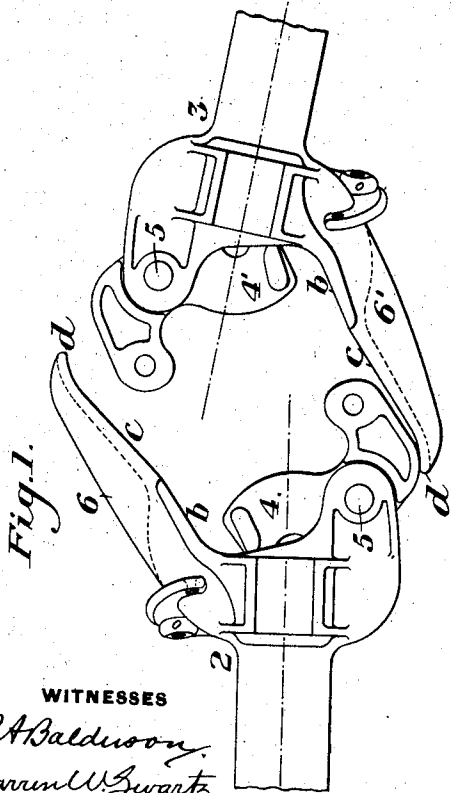
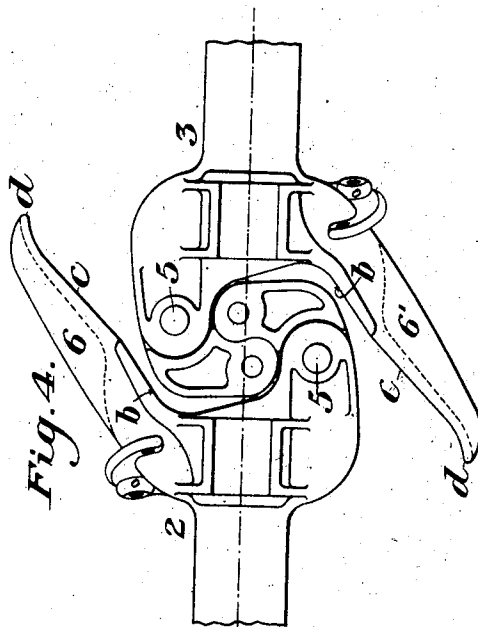
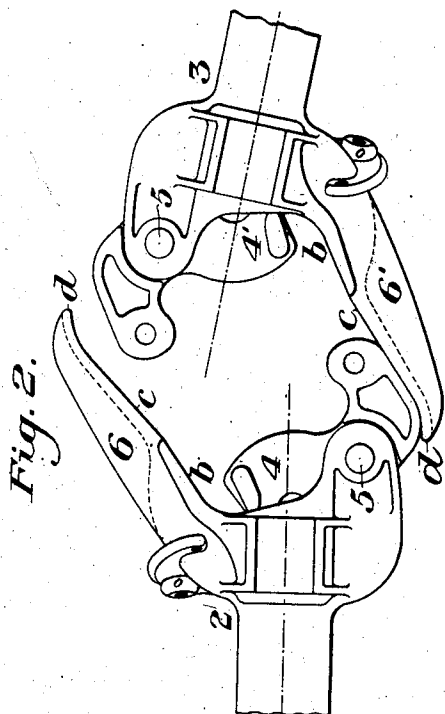


No. 834,814.

PATENTED OCT. 30, 1906.

H. T. KRAKAU.
CAR COUPLING.

APPLICATION FILED MAY 17, 1906.



WITNESSES
R. A. Baldwin
Warren U. Swartz

INVENTOR
Harry J. Krakau
By his Attorneys
Barnett & Byrnes

UNITED STATES PATENT OFFICE.

HARRY T. KRAKAU, OF CLEVELAND, OHIO, ASSIGNOR TO NATIONAL MALLEABLE CASTINGS COMPANY, OF CLEVELAND, OHIO, A CORPORATION OF OHIO.

CAR-COUPLING.

No. 834,814.

Specification of Letters Patent.

Patented Oct. 30, 1906.

Application filed May 17, 1906. Serial No. 317,363.

To all whom it may concern:

Be it known that I, HARRY T. KRAKAU, of Cleveland, Cuyahoga county, Ohio, have invented a new and useful Improvement in Car-Couplers, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 shows two of my couplers at the moment of their first engagement. Fig. 2 is a similar view showing the couplers when they have been moved more nearly into line. Fig. 3 is a similar view showing the couplers at the moment when the knuckles begin to close, and Fig. 4 shows the coupler with the knuckles closed and interlocked.

My invention relates to car-couplers mounted on radially-swinging draft-gears or otherwise arranged so as to have a laterally-swinging motion, and it is intended to provide means by which coupling can be effected when the cars are standing on curves which would otherwise prevent them from coupling. The purpose just mentioned cannot be effected by a simple extension of the guard-arm of the coupler in a straight line, because if this were attempted the engagement of such guard-arm with the knuckle of an opposing coupler which occupied a position at which it ordinarily would not couple would prematurely close the knuckle before the coupler had been brought by the guard-arm into coupling position. I accomplish the object, however, by extending the guard-arm and constructing it so that the first point of engagement of its end with the opposing knuckle shall be so far to the back of the knuckle that it will not have a tendency to turn the knuckle on its pivot, but will simply deflect the couplers and tend to draw them into line one with the other. As the couplers approach the knuckle slides along the surface of the guard-arm until it reaches a portion thereof which engages the forward part of the knuckle and closes it into locking position in the usual way. The shape of the guard-arm may be modified to suit the degree of lateral motion of which the coupler is capable.

In the drawings, 2 3 are the couplers of adjacent cars, which in Fig. 1 are shown as

standing upon a curve in such manner that the couplers are considerably out of line.

4 4' are the knuckles, which are pivoted at points 5.

6 6' are the guard-arms, each of which has an inner portion *b* of the construction usual in car-couplers adapted to engage and close the knuckle of the opposing coupler. The guard-arm has also an extension *c*, the inner surface of which is out of line with the portion *b* and is more divergent. At the end of the portion *c* is an inwardly-directed portion *d*, adapted to make the initial engagement with a rear part of the knuckle.

As shown in Fig. 1, as the cars approach the end *d* of one guard-arm engages the opposing knuckle at a rear point, and the couplers are thus crowded laterally toward one another without closing the knuckle, and as the couplers still further approach the knuckle slides along the guard-arm, as shown in Fig. 2, until it reaches the surface *b*, when the couplers are nearly in line and the knuckles begin to close, finally interlocking, as shown in Fig. 4.

The shape of the parts may be modified, since

What I claim is—

1. A laterally-movable coupler having an extended guard-arm with an end portion adapted to engage the knuckle of an opposing coupler at a rear point without closing the same, and having an inner portion adapted to close the knuckle.

2. A laterally-movable coupler having an extended guard-arm provided with an inwardly-projecting end portion arranged to make the first contact with the knuckle of an opposing coupler at a rear point without closing the same, said guard-arm having an inner portion arranged to close the knuckle.

3. A coupler adapted for lateral motion and having a guard-arm with surfaces *b c d*.

In testimony whereof I have hereunto set my hand.

HARRY T. KRAKAU.

Witnesses:

HARRY E. ORR,
F. L. HICKOX.