(No Model.)

P. M. REAGAN.

CAR COUPLING.

No. 466,082. Patented Dec. 29, 1891.

Fig. 1.

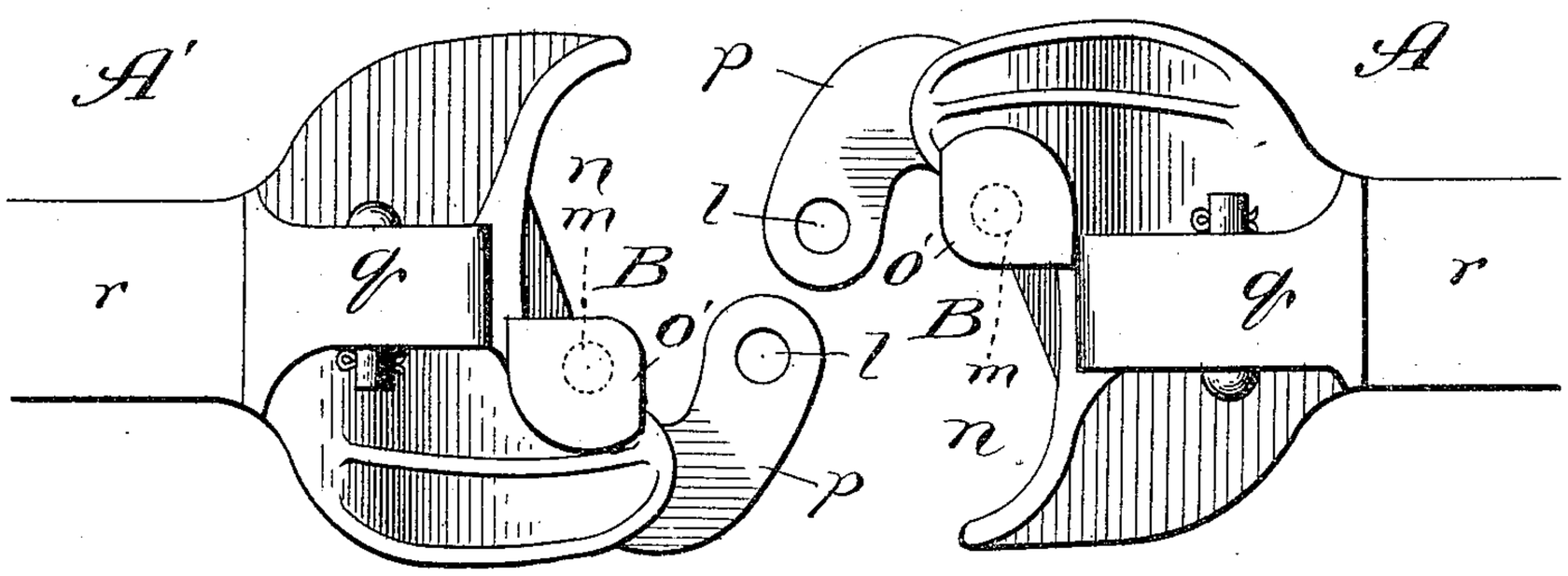
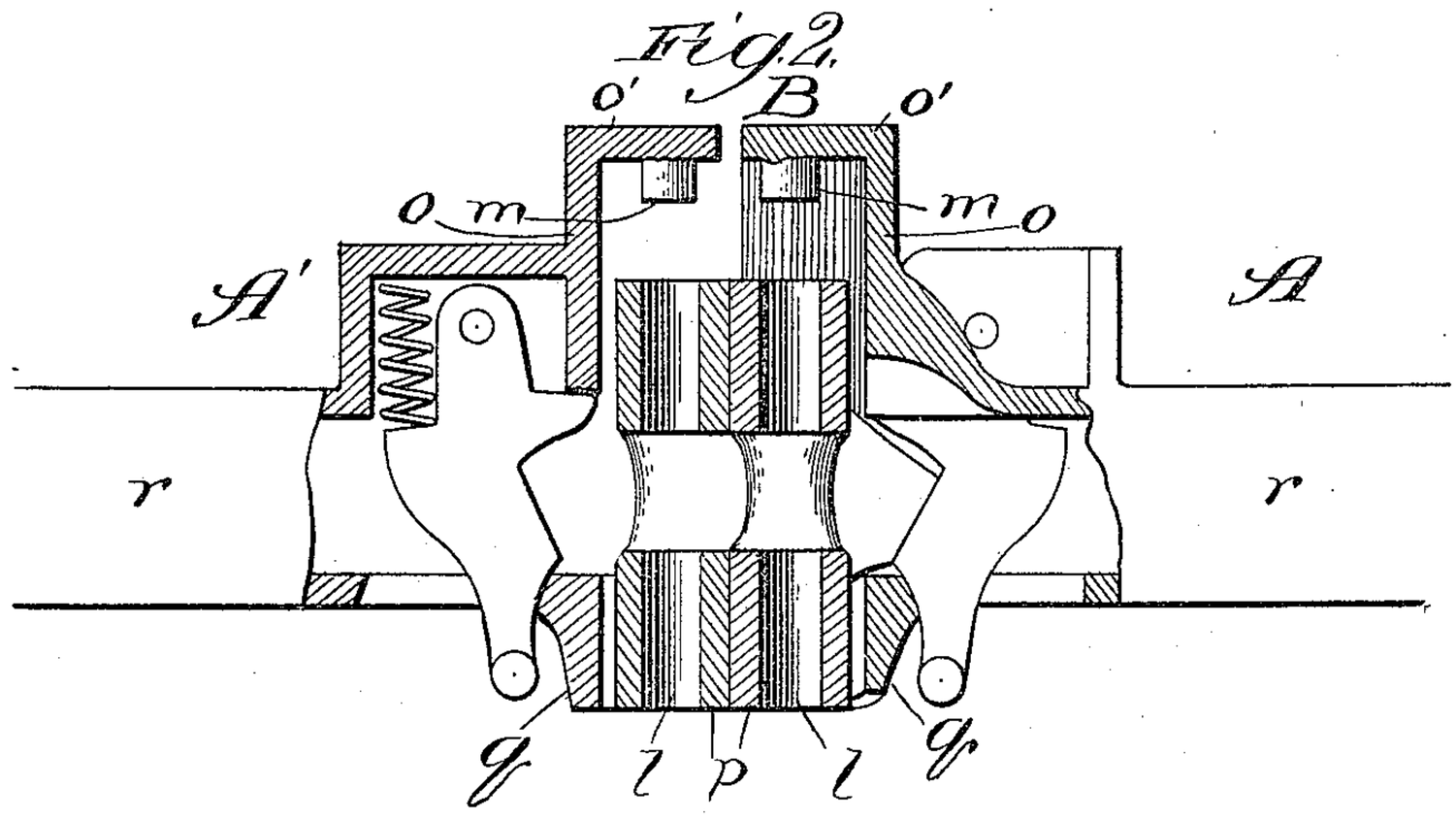


