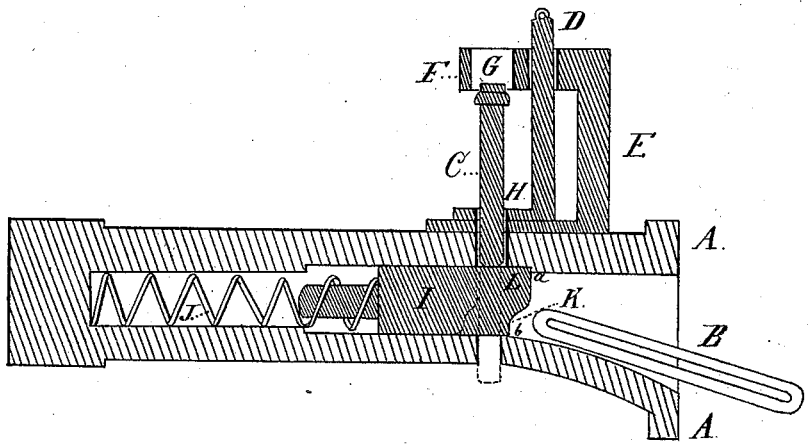
C. B. SANTEE.
Car-Coupling.

No. 221,192. Patented Nov. 4, 1879.



Witnesses.
Max Liebermann
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UNITED STATES PATENT OFFICE.

CORNELIUS B. SANTEE, OF RACINE, ASSIGNOR OF ONE-HALF OF HIS RIGHT TO PHILBERT J. SMOTHERS, OF NORWAY, WISCONSIN.

IMPROVEMENT IN CAR-COUPLINGS.

Specification forming part of Letters Patent No. **221,192**, dated November 4, 1879; application filed April 16, 1879.

To all whom it may concern:

Be it known that I, CORNELIUS B. SANTEE, of the city of Racine, in the county of Racine and State of Wisconsin, have invented certain new and useful Improvements in Car-Couplings; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawing, and to letters of reference marked thereon, which form a part of this specification.

The figure of the accompanying drawing represents a longitudinal transverse section of my invention.

My invention consists in a device for raising the coupling-pin when detaching the coaches from each other or preparatory to attaching them together, which device also steadies the upper end of the pin and retains it in a vertical position.

My said device is used in connection with a sliding block within the car-bumper, which is moved forward beneath the pin when raised by a spiral spring. Thus the block supports the pin until it is thrown back by the coupling-link of the approaching car, when the cars are automatically coupled together, all of which is further explained by reference to the accompanying drawing, in which—

A represents the car-bumper. B is a coupling-link. C is the coupling-pin. D is a substantial shaft, by which the operator raises the coupling-pin preparatory to coupling the cars. E is a substantial bracket, which is rigidly secured upon the bumper A, and retains the shaft D in a vertical position, while it admits of its free movement upward and downward through the arm F of the bracket, through which there is an opening for its reception.

The arm F is also provided with an opening, G, for the reception of the head of the coupling-pin C, which enters therein when raised, and is steadied and prevented from being thrown from the bumper thereby. H is a lifting-foot, which is rigidly connected with the pin D, and is provided with an opening for the reception of the pin C, which is loosely fitted therein, and through which it readily drops of its own gravity.

I is a sliding block, which supports the coupling-pin when raised. J is a spiral spring, which moves the block I forward beneath the coupling-pin when raised.

My invention operates as follows: When the link B enters the bumper it pushes back the block I from beneath the pin C, when the pin C drops, as before mentioned, through the link, and the coupling is complete. The pin C is raised and retained in its proper position for recoupling by simply drawing the shaft D upward, when the lifting-foot H carries the pin C up with it into the position shown in Fig. 1, when the sliding block I is thrown forward by the spring J beneath the pin, and supports it in that position until the block I is again moved backward by the action of the link. When the pin C is thus raised, and the block I having passed beneath it, the shaft D is released, when it drops to the position shown in the drawing.

The pin C may be extended upward to the top of the car, or a chain may be connected therewith which extends to the top of the car, in which case the operation of coupling and uncoupling may be performed when standing upon the top of the car.

The end of the block I is formed in the peculiar shape described by the line *a b*, that the end of the link may enter the recess K and pass the end of the pin before it drops from the projecting shoulder L, thus rendering it impossible for the falling pin to strike the link as it enters.

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

1. In couplers for railroad-cars, the combination of the bumper A, bracket E, having arm F, provided with opening G, shaft D, provided with lifting-foot H, as arranged to move freely upward and downward through arm F,

and pin C, all substantially as and for the purpose specified.

2. In couplings for railroad-cars, the combination of the pin C with bumper A, bracket E, lifting-foot H, and arm F, having opening G, all substantially as and for the purpose specified.

In testimony that I claim the foregoing as my own I affix my signature in presence of three witnesses.

CORNELIUS B. SANTEE.

Witnesses:
ALBERT G. KNIGHT,
H. V. VAN PELT,
JULIUS H. OFDALE.