

No. 610,666.

Patented Sept. 13, 1898.

W. J. TREVESSICK.

CAR COUPLING.

(Application filed Feb. 18, 1897.)

(No Model.)

Fig. 1.

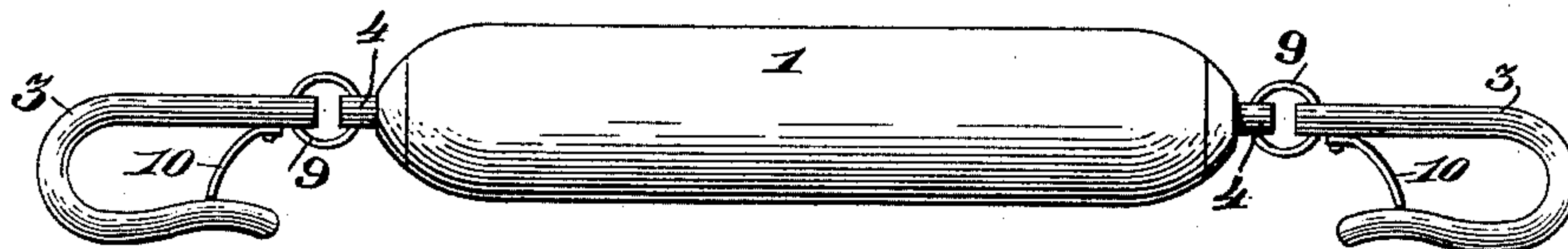


Fig. 2.

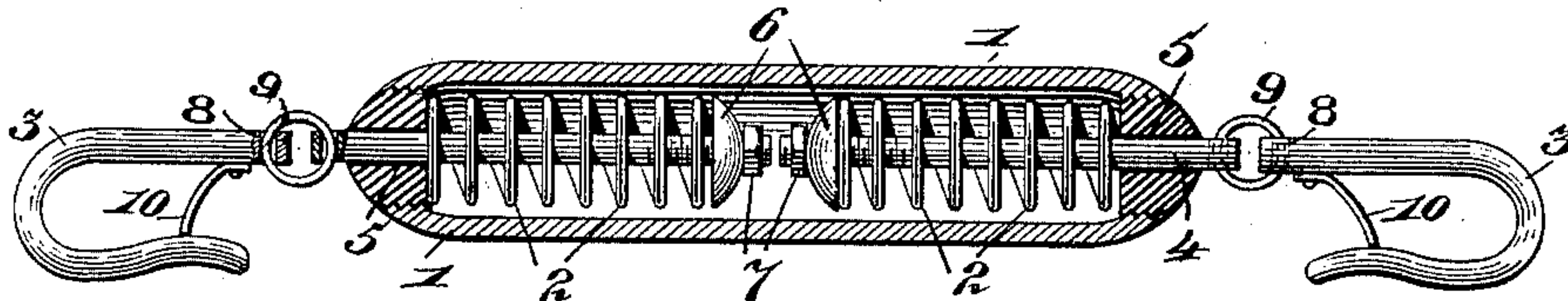
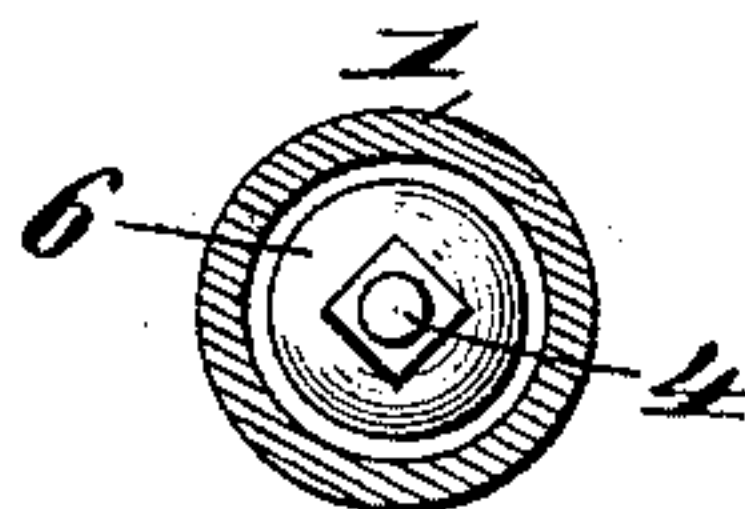


Fig. 3.



Inventor

Witnesses

H. G. Dieterich

By *his* Attorneys,

William J. Treversick

J. F. Riley

C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

WILLIAM J. TREVESSICK, OF GLEN CAMPBELL, PENNSYLVANIA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 610,666, dated September 13, 1898.

Application filed February 18, 1897. Serial No. 624,014. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM J. TREVESSICK, a citizen of the United States, residing at Glen Campbell, in the county of Indiana and State of Pennsylvania, have invented a new and useful Car-Coupling, of which the following is a specification.