Fig. 2.



Witnesses:
Chas. E. Gaylord.
Samuel J. Wilson.

Inventor:
Paul M. Reagan,
By Dyrenforth and Dyrenforth,
Att'ys.

UNITED STATES PATENT OFFICE.

PAUL M. REAGAN, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE HINSON CAR-COUPLER COMPANY, OF SAME PLACE.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 466,082, dated December 29, 1891.

Application filed July 3, 1891. Serial No. 398,371. (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 type of car-coupler involving, as its generally-stated construction, an expanded head on a draw-bar, a jaw pivotally connected with the head at one side to open and close by swinging laterally outward and inward, and a lock to hold the jaw when closed for coupling and to release it for uncoupling.

The object of my improvement is to provide a coupler of the class referred to with a stop which shall serve effectually to hold the coupler, in case of its attachments being broken or giving way, against falling down upon the track, where it would be liable to produce damage, such as the derailing of cars.

To this end my invention consists, in its broadest sense, in providing a stop on the upper side of the coupler to extend over the space thereon which the pivotal jaw of its companion coupler occupies, whereby in case of breaking of the first-named coupler it will be sustained from falling on the track by engagement of the stop with the said companion coupler.

My invention also consists in details of construction and combinations of parts, as hereinnfter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a broken plan view showing two of the couplers, each provided with my improved stop, in the relative positions they would occupy at opposing ends of adjacent cars and with their jaws open. Fig. 2 is a longitudinal vertical sectional view of the same with the jaws interlocked.

