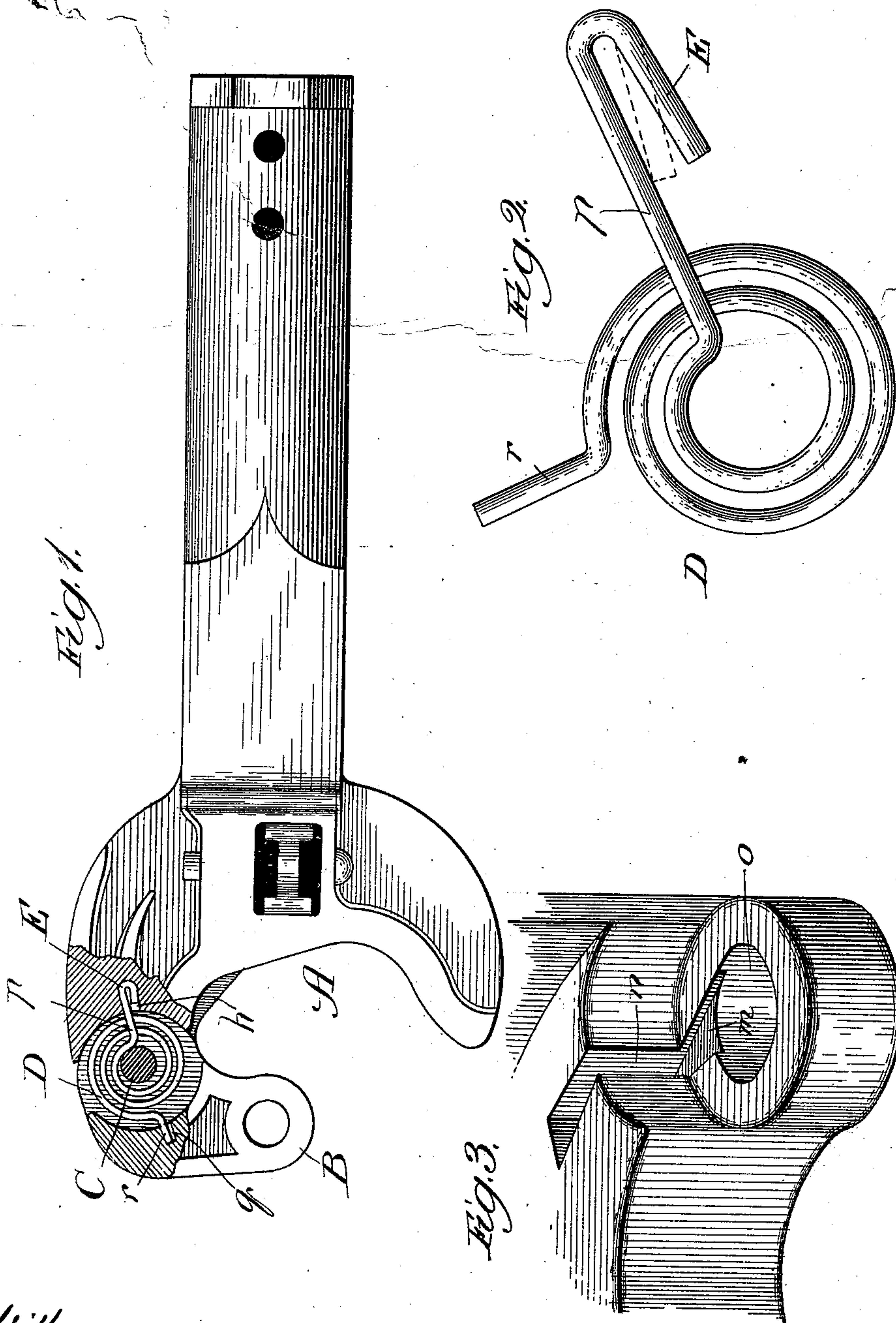


(No Model.)

P. M. REAGAN.
CAR COUPLING.

No. 485,356.

Patented Nov. 1, 1892.



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UNITED STATES PATENT OFFICE.

PAUL M. REAGAN, OF CHICAGO, ILLINOIS.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 485,356, dated November 1, 1892.

Application filed June 13, 1892. Serial No. 436,450. (No model.)

To all whom it may concern:

Be it known that I, PAUL M. REAGAN, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Car-Couplers, of which the following is a specification.