The invention relates to improvements in car-couplings.

The object of the present invention is to improve the construction of car-couplings and to provide a simple, inexpensive, and efficient device designed for coupling mine-cars and adapted to afford a yielding or elastic connection to cushion the cars in starting, and thereby avoid the shocks and jars incident to starting mine-cars with a chain-like or similar coupling, and thereby avoid the wear and tear on cars and the road-bed and also on mules or a locomotive employed in drawing the cars.

A further object of the invention is to cushion the cars, and thereby prevent portions of their contents from falling upon the track, and to prevent the loss of coal or other mineral mined and avoid the expense incident to cleaning the track of such fallen material.

The invention consists in the construction and novel combination and arrangement of parts, as hereinafter described, illustrated in the drawings, and pointed out in the claim hereto appended.

In the accompanying drawings, Figure 1 is a side elevation of a car-coupling constructed in accordance with this invention. Fig. 2 is a longitudinal sectional view. Fig. 3 is a transverse sectional view.

Like numerals of reference designate corresponding parts in the several figures of the drawings.

1 designates a cylindrical casing forming a housing for a pair of coiled springs 2 and connected with snap-hooks 3 by longitudinal rods 4, on which the coiled springs are disposed, as clearly illustrated in Fig. 2 of the accompanying drawings. The ends of the cylindrical casing are interiorly threaded and receive exteriorly-threaded plugs 5, which are provided with central perforations for the reception of the rods 4. The plugs, which form bearings for the outer ends of the springs, are readily removable to afford access to the in-

terior of the tubular casing to enable the parts to be readily assembled and removed when desired. The inner ends of the springs are engaged by disks 6, which are secured to the inner ends of the longitudinal rods and form heads for the same. The disks are perforated for the reception of the rods, which have their inner ends threaded and provided with nuts adapted to be readily adjusted to regulate the tension of the springs. The outer or engaging faces of the disks are flat, and their inner faces are rounded, as shown. The outer terminals of the longitudinal rods are provided with eyes and are connected with eyes 8 of the snap-hooks 3 by means of rings 9, which are linked into both of said eyes. The snap-hooks 3 are provided with suitable springs or tongues 10, which close their mouths and prevent the snap-hooks from becoming accidentally uncoupled. The rings and the eyes of the rods and the snap-hooks render the coupling sufficiently flexible to permit cars to come together, and the device which yieldingly connects two cars is always taut when the cars are standing still, so that there is no jar or jerk in starting the cars, thereby saving much wear and tear on the cars and on the motive power and enabling mules or a locomotive to pull cars with greater facility than when the same are coupled with the ordinary chain-like coupling. The lateral flexibility afforded by the rings 9 provides for the accurate adjustment of the hooks and casing in the line of draft or strain, and hence avoids the jamming of the stems 4 in the guide-openings provided in the heads or plugs 5, and this transverse flexibility attains the further advantage of allowing the parts of the coupling to be alined with the strain or draft without affecting the engagement of the hooks 3 with the cars. Also when the coupling has been at rest, the car or cars being stationary, the sudden application of strain, as in starting the car, will not cause any transverse strain on the stems 4, even should the terminal hooks 3, by reason of rust or other cause, hang or refuse to adjust themselves in line with the draft. The flexible connection between the hooks and the stems afforded by the rings 9 will accomplish the function of releasing the stems of lateral strain. Furthermore, the casing is prefer-

ably terminally rounded, the plugs being inserted in the rounded extremities and having their outer surfaces rounded to conform to the ends of the casing proper, whereby the
5 ends of the casing are adapted to slide readily from an object with which they come in contact, as when connected cars are descending a grade, to allow the proper points, as bumpers, of the cars to come in contact instead
10 of subjecting the coupling to this compressive strain. Furthermore, the rounding of the extremities of the casing provides for greater freedom of movement of the rings 9. It will also be seen that as the cars are cushioned
15 in starting them the material mined is not thrown along the track, as is the case when the cars are started with a sudden jerk, and the expense incident to cleaning the track of such foreign material is obviated.

20 What I claim is—

The herein-described car-coupling comprising an elongated terminally-rounded casing, revoluble and reciprocable rods projecting in

opposite directions through terminal guides in the rounded extremities of the casing, and 25 fitted within the casing with actuating-springs whereby they are normally held retracted, hooks carried by the rods for engagement with cars, and provided with means for preventing the accidental disengagement thereof, and pivotal rings connecting the shanks 30 of the hooks with the outer extremities of the rods, and capable of swinging movement, to provide for transverse flexibility between said connected parts, whereby when connected 35 cars come together the casing drops out of the path of the approaching bodies, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in 40 the presence of two witnesses.

WILLIAM J. TREVESSICK.

Witnesses:

IRVIN GARDNER,
JOSEPH FRANCE.