A and A′ are two similar couplers, which, though, as shown, they represent a particular construction in the aforesaid class selected for illustrating my improvement, may involve any other construction in that class, since my improvement is equally well applicable to any form of car-coupler in the class referred to. As, therefore, my improved stop is not limited for use to any especial construction of the coupler, the parts of the one selected for illustrating my improvement need be only generally referred to.

Each coupler comprises a draw-bar *r*, terminating in an expanded head *q*, having pivotally connected with it at one of its lateral extremities a knuckle or jaw *p* and a lock for the jaw, the couplers on opposing ends of adjacent cars operating, when brought together, to mutually interlock by engagement of their pivotal jaws, each to force the other into its locking position of extending transversely across the forward end of the head, whereby the jaw of each is confined in the space between the head and jaw of the other.

B is the stop, the preferred but not the only desirable construction of which is that illustrated, involving a short vertical post *o* in the form of a longitudinal section of a tube projecting upward from the upper side of the coupler-head *q*, at and conforming to the edge of the space *n*, afforded when the jaw *p* is in its locked position between the latter and its head, to receive and confine the jaw of the companion coupler. On the upper end of the post *o* is a head *o′*, projecting some distance over the end of the space *n* (and therefore over the end of a jaw *p*, confined in said space) and provided on its under side with a short stud *m* to coincide with, but reaching normally in a downward direction short of, a perforation *l*, formed vertically through the jaw near its free end, to receive the pin of a pin-and-link coupling when the latter is employed on one car to couple it with another car having a coupler of the class of that shown, to be provided with my improvement.

When two couplers A and A′, provided each on its upper side with a stop B, are coupled together, as shown, should one break, as by the fracture of its bar *r* or of the coupler-fastenings, it will fall until arrested by the head *o′* of its stop striking the top of the locked jaw *p* of the companion coupler, which prevents the broken coupler from falling on the track, and in so falling the stud *m* on the under side of the head *o′* of the stop enters the pin-hole *l* in the locked jaw of the unbroken companion coupler, whereby should the jaw of the broken coupler become unlocked by or

by reason of the fracture it cannot be pulled out from engagement with its companion jaw, since the stud will prevent.

If, instead of both couplers being provided with my improvement, it be on only one of them and the latter should break, obviously the stop will prevent the coupler provided with it from falling, while if the other should break, it, having no provision to prevent its falling, will be liable to fall on the track and cause damage, thus scoring a point in favor of my improvement.

From the foregoing it will be seen that the gist of my improvement lies in the location of the stop of any suitable form on the upper side of the coupler, in contradistinction to providing it on the under side thereof, which I disclaim, since in that position it saves the coupler provided with it from falling, whereas if extended at the under side it saves the companion coupler, affording no protection to itself, but, on the contrary, increasing its own liability to breakage by the location of the stop on the under side, where it would be the more liable to strike impediments, as the stop-bumpers, against which it is common to back cars in stopping them.

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

1. In a car-coupler, the combination of the expanded head, the jaw pivotally fastened to the head, forming therewith the space *n* to contain the jaw of a companion coupler, a lock for the jaw, and a stop extending at the upper side of the head over the space *n*, substantially as and for the purpose set forth.

2. In combination with a car-coupler of the character described, a stop on its upper side extending over the space for confining the pivotal jaw of a companion coupler and provided with a depending stud to coincide with the pin-hole in said jaw, substantially as and for the purpose set forth.

3. In combination with a car-coupler of the character described, a stop B on the upper side of its head *q*, the stop being formed of a post *o*, adjacent to the space for confining the pivotal jaw of a companion coupler, and having a head *o'* overlapping said space, substantially as and for the purpose set forth.

4. In combination with a car-coupler of the character described, a stop B on the upper side of its head *q*, the stop comprising a post *o*, adjacent to the space for confining the pivotal jaw of a companion coupler, and a head *o'* on the post overlapping the said space and provided with a depending stud *m* to coincide with the pin-hole in said jaw, substantially as and for the purpose set forth.

PAUL M. REAGAN.

In presence of—
J. N. HANSON,
M. J. FROST.