My invention relates to an improvement in the so-called "Janney" type of coupler provided with a spring surrounding the pivot-bolt (which connects the swinging jaw with the draw-bar head) and bearing at its opposite ends, respectively, against the head and jaw to automatically turn the latter outward when released from the lock, and thereby avoid requirement on the part of the operator to enter between cars for turning outward by hand the jaw when unlocked in order to adapt it to co-operate for coupling with the jaw of a companion coupler.

The object of my improvement is to provide such a construction of the spring and of the coupler to support it as will enable the spring to be readily and securely adjusted into position and will insure holding thereof firmly in the required position of coincidence of the passage through it with the bolt-opening in the coupler-head, and thus prevent the jaw in being adjusted into its operative position from so turning the spring as to move it out of such coincidence, whereby it would obstruct the insertion into place of the jaw-pivoting bolt.

In the accompanying drawings, Figure 1 is a broken plan view of a car-coupler, showing the head and jaw in section about their junction to display my improved spring-fastening means. Fig. 2 is a plan view of the spring. Fig. 3 is a broken perspective view showing the slot provided in the face of the draw-bar to receive and hold the wedge-shaped resilient end of the spring.

A is the draw-bar head of the coupler. B is the swinging jaw, and C is the pivot-bolt, fastening the jaw to the head.

D is the spring, shown in the form of a flat coil, with one end *r* bent outward to enter a recess *q* in the face of the jaw and the other end *p* also bent outward, bent upon itself toward its extremity to form a resiliently-yielding wedge extension E thereon.

In the face of the coupler-head adjacent to

the pivot-bolt hole *o* therein I provide, to receive the spring extension E, a recess *n*, which for mechanical reasons in casting the head extends to the top of the part thereof in which it is provided, though the fastening end of the spring is to be inserted into it from its face-opening, at the base of which is a backwardly-tapering guide-recess *m*, conforming more or less approximately to the shape of the end E of the spring. I prefer, also, that the recess *n* shall widen slightly in a backward direction, as it thus the better retains the spring.

To apply my improvement, the spring D is adjusted into position by inserting its end E into the recess *m* and forcing it thence into the recess *n*, whereby it is compressed between the sides of the last-named recess and firmly holds itself in place between the sides by its resilient quality. With the spring in the position described it encircles the bolt-opening *o*, and its end *r* coincides with and enters the recess *q* in the jaw B in adjusting the latter into place on the head to admit the pivot-bolt through its bolt-hole. The firm hold of the resilient wedge extension E of the spring in the recess *n* effectually resists displacement, by the jaw in being adjusted, of the spring D from coinciding at its opening with the bolt-hole *o* and obviates obstruction of the spring in adjusting the jaw against the ready insertion of the pivot-bolt, thus accomplishing the object of my improvement.

With the parts relatively adjusted, as shown in Fig. 1, the jaw B is obstructed by a lock which may be of the well-known kind, involving a bolt *l*, having vertical play to adapt it to drop by gravity into place or be withdrawn from the point of the usual tail-piece (not shown) of the jaw, in the latter case releasing or "unlocking" the jaw and permitting the spring D, set by turning the jaw inward in coupling, to recoil and turn it outward.

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

1. In a car-coupler, the combination of the head A, having a recess *n*, a pivotal jaw B, a lock, and a coiled spring D, surrounding the journal of the coupler and having one end provided with a wedge extension E, confined in the said recess, substantially as and for the purpose set forth.

2. In a car-coupler, the combination of the head A, having a backward flaring recess *n* in its face adjacent to the bolt-hole *o* and a guide-recess *m* at the base of the recess *n*, a
5 pivotal jaw B, a lock, and a coiled spring D, surrounding the journal of the coupler and having one end provided with a wedge extension E, confined in the recess *n*, substantially
as and for the purpose set forth.
- 10 3. In a car-coupler, the combination of the head having a recess *n*, a pivotal jaw B, having a recess *q*, a lock, and a coiled spring D, surrounding the journal of the coupler and having one bent end *r* inserted into the said
15 jaw-recess *q* and its other end provided with a wedge extension E, confined in the recess *n*, substantially as and for the purpose set forth.

PAUL M. REAGAN.

In presence of—

M. J. FROST,

W. N. WILLIAMS.