

S. B. REPLOGLE.
Car-Couplings.

No. 142,815.

Patented September 16, 1873.

Fig. 1.

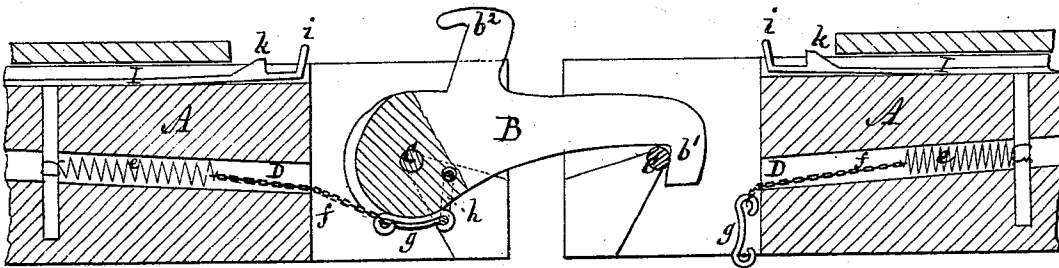
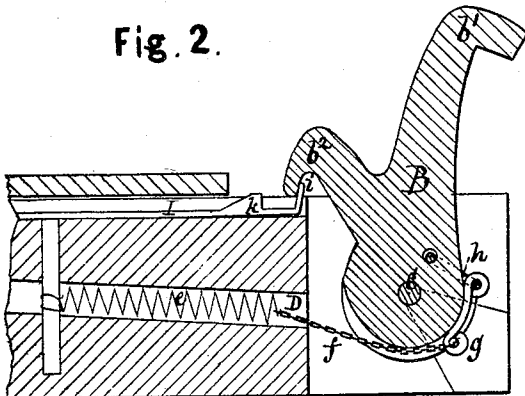


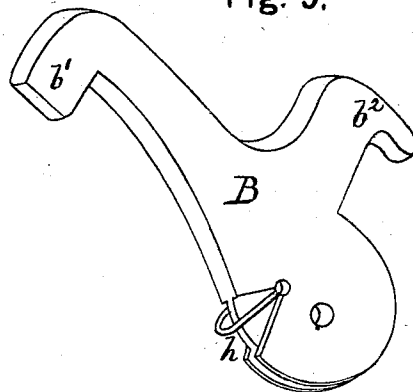
Fig. 2.



WITNESSES.

E. A. Bates.
Phille Heasi.

Fig. 3.



INVENTOR.

S. B. Replogle
Chipman & Son
Atty

UNITED STATES PATENT OFFICE.

SAMUEL B. REPLOGLE, OF ROARING SPRINGS, PENNSYLVANIA.

IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. **142,815**, dated September 16, 1873; application filed February 15, 1873.

To all whom it may concern:

Be it known that I, SAMUEL B. REPLOGLE, of Roaring Springs, in the county of Blair and State of Pennsylvania, have invented a new and valuable Improvement in Car-Couplings; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a sectional view of my car-coupling. Fig. 2 is a sectional view of a single draw-head. Fig. 3 is a detail view.

This invention has relation to means for coupling and uncoupling railroad-cars; and it consists in the construction and novel arrangement of the coupling-hook, having its lower end made in pulley form to engage with a chain, one end of which is attached to said hook, the other end being connected with a spiral spring, said chain and spring working in a longitudinal recess in the base of the draw-head. The invention also consists in the construction and novel arrangement of the hooked arm at the rear of the coupling-hook and the spring-hook for engagement therewith, seated in a suitable longitudinal recess at the top of the draw-head, and provided with a disengaging-wedge or inclined plane, as hereinafter described.

In the drawing, A A represent the draw-heads of two cars, on one of which is a coupling-hook, B. Bolts C pass transversely through the draw-heads, and are held in place by keys, so as to be readily removable. These bolts serve as pivots for the hooks to turn on, and also for the hook to engage with in coupling. When only one hook is used to couple two cars, the bolt is replaced in the draw-head from which the hook has been removed, so that the hook in the opposite draw-head will engage with it in coupling, as shown in Fig. 1. D is a tubular recess in the draw-head, in the bottom of which is secured one end of a spiral spring, *e*, to the other end of

which is attached a chain, *f*, which is connected to the coupling-hook B by a link, *g*, and pivoted loop *h*, or in any other suitable manner, so as to have a tendency to keep the coupling-hook in a horizontal position, as shown in Fig. 1. On the rear edge of the hook B, near its larger portion, is a hook, *b*², pointing in a direction opposite to the hook *b*¹ on the end, which engages with the bolt C. I is a flat elastic metallic bar, the rear end of which is secured to the upper side of the draw-head in such a manner that the outer end will have a tendency to spring upward. The outer end is turned up so as to form a stud, *i*, and immediately in rear of it is a projection, *k*, the rear end of which is inclined downward, and which is located immediately under the edge of the car-platform. When the cars are to be coupled, the coupling-hook B is raised to an upright position, so that the hook *b*² will engage with the stud *i* and be held upright, as shown in Fig. 2. When the cars come together, the concussion forces the draw-heads longitudinally backward sufficiently far to cause the edge of the car-platform to bear against the projection *k* and depress the bar I, releasing the hook *b*² from the stud *i*, when the force of the spring *e* brings the coupling-hook down and holds it in the position shown in Fig. 1, thus securely coupling the cars.

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

1. In combination with the coupling-hook B, the chain *f* and coiled spring *e*, working in the tube D, substantially as shown and described.

2. The bar I, with its stud *i* and wedge *k*, in combination with the coupling-hook B, substantially as shown and described.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

SAMUEL B. REPLOGLE.

Witnesses:

LEVI GRIFFITH,
SAMUEL BRUBAKER.