

S. S. SARTWELL.
Car-Couplings.

No. 146,363.

Patented Jan. 13, 1874.

Fig. 1.

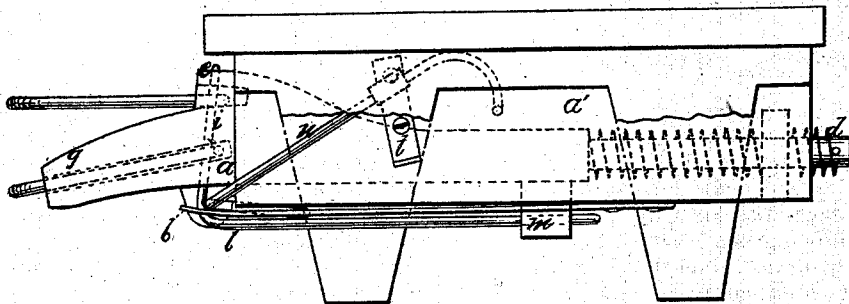


Fig. 2.

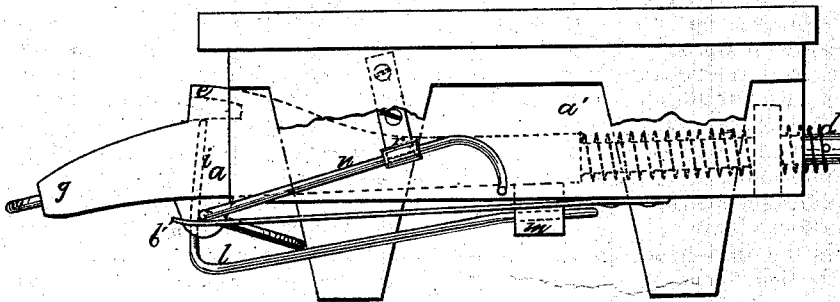
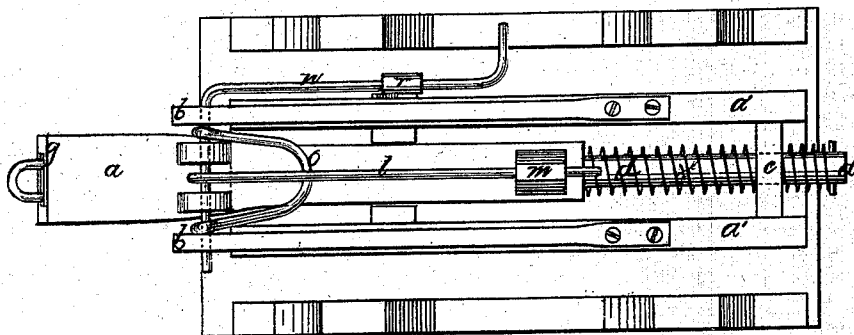


Fig. 3.



Witnesses:
H. H. Du Hamel
Thomas Byrne

Inventor:
S. S. Sartwell
Per H. J. Abbott
Attorney.

UNITED STATES PATENT OFFICE

SAMUEL S. SARTWELL, OF CAMDEN, NEW YORK.

IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. **146,363**, dated January 13, 1874; application filed March 13, 1873.

To all whom it may concern:

Be it known that I, SAMUEL S. SARTWELL, of Camden, county of Oneida and State of New York, have invented certain new and useful Improvements in Car-Couplings, of which the following is a specification:

The nature of my invention relates to an improvement in car-couplers; and consists in supporting the front ends of the draw-heads upon springs, giving them a limited vertical play, so that they will accommodate themselves to cars of all heights; in making the draw-heads with two separate compartments, the lower one of which projects beyond the upper one, and carries the link; and in the devices for operating the coupling-pin—all of which will be more fully described hereafter.

Figure 1 shows a side view of coupling with the connection made. Fig. 2 shows a side view of coupling set for the reception of link. Fig. 3 is a bottom view.

a represents the draw-heads, pivoted in the rear part of the draw-head timbers, and which have their front ends supported by the springs *b*, so as to allow them a free vertical play to adjust themselves to cars of different heights. Placed upon each side of the pivot-blocks *c* are coiled or other springs *d*, which serve to lessen the jar upon the cars, both in coming together and in starting. The front ends of the draw-heads are formed with two separate and distinct compartments, *e g*, the lower ones of which project out beyond the upper and carry the coupling-links. When the cars come together, one of the heads strikes upon the inclined plane upon the top of the compartments *g*, and is carried forward and upward until the coupling-link enters the compartment *e*, where they are bound together by the coupling rod or pin *i*. This pin consists of a spring-rod, *l*, secured in a downwardly-projecting lug, *m*, on the under side of the draw-head, and has its front end bent at right angles and extending upward through both compartments, *e g*. Pivoted by projecting

lugs to the under side of the draw-heads, and forming the projections by which the heads are supported upon the top of the springs, are the operating-levers *n*. Secured to these levers, and projecting back under the coupling-rod *l*, is a lever or arm, *o*, which, when the operating-lever is depressed, so as to disengage the link or set it for coupling anew, presses downward upon the rod, and draws the pin down so as to let the links go. To this lever is secured the projection or catch *r*, which serves to catch behind the flange or stop *t* on the side of the draw-head frame *a'*, and hold the lever down, drawing the coupling-pin downward, and, while in this position, the cars are ready to be coupled together without further care or trouble. When the cars are run together, the heads, striking, press one another backward sufficiently far to move the catches past the stops, when the spring-rods *i* are instantly released and shoot the coupling-pins home through the links.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The draw-heads *a*, having the two compartments *e g*, arranged to operate substantially as shown and described.
2. The coupling-rod *l i*, lever *n o*, catch *r*, and stop *t*, combined as and for the purpose set forth.
3. The combination, in a car-coupling, of the draw-head *a*, springs *d d*, spring coupling-rod *l i*, and lever *n o*, having catch *r*, with the draw-head frame *a'*, springs *b b*, and catch *t*, all constructed to operate as shown and described.

In testimony that I claim the foregoing as my invention, I hereunto affix my signature this 8th day of March, 1873.

SAMUEL S. SARTWELL.

Witnesses:

WARREN HUMESTON,
WILLIAM R. PADDOCK.